(Huebner) JK

JK M Whitehus Men net m M Jon Jenhar 18, 1929 M M PROPOSED STATEMENT ON THE FUTURE / MAN

It was just a little over one year ago that men first saw the Earth as it appears from the Moon. In the last twelve months, men from our planet have traveled to the Moon on four occasions and twice they have walked on its surface. With these unforgettable experiences, we have gained a new perspective on ourselves and our world.

I believe these accomplishments should help us gain a new perspective on our space program as well. Having completed that long stride into the future which has been our goal for the past decade, we must now define new goals which make sense for the Seventies. We must build on the successes of the past, always reaching out for new achievements. But we must also recognize that many critical problems on this planet make higher priority demands on our attention and our resources. By no means should we allow our space program to stagnate. But --- with the entire future and the entire universe before us --- we should not try to do everything at once. In short, our approach to space must continue to be bold --- but it also must be balanced.

When this Administration came into office, there were no clear, comprehensive plans for our space program after the first Apollo landing. To help remedy this situation, I established last February a Space Task Group, headed by the Vice President, to study possibilities for the future of that program. Their report was presented to me in September. After reviewing that report and considering our national priorities, I have reached a number of conclusions concerning the future pace and direction of the nation's space efforts.

In my judgment, three general purposes should guide our space program in the years to come.

The first is exploration. From time immemorial, man has insisted on venturing into the unknown despite his inability to predict precisely the value of any given exploration. He has been willing to take risks, willing to be surprised, willing to adapt to new experiences. Man has come to feel that such quests are worthwhile in and of themselves -- for they represent one way in which he expands his vision and expresses the human spirit. A great nation must always be an exploring nation if it wishes to remain great.

A second purpose of our space program is scientific knowledge -- a greater systematic understanding about ourselves and our universe. With each of our space ventures, man's total information

-2-

about nature has been dramatically expanded; the human race was able to learn more about the Moon and Mars in a few hours last summer than had been learned in all the centuries that had gone before. The people who perform this important work are not only those who walk in spacesuits while millions watch or those who launch powerful rockets in a burst of flame. Much of our scientific progress comes in laboratories and offices, where dedicated, inquiring men and women decipher new facts and add them to old ones in ways which reveal new truths. The abilities of these scientists constitute one of our most valuable national resources. I believe that our space program should help these people in their work and should be attentive to their suggestions.

A third goal of the United States space effort is that of practical application -- turning the lessons we learn in space to the early benefit of life on Earth. Examples of such lessons are manifold; they range from new medical insights to new methods of communication, from new management techniques to new ways of providing energy. But these lessons will not apply themselves; we must make a concerted effort to see that the results of our space research are used to the maximum advantage of the human community.

- - 3 -

We must see our space effort, then, not only as an adventure of today but also as an investment in tomorrow. We did not go to the Moon merchy for the sport of it. To be sure, these undertakings have provided an exciting adventure for all mankind and we are proud that it was our nation that met this challenge. But the most important thing about man's first footsteps on the Moon is what they promise for the future.

We must realize that space travel will be a part of our lives for the rest of time. We must think of it as a continuing process -- one which will go on day in and day out, year in and year out -and not as a series of separate leaps, each requiring a massive concentration of energy and will and accomplished on a crash timetable. What we do in space from here on in must become a normal and regular part of our national life and must therefore be planned in conjunction with all of the other undertakings which are also important to us. Space expenditures, in short, must take their proper place within a rigorous system of national priorities.

With these values in mind, I have concluded that our space program should meet the following specific objectives:

1. We should continue to explore the Moon. Future Apollo manued lunar landings should be spaced so as to maximize our

-1-

scientific return from each mission, always providing, of course, for the safety of those who undertake these ventures.

2. We should move ahead with bold <u>explorations of the planets</u>, building on our impressive successes with unmanned spacecraft. During the next decade, we plan to launch unmanned spacecraft which will observenthe planets of our solar system and explore the vast space between them. We also plan to send an unmanned spacecraft to land on the planet Mars and investigate its surface.

3. We should work to reduce substantially the cost of space operations. Our present rocket technology will provide a reliable launch capability for some time. But as we build for the longerrange future, our first step should be the development of a re-usable space shuttle, a vehicle that would be launched like a missile, but would land like an airplane, and could therefore be launched again and again. Such a transport system would help us realize important economies in our space program. The space shuttle should be designed so that it will be suitable for a wide range of scientific, defense and commercial uses.

- - 5--

4. We should seek to <u>extend man's capability to live and work</u> <u>in space</u>. The Experimental Space Station, a large orbiting workshop, can be an important part of this effort. We plan to build and launch such a station -- using systems originally developed for the Apollo program -- and should begin, during the next few years, to use it for manned operational missions. We expect that men will be working in space for months at a time during the 1970s.

Building on our experience with the Experimental Space Station, we should also begin, in this decade, to design a longer-lived Space Station Module. Such a module would provide a multi-purpose space platform for the longer-range future and would ultimately become a building block for manned interplanetary travel. As a part of this program, <u>I beliave that</u> we should eventually send men to explore the planet Mars.

5. We should <u>hasten and expand the practical applications of</u> <u>space technology</u>. The development of earth resources satellites -platforms which can help in such varied tasks as surveying crops, locating mineral deposits and measuring water resources -- will enable us to assess our environment and use our resources more effectively. We should continue to pursue other applications of space-related technology in a wide variety of fields, including

-6-

meteorology, communications, navigation, air traffic control, education and national defense. The very act of reaching out to new planents can help man improve the quality of life on Earth.

6. We should encourage greater international cooperation in space. In my address to the United Nations in September, I indicated that the United States will take positive, concrete steps "toward internationalizing man's epic venture into space -- an adventure that belongs not to one nation but to all mankind." I believe that both the adventures and the applications of space missions should be shared by all peoples. Our progress will be faster and our accomplishments will be greater if nations will join together in this effort, both in contributing the resources and sharing the benefits.

It is important, I believe, that the space program of the United States meet these six objectives. A program which achieves these goals will be a balanced space program, one which will extend our capabilities and knowledge and one which will put our new learning to work for the immediate benefit of all people.

But we must also recognize that we are faced with severe fiscal constraints and that we cannot afford to continue to fund our national space effort on the same level as in the past. With the entire universe before us and with many other urgent needs here on earth, we must

-7-

find a new balance for space in our national priorities. The space budget I will send to Congress for Fiscal Year 1971 will therefore be lower than the previous year's. I am confident, however, that the funding proposed in my budget message will allow our space program to make steady and impressive progress.

As we enter a new decade, we are conscious of the fact that man is also entering a new historic era. For the first time, he has reached beyond his planet; for the rest of time, we will think of ourselves as men <u>from</u> the planet Earth. It is my hope that we can plan and work in a way which makes us proud <u>both</u> of the planet from which we come <u>and</u> of our ability to travel beyond it.

# # # #

NASA

January 6, 1970

## MEMORANDUM FOR

Honorable Thomas O. Paine Administrator National Aeronautics and Space Administration

Honorable Robert P. Mayo Director of the Bureau of the Budget

It was agreed with Dr. Payne that NASA's FY 1971 budget will be \$3,530 million in budget authority and \$3,600 million in budget outlays. These goals will be met subject to the following Presidential objectives.

- 1. The Manned Space Flight Program is to be carried out on the previously agreed-upon schedule (there is to be no cancellation of any Apollo flight, the report to the contrary in the newspapers having been a misquote of Dr. Lowe).
- 2. HEAO and NTC satellites will not be started in Fiscal Year 71.
- 3. There is no commitment, implied or otherwise, for development starts for either the space station or the shuttle in FY 72. That is a matter to be discussed when the 172 budget is developed.
- 4. The President's option with regard to final Saturn 5 launch, as to whether it be a lunar mission or a second Experimental Space Station is still open.

Within the above objectives, NASA is to have full flexibility in planning and carrying out the reduction of its FY 71 budget from the original mark of \$3,825 million to the new mark of \$3,600 million in budget outlays.

cc: Mr. Ehrlichman Mr. Kriegsman Peter M. Flanigan Assistant to the President

NASA

January 5, 1970

## MEMORANDUM FOR MR. FLANIGAN

The current NASA budget situation is as follows:

BOB		NASA		
BA	BO	BA	BO	
3.410	3,600	3,609	3,600	

The major differences are:

- (a) BOB has reduced advanced research and technology by \$53 million BA below the NASA position.
- (b) BOB has reduced Viking by \$10 million BA lower than NASA.
- (c) BOB has reduced space station and shuttle by \$30 million BA below NASA.
- (d) NASA wants \$107 million BA for new starts (list attached) and prefers \$25 million across-the-board cuts in <u>outlays</u> rather than detailed BOB cuts.

NASA and BOB agree on FY 72 impact of Viking and other major programs. The total outlays estimated for the two proposals are:

	71	72			
		Run-out	BOB est. mla.		
BOB	3,600	3,450	3,650		
NASA	3,600	3,600	3,900		

Our major problem appears to be preserving the President's program and desired budget restraint while not "nickel and diming" Paine to death. I recommend the following compromise position be sent to Paine by you or John Ehrlichman:

The NASA FY 71 budget will be \$3,500 BA and \$3,600 outlays, subject to the following Presidential objectives:

1. The manned space flight program is to be carried out on the agreed schedule.

2. HEAD and NTC satellites are not to be started.

3. There is to be no contractual or implied commitment to FY 72 development starts for either the space station or the shuttle. Technology studies should give priority to the shuttle over the space station.

4. The option should be maintained for the President to decide on a lunar mission or a second Experimental Space Station launch for the last Saturn V of the current production run.

5. Within the above constraints, NASA is to have full flexibility in planning and carrying out the program.

> Clay T. Whitehead Staff Assistant

Attachment

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cc: Mr. Kriegsman Mr. Whitehead Central Files

CTWhitehead:ed

FY 71 Budget Authority for New Starts Requested by NASA (No FY 71 Outlays)

1º

Lanar science	5
Titoactence	5
OSO	4
Nimbus	6
Physic Explorer's	4
ATS	10
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WASA Bulget - Current Status

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

OFFICE OF THE ADMINISTRATOR

JAN 2 1970

Nonorable Robert P. Mayo Director, Bureau of the Budget Washington, D.C. 20503

Dear Mr. Mayo:

Peter Flanigan has indicated that concern may exist that the adjustments outlined in my letter today to attain the best Space Program within the very limited dollars would "commit" the President to a higher budget level in FY 1972. I can state categorically that on a straight runout basis because of reductions in Viking, Apollo, and other older programs, the program mix HASA has proposed for FY 1971 does not "commit" the President to a FY 1972 level in excess of \$3,600 million. A decision in the FY 1972 Budget to proceed with new programs, such as actual development of a space shuttle/space station or a "Grand Tour" of the outer planets, would, of course, bring FY 1972 requirements above the \$3,600 million level.

Mr. Flanigan also requested that NASA give you further information on the reduction of \$25 million in FY 1971 expenditures which, together with the deferral of the Viking mission, permits us to hold NASA's FY 1971 outlays to \$3,600 million. To achieve this reduction, NASA will, as we have done in the past, establish the necessary tight controls across the board on work accomplishment and procurement phasing harge extent these actions will be taken in major current contracts, in the support base for the Apollo-lunar programs, and in other support operations. We cannot at this time further identify all of the programs studies and experience show that with flexibility on the budget authority side we can guarantee to control our rates of expenditures to the \$3,600 I trust that this clarifies for you the 1972 implications of the minimal NASA program.

Sincerely yours,

Original signed by J.O.Paine T. O. Paine Administrator

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

OFFICE OF THE ADMINISTRATOR

January 1, 1970

Honorable Robert P. Mayo Director Bureau of the Budgat Executive Office of the President Washington, D. C. 20503

## Dear Mr. Mayo:

In giving me the President's decisions on the NASA FY 1971 budget Tuesday afternoon, Feter Flanigan made it clear that the controlling decision was the necessity to hold NASA FY 1977 outlays to \$3,600 million and that the Fresident wished to achieve the best possible space program for his Administration within this limitation. He gave me a table entitled "Impact of \$225 million outlay reduction in NASA space program" which had been discussed with the President. This table outlined the probable impact of such a reduction as seen by the Eureau of the Eudget, but Mr. Flanigan made it clear that NASA's space experts were free to revise anything on the sheet except the \$3,600 million outlay figure in the lower right hand corner. I emphasized to him and Bryce Harlow the necessity for giving NASA maximum flexibility within the \$3,600 million expenditure ceiling.

I advised him, and subsequently you, that I would, of course, accept and meet this expenditure limitation like a good soldier -- even though it would be extremely difficult to maintain the forwardlooking stance on the space program which the President has indicated to me many times he wishes to maintain -- <u>provided</u> that I have the flexibility to adjust program details and budget authority requirements to give the President the strongest possible balanced program within the expenditure limitation. This is the year, and the FY 1971 budget is the instrument, in which President Nixon's initiatives in space will go on the record books.

Following my meeting with Messra. Flenigan and Harlow, NASA worked around the clock to put together the best possible program within the \$3,600 million empenditure limit. We concurred that deferring the Viking mission two years was necessary. We made other adjustments to give the mation the best balanced space program and the Administration the soundest space initiatives to defend before the Congress with the FY 1971 budget. The enclosed corrected page proofs give the details. The adjustments that NASA considers essential produce a 1971 budget authority request of \$3,609 million and the required outlays of \$3,600 million. NASA has always met its commitments on outlays, and will absolutely guarantee to keep FY 1971 outlays within the \$3,600 million. NASA's experience with budget reductions in recent years has been such you need feel no concern on this point; you have agreed with me that our performance demonstrates that we will meet our estimates.

If these estimates are not acceptable to you, I will have to discuss the matter with the Fresident. The advice he has been given that the NASA budget authority should be reduced to \$3,410 million is not based on facts, and the suggested reductions are not the best way to reach the required limiting figure on outlays. We must have the flexibility to give the Fresident the best space program he can have within the drastic limitation on expenditure.

#### Sincerely yours,

Driginal signed by IT.O.Paine

T. O. Paine Administrator

cc: Mr. Peter Flanigan Assistant to the President The White House

> Mr. Bryce Harlow Assistant to the President The White House

Mr. John Ehrlichman Counsel to the President The White House

### THE WHITE HOUSE

WASHINGTON

December 19, 1969

# MEMORANDUM FOR THE STAFF SECRETARY

RE: Log No. 2518 (NASA Budget)

I submit the following recommendations with respect to Dr. Paine' letter of December 17, 1969, appealing the reduction in NASA's 1971 budget.

a. The Saturn V production should be suspended.

b. Effort on the space shuttle and space station should be reduced by \$150 million of MSF funds.

c. The frequency of Saturn V launches should be reduced to an average 1 1/2 year instead of two per year, thereby extending the period of manned space flight beyond the presently planned date of 1974 (I have asked Dr. Paine to comment directly to me on this point).

d. The university research funds should be eliminated as requested by the President.

e. The Electronics Research Center should be closed and critical stages of its research effort reassigned to existing centers.

f. HEAO should be deferred.

g. Program management costs should be reduced from \$707 to \$654 million.

The net result of these changes will reduce the NASA budget to \$3,700 million. We believe that this level will provide a satisfactory space program consistent with the proposed Presidential statement on space.

cc: Mr. Flanigan Mr. Kriegsman Central Files Dr. Paine's program changes to achieve a \$3,700 million budget are unacceptable to the Administration. They result in a termination of the manned space program in 1972, the onus of which would be on the President, and they begin development and create commitments for very expensive programs that will require excessive outlays in the next few years.

I believe we should not only reaffirm the President's \$3,700 million decision, but specify to NASA the broad outline, as described above, as to how it is to be achieved.

> Peter M. Flanigan Assistant to the President

Enclosure

Space

December 30, 1969

FOR: Dr. Kissinger

FROM: Peter Flanigan

Re the attached memorandum from you, I support your recommendation that Borman's memorandum be forwarded to Mr. Pollack. I note that you will "press for early action." It is not necessary that someone from my office be included in this group.

CC: Mr. Whitehead

MEMORANDUM

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### THE WHITE HOUSE

WASHINGTON

December 17, 1969

MEMORANDUM FOR PETER FLANIGAN

FROM : Henry A. Kissinger

SUBJECT: Foreign Astronauts and the U.S. Space Program

I have reviewed Colonel Frank Borman's memorandum on foreign astronauts' participation in our space program which you sent to me for comment. I agree with the essentials of the memorandum with one exception, which has to do with procedure. Colonel Borman suggests that Presidential instruction to Dr. Paine will suffice to get the program going. While this is certainly one way of getting the ball rolling, I would recommend another method which will achieve the same objective.

At Presidential direction an interagency group has been formed to study and make recommendations on all aspects of international space cooperation. Included in the group are representatives of State, Defense, NASA, OST, the Space Council, and my staff. I recommend that Colonel Borman's memorandum be forwarded to Mr. Herman Pollack, State/SCI, Chairman of the interagency group, as a matter pertinent to his responsibility. I shall press for early action. Do you want someone from your office in that group?

Space

Monday

1/5/70

1:50

Ken Cole's Office called. Tom had asked about the status of the Space message. Mr. Cole wrote a memo to Mr. Keogh sending over changes, and is having Mr. Keogh's office prepare it in final and hold the master indefinitely. She did not know what the reason is for the delay or how long "indefinitely" will be. She said she would take a note in to Mr. Cole and that he would probably call Tom if he could tell him anything more.

Space administration CTWE



DEC 22 1969

OFFICE OF THE ADMINISTRATOR

Mr. James Keogh Special Assistant to the President The White House Washington, D. C. 20500

Dear Mr. Keogh:

In accordance with our telephone conversation of Friday evening, I am sending you two versions of the suggested Presidential statement on space: the draft prepared by Tom Whitehead and your office (Huebner) with our suggested changes, and a new version that we would recommend.

Although we like the general tone and organization of the original draft, we want to suggest a different approach that reflects our knowledge of the reaction of the public and of the scientific community to the Space Task Group report.

Sincerely yours, Original signed T.O. Paine

T. O. Paine Administrator

Attachments

cc: Vice President Agnew Mr. Peter Flanigan Mr. Tom Whitehead Dr. Lee DuBridge Mr. Robert Mayo Mr. Herbert Klein Mr. William Anders

### Suggested Statement on Space with NASA Proposed Revisions

Just one year ago this week, mankind had its first opportunity to see the Earth as it appears from the Moon. We saw it, as Archibald MacLeish wrote last Christmas Day, "as it truly is, small and blue and beautiful in that eternal silence where it floats." In the one short year since that time, men from our planet have walked on the Moon's surface on two occasions. With these unforgettable experiences, we have gained a new perspective on ourselves and our world.

I believe that these accomplishments should help us gain a new perspective on our program in space, as well. Having completed that giant leap into the future which has been our goal for the past decade, we must now define new goals which make sense for the Seventies. We must decide intelligently just what it is we <u>want</u> to do and we must do it well. But we must also understand that -- with the entire future and the entire universe before us -- we should not try to do everything at once. Our approach must continue to be bold -- but it must also be balanced.

In my judgment, three purposes should guide our space program in the years to come.

The first is exploration. From time immemorial, man has insisted on venturing into the unknown, despite his inability to predict precisely the value of any given exploration. He has been willing to take risks, willing to be surprised, willing to adapt to new experiences. Man has come to feel that such quests are worthwhile in and of themselves -for this is one way in which he expresses his spirit and expands his vision. A great nation must always be an exploring nation if it wishes to remain great.

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-The second purpose of our space program is scientific knowledge, a greater systematic understanding about ourselves and our universe. On each of our recent space flights, man's total information about nature has expanded manyfold; the human race was able to learn more about the moon in a few hours last summer than it had learned in all the centuries that had gone before. The heroes who perform this important work are not only those who walk in spacesuits while millions watch

those who or launch powerful rockets in a burst of flame. Most of our scientific progress comes in laboratories and offices, where countless quiet heroes decipher new facts and add them to old ones in ways which reveal new truths. The abilities of these scientists constitute one of our most valuable natural resources; our space program should help them in their work and should be attentive to their suggestions.

The third goal of the United States' space effort is that of application -- turning the lessons we learn in space to the benefit of life on Earth. Such lessons are manifold: they range from new medical insights to new methods of communications, from new management techniques to new ways of providing energy. But these lessons do not apply themselves; we must make a concerted effort to see that the results of our learning are used to the maximum advantage of all mankind. We must see our space effort, then, not only as an adventure of today but also as an investment in tomorrow. We did not go to the Moon merely for the sport of it. To be sure, these undertakings have provided an exciting adventure for all mankind and we are proud to have been the people to meet this challenge. But the most important thing about these accomplishments is what they promise for the future. We must realize that space travel will be a part of our lives for the rest of time. We must think of it as a continuing process -- one which goes on day in and day out, year in and year out -- and not as a series of separate leaps, requiring massive concentrations of energy and will and accomplished on crash timetables. What we do in space from here on in must become a normal and regular part of our national life and must therefore be planned in conjunction with all of the other goals which are also important to us.

Earlier this year I established the Space Task Group to review possibilities for the future of our space program. I have studied their conclusions carefully and have reached the following answers to the question: "Where do we go from here?"

1. We should continue to explore the Moon. Future Apollo manned

### will be planned lunar landings should-be-paced so as to maximize our scientific return

We will even have a jeep-like, electric vehicle on from this project, elways-providing; of-course; for-a-launch-schedule. the Moon, to enable our astronauts to explore exciting new formations that-will>not-impair-the-safety-of-those-who-undertake-these-missions: unlike any areas previously reached.

2. We should move ahead with bold explorations of the planets of

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and the solar system. During the next decade we will launch a spacecraft to observe every planet and to explore the vast space between them. We plan to land an unmanned spacecraft on Mars in 1973. Meanwhile, new scientific satellites of many types **elso** will be launched into Earth orbit to explore near the Earth and to bring us new information about the universe beyond.

We need to substantially reduce the cost of space launches. We 3. We should lower the cost of space launches. Our present

have started to design a reusable space shuttle, a rocket plane that will cocket-technology-will-provide-a-reliable-launch-capability for some

take off vertically, but land horizontally like an airplane. It will be time Because the eight Saturn V launch vehicles in our current inventory.

able to travel between the earth's surface and orbit on a regular schedule, are sufficient for the planned rate of lunar exploration, we will suspend

and will carry men and supplies to and from a space station. This space the production of the Saturn V for the immediate future. This production

transport will be suitable also for a wide range of scientific, defense can be resummed later as the need arises. Building for the longer range

and commercial uses. future, we will begin to design a reusable space shuttle, a rocket that

can be fired, returned to earth, and used again for later launchings.

This space launching capacity will be suitable for a wide range of

scientific, defense and commercial uses.

We must extend man's capability to live and work in space. 4. We should develop an extended space capability for man -----

First, we will launch an experimental space station -- using presentfirst in Earth orbit and later in space beyond, We will launch and

to do useful tasks in space. The major scientific experiment will be end will begin manned operational missions in it during the next few

a large solar telescope which astronauts will use to study the sun for years By the middle of the 1970s; men will be working in space for

extended periods. By the middle of the 1970's, we should have a longermor have to a longer-more decade, we will also begin to design

life space-station module that will serve as a building block for a an even longer-lived Space Station Module that will provide a longer-

permanent base in earth orbit. From this space base, eventually, men range space platform. Such a Station also will serve as a building block

will set forth on an expedition to the planet Mars. for menned interplanetary travel, an effort which will ultimately include.

## sending men-to-explore the planet Marsa

5. We must expand earth applications of space technology. The development of an earth resources satellite -- an instrument which can help in such varied tasks as surveying crops, locating mineral deposits

tracking and tracing schools of fish -- will enable us to assess our environment and use our resources more effectively. We will continue to make other new applications of space-related technology, especially in fields such as meteorology, communications, navigation, and air traffic control. The very act of reaching out to new worlds can help man improve the quality of life in this world. 6. We must expand international cooperation in space. In my address to the United Nations in September, I indicated that the United States will take positive concrete steps "toward internationalizing man's epic venture into space -- an adventure that belongs not to one nation but to all mankind." I believe that both the adventures and the applications of space missions should be shared by all peoples. Our progress will be faster and our accomplishments will be greater if the nations work together in this effort, both in contributing resources and in enjoying the results.

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These five major principles will produce a space program which is far-reaching and comprehensive, one which extends our space capabilities, expands our scientific knowledge, and puts them to work on Earth.

The benefits of such a program promise to be substantial. We will seek to finance this program with a level of expenditures that will permit our space effort to make steady progress, year by year, in a manner which is consistent with our need to meet other important national objectives.

In a few days we will enter a new decade. As we do so, we are conscious of the fact that man is also entering a new historic era. For the first time, we are exploring beyond our planet; for the first time, we will think of ourselves as men <u>from</u> the planet Earth. It is my hope that we can plan and work in a way which makes us proud <u>both</u> of the planet from which we come <u>and</u> of our ability to travel beyond it. Suggested Draft: "A New Space Program -- Challenge and Opportunity" Dec. 21, 1969

Just one year ago this week, mankind first saw the Earth as it appears from far out in space. We saw it, as the poet Archibald McLeish wrote, "as it truly is, small and blue and beautiful in that eternal silence where it floats."

In just one short year since that time, men from our planet have returned to the Moon three times, and landed twice for surface exploration. We have come to understand that at Tranquillity Base mankind entered a new era and opened an endless frontier for our children and for future generations.

Stretching before us is the solar system challenging our future explorers to unlock its secrets. It is a vastness man can and will explore in search of answers about himself and his destiny.

Man's first lunar landing in 1969 was a critical milestone--and a turning point in the exploration of space. Now this nation must decide its future in space, in orbit, on the moon, and beyond. And we must seek new ways for men of other nations to join with us in this exciting enterprise.

We have not only a great challenge, but a great opportunity. History should record that we had the wisdom to plan our future, the courage to grasp our responsibility and the will to move forward boldly. And history should record that this Administration displayed the required leadership, selected the correct course, and set the right pace. This is a major responsibility to the future which we accept.

With the entire universe before us and with many other urgent needs here on earth, we obviously cannot seize upon every opportunity with all the vigor and capability at hand. We can and will, however, make a determined start, and prepare the way.

When this Administration took office last January, no clear-cut plans existed for a future space program after the first Apollo landing. I established a Space Task Group in February, headed by the Vice President, to make "definitive recommendations on the direction which the U.S. space program should take in the post-Apollo period." Not only did the Space Task Group bring together the high level leadership within the Administration, but it sought the advice and guidance of scientists, engineers, business leaders, private citizens and Congressional leaders.

The Space Task Group reported its recommendations to me in September. Today I am here to announce acceptance of its basic recommendations and to outline the space program I believe this Nation must pursue in the coming years.

The Space Task Group recommended "that this Nation accept the basic goal of a balanced manned and unmanned space program conducted for the benefit of all mankind" and, as a focus for the development of

new capability, that "the United States accept the long-range option or goal of manned planetary exploration with a manned Mars mission before the end of this century as the first target."

In my judgment, these recommendations are sound, and consistent with the three purposes which I believe should guide our space program in the years to come.

The first is <u>exploration</u>. Man has always been fired with the zeal to travel over the next hill, to venture into the unknown, despite his inability to predict precisely the value of any given exploration. He has been willing to take risks and endure hardships, willing to be surprised, willing to adapt to new experiences. Man has come to feel that such quests are worthwhile in and of themselves--for this is one way in which he expands his vision and expresses the human spirit. A great nation must be an exploring nation if it wishes to remain great.

The second purpose of our space program is <u>scientific knowledge</u>, a greater systematic understanding about ourselves and the vast universe around us. On each of our recent space flights, man's total information about nature has expanded manyfold; the human race learned more about the moon and Mars within a few weeks last Summer than had been learned in all the centuries that had gone before. The men who perform this important work are not only the heroes who walk in spacesuits while millions watch or launch powerful rockets in a burst of flame. Most of our scientific progress comes about in quiet laboratories and offices, where inquiring minds decipher new facts and add them to old ones in

ways which reveal new truths. These scientists are the true avant garde of our times--their abilities constitute one of our most valuable natural resources. Our space program should help them in their work and should be attentive to their suggestions.

The third goal of the United States' space effort is <u>practical</u> <u>application</u>--turning the lessons we learn in space to the early benefit of life on Earth. Examples of space benefits are manifold: they range from new medical insights to new methods of communication, from new management techniques to new ways of providing energy. But these lessons do not apply themselves; we must make a concerted effort to see that the practical results of our space research are applied to the maximum advantage of all mankind.

We must see our space effort, then, not only as an adventure of today but also as a sound investment in tomorrow. We did not go to the Moon to provide a TV spectacular. To be sure, our space undertakings have provided an exciting adventure for all mankind, and we are proud that it was America, building on the science and technology of all lands, which met this age-old challenge. But the most important thing about man's first footsteps on the moon are what they promise for the future. We must realize that space travel has become a part of our lives for the rest of time. We must think of it as a continuing process--one which started in our generation, but will go on day in and day out, year in and year out. Space exploration should be thought of as a continuing process, not as a series of separate leaps,

requiring massive concentrations of resources, and accomplished on crash timetables. What we do in space from here on should become a normal part of our vigorous national life planned in conjunction with all of the other goals which are important to us and to the nations who join with us.

Based on this Administration's thorough year-long study of our space strength and potential, I now recommend new commitments, bold new visions, a set of goals and objectives that will give purpose and direction to the space efforts of government, industry and the scientific and educational communities, and that will lead to spiritual and practical benefits to mankind. I propose seven major principles to guide our future in space:

1. We should continue to <u>explore the Moon</u>. Future Apollo manned lunar landings will be stretched out to maximize our scientific return from this project. We will increase our capabilities for lunar surface exploration as we gain experience. Later we will even have a jeep-like, electric vehicle on the Moon, to enable our astronauts to explore exciting new formations unlike those previously reached.

2. We should move ahead with bold <u>explorations of the planets</u>. During the next decade we will launch an automated spacecraft to observe every planet in the solar system and to explore the vast space between them. We plan to land an unmanned spacecraft on Mars in 1973. Meanwhile, new scientific satellites of advanced types will be launched into Earth orbit to bring us new information about the earth, the solar system and the universe beyond.

3. We need to substantially <u>reduce the cost of space operations</u>. We have started to design a reusable space shuttle, a rocket plane that will take off vertically, but land horizontally like an airplane. It will be able to travel between the Earth's surface and orbit on a regular schedule, and will carry men and supplies to and from a space station. This space transport will be suitable also for a wide range of scientific, defense and commercial uses.

4. We will move ahead to provide <u>nuclear power for space</u>. Chemical rockets and electrical power have sufficed for the initial ventures of the 1960's, but we will need to harness the power of the atom for future major ventures in space.

5. We must <u>extend man's capability</u> to live and work and do research in space. First, we will launch in 1972 our first experimental space station--using present-day Apollo technology. This will be a large workshop in orbit in which men learn how to perform useful tasks in space. The major scientific experiment will be a large solar telescope which astronauts will use to study solar phenomena for extended periods using wave lengths which cannot be observed from earth. By the middle of the 1970's, we should have the first longer-life space station module in orbit. Future launches will add additional modules to the space station, so that over the years we will build a large permanent base in earth orbit. From this space base, eventually, men will set forth on an expedition to the planet Mars.
6. We must <u>hasten practical earth applications</u> of space technology. The development of a new earth resources satellite--an instrument which can help in such varied tasks as surveying crops, locating mineral deposits, and detecting air and water pollution--will enable us to assess our environment and use our resources more effectively. We will continue to make other new applications of space-related technology, especially in fields such as meteorology, communications, navigation, and air traffic control. The very act of reaching out to new worlds can help man improve the quality of life in his home planet earth.

7. We must <u>expand international cooperation in space</u>. In my address to the United Nations in September, I indicated that the United States will take positive concrete steps "toward internationalizing man's epic venture into space--an adventure that belongs not to one nation but to all mankind." I believe that both the adventures and the applications of space missions should be shared by all peoples. Our progress will be faster and our accomplishments will be greater if nations work together in this effort, both in contributing resources and in enjoying the results. We have made a beginning here, but much remains to be done.

These seven major principles will produce a space program which is far-reaching and comprehensive, one which extends our space capabilities, expands our scientific knowledge, and puts them to work on Earth.

The benefits of such a program promise to be substantial. We will seek to finance this program with a level of expenditures that will permit our space effort to make steady progress, year by year, in a manner which is consistent with meeting other important national objectives.

I speak to you today in the final hours of an old decade. As we enter the new decade of the 70's, we are conscious of the fact that man is entering a new historic era. For the first time, terrestrial life has reached beyond its home planet; for the first time, man thinks of himself as <u>from</u> the planet Earth. I believe that the new space program I have described will make us proud <u>both</u> of the planet from which we come <u>and</u> of man's increasing ability to travel beyond it.

#### THE WASHINGTON POST Monday, Drc. 22, 1969 'A 10

# Nixon to Give Space Gouls; Modest Program Expected

By Thomas O'Toole Washington Post Staff Writer

While it will be the first months at a time. presidential space proclama-tion since President Kennedy tion, Mr. Nixon probably will If t surprises.

Mars, it is understood the for his program, though it is President will embrace a bal- understood the fiscal 1971 re-Washington Post Staff Writer In a special message to the nation Tuesday, President Nixon will outline America's goals in space for the next 10 years. President will embrace a bar anced, middle-of-the-road pro-gram, with major emphasis on development of a manned space station that can stay in space for weeks and even menths at a time

made it a national goal to land urge development of a reusa-men on the moon, Mr. Nixon ble shuttle craft to ferry men is expected to spring no such and supplies from earth to projects alone will cost \$10

Instead of calling for a spe-fic goal like landing to a spe-It is not clear how much clfic goal like landing men on money the President will ask

is the budget for the next five

If the President asks for a projects alone will cost \$10 billion or more.

Sce SPACE, A10, Col. 1

Should the timetable for their development and flight lie in the next decade, then heavy spending on these programs will have to begin in 1971, or 1972 at the latest.

If budgets for these programs do not show a steep increase next year or the year after, then two other questions crop up. Where does it leave the Apollo program to land eight more crews on the moon? And where does it leave the Apollo Applications Program, which has three earth orbital flights plauned for the next three years?

No matter what Mr. Nixon does, he must formulate a space program that will keep the Cape Kennedy launch facilities from mothballs—and a minimum of two manned flights a year is needed for that.

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But to save money for the new space station and space shuttle programs, the President may decide to scrap the last four Apollo flights to the moon. This move would divert as much as \$1 billion to other programs, since it would save \$250 million on each of the four Saturn 5 moon rockets needed to power the flights.

The President might also scrub the three Apollo Applications flights, though this move would not save anything like S1 billion.

Space sources consider elther one of these measures drastic, since they might have the effect of temporarily shutting down Cape Kennedy.

Despite the new emphasis on space stations and shuttles, the earliest the space station will fly is 10% and the earliest probable date for the shuttle is 1978. Without an Apollo or an Apollo Applications program to fill in the gaps, Cape Kennedy might go without a manned flight for as long as three years.

# December 22, 1969

# Tom:

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Here is a copy of the marked-up draft statement on space, which I got from Huebner.

See also article in the Post this morning.

Eva

(Huebner) JK

December 17, 1969

# Suggested Statement on Space

Just one year ago this week, mankind had its first opportunity to see the Earth as it appears from the Moon. We saw it, as Archibald MacLeish wrote last Christmas Day, "as it truly is, small and blue and beautiful in that eternal silence where it floats." In the one short year since that time, men from our planet have walked on the Moon's surface on two occasions. With these unforgettable experiences, we have gained a new perspective on ourselves and our world.

I believe that these accomplishments should help us gain a new perspective on our program in space, as well. Having completed that giant leap into the future which has been our goal for the past decade, we must now define new goals which make sense for the Seventies. We must decide intelligently just what it is we <u>want</u> to do and we must do it well. But we must also understand that -- with the entire future and the entire universe before us -- we should not try to do everything at once. Our approach must continue to be bold -- but it must also be balanced.

In my judgment, three purposes should guide our space program in the years to come.

The first is exploration. From time immemorial, man has insisted on venturing into the unknown, despite his inability to predict precisely the value of any given exploration. He has been willing to take risks, willing to be surprised, willing to adapt to new experiences. Man has come to feel that such quests are worthwhile in and of themselves -- for this is one way in which he expresses his spirit and expands his vision. A great nation must always be an exploring nation if it wishes to remain great.

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The third goal of the United States' space effort is that of application -- turning the lessons we learn in space to the benefit of life on Earth. Such lessons are manifold: they range from new medical

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insights to new methods of communication, from new management techniques to new ways of providing energy. But these lessons do not apply themselves; we must make a concerted effort to see that the results of our learning are used to the maximum advantage of all mankind.

We must see our space effort, then, not only as an adventure of today but also as an investment in tomorrow. We did not go to the Moon merely for the sport of it. To be sure, these undertakings have provided an exciting adventure for all mankind and we are proud to have been the people to meet this challenge. But the most important thing about these accomplishments is what they promise for the future. We must realize that space travel will be a part of our lives for the rest of time. We must think of it as a continuing process -- one which goes on day in and day out, year in and year out -- and not as a series of separate leaps, requiring massive concentrations of energy and will and accomplished on crash timetables. What we do in space from here on in must become a normal and regular part of our national life and must therefore be planned in conjunction with all of the other chined by the VP, goals which are also important to us.

Earlier this year I established the Space Task Group to review possibilities for the future of our space program. I have studied their conclusions carefully and have reached the following answers to the

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1. We should continue to explore the Moon. Future Apollo manned lunar landings should be paced so as to maximize our scientific return from this project, always providing, of course, for launch schedule that will not impair the safety of those who undertake these missions.

2. We should move ahead with bold explorations of the planets planto and the solar system. During the next decade we will launch & spacemake scientific observations of craft to observe every planet and to explore the vast space between In A73 launch to land on the In 1973 them. We plan to land an unmanned spacecraft on Mars in 1973. & efficience observe the surface of our neighton planet. Meanwhile, new scientific satellites of many types also will be launched into Earth orbit to explore near, the Earth and to bring us new informa. Econtraining of part municipal scientific tion about the universe beyond. 3. We should lower the cost of space launches. Our present rocket technology will provide a reliable launch capability for some time. Bocause the eight Saturn V-launch-vehicles-in-our-current-inventory are sufficient for the planned rate of lunar exploration, we will suspend the production of the Saturn V for the immediate future. This production can be resumed later as the need arises. Building for the longer range future, we will begin to design a reusable space shuttle, Johnde a rocket that can be fired, returned to earth, and used again for, later, // a transferration of a production launchings. This space launching capacity will be suitable for a wide discond to accomments

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We should develop an extended space capability for man --4. first in Earth orbit and later in space beyond. We will launch an Ex-systems ariginally developed for perimental Space Station -- utilizing Apollo-level-technology -- and will begin manned operational missions in it during the next few years. By the middle of the 1970s, men will be working in space for months at a time. In the coming decade, we will also begin to design an even longer-lived Space Station Module that will provide a longer-range space platform. Such a Station also will serve as a building block for We will manned interplanetary travel, an effort which will ultimately includesendingmen to explore the planet Marson a part four opace pugram. 5. We must expand earth applications of space technology. The development of in earth resources satellited -- an instrument which can help in such varied tasks as surveying crops, locating mineral deposits and tracing schools of fish -- will enable us to assess our environment and use our resources more effectively. We will continue arasal to make other new applications of space-related technology, especially in fields such as meteorology, communications, navigation, and air and mational defense. traffic control, The very act of reaching out to new worlds can help man improve the quality of life in this world.

6. We must expand international cooperation in space. In my address to the United Nations in September, I indicated that the United

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States will take positive concrete steps "toward internationalizing man's epic venture into space -- an adventure that belongs not to one nation but to all mankind." I believe that both the adventures and the applications of space missions should be shared by all peoples. Our progress will be faster and our accomplishments will be greater if all nations work together in this effort, both in contributing resources and in enjoying the results.

These five major principles will produce a space program which is far-reaching and comprehensive, one which extends our space capabilities, expands our scientific knowledge, and puts them to work on Earth.

The benefits of such a program promise to be substantial. We will seek to finance this program with a level of expenditures that will permit our space effort to make steady progress, year by year, in a manner which is consistent with our need to meet other important national objectives.

In a few days we will enter a new decade. As we do so, we are conscious of the fact that man is also entering a new historic era. For the first time, we are exploring beyond our planet; for the first time, we will think of ourselves as men from the planet Earth. It is my hope that we can plan and work in a way which makes us proud both of the planet from which we come and of our ability to travel beyond it.

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OFF.CE OF THE ADMINISTRATOR

DEC 2 2 1969

Mr. James Keogh Special Assistant to the President The White House Washington, D. C. 20500

Dear Mr. Keogh:

In accordance with our telephone conversation of Friday evening, I am sending you two versions of the suggested Presidential statement on space: the draft prepared by Tom Whitehead and your office (Huebner) with our suggested changes, and a new version that we would recommend.

Although we like the general tone and organization of the original draft, we want to suggest a different approach that reflects our knowledge of the reaction of the public and of the scientific community to the Space Task Group report.

Sincerely yours, Original signed T.O. Paine

T. O. Paine Administrator

Attachments

cc: Vice President Agnew Mr. Peter Flanigan Mr. Tom Whitehead Dr. Lee DuBridge Mr. Robert Mayo Mr. Herbert Klein Mr. William Anders

### Suggested Statement on Space with NASA Proposed Revisions

Just one year ago this week, mankind had its first opportunity to see the Earth as it appears from the Moon. We saw it, as Archibald MacLeish wrote last Christmas Day, "as it truly is, small and blue and beautiful in that eternal silence where it floats." In the one short year since that time, men from our planet have walked on the Moon's surface on two occasions. With these unforgettable experiences, we have gained a new perspective on ourselves and our world.

I believe that these accomplishments thould help us gain a new perspective on our program in space, as well. Having completed that giant leap into the future which has been our goal for the past decade, we must now define new goals which make sense for the Seventies. We must decide intelligently just what it is we <u>want</u> to do and we must do it well. But we must also understand that -- with the entire future and the entire universe before us -- we should not try to do everything at once. Our approach must continue to be bold -- but it must also be balanced.

In my judgment, three purposes should guide our space program in the years to come.

The first is exploration. From time immemorial, man has insisted on venturing into the unknown, despite his inability to predict precisely the value of any given exploration. He has been willing to take risks, willing to be surprised, willing to adapt to new experiences. Man has come to feel that such quests are worthwhile in and of themselves -for this is one way in which he expresses his spirit and expands his vision. A great nation must always be an exploring nation if it wishes to remain great.

The second purpose of our space program is scientific knowledge, a greater systematic understanding about ourselves and our universe. On each of our recent space flights, man's total information about nature has expanded manyfold; the human race was able to learn more about the moon in a few hours last summer than it had learned in all the centuries that had gone before. The heroes who perform this important work are not only those who walk in spacesuits while millions watch

those who or launch powerful rockets in a burst of flame. Most of our scientific progress comes in laboratories and offices, where countless quiet heroes decipher new facts and add them to old ones in ways which reveal new truths. The abilities of these scientists constitute one of our most valuable natural resources; our space program should help them in their work and should be attentive to their suggestions.

The third goal of the United States' space effort is that of application -- turning the lessons we learn in space to the benefit of life on Earth. Such lessons are manifold: they range from new medical insights to new methods of communications, from new management techniques to new ways of providing energy. But these lessons do not apply themselves; we must make a concerted effort to see that the results of our learning are used to the maximum advantage of all mankind.

We must see our space effort, then, not only as an adventure of today but also as an investment in tomorrow. We did not go to the Moon merely for the sport of it. To be sure, these undertakings have provided an exciting adventure for all mankind and we are proud to have been the people to meet this challenge. But the most important thing about these accomplishments is what they promise for the future. We must realize that space travel will be a part of our lives for the rest of time. We must think of it as a continuing process -- one which goes on day in and day out, year in and year out -- and not as a series of separate leaps, requiring massive concentrations of energy and will and accomplished on crash timetables. What we do in space from here on in must become a normal and regular part of our national life and must therefore be planned in conjunction with all of the other goals which are also important to us.

Earlier this year I established the Space Task Group to review possibilities for the future of our space program. I have studied their conclusions carefully and have reached the following answers to the question: "Where do we go from here?"

1. We should continue to explore the Moon. Future Apollo manned

lunar landings should be paced so as to maximize our scientific return

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Suggested Draft: "A New Space Program -- Challenge and Opportunity" Dec. 21, 1969

Just one year ago this week, mankind first saw the Earth as it appears from far out in space. We saw it, as the poet Archibald McLeish wrote, "as it truly is, small and blue and beautiful in that eternal silence where it floats."

In just one short year since that time, men from our planet have returned to the Moon three times, and landed twice for surface exploration. We have come to understand that at Tranquillity Base mankind entered a new era and opened an endless frontier for our children and for future generations.

Stretching before us is the solar system challenging our future explorers to unlock its secrets. It is a vastness man can and will explore in search of answers about himself and his destiny.

Man's first lunar landing in 1969 was a critical milestone--and a turning point in the exploration of space. Now this nation must decide its future in space, in orbit, on the moon, and beyond. And we must seek new ways for men of other nations to join with us in this exciting enterprise.

We have not only a great challenge, but a great opportunity. History should record that we had the wisdom to plan our future, the courage to grasp our responsibility and the will to move forward boldly. And history should record that this Administration displayed the required leadership, selected the correct course, and set the right pace. This is a major responsibility to the future which we accept.

With the entire universe before us and with many other urgent needs here on earth, we obviously cannot seize upon every opportunity with all the vigor and capability at hand. We can and will, however, make a determined start, and prepare the way.

When this Administration took office last January, no clear-cut plans existed for a future space program after the first Apollo landing. I established a Space Task Group in February, headed by the Vice President, to make "definitive recommendations on the direction which the U.S. space program should take in the post-Apollo period." Not only did the Space Task Group bring together the high level leadership within the Administration, but it sought the advice and guidance of scientists, engineers, business leaders, private citizens and Congressional leaders.

The Space Task Group reported its recommendations to me in September. Today I am here to announce acceptance of its basic recommendations and to outline the space program I believe this Nation must pursue in the coming years.

The Space Task Group recommended "that this Nation accept the basic goal of a balanced manned and unmanned space program conducted for the benefit of all mankind" and, as a focus for the development of

new capability, that "the United States accept the long-range option or goal of manned planetary exploration with a manned Mars mission before the end of this century as the first target."

In my judgment, these recommendations are sound, and consistent with the three purposes which I believe should guide our space program in the years to come.

The first is <u>exploration</u>. Man has always been fired with the zeal to travel over the next hill, to venture into the unknown, despite his inability to predict precisely the value of any given exploration. He has been willing to take risks and endure hardships, willing to be surprised, willing to adapt to new experiences. Man has come to feel that such quests are worthwhile in and of themselves--for this is one way in which he expands his vision and expresses the human spirit. A great nation must be an exploring nation if it wishes to remain great.

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The third goal of the United States' space effort is <u>practical</u> <u>application</u>--turning the lessons we learn in space to the early benefit of life on Earth. Examples of space benefits are manifold: they range from new medical insights to new methods of communication, from new management techniques to new ways of providing energy. But these lessons do not apply themselves; we must make a concerted effort to see that the practical results of our space research are applied to the maximum advantage of all mankind.

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Based on this Administration's thorough year-long study of our space strength and potential, I now recommend new commitments, bold new visions, a set of goals and objectives that will give purpose and direction to the space efforts of government, industry and the scientific and educational communities, and that will lead to spiritual and practical benefits to mankind. I propose seven major principles to guide our future in space:

1. We should continue to <u>explore the Moon</u>. Future Apollo manned lunar landings will be stretched out to maximize our scientific return from this project. We will increase our capabilities for lunar surface exploration as we gain experience. Later we will even have a jeep-like, electric vehicle on the Moon, to enable our astronauts to explore exciting new formations unlike those previously reached.

2. We should move ahead with bold <u>explorations of the planets</u>. During the next decade we will launch an automated spacecraft to observe every planet in the solar system and to explore the vast space between them. We plan to land an unmanned spacecraft on Mars in 1973. Meanwhile, new scientific satellites of advanced types will be launched into Earth orbit to bring us new information about the earth, the solar system and the universe beyond.

3. We need to substantially <u>reduce the cost of space operations</u>. We have started to design a reusable space shuttle, a rocket plane that will take off vertically, but land horizontally like an airplane. It will be able to travel between the Earth's surface and orbit on a regular schedule, and will carry men and supplies to and from a space station. This space transport will be suitable also for a wide range of scientific, defense and commercial uses.

4. We will move ahead to provide <u>nuclear power for space</u>. Chemical rockets and electrical power have sufficed for the initial ventures of the 1960's, but we will need to harness the power of the atom for future major ventures in space.

5. We must <u>extend man's capability</u> to live and work and do research in space. First, we will launch in 1972 our first experimental space station--using present-day Apollo technology. This will be a large workshop in orbit in which men learn how to perform useful tasks in space. The major scientific experiment will be a large solar telescope which astronauts will use to study solar phenomena for extended periods using wave lengths which cannot be observed from earth. By the middle of the 1970's, we should have the first longer-life space station module in orbit. Future launches will add additional modules to the space station, so that over the years we will build a large permanent base in earth orbit. From this space base, eventually, men will set forth on an expedition to the planet Mars.

6. We must <u>hasten practical earth applications</u> of space technology. The development of a new earth resources satellite--an instrument which can help in such varied tasks as surveying crops, locating mineral deposits, and detecting air and water pollution--will enable us to assess our environment and use our resources more effectively. We will continue to make other new applications of space-related technology, especially in fields such as meteorology, communications, navigation, and air traffic control. The very act of reaching out to new worlds can help man improve the quality of life in his home planet earth.

7. We must <u>expand international cooperation in space</u>. In my address to the United Nations in September, I indicated that the United States will take positive concrete steps "toward internationalizing man's epic venture into space--an adventure that belongs not to one nation but to all mankind." I believe that both the adventures and the applications of space missions should be shared by all peoples. Our progress will be faster and our accomplishments will be greater if nations work together in this effort, both in contributing resources and in enjoying the results. We have made a beginning here, but much remains to be done.

These seven major principles will produce a space program which is far-reaching and comprehensive, one which extends our space capabilities, expands our scientific knowledge, and puts them to work on Earth.

The benefits of such a program promise to be substantial. We will seek to finance this program with a level of expenditures that will permit our space effort to make steady progress, year by year, in a manner which is consistent with meeting other important national objectives.

I speak to you today in the final hours of an old decade. As we enter the new decade of the 70's, we are conscious of the fact that man is entering a new historic era. For the first time, terrestrial life has reached beyond its home planet; for the first time, man thinks of himself as <u>from</u> the planet Earth. I believe that the new space program I have described will make us proud <u>both</u> of the planet from which we come <u>and</u> of man's increasing ability to travel beyond it.

Industrial Communications

Weekly Information Sarvice

Robert E. Tell, Edia 561 National Press III Washington, D.C. 2003

Telephone 783-2482

No. 50

December 19, 1969

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	* * * * * * *		

This fiftieth issue of Industrial Communications completes our service for the year of 1969. There will be no issue of this publication dated December 26. News developments which occur next week will be covered in our next schedules issue, to be fated January 2, 1970. We would like to take this opportunity to thank you for your continued support of our service, and for your friendship, and to wish you the happiest of holiday seasons, and a prosperous New Year. 1:55 Terry in John Brown's office says they need something to give to the President re the attached.

She is asking for a call right back.

told berte

# Saturday 12/20/69

3:55 Tom dictated a note for me to dictate to Marie for Flanigan's signature, as follows:

Memo for the Staff Secretary -- from PMF

"The Presidential statement on the space program is currently planned for Tuesday release. It reflects the decisions you made during the past month regarding NASA budget matters. Attached is a draft; any changes are not expected to be significant.

4:10 Tom had me call Marie and tell her to forget the note. Also to call Terry in John Brown's office and tell her the whole thing is up in the air. If she needs to know anything, have her call Cole. Cole or Tom will be in touch about the final arrangements.

Saturday 12/20/69

2167

1:55 Terry in John Brown's office says they need something to give to the President re the attached.

She is asking for a call right back.



# Friday 12/12/69

11:50 John Brown's office was checking on plans for the release of the Space Program decision.

As you suggested, advised Terry in his office that you were working on it and hoped to have something by next Wednesday (12/17).



# THE WHITE HOUSE WASHINGTON

Date 12/2

4

TO: Will Kriegsman

FROM: Peter Flanigan

FYI	
Draft reply	
Please Handle	
File	

Other remarks

Please prepare refly for Pm7 signature.

#### THE WHITE HOUSE

ACTION MEMORANDUM

WASHINGTON

Date: Tuesday, December 2, 1969

Time: 2:00 p.m.

FOR ACTION: P. Flanigan

cc (for information):

FROM	THE	STAFF SECF	RETARY			
DUE:	Date:	Wed Friday,	10 December 5, 1969	Time:	2:00 p.m.	
						-

SUBJECT:

**President's** request for a report on the present plans for the announcement of the decision on the Space Program.

#### ACTION REQUESTED:

X\_For Necessary Action

\_\_\_\_ For Your Recommendations

\_\_\_\_\_ Prepare Agenda and Brief

\_\_\_\_ Draft Reply

----- For Your Comments

\_\_\_ Draft Remarks

**REMARKS:** 

Please submit your report to the Office of the Staff Secretary.

#### PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

JUD

K. R. COLE, JR. For the President THE WHITE HOUSE WASHINGTON December 2, 1969

# MEMORANDUM FOR PETER FLANIGAN

An article in the President's news summary noted that the space program seems to be sinking into a political swamp. It notes that there is confusion among scientists and in the government about what the future should be. It is almost time for the President to make a decision regarding the program and the "political climate is not favorable to any decision." Therefore the White House had better be ready for a "political hurricane" when the President does decide what to do.

On reading this the President inquired as to when public release of this decision is scheduled. He notes that the week after next might be an appropriate time.

Would you please submit a report to the President on the present plans for announcement of this decision.

Thank you.

JOHN R. BROWN III

AS OUR COLUMNISTS SEE IT 15 WEDNESDAY MORNING, NOVEMBER 26, 1969

y D. J. R. BRUCKNER pecial to The Inquirer nd Los Angeles Times WASHINGTON.

ACK on earth, the whole space program seems to sinking in some kind of itical swamp. There is fusion among the scienc and technological comnities about the future of program, and much more gerous confusion in the vernment. The men of ollo 11 and Apollo 12 have back for mankind if that ing were not followed up nplishments.

problem is bound to be cives what to do next,

money. The President is determined to hold down the budget, and available funds will continue to go down the drain in Vietnam for a long time if he persists in his apparent determination to wind down the war very slowly. -

Exploration or Research?

Congress and the public are filled with calls for spending the space budget on earthbound, even strictly domestic, programs. When President John F. Kennedy in ed so much; it would be a 1961 committed the nation to a moon landing in a decade, he was widely criticized and enduring and useful ac- even ridiculed. Vice President Spiro Agnew this year the time is fairly close came under heavy fire when t the Nixon Administration he suggested sending men to st decide the next phase Mars. The formidable public the space program - for, relations team at the White tics and Space Administration 10 or 15 years. The poli- House had best be prepared and the scientific community. al climate is not favorable for a political hurricane when The scientists want more tions, the politics of space exploit the moon is a comany decision. The immedi- President Nixon finally de time, more pure study; the will undoubtedly require manding prospect. After all,

ishing. After a decade of men flying short hops like so many robots, suddenly two crews have not only managed to land on the moon, but to work on it. In between the two Apollo flights, the Russians had multiple crews experimenting with the mechanics and technology of putting instruments together in space, Mariner went to Mars and exposed it to earth's scientists in vivid detail. It seems almost impossible to assimilate the knowledge that has burst up on us. This seems to be one of the roots, along with money worries, of the crisis of personnel in the National Aeronauspacemen want more explor- some work on the last one. If mankind has never had the

in September are impressive, and all of them politically troublesome. The five main and services to the earthbound.

made on the other op-

Future of Space Program Is Reaching a Critical Point fation. There is a crisis of the commitment can be chance to create WHAT has happened this ation. There is a crisis of the commitment can be year in space is aston- confidence here which mir- made, the prospects are thrillrors a much larger crisis of ing. For the first time we confidence in technology have the ability to look at which is sweeping the nation. carth as an object, from out-? The options outlined by the side, and, as the hand is di-President's space task group rected to what the eye sees, to use the earth more intelligently.

augulai

Control of traffic and comones are: International coop- munications can be done eration, which could be justi- much better from space. The fied on the grounds of cost- resources of earth, including sharing as well as peace- minerals and crops, and the making; construction of quality of these resources, space stations; vastly in- can be analyzed from space creased exploration of the so- more intelligently, and as a lar system in the pursuit of whole; the relationships belife-science knowledge; mili- tween resources also become tary applications of space, much more evident. In a word, we can find out the total dimensions and consequences of what we choose to WHATEVER decisions are do with the planet we live on. Beyond that, the chance to

another world.

B UT we are at a critical point in making decisions. All over the world politics seems to be turning away from space. Even the Russians, after their most recent Soyuz flights, have said it will take them at least five years to master the technique. of building a space station. And in this country, where so much technology has been used to destroy people and environment, educators have begun to express fright because so many of the bright young men are turning away from science and technology.

The Apollo 12 crew has dared and done such brilliant things; they come back to a frightened world which seems to doubt its chances of accomplishing anything.

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9/6/12	<ul> <li>Box 6 (Jackie's labels), Folder "Space Task Group Report to the President 9/1969"</li> <li>3) Memo fm Jeb Magruder, White House, to Tom Whitehead dtd. 12/12/69, no subject, 1 p., no markings, w/attachments: (1) Plan – Annual Report 1969, dtd. 12/11/69 [12/6/69] (Project Manager - Magruder), 3 pp., "Confidential"; (2) Plan – President's Troop Withdrawal Announcement, dtd. 12/11/69 (Project Manager - Hodek/Butterfield), 3 pp., "Administratively Confidential"; (3) Game Plan – Governors Conference, no date (Project Manager - Krogh), 3 pp., "Administratively Confidential"</li> </ul>									
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MANAN INCOMPANY AND
## December 22, 1969

NASA

To: James Schlesinger

From: Carole Koritko

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. .

Attached is a copy of the NASA budget memo, per the request of Tom Whitehead.

cc: Mr. Whitehead Carole Koritko

EDaughtrey

#### December 19, 1969

### MEMORANDUM FOR THE STAFT SECRETARY

RE: Log No. 2518 (NASA Budget)

I submit the following recommendations with respect to Dr. Paine's letter of December 17, 1969, appealing the reduction in NAGA's . 1971 budget.

A. The Saturn V production should be suspended.

B. Effort on the space shuttle and space station should be reduced by \$150 million of MSF funds.

C. The frequency of Saturn V launches should be reduced, within the limits of safety, to extend the period of manned space flight beyond the presently planned date of 1972. (I have asked Dr. Paine to comment directly to me on this point. Dr. Paine has suggested that a six month interval is the maximum permitted for safety reasons, while Dr. Low has said that a nine month interval is acceptable.

D. The university research funds should be eliminated as requested by the President.

E. HEAO should be deferred.

F. Program management costs should be reduced from \$707 to \$653 million.

The net result of these changes will reduce the NASA budget to \$3,700 million. We believe that this level will provide a satisfactory space program consistent with the proposed Presidential statement on space. Dr. Paino's program changes to achieve a \$3,700 million budget
 are unacceptable to the Administration. They result in a termination of the manned space program in 1972, the onus of which would be on the President. Dr. Paine's program begins development and creates commitments for very expensive programs that will require substantially increased outlays in the next few years.

I believe we should not only reaffirm the President's \$3,700 million decision, but specify to NASA the above indicated broad outlines as to how it is to be spent.

Peter M. Flanigan

Enclosure

cc: Mr. Flanigan Mr. Kriegsman Central files

## THE WHITE HOUSE

WASHINGTON

LOG NO.: 2518

Date: Wednesday, December 17, 1969 Time: 4:00 P.M.

FOR ACTION: Peter Flanigan

ACTION MEMORANDUM

cc (for information): J. Campbell

#### FROM THE STAFF SECRETARY

DUE:	Dato:	Friday, December 19, 1969	Time: 2:00 P.M.	
SUBJE	CT:	NASA's appeal to the President budget level.	regarding their FY 1971	

#### ACTION REQUESTED:

- For Necessary Action

. . ... Prepare Agenda and Brief.

- For Your Comments

REMARKS:

X For Your Recommendations

TAR. COLE, JR.

\_ Draft Roply

Draft Remarks

## PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED. Xit.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately



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

OFFICE OF THE ADMINISTRATOR

December 17, 1969

The President The White House Washington, D. C. 20500

Dear Mr. President:

Faced with the necessity, for fiscal reasons, to reconfigure NASA's FY 1971 Budget well below the level required for a progressive and balanced space program, we have taken another hard look at the implications of a NASA FY 1971 Budget below \$4,250 million. NASA can press forward with a curtailed and spartan program that keeps the Saturn V rocket in production at a level of \$4,075 million. By suspending Saturn V production, we can reduce this further to a level of \$3,935 million while still retaining a minimum tenable U.S. position in space during your Administration. At the \$3,700 million level proposed in your meeting with Budget Director Mayo, I believe that the nation's progress in space would not be acceptable to you and, therefore, must appeal for reconsideration. Let me summarize the impact of these levels, so the final decisions can be reached with a clear understanding of the consequences. Supporting details have been provided to the Bureau of the Budget.

The Space Program I recommend for your Administration is that developed by the Space Task Group. The STG report has been very well received. It provides a well-thought-out and flexible United States space program with sound long-term objectives which will surely stand the test of time. The STG Frogram should become the Nixon Space Program, and, as a result, I am confident that your Administration will go down in history as having established man's future in space, both nationally and internationally. If, because of today's severe fiscal constraints we must sacrifice some current operations using previously-developed systems, so be it. The important thing is to press forward now with our new program, which represents this Administration's initiatives in space.

At a NASA budget level of \$4,075 million, we can produce two Saturn V rockets per year, thus maintaining production of the free world's only large booster, developed at a cost of \$7 billion. The Soviet Union is expected to introduce soon a new, even larger rocket with 10-15 million pounds thrust, versus the Saturn V's 7.5 million pounds. The new Russian rocket undoubtedly will be used to orbit very large payloads, although it will not greatly surpass the Saturn V in pounds of payload delivered to orbit because of the higher efficiency of our hydrogen-oxygen upper stages. If we are willing to accept a suspension of U.S. manned flight activity after 1974, when Soviet cosmonauts will probably be carrying out major missions with their new big boosters, we can postpone further Saturn V production now and save \$140 million in the NASA 1971 Budget. Production of the first two stages of Saturn V will have to be resumed in a few years to launch the first module of the space station in the late 1970's. Stopping Saturn V production would allow us to cut the NASA Budget back to \$3,935 million, which in our assessment is the minimum tenable level.

.....

At a FY 1971 budget level of \$3,935 million (with outlays at \$3,900 million-representing no increase above 1970), we would accept a threeyear gap in U.S. manned space flight from the last of the existing Saturn V's in 1974 to the first test flight of the new space shuttle in 1978.

At both the \$4,075 and \$3,935 million levels, we would have to cut a number of promising scientific and applications projects, reduce further our work in advanced space technology, and incorporate in our plan a number of other reductions suggested by the Bureau of the Budget. Although these are very serious actions indeed, NASA can still carry out the following projects of major importance to the nation:

First -- We can make an effective and credible start on the key space station and space shuttle programs that are at the heart of the Space Task Group recommendations. This will clearly focus the long-term goals of this Administration's space program on building the bridge to space over which people of many nations will pass in future years to participate in exploration and utilization programs. True international involvement--including space station modules and shuttle components developed by other countries and foreign astronauts--can result from these new initiatives.

Second -- We can move forward with economically viable space applications in Earth Resources, communications, weather, navigation-traffic control, and other fields offering prospects of early substantial practical benefits. This Administration would be in an untenable position if the space program presented with your 1971 Budget did not contain a balance of practical applications of space that are technically and economically feasible.

Third -- We can carry to completion significant and visible major programs like the Viking unmanned mission to land on Mars

2

in the 1973 opportunity, the manned Apollo Applications orbital workshop flight in 1972, and other significant but less wellknown and less expensive programs of great scientific value.

Fourth -- We can make very effective use of the remaining Saturn V and Saturn IB vehicles previously procured for the Apollo program. We will change and stretch out the plans on which our past launch preparations and training have been based and fly future missions at the longest intervals that are safe and practical. We will complete the first phase of lunar exploration with only four more Apollo flights: Apollo 13 and 14 in 1970, and Apollo 15 and 16 in 1971. These flights are essential for a first look at the very different lunar regions we can reach with our present vchicles. Apollo 11 and 12 have shown that areas of the moon thought to be quite similar have surprising differences; the next four flights will undoubtedly turn up new surprises. In addition, they will keep our manned flight organization together for the launching in 1972 of the Apollo Applications orbiting space workshop. This spectacular mission, during which astronauts will be living and working in space for periods up to 56 days, should provide a new U.S. space climax in 1972 similar to Apollo 11 in 1969.

Finally -- At the \$3,935 (or \$4,075) million level we can avoid a prolonged suspension of U.S. manned flights after the 1972 AAP workshop flight, which would otherwise see no U.S. astronauts in space from 1973 to 1978. With FY 1971 provision for necessary modifications and equipment, we can use the last remaining Apollo hardware to undertake significant new manned missions after 1972, including two or three trips to the moon which would be major advances beyond earlier flights. In 1973 a jeep-like electric vehicle can be carried to allow U.S. astronauts to explore--with live television--exciting new terrain unlike lunar areas previously reached. The scientific returns should be great and popular interest will be high. Alternatively, one of the last three remaining Saturn V's could be used to launch a second earth orbiting workshop.

If the budget were cut to \$3,700 million, U.S. manned flight activity would end in 1972 with an uncertain date for resumption many years in the future. We would also have to make further significant and serious reductions in other important programs, as described in the detailed material furnished to the Bureau of the Budget. I strongly urge you to select one of the bolder courses at \$4,075 million or \$3,935 million, depending on your final decision on the desirability of continued production of Saturn V's for manned flight after 1974. A hiatus in U.S. manned flights from 1975 to 1978 could be acceptable with an advanced new shuttle and space station in final development, and U.S. and free world astronauts in training together for future shuttle and space station operations. I cannot recommend to you, however, the prolonged suspension of U.S. manued flight operations after 1972 that would result from a \$3,700 million Budget.

In conclusion, let me address two matters which the Director of the Budget asked that I bring specifically to your attention:

- 1. Work at Universities -- NASA does need at least \$10 million of the funds deleted by the BOB for our space work at universities. These funds are required to support NASA's current missions and the nation's long-term objectives in space. Inclusion of these funds is consistent with the policy Dr. DuBridge discussed with you--with which I agreethat mission agencies like NASA should continue to support university work they need done in their fields, while general support of university science remains a question for the National Science Foundation.
- Electronics Research Genter -- I believe strongly that NASA 2. should not be required to close this important Center, and that it is essential to restore the \$17 million in question to the NASA Budget. Future acrospace operations of greater reliability and economy require major technical advances in electronics systems. Nearly half of NASA's Budget is in electronics, and we must drastically reduce our costs here -- a prime mission of this Center. In addition, advanced air traffic control is a vital part of future aeronautical system developments. Non-NASA considerations reinforce this view. Other agencies face serious long-term problems whose solutions require advances in electronics technology. For example, John Volpe and Jim Beggs at the Department of Transportation have strongly urged me and the Director of the Budget to maintain MASA's Electronics Research Center in connection with the NASA-DOT joint work on vital air traffic control R&D.

Both the university and ERC budget items are included in the \$3,935 million recommendation.

I have written frankly, Mr. President, to lay the nation's space needs before you in realistic terms. The integrity and reputation that NASA has painstakingly earned by delivering on extremely difficult tasks within stated budget and time limits are assets we cannot afford to diminish. Sime 1966 our space program has already been reduced \$2 billion--a greater percentage than any other sector of the Budget. We have in the last four years reduced direct employment on NASA work from 420,000 down to 190,000. A FY 1971 Budget of \$3,935 million will further reduce nation-wide direct employment on NASA projects to about 170,000. This is a major decrease in aerospace employment, but one NASA can live with in this time of austerity.

I believe I would be extremely remiss and do you and your Administration a disservice if I did not place before you as you reach these important decisions on America's future in space the relevant facts, consequences, and potentialities. I firmly believe that no other part of your Administration offers you as fine an opportunity for forward-looking and timely leadership. It is in this spirit that I request additional consideration of NASA's Budget. I strongly recommend that you establish the NASA FY 1971 Budget at \$4,075 million or \$3,935 million, depending on your decision to keep the Saturn V in production to eliminate the gap in U.S. manned space flight after 1974. This strong leadership will have an enduring impact on man's future in space.

I look forward to the opportunity to discuss these critical matters with you at your earliest opportunity. You can be sure that whatever your decision, the entire NASA organization will continue to do its very best to ensure that you and the nation are proud of the resulting accomplishments.

Respectfully yours,

T. O. Paine Administrator

	NASA Submission	<u></u>	\$4.250 Billion Level	<u> </u>	\$4.025 Billion <u>Level</u>	<u> </u>	\$3.935 Billion Level		\$3.700 Billica Isvel
ART NERVA Nuclear Stege Studies	\$349.0 49.0 3.0	<u>\$-27.0</u> -9.0 -3.0	<u>\$322.0</u> 40.0	<u>\$-20.0</u>	\$302.0		<u>\$302.0</u> 40.0	<u>\$-20.0</u>	\$ <u>282.0</u> 40.0
Space Station Base Tech. Near Space Veh. Applic. Deep Space Vehicles 100 kw Power Supply	36.0 Sci. 18.5 25.4 3.7 23.0	-10.0	162.0	-20.0	142.0		. 142.0		142.0
Other Space Technology Aviation Technology	13.6) 125.0	-5.0	120.0		120.0		120.0	-20.0	100.0
TDA	318.0		318.0	-10.0	305.0		303.0	6.0	302.0
OUA	26.0	-15.0	·		11.0		11.0	-11.0	
OTU	5.0	-2.0	4.0		14.0		4.0		- 4.0
R&D Total	\$3,700.2	\$-241.0	\$3,459.2	\$-151.0	\$3,308.2	\$-100.0	\$3,208.2	\$-218.0	\$2,990.2
Coff	90.2	-12.0	78.2	-18.2	60.0		60.0		60.0
R&FM	712.6		712.6	-5.6	707.0			-17.0	690.0
Total NASA	4,593.0	-253.0	4,250.0	-174.8	4,075.2	-100.0	3,975.2	-235.0	3,740.2
Application of FY 1970 Sat V funds						-40.0	-40.0		
Total, Budget Authority	\$4,503.0	<u>\$-253.C</u>	\$4.250.0	5-174.8	\$4.075.2	<u>\$-140.0</u>	\$3.935.2	\$-235.0	\$3.700.1

\*

## REQUIRED REDUCTIONS TO MASA BUDGET AT VARYING LOWER FY 1971 LEVELS

		•	
NASA I	Sudget Submission (to support STG Report)	\$4.503	
. 1.	Apollo/Lunar - Reduce from 3 flights to 2 flights		
	in FY 1971 and rephace LEP72	-45	
2.	Space Station and Shuttle - Reduce funding from		
	\$268M to \$150M - slip completion of Phase B&C	-118	
3.	Reduce Advanced Missions and Supporting Technology		
	for Manued Space Flight from \$21M to \$14M	-7	
. 4.	Slip Nimburs, ATS F&G, and Physics Explorers, and		
1	reduce Launch Vehicle Support	-23	
5.	Reduce Nuclear Program from \$60M to \$48M	-12	
. 6.	Reduce Space Technology (\$10M) and Aeronautics (\$54)	-15	
7.	Reduce Sustaining University Program (\$26M to \$11M)	-15	
. 8	Reduce Technology Utilization from \$5M to \$4M	<u>1</u>	
9.	Reduce Facilities	-1.2	
-			
	New Total	\$4.250	
10.	Eliminate LEP#2	-40	
11.	Revise Lunar schedule and defer modifications	•	
	until after AAS	-95	
1.2.	Provision for start on 2nd Norkshop Co last lunar		-
1. 2. 1	payload	439.7	_
13.	Reduce Shottle engine facilities from \$75M to \$15!	-10	
14.	Slip 930, Reduce OSSA SET and Launch Vehicle Support	-24	
1.5.	Reduce Space Technology offort	-20	
16.	Reduce OTDA	-10	
17.	ReFA - Delete proposed new positions	3-	
18.	CofF - Delete proposed facilitien	-9	
	. New Total	\$4.015	
19.	Suspend Saturn V production	-1.00	
20.	Application of FY 1970 Saturn V funds	-40-	-
			_
	Nev Sotal	\$3.935	2
21.	Delete ERTS CED	-10	
22.	Apollo Lunar - Delete all modifications, payload	•	
	effort, and flight plans after 1972	-121	
23.	Delete plans for 2nd Morkshop	-39	*
24.	Delete Havigation and Traffic Control Satellite	-7	*
25.	Delete HEAO	-le	
26.	Reduce Aeronautics to FY 1970 Level	-20	
27.	Reduce CEDA	-6	
28.	Eliminate University Program	-11	
: 29.	- Elininate ERC or further reduce Apollo/Lunar	-1.7	
	Nev Total	\$3.700	
			4

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900

## National Aeronautics and Space Administration

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## CHANGES TO MASA BUDGET REQUEST

	NASA Submission	Δ	\$4.250 Billion Level	Δ	\$4.025 Billion Level		\$3.935 Billion Level	<u> </u>	\$3.700 Billion Level
	\$2.309.2	\$-170.0	\$7.939.2	\$-96.0	\$1.843.2	\$-100.0	\$1.743.2	\$-160.0	\$1,583.2
Apollo	7,760.0	-25.0	1.335.0	-95.0	1,040.0		1,040.0	-122.0	913.0
AAD	500.2		500.2		500.2		500.2		500.2
Common M	100.0		. 200.0		100.0	-100.0			
TED 22	60.0	-20-0	40.0	-40.0					
Conco Station	98.0	-43.0	50.0		50.0		50.0		50.0
Change Clauter	170.0	-76.0	100.0		100.0		. 100.0		100.0
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Norkshop #2 or Lunar				+39.0	39.0		39.0	-39.0	
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SSA	240.0	-20.0	250.0		250.0		: 250.0		250.0
Viking	270.0		11 0	-5.0	6.0		6.0		6.0
Lunar Ski/Data Anal.	12.00.		10/2 0		104.9		704.9		104.9
Other Ler	70-2-2		19.7	-4.0	31.7		. 14.7		14.7
CSO A-K	10.1	5 m has and	10.1		4.0		4.0	-4.0	
ILEAO I		4.0	12 /		17.4		17.4		12.4
Physics Explorers	15.4	-4.0	26 0		56.9		86.9		26.9
CLACT FEA	00-9		. 6.0	-5.0			1.9		1.9
BLOCCLORCE SHY	0.9		0.9	-2.4			. 8.0		3.0
Planetary Blosclence	0.0		5.5		1.5		j.5		1.5
BLOSSCOL122C	1.0		1.3 5		. 11.5		41.5		41.5
LILS A-B	41.2		32.0		10.0		10.0	10.0	
BING C-D	10.0		10.0		11.0		11.0		11.0
AND ALICIAIC	20.0	1-6 0	27 /.	2.0	27.4		27.4		27.4
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LEV. METH. CORCHOL	1.0		57 6		57.6		57-6		57.6
. Other Applications	21.0		37.0		71.4		. 71 . 4		71.0
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## LATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Office of the Administrator

December 18, 1969

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Mr. Tom Whitehead The White House Washington, D. C. 20500

Dear Mr. Whitehead:

Dr. Paine thought the attached copy of the speech he is to give in Houston this evening might be helpful to you in preparing the President's statement on our next decade in space.

Clare 2. Farley

Clare F. Farley Executive Officer

Enclosure

Dr. Thomas O. Paine Administrator National Aeronautics and Space Administration

> Chamber of Commerce Dinner

We have just heard Dr. Gilruth tell us something about the history of the national space program, and Dake Slayton about the present. Now I'd like to spend a few minutes talking about the future.

Texas, incidentally, is a great place to be talking about the future, because Texans have been proving for a long time now that they know how to take positive action to shape the future instead of just standing around wringing their hands and waiting for the inevitable to happen.

Here in Texas, if you need an airport, you don't build a few runweys and add a few more next year. You build one so big, and of such advanced dosign, that it will be able to handle any kind of craft that comes off the drawing board for years to come. If one of your Texas cities, such as Dalles, needs urban renewal, you don't pussyfoot around and nickel and dime it to death. You send in the bulldozers and rebuild it from the ground up--a supercity. If you need better highways, you pour more conceate in a few weeks or months than most places can manage in years. And if you decide you need a new sports stadium, while other cities keep praying they won't have to call off ballgames because of the weather, you build the astrodome. Not too many years from now--perhaps in the 1980's--we may be seeing an astrodome on the moon, or at least a structure with many of its features, being used as a permanent scientific station. Whether it will have astroturf or not I really cannot say at this time.

A lot of other things will be happening in the space program by that time, too, some even more exciting. A manned landing on Mars is certainly well within the realm of possibility, as one important mission that could fall within the framework of a vigorous 'space program the President's Space Task Group proposed earlier this fall.

In our final meeting, this group--consisting of the Vice President, the Budget Director, the Secretary of the Air Force, the President's Science Advisor, the Undersecretary of State, myself, and several others--met with the President and proposed to him three basic developments.

One of these is a "Space Shuttle" rocket plane, a DC-3 of space transportation, capable of carrying perhaps ten to twenty tons of payload and a dozen or so passengers from earth up to an orbiting space station and back. It would be reused many times, converting space transportation to a low-cost airline mode of operation. The "Space Shuttle" would support another important development--the permanent orbiting space station that I just mentioned. This would be a permanent research facility in space. It would be launched in modular form; every year a few more pieces would be added, so that over a decade a facility able to support a hundred scientists and engineers would evolve. They would look outward to the stars and planets, inward to earth. In the space environment, free of earth's gravity, it will be possible to conduct many new experiments on materials, structures, and processes, quite different from anything we can do in laboratories here on earth. And as the laboratory circles the globe every 90 minutes, studies can be made of earth resources, air and water pollution, farms, forests, and fisheries, and a host of other things.

A third development we proposed to the President is the NERVA nuclear rocket engine, which can pack far greater power than present chemical fueled rocket into a much smaller package. It is nuclear energy that will really usher in the Age of Space, and make it possible to travel much deeper into the solar system.

With these three developments, a space shuttle to fly men and supplies up to a permanent space station from which an efficient nuclear shuttle can fly out to the moon and back many times, great economies in space operations can be achieved. You can see that we've basically proposed to the President for the next decade is the development and operation of a new low-cost space transportation system, from earth to orbit, and from orbit to moon.

The key to the kind of reliability and economy we need for such a transportation system is reusability-we must stop throwing away the vehicle after each flight. I've heard the Texas stories about how you throw away your Cadillacs when the ashtrays are full. Well, Bob Gilruth tops this when he throws away a hundred million dollar vehicle after each ride. With the new space shuttle concept, we hope to be able to empty the ashtrays quite a few times, and cut costs to only a tenth of today's costs.

But while we are building this new transportation system, we will also be continuing many activities--and starting new ones--to make life better here on spacecraft Earth.

We will be orbiting Earth Resources Technology Satellites which will use special sensors to give us a new look at global mineral wealth, global agriculture, cescargraphy, forestry, geology, air and water pollution, and a host of other valuable things.

Communications satellites have been in routine commercial use for several years now, but within a few years we will be seeing worldwide communications by satellite to a degree that today seems hardly imaginable. Larger communications satellites, for example, can cut the cost of overseas telephone calls by more than half. They will allow direct radio and television broadcasts to homes, offices, remote villages, and--of major importance--to schools. Very recently, NASA signed an agreement with India to conduct an experimental program

for directly beaming instructional television programs to thousands of Indian villages. The experiment will be the first to provide direct broadcasting of instructional programs directly from a satellite into small village receivers without the need for TV stations on the ground. The projected experiment has been widely discussed in international forums including the United Nations and is regarded as an important pilot test of procedures and programs which could speed the advent of national communications systems in the developing world.

We will see other new services in space communications opening up in the near future, including air traffic control and navigation and worldwide computer-to-computer data links.

One last comment on communications that you may not be sware of: at the annual fall meeting of the Consultation Committee of International Telephone Carriers the agenda included assigning an area code for the moon!

Here in Texas another thing you know quite a bit about is hurricones. You know what weather satellites are already doing routinely in tracking down hurricones and predicting their course, and you appreciate the lives and property that have been saved as a result. This year ESSA scientists with weather satellite information to aid them, carried out the first experiments that may have changed

a hurricane's direction and force. It is too early to forecast the full import of this preliminary work, but the results are encouraging to say the least.

And all these new and increased capabilities from the space program will be working together to form the basis for new global technological and economic advances. Here in Houston you have seen the stimulus of space technology as it moves beyond its own confines and into the general economy. The same thing has been happening all around the great space crescent that extends from our centers in Maryland and Virginia, down to Cape Kennedy and the Marhhäal Space Flight Center in Alabama, scross through our Mississippi Test Facility and Michoud Assembly Facility near New Orleans, on to the Manned Spacecraft Conter fiere, and out to our Jet Propulsion Laboratory and Ames Research Center in California. You are undoubtedly following with great interest our new developments which will continue to give technological and economic stimulus to this whole region. One of the most important is earth resources.

Texas has traditionally been a leader in the utilization of resources, of seeing opportunities and making the most of them...When Henry Ford came up with the then far-out idea of a mass-produced sutemobile, it was Texas that responded with the petroleum industry that made the Model T and its successors such a phenomenal factor in the American way of life. After Henry Ford, Texas was never the same again.

What will be the development of the future that will do for Texas--and the United States--and the world--what Henry Ford's tin lizzie did fifty years ago? Or what Douglas' DC-3 did thirty years ago?

I would suggest to you that the satellite and the spacecraft, although still in their infancy, are already beginning to repeat the impact of the sutomobile and the sirplane.

The new low-coal transportation system will make it increasingly practicable to manage resources on a global scale. The Pacific Ocean, for example, was once a little-travelled barrier. Now we are fast moving toward a Pacific Basin where once farflung resources can be readily brought together: oil from Alaska, agricultural resources from California, the surging manufacturing vitality of Japan, the mineral resources of Australia, the potential great markets of the Orient and Latin America. The potential is great, and the jet transport, supertankers, satellite communications, and other new technologies will hasten the Pacific boom.

As is always the case with enything new or different, it takes time for some people to get the message. Henry Ford, after all, hed free advice for a good many years on the advantages of getting a horse. But here in Texes you are looking forward instead of back. This very building, for example, was built in honor of a man whose great vision played a very important part in getting our national space program under way-Albert T homas. So I don't need to beat the duums for the space program in Texas. It just happens, however, that ever since the Apollo 11 moon landing last July, I keep hearing one question, with infinite variations, dozens of times a day.

The question goes something like this: "If we can lend on the moon, why can't we....."--and then you fill in the blanks with whatever you feel frustrated about. It might be anything from eliminating ignorance, poverty and crime to a cure for hangovers.

Usually the question refers to the Nation's social ills. The implication is ithat by directly applying space-age technology and management, or by diverting space dollars and talents, the government could solve society's human problems. Our severer critics seem thoroughly convinced that, by grounding the astronauts, we would automically solve all our problems here on earth.

Well, the way to solve our problems here is not by destroying this nation's excellence!

Some wag has said that one good thing about mediocrity is that you know it is genuine. Well, we in America--and particularly here in Texas--are not satisfied with mediocrity, no matter how genuine it may be. We're in a new era, on era when compatence and meeting commitments is being expected by the public as never before. The space program has set new standards of excellence that are new spilling over into many other areas, and encouraging the country to set new higher levels of aspiration in other areas. Surely the schievements of Apollo should embolden us to set much higher standards and much higher performance levels in a number of areas.

I am convinced that the American public will back bold aspirations, and they will back large-scale programs where they are convinced that the performance will follow, and the commitment will be mat.

This country has never shied in the past from inventing a new institution that it needs to accomplish its tasks. We invented TVA, we invented the Atomic Energy Commission, the G. I. Bill, the Marshall Plan, and NASA. And I would submit that our string of successes in all these programs is very impressive indeed.

We can accomplish the things that the people of this Nation want accomplished. We have the resources: research and education; technology; and productivity. These elements are woven inseparably together. Research and education are the wellspring from which comes improved technology, which in turn gives our country its great productivity advantage. And this edvantage shows up most in new and advanced areas of technology. It is no coincidence that our balance of trade, although struggling in some areas, is strongly favorable in the fields NASA works in: aerospace and computers. The U. S. aircraft industry has a favorable balance of trade of about 285 percent, exports over imports. That is, our aircraft exports over imports is slmost three times the total U. S. balance of payments. And in computers--something else you have in Texas excel in--the balance is similarly favorable. It is in these areas of new and advanced technology that the United States must continue to lead if we are to keep our productivity advantages and high standered of living.

If we can bring to all our earthly problems the same kind of expertise, the same kind of commitment, the same kind of leadership that landed us on the moon, the sky is really not the limit any more. And there are plenty of jobs to be done, both in space and here on the good earth. Let's get on with them.

Miller Strate

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## Thursday 12/18/69

10:00 Mr. Friedlander (Assistant to Mr. Anders) called. Said they had received an outline copy of the President's statement from Jerry Wolff. They have prepared comments on that and can send them to you. They now understand there will be a short Presidential statement, followed by a 5-minute statement by the Vice President, which they're working on.

Wondered if the release was still expected at 11 o'clock on Tuesday (12/23) -- wondered if you knew that it happened to be the anniversary of the Apollo 8's orbit of the moon. Anders will be on the TODAY show that morning. 3 3 0 0

12/17

## Wednesday 12/17/69

1:10 As Mr. Whitehead requested, called DuBridge, Mayo, Anders, and Palne's offices to advise that the proposed message on space is not going aut until Tuesday and we hope to get a copy to them for their comments this afternoon or tomorrow.

#### Wednesday 12/17/69

- Advised Mr. Huebner that when they get a draft of 1:10 the space message, copies should be sent to:
  - Flanigan
  - Klein
  - Press Office
  - Paine (if Keogh agrees)
  - Vice President
  - DuBridge
  - Mayo
  - Whitehead

Pepel resind

Anyone else Mr. Keogh wants.

Log 2530 never 2/8 proft present proft Statement for Space due 9/2/22



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

OFFICE OF THE ADMINISTRATOR

December 17, 1969

Mr. Tom Whitehead The White House Washington, D. C. 20500

Dear Tom:

Thank you for the draft outline. We like the general tone and organization. With regard to substance, we would like to suggest some detailed changes that we feel are important. Our comments are attached.

Sincerely yours,

T. O. Paine Administrator

Attachment

### COMMENTS ON DRAFT OUTLINE OF PRESIDENT'S STATEMENT ON OUR NEXT DECADES IN SPACE

These comments deal principally with the paragraphs on page 2 that set forth various aspects of the future program.

3. Develop an extended earth orbit capability for man

We would suggest a slightly different wording that places emphasis on the Apollo Applications Workshop and its use, while making clear the difference between this and the space station.

"An experimental space station built from Apollo technology will begin operations in the next few years. This will be a workshop in which men learn how to live and work in space for longer periods of time. The major scientific experiment will be a large solar telescope with which astronauts will study the sun for extended periods. This workshop will provide the basis for the long-lifetime space stations to come later."

4. Extend man's capability in space

Consistent with the suggested wording of paragraph 3, paragraph 4 should read:

"In the next decade we will develop a true space station module. that will be the first step in building a permanent base in earth orbit and will serve as a building block for future manned interplanetary travel. Eventually men will set forth on an expedition to the planet Mars from this space base."  We suggest paragraph 5, "<u>Expand earth applications</u>," should read:

"Beginning with early development of an Earth Resources Technology Satellite, we will pursue over the next decade a vigorous program to emphasize a wide range of applications of space technology. We will continue our productive programs in meteorology and communications and open up new practical benefits in the fields of navigation, air-traffic control, use of our natural resources, and control of air and water pollution."

6. Lower the costs of space launches

This paragraph should really emphasize the space shuttle, which is the principal mechanism for lowering the cost for future launches. We would like to see the paragraph say:

"Our recently developed rocket technology will provide a new type of launch capability in the next decade. We will develop a space shuttle that will be reusable to provide frequent, reliable and low-cost launches for a wide range of payloads -- including passengers -between the surface of the earth and orbit."

7. Expand international cooperation

#### We suggest:

"We have established cooperative programs in space, but these should serve only as a base for developing more substantial international participation in the future. Other nations should be working with us in some aspects of our new programs -- the space station and the space shuttle. Progress will be faster and our accomplishments will be greater, if nations do indeed work together in this fashion."

Finally, we would point out that the proposed statement does not mention aeronautics. This is logical and proper in a statement confined to the next decades of space. However, the Space Task Group report was criticized in some circles, in particular by some Congressmen, because it did not also mention aeronautics.

3

NASA

December 15, 1969

MEMORANDUM FOR

Dr. Thomas O. Paine Administrator National Aeronautics and Space Administration

I understand that your tentative planning calls for future Saturn 5 launches at six-month intervals. This is considerably more frequent than we had understood to be consistent with safety and reliability requirements. As you know, the President would like to see these launches paced at the maximum intervals consistent with those objectives.

NASA, of course, must make the technical determination as to what launch schedule will be consistent with safety and reliability. However, given the decision to suspend Saturn 5 production and the limitation on funding available for space programs, the more frequent launch interval will have two adverse effects. It will deprive other worthwhile space programs of funds, and it will mean a probable hiatus in Saturn 5 launches once the current inventory is used up.

I would appreciate hearing your thinking on this matter.

Peter Flanigan Assistant to the President

cc: Mr. Flanigan Mr. Whitehead Mr. Kriegsman Central Files

CTWhitehead:jm

December 16, 1969

#### TO: BOB HALDEMAN

FROM: PETER FLANIGAN

In considering the date for a Presidential statement on Space you should know that on Sunday, January 4, there will be the dedication of the new Lunar Institute in Houston. Although this is not a big facility, it is a unique result of the Apollo missions.

On January 5, 6, and 7 there will be a meeting of 1,000 Space scientists in Houston including many from NASA and many from foreign countries. At the meeting there will be released dramatic new information resulting from the Apollo trips.

It appears to me that these activities would provide a good background for the President's statement on Space. If he is returning from San Clemente on the 4th, on the 5th he could stop in Houston, make the speech, and continue to Washington. If he did not wish to be there in person, he could issue the statement in connection with these activities.

With the Space budget still under appeal, this delay might be preferable to issuing the statement before the details of the budget are buttoned down.

bcc: Tom Whitehead Jeb Magruder

## December 16, 1969

To: Dr. Thomas O. Paine Administrator National Aeronautics and Space Administration

From: Tom Whitehead

This is still somewhat tentative. Will send a copy of the draft of the statement as soon as it is available.

Attachment -- Draft Outline dated 12/12/69 President's Statement on Our Next Decade in Space

CTWhitehead:ed

# OUT

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355	- Box 6 (Jackie's labels), Folder "	Box 6 (Jackie's labels), Folder "Space Task Group Report to the President 9/1969"										
1-1-	Proposed Presidential Statement on Space Log No. 2530, 1 p., no markings, w/attachments: (1)											
	Comments on Proposed Presidential Statement on Space, no date, 1 p., no markings; (2) Action Memo fm the Staff Secretary to Vice President Agnew et al., Log No. 2530, dtd. 12/18/69, subj:											
	Proposed Presidential Statement on Space, 1 p., "Confidential"; (3) Draft Suggested Statement on Space dtd. 12/17/69, with handwritten mark-ups, 6 pp., no markings											
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	UPC 51910 No. 125-OG											





INITIATIVE Contilled Fiber Sourcing
# Tuesday 12/16/69

4:10 Dr. Drew has Dr. DuBridge's comments on the space message outline but said if you were going to be sending a copy of the space message soon they would hold up and make comments on both papers at the same time.

北北

Tuesday 12/16/69

1:10 Told Mr. Magruder that you need to talk with Paine as soon as possible and you can't do it until you and Flanigan have talked so you would appreciate getting the papers he's preparing as early as possible

Mr. Magruder advises they are typing them now.

December 16, 1969

### MEMORANDUM FOR

Dr. Lee DuBridge Mr. Robert Mayo Dr. Russell Drew Mr. Jack Young/Mr. Don Derman

This is now in the hands of the speechwriters and we will be forwarding a complete draft as soon as it is available. We are tentatively planning for Thursday release. I believe this is basically consistent with the decisions made by the President in the recent NASA budget discussions. I would appreciate receiving any comments you may have as soon as possible, either on this outline or the final draft.

> Clay T. Whitehead Staff Assistant

Attachment

cc: Mr. Kriegsman Mr. Whitehead Central Files

CTWhitehead:ed

December 15, 1969

To: Mr. Magruder

From: Tom Whitehead

12/12/69 Draft outline of President's Statement on Our Next Decade in Space MEMORANDUM

THE WHITE HOUSE

HOUSE N December 13, 1969 December 13, 1969 Desh Mitoste

# MEMORANDUM FOR TOM WHITEHEAD

Subject: Space - Next Decade

Many thanks for the draft outline on the next decade in space, dated December 12. It's very helpful. What's the status of the decision-making process on these points? I think you may have indicated it to me before I got the memo, but if so I've forgotten.

Rely

·. : 11-

Raymond K. Price, Jr.

3.

#### 12/12/69 DRAFT OUTLINE

### President's Statement on Our Next Decade in Space

Here we are: Two successful visits to the Moon

Where are we going in space?

Three goals: Exploration -- man's quest; worthwhile in and of itself. Science -- extending our knowledge of the universe, matter and nature.

> Applications -- turning space science and technology to economics and social benefit here on earth.

Space as both: an adventure for the present an investment in the future

The manned lunar landing goal was a challenge to the Nation and an adventure for all mankind.

But it was also a vehicle for developing a space exploration capability.

We now have that capability -- both manned and unmanned -- and must now shift our focus to a continuing program of exploration and application; space exploration will be a part of our lives for the rest of time; we must now make it a continuing process rather than a series of crash timetables.

Based on a careful review of the possibilities developed by the Space Task Group, I have decided on the following ma jor program goals and initiatives for the next decade in space:

1. Explore the moon

The Apollo manned landings should be paced at a rate to maximize scientific return, consistent with the minimum launch rate for safety and reliability.

2. Explore the planets and the solar system

During the next decade, we will launch scientific spacecraft to observe every planet and to explore the vast space between. We will attempt to land an unmanned spacecraft on Mars in 1973. New scientific satellites also will be launched to explore space near the earth.

-2-

An Experimental Space Station built from Apollo technology will begin operational missions in the next few years. By the middle of the next decade, men will be working in space for months at a time.

Extend man's capability in space

In the next decade we will begin to design an even longer-lived Space Station Module that will serve both as a near-earth space station and a building block for manned interplanetary travel. We will land men on the planet Mars as a part of this program.

5. Expand earth applications

Beginning with <u>early development</u> of an Earth Resources Technology Satellite, we will pursue over the next decade a vigorous program to emphasize a wide range of new applications of space technology. Meteorology, communications, navigation, and air traffic control also will be explored.

6. Lower the costs of space launches

Our recently developed rocket technology will provide a reliable launch capability through the next decade. The production of Saturn V launch vehicles will be suspended in view of the planned rate of lunar exploration and our current inventory of 8 vehicles; it can be resumed at any time in the future as the need arises. We will continue our research to make possible even lower costs for launching space payloads in the future. We will begin to design a space shuttle that will be re-usable to provide frequent, reliable, and low-cost launches for a wide range of space payloads.

### 7. Expand international cooperation

Space exploration and its benefits here on earth should be a venture for all mankind. We do not seek to exploit space for national purposes, but to share it. Our progress will be faster and our accomplishments will be greater if all nations work together, both in contributing resources and in sharing results. This is a far-reaching and comprehensive program to extend our space capability and to put it to work for us here on earth. The resources required will be great, and so will the benefits. We will seek to provide a stable level of expenditures to enable steady progress consistent with other pressing national priorities. In addition, we hope to be able to expand our effort in some years and move some accomplishments nearer in time.

The important thing is to recognize that man has begun to explore new worlds. Mankind has entered a new era: For the rest of history, we will be men from the planet Earth. Let us conduct ourselves accordingly.

Space

### December 12, 1969

To: Mr. Keogh

From: Tom Whitehead

We are tentatively planning for a December 18th release.

Attachment

#### DRAFT OUTLINE 12/12/69

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The Apollo manned landings should be paced at a rate to maximize scientific return, consistent with the minimum launch rate for safety and reliability.

2. Explore the planets and the solar system

During the next decade, we will launch scientific spacecraft to observe every planet and to explore the vast space between. We will attempt to land an unmanned spacecraft on Mars in 1973. New scientific satellites also will be launched to explore space near the earth.

# 3. Develop an extended earth orbit capability for man

An Experimental Space Station built from Apollo technology will begin operational missions in the next few years. By the middle of the next decade, men will be working in space for months at a time.

#### 4. Extend man's capability in space

In the next decade we will begin to design an even longer-lived Space Station Module that will serve both as a near-earth space station and a building block for manned interplanetary travel. We will land men on the planet Mars as a part of this program.

### 5. Expand earth applications

Beginning with early development of an Earth Resources Technology Satellite, we will pursue over the next decade a vigorous program to emphasize a wide range of new applications of space technology. Meteorology, communications, navigation, and air traffic control also will be explored.

### 6. Lower the costs of space launches

Our recently developed rocket technology will provide a reliable launch capability through the next decade. The production of Saturn V launch vehicles will be suspended in view of the planned rate of lunar exploration and our current inventory of 8 vehicles; it can be resumed at any time in the future as the need arises. We will continue our research to make possible even lower costs for launching space payloads in the future. We will begin to design a space shuttle that will be re-usable to provide frequent, reliable, and low-cost launches for a wide range of space payloads.

### 7. Expand international cooperation

Space exploration and its benefits here on earth should be a venture for all mankind. We do not seek to exploit space for national purposes, but to share it. Our progress will be faster and our accomplishments will be greater if all nations work together, both in contributing resources and in sharing results. This is a far-reaching and comprehensive program to extend our space capability and to put it to work for us here on earth. The resources required will be great, and so will the benefits. We will seek to provide a stable level of expenditures to enable steady progress consistent with other pressing national priorities. In addition, we hope to be able to expand our effort in some years and move some accomplishments nearer in time.

The important thing is to recognize that man has begun to explore new worlds. Mankind has entered a new era: For the rest of history, we will be men from the planet Earth. Let us conduct ourselves accordingly.

### THE WHITE HOUSE

WASHINGTON

December 12, 1969

MEMORANDUM FOR

#### JEB MAGRUDER

It is my understanding that sometime in the near future we will be releasing, via a speech or Presidential statement, the President's decision on the future of the Space program his decision with regards to the options presented to him in the Space Task Force Report.

Although you, of course, do not know what decisions have been reached at this time, I don't think it's too early to begin drawing up a game plan, if one is thought advisable, as to how the release should be handled. I am certain that whatever the decision, there will be something there for somebody to stand up and say hurrah for the President on, and I believe that we should take advantage of this.

cc: Peter Flanigan John Ehrlichman Chuck Colson Jerry Warren

#### White House #1 -- \$3637 Million

Recap (Alternate #4 to WH #1)

1. Shutdown of production line and 9 month launch interval

1275

-330 (Apollo, LEP II and SAT V) 945 12/15/19

2. Limit space station to technology development 64.7 -20.0 (OMSF)

- 3. Limit shuttle to technology development
  - 106.0
  - -60.0 (OMSF and construction of facility)
- 4. Suspend nuclear rocket 48.0

 $-\frac{48.0}{00.0}$  (OART)

- 5. Cancel HEAO and OUA 15  $-\frac{15}{0}$  (OSSA - OUA)
- 6. Accelerate Viking from '75 to 73

50 + 200 - 250

# Apollo Costs -- 9 Month S5 Centers

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\$1207 -- NASA estimate 9 month centers -78 -- S5 Shutdown -60 -- LEP #2 \$1069 -75 -- Modify spacecraft for LEP #2 -50 -- Stretch Apollo 13, 14, 15 \$ 944

W.H. #2

### \$3, 565 million

12/5/69

Recap (Alt. #4 to W. H. #2)

1. Shutdown of Production Line and 9-month Launch Interval

2. Cancel HEAO and OUA

3. Continue Viking for '75 Launch

Maintain Space Shuttle, NERVA, Space Station at NASA, Alt. #4 levels

	BOB		NASA		W.H. #1		W.H. #2		
		3, 700		3, 910		3,685		3, 765	
Office of Manned Space Flight Apollo/Lunar LEP #2 Workshop Space Station Saturn V	1,646	960 50 480 100	1, 859	1,135 40 500 100	1, 459	945 500	1, 529	945 - 500	
Shuttle Space Station All Other Office of Space Science and	768	32 10 14	636	50 20 14	832	-  14	832	50 20 14	2
Viking High Energy Astronomical Observatory All Other		250 - 518		50 4 582		250 - 582		250 - 582	
Office of Advanced Research and Technology Shuttle Technology Space Station Technology Nuclear Rocket All Other	281	40 32 40 168	322	46 45 48 183	322	46 45 48 18 3	322	46 45 48 183	
Office of Tracking Data Acquisition & Office of Technology Utilization Office of University Affairs Construction Space Shuttle Facility All Other Research and Program Management	<u>286</u> <u>+</u> <u>40</u> <u>678</u>		318 11 51 713	10 41	<u>318</u> - <u>41</u> <u>713</u>	- 41	<u>318</u> - - 51 - - - - - - - - - - - - - - - -	10 41	
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	NASA	BOB	NASA	W.H.	W.H.	
	REQ.		Alt. #4	#1	#2 *	
	4.497	3, 700	3, 910	3,637	3,565]	
Office of Manned Space Flight	2,109	1, 646	1,859	1,459	1,529	
Apollo/Lunar	1,160	960	1, 135	945	945	
LEP#2	60	50	40	-	-	
Workshop Space Station	500	480	500	500	500	
Saturn V	100	100	100		-	
Shuttle	170	32	50	-	50	1
Space Station	98	10	20	-	20	
All Other	21	14	14	14	14	
Office of Space Science and				022	622	
Applications	893	768	636	832	032	
Viking	250	250	50	250	50	
High Energy Astronomical						
Observatory	4	-	4	-		
All Other	639	518	582	582	582	
Office of Advanced Research					222	
and Technology	349	281	322	274	322	
Shuttle Technology	46	40	46	40	40	
Space Station Technology	45	32	45	45	45	
Nuclear Rocket	60	40	48	-	48	
All Other	198	168	183	183	183	
Office of Tracking Data Acquisition & Office of						
Technology Utilization	323	286	318	318	318	
Office of University Affairs	26	-	11	-		
Construction	90	40	51	41	51	
Space Shuttle Facility	25		10	-	10	
All Other	65	-	41	41	41	12
Research and Program Manageme	mt 707	678	713	713	713	
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Workshop Space Station	500		480	500	500	500	500		500
Saturn V	100		100	100	100	100	-		
Shuttle	170		32	100	50	110	-		50
Space Station	. 98		10	50	20	60	-		20
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Applications	893		768	865	636	893	832		632
Viking	250		250	250	50	250	250		50
High Energy Astronomical	-								
Observatory	4	1.4		4	4	4	-		- 1
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and Technology	349		281	322:	322	332	274		. 322
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Space Station Technology	45		32	45	45 ,	45	45		45
Nuclear Rocket	60		40	48	48	48	-		48
All Other	198		168	183	183	193	183	+10	183
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All Other	65	1. 2.	-	25	10	25	-	+13	10
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NASA

Wednesday 12/3/69

4:40 Dick Speier wanted to ask a question:

Do you still want the summary of information that went to the President on NASA?

Yes

No

### December 2, 1969

Our approach to the NASA budget this year is particularly important: it is tied to decisions about the future pace of the space program, and deceptively small budget issues for FY 71 entail enormous (up to \$100 billion) budget commitments for future years.

In spite of the importance and the large funding levels involved, the issues and options that have been defined for the President and the information to support them are scarcely of the quality appropriate for a Presidential decision. We have had the following problems:

1. The Space Task Group members appointed by the President to review future space options were all from institutions that stood to benefit from a large space program. Even the Vice President has strong incentives to "speak out for space" since one of his few charters is to chair the Space Council. During the course of the Task Group review, NASA built public and industry expectations for large new space projects (Examples are attached at Tab A). The Task Group report presented options all calling for sizeable increases in space expenditures over the next decade, while White House staff efforts to include a mo re representative range of options were rejected (with such patently false arguments as "a NASA budget below \$3.0 billion per year would mean the end of manned space flight).

2. Low-cost opportunities for Presidential initiatives have been suppressed. For example: (a) The somewhat prosaicsounding Apollo Applications Program has been redesigned at some expense and now involves a program with substantial gr owth capability. The redesigned program has the potential for use of a manned orbiting workshop over a period of several years. This could have been (perhaps still can be if we insist) announced as a Nixon program for an experimental space station (XSS), thus giving the President credit for an operating U. S. "space station" within the (b) NASA is proceeding with and announcing plans next few years. for unmanned scientific spacecraft to explore the planets. This still could be made a Presidential initiative to launch to all the planets of our solar system by the end of the next decade. (c) Unmanned scientific space programs are much less expensive than manned programs, yet in all options (both NASA and BOB) both types of programs are scaled up or down in rough proportion, making almost invisible the option to expand unmanned space great ly while keeping the manned program and the budget more restrained. (d) Manned lunar landings have been scheduled at the rate of three per year at a cost of almost \$1 billion per year over a rate of one per year, without this issue ever being presented for Presidential consideration.

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3. The Budget Bureau has consistently been uncooperative in White House staff efforts to produce information on lower-cost options for Presidential consideration. BOB's career staff seems to suffer from an institutional tendency to save the President and his staff from hard decisions, to compromise with agencies as far as possible, then to defend the agency base. For example: Having accepted NASA's request for an FY 70 supplemental to extend production of the Saturn 5 launch vehicle, BOB now argues the President would look foolish reversing that decision. BOB stresses the \$300 million costs of restarting production lines after a period of down time, ignores the roughly \$2 billion cost savings in the shutdown years, and notes the NASA need for these vehicles for the manned Mars landing without noting that need would not occur for 8 to 12 years.

The attached table (Tab B) shows graphically five alternatives for the near future of the space program and corresponding expenditure levels. Each preserves the option to go to Mars as early as 1986. Also shown for each alternative are the dates when a commitment must be made in order to permit a Mars landing in 1986. (Note that 1986 is a totally arbitrary date, to which we pay homage only because of the STG report and not because of its intrinsic merits)

-3-

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Three major points should be noted:

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1. While the space program is interesting to most of the public, it ranks very low on their priorities for increased Federal spending: In a recent Gallup poll, 56% of "middle Americans" favored less spending for space exploration, ranking behind only foreign aid in disfavor in spite of the recent excitement of the Apollo 11 mission. There is no space program or mission on the horizon that offers popular appeal comparable to the first lunar landing, so that space is not likely to climb in the public eye as a desirable use of Federal funds. Recent public statements by Congressional leaders called for restraing and avoidance of "a premature commitment to distant goals" (Rep. George P. Miller, chairman of the House Committee on Science and Astronautics and a major space enthusiast

2. A striking feature of each of these options is their similarity in terms of program accomplishments. They are almost identical with respect to unmanned space activities and differ primarily in the number of manned lunar flights per year. It is unclear how much domestic and international political benefit accrues to the President and the Nation with the higher manned launch rates,

-4-

since the scientific value of the missions is maximized at about one per year and the public excitement appears to fall off as the launch rate expands. A major consideration is avoidance of another Sputnik-like event, but we now appear to be far ahead of the Soviets and any of the options presented here offers a base for rapid expansion at any time.

3. There is no need now to make any program commitments in order to preserve the 1986 Mars landing option. The President can at any time make a forward-looking statement on the future of our space program without any large funding commitments. The major issue for Presidential decision at this time is what should be the rate of manned lunar landings and XSS development over the next few years. A rate approaching one lunar landing per year and 1972 initial flight of XSS offers sizeable near-term budget savings while still preserving an active manned program. NASA is attempting to cast this as a technical issue by arguing that a rate of 2-3 per year is the lowest consistent with safety and reliability. The existing supply of 8 Saturn 5 vehicles potentially could be stretched to cover 9 years of manned space activity.

-5-

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# Washington outlook Continued

HEW Secretary Robert Finch now thinks some change in the supervision of FDA must come quickly. He's bothered by what he calls the agency's "waffling" on the safety of cyclamates and by similar seeming vacillation on such loaded questions as monosodium glutamate in baby foods and antibiotic compounds called ineffective by the National Academy of Sciences. In process is a review that almost surely will produce a closer linkage between the regulators and the Secretary himself.

11/29

Postal workers threaten slowdown in holiday mail The Nixon Administration is worried that Democrats in Congress and the postal workers' union may combine to play politics by bogging down the flow of holiday mail. The workers are threatening that unless they get a pay boost they may "work to rules"—in effect, delay business by obeying to the letter usually overlooked postal regulations.

The President has indicated that he will veto as inflationary the pay bill now pending. It boosts all federal workers' salaries by 5.4%, and makes the raise retroactive to Oct. 1, 1969. But his strategists now fear that Democrats may rush the bill through, calling his hand, and putting him in direct line for the blame if the slowdown develops.

# NASA under fire for lack of research in weightlessness

The U. S. space agency is in for hard criticism next year for underplaying the role of space medicine. The charge: By not doing enough research on the prolonged effects of weightlessness, NASA is endangering the lives of astronauts scheduled for month-long space missions as early as 1972.

Representative Joseph E. Karth, who heads the House subcommittee on space sciences and applications, is gearing up to lambast NASA on the issue. His concern dovetails with similar complaints—that NASA is losing a chance for important medical knowledge—that are made in a report issued by the President's Science Advisory Committee. The conclusions came from a panel headed by Lewis M. Branscomb, since named by President Nixon as head of the National Bureau of Standards. The furor may lead to specific orders to build up the health research programs being written into NASA's authorization bill next year.

The space agency insists that extended weightlessness presents no danger. It bases its conclusion on the success of the 14-day Gemini 7 flight of Frank Borman and James Lovell four years ago. But the steps to longer flights will be taken gradually. And if warning signs appear, officials say it is simple to redesign the space capsule so it spins enough to create some artificial gravity.

Capital wrap-up Builders around the country are being lined up quietly for a new HUD program that will try to upgrade some 15,000 units of currently substandard housing. Washington will supply low-cost money to nonprofit groups that would rent the refurbished homes to the poor. . . . Consumer advocates in Congress are planning to campaign next year for a law requiring the dating of all packaged perishables. . . . The Nixon Administration thinks the glamour has evaporated from oceanography: The Marine Sciences Council is understaffed, has no money for new research projects, and will get none in fiscal 1971. That's why Edward Wenk, Jr., head of the group, is moving to the University of Washington to develop a new engineering sciences curriculum.

NASA

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Tuesday 11/25/69

4:00

understing the Mr. Whitehead asked me to call Chapin's office a motor and say there was a meeting in late March or early April which the President had with Mayo and Paine on the 70 budget. Wanted to know if anyone was taking notes and see if they made Chapin's a memorandum of the meeting. Butte Ver office told me to call Butterfield's office. Butterfield's office indicates they can't find any record of the memorandum of the meeting; asked me to call Terry Good's office and find out if they can tell us more exactly when the meeting Sharon Leitkam is checking but was held. hasn't been able to find a meeting with President, May o and Paine. Dick Speier is supposed to check and let us know a more definite date.

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MEMORANDUM

### THE WHITE HOUSE

WASHINGTON

November 24, 1969

MEMORANDUM TO:

Tom Whitehead

pmo

FROM:

Peter M. Flanigan

Your memorandum of November 17th containing an outline of a Presidential statement on space is most helpful.

I'm most interested in your comment regarding cost estimates. Could you give me some specific items which have increased as substantially as you indicate?

You also make comments with regard to public opinion reaction to space accomplishment and space spending. Could you give me what documentation you now have on that reaction?

My own view is that no specific commitment should be made by the President until after the State of the Union Message. Dr. Paine agrees with this view.

I look forward to receiving the memorandum you referred to.

11/2/169 10:30 cm

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THE WHITE HOUSE WASHINGTON

Nov 18, 1969

FOR

FROM

CTW

WEK

I have arranged for a CIA briefing on the Russian space program for 10:30, Friday, November 21st, in Room 282. You are welcome to attend if you so desire.

En: Note

THE WHITE HOUSE WASHINGTON

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November 20, 1969

MEMORANDUM FOR

### PETER FLANIGAN

In accordance with our conversation this morning, attached is the background information I mentioned with regard to the Space Task Group Report.

Attachment

THE	WHITE HOUSE
ACTION MEMORANDUM	WASHINGTON LOG NO.: 1491
Date: September 30, 1969	Time: 10:48 A.M.
FOR ACTION: J. Ehrlichman H. Kissinger L. DuBridge B. Harlow P. Flanigan FROM THE STAFF SECRETARY	cc (for information): R. Mayo
DUE: Date: Monday, October	6. 1969 Time: 2:00 P M

SUBJECT:

Dr. Mayo memorandum on Space Task Group Report

ACTION REQUESTED:

For Necessary Action

Prepare Agenda and Brief

X For Your Recommendations

For Your Comments

Draft Remarks

**Draft Reply** 

REMARKS:

Please review Dr. Mayo's memorandum and submit your recommendations to the Staff Secretary

PLEASE ATTACH THIS COPY TO MATERIAL SUBMITTED.

If you have any questions or if you anticipate a delay in submitting the required material, please telephone the Staff Secretary immediately.

JAB

K. R. COLE, JR. For the President

## EXECUTIVE OFFICE OF THE PRESIDENT BUREAU OF THE BUDGET WASHINGTON, D.C. 20503

### SEP 2 5 1969

### MEMORANDUM FOR THE PRESIDENT

Subject: Space Task Group Report

This memorandum presents a summary of my views on the Space Task Group Report and my recommendations as to the next steps in the decision process. I was an observer on the Space Task Group and, as such, participated in its discussions on the future of the space program, reserving the right to present to you my independent judgment as your Budget Director.

The report sets forth an excellent catalog of technical possibilities for the future. However, standing by itself, it has several shortcomings. In my view, these shortcomings impair its completeness as a vehicle for your final decision.

1. The report does not clearly differentiate between the values of the manned space flight program versus a much less costly unmanned program with its greater emphasis on scientific achievement and potential economic returns.

2. The Space Task Group could not, nor did it try to, assess the relative standing of the space program in our full range of national priorities. In order to do this, you might wish to have the report reviewed by the Cabinet-and perhaps the Security Council as well.

3. The Group could not address the future economic context within which the recommended space expenditure increases would have to be considered.

4. The report is written in such a way that your endorsement of any of the recommended program options implies endorsement of major new long-term development projects, which are included in all three of the program options. Therefore, in a practical sense, the report gives you little flexibility except as to timing (and therefore annual costs). The impact of this is only slightly softened by the assertion that the rate of progress toward the goals would be subject to annual budget decision. This reservation has very practical limits. All the defined options involve significant budget increases over current levels.

5. The Bureau of the Budget has not had the opportunity to review in detail the estimates set forth on page 22 of the report, but they vary sufficiently from other estimates which have been used recently so that we believe they are significantly underestimated. Furthermore, these figures are presented in terms of 1969 dollars and are therefore further underestimated by reason of the inflation that has already taken place. Of course, there is no reflection of price increases that are almost certain to come in the years ahead.

The other decision factors that most concern me are related specifically to the 1971 budget, now under preparation, and to the budgets that you will be preparing during the remainder of your first term.

The 1971 problem is severe because of:

1. The inflation we are still trying to bring under control.

2. The need to assume continuation of the Vietnam conflict for budget preparation purposes.

3. The commitments we have already made in such areas as domestic welfare, manpower training, social security benefits, revenue sharing, airports/airways, mass transit, and supersonic transport development among others. Every one of these commitments requires outlay increases in 1971.

4. Uncontrollable items such as interest on the national debt.

5. Revenue losses associated with the tax bill-even with proposed Treasury amendments.

In light of these circumstances, I gave NASA an official budget planning target of \$3.5 billion for 1971. (\$350 million below 1970). This target was based on the assumption that after the manned lunar landing, some reduction in NASA's current budget levels could be made to ease our overall budget problem, without stopping the manned space program. All three options set forth in the report require 1971 budgets of at least \$100 million plus price increases above the current NASA funding levels and further increases in following years. These increases will have to come from programs of other agencies.

Because the Space Task Group report has now been published, your endorsement now of any specific option will commit us to annual budget increases of at least the magnitudes specified in the report. Therefore, you could lose effective fiscal control of the program.

I am convinced that a forward-looking manned space program can be developed for you that does not involve commitments to significant near-term budget increases.

Such a program would involve a slower rate of manned Apollo flights than NASA now considers desirable. It would also involve consecutive rather than simultaneous development of a space transportation system and space station, which are necessary steps toward a manned Mars mission. I intend to explore such a program in some detail with Dr. Paine during the FY 1971 budget decision process. Such a program could be accelerated in the future if conditions permit. I believe this course would be preferable to announcing ambitious long-range plans now and then having to cut back in the future due to economic constraints.

# In this circumstance, I recommend:

1. That you withhold announcement of your space program decision until after you have reviewed the report recommendations specifically in the context of the total 1971 budget problem.

2. That you ask the Cabinet and perhaps the NSC to consider the Space Task Group report during October or November and advise you of their views on its recommendations, so that you will have those views in mind during your budget decisions.

3. That you consider meeting with Tom Paine and me after I have had an opportunity to discuss with him the lower cost program option I have described above. Your meeting could be planned for December, and could serve as the final step in your decision process on the NASA 1971 budget. At that time, it is essential that you specify program content as well as budget guidance in order to help maintain effective fiscal control of the program.

4. That your space program decisions be announced in the State of the Union address, the budget message, or a special message to the Congress in the spring of 1970.

Cohert & Mayo

Robert P. Mayo Director

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# THE WHITE HOUSE

November 17, 1969

### MEMORANDUM FOR JOHN C. WHITAKER

FROM: Henry A. Kissinger K

SUBJECT: Space Task Group Report

I have reviewed Robert Mayo's memorandum to the President on the subject of the Space Task Group Report. I am in general agreement with the theme of the memorandum. We must avoid both an emotional overcommitment to a post-Apollo program and an undercommitment which reflects a failure to comprehend the long-term and far-reaching benefits of a vigorous space program.

Although a review of the Space Task Group Report by the Cabinet could conceivably lend balance to final recommendations to the President, I have reservations about how a review of this nature would be staffed and therefore suggest that it may be impractical. In addition, the notion that a comprehensive review of space goals can be finished by December seems to be overly optimistic. Such a review would entail consideration not only of space goals as related to other competing programs and priorities, but also the problem of priorities within the space program itself.

With regard to the latter problem, I recommend that it be looked into by the National Aeronautics and Space Council (NASC) using the highly qualified staff of its Executive Secretary, Astronaut William Anders. This would provide a departure point from which to place total space needs into perspective with the demands of other national programs. Depending on the outcome of a NASC staff review of objectives and priorities within the space program, it may be appropriate to ask the NSC to consider the Space Task Group Report.

Finally, opportunities exist for modest relief in space funding through a program of international space cooperation. Investigation of these opportunities is currently underway within the NSC machinery. EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF SCIENCE AND TECHNOLOGY WASHINGTON, D.C. 20506

October 13, 1969

### MEMORANDUM FOR

Kenneth Cole Staff Secretary The White House

SUBJECT:

Director, Bureau of the Budget Memorandum on Space Task Group Report

This memorandum is in response to your request for review of Mr. Mayo's memorandum to the President of September 25, commenting on the recent Space Task Group Report.

The memorandum from Mr. Mayo raises a number of specific points about the Space Task Group report which are classed as "shortcomings" that "impair its completeness as a vehicle for...final decision."

The purported "shortcomings" of the Task Group Report relate principally to treatment of the broad economic and fiscal context in which decisions on funding for space are to be decided. The Task Group recognized the difficulty of making specific budget decisions and refrained from advocating a fixed funding level to carry out the recommended program. In fact, a very important aspect of the report, apparently overlooked, is that there is flexibility in carrying out the Task Group recommendations and that adoption of a specific Option does not necessarily commit the President to a fixed funding level in any fiscal year.

The basic conclusions of the Task Group were:
The U.S. should continue to play a major role in space - both in exploration and in its exploitation, for a number of reasons - economic, national security, international prestige, national pride, advancement of science, and as a stimulus to advancing technology.

 There are many new opportunities in space - more than we can fund if we pursue them all at a maximum pace - and therefore decisions on specific development programs and priorities will be required.

3. Two major new technological developments, the space shuttle and the space station, are the next steps that should be taken in the development of new capability but these developments should be coupled with a broad program which emphasizes applications, science, and national security efforts while encouraging international participation and cooperation.

4.

Manned exploration of Mars should be adopted as a longrange goal of a balanced program which recognizes the above objectives and proceeds at a pace which is in consonance with the fiscal and human resources than can be made available to the space program. A minimum capability for manned operations must then be maintained.

These points from the Task Group Report can provide the basis for Presidential decision at an early date, while not foreclosing flexibility for specific budget decisions as the FY 1971 budget process matures. Since the options included in the Space Task Group Report were illustrative only, and were intended to provide insight into the budgetary impact of program decisions, it would not be necessary for the President to accept or reject a specific option.

It would be preferable if the President's decision could be in terms of program content - accepting a balanced program with emphasis in specific areas - such as applications and science. The Task Group recognized the possibility that commitment now to growth of the space budget to nearly \$6 billion in the mid-1970's may

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not be desirable, and therefore pointed out that simultaneous development of the space shuttle and space station would not be necessary. If phased development of the space shuttle and space station were required, I would recommend that initial efforts be devoted to the more technologically challenging space shuttle in view of its profound impact upon our entire approach to placing payloads into orbit. At an appropriate time in the shuttle development cycle the space station program could be initiated, thus reducing projected peak funding requirements.

I agree with Mr. Mayo that NASA's budget request for FY 1971 must be considered in the context of broad government fiscal constraints, but I do not believe that such a requirement need be inconsistent with early Presidential decision on the basic character of the Nation's space program in the post-Apollo period.

If the President has made a decision on the NASA program, it would appear desirable to announce this decision as soon as other factors, both nationally and internationally, will permit. A prior discussion by the Cabinet or NSC would surely be appropriate.

Lee A. DuBridge Director

MEMORANDUM

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#### THE WHITE HOUSE

WASHINGTON

OCTOBER 7, 1969

TO:

STAFF SECRETARY

FROM:



RE:

DIRECTOR MAYO'S MEMO ON SPACE TASK FORCE REPORT LOG NO. 1491

I concur with the Director's recommendations.

#### THE WHITE HOUSE

WASHINGTON

October 6, 1969

MEMORANDUM FOR THE STAFF SECRETARY

FROM: Bryce Harlow

SUBJ: Space Task Group Report

Bob Mayo's critique of the Space Task Group Report and his recommendations to the President seem to me to be most appropriate at this point in time if we are to stay within the debt ceiling limitation which the President has openly announced.

The President might wish to consider asking NASA to go through a study exercise of stretching out the manned Apollo flights that would not be wasteful of the skilled manpower necessary and also would not risk deterioration of safety and reliability throughout the program. Such a study might be completed and available for further decision making in December.

The postponement of any announced program decisions will afford the President greater flexibility in the event there are any changes in the world picture between now and the State of the Union address. MEMORANDUM

THE WHITE HOUSE

October 6, 1969

TO: THE STAFF SECRETARY FROM: PETER FLANIGAN

RE: Log 1491

For your information, I am attaching hereto as Exhibit A a letter from Dr. Paine to the President recommending that he support Option 2. As Exhibit B, I am attaching a copy of a letter from Mr. Mayo to me which was sent to me with a copy of his letter to the President. Both these expand on problems set forth in Director Mayo's memorandum to the President of September 25.

I agree with Director Mayo that it would be a mistake for the President to adopt now a fixed set of actions which would have serious budgetary implications over the next year. However, I do not believe that the President can delay until the budget review to respond to the Space Task Group herton to him. I believe there is a middle ground which can meet the political requirements of an affirmative response from the President and at the same time meet the fiscal requirements so persuasively stated by Bob Mayo. In this middle ground the President should say that after a review of the Space Task Group's report, he believes that we should plan on a Mars landing in the mid-1980s. (This is essentially Option 2. However, by limiting it to the Mars landing, he does not approve all the other items of Option 2.) The President's statement should go on to say that obviously a program extending over the next 17 years cannot be fixed as of this time; that in moving toward this goal we must recognize that in certain years actions might be taken which temporarily delay certain activities, whereas in other times when budgetary conditions permit we can increase our effort and hopefully advance the date of the Mars landing.

I believe a program developed along these lines will result in retaining the needed fiscal flexibility, yet keeping for the President the enthusiasm generated by the current space program. At the time the President releases this memorandum, he can also direct NASA to prepare a 1971 budget at the "below 4.0B" level referred to in Mayo's memorandum to me of September 25. I have asked my staff to draft the essential elements that would be used in a statement by the President along the lines suggested above.

Enclosures

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## THE WHITE HOUSE

ACTION MEMORANDUM WASHINGTON

Date: September 30, 1969 Time: 10:48 A.M.

FOR ACTION: J. Ehrlichman cc (for information): R. Mayo

H. Kissinger

L. DuBridge

B. Harlow

• P. Flanigan

FROM THE STAFF SECRETARY

DUE: Dato: Monday, October 6, 1969 Time: 2:00 P.M.

SUBJECT:

Dr. Mayo memorandum on Space Task Group Report

ACTION REQUESTED:

\_\_\_\_ For Necessary Action

\_X.For Your Recommendations

\_\_\_\_ Prepare Agenda and Brief · \_\_\_\_ Draft Reply

For Your Comments

\_\_\_\_ Draft Remarks

REMARKS:

Please review Dr. Mayo's memorandum and submit your recommendations to the Staff Secretary

## EXECUTIVE OFFICE OF THE PRESIDENT

BUREAU OF THE BUDGET

WASHINGTON, D.C. 20503

SEP 2 5 1969

## MEMORANDUM FOR THE PRESIDENT

Subject: Space Task Group Report

This memorandum presents a summary of my views on the Space Task Group Report and my recommendations as to the next steps in the decision process. I was an observer on the Space Task Group and, as such, participated in its discussions on the future of the space program, reserving the right to present to you my independent judgment as your Budget Director.

The report sets forth an excellent catalog of technical possibilities for the future. However, standing by itself, it has several shortcomings. In my view, these shortcomings impair its completeness as a vehicle for your final decision.

1. The report does not clearly differentiate between the values of the manned space flight program versus a much less costly unmanned program with its greater emphasis on scientific achievement and potential economic returns.

2. The Space Task Group could not, nor did it try to, assess the relative standing of the space program in our full range of national priorities. In order to do this, you might wish to have the report reviewed by the Cabinet-and perhaps the Security Council as well.

3. The Group could not address the future economic context within which the recommended space expenditure increases would have to be considered.

4. The report is written in such a way that your endorsement of any of the recommended program options implies endorsement of major new long-term development projects, which are included in all three of the program options. Therefore, in a practical sense, the report gives you little flexibility except as to timing (and therefore annual costs). The impact of this is only slightly softened by the assertion that the rate of progress toward the goals would be subject to annual budget decision. This reservation has very practical limits. All the defined options involve significant budget increases over current levels.

5. The Bureau of the Budget has not had the opportunity to review in detail the estimates set forth on page 22 of the report, but they vary sufficiently from other estimates which have been used recently so that we believe they are significantly underestimated. Furthermore, these figures are presented in terms of 1969 dollars and are therefore further underestimated by reason of the inflation that has already taken place. Of course, there is no reflection of price increases that are almost certain to come in the years ahead.

The other decision factors that most concern me are related specifically to the 1971 budget, now under preparation, and to the budgets that you will be preparing during the remainder of your first term.

The 1971 problem is severe because of:

1. The inflation we are still trying to bring under control.

2. The need to assume continuation of the Vietnam conflict for budget preparation purposes.

3. The conmitments we have already made in such areas as domestic welfare, manpower training, social security benefits, revenue sharing, airports/airways, mass transit, and supersonic transport development among others. Every one of these commitments requires outlay increases in 1971.

4. Uncontrollable items such as interest on the national debt.

5. Revenue losses associated with the tax bill--even with proposed Treasury amendments.

In light of these circumstances, I gave NASA an official budget planning target of \$3.5 billion for 1971. (\$350 million below 1970). This target was based on the assumption that after the manned lunar landing, some reduction in NASA's current budget levels could be made to ease our overall budget problem, without stopping the manned space program. All three options set forth in the report require 1971 budgets of at least \$100 million plus price increases above the current NASA funding levels and further increases in following years. These increases will have to come from programs of other agencies.

Because the Space Task Group report has now been published, your endorsement now of any specific option will commit us to annual budget increases of at least the magnitudes specified in the report. Therefore, you could lose effective fiscal control of the program.

I am convinced that a forward-looking manned space program can be developed for you that does not involve commitments to significant near-term budget increases.

Such a program would involve a slower rate of manned Apollo flights than NASA now considers desirable. It would also involve consecutive rather than simultaneous development of a space transportation system and space station, which are necessary steps toward a manned Mars mission. I intend to explore such a program in some detail with Dr. Paine during the FY 1971 budget decision process. Such a program could be accelerated in the future if conditions permit. I believe this course would be preferable to announcing ambitious long-range plans now and then having to cut back in the future due to economic constraints.

#### In this circumstance, I recommend:

1. That you withhold announcement of your space program decision until after you have reviewed the report recommendations specifically in the context of the total 1971 budget problem.

2. That you ask the Cabinet and perhaps the NSC to consider the Space Task Group report during October or November and advise you of their views on its recommendations, so that you will have those views in mind during your budget decisions.

3. That you consider meeting with Tom Paine and me after I have had an opportunity to discuss with him the lower cost program option I have described above. Your meeting could be planned for December, and could serve as the final step in your decision process on the NASA 1971 budget. At that time, it is essential that you specify program content as well as budget guidance in order to help maintain effective fiscal control of the program.

4. That your space program decisions be announced in the State of the Union address, the budget message, or a special message to the Congress in the spring of 1970.

Robert & Mayo

Robert P. Mayo Director



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

OFFICE OF THE ADMINISTRATOR

September 19, 1969

The President The White House Washington, D. C. 20500

Dear Mr. President:

This letter provides my recommendations for further actions you may wish to take on the report of the Space Task Group.

The report and your initial reaction to it are receiving positive and widespread public support. Representative editorials are enclosed. Particularly noteworthy are the favorable comments of the New York Times and Washington Post, papers which are often critical. This favorable environment suggests the desirability of an appropriate follow-up.

In considering which of the STG Report's three options you may wish to select, other problems currently facing the nation must obviously be taken into account. Option 1, the most vigorous of the proposed programs, clearly offers this nation the greatest opportunities and greatest challenge in the long run. However, it is the most expensive in the near term when resources are most constrained. Option 3, which defers for at least 20 years the challenge of a manned mission to Mars, lacks vigor and fails to seize fully the opportunities available.

My recommendation, therefore, is that you select Option 2, a balanced and challenging program which includes as major objectives the earth-orbiting space station, space shuttle and nuclear stage in the 1970's, leading to a manned mission to Mars in the 1980's. As the nation progresses toward meeting its other needs during the next few years, I would hope that we may be able to reexamine this and move closer to Option 1.

In the near future I believe it would be advantageous for you to make a public statement of your view of the nation's future in space. As I mentioned at our meeting last week, the dedication of the new Lunar Science Institute at Houston might afford an appropriate occasion. We could arrange the dedication for any date convenient to you in the next month.

I would be happy to discuss these matters further with you at any time.

Sincerely yours,

T. O. Paine Administrator

Enclosures

## NEWS MEDIA REACTION TO SPACE TASK GROUP REPORT

The news media reaction to the Space Task Group report has been good. The story broke in two parts. The first followed the briefing for you at the White House and the press reported that both a "crash" program and a "going-out-of-business" program had been rejected by the President. The immediate reaction was favorable. The second wave of reaction, which is still current, followed the press briefing by the Vice President this week.

Today's Washington Post took a reasoned approach and is typical of the kind of reaction we are hearing from individual members of the press and what we can anticipate from editorial comment in the near future. It is interesting that there has been no "selection" by the news media of a favorite option--all seem to be judged as reasonable and rational.

The Post said, "Acceptance by the President of the basic recommendation would eliminate talk of abandoning manned space flight, which would be a foolish course of action, or of proceeding toward Mars in a crash effort to get there as quickly as possible.

"It is difficult for anyone to reach any other conclusion except those who blindly opposed manned space travel or those who, equally blindly, favor giving it the nation's top priority."

The Evening Star said the decision not to engage in a crash program is a "sensible, realistic view."

The New York Times said, "If the President made a commitment to a manned landing on Mars, as his press secretary suggested, it was of a very different character from the commitment with regard to the moon that President Kennedy made in 1961. Mr. Nixon indulged in no dramatics; he did not appear before Congress; and he set no inflexible timetable to be achieved at almost any cost..... The extreme options Mr. Nixon is said to have rejected were always unreal. There was never any prospect that this country would abandon manned space flight entirely, or, conversely, that the United States would give a manned flight to Mars first priority over its many pressing domestic problems."

# The Washington Post

\* \* \* \* \*

AN INDEPENDENT NEWSPAPER

FRIDAY, SEPTEMBER 19, 1969

PAGE A26

# A Spaceman's Sense of Balance

The report of President Nixon's Task Group on Space and, indeed, even the speeches to Congress of the three men who rode in Apollo 11 have brought some rationality back to the discussion of whither the space program. That report recommends that the President commit the nation to a "long-range goal of manned planetary exploration" aimed at a landing on Mars in the early 1980s, the mid-1980s, or the 1990s. Acceptance by the President of the basic recommendation would eliminate talk of abandoning manned space flight, which would be a foolish course of action, or of proceeding toward Mars in a crash effort to get there as quickly as possible.

It is difficult for anyone to reach any other conclusion except those who blindly opposed manned space travel or those who, equally blindly, favor giving it the nation's top priority. Space exploration ought to proceed in an orderly way, maximizing at every step the advance of knowledge and the utilization of it here on earth. In fact, it is not at all clear that the President should set a "goal" of a Mars landing in any particular year.

What is important is for the nation to push ahead on the immediate recommendations of the Task Group—exploring the moon, developing the tools that are needed for systematic exploitation of our space travel capability, and extracting from the space program more benefits for those of us who are earthbound. This means that NASA would continue its moon flights, perhaps reaching the day in the 1970s when semi-permanent colonies would be established on the moon's surface. At the same time, it would push development of a nuclear rocket engine, which would make long-range space travel more feasible, a space vehicle that could be landed on earth and used over and over again, which would reduce the costs of each mission sharp-

ly, and a space station to hold a dozen or so men that could be flown in orbit around the earth or the moon or, when the time comes, Mars.

This kind of program would keep NASA operating for a while on about the budget it now has. It would have the advantage of allowing the agency to keep together the remarkable team of scientists and engineers it has created by giving them new and interesting problems to solve. At the same time, it would encourage those in NASA who want to tailor the space program to produce more information directly useful in the solution of earthly problems—surveys of natural resources, weather prediction and control, and so on.

Although parts of the speeches the three astronauts of Apollo 11 delivered to Congress Tuesday were open pleas for money for future space flights, they were carefully balanced by the recognition each man gave to the needs of domestic programs for the funds that might otherwise be spent in space. The words of Neil Armstrong, the first man to walk on the moon, are worth repeating because they catch the spirit of the delicate balance that must be made between the dreams for adventure and the practical realities of life:

Several weeks ago, I enjoyed the warmth of reflection on the true meaning of the spirit of Apollo. I stood in the highlands of this nation, near the continental divide, introducing to my sons the wonders of nature and pleasures of looking for deer and elk. In their enthusiasm for the view, they frequently stumbled on the rocky trails, but when they looked only to their footing, they did not see the elk.

To those of you have advocated looking high we owe our sincere gratitude, for you have granted us the opportunity to see some of the grandest views of the Creator. To those of you who have been our honest critics, we also thank, for you have reminded us that we dare not forget to watch the trail.



## Slow Trip to .Mars

in and

Although President Nixon supports an American commitment to land a man on Mars, he has made clear through Press Secretary Ziegler that the undertaking will not involve a high-speed, extra-costly crash program that would ignore "budgetary considerations."

This is a sensible, realistic view. It is in keeping, in fact, with the balanced space program that has been recommended by a special panel of advisers in the report just accepted and endorsed by Mr. Nixon. The panel, headed by Vice President Agnew, includes NASA Administrator Thomas O. Paine, Air Force Secretary Robert C. Seamans and White House Science Adviser Lee E. du Bridge — all well-qualified to offer sound counsel on the subject.

These and other distinguished members of the study group have given the President three options as to the timing of a landing on Mars—in 1983, no sooner than 1986, or around the year 2000. With the President's concurrence, the panel has rejected two alternatives as extreme. One would have the country go all-out more or less in the manner of the Apollo moon landing — to put an American on Mars in the shortest possible time, regardless of cost. The other, on completion of the Apollo program, would put an end to all manned space projects.

What seems predictable is that when

- 14 - 14 - 17 - 17 - 17 -

he makes his decision on the timetable for Mars, Mr. Nixon will be governed by what its effects may be not only on other space ventures, but also on downto-earth human requirements and the amount of money available to meet them. Meanwhile, he has indicated that he fully agrees with the panel's recommendation that the space program, wholly apart from the Apollo landings still to come, should be pressed forward with vigor through the 1970s. The program would include unmanned probes of the Martian surface and a "grand tour" of the environs of the outer planets. Also, strenuous efforts would be made to develop a re-usable shuttle vehicle that would be capable of remaining in orbit, with large crews, for months at a time.

One of the important aspects of such a program is that it would provide for projects numerous enough and significant enough to insure against a grave weakening or withering away of the great and vital complex of scientists, technicians, administrators and technological plants now engaged in space work. It is work full of immense actual and potential value. And it will lead, among other things, to the day when man will almost certainly set foot on Mars and go on from there to explore deeper and deeper in the firmament.



"Give light and the perale will find their own way." Ray F. Mack.

DAILY ON OWS

Business Monager THURSDAY, SEPTEMBER 18, 1969

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Ir. Metropoliton Washington: By corrier, 37c per week; \$1.60 per month. By mail: 3 months. \$5.25

## A cool trip to Mars

11

THE special space Task Group headed by Vice President Spiro T. Agnew has soundly advised the President to adopt a slow-but-sure approach to a manned landing on Mars.

SCRIPPS - HOWARD

Their report, submitted yesterday, proposes landing a man on Mars no sooner than the early 1980's, perhaps not before 1986 and possibly not until the 1990's.

Mr. Agnew says he favors the 1986 target date as a reasonable compromise that would muster "broad scientific and political support."

This would mean a National Aeronautics and Space Administration (NASA) budget of around \$4 billion for each of the next three fiscal years, rising gradually to a peak of \$8 billion in the 1980's.

Thus, the nation would ease into its Mars commitment instead of adopting the expensive race-ahead tactics of the \$24 billion Apollo moon program.

But even a cool trip to Mars will cost plenty - and the space scientists hope to get the most for their money.

For instance, the Task Group members - Mr. Agnew, Thomas O. Paine of NASA, Air Force Secretary Robert C. Seamans and Lee A. DuBridge, the President's science adviser - proposed reusable space ships instead of present craft, which shed their multi-milliondollar parts like throw-away beer cans.

And they offered their alternative timetables so that the pace of the Mars project could be tailored to the availability of funds.

In short, the President's advisers are

saying it would be a mistake to get out of space - but a mistake to plunge ahead regardless of cost.

They recognize the Mars mission must take its place alongside the other national needs - some of them very pressing indeed.

The economic spin-off benefits of space technology, the challenge of new worlds beyond our own and the potential military significance of space ventures amply justify the kind of Mars program the Task Group proposes.

## Slow Boat to Mars

The Apollo 11 astronauts were low-pressure advocates of the space program in their Congressional appearance yesterday. No one listening to them could doubt that they would like to see Americans walk on Mars as soon as possible. But they made it plain that they knew there are many problems on earth that cannot be ignored. The result was a modest plea for a continuing space program having an appreciable but hardly an overriding priority.

That same reasonable spirit seems to have animated President Nixon's reaction to the report of a study group on space exploration. If the President made a commitment to a manned landing on Mars, as his press secretary suggested, it was of a very different character from the commitment with regard to the moon that President Kennedy made in 1961. Mr. Nixon indulged in no dramatics; he did not appear before Congress; and he set no inflexible timetable to be achieved at almost any cost. About all he seems to have done is to indicate that it would be a good idea to land Americans on Mars well within the next half century and to promise that he'd try to help the project along within the limits of available resources.

The extreme options Mr. Nixon is said to have rejected were always unreal. There was never any prospect that this country would abandon manned space flight entirely, or, conversely, that the United States would give a manned flight to Mars first priority over its many pressing domestic problems.

The intermediate path that will be followed in the years ahead will depend upon the most varied factors from the progress made in curing the ills of the cities to the new challenges in space that the Russians and others are likely to pose. The space age is here to stay, but the precise contours of how far and how fast this nation will go in the decades ahead will have to be determined on a pragmatic basis, almost year by year and Administration by Administration.

4

#### THE SUN, BALTIMORE, WEDNESDAY MORNING, SEPTEMBER 17, 1969

#### Mars Can Wait

The Space Task Group's recommendation against making an early, hard-and-fast decision on scheduling a manned expedition to Mars was sensibly made and has been sensibly accepted. The project is much too ambitious and will be much too costly to be fitted headlong to a timetable. Mr. Nixon has approved a "balanced" space program which contemplates the possibility of a Martian landing perhaps in the mid or late 1980's, perhaps before the end of the century, perhaps not until sometime after the year 2000.

So far as can be seen now the "balance" is the strongest point of the endeavor to formulate plans for the future space exploration. The task group proposes that in the next decade the United States undertake instrumental tours and probes of the planets (including Mars of course), further manned study of the moon, development of a reusable space shuttle which could serve as a large space laboratory and of a nuclear-powered rocket. Much of this would be essential to an attempt to put men on Mars in any case, and all of it promises to advance knowledge of the solar system.

As for Mars, the eagerness to reach it has to be tempered by a very sober, prudent consideration of all the pressing needs of the country and the earth. It is not something to which we can, or should, commit ourselves and the future in a fit of adventurous and extremely expensive impatience. Fortunately, it seems that scientists and Washington are now wisely agreed on that.

#### THE CHRISTIAN SCIENCE MONITOR Wednesday, September 17, 1969

## Pace for space

President Nixon's task force on space offers useful guidance for the American space program over the next decade. A manned orbiting station, a space shuttle, a nuclear-powered rocket, unmanned probes, and satellites for communication, meteorology, and navigation — these set the tone and pace for the postmoon phase.

The United States needs a vigorous space drive. This is a vast, productive, challenging frontier. There must be, of course, a thoughtful sharing of funds with the more urgent and immediate programs here on earth. A proposed \$4 billion budget for each of 10 years may be overly ambitious. But even the eventual manned landing on Mars should not be jettisonct.

An orbiting space station would be a

gate-opener for further explorations, besides affording essential experience in space living. The space shuttle would, economically, get men to the orbiting station, bring intelligence data back to earth, launch unmanned vehicles. The nuclear rocket would power, someday, the great ship for Mars.

The essential aerospace companies need a continuity if they are to maintain their talent assemblages and financial stability. Someday, the American space program may become a worldwide project, including the Soviets. But as of now it is up to President Nixon to assure that the United States carries on adequately with its wellbegun space odyssey.

## EXECUTIVE OFFICE OF THE PRESIDENT BUREAU OF THE BUDGET WASHINGTON, D.C. 20503

SEP 2 5 1969

#### MEMORANDUM FOR MR. FLANIGAN

Subject: Space Task Group Report

This is in response to your September 22 request for my comments on Tom Paine's recommendation to the President that Option II of the Space Task Group report be selected as the announced space program for the future.

My views are set forth in a separate memorandum to the President (copy attached).

Our preliminary analysis of the funding levels set forth in the Space Task Group report leads us to believe that they are underestimated (in addition to the fact that 1969 dollars are used). If this is in fact the case, then if the President chooses Option II he will be faced with even greater annual budget increases for NASA than forecast in the report.

We have attempted to modify the program content of Option II, maintaining the goal of a manned Mars expedition in 1986. By reducing the Lunar Exploration program to two flights a year, by eliminating the manned activities not directly related to the Mars mission (i.e., Space Bases and Lunar Surface Bases), and by developing the space transportation system and the space station in series rather than in parallel, we estimate that the 1971-1973 annual budgets for NASA can be kept below \$4.0 B. By 1980, however, a budget approaching \$7.0 B can be anticipated.

These estimates are below those shown for Option II in the Space Task Group report and admittedly are not precise. However, it is my belief that in order for this Administration to make a credible start to meet the goals and objectives set forth in any of the options, we cannot go much below these funding levels. That is why I am against endorsement of any option until after the 1971 budget review process. The Bureau of the Budget needs the opportunity to conduct a full scale analysis and review of the documentation supporting the estimates in the report.

Should the President feel that announcement of a decision is required now, I would recommend that he specifically avoid endorsing any option defined in the report. These options were composed of illustrative programs and gross estimates of ultimate costs. If he endorses the manned Mars goal, I would hope that the timing would be left at "sometime in ' this century" until much more review of the requirements for meeting that goal can be completed. We are prepared to supply you with a list of the programmatic and fiscal constraints which should be communicated to NASA along with the final decision made by the President.

Robert & Mayo

Robert P. Mayo Director

Attachment

#### DRAFT OUTLINE 11/17/69

## President's Statement on Our Next Decade in Space

Here we are: (#) Two successful visits to the Moon (B) One success in two attompts

. Where are we going in space?

Three goals: Exploration -- man's quest; worthwhile in and of itself. Science -- extending our knowledge of the universe, matter and nature.

Farth applications -- turning space science and technology to economics and social benefit here on earth.

Space as both: an adventure for the present an investment in the future

The manned lunar landing goal was a challenge to the Nation and an adventure for all mankind. But it was also a vehicle for developing a space exploration capability.

We now have that capability -- both manned and unmanned -- and must now shift our focus to a continuing program of exploration and application; space exploration will be a part of our lives for the rest of time; we must now make it a continuing process rather than a series of crash timetables.

Based on a careful review of the possibilities developed by the Space Task Group, I have decided on the following major program goals and initiatives for the next decade in space:

Explore the moon 1.

The Apollo manned landings should be continued and paced at a rate to maximize scientific return, consistent with the minimum launch rate for safety & reliability

2. Explore the planets and the solar system

During the next decade, we will launch scientific spacecraft to observe every planet and to explore the vast space between. New scientific satellites also will be launched to explore space near the earth.

We will attimpt to land an unmanned spacecraft on Mara in 1973.

Develop an extended earth orbit capability for man Anewly designed Experimental Space Station will begin operational missions in the next few years. By the middle of the next decade, men will be working in space for months at a time.

Extend man's capability in space

3.

tion of Later

In the next decade we will begin to design an even longer-lived Space Station Module that will serve both as a near-earth space station and a building block for manned interplanetary travel. We will land mgn on the planet Mars as a part of this program, perhaps as early as 1986.

Expand earth applications

Beginning with early development of an Earth Resources Technology Satellite, we will pursue over the next decade a vigorous program to emphasize new applications

of space technology. Meteorology & communications, navigation, + air traffic control also will be explored. Lower the costs of space launches

Our recently developed rocket technology will provide a reliable launch capability through the next decade., We will continue our research to make possible even lower costs for launching space payloads in the future. We will begin to design a space shuttle that will be

re-usable to provide freq

7. Expand international cooperation

Space exploration and its benefits here on earth should be a venture for all mankind. We do not seek to exploit space for national purposes, but to share it. Our progress will be faster, if all nations work together, both in contributing resources and in sharing results.

This is a far-reaching and comprehensive program to extend our space capability and to put it to work for us here on earth. The resources required will be great, and so will the benefits. We will seek to provide a stable level of expenditures to enable steady progress consistent with other pressing national priorities. In addition, we hope to be able to expand our effort in some years and move some accomplishments nearer in time.

, Mankind has entered a new era;

The important thing is to recognize that man has begun to explore new worlds. For the rest of history, we will be men from the planet Earth. Let us conduct ourselves accordingly.

November 17, 1969

Space 1.

TO: Mr. Flanigan

FROM: Tom Whitehead

The attached outline of a Presidential statement on space is a compromise between strong positive words and the restraint necessary to maintain the President's flexibility in budgeting.

You will note that I have not specifically referred to Option II of the STG; to do so would have the effect of locking us into the spending stream projected for that option as a floor on NASA expectations. (Cost estimates are already climbing and in some cases by several hundred percent; NASA now wants \$4.5 billion for FY 71 to carry out Option II rather than the \$3.7 billion reflected in the STG report.)

I think a draft outline should be sent to the President along with a memo showing what we are and are not letting Paine commit us now to begin spending on. I am working on this with BOB and OST. He should also be made aware of the latest public opinion reaction on space accomplishments and space spending, along with the costs and accomplishments of a higher funding level.

I hope to have a draft memo this week and assume an early or middle December release is about what we are aiming for.

> Clay T. Whitehoad Staff Assistant

Attachment

cc: Mr. Whitehead Central Files Mr. Kriegsman

CTWhitehead od

## DRAFT OUTLINE 11/17/69

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Here we are: (A) Two successful visits to the Moon (B) One success in two attempts

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- Develop an extended earth orbit capability for man
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- 4. Extend man's capability in space

In the next decade we will begin to design an even longer-lived Space Station Module that will serve both as a near-earth space station and a building block for manned interplanetary travel. We will land men on the planet Mars as a part of this program, perhaps as early as 1986.

5. Expand earth applications

Beginning with early development of an Earth Resources Technology Satellite, we will pursue over the next decade a vigorous program to emphasize new applications of space technology.

6. Lower the costs of space launches

Our recently developed rocket technology will provide a reliable launch capability through the next decade. We will continue our research to make possible even lower costs for launching space payloads in the future.

7. Expand international cooperation

Space exploration and its benefits here on earth should be a venture for all mankind. We do not seek to exploit space for national purposes, but to share it. Our progress will be faster if all nations work together, both in contributing resources and in sharing results.

This is a far-reaching and comprehensive program to extend our space capability and to put it to work for us here on earth. The resources required will be great, and so will the benefits. We will seek to provide a stable level of expenditures to enable steady progress consistent with other pressing national priorities. In addition, we hope to be able to expand our effort in some years and move some accomplishments nearer in time.

The important thing is to recognize that man has begun to explore new worlds. For the rest of history, we will be men from the planet Earth. Let us conduct ourselves accordingly.