* TABLE OF CONTENTS

* See Memo from Jack Thornell for further detail of Table of Contents Oct 15, 71.

	TAB
Response from Peter G. Peterson to Whitehead's letter of Sep 24, dtd 14 Oct 71.	P
Letter to Don Rice (OMB) from Jim Beggs (DoT) dtd Oct 7, 1971.	Q
Letter from Joseph Charyk (COMSAT) to Whitehead w/atch., dtd Sep 1, 1971.	R
Letter from John Keyes (COMSAT) to Jack Young (OMB) Oct 11, 1971.	S
Letter from J. Francis Taylor (ARINC), Aug 21, 1971.	T
Memo for Flanigan from Whitehead, 13 Oct 71.	U
Ltr from DoS to Mr. Donald A. Rice, Oct. 20, 1971	V
Ltrs from Senators Allott (Colo) and Byrd (Chrmn of the Subcmte on the DoT & Related Agencies	W
Memo from U. Alexis Johnson, DoS, to H. A. Kissinger	XYZ
Memo from Dr. Mansur to Jon Rose, 17 Nov 71, 2/w atchs (Draft) Memo to Kissinger & Flanigan; (Draft) Memo to Whitehead from Flanigan)	XYZ
Ltr from Comsat Corp to Peter Flanigan, Nov. 18, 1971	XYZ
Memo from Kissinger to Flanigan (Conf.), Nov. 1, 1971	AA
Memo for Haig from Whitehead, Nov. 29, 1971	BB
Memo for Flanigan and Haig from Whitehead, Dec. 2, 1971	CC
Memo for Mr. Whitehead from Gen Haig, Dec 8, 1971	DD

TABLE OF CONTENTS

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

Oct 15, 1971

To: Tom

From: Jack Thornell

Subject: Aerosat

Due to the level at which the aeronautical satellite issue is now being discussed, I consider it appropriate that you have a quick reference file of the critical correspondence on the program. The following is a listing and short summary of the correspondence that is attached.

A. The OTP policy statement, January 7, 1971

B. A letter from Don Rice (OMB) to Whitehead, stating OMB concurrence with the Jan 7 policy statement.

C. Letter to Jack Shaffer from Whitehead, defining four critical policy points to be followed in the negotiations with the Europeans.

D. Letter from Jim Beggs (DOT) to George Shultz, requesting approval of the program. (This was prior to the start of the European meetings.)

E. Letter from Don Rice (OMB) to Jim Beggs (DOT), responding to Beggs' June 1 letter. (This letter is the source justification of the DOT embarking on a joint international program -- see paragraph 2.)

F. Letter from John Volpe to Rogers -- Rogers had sent Volpe a letter requesting that DOT incorporate international participation in the program and Volpe's response stated that DOT is being guided by the OTP policy of Jan 7.

G. Letter to U. Alexis Johnson from Whitehead, asking for views on the program as a result of the Madrid meetings. Identical letters were sent to Jim Beggs and Jack Shaffer

H. Response from Jack Shaffer and Jim Beggs to the Whitehead letter of August 12.

I. Response from State Department (Bert Rein) to Whitehead's letter of August 12.

J. Letter to Jack Shaffer from Clay Whitehead, directing that discussions should be postponed until a policy review is completed.

K. Response from Shaffer to Whitehead's letter of Sep 17, stating that the FAA intends to continue on their present course of action.

L. Letter to Jack Shaffer from Mansur, requesting that the FAA clarify to ESRO that the proposed arrangements are tentative and that further review is necessary.

M. Response from Shaffer to Mansur's letter of September 24.

N. Letter to Ed David from Clay Whitehead, soliciting the OST views of the program.(Identical letter sent to Peter G. Peterson.)

O. Letter from Ed David to Tom Whitehead, giving OST views on the program.

P. Response from Peter G. Peterson to Whitehead's letter of September 24.

Q. Letter to Don Rice (OMB) from Jim Beggs (DOT), requesting approval of the joint international program, dated October 7, 1971.

R. Letter from Joe Charyk (COMSAT) to Whitehead, with an attachment,giving the COMSAT views on the joint international program.

S. A letter from John Keyes (COMSAT) to Jack Young (OMB),giving further views of COMSAT on the joint international program.

T. A letter from J. Francis Taylor (Aeronautical Radio, Inc.), giving the airline views on the aerosat program.

U. Memorandum for Flanigan from Whitehead, stating the OTP position on Aerosat.

JT

Attachment

cc: Dr. Mansur

October 19, 1971

AEROSAT

PROGRAM:

1. The purpose is to provide improved communications and ultimately navigation for over ocean commercial air traffic control.

2. The program consists of two phases: "pre-operational" beginning in 1973 which will transition to "operational" (mandatory) by 1980.

3. Current plans are for two satellites over each of the Atlantic and Pacific Oceans, to be followed in the late 70's with additional satellites to provide world coverage.

4. Costs estimates for the program range from less than $75 M (Hughes) to $140 M (FAA/ESRO.) (phase 1)

5. Although the focus is currently on FAA ATC utilization, it is expected that a properly conceived system would provide major new services to the Maritime community as well. (wanted)

ADMINISTRATION POLICY:

1. Plans for an aeronautical satellite have been discussed since 1966, but technical and institutional problems prohibited initiation of the program.

2. Between 1966 and 1970 two competing programs evolved: an FAA/COMSAT lease arrangement and a NASA/ESRO research and development program.

3. OTP undertook a policy review in October 1970 which lead to enunciation of the Administration Policy on 7 January 1971. Principal features of the policy are:

a. Delegated full responsibility to the FAA thereby killing the NASA/ESRO program.

b. Required the Government to lease services from the private sector by competitive bid.

c. Required institutional arrangements to be consistent with deployment of a multiple user system, and

d. Encouraged international cooperation where consistent with other objectives.

STATUS:

1. By letter of 11 June, OMB asked the FAA to explore international participation.

2. This lead to FAA/ESRO discussions starting in July and continuing to the present.

3. A tentative draft memorandum of understanding has been prepared by the FAA and ESRO which:

a. Provides for the Europeans to contribute 50% of the program cost which is estimated at $125-140 M.

b. Requires unanimity between the US and ESRO in all program decisions which, in effect, provides veto power to any member of ESRO.

c. Requires that production be shared with the Europeans on a 50-50 basis.

d. Requires 50% ownership of the enterprise by the Europeans.

4. The draft Memorandum of Understanding is scheduled to be signed by the FAA and ESRO on 3 November.

RESULTS:

1. US aerospace industry and common carriers received the Administration Policy of 7 January very favorably, and initial indications were that five firms planned to bid the program on a lease-service basis. These five were: COMSAT, RCA GLOBCOM, Hughes, Philco Ford, and GE.

2. As presently structured in the draft Memorandum of Understanding, the U.S. aerospace industry and common carriers have stated that they cannot provide leased services because of the absence of investment incentives and the "bizarre institutional arrangements.

3. Accordingly, the FAA is now requesting a Government owned system with 50% ownership by the FAA and 50% ownership by ESRO.

POSITIONS:

1. The FAA and State Department support the program.

2. OST, Pete Peterson, and NASC have major problems with the Memorandum of Understanding, but are uncertain as to what steps should be taken at this time.

3. NSC also has serious problems with the Memorandum of Understanding, but does not believe the issues are sufficiently important to be addressed by NSC.

4. The U.S. communications carriers strongly oppose the Memorandum of Understanding since it precludes a private sector offering of a major new communication service.

(5) Most of the aerospace industry opposes the Memorandum of Understanding because of the awkward management and procurement provisions.

(6) The international air carriers, both U.S. and foreign, are unalterably opposed to the FAA/ESRO program and have currently mounted a campaign in Congress to stop the program. Congressman McFall of the House Subcommittee on Transportation plans to hold hearings on the proposed FAA/ESRO program the week of 18 October.

RECOMMENDATIONS:

(1.) As presently structured, the program should be disapproved on the basis that it is inconsistent with Administration policy.

(2.) Alter the program to provide incentives for private sector development.

(3.) Try to establish an international "coordinated" program rather than a "joint" program.

(4.) If 3., is not possible, proceed with deployment in the Pacific where the U.S. has unilateral ATC responsibility and work towards extension of the system to the Atlantic in 1974-1975.

5. Accelerate the program to realize employment opportunities by summer of '72.

A

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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.

B

Aeronautical Satellite (B)

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

DEC 2 9 1970

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

Dear Tom:

As requested by Dr. Mansur, we have reviewed the draft policy paper, find it in accord with the sense of the Working Group, and have no objection to release of the substantive findings contained in the policy document.

We would, however, stress two points concerning presentation to the agencies and to the public. The proposed summary should be revised to reflect these points. To avoid speculation that the policy encourages duplicative Federal facilities or responsibilities, or that NASA's statutory R&D and consultative role is being deemphasized, the summary should recognize NASA's primary role in satellite technology. Similarly, since the policy substantially changes the two system approach proposed by NASA and FAA, the summary should state that the economic viability of an aerosat system is dependent upon combining requirements into a single program which equitably distributes financial responsibility among all users. Editorial comments have been provided to your staff.

The Executive Office Working Group on Aeronautical Satellite Systems contributed directly to the budget process. This evolving policy position should provide Federal agencies and industry with a focal point for more balanced program planning. Your efforts in convening this worthwhile undertaking have been most helpful.

Sincerely,

Don

Donald B. Rice
Assistant Director

C

JUL 12 1971

Honorable Jack H. Shaffer
Administrator
Federal Aviation Administration
Department of Transportation
Washington, D.C. 20553

Dear Mr. Shaffer:

To clarify existing telecommunications policy and to incorporate other factors of national interest which affect the program, the following policy guidance is provided for formulation of a U.S. negotiating position for the forthcoming European meetings:

1. All activity should proceed forthrightly toward a decision in early August to proceed with a joint international program or an independent program during or immediately after the Madrid meetings.

2. The U.S. feels there must be a multiple user satellite communications system to provide those aeronautical communications services required by the FAA in the operational system. Since the pre-operational aeronautical satellite program is the first step toward the establishment of such a system and could establish many precedents, the institutional, technical and financial arrangements of a joint pre-operational international aerosat program should be consistent with this longer term goal. The possibility of a multiple user system in the pre-operational system should not be precluded until such time as it would cause significant delay in the aerosat program.

3. The policy of the U.S. is ownership of communications systems in the private sector; accordingly, the ownership of the U.S. portion of both the pre-operational and operational systems must be in the private sector. Although our foreign counterparts typically provide communications with government-owned systems, we should encourage the Europeans to adopt a private ownership approach for the aeronautical satellite program.

4. All procurements within a joint international aeronautical satellite program shall be international competitive bid.

This office supports a joint international program established under existing U.S. policy. This program can establish U.S. policy precedents in international communications programs that are important to U.S. Government and industry. Although we recognize the primary purpose and need for this program is aeronautical communication for air safety, the negotiations and any resulting joint program should atune with the sensitivities of issues broader than aeronautical satellites alone.

Sincerely,

Clay T. Whitehead

Mr. Thornell's files
Mr. Whitehead (2)
Dr. Mansur

cc: Bert Rein

D

(D)

THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

JUN 1 1971

Honorable George P. Shultz
Director
Office of Management and Budget
Washington, D. C. 20503

Dear George:

The purpose of this letter is to obtain your approval for a far-reaching proposal and plan aimed at providing improved and essential satellite telecommunication services for air transportation over the Pacific and Atlantic Oceans by the late 1970's.

On January 7, 1971, the Administration, through the Office of Telecommunications Policy, announced publicly its detailed policy in this field. The policy statement issued at that time made a number of fundamental points:

- The United States will promote deployment of pre-operational satellite telecommunications systems in the Pacific in 1973 and in the Atlantic in 1975 in order to meet the projected requirements in those areas for air traffic control and other air transportation purposes.

- The Department of Transportation (Federal Aviation Administration) will be the lead management agency and will assume management responsibility for the pre-operational and operational systems and services.

- Commercial telecommunications facilities and services will be employed to the maximum extent feasible in the pre-operational and operational system.

- The UHF frequency band (L-Band) will be used in both the pre-operational and operational systems.

- The system should be so designed as to satisfy both government and airline requirements in the Pacific and Atlantic oceanic areas in order to achieve maximum economies.

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

.. Through the Department of State, the Department of Transportation will seek international utilization of the pre-operational system and begin cooperative efforts with other nations to establish an operational system in both oceanic areas by 1980.

This statement of policy and planning assumptions was affirmed and elaborated upon in a letter dated March 19, 1971, from the Office of Telecommunications Policy to the Federal Aviation Administrator, Mr. Shaffer. That letter enclosed a document setting forth a proposed National Program on Satellite Telecommunications for International Civil Aviation Operations. The Department, through the FAA, has given priority attention to developing in more detail a plan to accomplish the objectives stated in these documents, with which the Department is in full accord. An action program has been prepared by the FAA which is consistent with the aims and time-table envisioned in the Administration's stated policy on satellite telecommunications.

A critical early step in this plan involves the issuance of a "Request for Proposals" (RFP) to prospective commercial suppliers of these services. It is our opinion that to meet the established timetable a contractor must be selected by about January 1972 and thus the RFP should be issued by July 1 of this year or soon thereafter. Some $2.7 million is included in the FAA's FY 1972 budget for research and development to cover the first year's commitment under the prospective contract as well as other related projects. The contract will be for satellite voice and data link services over the period of approximately 1974-1980. The first year's costs in FY 1972 will depend upon the phasing of the lease payments and could range from a nominal sum to a few million dollars.

It is estimated that the total costs of the pre-operational leased services to 1980 will not exceed $100 million for the Pacific and $75 million for the Atlantic. The U. S. Government's share could be considerably less depending upon arrangements reached with the air carriers involved and with other nations who now share in

providing oceanic air traffic control services. It is intended that the U. S. Government's share of the lease costs for this service will be paid in large measure by the air carriers through user charges paid into the Airport/Airway Trust Fund for airways system costs and partly through normal user charges for communication services which are primarily for the airlines' own operational purposes.

The approval of OMB of the general thrust of our plan will not only permit us to move ahead promptly with the issuance of a Request for Proposals but will also provide the basis for discussions with the many organizations, both private and governmental, and both domestic and international, who are involved in this endeavor.

The basic rationale for this national initiative has been set forth by the Office of Telecommunications Policy, but I believe it may be useful to set out here some of the basic considerations which are involved.

1. The capacity of the oceanic air traffic control service in the Atlantic and Pacific is approaching its limits in terms of the communications demands placed upon it. All projections of traffic indicate that the volume and density will significantly exceed the system's capability to handle it by 1980. Our most recent projections indicate that telecommunications limitations, inherent in the existing system, will become serious in the Pacific by about 1973 and in the Atlantic area by 1975.

2. Studies of available alternatives have all pointed to satellite voice and data link communications as the best -- if not the only -- means of achieving improvements in air traffic control service over the oceans. There is universal agreement that satellite communications will be essential to an operational system over both oceans by 1980.

3. This Department strongly concurs in the choice of L-Band frequencies for the aircraft/satellite link as being optimum for future development of oceanic air traffic control and communications systems.

4. Our best estimates of the total lease costs of an operational L-Band system indicate that they are reasonable in terms of the communications improvements

that will be achieved as compared with other alternatives, none of which appear to be operationally or technically as satisfactory or feasible.

5. In addition to the use of the system for telecommunications, a satellite service could provide an independent surveillance capability which may be desirable for both oceanic and domestic use. This possibility can be examined in detail during the early pre-operational phase of the proposed program.

6. To provide an improved international air traffic control capability by 1980 -- in both oceans and under ICAO agreements and standards -- will require a major effort. It will be necessary to negotiate these international agreements and standards beginning in about 1975. Moreover, avionics and ground system installations based on these standards should be started in 1977. Approval of the basic approach now is necessary if this schedule is to be met.

We should not underestimate the difficulties that must be overcome in sustaining U. S. initiative and leadership in this program. Many of the user airlines have reservations about moving forward now with an L-Band satellite system. This results in part from the premature investments which some have made in airborne VHF satellite communications equipment. They are also concerned that the total program has not been worked out and priced out in the detail that they would like to see. It is our judgment that this simply cannot be done until we have moved further into the pre-operational system.

In addition, the current view of most European countries is that aeronautical satellite services should be provided by government investment with an internationally owned and operated satellite. We believe that if we can establish at an early point the feasibility and desirability of the approach we are proposing in the Pacific area, these views can be changed. We do believe, however, that for the Atlantic pre-operational system, a mixed leased investment arrangement might turn out to be both feasible and desirable.

In any event, these problems and obstacles in our judgment are by no means insuperable. What we need, however, is a firm decision

to move forward and, most important, we must proceed rapidly with arrangements for leased services as we have described earlier.

The foregoing has been a very brief description of our proposal and the problems which we must address. We are enclosing a booklet that outlines in more detail the problem, our proposed solution, and our plan of action. It is, in all respects, consistent with the Administration's stated policy and the program as set forth by the Office of Telecommunications Policy. A decision is particularly urgent now as the countries of the Atlantic and Pacific oceanic areas are pressing strongly for early resolution of the issues. On June 15, 1971, as a result of arrangements made through the State Department, representatives of the European Space Research Organization (ESRO) and member States are meeting here in Washington to exchange views on issues relating to the aeronautical satellite program. To prepare for this conference, I believe it would be most useful to have a full exchange of views among representatives of this Department, the Department of State, the Office of Management and Budget, and the Office of Telecommunications Policy. We will be in touch with you to arrange such a meeting within a week if at all possible.

Meanwhile, we will provide your staff and that of the other agencies principally concerned with a full briefing on our proposals. I am sending a copy of this letter to the Department of State and the Office of Telecommunications Policy for their information and advice.

Sincerely,

Jim

Acting Secretary

Enclosures

cc:
Honorable U. Alexis Johnson
Under Secretary of State for
Political Affairs

Mr. Clay T. Whitehead
Director, Office of Telecommunications
Policy

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

(E)

JUN 1 1 1971

MEMORANDUM FOR HONORABLE JAMES M. BEGGS
Under Secretary of Transportation

Subject: DOT/FAA Aeronautical Satellite Program

We have reviewed your June 1, 1971, letter requesting OMB approval for a DOT/FAA program to establish oceanic satellite telecommunication services for air traffic control by 1980. My staff has conducted follow-up meetings with personnel from DOT/FAA, the Department of State, National Security Council, Office of Science and Technology, and the Office of Telecommunications Policy in order to understand the views of all agencies concerned with this project.

We share your belief that satellites provided through leased services are the best long-term solution to the problems presented by current communication limitations in the Atlantic and Pacific Oceans. We need to explore further, however, three areas of concern before release of an RFP.

(1) Development approach. Three questions concerning the satellite's development require discussion at the staff level:

- Why are two satellites rather than one required for pre-operational evaluation?

- Should the airlines, rather than the Government, fund the development of the avionics?

- Can NASA's Applications Technology Satellites (ATS-F, ATS-G), ground simulations, and Department of Defense experience with communication satellites be substituted for a dedicated development satellite?

(2) International co-operation. The staffs of the Department of State, National Security Council, and Office of Science and Technology see this program as an opportunity to further international co-operation in line with the President's overall objectives. We are sympathetic to this view and believe that the U.S. Government should fully explore the possibilities of making this an international project before we proceed unilaterally.

(3) Costs. More specific concepts of funding arrangements among DOT, the airlines, and other nations should be worked out before the issuance of an RFP in order to insure program commitment and continuation to prospective contractors. Concerning future year budget requirements, we assume that the aeronautical satellite has sufficient priority among the DOT/FAA programs that you are willing, if necessary, to reprogram funds in 1973 to accomodate future leased costs.

James L. Pelkey for

Donald B. Rice
Assistant Director

THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

Gio Marcona (F) (S)

aw Ltr

JUN 14 1971

Honorable William P. Rogers
Secretary of State
Washington, D.C. 20520

Dear Mr. Secretary:

I share your concern regarding the international aspects of aeronautical satellite services as expressed in your letter of June 4. We look forward to the June 15 - 17 exploratory talks with the Europeans and representatives of Canada, Japan, Australia, and the Philippines.

I am sure you are aware that in the development of the U.S. aeronautical satellite program, the Department of Transportation is being guided by the Policy Statement issued January 7, 1971, by the Office of Telecommunications Policy.

With warmest regards,

Sincerely,

/s/

John A. Volpe

G

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cy sent Sahn Trade

AUG 12 1971

Honorable U. Alexis Johnson
Under Secretary for Political Affairs
Department of State
Washington, D. C. 20520

Dear Alex:

Recent meetings in Paris and Madrid between the FAA and the European aviation and space communities have led to a tentative decision to proceed with definition of a joint European-U.S. Program for Aeronautical Satellite Services. As a result, preparation of a Memorandum of Understanding and joint procurement specifications will take place during the next few weeks.

The Administration's policy of 7 January 1971 embodied several principles which have a bearing on these activities:

1. Ownership of the system is to be in the private sector with the FAA service requirements provided through lease arrangements.

2. Procurement of services and equipment shall be through international competitive bid.

3. The institutional, technical, and financial arrangements shall be consistent with the possibility of a multiple user system.

4. Program development should proceed promptly leading to preoperational service in 1973.

In the coming weeks these principles will be translated into tentative working agreements in terms of procurement, financial, management

ownership, and operating arrangements. Accordingly, we would like to have your views concerning the specific arrangements to be incorporated in the preliminary agreements currently being drafted.

In view of the rapid pace of events, I would appreciate having your views by 20 August.

Sincerely,

Clay T. Whitehead

Identical letters sent to

U. Alexis Johnson
James Beggs
Jack Shaffer

cc: Mr. Whitehead
Dr. Mansur
Mr. Thornell

GFMansur:tw/jm 8/11/71

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

WASHINGTON, D.C. 20590

OFFICE OF
THE ADMINISTRATOR

(H) ⑦

23 AUG 1971

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

Dear Tom:

This is in response to your letters of 12 August to Under Secretary Beggs and to me which note the recent meetings in Paris and Madrid concerning a joint European-U. S. program for aeronautical satellite communication services and requests our views concerning the specific arrangements to be incorporated into the material being drafted.

In general, the specific arrangements will conform to the policy positions expressed in the OTP statement of 7 January, with clarification provided in your letter of 12 July. I am aware of no departures from this policy, except the practical difficulty of meeting the 1973 date at this juncture.

The specific basis for the proposed Memorandum of Understanding and joint procurement specifications is contained in the report of the Madrid meeting and associated summary of discussions. I have enclosed copies for your use. The Ad Hoc Group, formed at the earlier Washington meeting and extended by action of the Madrid meeting, met in Madrid on 4 and 5 August to prepare initial drafts of these two documents. The Ad Hoc Group met in Washington on 19 and 20 August to proceed with the drafting of the Memorandum of Understanding and will convene at ESTEC in Holland on 6 September for drafting of the RFP. In both cases, the drafting will conform to the understandings reached in Madrid.

As at all previous sessions of the Ad Hoc Group, continued representation from your Office is invited and would serve as the best vehicle for providing you with a direct input concerning the details and specific wording of both documents. Arrangements for attendance can continue to be made through David Israel of my staff.

In the event that you desire a personal review of the progress, I would suggest a meeting at your convenience during the week of 23 August.

Sincerely,

J. H. Shaffer
Administrator

Enclosures

DEPARTMENT OF STATE

Washington, D.C. 20520

20 AUG 1971

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

Dear Tom:

Under Secretary Johnson has asked me to reply to your letter of August 12, 1971 concerning the exploratory talks we have had with the Europeans and others on the establishment of an experimental pre-operational aeronautical satellite capability for international civil aviation purposes.

In accordance with the January 7 policy statement, this Department has sought to assist DOT/FAA in its efforts to develop an acceptable international framework for an experimental/pre-operational aeronautical satellite capability. We believe that DOT/FAA has made every effort to exercise its "unambiguous leadership" in accordance with the policy statement of January 7 and the Office of Management and Budget Memorandum of June 11, 1971. We think that the understandings reached in the meetings to date have had substantial foreign relations benefits for the United States and have paved the way toward rapid international action on specifications for an international system.

As you know, we are advising DOT/FAA on various foreign policy aspects of the draft Memorandum of Understanding which was discussed in Madrid. Representatives of your office are also participating in that process. We believe that these in depth, interagency discussions provide the best vehicle for determining how our policy goals can be realized in the context of our existing commitments and our foreign relations interest.

Sincerely yours,

Bert W. Rein

Bert W. Rein
Deputy Assistant Secretary
Bureau of Economic Affairs

J

(5)

17Sep71

Mr. John Shaffer
Administrator
Federal Aviation Administration
Washington, D.C. 20553

Dear Mr. Shaffer:

Discussions with the Europeans concerning the Aeronautical Satellite program have progressed to a point where the principal features of the arrangements are known. In discussions with other elements of the Executive Office it has been concluded that the issues involved are of sufficient importance to warrant an in depth policy review prior to formalization of a joint program.

Accordingly, you should postpone further discussions with the Europeans until such time as the policy review is completed.

Sincerely,

CTW

Clay T. Whitehead

cc: Hon. U. Alexis Johnson
Hon. James M. Beggs
cc: Dr. Mansur
DO's Chron
DO's Records
Mr. Thornell's Files

J/Thornell/pm/17Sep71

K

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

(IC)

WASHINGTON, D.C. 20590

OFFICE OF
THE ADMINISTRATOR

22 September 1971

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

Dear Mr. Whitehead:

After careful consideration of your letter of 17 September 1971, I have concluded that the Aerosat discussions with the Europeans (and others) scheduled for later this week and next should proceed as planned. As you know, we have been exploring the possibilities of a joint program with the Europeans as a result of OMB guidance of 11 June 1971. You will recall that at Madrid we explicitly conditioned our participation in the joint United States-European discussions upon additional internal review and final approval within the United States. Until this internal process is completed, further international discussions for essential detailed refinement will not commit the United States. On the other hand, cancellation of these discussions at this time will raise serious doubts concerning our credibility and motives.

In coordination with the Office of the Secretary of Transportation, we plan to respond to the OMB guidance within the next two weeks and describe what we believe is a basis for a successful joint program. We believe that this represents a suitable and proper occasion for a policy review.

Sincerely,

J. H. Shaffer
Administrator

cc: Hon. U. Alexis Johnson
Hon. James M. Beggs

(L)

September 24, 1971

Mr. J. H. Shaffer
Administrator
Federal Aviation Administration
Washington, D.C. 20590

Dear Mr. Shaffer:

Mr. Whitehead's letter of 17 September, which suggested postponement of Aerosat discussions with ESRO, was prompted by concern that continuation of the discussions before agreement within the Government upon the essentials of the U.S. position would be detrimental. As you know, we have serious reservations concerning the management, procurement, and ownership arrangements which have been proposed. Similar reservations have been expressed by industry, both aerospace and carriers.

Your letter of 22 September, indicates that the discussions should proceed as planned, subject to additional internal review by the U.S. Government.

If the FAA elects to continue the discussions, we believe it is essential to make clear to ESRO that the proposed arrangements are tentative and that further review is necessary.

Sincerely,

George F. Mansur

George F. Mansur

DD Chron
DD Records
Mr. Whitehead
Mr. Thornell

GFMansur/tw/24Sep71

M

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

WASHINGTON, D.C. 20590

OFFICE OF
THE ADMINISTRATOR

(m)

29 SEP 1971

Dr. George Mansur
Office of Telecommunications Policy
Executive Office of The President
Washington, D. C. 20504

Dear Dr. Mansur:

This is in response to your letter of 24 September and confirms that at the opening session of the present discussions on the AEROSAT program with the Europeans, Mr. Israel made it clear, as stated at Madrid, that the proposed arrangements are subject to further review within the U.S. Government.

I would like to take this opportunity to comment on several other matters. We acknowledge and fully appreciate the OTP's responsibilities with respect to the formulation of the Executive Branch's policies in the telecommunications field. I wish to make it clear that we have, to the best of our ability, been following the official policy statements produced by your Office over the past year. However, letters such as we received on 17 September from OTP concerning the delay of the meetings with the Europeans are somewhat unfortunate -- and especially the publicity thereto -- and could undermine our important relationships and dealings with the world's civil aviation community. We certainly appreciate your point that this preoperational AEROSAT program has implications well beyond FAA's unique aeronautical interests; however, it is also important to note that FAA interests, responsibilities, and commitments to international civil aviation go well beyond and are much deeper than the telecommunications aspects of the AEROSAT program. This duality must be recognized by both parties.

We also appreciate your concern regarding the institutional and related arrangements for the AEROSAT program. We share these and are mindful of the reservations expressed by industry. It is for these reasons that we now propose to answer OMB (which, as you know, asked us to consider an international program) with a proposal that the U.S. Government proceed on an investment basis and, further, that we and ESRO join on this basis in a single contract with a successful AEROSAT contractor. We believe that these two steps will further simplify the institutional arrangements and not in any way prejudice future arrangements for an operational system.

Sincerely,

J. H. Shaffer
Administrator

(n)

SEP 2 4 1971

MEMORANDUM FOR

Dr. Edward E. David

Improved over-ocean aviation communications through the use of satellites has been discussed since 1966, but financial, institutional, and technical problems retarded progress. In October, 1970, an Executive Office Working Group was formed to review policies under which the program should proceed, and the resulting Administration policy was set forth in a statement released on January 7, 1971. The policy and a subsequent interpretation by letter of July 12, 1971, included the following points:

- Projected increases in international air traffic will require improved communication services afforded by satellites in the Pacific and Atlantic Oceans in 1973 and 1975, respectively.

- Satellite communication services required by the FAA should be leased from the private sector and should be procured by international competitive bid.

- Any institutional arrangements for the procurement of services should not be inconsistent with evolution of a multiple user communication service (e.g., aeronautical and maritime), although significant program delay is not warranted to foster such service.

- International cooperation should be encouraged to the extent consistent with the above objectives.

This policy statement met with wide approval in the aerospace industry and with the communications carriers since it provided new opportunities for application of aerospace technology and evolution of new service opportunities for U.S. industry.

Discussions between the FAA and the European aviation and space communities, initiated in June, 1971, have departed substantially from the Administration policy. These tentative arrangements include:

1. Procurement plans and practices oriented first towards extensive research and development programs and only secondarily to providing commercial communication service, and which assure European industry a substantial share (approximately 50%) in the production of system equipment.

2. Management policies requiring unanimous agreement for all program decisions and which are designed to assure production and technology sharing.

3. Ownership arrangements requiring joint and equal ownership of the enterprise by a European government entity (European Space Research Organization) and a U.S. commercial firm.

4. In exchange the Europeans have agreed to pay 50% of the cost of the program, estimated to be $125-140 million. The U.S. share of this limited program would be $60-70 million.

The reaction of the U.S. communications and aerospace industries to the FAA/ESRO discussions has been universally negative. Most have formally expressed an unwillingness to risk venture capital because of the "bizarre" management and ownership provisions. The air carriers, both U.S. and international, being unsympathetic to any satellite program because of current operating losses, are especially opposed to the proposed joint FAA/ESRO program because of its government ownership and anticipated higher costs. The proposed program does bring in European money, but is far more costly than the competitively bid program originally envisaged and is likely to result in higher U.S. Government outlays overall.

Nevertheless, the State Department and FAA support the tentative arrangements because of "our existing commitments and our foreign relations interest," and ESRO and the several European governments view the program as beneficial to European space technology and commerce.

As agreed, we have directed the FAA to suspend negotiations with the Europeans pending an Executive Office review. Because the lifetime of the proposed pre-operational satellites is such that any institutional agreements formulated now will continue through the next decade and establish important precedents, our proper direction at this time is crucial.

There are two central issues: (1) Is the U.S. Government willing to appease the European desire to bolster their electronic and aerospace industry at the price of severely limiting U.S. industry's opportunity to compete and to utilize U.S.-developed technology to the economic advantage of the U.S.? (2) Does the U.S. wish to encourage international communications to develop on the Intelsat model of a jointly-owned, jointly-managed international organization or to encourage a cooperative but private enterprise framework?

I believe the answer to both questions is clearly no -- especially while this Administration is in office. I further believe we are faced with a clear challenge by the Europeans, the State Department, and FAA, to the President's determination in this area.

I propose to request the FAA to redirect the program to be consistent with the objectives expressed in the Administration's policy of January 7, 1971. This will require:

1. Alteration of the proposed management arrangements to a "joint" program restricted to coordination, and with space segment services provided by the private sector.

2. Reaffirmation of the principle of competitive bidding to assure optimum price, quality, and delivery for equipment and services.

3. Decisions regarding ownership of the space segment be reserved to private management choice and initiative, and without U.S. Government guarantees of ownership to the Europeans.

4. Careful distinction be drawn between prerogatives that may be afforded users of the system and the rights attributable to ownership of any part of the system to assure an environment favorable to private investment incentives.

Alteration of the tentative FAA/ESRO arrangements at this time will upset the European space community. Since ESRO is closely coupled to the European governments, we may anticipate an unfavorable reaction from the French and German governments, and to a lesser extent the U.K. The commercial international air carriers will, in general, support any move which reorients the program toward aviation rather than space research and development.

I believe that the United States can by adept negotiation minimize the effect on the European nations. If negotiations with the Europeans do not result in satisfactory arrangements in a reasonable time, we probably would elect to proceed unilaterally in the Pacific basin, for which the U.S. has air traffic control responsibility, and simply defer implementation of the Atlantic basin program. We would , of course, continue to seek technical coordination. And, of course, U.S. industry would have a significant leg-up in getting the Atlantic basin business if this occurred.

I would appreciate your views by Wednesday, 29 September.

George F. Mansur

Clay T. Whitehead

GFMansur/tw/24Sep71

DD Chron
DD Records
Mr. Whitehead
Mr. Thornell

THE WHITE HOUSE

WASHINGTON

(a)

September 30, 1971

Dear Tom:

I am sympathetic with many of the views expressed in your memorandum to me of September 24, 1971. However, I don't understand the implications of the courses of action open to us at this stage. A set of realistic options needs to be developed using both the policy documents and the product of the working level discussions with the Europeans before a decision can be made on our future course of action. In developing these options, we should be guided by the need to preserve essential U. S. interests while at the same time engaging the Europeans in a meaningful--and workable--cooperative endeavor.

I suggest that you organize, on an urgent basis, a group to develop these options and to review the current status of this program. I believe the points you have raised deserve careful consideration before we proceed to any definitive agreement with the Europeans on this program but a delay in resolving these issues would be likely to affect our relationships with the Europeans and prejudice our ability to gain international agreement in ICAO on aeronautical satellite services.

I expect Dr. Russell C. Drew of my staff to be available to participate in additional discussions of these questions and I, of course, would be pleased to discuss it with you personally at an appropriate future date.

Sincerely,

Ed

Edward E. David, Jr.
Science Adviser

Mr. Clay T. Whitehead
Director
Office of Telecommunications Policy
Room 770, 1800 G Street, N. W.
Washington, D. C. 20504

THE WHITE HOUSE

WASHINGTON

October 14, 1971

Dear Tom:

I appreciated your recent memorandum bringing me up-to-date on the latest developments in the Aeronautical Satellite Program (AEROSAT).

As you know, I am extremely interested in situations in which the U.S. may be involved in transferring technology abroad without reaping the full commercial benefits that should flow to the U.S. from such transactions. Because my familiarity with the many complex technical and foreign policy issues at stake in the current AEROSAT negotiations is far from complete, I am not able to judge the merits of the specific recommendations that you have made in your memorandum.

I do agree, however, that the appropriate Executive Offices, perhaps headed by OMB, should review the situation within a 30-day period and examine the alternatives to the present course of action.

Best regards.

Sincerely,

Peter G. Peterson
Assistant to the President
for International Economic Affairs

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

(4)

THE UNDER SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

OCT 7 1971

Mr. Donald P. Rice
Assistant Director
Office of Management and Budget
Executive Office Building
Washington, D. C. 20503

Dear Mr. Rice:

In your memorandum of June 11, 1971, prepared in response to my letter on this subject of June 1, 1971, it was requested that three aspects of the aeronautical satellite program be explored further, namely: development approach, international cooperation, and funding. As suggested, the first subject has been discussed with your staff and satisfactorily resolved. This letter addresses the international cooperation and funding considerations.

Background

In accordance with your suggestion, the FAA, together with representatives from the Office of the Secretary and the Department of State, with observers from OTP and in periodic coordination with other Executive Offices, conducted a series of meetings beginning in mid-June (and extending to the present) to consider a joint pre-operational aeronautical satellite program with representatives of countries directly concerned with civil aircraft operations in the North Atlantic and Pacific Oceans. The first meeting in Washington and a meeting in early August in Madrid were conducted at ministerial level, with the U. S. delegation at Madrid led by the Administrator of the FAA and the European delegation led by General Salvador, Spanish Minister of Aviation. The European group represented ten countries which are also members of the European Space Research Organization (ESRO). Representatives of Australia, Canada, Ireland, Japan, and the Philippines have attended these meetings.

Joint Program

The unanimous conclusion of the Madrid meeting was that a joint program to achieve a preoperational aeronautical satellite capability was necessary, attainable, and mutually desirable. The nature of the recommended program is described in the Madrid meeting report, a copy of which is enclosed. Also enclosed is the latest draft of the proposed Memorandum of Understanding whose signing by designated participants (FAA for the U. S.; ESRO for Europe) would initiate the joint program.

In short, the joint program would provide a four-satellite pre-operational capability, with two each over the Atlantic and Pacific, by the mid-1970's based on the principle of equal sharing of costs and responsibilities of the space segment by the U. S. and the ESRO group. The efforts on the avionics and earth segments would not necessarily be jointly funded but would be carefully coordinated by the participants. Arrangements are also provided for participation by other countries. (At this time, Australia, Canada, and Japan appear to be the most promising candidates for other participants.)

International Cooperation

DOT believes that the arrangements outlined in the Madrid report are highly satisfactory and represent an outstanding example of international cooperation. We understand that this view is shared by the Department of State.

We believe that these "partnership" provisions, to include participation by other countries, represent a mutually satisfactory arrangement and one which is also in the best interests of the U. S. The program discussions have been exemplified by a spirit of international cooperation and a strong interest in the advancement of international civil aviation. We fully expect that this attitude and interest will continue and provide a very successful preoperational system which will lead to establishment of an ultimate operational capability under ICAO standards.

Economic Aspects

Beyond the aspects of international cooperation, the program is favorable to the U. S. in the economic sense. The Europeans are

sharing all costs of the space segment. The result is that the joint program meets all our requirements at a smaller cost to the U. S. than a unilateral program. There will also be a positive balance of payments of some $15-22.5M representing the European share of the launch costs.

Using the guidance of a leased service, as stated in OTP's policy statement of January 7, 1971, we have developed what we believe to be the most simple and direct institutional arrangements possible under current circumstances, to allow the U. S. to utilize a leasing arrangement in the AEROSAT program. Both the FAA and ESRO would have separate contracts with the successful AEROSAT contractor. The U. S. contract would be for the lease of one-half of the total capability, that half of the capability to be owned by the AEROSAT contractor. The ESRO contract would be for the purchase and ownership of the other half of the total capability. Thus, the contractor will sell one-half of the capability to ESRO and own the other half which it leases to the U. S. (FAA).

Lease Versus Investment

We have studied this lease/ownership arrangement and discussed it with U. S. industry. It is our conclusion that the arrangement can be made to work; however, we believe that it is neither a practical nor desirable arrangement due to combining of lease and investment provisions in an already complex joint international venture.

We believe that a U. S. investment position in this program will solve this problem and will also present a number of other advantages. A common investment position will materially simplify the institutional arrangements and will permit a single FAA/ESRO contract instead of two. U. S. investment, without the large capital requirements on a contractor, will provide for a much wider range of industry interest and competition. U. S. investment with government-furnished launches provides for a deferral and potential saving on launch costs. Also, U. S. government ownership of the ground stations will permit easier transition to an operational system.

We also believe that cost savings in at least two areas will accrue from a U. S. investment policy. First, there are potentially significant savings in the administrative, procurement, and legal

personnel (both government and industry) who would otherwise be required to establish and monitor two contracts and to set and negotiate lease rates on one of these contracts. Second, all discussions with industry indicate that the costs imposed by contractors to account for the program risks necessarily involved in a leasing arrangement will far exceed the 10 percent dollar discounting advantages normally associated with a lease contract.

With the U. S. participating on an investment basis, we would nevertheless retain the many beneficial aspects of a leased service contract by purchasing a communication system rather than pieces of equipment.

Accordingly, on institutional and financial grounds, we now conclude that the special nature of this preoperational system as a joint international venture (with a European partner who has no desire to lease his services) requires that we participate on an investment basis rather than on a lease basis. Hence, we strongly recommend that the U. S. proceed in a manner which will provide for joint satellite ownership, by the U. S. and Europe. We believe that the OTP policy was never intended to cover the present situation--a joint international program--and conclude that leasing in this situation does not meet the "feasibility" criteria enunciated in the OTP policy, from either the U. S. government or U. S. industry point of view.

We should point out that while this investment position is strongly indicated for the preoperational system, we believe that a leasing arrangement is the most desirable approach for the follow-on operational system.

Request for OMB Approval

Accordingly, we request OMB approval and support to proceed with the joint satellite program described in the Madrid report except as modified to account for U. S. investment in the space segment. The U. S. investment cost of the space segment is expected to be about $60 million spread from FY-72 through FY-75. We will reprogram to meet the limited FY-72 requirements and will include the FY-73 portion in an amended or supplemental budget submission to you. (Beyond the $60 million, our efforts in the avionics and ground segments and in evaluation and exercising activities are expected to total about $70 million through 1980, and are included in our FY-73 submission and ten-year planning documents previously submitted to you.)

In view of the current position of the potential users of the system (see below), and the lack of interest in the project by general aviation, we would propose that the program be handled under the General Fund.

With early approval, we plan to meet the following schedule:

1. U.S. Agreement on Memorandum of Understanding by October 20, 1971.

2. Signing of Memorandum of Understanding on November 3, 1971.

3. Release of RFP by mid-November 1971.

We would expect that FAA and ESRO could be on contract by very early in FY-73.

OTP

Our informal discussions with OTP indicate that they do not share our belief that a program based on the Madrid report is a useful or feasible one, with or without modifying the U.S. position to an investment basis. Nevertheless, we are convinced that a joint international program as described, with both parties participating on an investment basis, represents the only realistic and truly cooperative joint effort which can be obtained. Further, such a program would be an extremely favorable one for the U.S. The only alternative would be the unilateral U.S. program in the Pacific which we originally proposed to OMB; however, we now believe this is no longer an acceptable alternative and strongly recommend that such a program not be considered.

Air Carriers

In closing, we must acknowledge that the U.S. international air carriers have expressed doubt about the desirability of the AEROSAT program. Their misgivings do not stem from the international aspects of the program but rather from their concern over its projected cost and their uncertainty of future cost impact. We have assured the carriers that neither we nor the Europeans plan any

user charge for the preoperational service and that the proposed program is the only feasible way to reach a 1980 goal of an operational system of whose need we are all in agreement.

We believe we must move ahead on this program now to provide the ATC oceanic service required in the late 1970's and that the foresight of the carriers is hindered at this time by their justifiable concern with the current economic situation. We believe we have made every effort to minimize the costs of the AEROSAT program and that it can and should go forward at this time without detracting from the large R&D efforts which we and they believe are necessary in other areas of air traffic control.

Recognizing the complexity of this entire matter, we are prepared to provide you with more detailed briefings and discussions of the points made in this letter.

Sincerely,

Enclosures

COMMUNICATIONS SATELLITE CORPORATION

JOSEPH V. CHARYK
President

September 1, 1971

Dear Tom:

I am enclosing a copy of a memorandum to me from John Martin which I believe summarizes very well the basis for our serious concern regarding the viability of the course apparently being adopted in connection with U.S. participation in a joint United States-European aeronautical communications satellite program. I would certainly hope that the course of action could be reviewed before a final commitment is made.

Sincerely,

Joseph V. Charyk

Encl.

Honorable Clay T. Whitehead
Director
Office of Telecommunications Policy
1800 G Street, N.W.
Washington, D. C. 20504

COMSAT

INTER-OFFICE MEMORANDUM

Date: August 26, 1971

To: Dr. J. V. Charyk

From: J. L. Martin, Jr.

Subject: Outlook for Comsat Participation in Aeronautical Satellite Program

1. Negotiations are continuing between the U.S. government representatives and the Europeans to refine the details of the broad agreement reached in the Madrid meeting. All that we have been able to learn indicates that the general approach remains unchanged from that outlined in the 3 August FAA debriefing to U.S. industry.

2. Aside from considerations of a legal, financial and operational effectiveness nature, the approach which is currently being taken by the U.S. has very serious negative business incentives from Comsat's viewpoint, which are summarized below:

a. The proposed actions seem to reflect a strong interest in excluding communications carriers (without actually saying so) and limiting the participation of industry to hardware manufacturers. The time period for the pre-operational system of four satellites being considered extends over ten years into the future after the contracts have been signed, even if the program is not extended through use of the two spares (two and a half to three years to first launch, three years between the first and fourth launch, and five years satellite lifetime in orbit). It seems obvious that, regardless of the number of initial users of such satellites, if this program is initiated, other aviation administrations, and eventually, some airlines, will desire to obtain some service through these satellites before this pre-operational period is concluded. Obviously, this is a communications carrier function, yet all consideration of industry participation in the proposed program is exclusively centered on hardware manufacturing and manufacturing consortia.

b. The proposed "lease" by the U.S. clearly contemplates a lease of satellite hardware rather than a lease of communications links. This fact, coupled with several other aspects, apparently is intended to prevent aeronautical satellite service from being obtained in a communications carrier fashion, such as the provider of service to the U.S. also being able to provide service to other aviation administrations, and, in time, to airlines. The proposed "lease" is rather a purchase of satellite hardware on the easy payment plan, with no money down and payments extending over the full lifetime of the hardware, with 100% warranty throughout this period.

c. The proposed arrangement actually prevents provision of communications links to the U.S. rather than satellite hardware, since the "lease" of satellites is to be determined separately from the provision of the U.S. earth stations, and, in fact, these may not even be supplied from the same source. In any event, the bids concerning either satellites or U.S. earth stations cannot be based on the provision of communications service, but must be based on the separate provision of satellite and earth station hardware.

d. The point has been made formally in the negotiations between the U.S. and the Europeans, and subsequently emphasized in the debriefing to U.S. industry, that neither the institutional nor the procurement arrangements for the pre-operational system are intended to pre-judge corresponding arrangements for a follow-on operational capability to enter service about 1980. From a purely business viewpoint, this means that a bidder must ignore the realistic depreciation periods of various aspects of his proposed investment and consider this program as a one-time dead-end venture, with no reasonable basis for expecting any future recovery of any less-than-normal revenue obtained in the initial service period. He must ignore the fact that several of the initial program of six satellites may have several years of useful life left at the start of the follow-on operational program, and he must price his program to obtain the full return he expects in the initial pre-operational period. Aside from the obvious impact on the smoothness and operational effectiveness of the transition from pre-operational to operational service, the business incentive of this arrangement is certainly negative.

e. The proposed course of action also puts the U.S. industry in an extremely unfavorable position in several major respects. Although this industry is expected to finance the portion of the

satellites allocated to serving the U.S. needs, and to take the risk of this venture on the expectation that the satellites will perform satisfactorily throughout the specified pre-operational period, it is to have no voice in the determination of the system hardware specifications. It is to be a part owner of this hardware, and must in effect guarantee that it will perform satisfactorily for the entire planned lifetime, as that is the only basis for recovery of the investment and return on investment. Yet this industry is to be subject to detailed program technical direction and supervision in the manufacture, test and launch of these satellites, detailed supervision and direction of its investment, on which it takes the risk. In contrast, the other part-owners of these satellites not only are to have a full voice in the determination of the hardware specifications; they are to have a full voice in the selection of the U.S. industry which will be involved, and in the subsequent technical direction of the work of that industry.

3. On balance, the proposed arrangements, through unnecessary and unrealistic provisions, are setting the stage for the conclusion that aeronautical satellite services are not practically available on a commercial basis. Yet in reality this conclusion would be simply the direct consequence of the manner of seeking the service and the constraints imposed on the potential provider. The conclusion that the aeronautical communications services cannot be obtained on a commercial basis would be totally unwarranted, for they would not only have been precluded by the imposed conditions; they would not even have been the objective of the selection process.

4. We have continued to point out in our discussions that Comsat considers the provision of all communications services being contemplated for the aeronautical satellite program to be well within the present state-of-the-art and completely feasible to be provided on a commercial communications service basis, including voice, data, and surveillance communications, from the points of origin in aviation control centers and airline operational centers to the earth stations and through the satellites to the aircraft, and vice versa. We have brought up our repeated offer to provide such service, and pointed out that we remain interested in doing so under conditions which offer appropriate business incentives to invest the capital required and which permit appropriate company management over all aspects of its investment consistent with the risks of such investment. We have stated that we are quite willing to enter into a

joint ownership arrangement on an international basis, subject to these conditions, and indeed feel that this would be in the best interest of the U.S. as well as other initial and potential users of aeronautical services, providing a sound basis for growth on a fully international scope, and a smooth and orderly progression from pre-operational to follow-on operational services. However, we can see no indications that these views are having any effect on the approach being taken by the U.S. in the current discussions. All of the discussions are based on selection of hardware manufacturers rather than providers of communications services. We have repeatedly suggested a two-step selection process in which the U.S. entity to provide the U.S. services would be selected in the first step, by the U.S. Then this entity would proceed in a second step to select the hardware manufacturers in conjunction with its European partners in the ownership of the system, and on equal terms commensurate with the equal investment and equal risk involved. The hardware manufacturers would be selected on the basis of international competition. However, it is evident that this suggestion has not received any acceptance. The single-step selection of a manufacturing consortium continues to be the intended procedure. The provider of services to the U.S. will be determined by the outcome of this selection on the basis of a hardware bid.

5. Obviously, this is not a satisfactory outlook from Comsat's viewpoint. We can only hope that the current program discussions will result in changes to the announced plans and evolve into an approach under which it would make sense to consider submitting a bid.

John L. Martin, Jr.

S

COMMUNICATIONS SATELLITE CORPORATION

October 11, 1971

Mr. John D. Young
Chief, Economics, Science and
Technology Division
Office of Management and Budget
Executive Office Building
17th & Pennsylvania Avenue, N.W.
Washington, D. C. 20503

Dear Mr. Young:

In confirmation of our meeting on October 7, 1971, we wish to summarize our views relative to the current planning by the U.S. Government in the establishment of an Aeronautical Communications Satellite Program.

Lease vs. Buy

As stated in recent FAA briefings to industry it is understood that consideration is being given to the initiation of a program for the procurement of communication satellite hardware (rather than services) to satisfy air traffic control requirements.

The Communications Satellite Corporation has stated a willingness to make the investment necessary to provide these services. In fact, a proposal was submitted to the FAA in January 1969. The proposal was based on the use of VHF frequencies and was amended in May 1970 to provide these services at VHF and L Band. The satellite technology required to satisfy the requirements of aeronautical services is sufficiently developed that they can be satisfied on a commercial basis. The only experimentation involved is in the efficient operational use of this capability to optimize its application to improved air traffic control and safety.

Policy

It is our understanding that it is not only the published policy but the practice of the Government to procure commercially available services when available. This policy has been stated in B.O.B. circular A-76 and the Executive Offices of the President in January 1971 restated this policy specifically with reference to Aeronautical Services. As a corporation we have invested a considerable amount of discretionary funds with the understanding that we would have the opportunity to compete for these services.

Cost

We believe the policy is in the best public interest and if implemented would result in the service being provided at a lower total cost to the Government. The procurement of communication services would also make it unnecessary for the government to make the large capital commitment associated with the procurement and operation of the system.

The leasing of the communication service would result in lower cost because a carrier could:

1. Establish a price for the service that would take into consideration his ability to provide the service to other customers.

The present plan is to initiate a spacecraft hardware contract in early FY 1973, the launch date would be from two to three years of this date, and with an expected satellite lifetime of five to seven years the initial launches would provide a service until 1980 to 1983 and subsequent planned launches to approximately 1985. It is inconceivable to us that in this time period other potential markets and users would not develop. Specifically the maritime industry and ARINC are potential users of the service.

2. The Communications Satellite Corporation would, as is its current practice, amortize the cost of the associated earth terminals over an extended period rather than over the expected lifetime of the first generation satellites.

3. Many of the intangible but real cost of the Government providing its own system would be reduced or eliminated.

Requirements

There is reason to believe that the recently stated requirements for a minimum of 12 channels, with 26 desired over each ocean will provide a capability considerably in excess of that required for a pre-operational system. The earlier studies which formed the basis for the establishment of this program proposed a system of 4 channels per satellite.

In the event the planned capacity is:

(a) provided by the government and is in orbit until 1985 and

(b) the maritime and air carrier industry services market grows as expected the government will be required to:

1. let any excess communication capability go unused; or

2. delay the date in which a private company can offer such services to private users because the Government is either offering the service free or at a price established from sharing the cost of the Government system resulting in less cost to a potential user than that required to establish a new private system; or

3. the Government be directly involved in the communication services business and indefinitely preclude private interests from being able to make the investment required for the establishment of this service.

The thought that the present proposed system with its planned capacity is a pre-operational system and that the operational services would be commercially procured at a later date is completely unrealistic.

Flexibility

We are confident, based on our experience in developing competitive proposals in support of the Domestic Communications Satellite System, that the provisions of a leasing arrangement for aeronautical communication services can be negotiated which will economically provide the Government with complete freedom of action in the use of the system.

Management

It is understood from the industry briefings that decisions regarding the day to day management of a spacecraft contractor as well as the percentage of hardware manufactured in Europe and the United States is being determined as part of government to government agreements. We believe that this will require the cost of any resulting program if it is successful to necessarily be considerably in excess of what is required. This situation is further aggrevated if there is a dicodomy? of objectives in the managing bodies; ie, ESRO (European spacecraft technology development) and FAA (establishment of a pre-operational service). If the services are to be successfully provided it will be necessary for those that have a financial interest in the establishment of the system to have control of decisions effecting its development.

This does not mean that European participation would not be significant. On the contrary, this would be a major factor in the selection of the aerospace contractor to build the spacecraft. COMSAT has had considerable experience in the development and use of non-U.S. aerospace technology in the development of INTELSAT III and IV. We would make a competitive award to a spacecraft contractor based on a balance of his non-U.S. participation, cost, delivery, management and technical proposal. A pre-established arbitrary percentage of European participation is incompatible with the desire to provide a pre-operational aeronautical service satellite for a reasonable cost with long life reliability and early delivery.

In summary, it is our conclusion that (a) there is no need for the Government to incur the investment associated with establishing its own satellite system; (b) doing this would preclude the possibility of private common carrier interests of providing this service indefinitely; (c) it is possible to satisfy the need for a pre-operational system and share the costs with other potential users as well as involve European industry in a managerial way; and (d) the present proposed management arrangements do not contain the essential ingredients necessary for the program to provide aeronautical communication services at either the earliest date or lowest cost.

We trust that your consideration will be given to these thoughts and we would appreciate being advised of any questions or comments.

Very truly yours,

John A. Keyes
Director, System Requirements

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AERONAUTICAL RADIO, INC.
2551 RIVA ROAD, ANNAPOLIS, MARYLAND 21401

August 27, 1971

File: 07-15-2

Mr. Jack Thornell
Program Manager
Office of Telecommunications Policy
Executive Office of the President
Washington, D. C. 20504

Dear Mr. Thornell:

Reference your telephone call of August 24 and confirming our conversation of this date, the following are reasons generally offered as to why the airline community is opposed to the present U. S.-ESRO satellite program.

1. The system is not required. The present program involves aircraft positioning as well as communications. The positioning function requires an extra satellite for each ocean and the airlines' firm position is that positioning service in oceanic traffic control is not needed. Position by inertial navigation with which all the international carriers are equipped gives excellent accuracy with even further refinements possible. A digital communications system to report INS derived position to the ground is needed and this is one compelling reason a satellite communications system is needed. A computer-driven traffic control display, using INS-derived position sent to the display via data link, is now in operation at the Oakland, California, Air Route Traffic Control Center. Controllers are said to be enthusiastic about it. As you well know, INS, besides providing aircraft position to the pilot, also furnishes the gyro platform that today's aircraft require. Thus, the added complexity to provide navigation service is reasonably priced. Air traffic control services at the moment do not require another method to determine position. What is needed is a means to use the sensing systems already available.

2. Expense: I can't get a real feel for the expense of the present U. S.-ESRO proposal. Nearly everyone I have talked to thinks the $140 million figure is about one-half of what it should be. The avionics cost is also unknown and will remain uncertain as long as this proposal lacks system definition and system design. The one thing agreed to is that the airlines cannot afford it, particularly in view of the recurring nature of the cost of the space segment.

3. The airlines have really not been a part of the present program. FAA has been conscientious, we feel, about reporting their progress to us but, aside from that, we have not been consulted and, of course, have not participated in it.

4. Technical Uncertainties: I have already touched on this, however, it seems that we are buying an awfully big system when it is considered the technical feasibility of what we are trying to do has yet to be established. We have recommended NASA's ATS-F and/or ATS-G be used to establish technical assurance. It would require some reprogramming of what is to be done on ATS-F and maybe even delay the final system if the experiments had to be carried on to ATS-G. The delay would not concern us.

5. Which brings me to the final point and that is that the urgency that apparently was here 18 months ago is no longer present; not only has the forecast growth in trans-Pacific and trans-Atlantic flights not materialized, but with the wider bodied jets now present we are actually flying fewer schedules than we did last year and the year before. There are still more wide bodied jets to come and, unless there is a business upturn, an increase in trans-oceanic traffic must be considered doubtful. Our new monetary policy may further limit foreign travel.

Obviously, I have had insufficient time to coordinate this reply with the airlines. It is, therefore, my personal summation of the thoughts most frequently expressed by the airlines, the Air Transport Association of America, and us.

Very truly yours,

AERONAUTICAL RADIO, INC.

J. Francis Taylor, Jr.
President

(7)

OCT 13 1971

MEMORANDUM FOR MR. FLANIGAN

The issues which have arisen in connection with the Aeronautical Satellite Program are of a broad and fundamental nature, and the program itself is simply the current focal point. This Administration is committed to creation of an environment which will foster new business opportunities in the private sector, and I believe that space communications technology is sufficiently advanced so that a wide range of new communications services are now commercially viable. Several major communications carriers and aerospace firms have expressed strong interest in construction and leasing of facilities to provide for the needs of the aeronautical community, and the maritime and public telephone communities as well -- if the private enterprise institutional arrangements are reasonable.

The Europeans, and especially the French, also recognize the commercial potential of this technology and the leading role of the aeronautical satellite program in gaining a lead in the broader market. The Europeans have a twofold interest: first, their space industry hopes to acquire and develop technology from the United States and to obtain major concessions in the manufacture of space and avionics equipment; and second, they wish to exercise a disproportionately large control of not only the Atlantic portion of the system, but also the worldwide system. Accordingly, the institutional arrangements advanced by the Europeans and accepted in large measure by the FAA have been designed to achieve these objectives. These arrangements include European power of veto for all program management decisions, guarantees of an equal share in research, development, and manufacturing activities for the space segment, and 50% ownership of the resulting enterprise in conjunction with a U. S. contractor.

These proposed arrangements are universally opposed by U. S. communications carriers, aerospace industries, and air carriers. My Office has been informed by all of the possible contractors that the "bizarre" arrangements virtually prohibit investment of the risk capital necessary

for construction of the system. Even the FAA has recognized that the arrangements are not workable and is now proposing that the U. S. share of the system be Government owned, with government-to-government joint ownership and management.

These issues are symptomatic and typical of those which arise between the U. S. and European governments, especially France, in all discussions concerning electronics and communications programs. NATO is confronted with an identical set of issues, and we have been informed that the Europeans are closely watching events in the Aeronautical Satellite Program as a possible precedent for NATO and other programs.

The FAA and the Department of State will argue that the discussions are so far advanced that it is impossible to make alterations in the program. I do not believe this to be the case. Although there will certainly be strong negative reactions, in comparison to other new economic policies, the effect will be minimal.

There is great pressure from the Europeans and the State Department to extend the precedent of INTELSAT -- i.e., international communications to be handled as a joint venture among governments rather than as a commercial activity. The INTELSAT arrangements are bad enough as precedent, but they are nothing compared to this situation. It is my firm view that the precedent that would be established by the current FAA plan will foreclose any chance we have to see international communications develop as a private sector activity. I am also concerned that if on an issue so clear cut as this we are not willing to be firm with the Europeans and accept some tactical unhappiness on their part, then we will not be able to stand up to the President's objective of developing U. S. technology to the benefit of U. S. trade and economic strength. (I note one example in passing: We are now getting cables indicating that the Europeans would like to see this kind of arrangement to see the aeronautical satellite arrangements serve as the model for post-Apollo space cooperation broadly.)

In addition to the substantive issues above, I must make it clearly understood that the effectiveness of the Office of Telecommunications Policy as an Executive Office will be seriously compromised if the Aeronautical Satellite Program continues on its present course -- directly contrary to policy guidance we established with the unanimous agreement of all concerned Executive Office agencies.

Clay T. Whitehead

cc: Mr. Whitehead
Dr. Mansur
Mr. Thornell

GFMansur:tw/jm

DEPARTMENT OF STATE

Washington, D.C. 20520

OCT 20 1971

Mr. Donald B. Rice
Assistant Director
Office of Management and Budget
Executive Office of the President
Washington, D. C. 20503

Dear Mr. Rice:

On October 7, Under Secretary Beggs of the Department of Transportation informed you by letter of the status of the exploratory discussions with the Europeans and certain other countries in respect to a joint experimental preoperational aeronautical satellite program.

This Department fully supports the joint program which we believe is the best available means of moving toward required international agreement on operational standards for satellite-based air traffic control by the Administration's target date of 1980. We also believe that this cooperative international effort among the major aviation countries will create conditions necessary for reordering international air traffic control responsibilities in a manner which takes full advantage of the potential of improved communications for centralizing and automating air traffic control and hence effecting economies in en route charges which heavily affect U.S. carriers and passengers. These and other considerations are explored in more detail in the enclosed paper.

Major European countries have had a continuing interest in participating in the development and management of satellite communications for air traffic control. This interest was evident in the negotiations on definitive arrangements for INTELSAT (where European pressure resulted in placing such communications services in a special category requiring government approval for INTELSAT action), in continuing bilateral approaches to the United States, in the public statements of the European Space Conference, and in European initiatives within the International Civil Aviation Organization seeking to require that Organization's prior approval of any preoperational efforts. The European Space Research Organization has contracted for and received three system designs for a

European preoperational system. Thus, the Department believes that any U.S. preoperational efforts should take account of the interest and capabilities of our European allies and be consistent with the President's stated intention to pursue opportunities for international space cooperation in general and specifically with the Europeans.

The proposed program is of sufficient interest to the Europeans that they have made substantial concessions to our preferences. For example, they are willing to assume half the full program cost for a combined Atlantic/Pacific capability despite the fact that United States authorities will utilize about two-thirds of the system capability without user charges. While the Europeans are assured a "fair and reasonable" industrial opportunity, they have accepted the balance of payments outflow of half the launch costs (approximately 15% of total program cost), of half the administrative cost of a management facility almost certain to be located in the United States, and of necessary U.S. procurement to fulfill contractual obligations allocated to European subcontractors by an anticipated U.S. prime contractor. Most important, they are entering the joint program with the express understanding that these arrangements are applicable only to preoperational efforts to work toward ICAO standards and that the United States fully intends that operational traffic control communications be provided by a commercial entity and integrated into a multiple user system.*

We are concerned that European governments (and Canada) would be gravely disappointed by U.S. rejection of these agreements and would interpret it as a U.S. refusal to participate in any effort which we could not dominate. Such an attitude would be totally inconsistent with the President's posture toward our major allies.

Equally important, the likely European reaction to a U.S. decision to proceed unilaterally in the Pacific would be a parallel unilateral European effort in the Atlantic and a boycott of our Pacific system. While this effort might be slow to bear fruit, there is every likelihood that Europe

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*The January 7 OTP Policy Statement states that "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".

would produce a system (which we are committed to launch) and that the present political alignment of ICAO would result in acceptance of European specifications despite their technical or economic inferiority. Such a risk, combined with the adverse foreign policy consequences of program rejection, seems intolerable from our point of view.

Technological superiority is, of course, of commercial significance only when it results in producing saleable products. In air traffic control, governments are the principal customers and foreign governments control their air carriers which are the other principal source of system patronage. Thus, there must be a balance between the preservation of U.S. technological superiority and the need to preserve the potential market. Since this project will be a first crack at a mobile service communications satellite, what is likely to be most important in future technical terms is how a second generation, multi-purpose satellite can be improved on the basis of this experience. A U.S. lead contractor, responsible for overall systems design and coordination, should be in a far better position for future competition than any limited European participant.

At the same time, a cooperative program will enable us to have a determinative voice in ICAO specifications and preclude the development of a rival system. In an operational phase, the number of customers will extend far beyond those interested in manufacturing, thus creating pressure for broad procurement competition as in INTELSAT.

In sum, therefore, the Department of State believes that:

(1) Agreement on appropriate standards for an operational system by 1980 requires major European participation in the preoperational program;

(2) Reduction of overall cost of the preoperational program requires major European participation;

(3) Achievement of balance-of-payments advantages in the preoperational phase requires at least major European participation and hopefully broader participation;

(4) Major European participation is attainable only if Europe has a significant role in program management and European industry can participate on a reasonable basis;

(5) The proposed program provides for European participation on a reasonable basis consistent with U.S. objectives and our overall foreign policy posture toward Eurone;

(6) European interest, cohesion and capability in this matter is sufficient to support a successful joint effort.

With respect to Under Secretary Beggs' request for authority to conduct the U.S. portion of such an experimental/preoperational program on an investment basis rather than a lease basis, we have more limited comments. We recognize the "unambiguous leadership" conferred upon DOT/FAA by the January 7 OTP Policy Statement and we have no reason to dispute the FAA's views that it must play a major management role in the joint project through the proposed Joint Program Office. With FAA exercising this responsibility, making a U.S. private contractor responsible under lease for system performance would result in duplication of management structure and threaten conflict between the leasor's management views and those of the FAA. A lease arrangement might also throw upon a private contractor the risk of launch failure (which is totally within Government control) and create a boom or bust contract depending on launch experience. Moreover, a lease arrangement combining hardware and services with international contractor selection raises serious precedential questions which might delay the program, when a very similar degree of private participation might be obtained by contracting separately for hardware and operation of control facilities and earth stations. Finally, Under Secretary Begg's comparison of private and Government financing charges seems most appropriate.

From the international point of view, an investment arrangement would simplify the arrangements and ensure a more cohesive U.S. position since separate FAA and contractor interests would not be involved in management decisions. From a policy point of view it would be acceptable for a preoperational (experimental) system while, at the same time, it would clearly separate the preoperational and operational phases

and thus optimize the prospects that development and ownership of the subsequent operational system will be attractive to a commercial entity.

Sincerely yours,

Philip H. Trezise
Assistant Secretary
for Economic Affairs

Enclosure:

As stated above.

Summary of International Aviation and Foreign Policy Issues in the Aeronautical Satellite Program

There are a number of interrelated international aviation and foreign policy issues involved in the proposed preoperational aeronautical satellite program. One that must be given full recognition and consideration is the United States commitment to the ICAO (International Civil Aviation Organization) whose membership includes 120 contracting States. ICAO is responsible for adopting telecommunications standards (among others) for international civil aviation to assure safe and efficient operations.

Various meetings of ICAO organs prepare Standards and Recommended Practices (SARPS). In turn, such recommendations are forwarded to all States for comment and approval. The ICAO Council then reviews the recomemndations and, taking into account the comments of States, adopts (or rejects) SARPS. Upon approval by the Council, States are obligated to adopt and put into operation the standards, practices and procedures to the maximum extent possible. ICAO SARPS require approval of a majority of the contracting States, and Council adoption requires a 2/3 majority of its 27 members. The development and approval of SARPS involves political as well as technical considerations since there are economic impacts on the users and also the industrial sectors of various member countries are desirous of and insistent on having opportunities to participate in the production of avionics and other equipment.

In 1968, ICAO established a panel to develop the recommended requirements and technical characteristics for an operational aeronautical satellite system. The members of the panel are the United States, Australia, Canada, France, Federal Republic of Germany, Japan and the United Kingdom; the ITU (International Telecommunication Union), IATA (International Air Transport Association) and WMO (World Meteorological Organization) also participate. Until the time of its last meeting (January 1971) the panel was sharply divided in respect to the order of radio frequencies to be used; the U.S. position on VHF was supported by the IATA but strongly opposed by the other members of the panel. By the time the frequency problem was resolved as a result of the OTP Policy Statement of January 7, 1971, which specified UHF, considerable fear of

U.S. intentions to proceed unilaterally had developed among the other members; as a result, the majority of the panel took the position over U.S. objection that ICAO must specify the characteristics and parameters for both preoperational and operational systems.

While the OTP Policy Statement resulted in an alignment between the U.S. and the Europeans in respect to radio frequencies, it gave the Europeans no encouragement in respect to a cooperative preoperational program; the European position being that they wanted their fair share of the voice in deciding the design of any aeronautical system and their share of the manufacturing. They also sponsored and paid for three study contracts leading toward pursuing the establishment of their own preoperational capability in the Atlantic area. This, of course, was also a warning to the United States that they were prepared to go it alone and with confidence that their design would eventually be acceptable to the majority of ICAO.

The first of the current series of exploratory meetings between the U.S., Europeans, Australia, Canada, Japan and the Philippines, took place on June 15-17, 1971 here in Washington. At that time the Europeans made unequivocally clear that they would not accept a preoperational program in which they would be merely subscribers to services provided by a system established unilaterally by the U.S.; the European community also emphasized that financial support for a cooperative program was available, and that if such a program were not attainable, they would proceed on their own.

While Europe does not now have an independent capability to launch an aeronautical communications satellite into geostationary orbit, the United States, in the context of the Johnson-Lefevre negotiations, has promised to provide launch services for such type operations. Also, while present European capability to construct the satellites without some U.S. assistance is doubtful, U.S. companies seem willing to sell the necessary technology; the only effective policy bar to U.S. assistance would relate to national security matters. If the Europeans decided to proceed without the U.S., they might not be able to establish a preoperational system within the same timeframe as envisaged in the current U.S./European draft program, but they could do so in a somewhat longer

timeframe. If the Europeans did go it alone, they certainly could and would be prepared to fight politically for approval of SARPS based on their preoperational capability standards and as noted above, they could probably win such a fight. In short, however, U.S.-European cooperation in an aeronautical program has reached the stage of discussions where U.S. positions must reflect a reasonable degree of consistency with stated U.S. policy in respect to cooperation with Europe in space programs generally and, in particular, in an aeronautical satellite program.

As stated above, a joint U.S.-European program will require U.S. assistance for the launches as well as in construction of the satellites. In respect to U.S. assistance with satellite technology and "know how", the Department believes it likely that the benefits to the U.S. would exceed the gain to Europe. Assuming a 50-50 basis cost sharing arrangement for the program, the actual U.S. investment would be appreciably less because of the need by Europe to purchase U.S. assistance in order to satisfy European responsibilities in the program. The net costing might be more like 40-60 or even possibly 30-70 percent in favor of the U.S.; thus the major user of the preoperational system would enjoy a lower dollar investment while gaining in reverse gold flow.

Given the current discussions with the U.S. and the indications that an acceptable preoperational program is emerging, the Europeans have not continued to press for immediate further action on the part of the ICAO panel; it being obvious that the Europeans believe, as do the Department and the DOT (FAA), that a U.S.-European understanding will in fact set the preoperational standards.

A major objective of the USG in its discussions with the Europeans on an aeronautical satellite program has been to establish the basis for an experimental/preoperational program with broad international participation so as to facilitate the emergence of operational standards by 1980 which will be readily accepted by ICAO. This would be consistent with U.S. policy and principles in respect to cooperation with the Europeans in space programs. Further, improved communications for air traffic control and air carrier operations in the Atlantic and Pacific basins, as well as the need for experimentation with surveillance systems,

has been documented by the FAA. Thus, one thrust of the U.S. in the joint discussions is to advance the likelihood that ICAO approval of characteristics for an operational system can be attained within an appropriate timeframe.

If a U.S.-European cooperative program is not attained, the Department is strongly of the opinion that the impact will be one of adverse effects on the United States, in respect to both foreign relations and the timely establishment of an operational aeronautical satellite system. In this regard, two salient facts should be recognized:

(1) While the U.S. could unilaterally establish a preoperational system in the face of a separate European effort, unilateral testing and use would not advance the interests of the U.S. internationally, and it would complicate and delay ICAO's adoption of operational standards; and

(2) The operational satellite system must be integrated into a common system of air traffic control; air traffic control involves the safety of life and property and such a system must be standardized and accepted by all; and international agreement is required to re-configure existing Flight Information Regions (FIR's) in order to take maximum advantage of the communications satellite mode and to economize on en route charges to civil aviation.

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United States Senate
COMMITTEE ON APPROPRIATIONS
WASHINGTON, D.C. 20510

October 29, 1971

Mr. Clay T. Whitehead, Director
Office of Telecommunications Policy
1800 "G" Street
Washington, D. C. 20504

Dear Mr. Whitehead:

Forwarded herewith is a copy of a letter I have received from Mr. Stuart G. Tipton, President, Air Transport Association.

You will note that in the last paragraph of his letter Mr. Tipton indicates that it is his understanding your office will be reviewing the Federal Aviation Administration proposed program for the use of satellites in civil aviation. The letter is very articulate and succinctly sets out strong arguments against such a program.

I would appreciate any information which you can provide to me at this time as well as a report on any findings which may be developed by your office.

Best regards.

Sincerely yours,

Gordon Allott

Gordon Allott
United States Senator

GA:jet

1 Enclosure a/s

United States Senate
COMMITTEE ON APPROPRIATIONS
WASHINGTON, D.C. 20510

October 26, 1971

Mr. Clay T. Whitehead, Director
Office of Telecommunications Policy
1800 G Street
Washington, D. C. 20504

Dear Mr. Whitehead:

I am transmitting herewith a copy of a letter dated October 14 from Mr. Stuart G. Tipton, President of the Air Transport Association, and a copy of my letter to the Honorable John A. Volpe, Secretary of Transportation. The correspondence relates to a proposed agreement for a joint international program of preoperational trials of satellites for civil aviation.

It would be helpful for the Subcommittee to have your comments on the points raised by Mr. Tipton, with particular reference to the review of this matter within the Executive Branch. Your early response is requested.

With kind regards.

Sincerely,

Robert Byrd

Robert C. Byrd
Chairman
Subcommittee on the
Department of Transportation
and Related Agencies

RCB:Wk

UNDER SECRETARY OF STATE
FOR POLITICAL AFFAIRS
WASHINGTON

Nov. 1971

MEMORANDUM FOR MR. HENRY A. KISSINGER
THE WHITE HOUSE

Subject: DOT/FAA Preoperational Aeronautical Satellite Program

The Department of State strongly supports the DOT/FAA program for implementing a preoperational aeronautical satellite system on a joint basis with ESRO, and involving participation by Australia, Canada and Japan. The Department believes that failure to go forward would have serious negative foreign relations consequences, and it favors approval of the project as now negotiated for the following reasons:

1. It represents a favorable opportunity to engage the Europeans successfully in a major joint enterprise of high industrial and political interest in Europe. We have already entered into serious and well-publicized negotiations with the Europeans, and to reverse ourselves would, in our view, have an unfavorable impact not only on future cooperation in post-Apollo and other space-related activities, but on overall US-European relations.

2. Cancellation would result in a clear diminution of United States influence and leadership in ICAO should the US change its negotiated position and decide to proceed unilaterally in the Pacific Ocean area. We believe that the Europeans would, in turn, decide to proceed unilaterally in the Atlantic. They clearly have the capability, motivation and desire to go it alone, and we have offered to launch this type of satellite for them. This would result in the Europeans proposing to ICAO their own system specifications as operational standards. These standards would probably be adopted over any competing US proposals.

3. A favorable balance of payments will result from the negotiated program, because, in paying one-half the cost of the program, the Europeans would pay the United States for half the launch costs.

4. Transoceanic civil aviation is, by its very nature, international. Any satellite system must be integrated into a common system of air traffic control. Air traffic control involves the safety of life and property and such a system must be standardized and accepted by all. International agreement is required to re-configure existing Flight Information Regions (FIR's) in order to take maximum advantage of the communications satellite mode and to economize on en route charges to civil aviation.

5. Given the state of the art in Europe, the benefits of a joint program can be obtained without the loss of United States technological advantage. Moreover, the draft Memorandum of Understanding includes a provision ensuring that Munitions Control regulations would apply.

While the United States could unilaterally establish a preoperational system in the face of a separate European effort, unilateral testing and use would not advance the interests of the US. In contrast, the negotiated program is clearly in the interests of the United States. Amplification of the foregoing points is contained in the Department's letter of October 20 to the Office of Management and Budget and is appended hereto.

The DOT/FAA concurs in this memorandum.

U. Alexis Johnson

Attachment:
Department's letter of October 20

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11/18

November 17, 1971

TO: Jon Rose

FROM: George F. Mansur

Attached are draft copies of memoranda which you discussed with Tom yesterday. Also attached is a talking paper which was distributed at the Flanigan meeting on Aerosat 3 weeks ago; it may be useful in providing a quick review of the program.

In view of our conversation yesterday, it is not clear that the memos should be dispatched to Kissinger and Flanigan until you and Tom have talked further. We would, however, appreciate your comments concerning the validity of the views expressed in the memo.

I believe there are three options which have been enunciated:

1. Approve the tentative Memorandum of Understanding on grounds that foreign relations requires this course of action.

2. As a first step, request the FAA (Shaffer) to consult with OTP to determine the feasibility of negotiating revisions to be more consistent with Administration objectives. From our viewpoint, this has the advantage of establishing an OTP overview but the substantive results would probably be minimal.

3. Recognize that the draft Memorandum of Understanding embodies provisions which should be corrected and, as a result, reorient the U. S. -European discussions to achieve a mutually acceptable agreement more consistent with U. S. objectives. This approach would require:

   a. A low key announcement that the draft Memorandum of Understanding was under review by the Administration.

b. Postponement of joint program approval until at least mid-January.

c. Changes in both the forum for negotiations as well as the substance. With respect to the former, we believe that low-profile bilateral discussions would be essential.

As noted in earlier memoranda, the draft Memorandum of Understanding contains three apparently independent provisions which we find objectionable:

a. Requirement for unanimous agreement in program decisions, which in effect provide veto power to ESRO.

b. Guarantees of equal sharing of R&D and production to ESRO.

c. Equal and joint ownership of the enterprise by the ESRO and a U.S. industrial firm.

In truth, these provisions are not independent but are interrelated such that any two of the three provide ESRO with control of this program and of <u>any commercial activity</u> that may evolve.

We believe that b. and c., should be amended as follows:

- Award contracts for services and hardware on a basis which will solicit European participation but which is not mandatory. Article X of the Intelsat Agreement is a suitable precedent and provides for contractor evaluation, first, on the basis of price, quality and delivery, and second, on the degree of international distribution of work.

- ESRO ownership (or indefeasible right of use) of communications channels to meet ESRO service requirements is acceptable; however ownership of the enterprise should be discouraged on several grounds, i.e., inconsistent with private sector investment, and forecloses offering broad additional services to the maritime and telephone communities. There are many precedents for this approach in the international communications industry.

If b. and c., can be structured properly, a., is probably acceptable to the U.S. and it may be tactful to yield on this point.

As a postscript, I believe that many of our existing problems in space cooperation are a direct result of our failure to structure a well planned Post-Apollo activity which meets both U.S. needs and legitimate desires of the Europeans for interaction with the U.S. space community. I want to emphasize that this can and should be done, and further it can be compatible with U.S. commercial exploitation of space technology. If we set our minds to the task, appropriate new Post-Apollo initiatives can be defined and presented to the Europeans in the near-term. This would tend to defuze current problems in NATO, aerosat, and space shuttle.

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11/18

November 17, 1971

MEMORANDUM FOR

Mr. Henry Kissinger
Mr. Peter Flanigan

The issues which have arisen in connection with the aeronautical communications satellite are of a broad and fundamental nature, and the program itself is simply the current focal point. The President is committed to a lessening of the role of the Federal Government in activities which are more appropriately a part of the private sector. The Administration's Aeronautical Satellite Policy of 7 January 1971, is intended to further this objective and to establish precedents for other programs.

The principal features of this Policy are:

a. Placement of responsibility to implement the Policy in the FAA.

b. Requirement that the Government (FAA) lease its communications services from the private sector by competitive bid.

c. Requirement that institutional arrangements not foreclose establishment of a communication service which would serve a broad range of users, including the FAA.

d. Encouragement of international cooperation in ways consistent with other objectives.

In May the FAA, in conjunction with DoS, initiated exploratory discussions with the Europeans represented by ESRO to develop a cooperative program. The draft Memorandum of Understanding which has resulted is not consistent with the Administration's Policy of January, 1971. The tentative arrangements include:

a. ESRO veto power over all program decisions.

b. Guarantees of an equal share for the Europeans in R&D and manufacturing for the space segment.

c. Ownership of the resulting enterprise divided equally between ESRO and a private U.S. contractor.

The proposed arrangements contravene private sector incentives for investment of venture capital, and as a result the joint FAA/ESRO program is opposed by U.S. communications carriers and several aerospace firms. The international air carriers, both U.S. and foreign, are also inalterably opposed because of expected increased costs, implications of government ownership, and European control of the satellite communications serving our domestic routes between the U.S. Mainland and Hawaii.

The Department of State has expressed concern that unilateral U.S. alteration to the proposed Memorandum of Understanding would be harmful to our foreign relations and has suggested that ICAO would block approval of the operational system. It seems to us that these fears are not well founded for several reasons:

a. The FAA, including its Administrator, has continually made it clear that the discussions were exploratory and that a review of the tentative agreements by the respective governments, both U.S. and European, would be necessary.

b. No ICAO action is necessary or contemplated until the end of the decade, and it is difficult to believe that present differences will have discernible effects on a world body of 122 nations in 1980.

c. The French and German space communities have provided the principal motivation and guidance for the evolution of the European views. In assessing the impact of renegotiation we must understand that there is a clear distinction between the aviation ministries, the international air carriers, and the French and German space communities. The French and German aviation ministries, and to a lesser extent the British aviation ministry, tend to be influenced by the views of their respective space communities, but I do not think that most aviation ministries have strong fundamental views

concerning the specific arrangements embodied in the proposed Memorandum of Understanding.

The fundamental focus of current concern should not be the draft Memorandum of Understanding, but the central issue, which is, Can a cooperative program be structured which is consistent with Administration policy, and can such a program now be negotiated with acceptable effects on foreign relations.

The answer to this question can never be known unless further negotiation is at least attempted. There are reasons to believe it may succeed. While prospects to alter the program will definitely create adverse reaction from the French and German space communities, we believe that the over-all reaction of governments can be minimized by firm and tactful negotiation with the interested aviation ministries. The Europeans are acutely aware of the strong opposition to the program by the international air carriers, and of the recent concern of several members of Congress. They know also that there are divergent views within the Executive Branch and that the Administration is reviewing the tentative arrangements. Accordingly, the Europeans are uncertain about the outcome and we propose therefore to use this uncertainty to negotiate arrangements consistent with broader United States objectives.

In our view, this program can, if properly structured with the Europeans, provide the pivot for development of a new public communications industry. Since the satellites for this program are designed with 5-7 years lifetimes, we are now structuring the institutions for the traffic control communications, and more generally perhaps, a mobile communications industry for the next decade and beyond. This industry might grow as much as $1 billion over the next decade. It can provide work in excess of $150 million to our aerospace and electronic industries in the next five years. For this reason, the central thrust of our policy is to permit a fair and equal competition by U.S. and European industries without governmental guarantees which, in the tentative agreement, restrict competition by providing for an equal sharing of production independent of price.

The Congress is taking an active interest in the evolution of this program and in the Executive Branch decision process. We are concerned about our inability to respond to the several inquiries we have received from the Congress. Early resolution of these issues is essential.

I suggest that OTP be instructed to undertake, in conjunction with the FAA and DoS, a continuation of the discussions between the U.S. and the Europeans to restructure an agreement which is consistent with the Administration objectives.

Clay T. Whitehead

DO CHRON
DO RECORDS
Mr. Whitehead

GFMansur/tw

THE WHITE HOUSE

WASHINGTON

November 17, 1971

TO: Clay T. Whitehead

FROM: Peter Flanigan

Henry Kissinger and I have reviewed the policy implications of the proposed U.S.-European aeronautical satellite memorandum of understanding. We share your view that many of its provisions are not consistent with the Administration's policies and objectives.

As a result you should reorient the negotiations, in conjunction with the FAA and Department of State, to explore with the Europeans, ways to develop a cooperative program which is consistent with Administration policies. If this does not prove to be feasible, you should develop options for further consideration.

October 19, 1971

AEROSAT

PROGRAM:

1. The purpose is to provide improved communications and ultimately navigation for over ocean commercial air traffic control.

2. The program consists of two phases: pre-operational beginning in 1973 which will transition to operational (mandatory) by 1980.

3. Current plans are for two satellites over each of the Atlantic and Pacific Oceans, to be followed in the late 70's with additional satellites to provide world coverage.

4. Costs estimates for the program range from less than $75 M (Hughes) to $140 M (FAA/ESRO.)

5. Although the focus is currently on FAA ATC utilization, it is expected that a properly conceived system would provide major new services to the Maritime community as well.

ADMINISTRATION POLICY:

1. Plans for an aeronautical satellite have been discussed since 1966, but technical and institutional problems prohibited initiation of the program.

2. Between 1966 and 1970 two competing programs evolved: an FAA/COMSAT lease arrangement and a NASA/ESRO research and development program.

3. OTP undertook a policy review in October 1970 which lead to enunciation of the Administration Policy on 7 January 1971. Principal features of the policy are:

a. Delegated full responsibility to the FAA thereby killing the NASA/ESRO program.

b. Required the Government to lease services from the private sector by competitive bid.

c. Required institutional arrangements to be consistent with deployment of a multiple user system, and

d. Encouraged international cooperation where consistent with other objectives.

STATUS:

1. By letter of 11 June, OMB asked the FAA to explore international participation.

2. This lead to FAA/ESRO discussions starting in July and continuing to the present.

3. A tentative draft memorandum of understanding has been prepared by the FAA and ESRO which:

a. Provides for the Europeans to contribute 50% of the program cost which is estimated at $125-140 M.

b. Requires unanimity between the US and ESRO in all program decisions which, in effect, provides veto power to any member of ESRO.

c. Requires that production be shared with the Europeans on a 50-50 basis.

d. Requires 50% ownership of the enterprise by the Europeans.

4. The draft Memorandum of Understanding is scheduled to be signed by the FAA and ESRO on 3 November.

RESULTS:

1. US aerospace industry and common carriers received the Administration Policy of 7 January very favorably, and initial indications were that five firms planned to bid the program on a lease-service basis. These five were: COMSAT, RCA GLOBCOM, Hughes, Philco Ford, and GE.

2. As presently structured in the draft Memorandum of Understanding, the U.S. aerospace industry and common carriers have stated that they cannot provide leased services because of the absence of investment incentives and the "bizarre institutional arrangements.

3. Accordingly, the FAA is now requesting a Government owned system with 50% ownership by the FAA and 50% ownership by ESRO.

POSITIONS:

1. The FAA and State Department support the program.

2. OST, Pete Peterson, and NASC have major problems with the Memorandum of Understanding, but are uncertain as to what steps should be taken at this time.

3. NSC also has serious problems with the Memorandum of Understanding, but does not believe the issues are sufficiently important to be addressed by NSC.

4. The U.S. communications carriers strongly oppose the Memorandum of Understanding since it precludes a private sector offering of a major new communication service.

5. Most of the aerospace industry opposes the Memorandum of Understanding because of the awkward management and procurement provisions.

6. The international air carriers, both U.S. and foreign, are unalterably opposed to the FAA/ESRO program and have currently mounted a campaign in Congress to stop the program. Congressman McFall of the House Subcommittee on Transportation plans to hold hearings on the proposed FAA/ESRO program the week of 18 October.

RECOMMENDATIONS:

1. As presently structured, the program should be disapproved on the basis that it is inconsistent with Administration policy.

2. Alter the program to provide incentives for private sector development.

3. Try to establish an international "coordinated" program rather than a "joint" program.

4. If 3., is not possible, proceed with deployment in the Pacific where the U.S. has unilateral ATC responsibility and work towards extension of the system to the Atlantic in 1974-1975.

5. Accelerate the program to realize employment opportunities by summer of '72.

COMMUNICATIONS SATELLITE CORPORATION

JOSEPH H. McCONNELL
Chairman of the Board

November 18, 1971

Mr. Peter Flanigan
Assistant to the President
The White House
Washington, D. C. 20500

Dear Peter:

I know that you have been closely aware of Comsat's interest in seeking to provide aeronautical communications services to meet the growing need and requirements for such services. Comsat's interest and investment in all aspects of an initial commercial aeronautical communications satellite system have now extended over a number of years. We are, therefore, greatly disturbed at the apparent conclusion of the FAA that it is now planning to proceed on the basis of a government ownership of the satellites and that it is seeking budgetary approvals for such a system.

As you know, Comsat, although a one hundred percent private stock company, is limited specifically by statute to the field of satellite communications. Since our establishment we have vigorously pursued the economic development of reliable commercial services including satellite communication services to aircraft in trans-oceanic flight. We have invested considerable resources over the last several years in the development of aeronautical services and have submitted four proposals to provide this service to the U. S. government and commercial airlines. These proposals were based on extensive prior discussion of requirements with officials of the government concerned with aeronautical communications. We have offered to provide the desired services on a commercial lease basis where we provide all investment and guarantee the service;

the customer(s) would pay only when the leased services are available, and for the time that they are available, for the duration of the lease period.

In making the corporate investment on which these prior proposals were based, we have been guided by the established government policy to utilize commercial communications services when available rather than investing in government owned and operated equipment. We were encouraged when the Office of Telecommunications Policy, after reviewing the aeronautical satellite question, restated on January 7, 1971 that it is the government policy to proceed with the program and lease services rather than buy and operate equipment. We have, therefore, continued to expend our resources since this reaffirmation of policy, and believe the reversal of such a decision now would not be in the public interest and would be grossly unfair to our stockholders.

I am aware that the terms and details of a proposed U.S.-European Agreement which is being constructed tends to cloud the essential issues, and I wish to emphasize several fundamental points for your consideration:

Comsat is willing to provide any aeronautical service(s) presently being contemplated for the proposed aeronautical satellite program, in any of the frequency ranges being considered, on a fixed-price leased-services contract(s), for a guaranteed service, without the necessity of government investment. The only limitation on the quantity or quality of service to be provided is the technical state-of-the-art, which is unrelated to a lease or buy decision. The only research and development involved lies in the way the communications links through the earth stations and satellites would be used and not in the satellite technology.

While the terms of the proposed U.S.-European Agreement obviously present serious impediments to a U.S. government lease of aeronautical services, it must be emphasized that

these impediments are the direct consequence of the particularly bizarre management arrangements provided by the proposed Agreement. They are not at all necessary consequences of a leased-services approach. We would be quite willing to invest in a partnership in which the partners have equal voice in the selection of subcontractors and vendors, the technical designs, adequacy of acceptance tests, etc., where the decision and direction is in equitable proportion to investment risk. Obviously we could not accept technical direction from a third party over these matters affecting our investment.

Regardless of the scope of the initial program, the total investment required and the realizable satellite lifetime clearly supports the expectation that additional customers could make use of these services, including some airlines. We can, therefore, see no conceivable reason why the initial program should not be based on a common carrier approach. In this manner, not only could additional customers easily be accommodated but the cost to the government minimized, since the depreciation of ground equipment would extend over more than the lifetime of the initial satellites.

In summary, we have invested our resources on the basis of published and reaffirmed U.S. government policy of leased services, rather than government investment and ownership. If the service is available commercially on a fixed-price, guaranteed basis, how can it be justified on a research and development basis, or on a government-ownership basis? Is consideration of leased-service to be dismissed on the basis of one particularly complex approach to a lease arrangement, without even considering letting the investment partners make the partnership arrangements on the basis of their investment? And finally, when it is obvious that a successful aeronautical satellite program can provide services to a number of users, including commercial airlines, within the reasonable lifetime of the first generation of aeronautical satellites, how can any approach except that of a common carrier be justified?

I have not wished to impose on your time at this stage by including in this letter a point-by-point analysis of the many and substantial respects in which we believe the arrangements proposed by FAA are impractical, and we believe contrary to the public interest. We would be glad to provide such an analysis in writing or orally, if you believe it would assist the decision-making process.

Finally, an important point should be emphasized. Our discussions with FAA and the airlines that have ensued over a number of years up to these recent proposals have required us to perform substantial planning and development work for the offering of aeronautical communications services. In the course of this work we have incurred system development costs in excess of one million dollars ($1,176,000 as of September 30, 1971), which now stand on our books. These costs must be written off in a single year, if the Government proceeds in the fashion proposed by the FAA. We think it is a discouraging commentary on the seriousness of purpose with which the Government views the mission of this Government-sponsored corporation, that, as a result of actions of the Government itself, we should be required to write off the costs of our efforts to develop an aeronautical communications system which would benefit private and Government users alike.

Sincerely,

Joseph H. McConnell

cc: Mr. C. T. Whitehead

11/1/71 memo from
Kissinger to Flanigan
re Aerosat

UNDER SECRETARY OF STATE
FOR POLITICAL AFFAIRS
WASHINGTON

Nov. 5, 1971

MEMORANDUM FOR MR. HENRY A. KISSINGER
THE WHITE HOUSE

Subject: DOT/FAA Preoperational Aeronautical Satellite Program

The Department of State strongly supports the DOT/FAA program for implementing a preoperational aeronautical satellite system on a joint basis with ESRO, and involving participation by Australia, Canada and Japan. The Department believes that failure to go forward would have serious negative foreign relations consequences, and it favors approval of the project as now negotiated for the following reasons:

1. It represents a favorable opportunity to engage the Europeans successfully in a major joint enterprise of high industrial and political interest in Europe. We have already entered into serious and well-publicized negotiations with the Europeans, and to reverse ourselves would, in our view, have an unfavorable impact not only on future cooperation in post-Apollo and other space-related activities, but on overall US-European relations.

2. Cancellation would result in a clear diminution of United States influence and leadership in ICAO should the US change its negotiated position and decide to proceed unilaterally in the Pacific Ocean area. We believe that the Europeans would, in turn, decide to proceed unilaterally in the Atlantic. They clearly have the capability, motivation and desire to go it alone, and we have offered to launch this type of satellite for them. This would result in the Europeans proposing to ICAO their own system specifications as operational standards. These standards would probably be adopted over any competing US proposals.

3. A favorable balance of payments will result from the negotiated program, because, in paying one-half the cost of the program, the Europeans would pay the United States for half the launch costs.

4. Transoceanic civil aviation is, by its very nature, international. Any satellite system must be integrated into a common system of air traffic control. Air traffic control involves the safety of life and property and such a system must be standardized and accepted by all. International agreement is required to re-configure existing Flight Information Regions (FIR's) in order to take maximum advantage of the communications satellite mode and to economize on en route charges to civil aviation.

5. Given the state of the art in Europe, the benefits of a joint program can be obtained without the loss of United States technological advantage. Moreover, the draft Memorandum of Understanding includes a provision ensuring that Munitions Control regulations would apply.

While the United States could unilaterally establish a preoperational system in the face of a separate European effort, unilateral testing and use would not advance the interests of the US. In contrast, the negotiated program is clearly in the interests of the United States. Amplification of the foregoing points is contained in the Department's letter of October 20 to the Office of Management and Budget and is appended hereto.

The DOT/FAA concurs in this memorandum.

U. Alexis Johnson

Attachment:
Department's letter of October 20

11/29/71 Memo for
Haig from Whitehead

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

November 29, 1971

DIRECTOR

MEMORANDUM FOR

Brigadier General Haig
The White House

Following our conversation on Friday, I have thought more about moving the Aerosat negotiations to a higher level and broadening the context to include other communications issues important to the Europeans. Attached at Tab A is a list of such issues of current concern to us and the Europeans; at Tab B is a list of the points Don Rice and I made about the tentative Aerosat Memorandum.

The Europeans are unhappy with many things in international communications, and recent FCC actions have caused them great consternation. There are many concessions we can make to the Europeans in the communications field that are of far more value to them than the Aerosat program, and the psychological value of a visit by me to the various communications ministers to make some of these trades would be very beneficial.

Since I have been considering a trip to Europe to discuss some of these matters in any event, I could be prepared to undertake the broader mission in reasonably short order. With the appropriate combination of tact, pomp, and plain old horse trading, we could take care of most of our problems with Aerosat and leave the Europeans feeling very good indeed as far as cooperation in communications is concerned.

If it is agreed that a trip of this sort would be useful in the near future, the President could offer to Pompidou, Brandt, and Heath to send his Director of Telecommunications to meet with their Ministers of Communicatio to work out some of the problems that he knows are causing concern in Europe.

Tom

Clay T. Whitehead

Attachments

A

- The landing site for a new 4000 circuit transatlantic cable (TAT-6). Selection of France would mean $100 million in revenues for the French from transit charges over the first ten years.

- Production arrangements for TAT-6 which will determine distribution of $40 million in manufacturing.

- Ways to improve international communications coordination concerning construction and investment in new facilities. This is of great concern to the Europeans since current U. S. Government procedures practically force their governments to appear before the FCC.

- Procedures for deciding which cable and satellite circuits will be used. There are sensible alternatives to current FCC procedures which in effect dictate to the Europeans how they will use circuits in which they have capital investment.

- Exploration of the role of regional satellite systems in a worldwide communications network. This is of great interest to France particularly and there is likely to be a mutual interest in an agreement now that the Intelsat arrangements have been adopted.

- Restructuring of the International Telecommunications Union and related international frequency allocation methods.

- Expanded European participation in the NASA ATS-6 experimental communications satellite and support of European development of a new technology communications satellite program. This could lead to a cooperative program for satellite-to-satellite relay.

B

Arguments for Renegotiation

- It calls for U.S. Government ownership and operation of the aerosat communications service in a 50/50 management and ownership program to 1980. Together with the precedent of Intelsat, this arrangement would effectively foreclose any possibility of keeping international satellite communications in the private sector. This could be a new communications service industry with revenues up to $1 billion over this decade. It seems clearly contrary to the President's intent in such areas.

- It gives significant encouragement to the concept of sharing production by political agreement and will, as a U.S. Government commitment, stand as a persuasive precedent in the future contrary to U.S. interests.

- Institutional arrangements for a maritime system will be discussed early next year. Maritime communications will be at least ten times larger in volume than aviation, and aerosat is being closely watched as a precedent.

- The terms of the draft MOU are inconsistent with U.S. positions in other international forums; i.e., Intelsat and NATO. The Secretary of Defense has formally expressed strong opposition to divided management and production sharing for the proposed NATO Integrated Communications System (NICS), and will be out on a limb if the MOU is signed.

- The management-by-consensus arrangements, with the implicit European veto, practically guarantee program delays and cost overruns. It is likely to bring about more differences and contentions than cooperation with Europe and other nations. This is a far worse case than the Space Shuttle "cooperation" that the President agreed to turn off.

- The international (including European) and U.S. airlines oppose the agreement as do U.S. aerospace and communications service companies. They oppose Government ownership and object to the higher cost of the FAA/ESRO program ($125 M - $140 M) over a private sector service ($75).

- It excludes major Pacific powers with aviation and communications interests from a significant role. This imbalance follows our recent special concession to Europe on launch assurances.

- It will avoid short-term unhappiness on the part of the French, Germans, and British. State contends that any delay or renegotiations would cause Europe to build their own system for the Atlantic; however, ESRO is a faltering organization, and we doubt they have the resources or resolve to do so. State also contends the Europeans might vote against us in ICAO, but no ICAO action is to be taken until the end of the decade.

- The draft MOU is not consistent with the Mutual Security Act of 1954, Section 414. The MOU commits the U.S. to provide access to technology (that is likely to be classified) prior to the review by the Munitions Control Board that the Act requires.

- Firm defense of the MOU by all elements of the Administration will be necessary to sell the program to Congress during budget hearings and other hearings that may be called. This will be difficult, if not impossible, to do in the face of the high cost of the FAA program, the commercial nature of the service, industry criticism, negotiations that will be underway on international maritime communications, and the acknowledgement that the MOU is contrary to established U.S. policy. It could be quite embarrassing to the Administration in 1972.

Arguments for Signing Current MOU

- The draft MOU is the outcome of FAA/ESRO negotiations, subject to approval by governments. To reopen negotiations now would be considered by the European negotiators as upsetting a deal reached by compromises on both sides.

- Reopening the negotiations would cause the Europeans to conclude that the U. S. is favoring U. S. industry in this program because of its lead in space technology.

- Attempts to renegotiate may cause the Europeans to threaten a unilateral program in the Atlantic with no cooperation.

12/2/71 Memo for
Haig and Flanigan
from Whitehead

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

DIRECTOR

December 2, 1971

MEMORANDUM FOR

Peter Flanigan
Brigadier General Alexander Haig

There have been a number of recent events concerning Aerosat with which you should be aware. On October 19, the House Appropriations Subcommittee on Transportation held a closed hearing, to be briefed on the program, and yesterday the Senate Commerce Subcommittee on Aviation held a similar review. I have learned today that Senator Cannon, Chairman of the Aviation Committee, expects to hold formal hearings in early January. In addition, Senators Anderson, Byrd and Allott, acting independently, have asked for clarification of the program from the Executive Branch.

It is becoming clear that Congress is taking a serious view of the tentative Memorandum of Understanding, and there is some indication that funds for the program may be delayed or withheld. In any event, the Appropriations Subcommittee has advised FAA that the MOU should not be executed before budget clearance has been obtained from the committee.

This Congressional delay almost forces the U.S. to defer signing of the MOU and provides the time we sought for the Administration to renegotiate the terms that are most objectionable.

I have had tentative discussions with Comsat, AT&T, and FCC regarding items we might usefully give the Europeans in the communications area. The agenda is more than ample to justify a trip such as I described in my last memorandum, and probably would provide the best vehicle for renegotiating Aerosat. AT&T has agreed to postpone certain agreements that they would otherwise make with the Europeans to permit us to be more forthcoming in gaining the credit for certain decisions important to the Europeans.

It is my understanding that logistics prevent signature of the MOU till January, in any event. If you concur, I would like to begin immediately to plan how we can best proceed. So that we can maintain more effective control and liaison than we have had in the past, I would propose to keep you informed more frequently and directly via memorandum.

Tom

Clay T. Whitehead

12/8/71 memo from
Haig to Whitehead

Mr. Whitehead 5 12/9

THE WHITE HOUSE

WASHINGTON

December 8, 1971

MEMORANDUM FOR

Dr. Clay T. Whitehead
Director
Office of Telecommunications Policy

SUBJECT: Aerosat

This memorandum responds to yours of November 29, and also my discussion of December 2 with your Deputy, Dr. Mansur.

The discussion of the Aerosat program has become so complex, and involves such a diversity of interests, that a clear development and exposition of the alternatives is needed before raising the level of the Aerosat negotiations. To this end I suggest that you convene an ad hoc intragovernmental committee on which the principal views are represented: your own, FAA's, State's, OMB's, etc. This group could prepare a report presenting all the feasible alternatives as well as the positions of the participants. As you suggest, some of the alternatives should "package" other international space issues with Aerosat, particularly to ameliorate the impact of alternatives in which we would withdraw from the draft Memorandum of Understanding. This report could then be forwarded through the NSC to the President, with your recommendations, for his decision, thereby concluding the matter with finality.

Inasmuch as a significant delay is, in itself, a decision, I urge that this review be conducted expeditiously, in order that the matter can be brought up within a week for Presidential decision.

Alexander M. Haig, Jr.
Brigadier General, U. S. A.
Deputy Assistant to the President
for National Security Affairs

Memo fr Whitehead
to Gen Haig, 12/13/7

Mr. Whitehead

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

December 13, 1971

DIRECTOR

MEMORANDUM FOR

Brigadier General Haig
The White House

Enclosed is the memorandum to the President summarizing the issues, options, and agency views regarding the aeronautical satellite program. Attached to that memorandum is a staff paper resulting from the interagency working group which we established last week. I am also enclosing, for your convenience, copies of letters from the Congress expressing their interest and concern.

The interagency staff paper is of doubtful usefulness. In order to reach agreement in the working group, we tolerated many inconsistencies in the paper. Its principal usefulness is that it highlights the perspectives and recommendations of the agencies involved.

The aerosat service does not fall into the category of space projects amenable to the kind of international cooperation Henry and the President presumably have in mind. (The program was, in fact, pulled away from NASA for just that reason.) However, you and Henry may wish to use this occasion to call attention to the need for a systematic development of cooperative space and other science projects that are consistent with other U. S. objectives. NSSM 72 failed, but I believe an Executive Office working group could provide what you need.

Clay T. Whitehead

Attachments

cc: Mr. Peter Flanigan

FF
Memo fr Whitehead
to President Dec 13
FF

DEC 13 1971

MEMORANDUM FOR THE PRESIDENT

FROM: Clay T. Whitehead SIGNED

SUBJECT: Aeronautical Communication Satellite Service

The Federal Aviation Administration is asking for approval of a draft Memorandum of Understanding (MOU) establishing a satellite communication service for civil aviation use in the Atlantic and Pacific, to be jointly owned and managed by the United States and European governments. The MOU is the result of discussions between the FAA and the European Space Research Organization (ESRO) and is now before the concerned governments for approval.

There is a growing need for maritime and aeronautical communications over the oceans that is best met by satellites. The INTELSAT system is expected to grose $3 billion over the next decade, and aeronautical and maritime communications services could produce commercial revenues of $500 million to $1 billion over the first decade of service. The United States made major concessions to Europe in the recent INTELSAT negotiations in the direction of more political control at the cost of commercial interests and principles. These same issues are now at stake in the proposed FAA-ESRO arrangement.

The proposed MOU is not consistent with stated and published Administration policy (summary at Tab A) in that it provides for (1) ownership and operation by the government rather than the private sector; (2) political agreement to share production between Europe and the United States in equal proportion; (3) European veto over all program management decisions; and (4) exclusion of maritime interests. Together with INTELSAT, this arrangement would stand as a persuasive precedent for the long-run future of international communications contrary to U.S. interests. It also requires FY73 funding of about $60 million not now included in OMB planning.

The provisions of the MOU are favorable to European interests in (1) gaining access to U.S. technology and know-how; (2) assuring more production for their aerospace industry; and (3) furthering the principle of government-to-government control of international communications as opposed to private sector commercial development.

The Departments of State and Transportation favor the draft MOU in spite of its inconsistency with stated policy because of the European desire for government ownership of communications and mandatory production sharing. The provisions of the MOU are opposed by OTP, OMB, and the Assistant to the President for International Economic Policy because of the major undercutting of U.S. objectives and the likelihood that the management arrangements will be productive of more international contention than harmony in the future. The program is opposed by U.S. and foreign international air carriers, by U.S. communications carriers, and by several aerospace manufacturing firms. There is significant bi-partisan Congressional opposition and hearings have been announced.

The fundamental issue for your decision is the choice between two basic options:

1. Approve the MOU with its significant harm to U.S. economic and communications policy objectives in order to avert adverse European reaction.

2. Direct that the MOU not be approved and that cooperative arrangements more consistent with fundamental U.S. objectives be sought through negotiations at higher levels of government on a broader basis.

Attached at Tab B is a summary of the pros and cons of the two options; at Tab C is an interagency staff paper. I strongly recommend that you approve the second option so that this and other international communications matters can be put on a more solid basis in cooperation with European and Asian communications authorities.

Approve Option 1 _____

Approve Option 2 _____

Other _____

CTWhitehead:lmc 12/13/71
cc:
DO Records
DO Chron
Mr. Whitehead-2
Dr. Mansur
Mr. Smith

Administration Policy

The Administration policy for aeronautical communications services is stated in the Policy of 7 January 1971 and subsequent letters to the FAA of 19 March and 12 July.

The principal features of this Policy are:

a. The responsibility to implement the Policy is placed in the FAA.

b. The Government (FAA) should lease its communications services from the private sector.

c. Institutional arrangements should not foreclose establishment of communications to serve a broad range of users including both maritime and aeronautical communities.

d. Services and equipment needed by the Government shall be procured by competitive bid.

e. The Government shall utilize the UHF frequency band near 1000 megahertz.

f. International cooperation should be encouraged in ways consistent with other objectives.

TAB B

Arguments for Renegotiation Of the Proposed Memorandum of Understanding

- It calls for U.S. Government ownership and operation of the AEROSAT communications service in a 50/50 management and ownership program to 1980. Together with the precedent of INTELSAT, this arrangement would effectively foreclose any possibility of keeping international satellite communications in the private sector. Communications for aviation and merchant shipping could be a new communications service industry with revenues up to $1 billion over the first decade.

- It gives significant encouragement to the concept of sharing production by political agreement and will, as a U.S. Government commitment, stand as a persuasive precedent in the future contrary to U.S. interests.

- Institutional arrangements for a maritime system will be discussed early next year. Maritime communications will be several times larger in volume than aviation, and AEROSAT is being closely watched as a precedent.

- The terms of the draft MOU are inconsistent with U.S. positions in other international forums; i.e., INTELSAT and NATO. The Secretary of Defense has formally expressed strong opposition to similar proposals for divided management and production sharing for the proposed NATO Integrated Communications System (NICS).

- The management-by-consensus arrangements, with the implicit European veto, practically guarantee program delays and cost overruns. It is likely to bring about more differences and contention than cooperation with Europe and other nations.

- The international (including European) and U.S. airlines oppose the agreement as do communications service companies (and several aerospace firms). They oppose government ownership and object to the higher cost of the FAA/ESRO program ($125 M-$140 M) over a private sector service ($75).

- It excludes major Pacific powers with aviation and communications interests from a significant role. This imbalance follows our recent special concession to Europe on launch assurances.

- It will avoid short-term unhappiness on the part of the French, Germans, and British. State contends that any delay or renegotiations would cause Europe to build their own system for the Atlantic; however, ESRO is a faltering organization, and we doubt they have the resources or resolve to do so. State also contends the Europeans might vote against us in ICAO, but no ICAO action is to be taken until the middle of the decade.

- The draft MOU is not consistent with the Mutual Security Act of 1954, Section 414. The MOU commits the U. S. to provide access to technology (that is likely to be classified) prior to the review by the Munitions Control Board that the Act requires.

- Firm defense of the MOU by all elements of the Administration will be necessary to sell the program to Congress during budget hearings and other hearings that may be called. This will be difficult, if not impossible, to do in the face of the high cost of the FAA program, the commercial nature of the service, industry criticism, negotiations that will be underway on international maritime communications, and the acknowledgement that the MOU is contrary to established U. S. policy. It could be quite embarrassing to the Administration in 1972.

Arguments for Signing Draft MOU

- The draft MOU is the outcome of FAA/ESRO negotiations, subject to approval by governments. To reopen negotiations now would be considered by the European negotiators as upsetting a deal reached by compromises on both sides.

- Reopening the negotiations would cause the Europeans to conclude that the U.S. is favoring U.S. industry in this program because of its lead in space technology.

- Attempts to renegotiate may cause the Europeans to threaten a unilateral program in the Atlantic with no cooperation.

December 11, 1971

JOINT AERONAUTICAL SATELLITE PROGRAM

I Background

II Ad Referendum Memorandum of Understanding

III Options

IV A. Approve the Ad Referendum MOU and Fund the Program

1. Arguments for this option

2. Arguments against this option

B. Renegotiate After Disapproval of the Ad Referendum MOU

1. Arguments for this option

2. Arguments against this option

V Recommendations

Joint Aeronautical Satellite Program

I. Background

During the past several years, the Administration has been actively encouraging the application of satellite technology to improve the safety and efficiency of international civil aviation.

a. Telecommunication Policy Objective

Consistent with the Administration's policy of lessening the Federal Government's role in activities which more appropriately can be undertaken in the private sector, the Office of Telecommunications Policy supports the development of the satellite communications services required for air traffic control by private, non-Government entities. Its objective is an international arrangement providing oceanic satellite communication services from a commercial organization.

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All interested agencies favor the immediate development of an air traffic control program utilizing satellite communications in order to establish by 1980 internationally approved operational satellites and procedures. Under treaty, operational activation of satellite telecommunications for air traffic control requires International Civil Aviation Organization (ICAO) approval of technical specifications and international regional understanding on operating procedures.

c. Policy of January 7, 1971

On January 7, 1971, the Office of Telecommunications Policy issued a policy statement to encourage expeditious action on a pre-operational/experimental program in air traffic control utilizing satellite communications with the following objectives:

"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."

The 7 January policy and subsequent letters to the FAA and DOS of 12 July directed that:

1. "The Department of Transportation . . . 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. Through the Department of State, the Department of Transportation . . . 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." (January 7 policy)

2. "The Government shall utilize commercial telecommunications facilities to the maximum extent feasible." (7 January policy)

"The policy of the U. S. is ownership of communications systems in the private sector; accordingly, the ownership of the U. S. portion of both the pre-operational and operational systems must be in the private sector.

Although our foreign counterparts typically provide communications with government-owned systems, we should encourage the Europeans to adopt a private ownership approach for the aeronautical satellite program . . .. All procurements within a joint international aeronautical satellite program shall be international competitive bid." (Letter to FAA Administrator 12 July 1971)

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The understandings reached are contained in an ad referendum Memorandum of Understanding (MOU) which creates an experimental, pre-operational program for test and evaluation of satellite communication for air traffic control which is a necessary step to establish international agreement on technical operational standards and operating procedures by 1980.

The ad referendum MOU is now before the governments concerned for approval. The essential features are:

a. Provision of joint US/European procurement of satellites, control stations, and test avionics sufficient to place two satellites, each over the Atlantic and Pacific by 1977 at a cost ranging between $125 and $142 million;

b. Provision for separate but coordinated procurement of ground stations and pre-production aircraft avionics;

c. Provision for use without charge of satellite capability by the major partners and other nations wishing to join in the coordinated aeronautical experimentation;

d. Partnership management arrangements for the U. S. and Europe including:

(1) joint and equal funding;

(2) joint and equal management requiring unanimous US/European agreement through an Aerosat Council on which the U. S. and the Europeans (as a group) would each have one vote. This is equivalent to a veto by either party and provides each party with essential control over all aspects of the program beyond the basic provisions of the MOU;

(3) joint and equal ownership of two communication satellites over both the Atlantic and Pacific oceans;

(4) a fair and reasonable distribution of the work in recognition of the joint funding among member states of the ESRO states participating in the joint program and the U.S. The FAA and ESRO agree that this will result in approximately equal distribution of contract responsibilities through subcontract between U.S. and Europe.

e. Participation on a non-partnership, advisory basis by Australia, Canada, and most probably Japan, each contributing $4 million and engaging actively in the testing and evaluation effort but on a non-production basis.

f. The MOU terminates on or before 1 January 1980, without prejudice to follow-on arrangements.

III. Options

The courses of action open to the U. S. Government are:

Option One - Approve signing of the ad referendum MOU and fund the program as defined.

Option Two - Renegotiate after disapproval of the ad referendum MOU by proposing to the Europeans, as well as the Japanese, Canadians, and Australians, further discussions with government communications officials as to how best to meet broad communications needs for the 1970's, including aeronautical satellite. (Such discussions would not be with the European Space Research Organization (ESRO).)

IV. Discussion on Options

A. Approve the Ad Referendum MOU and Fund the Program (Option One)

1. Arguments for this Option

a. The U. S. should sign the MOU and fund the program since it represents a highly satisfactory arrangement with significant benefits for international aviation, international relations, the U. S. Government and U. S. industry.

b. This pre-operational/experimental program offers the only prospect for adoption of an ICAO standard and an internationally accepted implementation plan by 1980.

c. Since this is an experimental program in air traffic control (although not in satellite communications technology), only governments are willing to defray the air traffic control expenses and all existing offers are premised on major government support by investment or guaranteed lease payments. Equal participation by Europe and financial contributions by Canada, Australia, and Japan will lessen the load on the U. S. taxpayer and create a sound precedent for other experimental space programs in which the Administration has sought to enlist European cooperation.

d. International participation will produce a balance of payments inflow of at least $30 million in this program while satisfying strong foreign demands for a responsible role in space exploration. In view of the contributions from Australia, Canada, and Japan, the expected cost to the partners is $56 million each, assuming an estimated total space segment cost of $125 million. The expected return to U. S. industry is in excess of $85 million.

e. Government investment will be limited to the pre-operational/experimental phase which is consistent with the nature of the program. The program arrangements will thus preclude any precedent for Government involvement in commercial operations.

f. The U. S. will insist that the subsequent operational system will be organized on a private lease basis.

g. A joint program will create an atmosphere conducive to the establishment of satisfactory commercial arrangements for an operational capability useful not only to aeronautical authorities but to other mobile service users who, by or before 1980, may develop requirements.

h. Government investment, which is consistent with our operation of other experimental programs, will minimize costs to the U. S. taxpayer by utilizing existing management capability, reducing administrative complexity, especially in the U. S.-European interface (the Europeans have rejected participation on a lease basis and insist on investing). Government investment to minimize costs and reduce administrative complexity is supported by U. S. manufacturing industry.

i. The proposed partnership arrangement entails European sharing of responsibilities for management and production in return for full sharing of costs. Production sharing has been used in NATO and INTELSAT and is still being considered in NATO negotiations. It is an essential part of the partnership arrangement of this program.

2. Arguments Against this Option

a. This program can, if properly structured with the Europeans, provide the seed for development of a new mobile communications industry. Since the satellites for this program are designed for 5-7 years, there is concern that we are now

structuring the institutions for aeronautical communications, and, more generally perhaps, a mobile communications industry for the next decade and beyond. The American Institute for Merchant Shipping has asked that the Policy of 7 January be augmented to assure full maritime participation. The Maritime Administration even now has a program underway leading to a maritime satellite system. If allowed to develop, this industry may gross from $500M to $1 billion in the first decade. It can provide work in excess of $150 million to our aerospace and electronic industries in the next five years. For this reason, the central thrust of policy should be to permit a fair and equal competition by U. S. and European industries without governmental guarantees. In the tentative agreement, competition is restricted by providing for sharing of production, and the management and ownership arrangements practically foreclose private sector venture investment.

b. The proposed FAA/ESRO program may establish a precedent of joint government management and ownership which would be difficult to reverse in 1980 when the pre-operational project concludes.

c. The MOU includes a program of satellite development using technology generally available from prior U. S. aerospace efforts and, in effect, may subsidize European aerospace industry.

d. The proposed management, production sharing, and ownership arrangements contravene private sector incentives for investment of venture capital and, as a result, the joint FAA/ESRO program is opposed by U. S. communications carriers and several aerospace firms. The international air carriers, both U. S. and foreign, are also opposed because of expected increased costs. The Air Transport Association is concerned because of implications of government ownership

and European influence of the satellite communications serving our domestic air carrier routes between the U.S. Mainland and Hawaii.

c. The production arrangements encourage the concept of sharing production by political agreement and will, as a U.S. Government commitment, stand as a persuasive precedent in the future, which is contrary to U.S. interests. In this respect, the draft MOU is inconsistent with U.S. positions in other international forums, i.e., INTELSAT and NATO. The Secretary of Defense has formally expressed strong opposition to divided management and production sharing for the new NATO Integrated Communications System. An agreement for production sharing for this program would seriously undermine credibility of the U.S. in NATO negotiations.

f. Finally, the draft MOU is inconsistent with the Mutual Security Act of 1954, Section 414. The MOU commits the U.S. to provide access to technology prior to the review by the Munitions Control Board that the Act requires.

g. It is doubtful that the Europeans have the will to carry out any threat to go forward alone in producing an air control traffic system using satellite communications if we do not accept the present agreement.

h. Approval of this program prior to Congressional action authorizing U.S. funds for the programs is unwise because legislative approval cannot be guaranteed, especially in the light of publicly expressed Congressional opposition and industry attitudes toward the program. Embarrassment to the U.S. among the Europeans would follow signature of the MOU now if Congress were later to refuse funds for the program.

B. Renegotiate After Disapproval of the Ad Referendum MOU (Option Two)

1. Arguments for this Option

a. Concern has been expressed that unilateral U. S. alteration to the proposed Memorandum of Understanding would be harmful to our foreign relations and has suggested that ICAO would block approval of the operational system. These fears are not well founded for several reasons:

(1) The FAA, including its Administrator, has continually made it clear that the discussions were exploratory and that a review of the tentative agreements by the respective governments, both U. S. and European, would be necessary.

(2) No essential ICAO action is necessary until the middle of the decade, and it is difficult to believe that present differences will have discernible effects on a world body of 122 nations in 1980.

(3) The French and German space communities have provided the principal motivation and guidance for the evolution of the European views. In assessing the impact of renegotiation, it must be understood that there is a clear distinction between the aviation ministries, the international air carriers, and the French and the German space communities. While the French and German aviation ministries, and to a lesser extent the British aviation ministry, tend to be influenced by the views of their respective space communities, other European aviation ministries and governments are believed to have few strong fundamental views concerning the specific arrangements embodied in the proposed MOU.

b. The fundamental focus of current concern should not be the draft MOU, but the central issue, which is: Can a cooperative program be structured which is consistent with Administration policy, and can such a program now be negotiated without unacceptable effects on foreign relations.

The answer to this question can never be known unless further negotiation is at least attempted. There are reasons to believe it may succeed. While proposals to alter the program will definitely cause adverse reaction from the French and German space communities, we believe that the overall reaction of governments can be minimized by firm and tactful negotiation. The Europeans are uncertain about the outcome, and it is proposed, therefore, to use this uncertainty to negotiate arrangements consistent with broader United States objectives.

c. The U. S. should accept the temporary political cost of disapproving the draft MOU while discussing with the communications officials of the European and other governments the real problem of providing satellite communications to all who cross the seas.

The U. S. should deal with the whole oceanic satellite communications problem, not merely a limited system directed to air traffic control, and discussions with all interested states should be lifted out of the space-aviation area and concentrated among those foreign officials responsible for communication problems. In this different environment, the need to have an oceanic satellite communications system could be presented along with other programs the U. S. is prepared to undertake. Starting anew on a broader base, the U. S. can be consistent in pursuing its objective of maintaining communications in the private sector and allowing industry to enter fairly and competitively.

2. Arguments Against this Option

a. Disapproval of the MOU in anticipation of broader discussions and negotiations in the future is both unnecessary and undesirable.

b. It is premature to attempt to discuss "the whole oceanic satellite communications problem" because mobile service requirements, other than air traffic, cannot be defined at this time. Furthermore, efforts to broaden the program could be interpreted as a U. S. step toward undermining the INTELSAT Agreement.

c. The expected capability (consistent with economic constraints) of the pre-operational/experimental satellite system (two satellites over each ocean) is needed to meet the aeronautical test and evaluation goals. Hence, it is not essential to consider now the broader issue of multiple-users, except on an experimental basis which is provided for in the MOU, and the aeronautical satellite can be isolated for separate and immediate consideration.

d. The discussions leading to the MOU were conducted with the representatives of the governments involved selected by those governments. It is unreasonable to expect that negotiations with foreign government communications officials would be possible or would result in a more favorable agreement for the U. S. on the immediately needed aeronautical satellite program than the present MOU. Further, given the complexity of the overall oceanic communications problem and the need to reconsider the Communications Act of 1962 under this option, the time necessary to attempt to negotiate a more general agreement will delay even further the consummation of any agreement in an area where immediate action is needed and render impossible the goal of a 1980 operational system.

e. Disapproval would greatly disturb the Europeans (as well as Canada, Australia, and Japan) and cast strong doubts on our credibility with regard to proceeding on any joint aeronautical or space venture. It might also endanger ratification of the recently-negotiated definitive arrangements for INTELSAT. This option is in fact self-defeating since the best way to establish a cooperative framework for a future program would be to first establish a short-run cooperative relationship on the proposed joint program as defined in the MOU.

f. It will "sour" the ICAO outlook with respect to U.S. views on aeronautical satellites and other issues of international civil aviation and would result in a clear diminution of U.S. influence and leadership in ICAO.

g. It would lead to an independent European/Canadian action in the Atlantic (since they have the technology, the funds, and the assurance of a U.S. launch) which would put the U.S. Government and industry at a clear disadvantage with respect to an operational system and create vested interests effectively precluding a broad-based approach to oceanic mobile communications in the future. It also would provide an "opening" for seeking eventually to recover their costs for such a program by "user" charges on international traffic in the Atlantic where two-thirds of the passengers are U.S. citizens.

V. Recommendations

a. The DOT/FAA and DOS strongly recommend that the Administration approve the MOU and fund the program (Option One). The discussions leading to the MOU were conducted in accordance with OTP guidance; the stated OTP objectives of 7 January have been met, and the program represents a highly satisfactory arrangement with significant benefits for international aviation, international relations, the U.S. Government, and U.S. industry.

b. The Assistant to the President for International Economic Affairs recommends renegotiations (Option Two) to seek an agreement more consistent with the Administration's international economic objectives.

c. The OMB recommends renegotiation on the basis that the proposed MOU:

1. Is contrary to U.S. commercial and balance of trade interests;

2. Is likely to lead to management and budgeting differences with the European partners that will soon undermine the good will created by going ahead at this time;

3. Is contrary to published Administration policy to an extent that will be difficult and potentially embarrassing to justify to Congress and to industry (Senate Commerce Committee has scheduled hearings which it feels should precede signing of the MOU);

4. Adds $60 million unnecessarily to the FAA budget that is not included in current planning (House and Senate Appropriations Committees have indicated opposition and concern).

d. The Office of Telecommunications Policy recommends renegotiation (Option Two). The United States should seek a cooperative program consistent with the fundamental policies and objectives of this Administration. A successful program cannot be based on management-by-consensus proposed in the MOU, with the implicit European veto which practically guarantees program delays and cost over-runs. It is likely to bring about more contention than cooperation with Europe and other nations. Renegotiation offers the prospect of a cooperative program consistent with investment incentives for the private sector rather than government ownership as proposed.

Ltr fr Katz to
Whitehead, Dec 14

DEPARTMENT OF STATE

Washington, D.C. 20520

13
12/15

December 14, 1971

Dear Mr. Whitehead:

In accordance with your request for comments on the draft aeronautical satellite options paper, we have reviewed the matter carefully and believe the following observations should be taken into account and accompany the paper when it goes forward to the President.

(a) The background section, as now drafted, does not adequately reflect the sense of urgency in commencing air traffic control experimentation which was evident in the January 7 policy statement and your letter of July 12. As you will recall, one of OTP's principal arguments for a unilateral U.S. program (the alternative suggested in the July 12 letter) was the need to avoid lengthy negotiations. If your views on this matter have been modified, I believe you should reflect the reasons for that modification under Option 2.

(b) Paragraph a on pages 8 and 9 should also point out that the "fair and reasonable distribution of work" formula is a step forward from the no transfer of funds provisions which were proposed for the post-Apollo program. The "fair and reasonable" formula allows both deviation from a strict 50-50 formula and a favorable U.S. balance of payments inflow arising from European purchase of U.S. parts necessary to fulfill European contract responsibilities.

The Honorable
Clay T. Whitehead,
Director of Telecommunications
Policy,
Executive Office of the
President.

(c) With respect to paragraph d on page 9, we are aware of ComSat's reservations on the ad referendum MOU and we understand that Hughes has indicated some private concern. We are not aware of other carrier or aerospace opposition (certainly none has been expressed publicly) and we note that ATA has publicly stated that it would not oppose the program although it favors a NASA (government-owned) experiment. In any event, U.S. mainland-Hawaii routes traverse international air space and are separated from domestic air routes (as Overseas Air Transportation) under the Federal Aviation Act.

(d) Paragraph e on page 10 should point out that the INTELSAT procurement arrangements are settled and that we were able to eliminate the strong production-sharing aspect of the Interim Agreement in the Definitive Agreement when a large group of non-producing states became involved.

(e) Paragraph f on page 10 is disputed by the Department's Office of the Legal Adviser who feels that Section 414 munitions control requirements are satisfied.

(f) Paragraph h on page 10 mistakes the intent of Option 1 which is the formulation of an Administration position. Certainly, no assurance of U.S. participation can be given without Congressional funding approval. However, Congress can make no decision until the Administration proposes the program.

(g) Paragraph a(2) on page 11 should acknowledge the ongoing work of the ICAO ASTRA panel which will have a powerful influence on future ICAO action and in which we have already experienced difficulties.

(h) Paragraph a(3) on page 11 ignores the fact that the Ministerial Council of the European Space Research Organization supports the Aerosat program as now proposed. This means a governmental commitment by the participating countries in Europe. In these circumstances, it is not accurate to state that governments have few strong fundamental views concerning the MOU.

(i) Paragraph b on page 12 fails to reflect the fact that the issue of mobile services was discussed at great length during the INTELSAT negotiations and extensively explored in the negotiation of the MOU. U.S. views on the broader issues were not well received by the Europeans and a favorable resolution of these issues will require extensive and broad based negotiations in order to involve smaller countries more inclined to U.S. views. It is clear that the Europeans would not view Option 2 as a first move to negotiate on a new foundation, but rather as a refusal to engage in any short-term, limited, joint experimental activity without a concession on longer term issues.

Representatives of the Department would be glad to discuss these issues with you at your convenience, and we would appreciate being informed of the consequential adjustments in the draft paper.

Sincerely yours,

Julius L. Katz
Acting Assistant Secretary
for Economic Affairs

Ltr to Whitehead
from Beggs, Dec 15

Mr. Whitehead

THE UNDER SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

December 15, 1971

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

Dear Mr. Whitehead:

As you know, over the past several weeks our respective staffs, together with representatives from the Department of State, have worked to prepare a paper outlining the arguments for and against approving the ad referendum Memorandum of Understanding for a Joint Aeronautical Satellite Program with the Europeans. I should like to take this opportunity to make these broad comments on the results of their efforts, the enclosed paper dated December 11, which I understand you intend to forward through appropriate channels to the President.

First, it was my understanding that this paper was intended to define the issues and the options and to set forth the respective views of the Department of Transportation and Department of State, who favor proceeding with the program, and of your office which is in opposition to this course of action. While this concept is quite agreeable to me, I am concerned that the paper as it stands might inadvertently be taken by the uninformed reader to be an unbiased account. By its nature, it is an adversary document and it should be treated as such. For this reason, I believe this should be made clear on the final document.

Second, and of greatest concern to me, is your proposed inclusion of a Section V entitled "Recommendations," which includes the views of parties who did not participate in the preparation of the paper; namely, the Assistant to the President for International Economic Affairs and the Office of Management and Budget. Their views clearly do not belong in a document intended to reflect the beliefs on the aeronautical satellite program held by OTP on one hand, and DOS and DOT on the other.

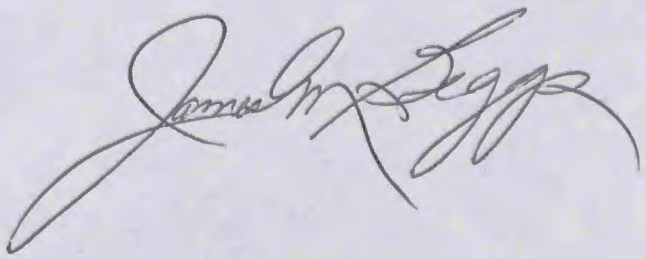
I might add at this point my belief that, just as these offices have not participated in the many discussions which DOT/FAA, DOS, and OTP have had on the advantages and disadvantages of the program, they have not had the opportunity to receive briefings on all facets of the program, and in particular from DOT and DOS. Therefore, I do not believe that the elements of their recommendations are based upon complete knowledge of the information available. Consequently, I have

asked my staff to contact these offices to provide them with complete and detailed briefings, to answer any questions they might have, and to provide them with whatever factual material they may require.

My third point is that I believe other revisions to the paper are necessary. For example, in Section I entitled "Background," I note that a "policy guidance" letter you sent to Federal Aviation Administrator Shaffer is quoted in context with your January 7 Policy Statement. I consider this inappropriate because by so doing, a publicly issued statement of Administration policy is, by implication, given equal stature with a letter sent more than a half year later. I also note that you make a number of assertions with regard to foreign affairs, and that you argue that Administration endorsement should be withheld because of possible embarrassment in the event that Congress did not approve funds for the program. I will defer to the Department of State as regards the former matter. However, concerning our relationship with Congress, I believe that we in the Administration normally establish our position before seeking Congressional action, and see no reason to change this process in this case.

In spite of the foregoing comments, I would be agreeable to your sending the paper forward provided you include this letter in the package. I would appreciate being advised as to the course of action you plan to follow.

Sincerely,



Enclosure

December 11, 1971

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b. Provision for separate but coordinated procurement of ground stations and pre-production aircraft avionics;

c. Provision for use without charge of satellite capability by the major partners and other nations wishing to join in the coordinated aeronautical experimentation;

d. Partnership management arrangements for the U. S. and Europe including:

   (1) joint and equal funding;

   (2) joint and equal management requiring unanimous US/European agreement through an Aerosat Council on which the U. S. and the Europeans (as a group) would each have one vote. This is equivalent to a veto by either party and provides each party with essential control over all aspects of the program beyond the basic provisions of the MOU;

(3) joint and equal ownership of two communication satellites over both the Atlantic and Pacific oceans;

(4) a fair and reasonable distribution of the work in recognition of the joint funding among member states of the ESRO states participating in the joint program and the U.S. The FAA and ESRO agree that this will result in approximately equal distribution of contract responsibilities through subcontract between U.S. and Europe.

e. Participation on a non-partnership, advisory basis by Australia, Canada, and most probably Japan, each contributing $4 million and engaging actively in the testing and evaluation effort but on a non-production basis.

f. The MOU terminates on or before 1 January 1980, without prejudice to follow-on arrangements.

III. Options

The courses of action open to the U. S. Government are:

Option One - Approve signing of the ad referendum MOU and fund the program as defined.

Option Two - Renegotiate after disapproval of the ad referendum MOU by proposing to the Europeans, as well as the Japanese, Canadians, and Australians, further discussions with government communications officials as to how best to meet broad communications needs for the 1970's, including aeronautical satellite. (Such discussions would not be with the European Space Research Organization (ESRO).)

IV. Discussion on Options

A. Approve the Ad Referendum MOU and Fund the Program (Option One)

1. Arguments for this Option

a. The U. S. should sign the MOU and fund the program since it represents a highly satisfactory arrangement with significant benefits for international aviation, international relations, the U. S. Government and U. S. industry.

b. This pre-operational/experimental program offers the only prospect for adoption of an ICAO standard and an internationally accepted implementation plan by 1980.

c. Since this is an experimental program in air traffic control (although not in satellite communications technology), only governments are willing to defray the air traffic control expenses and all existing offers are premised on major government support by investment or guaranteed lease payments. Equal participation by Europe and financial contributions by Canada, Australia, and Japan will lessen the load on the U. S. taxpayer and create a sound precedent for other experimental space programs in which the Administration has sought to enlist European cooperation.

d. International participation will produce a balance of payments inflow of at least $30 million in this program while satisfying strong foreign demands for a responsible role in space exploration. In view of the contributions from Australia, Canada, and Japan, the expected cost to the partners is $56 million each, assuming an estimated total space segment cost of $125 million. The expected return to U. S. industry is in excess of $85 million.

e. Government investment will be limited to the pre-operational/experimental phase which is consistent with the nature of the program. The program arrangements will thus preclude any precedent for Government involvement in commercial operations.

f. The U. S. will insist that the subsequent operational system will be organized on a private lease basis.

g. A joint program will create an atmosphere conducive to the establishment of satisfactory commercial arrangements for an operational capability useful not only to aeronautical authorities but to other mobile service users who, by or before 1980, may develop requirements.

h. Government investment, which is consistent with our operation of other experimental programs, will minimize costs to the U. S. taxpayer by utilizing existing management capability, reducing administrative complexity, especially in the U. S. - European interface (the Europeans have rejected participation on a lease basis and insist on investing). Government investment to minimize costs and reduce administrative complexity is supported by U. S. manufacturing industry.

i. The proposed partnership arrangement entails European sharing of responsibilities for management and production in return for full sharing of costs. Production sharing has been used in NATO and INTELSAT and is still being considered in NATO negotiations. It is an essential part of the partnership arrangement of this program.

2. Arguments Against this Option

a. This program can, if properly structured with the Europeans, provide the seed for development of a new mobile communications industry. Since the satellites for this program are designed for 5-7 years, there is concern that we are now

structuring the institutions for aeronautical communications, and, more generally perhaps, a mobile communications industry for the next decade and beyond. The American Institute for Merchant Shipping has asked that the Policy of 7 January be augmented to assure full maritime participation. The Maritime Administration even now has a program underway leading to a maritime satellite system. If allowed to develop, this industry may gross from $500M to $1 billion in the first decade. It can provide work in excess of $150 million to our aerospace and electronic industries in the next five years. For this reason, the central thrust of policy should be to permit a fair and equal competition by U. S. and European industries without governmental guarantees. In the tentative agreement, competition is restricted by providing for sharing of production, and the management and ownership arrangements practically foreclose private sector venture investment.

b. The proposed FAA/ESRO program may establish a precedent of joint government management and ownership which would be difficult to reverse in 1980 when the pre-operational project concludes.

c. The MOU includes a program of satellite development using technology generally available from prior U. S. aerospace efforts and, in effect, may subsidize European aerospace industry.

d. The proposed management, production sharing, and ownership arrangements contravene private sector incentives for investment of venture capital and, as a result, the joint FAA/ESRO program is opposed by U. S. communications carriers and several aerospace firms. The international air carriers, both U. S. and foreign, are also opposed because of expected increased costs. The Air Transport Association is concerned because of implications of government ownership

and European influence of the satellite communications serving our domestic air carrier routes between the U.S. Mainland and Hawaii.

e. The production arrangements encourage the concept of sharing production by political agreement and will, as a U.S. Government commitment, stand as a persuasive precedent in the future, which is contrary to U.S. interests. In this respect, the draft MOU is inconsistent with U.S. positions in other international forums, i.e., INTELSAT and NATO. The Secretary of Defense has formally expressed strong opposition to divided management and production sharing for the new NATO Integrated Communications System. An agreement for production sharing for this program would seriously undermine creditability of the U.S. in NATO negotiations.

f. Finally, the draft MOU is inconsistent with the Mutual Security Act of 1954, Section 414. The MOU commits the U.S. to provide access to technology prior to the review by the Munitions Control Board that the Act requires.

g. It is doubtful that the Europeans have the will to carry out any threat to go forward alone in producing an air control traffic system using satellite communications if we do not accept the present agreement.

h. Approval of this program prior to Congressional action authorizing U.S. funds for the programs is unwise because legislative approval cannot be guaranteed, especially in the light of publicly expressed Congressional opposition and industry attitudes toward the program. Embarrassment to the U.S. among the Europeans would follow signature of the MOU now if Congress were later to refuse funds for the program.

B. Renegotiate After Disapproval of the Ad Referendum MOU (Option Two)

1. Arguments for this Option

a. Concern has been expressed that unilateral U. S. alteration to the proposed Memorandum of Understanding would be harmful to our foreign relations and has suggested that ICAO would block approval of the operational system. These fears are not well founded for several reasons:

(1) The FAA, including its Administrator, has continually made it clear that the discussions were exploratory and that a review of the tentative agreements by the respective governments, both U. S. and European, would be necessary.

(2) No essential ICAO action is necessary until the middle of the decade, and it is difficult to believe that present differences will have discernible effects on a world body of 122 nations in 1980.

(3) The French and German space communities have provided the principal motivation and guidance for the evolution of the European views. In assessing the impact of renegotiation, it must be understood that there is a clear distinction between the aviation ministries, the international air carriers, and the French and the German space communities. While the French and German aviation ministries, and to a lesser extent the British aviation ministry, tend to be influenced by the views of their respective space communities, other European aviation ministries and governments are believed to have few strong fundamental views concerning the specific arrangements embodied in the proposed MOU.

b. The fundamental focus of current concern should not be the draft MOU, but the central issue, which is: Can a cooperative program be structured which is consistent with Administration policy, and can such a program now be negotiated without unacceptable effects on foreign relations.

The answer to this question can never be known unless further negotiation is at least attempted. There are reasons to believe it may succeed. While proposals to alter the program will definitely cause adverse reaction from the French and German space communities, we believe that the overall reaction of governments can be minimized by firm and tactful negotiation. The Europeans are uncertain about the outcome, and it is proposed, therefore, to use this uncertainty to negotiate arrangements consistent with broader United States objectives.

c. The U. S. should accept the temporary political cost of disapproving the draft MOU while discussing with the communications officials of the European and other governments the real problem of providing satellite communications to all who cross the seas.

The U. S. should deal with the whole oceanic satellite communications problem, not merely a limited system directed to air traffic control, and discussions with all interested states should be lifted out of the space-aviation area and concentrated among those foreign officials responsible for communication problems. In this different environment, the need to have an oceanic satellite communications system could be presented along with other programs the U. S. is prepared to undertake. Starting anew on a broader base, the U. S. can be consistent in pursuing its objective of maintaining communications in the private sector and allowing industry to enter fairly and competitively.

2. Arguments Against this Option

a. Disapproval of the MOU in anticipation of broader discussions and negotiations in the future is both unnecessary and undesirable.

b. It is premature to attempt to discuss "the whole oceanic satellite communications problem" because mobile service requirements, other than air traffic, cannot be defined at this time. Furthermore, efforts to broaden the program could be interpreted as a U.S. step toward undermining the INTELSAT Agreement.

c. The expected capability (consistent with economic constraints) of the pre-operational/experimental satellite system (two satellites over each ocean) is needed to meet the aeronautical test and evaluation goals. Hence, it is not essential to consider now the broader issue of multiple-users, except on an experimental basis which is provided for in the MOU, and the aeronautical satellite can be isolated for separate and immediate consideration.

d. The discussions leading to the MOU were conducted with the representatives of the governments involved selected by those governments. It is unreasonable to expect that negotiations with foreign government communications officials would be possible or would result in a more favorable agreement for the U.S. on the immediately needed aeronautical satellite program than the present MOU. Further, given the complexity of the overall oceanic communications problem and the need to reconsider the Communications Act of 1962 under this option, the time necessary to attempt to negotiate a more general agreement will delay even further the consummation of any agreement in an area where immediate action is needed and render impossible the goal of a 1980 operational system.

e. Disapproval would greatly disturb the Europeans (as well as Canada, Australia, and Japan) and cast strong doubts on our credibility with regard to proceeding on any joint aeronautical or space venture. It might also endanger ratification of the recently-negotiated definitive arrangements for INTELSAT. This option is in fact self-defeating since the best way to establish a cooperative framework for a future program would be to first establish a short-run cooperative relationship on the proposed joint program as defined in the MOU.

f. It will "sour" the ICAO outlook with respect to U.S. views on aeronautical satellites and other issues of international civil aviation and would result in a clear diminution of U.S. influence and leadership in ICAO.

g. It would lead to an independent European/Canadian action in the Atlantic (since they have the technology, the funds, and the assurance of a U.S. launch) which would put the U.S. Government and industry at a clear disadvantage with respect to an operational system and create vested interests effectively precluding a broad-based approach to oceanic mobile communications in the future. It also would provide an "opening" for seeking eventually to recover their costs for such a program by "user" charges on international traffic in the Atlantic where two-thirds of the passengers are U.S. citizens.

V. Recommendations

a. The DOT/FAA and DOS strongly recommend that the Administration approve the MOU and fund the program (Option One). The discussions leading to the MOU were conducted in accordance with OTP guidance; the stated OTP objectives of 7 January have been met, and the program represents a highly satisfactory arrangement with significant benefits for international aviation, international relations, the U.S. Government, and U.S. industry.

b. The Assistant to the President for International Economic Affairs recommends renegotiations (Option Two) to seek an agreement more consistent with the Administration's international economic objectives.

c. The OMB recommends renegotiation on the basis that the proposed MOU:

1. Is contrary to U.S. commercial and balance of trade interests;

2. Is likely to lead to management and budgeting differences with the European partners that will soon undermine the good will created by going ahead at this time;

3. Is contrary to published Administration policy to an extent that will be difficult and potentially embarrassing to justify to Congress and to industry (Senate Commerce Committee has scheduled hearings which it feels should precede signing of the MOU);

4. Adds $60 million unnecessarily to the FAA budget that is not included in current planning (House and Senate Appropriations Committees have indicated opposition and concern).

d. The Office of Telecommunications Policy recommends renegotiation (Option Two). The United States should seek a cooperative program consistent with the fundamental policies and objectives of this Administration. A successful program cannot be based on management-by-consensus proposed in the MOU, with the implicit European veto which practically guarantees program delays and cost over-runs. It is likely to bring about more contention than cooperation with Europe and other nations. Renegotiation offers the prospect of a cooperative program consistent with investment incentives for the private sector rather than government ownership as proposed.

Memo fr Volpe to the President, Dec 16, 1971

Mr. Whitehead

12/20

DEC 16 1971

MEMORANDUM FOR: The President

This is to recommend your approval of a jointly funded and managed US/European aeronautical satellite program to provide, during the mid and late 70's, the precperational/experimental test and evaluation of oceanic communications for air traffic control purposes. There is general agreement both here and among our Atlantic and Pacific allies that such a program is required to gain the technical and operational experience to permit the establishment of an operational system by the early 1980's, when industry and government projections indicate that there will be a serious congestion and safety problem in the air routes over the Atlantic and Pacific ocean areas.

Despite this general agreement over the seriousness of the projected problem and the need to move expeditiously to develop the necessary solutions, there is disagreement within the Administration as to how best to proceed. This Department, and the Department of State strongly recommend that approval be given to proceed with the program as set forth in an Ad Referendum Memorandum of Understanding developed in discussions this Summer and Fall with the European Space Conference, representing 10 European countries, and with Canada, Australia, and Japan. The Office of Telecommunications Policy and, we understand, the Office of Management and Budget and the Assistant to the President for International Economic Affairs advise against this.

These international discussions were the culmination of several months of technical and programmatic study and consultation within the Administration, which began with the public issuance, in January 1971 of a policy statement by the Office of Telecommunications Policy which highlighted the pressing future need for aeronautical satellite services and directed the Department to develop the necessary preoperational program on an urgent basis. During this period of assessment, it became apparent that to proceed unilaterally with a system in the Pacific, as had been initially envisioned, would have been too costly, both in a financial sense, and in international terms.

We accordingly reached tentative agreement with the Europeans for a program which would provide:

* Joint US/European procurement of two communications satellites each over the Atlantic and Pacific ocean areas for a total cost of $125-142 million, which would be available by 1977 for use without charge by the partners and other nations, such as Canada, Australia and Japan, who would be willing to join in the experiment as associates from the outset by providing $4 million each towards its cost and an experimental ground station.

* Joint and equal funding, at a cost to the U.S. of some $60 million, coupled with joint and equal management and a fair and reasonable distribution of work between the U.S. and Europe. The $60 million U.S. share would be spread over the fiscal years 1973 through 1977.

* A net balance of payments to the U.S. of at least $30 million, resulting from the procurement of the necessary launch vehicles from the U.S. This would mean that over two-thirds of the cost of the program would be received by the U.S. aerospace industry.

* Freedom of action as regards our role in defining the operational system. It will provide a strong U.S. position of influence in the International Civil Aviation Organization, which will allow us to ensure the operational system is organized on a lease basis in 1980 when the experimental agreement expires and the operational system must be agreed to by international civil aviation.

I am convinced that the alternative of not signing the Memorandum of Understanding would result in the Europeans proceeding unilaterally on a program which would cause serious harm to U.S. civil aviation and industrial interests. There is no transfer of strategic or commercial technology involved, in fact, the Europeans have the money, the necessary technology, and the assurance of a U.S. launch -- all necessary ingredients to a unilateral program if they were to embark on this course of action.

It has been suggested by the Office of Telecommunications Policy that the alternative of not signing the Memorandum of Understanding be accompanied by a renegotiation of the program on a much broader scope to encompass all areas of oceanic communications of international interest. I fail to see how such a renegotiation can do anything other than delay a program which is needed now, particularly since the objectives and ground rules of such a renegotiation have not been defined.

I believe it would be extremely prejudicial to our interests in the international aeronautical and in space fields if we did not proceed. Our leadership role in international civil aviation is already diminished; we cannot afford to further weaken our position by demonstrating our inability to work with our allies in an area which, by definition and treaty, is international.

In view of my responsibilities as Secretary of Transportation, I strongly recommend that the Administration approve the signing of the Ad Referendum Memorandum of Understanding, as it has been negotiated, and the funding of the U.S. share of the program.

(S/ J.A. Volpe

Ltr from Rogers to
the President
Dec 17, 1971

Aeronat Chron Book

Adams 8F-100

THE SECRETARY OF STATE

WASHINGTON

17 DEC 1971

INFORMATION: Mr. Israel, EM-1
INFO CC: Gen. Lundquist, ED-1
Mr. Darden, AV-1
Mr. Pulling, PL-1
Mr. Cary, IA-1
12/23/71

MEMORANDUM FOR THE PRESIDENT

Subject: Aeronautical Satellite Program

The Department of State believes that the proposed international, experimental aeronautical satellite program would contribute significantly to our civil aviation and international relations objectives. The joint and equal U.S.-European partnership, with added participation by Australia, Canada and Japan, would be a concrete realization of your announced objective to promote international cooperation in the exploration of the peaceful uses of space. Working together, the major aviation states could accelerate ICAO acceptance of standards for satellite communications for international air traffic control (as well as reform underlying treaty agreements on traffic control responsibilities to capitalize on the cost-saving potential of advanced communications) and pave the way for a follow-on global commercial capability serving all air and sea carrier communications needs.

Rejecting the proposed program and attempting to obtain a revised arrangement such as a worldwide commercial agreement before proceeding with experimental work in air traffic control would have a number of serious, adverse consequences. This program has been designated Europe's number one communications and space research priority and European disappointment would be intense thus hampering other cooperative space and technological research projects. Also, it is most likely that rejection would cause Europe and Canada to pursue their own experimental aeronautical satellite program over the main North Atlantic air routes which they control under the Chicago Convention, and thus undercut the possibility of a global commercial capability. The Europeans have the funds, plus the

technology in hand or under development, and we have publicly assured them a launch. At the very least, since global commercial arrangements will require lengthy and difficult domestic debate involving the Federal Communications Commission, the courts and the Congress, as well as extended international discussions, rejection of this program would frustrate the Administration's published objective of obtaining international clearance for operational satellite-based traffic control as soon as possible.

I recommend that you endorse the proposed program, and authorize the Secretary of Transportation to seek appropriate funding.

William P. Rogers

KK - Memo from Kissinger
and Flanigan to President
(Walsh draft)

Original Walsh Draft

MEMORANDUM

THE WHITE HOUSE

WASHINGTON

ACTION

MEMORANDUM FOR: THE PRESIDENT

FROM: HENRY A. KISSINGER
PETER M. FLANIGAN

SUBJECT: Satellite for Aeronautical Telecommunications (AEROSAT)

Following the promulgation of guidance by the Office of Telecommunications Policy (OTP), State and the FAA have negotiated with the European Space Research Organization a tentative agreement for a joint program to provide a preoperational system to provide satellite communications with trans-oceanic aircraft. [It is termed "preoperational" because although the satellite is not experimental, the operational procedures are; an "operational" system is one whose use by aircraft is mandatory.] FAA wants funds and approval to initiate the program and is strongly supported by State. OTP holds that the agreement is not in accordance with policy guidance, and should be rejected.

3 4 ~~Although the agreement might accord with a narrow interpretation of the letter of policy, OTP's objections are fundamental.~~ Under the proposed arrangement Europe would pay half and be guaranteed about one-third the work. OTP objects to the guarantee and wants work to be bid competitively (which the U.S. would surely win). It also wants the service to be provided by private enterprise on a lease basis. This is proposed not only on general grounds but in order to help get started a free-enterprise satellite communication service to mobile users, which OTP envisions as an activity grossing $1 billion this decade.

6 As OTP states in their letter to you (Tab E/Study, Tab F) the alternatives are: Sign the agreement or reopen negotiations in a different forum.

7 Approve the MOU which

~~Signing the agreement will initiate a needed program,~~ will further ~~your objectives of~~ international cooperation in space and will provide a real accomplishment in an area wherein accomplishments have been ~~few, as well as~~ and head off mounting European criticism of our apparent indecisiveness in our space cooperation. However, it features government ownership of the preoperational system, might set a pattern which would preclude private sector ownership of the operational system, and includes guaranteed work sharing.

too one-sided

Successful Renegotiation will

Renegotiation, if successful, ~~would~~ eliminate guaranteed work sharing, ~~would~~ lead to private sector ownership, and ~~would~~ do so through a system which would provide the impetus for a maritime (and other mobile) communication services industry.

Secretaries Rogers and Volpe urge that the agreement be signed (Tabs C and D) the former taking a strong personal position ~~in terms of his personal credibility~~ noting that the agreement was negotiated in good faith following the original guidance, and the latter for these reasons as well as the international relations impact of not signing and the great difficulties, both domestic and international, of attempting to reopen negotiations. (Rogers has repeated these views in subsequent correspondence.)

OTP believes that the agreement should be renegotiated in order to fully achieve your policy objectives. In this they are supported by the Assistant to the President for International Economic Affairs.

Mr. Shultz believes that the agreement should be rejected, for essentially the same reasons as OTP, as well as a desire to defer the need for funds to FY75 (Tab B).

We are being approached regularly by European representatives who point out the importance with which this program is regarded in Europe and the adverse impact of rejecting the agreement (~~Tab A~~).

It is clear that the resolution of this matter requires a balancing between domestic and international considerations. We have carefully considered this matter and conclude that, while the effects on domestic matters are fairly clear, and serious, the effects on international relations are much less obvious. The stream of communications from Europe may be partially motivated by their eagerness to solidify an arrangement which is particularly attractive to them. Thus, the consequences of rejecting the present draft agreement, while significant, are not likely to be dire. The principal real concern is that Europe, out of pique, may attempt to frustrate us in the International Civil Aviation Organization (ICAO).

Having examined the matter, we recommend on balance that, despite the strong views of Secretaries Rogers and Volpe, the Aerosat negotiations be reopened. Moreover, to provide assurance that these subsequent negotiations lead to an agreement which accords with your policy objectives, we recommend that the negotiations should be led by your Director of Telecommunications policy.

If you accept these recommendations, we will so advise the Secretaries of State and Transportation.

Reopen negotiations (Our recommendation) _____

FAA sign agreement (OMB must amend budget to fund) _____

Other _____

LL - Memo to Flanigan
from Whitehead, 1/18/72

January 18, 1972

MEMORANDUM FOR MR. FLANIGAN

I understand that General Haig and John Walsh (NSC Staff Scientific Expert) are coming to see you this afternoon to discuss Aerosat. It might be useful for me to sit in, but in any event, I will try as best I can to summarize my views on this issue.

Haig and I have discussed this subject on several occasions; as you can imagine, it is not high on his priority list. The ball has been in his court since December 13, when I forwarded to him our latest interagency review and a memo for the President. He and Walsh are being advised by State that failure to sign the draft Memorandum of Understanding by the United States and the 10 European countries involved will cause a serious international relations problem. As you know, State always advances this type of argument to support any position they favor. Although the precise truth is impossible to assess, I am convinced from my own rather extensive discussions with communications, space, and foreign office officials from European countries that the impact of a refusal to sign would be serious, but that the impact of a tough-minded negotiation would be modest if handled with some sensitivity. The State Department has argued since mid-summer of 1971 that changes in the MOU were impossible and that an early signing date was essential for foreign relations reasons. However, it has always been possible for them to change the MOU and to delay conclusion of the negotiations when it suited their purpose. Most recently, the State Department has argued that failure to sign the draft MOU in early November would seriously upset the Europeans and perhaps cause them to proceed with a unilateral system. Haig supported this position because of growing concern about Secretary Connally's tactics in negotiating the monetary crisis and the upcoming Presidential summit meetings with the Europeans. As you can see, faced with the prospect that the Administration might not approve the MOU, State and FAA have conveniently delayed the target date for signing. Further, we got through the Presidential meetings with no visible effect on our international relations.

Clearly, I cannot be the final word on the international impact of this situation. However, one of the major responsibilities of this Office is the coordination of the international communications policies and negotiations of this country. I assume that implies a responsibility for making responsible judgments on these matters. If, indeed, this is a problem of serious concern at the Presidential level, I am prepared to bow to the weight of superior authority and judgment. However, that does not seem to be the case, as evidenced by Haig's not having time to get to it for so long. Al and I have discussed the problem of assessing the degree of international concern. (At one point, he referred to "cables from Europe," which later turned out to be one cable from the American Embassy in England.) He and I agreed that much of the "grass roots" opposition of this type from abroad is frequently generated by the State Department. Now, thanks to the long delay, the Europeans are beginning to apply more pressure in an attempt to sway the U.S. Government's decision. It is my strong belief after several months in this effort that there is very little tangible evidence that serious, high level international problems would be produced by a U.S. decision to reopen the negotiations. (State and FAA realize that the negotiations must be reopened, in any event, to allow for certain changes that they feel are necessary.)

I realize that OTP must share some responsibility for letting things get to this state. Willingly accepting that, I must point out that we were constantly battered by State and FAA that there would be sufficient opportunity to review the memorandum once it was drafted. Since then, they have constantly taken the position that once drafted, it could not be changed. Needless to say, I find this behavior reprehensible, and I could be more angry only if they are allowed to get away with this kind of thing.

In contrast to the transient, and somewhat uncertain international relations considerations, the case against the proposed arrangements on their merits is overwhelming and is conceded broadly even by Haig. The most significant reasons are as follows:

1. The provision for joint and equal government ownership of the system will foreclose the development of maritime and aeronautical satellite communications as a private sector activity. Since satellites are inherently superior

to present radio communications, we are effectively killing an important area of private sector communications services. The market potential for these new satellite services is likely to be between $500 million and $1 billion during the first decade.

2. This case will constitute a persuasive precedent for future space cooperation and for joint ventures among governments in commercial applications of space. The overwhelming majority of space applications lie in and around the communications field, so that these agreements will tend to shape the international communications industry for a long time to come. I see no way that the United States can retreat from precedents established in view of the Europeans' positions in INTELSAT and NATO and their expressed intent to use this program as a model for future communications ventures.

3. The management provisions (providing for veto power by both parties, equal sharing of hardware production, and joint ownership and operation of the system) are clearly unsound. This program is very unlikely to be unworkable and even if it can be made to work, it is likely to lead to more international strife than goodwill.

4. State has frequently argued that if we attempt to change the MOU that the Europeans will "go it alone" leaving our industry completely out of the picture. They also inferred that the French and possibly other European countries might well go into an alliance with the Soviet Union. However, there is unanimous agreement in the United States Technical Committee that the Europeans lack important technologies needed in building a complete satellite. The Soviet Union has never demonstrated a capability to launch satellites into synchronized orbit (this latter point is no doubt highly classified). To the contrary, there are strong incentives for the Europeans to want cooperation with us.

The program is opposed by OMB, OST, NASC, Pete Peterson, and myself. It is blatantly contrary to published Administration policy, dated January 7, 1971, on aeronautical satellite communications

approved by all members of the Executive Office, including NSC, after extensive review. That policy specifically stated that international cooperation is to be sought on standards, operations arrangements, etc., but are not to involve government ownership, joint management, and must provide for international competitive bidding rather than production sharing by political agreement. The arrangements proposed in the MOU are opposed by U.S. and foreign airlines, U.S. communications carriers, and most U.S. satellite manufacturers. There is significant opposition in the Congress and an increasingly negative view of the Administration's handling of this whole affair. The Senate Commerce Committee and the House Appropriations Committee are planning hearings and the FAA has been advised to defer signature of the MOU until budget clearances are obtained from the Congress. There are no provisions in the President's FY 73 budget for the $60 million that would be required for investment in this program if the proposed MOU is executed.

Of course, the senior Administration witness at Congressional hearings would be the Director of Telecommunications Policy, a most unhappy event for me and the Administration if the MOU is signed. I cannot defend this specific program or the type of relationship negotiated in the MOU because I feel strongly that they are unsatisfactory from both technical and economic points of view and because the precedents involved are seriously disadvantageous to U.S. interests. The only basis on which I could defend our signing of this agreement would be that certain unspecified international considerations were controlling. In view of the hostile attitude of the Congress towards this program, and the distinct possibility that they may object to funding the program, I would hope we would have a sufficient sense of self-preservation, foresight, and fortitude to deal with this matter ourselves before things get to that point.

Finally, a point somewhat less important with regard to this episode, but of great importance for our future, is the ability of OTP to carry out its responsibilities in the international communications area. The Congress has made it amply clear that they look to OTP and not State for this leadership and, indeed, one of our assigned responsibilities is the coordination of such activity. If DOT and State are permitted to trap the Administration into reversing its own stated policy and are able to endrun OTP, we can be sure that there will be similar arrangements in negotiations by other departments in the future.

This kind of very complex negotiation is the sort of thing which OTP is equipped to deal with and, indeed, has the responsibility to deal with, that should not end up at the White House to be mediated at the level of Henry and yourself. However, there are many more issues of this type coming along, and they will continue to annoy you and Henry unless OTP's responsibility and authority in this area are affirmed. Our current unfortunate situation is complicated, I realize, by OTP's failure to bash DOT and State over the head at an earlier stage in the negotiations. However, I have learned my lesson. I believe I can deal with this and other matters both tactfully and strongly if I am simply told (along with whomever else you deem relevant) to straighten the thing out right. I have attached a memo that would accomplish that result.

Clay T. Whitehead

Attachment

cc: Mr. Whitehead
Dr. Mansur
DO Chron
DO Records ✓

Whitehead/Mansur:jm/tw 1/18/72

Clay T. Whitehead/jm
DRAFT
1/17/72

MEMORANDUM FOR

Secretary of State
Secretary of Transportation
Director of Telecommunications Policy

Subject: Aeronautical Satellite Program (Aerosat)

After a careful review which took into account international, domestic, and Congressional considerations, the President has decided that the proposed FAA/ESRO aeronautical satellite program should be substantially redirected.

The Director of Telecommunications Policy has been instructed by the President to coordinate the implementation of his decision and to initiate immediate discussions concerning cooperation in international communications, including aeronautical satellite services, responsive to the Administration's several objectives in this area.

In conveying this decision to European and other foreign governments concerned, every effort will be made to reassure these governments that the United States fully supports international cooperation in space even though it cannot accept the specific proposals contained in the current draft FAA/ESRO Memorandum of Understanding.

Henry A. Kissinger

cc: Director, Office of Management and Budget
Administrator, Federal Aviation Administration

MM - Memo to Sec. State, Transportation from Kissinger, 2/9/72

THE WHITE HOUSE

WASHINGTON

February 9, 1972

MEMORANDUM FOR

The Secretary of State
The Secretary of Transportation

SUBJECT: Aeronautical Communications Satellite (AEROSAT)

After careful consideration of your memoranda of December 17 and 16, respectively, and a review which took into account domestic and Congressional, as well as international considerations, the President has decided that the proposed FAA/ESRO aeronautical satellite program as set forth in the draft Memorandum of Understanding is not in accord with Administration policy, and should be substantially redirected.

The President has instructed the Director of the Office of Telecommunications Policy to coordinate the implementation of his decision by providing an updated statement of policy in this area, and by undertaking responsibility for the substantive portion of the reopened negotiations for aeronautical satellite services.

In conveying the decision to European and other foreign governments concerned, every effort will be made to reassure these governments that the United States fully supports international cooperation in space even though it cannot accept the specific proposals contained in the current draft FAA/ESRO Memorandum of Understanding. The Secretary of State will inform these governments, with the specific form of the notification coordinated with the Director of the Office of Telecommunications Policy.

Henry A. Kissinger

cc: Director, OMB
Director, OTP

Memo from Whitehead to
Flanigan, Kissinger, 2/11/72
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OFFICE OF TELECOMMUNICATIONS POLICY
EXECUTIVE OFFICE OF THE PRESIDENT
WASHINGTON, D.C. 20504
February 11, 1972

DIRECTOR

MEMORANDUM FOR

Mr. Kissinger
Mr. Flanigan

In order to assess the European reaction to the President's decision to restructure Aerosat and to develop tactics for renegotiation, I would like to review European space objectives and the Aerosat options which may be open to them.

In discussing European objectives, we must maintain a careful distinction between England, France, and Germany, as well as the differing objectives of industry, ESRO, and Governments. In its simplest terms, the objective of industry is to effect technical parity with the United States through government subsidy and guaranteed production quotas. ESRO supports industry but, in addition, needs to strengthen its institutional role by shifting its focus from scientific activities to applications. The governments of Germany and United Kingdom are sensitive to pressures from their industries and, therefore, reflect their views concerning guaranteed production sharing.

The Government of France has similar views but, perhaps as importantly, a basic and fundamental objective is related to the Concorde. The economic viability of the Concorde is marginal at best and is highly dependent on optimizing routes and minimizing traffic delays on the North Atlantic and Pacific routes. Therefore, improved air traffic control may figure prominently in French considerations, as well as production sharing.

There are four possible reactions to U. S. overtures for renegotiation of Aerosat:

1. After an initial negative reaction, accept U. S. assurances at face value and negotiate the best cooperative arrangement available to them.

2. Immediately reject any proposal for alteration of the program and declare their intention to proceed with a unilateral program in the Atlantic.

3. Enter into negotiations but ultimately reject U.S. proposals for a restructured cooperative program and, thereafter, proceed with a unilateral program.

4. Withdraw completely, but impede U. S. progress toward a satellite communications system, and vote against adoption of the associated ATC system when it comes before ICAO in 1977-78.

The first course of action, we believe, is the most probable. Options 2 and 4 are clearly not in accord with their objectives. Option 3 stands as a possibility, since the Europeans could conceivably construct a European satellite even though it would probably not be competitive financially or in time.

If the U. S. recognizes the legitimate wishes and desires of France, Germany, and the United Kingdom, then a restructured and cooperative Aerosat can be effected. I believe that development of a suitable Post-Apollo cooperative space program will go far in meeting both the wishes of the President for space cooperation and the legitimate ambitions of the Europeans, and yet foster evolution of communications in the private sector in the United States.

Attached is my plan for the initial steps in the renegotiation of Aerosat. In addition, the President may wish to assure that appropriate Post-Apollo initiatives are developed in the near term so that the U. S. can advance space cooperation in the proper spirit and framework.

Clay T. Whitehead

Attachment

ATTACHMENT 1

1. Immediately notify France, Germany, the United Kingdom, and Spain, including assurance of U.S. desire for a restructured cooperative program.

2. Concurrently inform the interested countries of Japan, Australia, Philippines, Ireland, Italy, Belgium, the Netherlands, Sweden, Denmark, Switzerland, Luxembourg, and New Zealand.

3. Concurrently inform Canada, coupled with personal assurances to Minister of Communications, Robert Stanbury; seek to persuade Canada to identify her interests with the U.S., rather than the Common Market, as a crucial element in the North American air traffic system.

4. During the week of 14 February, initiate bilateral discussions to dispel European uncertainty concerning U.S. views, and to assess European reaction. The "informal" bilateral discussions should be conducted at the Deputy Ministerial level with:

   Germany: Ministry of Foreign Affairs
   Ministry of Education and Science
   Ministry for Transportation, Posts and Telecommunications

   France: Ministry of Post and Telecommunications
   Ministry of Aviation
   Ministry of Foreign Affairs

   United Kingdom: Ministry of Post and Telecommunications
   Secretary of Foreign and Commonwealth Affairs
   Ministry of Technology

5. Seek to establish procedures within Government to assure co-ordination of Administration policies and programs, which effect space cooperation, communications, and foreign relations.

6. Within the framework of 5, develop definitive proposals for:

   a. European regional satellite (CEPT).

   b. Government approval of the proposed transatlantic cable and its landing in France.

c. Broadly based technical coordination for improved ATC.

d. Expanded launch guarantees, including sale of limited class of boosters.

7. Initiate bilateral consultation with Pacific basin nations immediately following European discussion.

8. In coordination with Aerosat negotiations, initiate "informal" bilateral discussions of 5b., above.

9. Evaluate results at this point before proceeding.