# JUL 3 0 1971

· Space -

#### MEMORANDUM FOR

# Mr. Peter Flanigan Dr. Edward David

I have been trying to think through where we are and where we might want to be going on the question of international cooperation in space and our own planning for the post-Apollo space program. It seems to me that most of the discussions on these subjects going on in the bureaucracy have gotten mired down in a narrow perspective and far too much detail.

I suppose my thoughts basically boil down to two propositions and a rather simple proposal:

#### Propositions:

1. Launch assurances are the main issue with the Europeans; if the United States is going to give away launch assurances on a significant basis, we should get far more credit for the country and President than the current scenarios would permit. This should be announced and played as the really significant U.S. initiative it is.

2. With the passing of the moon landing goal, we have not been able to find any useful rationale or planning framework to guide NASA in planning the space program. We very much need to find some such device to guide planning and establish expenditure restraints.

#### Proposal:

Put NASA launch operations (include launch vehicle design and procurement) on a commercial accounting basis within NASA; this presumably would involve some kind of trust fund or industrial fund that would take full account of investment, operating costs, depreciation, etc. Have the President announce that NASA launch operations are being put on a commercial-type basis and that these services will be made available to the nations of the world and to private business on nondiscriminatory economic basis. The general pitch would be that the United States was putting space launch services on a stable, regular basis for the economic, social, and scientific benefit of mankind.

This clearly needs some more thought to fill out the scope and the posture that would maximize our various objectives, but I believe something like this has great promise. If you agree, I propose that we establish a small Executive Office working group to explore the idea a bit more before getting NASA and State all excited.

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Clay T. Whitehead

cc: Mr. Whitehead (2) Subject File Chron File

CTWhitehead:ed/jm/ec:7/27/71

Space

February 8, 1971

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To: Jon Rose

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From: Tom Whitehead

Here is the NASA memo. I will have a shorter memo on the private sector area Tuesday or Wednesday before I come over to meet with Pete.

Attachment

cc: Mr. Whitehead

CT Whitehead:jm

### 6 FEB 1971

# MEMORANDUM FOR MR. PETER FLANIGAN

This Administration has never really faced up to where we are going in Space. NASA, with some help from the Vice President, made a try in 1969 to get the President committed to an "ever-onward-andupward" post-Apollo program with continued budget growth into the \$6-10 billion range. We were successful in holding that off at least temporarily, but we have not developed any theme or consistency in policy. As a result, NASA is both drifting and lobbying for bigger things -- without being forced to focus realistically on what it ought to be doing. They are playing the President's vaguely defined desire for international cooperation for all it's worth, and no one is effectively forcing them to put their cooperative schemes in any perspective of whether they are good or not so good, what are their side effects, and are they worth the candle. For the last two years, we have cut the NASA budget, but they manage each year to get a "compromise" of a few hundred million on their shuttle and space station plans. Is the President really going to ignore a billion or so of sunk costs and industry expectations when he gets hit for the really big money in a year or two?

I will try to be constructive by sketching out a few thoughts on the subject that might suggest what we should do about all this.

NASA is -- or should be -- making a transition from rapid razzledazzle growth and glamor to organizational maturity and more stable operations for the long term. Such a transition requires wise and agile management at the top if it is to be achieved successfully. NASA has not had that. (Tom Paine may have had the ability, but he lacked the inclination -- preferring to aim for continued growth.) They have a tremendous overhead structure, far too large for any reasonable size space program, that will have to be reduced. There will be internal morale problems of obvious kinds. The bright young experts attracted by the Apollo adventure are leaving or becoming middle-aged bureaucrats with vested interests and narrow perspectives. (Remember when atomic power was a young glamor technology? Look at AEC now and you see what NASA could easily become.) There needs to be a sense of direction, both publicly and within NASA. The President's statement on the seventies in space laid the groundwork, but no one is following up. What do we expect of a space program? We need to define a balance of science, technology development, applications, defense, international prestige and the like; but someone will have to do that in a way that really controls the program rather than vice-versa. In particular, we need a new balance of manned and unmanned space activity, for that one dimension has big implications for everything else. We need a more sensible balance of overhead expenditures and money for actual hardware and operations; the aerospace industry could be getting a lot more business than they are, I suspect, with the same overall NASA budget if we could get into all that overhead.

NASA is aggressively pursuing European funding for their post-Apollo program. It superficially sounds like the "cooperation" the President wants, but is this what the President would really want if we really thought it through? We have not yet decided what we want our post-Apollo program to be or how fast it will go, but if NASA successfully gets a European commitment of \$1 billion, the President and the Congress will have been locked into NASA's grand plans because the political cost of reneging would be too high. I assume the President wants space cooperation as a way of building good will and reducing international tensions. But it does not follow that all joint ventures will have that effect. INTELSAT, for example, is a fully cooperative space venture and less political than the post-Apollo effort now envisaged would be, but most would agree it has been more of a headache than a joy and has created new tensions and contentions rather than good will and constructive working relationships. Finally, the U.S. trade advantage in the future will increasingly depend on our technological know-how. The kind of cooperation now being talked up will have the effect of giving away our space launch, space operations, and related know-how at 10 cents on the dollar. It does seem to me that taking space operations out of the political realm and putting it more nearly in the commercial area would diminish international bickering and give U.S. high technology industries the advantages and opportunities they deserve; this may or may not prove fully feasible, but the point is, no one in this Administration is seriously trying to find out.

The key thing missing, I think, is management attention to these issues. We need a new Administrator who will turn down NASA's empire-building fervor and turn his attention to (1) sensible straightening away of internal management and (2) working with OMB and White House to show us what broad but concrete alternatives the President has that meet all his various objectives. In short, we need someone who will work with us rather than against us, and will seek progress toward the President's stated goals, and will shape the program to reflect credit on the President rather than embarrassment. We need a generalist who can understand dedicated technical experts rather than the opposite. But we also need someone in the Executive Office who has the time, inclination, and authority to coordinate policy aspects. Separate handling of political, budget, technical, and international aspects of NASA planning here means that we have no effective control over the course of events because all these aspects are interrelated.

We really ought to decide if we mean to muddle through on space policy for the rest of the President's term in office or want to get serious about it.

Clay T. Whitehead

# THE NEXT DECADE IN SPACE



A Report of the Space Science and Technology Panel of the President's Science Advisory Committee

EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF SCIENCE AND TECHNOLOGY

March 1970

104/1/21

THE WHITE HOUSE

Date: 10/6/70

Tom Whitehead

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FOR

FROM

Will Kriegsman

FYI.



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

November 4, 1970

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OFFICE OF THE ADMINISTRATOR

MEMORANDUM FOR: Mr. William E. Kriegsman Executive Office of the President

Here is a copy, for your information, of a paper on the need and importance of a continuing program of manned space flight which we prepared in response to a personal request from Mr. George Shultz of OMB.

Copies have gone to Messrs. Weinberger, Rice, and David.

日月 Willis H. Shapley

Associate Deputy Administrator

Enclosure

#### THE ROLE OF MANNED SPACE FLIGHT

This statement summarizes NASA's current thinking on the question of the need for and role of a continuing program of manned space flight. The reasons outlined below lead to the same conclusion reached by each responsible group that has studied this question from a broad technical and national point of view: Manned space flight is an essential part of a balanced space program and a necessary continuing activity of the United States.

The discussion will cover four main points:

- The role of manned space flight as a means for accomplishing objectives in space. This question is concerned with the relative capabilities and cost of manned, unmanned, and combined systems like the space shuttle--a manned system for placing unmanned satellites in orbit as well as for conducting manned missions.
- The importance of manned space flight to the United States as an <u>end</u> in itself. This question involves additional considerations such as the human values of manned exploration and the contributions of manned space flight to our national and international positions.
- The implications of a decision to discontinue U.S. manned space flight activities.
- The national posture on manned space flight contemplated in NASA's program for the 1970's.

#### Manned, Ucmanned, and Combined Systems

Both manned and unmanned systems have made great contributions in the first twelve years of the space program. In the future a single combined system, the space shuttle, will provide the preferred means for economical accomplishment of both unmanned and manned missions.

Starting with small satellites with simple experiments, like Explorer I and Vanguard, <u>unmanned systems</u> have evolved into increasingly sophisticated and useful devices. Automated weather, communications, and scientific satellites have been most successful. Unmanned probes sent into deep space have sent back large amounts of information about other planets in the solar system. We have also learned a great deal about the moon from our unmanned Ranger, Surveyor, and Orbiter projects.

In the same period of time, our <u>manned systems</u> have also made major contributions to the exploration of space. In Project Mercury, we first learned about man's capabilities in space; in Gemini, man developed operational proficiency in space; and in Apollo, man first set foot on another body in space and, at the same time, gave us a clear demonstration that important results in science and in exploration can be achieved in manned space flight.

However, both manned and unmanned systems have been expensive. The basic reason is that each spacecraft and each launch vehicle has been used only once--it could not be reused. Also, all systems--manned and unmanned--have had to be designed and tested to extremely exacting standards; everythin, has had to work to avoid loss of the entire investment. Now, however, NASA's experience and research over the years with unmanned systems, manned systems, and in aeronautics have come together in a new concept--<u>the reusable manned</u> <u>space shuttle system</u>--which will bring about a fundamental change in space operations and result in very substantial cost reductions, for both manned and unmanned missions.

The space shuttle combines into a single space transportation system the requirements for previous unmanned <u>and</u> manned systems. Unmanned satellite will be placed in orbit by the manned shuttle and later brought back from orbit by the shuttle for repair and reuse. Manned "sortie" missions in earth orbit of up to seven days can be conducted economically with the shuttle, with transportation costs no greater than unmanned missions. Larger space systems, such as those required for future lunar exploration or earth orbital space stations, can be delivered to orbit by the shuttle in modules for assembly and supply in space. <u>The shuttle is not a "manned spacecraft"; it</u> <u>is a space transportation system</u>.

Our detailed cost and use studies show that the cost of space shuttle missions will be less than our present unmanned missions. There are several reasons. The shuttle will be reusable, like an airplane, up to 100 times. Spacecraft and experiments will be cheaper because the size and weight constraints on payload design can be relaxed. The number of spacecraft and payloads to be procured will be reduced because the shuttle can bring them back from orbit for repair and reuse.

The space shuttle, therefore, will not only make the use of automated unmanned systems more efficient, but will also permit, without large extra cost, the use of manned operations when they offer important advantages.

Generally speaking, if a space mission can be defined in detail in advance, an automated system not requiring the presence of men can be

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conceived that can do the job. But when the objectives cannot be fully defined in advance, as in the case of exploration, or when the required operations are exceedingly complex, as in the case of the operation and maintenance of a large space telescope, the presence in space of man with his unique intelligence and versatile physical capabilities can be an essential advantage.

Thus, while it is possible to conceive of complex unmanned systems which might do some of the operations performed on the moon by the Apollo astronauts, it is virtually impossible to conceive of practical systems that could accomplish many of the most important things, such as the discovery of unexpected features on the moon, the careful selection and documentation of lunar samples, and the reporting of conditions on the moon other than those measured directly by instruments selected in advance. Unmanned robot systems approaching the capabilities of the astronauts would also--through their complexity--tend to approach the manned systems in cost without ever equaling them in capability.

In earth orbital operations, many potential advantages can also be cited for manned systems--examples are the assembly, calibration, operation, and repair of complex scientific equipment; the recognition and prompt observation of transitory phenomenon; and the utilization of weightlessness in space for laboratory-type research in the physical and biological, and engineering sciences. However, a precise identification of the types of operations in earth orbit where man is essential, advantageous, not needed, or a hindrance, requires actual flight experience under conditions where

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the crew can experiment over an extended period with a variety of scientific and other operations. A principal objective of the Skylab program is to provide this experience, while at the same time conducting major scientific and earth resources experiments.

Although there are some who question the worth of space stations at this time, there is also a body of scientific and engineering opinion today that a space station will be an important and extremely valuable next step in man's exploration and utilization of space. (In fact, today's support, by scientists, for the space station appears to be greater than their support for Apollo as little as two years ago!) With Skylab, we can extend our experience from two weeks to two months; we can test realistically man's contribution to science, applications, and engineering functions; and we can develop an understanding of our future options early enough to permit the rational, deliberate evolution of cur programs.

At the same time, Skylab-borne experiments are of unique scientific and technical value in themselves. The Apollo Telescope Mount (ATM) will, because of its capability to use film, have data acquisition rates a million times higher than that of the automated Orbiting Solar Observatory; the ATM is therefore ideally suited for the very high resolution study of rapidly varying solar phenomena. The earth resources survey package will give us the first meaningful intercomparison of photographic, infrared, and microwave remote sensors to correlate with circraft and ERTS experiments for determination of the next step in this exciting and relevant applications area. This package will also provide a spectral resolution far greater than the unmanned ERTS instruments.

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In summary, <u>Skylab</u> is the next step in the manned exploration of space--an experimental manned space station with major tasks in astronomy and earth resources that will extend our knowledge of man's ability to live and work in space. And the development of the <u>space shuttle</u> will bring together what we now know as "unmanned" and "manned" missions into a single combined mode of operations. This combined mode will be a less costly and more effective space transportation system than both the unmanned and manned modes it will replace. It will permit manned missions in the future at a small fraction of the cost of present types of equipment. At the same time, its development can be fully justified on cost-effective bases for unmanned missions only, entirely apart from its use in future manned missions.

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# The Importance of Manned Space Flight to the United States

NASA's manned space flight program to date has been undertaken primarily to achieve and demonstrate United States leadership in science and technology. Apollo has also made significant contributions to lunar science and exploration and Skylab will carry many important experiments. But the intrinsic and potential values of manned space flight itself have been the driving considerations in the decisions to undertake and follow through with our manned space flight programs.

Because of the large costs involved, the question whether these values justify continuing our manned space flight activities has been repeatedly reexamined. All responsible groups which have considered this question, including President Nixon's Space Task Group, the President's Science Advisory Committee, and Congressional committees have concluded that the nation should continue to support over the years a significant and useful program of manned space flight. The reasons are variously stated but come down to four principal points.

1. The demonstrated and potential utility of manned space flight in exploration, scientific research, and other space operations, as discussed above.

2. Acceptance of manned exploration of space as an important and continuing human goal in its own right, and agreement that the United States, as a great nation, should continue, over the years, to take a leading role in such exploration. As President Nixon's statement of March 7, 1970, put it:

> "... 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."

The general acceptance of manned exploration of space as a continuing goal has not implied and does not depend on a commitment to a specific future goal, like a manned mission to Mars. Present program plans include continued exploration of the moon with the remaining Apollo flights and exploration in earth orbit with Skylab, and envisage a future decision to resume exploration of the moon in the 1980's with a system using the NERVA engine. While both the Space Task Group report and the President's statement mentioned manned flight to Mars as a future possibility, this is not a part of the program now planned. Under the program levels now projected by NASA for the rest of the 1970's, a decision to begin work on a manned mission to Mars could not be implemented until the 1980's or later.

3. <u>Recognition of the unique contribution of manned space flight</u> in projecting a positive image of the United States to the rest of the world. In the world situation as it can now be foreseen, manned space flight will continue to be the best and perhaps the only arena of worldwide interest where the United States can demonstrate at the same time technological strength, peaceful intentions, power without confrontation, and the openness of a free society. Even if the worldwide attention is less than the total preoccupation with Apollo 11 and 13, leadership groups all around the world will be watching the U.S. and the USSR closely. A continuing and progressive series of manned space flight accomplishments can continue to be an important factor in promoting a positive attitude toward the United States.

4. The possible future military potential of manned space flight. We cannot ignore the possibility that at some time in the near future the defense needs of the United States will require a manned space flight capability. Continuing an active and technologically advanced manned space flight program for exploration and other civilian purposes will ensure that we are prepared for such an eventuality.

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#### Implications of Discontinuing Manned Space Flight

Termination of U.S. manned space flight activities by a conscious decision or by failure to provide adequate support to continue a balanced total program would mean--besides the loss of the benefits and advantages cited above--that for the indefinite future the Soviets would have manned operations in space as their exclusive domain.

There is no doubt that the USSR is pursuing manned space flight as a continuing major objective to which they are applying very substantial resources. The Soviets would undoubtedly exploit our withdrawal--contrasted with continuing highly visible progress on their part--as a major basis for humiliating the U.S. and the Free World system in the eyes of the world. Such a situation, in our view, is unacceptable to the United States, and is one which should not be permitted to come into being.

## Posture on Manned Space Flight

Under present plans, U.S. manned space flight will be suspended after completion of the Skylab mission in 1973 until the first flights of the space shuttle system--suborbital test flights could start in 1975 and the first orbital flights in 1977. Termination of flights with Apollo hardware after four more Apollo lunar flights and Skylab has been forced by previous and current budget constraints: A decision, also for fiscal reasons, has been made to defer initiation of space station work beyond the study stage to a later time. The space shuttle system would be the only manned space flight program the United States would have under development for the future. All considerations point to the central importance of carrying out Skylab and proceeding with the development of the space shuttle system. In summary:

a. To forego Skylab would leave the United States without the data base for future manned mission decisions. It would have a powerful negative impact on astronomy and earth rescurces surveys. It would surrender to the USSR the option of having the first real space station in orbit. It would leave underdeveloped the desirable precedent of openly shared manned flight program scientific and technical results, a possibility currently underscored by the discussions in Moscow on the suggestion that the U.S. and USSR use common docking hardware in their orbital spacecraft.

b. The shuttle is clearly a necessary and worthwhile development for the long-term future of the space program--an economical and versatile launch system for both unmanned and manned missions. The shuttle is not a "manned spacecraft." It is a space transportation system.

c. Moving ahead now with the shuttle system is the best available way to end the post-Skylab hiatus in U.S. manned space flight; it does not require the establishment or acceptance of a new major mission goal in space.

d. It will provide a focus for halting the further erosion of U.S. aerospace capabilities which will otherwise occur.

e. It is essential for success in the effort NASA has undertaken, at the request of the President, to secure international participation in our future major space programs. The decision to defer the space station development leaves the shuttle as the only major focus of such cooperation. Without a clear U.S. decision to proceed with the space shuttle program, European interest in participation--new surprisingly strong--will evaporate. f. The space shuttle will open up exciting new possibilities in the exploration of space; it will revolutionize our use of space in ways we cannot even imagine today. Because it will be cheaper to carry payloads into orbit, because it will be possible to bring them back, and because scientists, engineers and others who are not trained as astronauts will be able to fly in it, we will be able to do things in space that we would not even consider doing today.

National Aeronautics and Space Administration November 2, 1970 11

Dick Speier never did come down to read this.

DECLASSIFIED E.O. 13526, Sec. 3.3h

By MW, NARA, Date 11/24/1

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CONFIDENTIA

THE WHITE HOUSE WASHINGTON

April 9, 1970

NASA

# MEMORANDUM FOR THE PRESIDENT

Dr. Paine has recently visited Japan and Australia and has met in Washington with representatives of the European space organizations. In all of the conversations, he found substantial interest for foreign participation in the U. S. space program and particularly in the space station/space shuttle efforts.

Dr. Paine notes in the attached letter to you that substantive cooperation in our program raises many complex problems for both the U.S. and for the foreign participants. As one example, NASA is presently discussing with State the kinds of assurances of access to and use of the proposed jointly developed new systems that the U.S. should be prepared to give foreign collaborators in order to win their participation.

Space offers an outstanding opportunity for international cooperation. I am concerned, however, that in his enthusiasm for achieving a broadened base of cooperation, Dr. Paine is essentially committing us to the development of both the space station and space shuttle in the near term. Preliminary economic analysis indicates that such a commitment in, for example, FY 1972, will create extremely large expenditures in the FY 1973-77 time period and will not provide any real payoff until the mid-1980s. Furthermore, the escalating cost estimates for the shuttle program raise serious questions about the desirability of committing to this approach, future space launch operations.

For these reasons, we have asked NASA to make an in-depth study of the space shuttle program this year for use in the FY 1972 budget review process. After the study is made, we should be in a better position to discuss a firm commitment.

NASA

## April 3, 1970

To: Will Kriegsman

From: Tom Whitehead

I think your memo for Pete to send to the President is fine; however, I do suggest that one sentence be added regarding the cost escalation and its implications for the shuttle program.

I do think a more detailed letter from the President to Dr. Paine is in order however, and I suggest the attached draft.

Attachment

Story Lang

# Space Program

PRESIDENT NINON'S delineation of this nation's space goals for this decade is both imaginative and realistic in terms of objectives and in terms of money.

Just as President Kennedy laid the foundation for our landings on the moon-landings which would have been accomplished after his normal two terms in office-so President Nixon is laying the foundation for spectacular achievements which are scheduled after his possible second term.

Such undertakings require long-range planning. That is why it is essential that the schedules be outlined now.

Having made our leap into space at this particular time, we are faced with a golden opportunity. Once every 175 years the planets Jupiter, Saturn, Uranus and Neptune are lined up in such a way that a single unmanned space vehicle from earth can visit each planet in turn while traveling a single arc. That unique time frame occurs during this decade.

President Nixon is seizing the opportunity and will make the most of it.

His plan calls for more moon landings, visits to the other planets of this solar system and, eventually, the manued exploration of Mars itself.

Most important of all objectives is the one aimed at developing nuclear power plants for space vehicles. This is the key to cutting the time of space journeys into a fraction of what they would be with ordinary rocket power. This is what is essential in getting a man on Mars or any other planet in the solar system.

It would not be surprising if, as we progress in our space endeavors, shortcuts heave into view which could alter or reduce the time required for reaching some objectives.

The President's definition of goals should revitalize our space effort. The uncertainty which has surrounded it for so many months could only have a deleterious effect upon it it and upon those involved in it.

Now the uncertainty is gone. Mr. Nixon has spelled out what we shall do during the 1970s and has projected at least one effort for the 1980s.

All that remains now is for us to get on with it.

ATLANTA JOURNAL 3/10/70

#### FOR IMMEDIATE RELEASE

March 7, 1970

OFFICE CF THE WHITE, HOUSE PRESS SECRETARY

THE WHITE HOUSE (Key Biscayne, Florida)

PRESS CONFERENCE

OF

DR. THOMAS O. PAINE ADMINISTRATOR, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

MR. WARREN: If everyone is ready, I think we can go ahead now.

You have the statement by the President.

Dr. Thomas O. Paine, the Administrator of NASA, is here with you this morning to discuss the President's decision and the President's statement. Dr. Paine has just returned from a trip to Canada, Australia and Tokyo, where he has been discussing the international aspects of the President's program for cooperation in the space venture that we are about to take.

If I could ask you to put down your telephones, we will go ahead.

Dr. Paine.

10.00

DR. PAINE: Good morning.

The President today announced a bold, diversified, very wide ranging program for the 1970's, a program which will carry substantial activity forward into the 1980's. The longest range program which the President has described is the "Grand Tour" of the outer planets with launches from Earth in 1977 and 1979, with the spacecraft reaching the planet Neptune as late as 1988. So the programs laid out by President Nixon will guide the development of our space program for more than a decade.

A strong effort in exploration, in science and in the practical application of space for the benefit of man here on Earth is laid out, with increasing emphasis on international cooperation.

The reduction of the cost of space activities and the increase in man's ability to travel back and forth to space and to work there effectively for long periods of time is contained in the space shuttle rocket plane proposal, and the long-life space station for the late 1970's.

The so-called space shuttle is a two-stage rocket plane which will be able to take off vertically from the surface of the Earth, and at an altitude of about 40 miles and a speed of 7,000 miles an hour, the upper stage will take off and carry men, equipment and supplies, about a 25-ton payload, on up into Earth orbit, with the first stage returning to Earth, landing horizontally like a jetliner, and the second stage, after performing its mission in space, which may last for a week or two weeks, will re-enter the atmosphere and also land horizontally ready for reuse.

The programs to explore the planets laid out in the President's statement will provide man with a closehand look of every planet in the solar system. The continued exploration of the moon through the remaining Apollo flights is planned through 1974, after which men will utilize the new space transportation system envisioned in the space shuttle, space station and other new devices coming in in the late 1970's to produce a more reliable round trip capability to the moon for the late 1970's.

Great emphasis is put on the practical applications of space techniques, not only in communication satellites and weather satellites, but in new areas such as Earth resources satellites which will be able to survey a wide range of activities of economic interest from space, send the information back down to ground stations. This information will range from oceanography, hydrology, studies of pollution, studies of the fields, forests and fisheries of economic benefit here on Earth; areas such as the complete ability to survey the agricultural production, and the mineral resources of the Earth, the capability to manage all of these systems for more full and effective utilization by man.

Other new areas include the direct broadcast of radio and television from orbit, and the ability to begin to plan for the first North Atlantic air traffic control satellite for very substantial economic benefits in this heavily travelled air route.

Perhaps the most statesmanlike portion of this statement in my view is the increasing recognition of the international participation of other nations in both the exploration and the utilization of space which receives great emphasis in the President's statement.

As was mentioned, I personally have visited the space capitals of the world and discussed the opportunities in the future to join with the United States in more fully making this a broad activity of all mankind.

Although it is too early today to report any specific results, there certainly is a very substantial interest overseas in utilizing more fully the American program as a means of closing the technology gap on the part of other nations and, at the same time, allowing them to participate in both the exploration and the utilization of space in the decades to come.

I will be very happy to answer any questions you may have.

Q Dr. Paine, why haven't you set any target date for landing men on Mars?

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DR. PAINE: It is too early at this time to judge the effectiveness of several of the new development projects which must be undertaken successfully in the 70's in order to plan the first mission to Mars. These include the space shuttle system, which will have to be fully operational; the space station activity, which will give us the base in Earth orbit from which we will set out from Mars, and will also prove out the life support systems necessary to support men in space for the two years required for a Mars mission.

And, thirdly, the effectiveness of our nuclear rocket system which is not scheduled for flight before the late 1970's and which must provide the propulsion for a Mars journey.

Q But didn't you present options some time ago, to start right away, or you could have a 1986 landing, or a third option of going beyond?

Q Would you outline the three options?

DR. PAINE: Three options were presented to the President in the Space Task Group recommendations. Number one was an all-out option in which the money side of it was not regarded as a limitation and we simply presented to the President how rapidly we could move ahead in space, providing an unlimited budget were made available to NASA.

It was really a technological capability option --

Q Would you explain those three?

DR. PAINE: Option one was the all-out effort, moving as fast as our technology would allow us to move. Option two as when we attempted to move as rapidly as we could, technologically, but being highly selective of our allocation of resources so that we could keep the NASA budget down within the range of the budgets for approximately the last decade or so, not moving ahead very rapidly in the budget area.

Option three was a similar option to option two but without the longer range objective of being sure in the development of our new capabilities in the 1970's that we were making it possible for man to plan for a mission to Mars in the 1980's or 1990's.

I would say that the recommendation which I personally made to the President, which I haven't talked about before this, but which I feel free now to state, was that I recommended option two, and the statement which the President made is essentially along the lines of option two.

(OVER)

It does recommend that in some time in the future but without a specific date, we do plan our capabilities in such a way that it will be possible for men to go to Mars.

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Q Dr. Paine, in the option that the President took, as he has outlined in his statement, when will we attempt a man landing on Mars? Can you say?

DR. PAINE: There is no specific date outlined. This is a decision which we would not have to make in any case before about 1976.

The developments that we will be carrying on under the President's program will be such that it will be possible to contemplate a trip sometime in the 1980's. But the first specific hardware, the first program decision, would not have to be made for another six years.

Q Dr. Paine, I believe option two mentions the date of 1986. If this program goes ahead as you envision, is that still a possibility, 1986?

DR. PAINE: 1986 would be a possibility. There is another window in 1983 and another window in 1988. All of these would be possible, depending on decisions made farther downstream.

Q 1983 would still be possible even though that was the best that option one would have?

DR. PAINE: It would be possible, providing we are successful in the development programs now underway and make all of the progress we expect to make. If there are any setbacks, 1986 would be more realistic. If we go at a somewhat more slower pace, 1988 would be the date. No specific date is envisioned here and, indeed, there is no commitment to starting the Mars program at any particular time contained in this message. It is merely a focusing kind of objective so that as we develop our capabilities in the 1970's we have our eye on such future missions so that when the future mission becomes feasible we don't have to start from scratch, but we have already done quite a bit of the development activity that will be required.

 $\Omega$  Dr. Paine, do you consider this to be an acceleration of the U. S. space effort or a deceleration?

DR. PAINE: Neither. I would say that this statement as it comes out is a continuation of the program pretty much as we have known it, with perhaps a little more fiscal restraints than we have had in the past in the great press of meeting our commitment for landing on the moon before the end of the 1960's. But I consider it a very bold and forward-looking, but at the same time a broad and physically prudent program. Q How much money does it provide, roughly, in terms of billions of dollars a year?

- 5 -

DR. PAINE: This program, essentially, as it is presently laid out, would require funds at approximately the seme range as present. There is a great deal of flexibility in this program. It will be possible in some years to go ahead more rapidly, if more dollars are available. In other years, we can out back and slow down the program. There is a great deal or flexibility in this program.

Q Is this \$3.5 or \$4 billion a year?

Q What are the 1970 and 1971 budgets?

DR. PAINE: The '70 and '71 budgets are in the range of \$3.5 billion.

Q Is that the idea, to keep it \$3.5 billion throughout the '70's?

DR. PAINE: \$3.5, \$4, \$5, this general range. As I say, we have built a great deal of flexibility in this. This is not a commitment to any specific budget number. This is a commitment, rather, to the goals and objectives and the focusing technologies that the space program will have.

Q Dr. Paine, how much money is there in the '71 fiscal budget for the grand tour, the beginning of that?

DR. PAINE: There is no money in the '71 budget. That is an item which will first enter our budget in 1972.

Q How much will it be then; do you know?

DR. PAINE: It will be a relatively modest sum in '72 since the first launch isn't until 1977 and 1979.

Q What is a relatively modest amount in your jargon?

DR. PAINE: A relatively modest amount will be in the order of parhaps \$10 million.

Q Dr. Paine, you mentioned that there are also military aspects to this program. Cound you tell us something about that, if that will be a space station to do the job that the manned orbiting laboratories were intended to do?

DR. PAINE: With respect to the military aspects, as you all know we really have two parallel space programs in the United States. The military carries on its own program and this is well covered in the Space Task Group report, the military portion of which was written by the Department of Defense. NASA, by law, carries out the civilian part of the American space program, although among the other areas of national activity we contribute to is the defense of our country.

Dr. Seamans and I have recently concluded an agreement

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(OVER)

whereby we have set up a joint board to review the development of the space shuttle rocket plane program to insure that as this NASA development proceeds, and this is a generally unclassified, open program which we are inviting other nations to participate in with us, that it will meet the R&D advanced development requirements of the Air Force and the Department of Defense as well as NASA.

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Q Is there any problem in maintaining your engineering team with this more restricted budget in order to do this job of landing men on Mars in 1986 or 1988?

DR. PAINE: The problem of maintaining the NASA team, the great spirit, the bold thrust forward that we have had in the 60's, under the budget of the 1970's, in my opinion, has been somewhat overestimated. We have an extremely enthusiastic group of people. Our turnover rate is lower than almost any other part of government or industry, for that matter, and the program which the President has laid out here, believe me, will challenge the team that went to the moon and 'give them an extremely, onerous and just the kind of problem that they like to tackle.

 $\Omega$  I am not talking about the spirit. I am talking about the fact that you don't have as much money. What happens to the contractors and the other engineering units that go out of business because their programs are turned off? Can you start them up again in time to do the job?

DR: PAINE: That is a major problem. What we are really faced with here in this change as President Nixon's space program replaces the old space program of the '60's is we are essentially taking a \$3.5 billion enterprise which has been going in one direction, a very single-minded purpose, and completely changing it around and moving in a new direction.

That is a tough job. It is not easy to do. One of the things that characterizes the aerospace activities in the United States is the ability to shift from one area to another. The flexibility is built in the way we structured NASA originally. As you perhaps know, more than 90 percent of the activities which NASA carries out is outside the government civil service area. It is carried out in industry and in universities. We are used to shifting this activity from one area to another. We are continuing to do that.

Yes, it is real tough; it causes a lot of people to have to go through some very difficult times. It requires a very high degree of management skill and judgment. But I am sure it can be successfully done, and, in fact, it is being successfully done.

Q Dr. Paine, what will be the total cost of the grand tour as you now estimate it?

DR. PAINE: I do not have any cost estimates yet on the grand tour. This is a program which so far is only a gleam in the eye of the advance planners. Q Does that grand tour include man on Mars or is that just a visit to the outer planets?

DR. PAINE: As far as the grand tour is concerned, Mars is something you go by as you back out of the driveway. The first interest we have in the grand tour is some 500 million miles out in space as we swing past the planet Jupitor. The first mission launched will then proceed on out to the planets Uranus and swing by that and then will swing farther on out to the planet Neptune, reaching that about 1988.

One of the interesting things about this mission is the fact that with an 11 year period between the time our space craft leaves the planet Earth and reaches its final destination, the planet Neptune, to send back the television signals of the surface, we will have obviously had one of the longest timesann electronic system has ever had to operate without human attention.

In order to carry this out, we will have to make some very substantial advances both in electronic equipment and in self-checking computers that will essentially be able to perform the function much as a man would do were he aboard this speace craft.

The kind of computer we will have aboard this will be something like the computer HAL in the movie 2001. It will be a computer which contin ously monitors all of the activites aboard the space craft, is fully capable of making repairs, alterations, modifications, over this period of more than a decade as this space craft moves out 3 billion miles into space.

I might also add that as it leaves the planet Neptune, the gravity of Neptune will fling this space craft outside the solar system. This will become the first man made object to be fully moved completely away from the influence of the sun.

Q Dr. Paine, with regard to the fifth objective, how can we hasten and expand the practical applications of space ctechnology at the same time we are closing the Electronic Research Center?

DR. PAINE: The Electronic Reaearch Center closing is certainly one of the budgetary items which was the most difficult for us. As you know, we have been discussing with every Cabinet officer, every agency in Washington, possible other uses for the Electronic Research Center. We have been working very closely in particular with Secretary Volpe in the Department of Transportation.

Although at the present time no final decision has been made on this, we may have something to announce in the near future.

Q Dr. Paine, the President's message mentions that the space budget for fiscal '70 is less than for last year. Can you tell us what those two figures are?

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DR. PAINE: Fiscal '711 represents a 12 percent decrease from the 1970 space budget. But I would like to point out that this 12 percent decrease does not represent a 12 percent butback in many activities. We have increased our science budget; we have increased our aeronautics budget, and we have increased our practical applications budget.

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Much of the reduction has come from the fact that our giant Saturn V moon rocket system has now been essentially procured, and the last of the 15 moon vehicles which we purchased will be delivered before the end of fiscal '70.

In the '71 period we are essentially in somewhat of a valley between the end of the Saturn V moon rocket procurement, before we are in the area of beginning to procure the new systems, the space shuttle, the grand tour, and the Mars landing.

Q What are the numbers?

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DR. PAINE: I have here a statement which lists quite a few of these numbers. It has quite a bit of backup information in it. I would be very happy to make these available to you. You can go through this. It takes each one of the President's six major pronouncements and gives you an indication of the dollars involved, what we have been doing in that area, and what we will now be doing under the new Nixon program

Q Can you give us the figures for '70 and '71?

DR. PAINE: For 1971, the 12 percent reduction means that we are now before the Congress asking for \$3.333 billion. That is the total figure for the fiscal year 1971.

Q What was it last year?

DR. PAINE: Last year was \$3.78 billion.

Q What was the peak of spending in prior years?

DR. PAINE: The peak of spending in prior years was about a \$4.9 billion level.

Q What year was that, Doctor?

DR. PAINE: 1966. 1966 represented the peak both of bringing in the construction of the big Apollo system and also in building across the country the tremendous space facilities that had to be built as America began to move ahead and create the kind of space capability we have today. This is the construction of Cape Kennedy, the construction of the Manned Spacecraft Center at Houston, and so forth.

Q Dr. Paine, the statement mentions scientific knowledge as only the second of the objectives, and has what looks at first glance like a rather weak statement at one point that the space program will be "attentive to their suggestions", referring to the scientists.

To what degree do you think that this program will meet

the disatisfactions that have been developed in the scientific community in the United States?

DR. PAINE: I think this program will go a long way toward satisfying the many different aspects of the space program, the many different supporters, including not only the scientists but the practical application engineers, the aeronautics people, the research and development people, and many other areas which are covered in various degrees in this.

It represents in our view the best possible balanced program within the resources which we feel is realistic to expect the United States to put into the space program.

I should hasten to add that everybody is not going to be happy. There will always be a certain amount of criticism, a fair amount of criticism, perhaps, and we welcome a lot of this kind of discusion.

I think it helps us to come up with a better program.

One of the advantages of running an open program like we run in NASA is that we can take advantage of a lot of the kind of criticism we get and improve the program as a result.

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Q Dr. Paine, could you give us sort of a rough chronology, starting with the year 1970 and going to 1989 as to what the highlights will be, not necessarily at year intervals?

DR. PAINE: I don't want to run through the entire thing because it would take too long. I can give you a few highlights. In 1971 and 1972, we will be sending two additional Apollo missions to the moon each time. Starting with Apollo 16 we will carry, for the the first time, a lunar Rover vehicle that will allow two astronauts to ride out some 20 to 25 miles and cover a great deal of additional area of scientific interest and bring back much better samples of the surface.

We will also be launching in 1972 the first of our Explorer spacecraft out to Juniper.

At the end of 1972, we will suspend Apollo operations to the moon for a year while we put into orbit our project Skylab which is an experimental space station contained within a third-stage Saturn rocket module. It will contain a major solar telescope experiment to be operated by the astronauts, and will be visited during the last quarter of 1972 and the first half of 1973 on three separate occasions by three-man astronaut crews.

We are going to attempt to keep astronauts in orbit in this space station for a period as long as 56 days, exploring the long-term effect of weightlessness on man and establishing man's ability to work for prolonged periods in space.

In 1973, we will launch a Mariner class spacecraft which will swing past the planet Venus, head on in toward the sun, and give us our first closeup view of the planet Mercury.

As we move on out into '75, '76, we will be having, in '76, if our progress remains on schedule, our first look at the surface of the planet Mars. We will be putting two orbiters around Mars in 1971. These will give us a map of 70 percent of the surface of Mars and we hope will give us the first look at the changing coloration of Mars as the spring goes up the planet, as the icecap disappears under the influence of the sunshine, and as a wave of darkening goes over the surface.

We don't know what this wave of darkening is due to, and in 1971 we hope to get some clues.

In 1976, we will actually land two spacecraft on the planet Mars, carrying life detection equipment in areas that were selected from the maps that were prepared in the 1971 encounter.

MORE

In 1976, we also hope to have the first flights of our reusable space shuttle rocket plane, and shortly thereafter perhaps the first launch of our original space station module.

The space station will then be built up, year by year, with additional launchings which will be added to the original module so that over about a decade a long life, permanent base station will grow in Earth orbit as module after module is added.

We hope very much that other nations will wish to join with us, both in the operation of the reusable space shuttle rocket plane back and forth from the surface of Earth to the space station, and also in the operation of the space station which will have many different capabilities. It will be an extremely useful research station for men in space.

In 1977, we hope to launch the first of the "Grand Tour" activities to the outer planets; in 1979, the second "Grand Tour" mission.

In the period of about 1978 we hope to have the first launch of our nuclear propulation rocket, which has been under test, ground test, at our Nevada test station now for several years, which is now ready to move toward a flight weight engine to prove this technology out in actual space flights.

That is some kind of an outline of major events for the future.

Q Dr. Paine, what are the prospects of getting the Soviets to cooperate with us on these space projects, particularly having Soviet astronauts on some of these missions?

DR. PAINE: We hope very much that the Soviets will indeed wish to increase the degree of cooperation that we have had in the past decade.

As you know, the past decade has been more marked by a spirit of competition than a spirit of cooperation. But there has been some cooperation and we believe that it is possible to increase this.

In this connection, I have sent to the leaders of the Soviet space program our space plans for the next decade as proposed in the Space Task Group, and we have invited their increasing cooperation with us as our programs for the future mature.

Ω Dr. Paine, is this direction generally the same direction the Soviets are moving in, from what you know about their space program?

DR. PAINE: The Soviet spaced program is somewhat the program that Winston Churchill once described, the mystery wrapped in an enigma. The Soviets, as you know,

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do not have an open space program. They prefer to announce what they have done after they have done it and after they have seen that they have been successful. Therefore, it is very difficult for us to comment specifically on what their plans are.

We do know that they are continuing to move toward the moon. We do know that they have made very substantial statements about the desire for not only planetary exploration of the unmanned type, but also for Soviet cosmonauts to visit the planets.

We do know that they are extremely interested in putting into orbit a major space station at an early date.

We do know that they are proceeding with the construction of very large rocket capability, even larger, probably, than our Saturn V system.

So we see a great deal of activity in the Soviet Union, a great deal of interest in moving ahead with very spectacular projects. I think we will simply have to wait until these mature before we will really know specifically what they are going to do by what date.

Q What about the Soviet astronaut? Is that a possibility or probability?

DR. PAINE: I think that before we have Soviet cosmonauts flying with our astronauts in orbit we will very likely have people from other parts of the free world flying with us, particularly in the era of our space shuttle when it will be possible for men and women of many nationalities, people who are simply in good health -- they won't have to have the very elaborate astronaut or cosmonaut kind of training -- be able to fly as passengers to orbit and return in this period of the late 1970's.

In fact, we will even be able to take healthy newsmen, if we can find any in this period.

THE PRESS: Thank you very much.

END

(AT 11:45 A.M. EST)
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### Office of the White House Press Secretary (Key Biscayne, Florida)

#### THE WHITE HOUSE

# STATEMENT BY THE PRESIDENT

Over the last decade, the principal goal of our nation's space program has been the Moon. By the end of that decade men from our planet had traveled to the Moon on four occasions and twice they had walked on its surface. With these unforgettable experience, we have gained a new perspective of ourselves and our world.

I believe these accomplishments should help us gain a new perspective of our space program as well. Having completed that long stride into the future which has been our objective 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 here on this planet make high 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. Our approach to space must continue to be bold -- but it must also 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 in February of 1969 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. The budget recommendations which I have sent to the Congress for Fiscal Year 1971 are based on these conclusions.

# Three General Purposes

In my judgment, three general purposes should guide our space program.

One purpose 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 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.

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(OVER)

A third purpose 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 better weather forecasts to new management techniques and 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.

#### A Continuing Process

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, those 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 activities will be a part of our lives for the rest of time. We must think of them as part of 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. Our space program should not be planned in a rigid manner, decade by decade, but on a continuing flexible basis, one which takes into account our changing needs and our expanding knowledge.

We must also realize that space expenditures must take their proper place within a rigorous system of national priorities. 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. The space budget which I have sent to Congress for Fiscal Year 1971 is lower than the budget for Fiscal Year 1970, a condition which reflects the fiscal constraints under which we presently operate and the competing demands of other programs. I am confident, however, that the funding I have proposed will allow our space program to make steady and impressive progress.

#### Six Specific Objectives

With these general considerations in mind, I have concluded that our space program should work toward the following specific objectives:

1. We should continue to <u>explore the Moon</u>. Future Apollo manned lunar landings will be spaced so as to maximize our scientific return from each mission, always providing, of course, for the safety of those who undertake these ventures. Our decisions about manned and unmanned lunar voyages beyond the Apollo program will be based on the results of these missions.

2. We should move ahead with bold exploration of the planets and the universe. In the next few years, scientific satellites of many types will be launched into Earth orbit to bring us new information about the universe, the solar system, and even our own planet. During the next decade, we will also launch unmanned spacecraft to all the planets of our solar system, including an unmanned vehicle which will be sent to land on Mars and to investigate its surface. In the late 1970s, the "Grand Tour" missions will study the mysterious outer planets of the solar system -- Jupiter, Saturn, Uranus, Neptune, and Pluto. The positions of the planets at that time will give us a unique opportunity to launch missions which can visit several of them on a single flight of over three billion miles. Preparations for this program will begin in 1972.

There is one major but longer range goal we should keep in mind as we proceed with our exploration of the planets. As a part of this program we will eventually send men to explore the planet Mars.

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3. We should work to <u>reduce substantially the cost of space operations</u>. Our present rocket technology will provide a reliable launch capability for some time. But as we build for the longer-range future, we must devise less costly and less complicated ways of transporting payloads into space. Such a capability -- designed so that it will be suitable for a wide range of scientific, defense and commercial uses -- can help us realize important economies in all aspects of our space program. We are currently examining in greater detail the feasibility of re-usable space shuttles as one way of achieving this objective.

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

We have much to learn about what man can and cannot do in space. On the basis of our experience with the XSS, we will decide when and how to develop longerlived space stations. Flexible, long-lived space station modules could provide a multi-purpose space platform for the longer-range future and ultimately become a building block for manned interplanetary travel.

5. We should hasten and expand the practical applications of space technology. 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 meteorology, communications, navigation, air traffic control, education and national defense. The very act of reaching into space can help man improve the quality of life on Earth.

6. We should <u>encourage greater international cooperation in space</u>. In my address to the United Nations last 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 in enjoying the benefits. Unmanned scientific payloads from other nations already make use of our space launch capability on a cost-shared basis; we look forward to the day when these arrangements can be extended to larger applications satellites and astronaut crews. The Administrator of NASA recently met with the space authorities of Western Europe, Canada, Japan and Australia in an effort to find ways in which we can cooperate more effectively in space.

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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.

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 from the planet Earth. It is my hope that as we go forward with our space program, 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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March 6, 1970

## MEMORANDUM FOR MR. EHRLICHMAN

I have prepared the attached brief for the meeting of Dr. Paine with the President in case it is decided that Paine will meet with the President prior to his press briefing on the space statement.

I think it would be desirable for the President to meet with Paine for a short time. However, I would urge that this not be an occasion for Paine to attempt to talk the President into reinterpretations of the Message, since we are not yet ready to make any further commitments on NASA programs.

> Peter M. Flanigan Assistant to the President

#### Attachments

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

CTWhitehead:ed

#### March 6, 1970

#### MEMORANDUM FOR

#### THE PRESIDENT

SUBJECT:

Meeting with Dr. Thomas O. Paine March 7, 1969

#### I. PURPOSE

To discuss your stat ement on the future of the space program prior to its release and Dr. Paine's press briefing.

#### II. BACKGROUND

This statement has been under discussion with NASA, OST, BOB, and the Vice President's office for the past three months. It is designed primarily to put space in perspective vis-a-vis our other priorities and to set forth a rationale for planning the future direction of the space program. The statement complements the specific program information presented in the FY 1971 budget submission. Many of NASA's suggestions have been incorporated, but not all.

#### IIL POINTS OF DISCUSSION

There is no need for you to raise any of the following issues at this time. They are presented for your information in case Dr. Paine raises them.

A. Dr. Palne may discuss his trips abroad to explore opportunities for more international cooperation in space. Both Mr. Flanigan and Mr. Kissinger's staffs have been working with NASA, and this area turns out to be more difficult than might be expected.

#### RECOMMENDATION

That you encourage Dr. Paine to continue his efforts, but stress the need for a firm occaomic and technical foundation to be laid before too roany expectations are raised publicly.

B. He may also raise the extent of your commitment to the future development of the re-usable space shuttle. The development cost estimates for this program are very high and quite uncertain.

#### RECOMMENDATION

That you stress the need to consider a full range of options and make design and development decisions only after more technological and cost unknowns are resolved.

#### IV. POINTS YOU MAY WISH TO RAISE

The tone of the space statement is important. While it includes a number of spacific program initiatives, the thrust is more explanatory of a rationale than a listing of major initiatives.

#### RECOMMENDATION

That you emphasize this point to Dr. Paine and suggest he address the rationale as well as program initiatives in his press briefing.

Peter M. Flanigan

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# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION WASHINGTON

March 6, 1970

TO: Mr. Tom Whitehead FROM: Willis H. Shapley

These are the changes George Low and I recommended to you on the phone at Dr. Paine's request.

Willis

Willis H. Shapley

(Huebner) JK

March 4, 1970

Proposed Statement on the Future Of the U. S. Space Program

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Over the last decade, the principal goal of our nation's space program has been the Moon. By the end of that decade men from our planet had traveled to the Moon on four occasions and twice they had 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 objective 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 n achievements. But we must also recognize that many critical problems here 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 - we should not try to do everything at once. Our approach to space must continue to be bold -- but it must also 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 in February of 1969 a Space Task Group, herded 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 consider-

ing our national priorities, I have reached a number of conclusions concerning the future pace and direction of the nation's space efforts. The budget recommendations which I have sent to the Congress for Fiscal Year 1971 are based on these conclusions.

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selves -- 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.

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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 purpose of the United States space effort is that of there is a hard " The state of the second of t 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 better weather forecasts to new management techniques and 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:

A Continuing Process

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, those 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 activities will be a part of our lives for the rest of time. We must think of them as part of 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. Our space program should not be planned in a rigid manner, flecade by decade, but on a continuing flexible basis, one which takes into account our changing needs and our expanding knowledge.

We must also realize that space expenditures must take their proper place within a rigorous system of national priorities. 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. The space budget which I have sent to Congress for Fiscal Year 1971 Is lower than the budget for Fiscal Year 1970, a condition which reflects the fiscal constraints under which we presently operate and the competing demands of other programs. I am confident, however, that the funding I have proposed will allow our space program to make

steady and impressive progress.

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With these general considerations in mind, I have concluded

that our space program should work toward the following specific ob-

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

manned lunar landings will be spaced so as to maximize our scientific return from each mission, always providing, of course, for the safety of those who undertake these ventures. Our decisions about manned

and unmanned lunar voyages beyond the Apollo program will be based

on the results of these missions.

2. We should move ahead with bold <u>exploration of the planets</u> and the <u>universe</u>. In the next few years, scientific satellites of many types will be launched into Earth orbit to bring us new information about the universe, the solar system, and even our own planet. During the next decade, we will also launch unmanned spacecraft to all the planets of our solar system, including an unmanned vehicle which will

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workshop -- will be an important part of this effort. We are now building such a station -- using systems originally developed for the

Apollo program -- and plan to begin using it for operational missions

in the next few years. We expect that men will be working in space

for months at a time during the coming decade.

We have much to learn about what man can and cannot do in space. On the basis of our experience with the XSS, we will decide when and how to develop longer-lived space stations. Flexible, long-

lived space station modules could provide a multi-purpose space

platform for the longer-range future and ultimately become a building

block for manned interplanetary travel.

5. We should hasten and expand the practical applications of

space technology. 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 meteorology, communications, navigation, air traffic control, education and national defens

The very act of reaching into space can help man improve the quality

of life on Earth.

6. We should <u>encourage greater international cooperation in</u> <u>space</u>. In my address to the United Nations last 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 <u>effort</u>, both in contributing the <u>inert attacked</u> resources and in enjoying the benefits. The Administrator of NASA recently met with the space authorities of Western Europe, Canada, Japan and Australia in an effort to find ways in which we can cooperate more effectively in space.

. 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.

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 from the planet Earth. It is my hope that as we go forward with

our space program, 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

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INSERT ON PAGE 8

Unmanned scientific payloads from other nations already

make use of our space launch capability on a cost-shared

· · · 6

basis; we look forward to the day when these arrangements can be extended to larger applications satellites and astronaut crews.

# Insert 1 to replace last sentence of par. 3 on page 6

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We are currently examining the design of a reusable space shuttle that could evolve into a new space capability. With this capability, we could fully exploit and use space for the benefit of all mankind and at the same time substantially reduce the cost of space operations.

(Wording adapted from Page 99 of the FY 71 Budget.)

Space

Friday 3/6/70

4

3:03 The pouch will be open until 5 o'clock to get things on the Courier plane; we can get it to the Situation Room when it is ready.

80% . L

Friday 3/6/70

Space

2:20

John Brown's Office called. Steve Bull said you will have to do a briefing paper for the President who will be meeting with Dr. Paine some time tomorrow. This briefing paper has to go with the courier by 4:30.

# March 6, 1970

Space

To: Willis Shapley

From: Tom Whitehead

We still haven't received a copy of the final Message - but here's a copy of what we sent over, with changes.

# Attachments

CTWhitehead:ed

Space.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION WASHINGTON

March 6, 1970

TO: Mr. Tom Whitehead

FROM: Willis H. Shapley

These are the changes George Low and I recommended to you on the phone at Dr. Paine's request.

Willin

Willis H. Shapley

(Huebner) JK

March 4, 1970

Proposed Statement on the Future Of the U. S. Space Program

S. F. W. S. Strath Starting

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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. The budget recommendations which I have sent to the Congress for Fiscal Year 1971 are based on these conclusions.

Three General Purposes

In my judgment, three general purposes should guide our space

program.

One purpose 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

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(Wording adapted from Page 99 of the FY 71 Budget.)

Space

Friday 3/6/70

3:00 Mr. Shapley said the changes are the same as the ones he gave you over the phone -- do you want them in writing?

Tom said "yes."

Shapley's office will send them right over.

Space

Thursday 3/5/70

6:25 Mr. Shapley called again -- doesn't want to "bug" you, but would like to get one last reading on where we stand on the Message. Dr. Paine will be calling him from California this evening to find out if there is anything he needs to do.

Shapley will be in his office a little while --(13) 24715takes about 20 minutes to get home and would<br/>appreciate your calling him there if you don't<br/>reach him at the office.337-1956
Space

March 5, 1970

To: John Campbell

From: Tom Whitehead

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Our changes are indicated on pages 1, 6, and 8. The changes on pages 6 and 8 are substantive and particularly important.

Attachments

cc: Mr. Whitehead Central Files

CTWhitehead:ed

Unmanned scientific payloads from other nations already make use of our space launch capability on a cost-shared basis; we look forward to the day when these arrangements can be extended to larger applications satellites and astronaut crews.

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(Huebner) JK

March 4, 1970

Whitehead lap

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#### A Continuing Process

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-3-

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1. We should continue to <u>explore the Moon</u>. Future Apollo manned lunar landings will be spaced so as to maximize our scientific return from each mission, always providing, of course, for the safety of those who undertake these ventures. Our decisions about manned and unmanned lunar voyages beyond the Apollo program will be based on the results of these missions.

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-7-

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## # # # # # # #

## March 5, 1970

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Span

To: Marge

From: Tom

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aji.

This was inserted in the paragraph on international cooperation.

If Mr. Flanigan has any troubles, blow the whistle fast!!!

Attachment

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cc: Mr. Whitehead Central Files

CTWhitehead:ed

Unmanned scientific payloads from other nations already make use of our space launch capability on a cost-shared basis; we look forward to the day when these arrangements can be extended to larger applications satellites and astronaut crews.

14

Space

# Thursday 3/5/70

4:30 Mr. Whitehead asked us to call Shapley's office and tell him it is highly unlikely that we will have anything for them before tomorrow.

Space

Thursday 3/5/70

4:10 Judy called John Campbell's office and asked them to send us 6 copies of the Space Message when it's final.

Tom wants them to go to:

NASA Space Council Vice President OST TW 1 extra

Space

Wednesday 3/4/70

7:20 Mr. Keogh's secretary brought this copy of the space message to you.

Copies have gone to:

Cole Campbell Huebner Harlow

Space

### March 4, 1970

At a la la fair and

To: Mr. Flanigan

From: Tom Whitehead

Cy of draft of proposed space statement.

March 6, 1970

NASA

To: Bill Timmons

From

Tom Whitehead

NASA assures me these requests can be taken care of although it is highly unlikely that they will be able to supply an astronaut who has been to the moon; i.e., they will provide one of the astronauts who has not yet flown. I will let you know as soon as I can who they have lined up so you can pass the word on to Staggers and Wyatt.

#### Attachments

cc: Mr. Flanigan Mr. Whitehead Cehtral Files

Mr. Harlow CTWhitehead:ed

March 6, 1970

NASA

To: Willie Shapley

From: Tom Whitehead

These two particular requests for astronauts are ones we feel strongly we would like to have honored. Would you please take care of this and get back as soon as possible.

Attachmente

cc: Mr. Flanigan Mr. Harlow Mr. Timmons Central Files Mr. Whitehead

CTWhitehead:ed

#### Thursday 3/5/70

100

Marge called. Mr. Flanigan would like you to call Julian Scheer, NASA, in reference to 2 requests for appearances of the astronauts which he would like to have honored.

(1) Chairman Harley Staggers would like one of the astronauts to speak at Keyser, West Virginia, at a function honoring a soldier killed in the service who received the Congressional Medal of Hnnor. Bryce Harlow asked if we could do something and then let Bill Timmons know the outcome.

(2) Congressman Wendell Wyatt would like one of the astronauts to be Grand Marshall at a Rose Parade in Portland, Oregon, on June 13th. This Rose Parade is almost comparable to the one at Pasadena, California.

Marge is sending over a memo on this.

Return w/

Scheer -- 13-35302

6/13 Rose Parade Portland, Oregon Grand Marshall Astronaut Wendell Wyatt.

THE WHITE HOUSE WASHINGTON Judy The 2 matters I told you about on the phone. Marge

#### MEMORANDUM

THE WHITE HOUSE WASHINGTON

March 3, 1970

Tom Id send fine cold Scheen

TO: Peter Flanigan

FROM: Bryce Harlow

Chairman Harley Staggers pleads for an astronaut to speak at an April 27 function in Keyser, West Virginia, honoring a soldier who was killed in the service and received the Congressional Medal of Honor.

Staggers said that the astronaut could jet his way to Cumberland, Keyser being some twenty minutes away from there, and could be back very shortly thereafter. He tried through George Miller, Chairman of the House Space Committee, and failed. This is extremely important to Staggers, and he comes to us as a final appeal.

I recommend that we try to do this for Staggers. Not only is he Chairman of the House Interstate Committee, but he is also a great sentimentalist. If we came through on this, it would be a very valuable investment.

Can you, with your inestimable clout, pursue this with NASA -- then let Bill Timmons know the outcome so that he can tell the good Congressman?

cc: Bill Timmons

(Huebner)

March 4, 1970

PROPOSED STATEMENT ON THE FUTURE OF THE U.S. SPACE PROGRAM

Over the last decade, the principle goal of our nation's space program has been the Moon. By the end of that decade men from our planet had traveled to the Moon on four occasions and twice they had walked on its surface. With these unforgetable 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 objective 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. Bv 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 in February of 1969 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. The budget recommendations which I have sent to the Congress for Fiscal Year 1971 are based on these conclusions.

. 2 -

#### Three General Purposes

In my judgment, three general purposes should guide our space program.

One purpose 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 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.

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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 better weather forecasts to new management techniques and 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.

A Continuing Process

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, those 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 activities will be a part of our lives for the rest of time. We must think of 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 time-table. Our space program should not be planned in a rigid manner, decade by decade, but on a continuing flexible basis, one which takes into account our changing needs and expanding knowledge. We must also realize that space expenditures must take their proper place within a rigorous system of national priorities. 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. The space budget which I have sent to Congress for Fiscal Year 1971 is lower than the budget for Fiscal Year 1970, a condition which reflects the fiscal constraints under which we presently operate and the competing demands of other programs. I am confident, however, that the funding I have proposed will allow our space program to make steady and impressive progress.

### Six Specific Objectives

With these general considerations in mind, I have concluded that our space program should work toward the following specific objectives:

1. We should continue to <u>explore the Moon</u>. Future Apollo manned lunar landings will be spaced so as to maximize our scientific return from each mission, always providing, of course, for the safety of those who undertake these ventures. Our decisions about manned and unmanned lunar voyages beyond the Apollo program will be based on the results of these missions.

2. We should move ahead with bold <u>exploration of the planets and</u> <u>the universe</u>. In the next few years, scientific satellites of many types will be launched into Earth orbit to bring us new information about the universe, the solar system, and even our own planet. During the next dec we will also launch unmanned spacecraft to all the planets of our solar system. Work is already underway on an unmanned spacecraft which will be sent to land on Mars and to investigate its surface. In the late 1970's, the "Grand Tour" missions will study the mysterious outer planets of the solar system -- Jupiter, Saturn, Uranus, Neptune, and Pluto. The positions of the planets at that time will give us a unique opportunity to launch missions which can visit several of them on a single "Grand Tour" flight of over three billion miles. Preparations for this program will begin in 1972.

There is one other goal we should keep in mind as we plan the future of space exploration. As a part of this program we should, I believe, eventually send men to explore the planet Mars.

3. We should work to reduce substantially the cost of space operation Our present rocket technology will provide a reliable launch capability for some time. But as we build for the longer-range future, we must devise less costly and less complicated ways of transporting payloads into space. Such a transport system -- designed so that it will be suitable for a wide range of scientific, defense and commercial uses -- can help us realize important economies in all aspectsof our space program. We are currently examining in more detail the feasibility of re-usable space shuttles as one way of achieving this objective.

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

We have much to learn about man's capability in space. On the basis of our experience with the XSS, we will decide when and how to develop longer-lived space stations. Flexible, long-lived space station modules could provide a multi-purpse space platform for the longer-range future and ultimately become a building block for manned interplanetary travel. 5. We should <u>hasten and expand the practical applications of space</u> <u>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 meteorology, communications, navigation, air traffic control, education and national defense. The very act of reaching out to new planets 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 in enjoying the benefits. The Administrator of NASA has recently met with the space authorities of Western Europe, Canada, Japan, and Australia in an effort to find ways in which they -- and other nations -- can increase their participation in our space program. 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.

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 from the planet Earth. It is my hope that as we go forward with our space program, 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.

# # #

February 28, 1970

To: James Keogh

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From: Tom Whitehead

I have not yet had a chance to read this but will do so over the weekend and discuss it with Lee Huebner on Monday.

Memo Shapley/Whitehead enclosing suggested revisions in draft of the President's statement on space.

CTWhitehead:jm



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

but into the observer

February 26, 1970

OFFICE OF THE ADMINISTRATOR

MEMORANDUM FOR: Mr. Clay T. Whitehead The White House

Enclosed are our suggested revisions in the draft of the President's statement on space that was agreed to last January.

The two principal suggestions are new paragraphs on (1) international cooperation, including an announcement that we will invite the participation of foreign astronauts and (2) the "Grand Tour" planetary missions later in the decade as the most interesting new missions included in the Space Task Group Report but not previously announced as a part of the program. In addition, we have suggested language clarifying the paragraph on the Apollo Applications orbital workshop and giving it its new name of "SKYLAB," updated the statement where necessary to reflect the fact it now follows rather than precedes the submission of the Budget, and suggested a number of miscellaneous editorial changes. For your convenience, there is attached a list of the changes with a brief explanation of each.

We understand that you will staff this through Jim Keogh's shop as indicated in Mr. Flanigan's letter to Dr. Paine of January 28. Our most recent information is that the statement is now scheduled for release on Saturday, March 7. Please let us know if there is to be any change in this date.

We will be glad to discuss these suggestions or other aspects of the statement whenever you wish. I assume we will have an opportunity to comment on the final draft prior to its release.

Nou About

₩illis H. Shapley Associate Deputy Administrator

Enclosures

# NASA Recommended Changes in Draft of Jan. 8, 1970

- Page 2 <u>Insert "A</u>" at end of first paragraph. This makes clear the relation of the statement to the Budget message.
- Pages 2 & 3 Eliminate the words "first," "second," and "third" to avoid implying an order of priority among the three "general purposes" discussed.
- Page 3 <u>Insert "B"</u>. Language expanding on the relevance of the scientific knowledge from space. This seems more appropriate than the material which now appears at the point.
- Page 3 Last paragraph: editorial changes to sharpen examples.
- Page 4 "work in space" seems better than "space travel."
- Page 4 <u>Insert "C"</u> adds suggested language supporting the importance of continued lunar exploration.
- Page 4 Last line: "will" is better since President has decided this in his Budget.
- Page 5 "Work is underway on . . ." better characterizes the status of the Viking project which was approved by Congress last year and is now under contract.
- Page 5 <u>Insert "D"</u>. In accordance with Dr. Paine's White House discussions, this highlights the "Grand Tour" missions later in the decade as a specific objective which the President can now announce.
- Page 5 Par. 3: We prefer "use of space" to "space operations" as more accurate and "rocket" to "missile" as less warlike sounding.
- Page 6 First paragraph: Wording changes to clarify status of AAP Workshop project (well along) and to refer to it by its new name: "SKYLAB".

- Page 6 Second paragraph: Insertion of "and develop" is necessary to avoid implication that design will "begin" all through the decade. 1971 Budget included funds for beginning design. This change is essential and was agreed to in Shapley-Whithead conversation prior to deferral of statement in January.
- Page 7 Paragraph 6: Underline "international cooperation" for consistency with other paragraphs. Insert "In the long run . . ." as a necessary qualification to the point being made.
- Page 7 <u>Insert "E</u>" Adds a new paragraph to item 6 to place more emphasis on international aspects as agreed at Dr. Paine's White House meeting. Includes first official U.S. announcement on foreign astronauts. Foreign astronaut participation is linked to space shuttle-space station projects as the first practical opportunity for foreign astronauts in the current U.S. program. Foreign astronaut participation is also tied to "broad involvement" and "contribution" by the foreign nations to the space shuttle-space station programs by the foreign nations so as to be consistent with our attempt to secure meaningful participation by the other countries. Reference to foreign astronauts as "candidates" and to their participation in U.S. Training programs are needed to make it clear that flight opportunities cannot be guaranteed in advance to specific foreign (or U.S.) astronauts and that the astronauts will have to be trained to U.S. standards.
- Pages 7 & 8 Paragraph starting "But we must also . . ." could now be omitted in view of the fact that the Budget has now been submitted and because it repeats points made earlier on Page 1 and Page 4.
(Huebner) JK

January 8, 1970

# PROPOSED STATEMENT ON THE FUTURE OF THE U. S. SPACE PROGRAM

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. (Insert "A")

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.

Another and related

(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

(Insert "B") before./ (The people who perform this important work are not only-

those-who walk-in-space suits-while-millions-watch-or-those-who-

kanch powerful rockets-in-a-barst-of flame -- Much of -our-scientific

Suggest Deletion

progress-comes in laboratories and offices, where dedicated;

inquiring-men-and-women-deciphor-new-facts-and-add-them-to-old

ones in-ways which reveal new truths -- The abilities of these

scientists-constitute one-of our most unluable mational resources-

I boliovo that our opace-program should help these people in their

work-and-should be attentive-to-their ouggestions)

equal importance

A third goal of the United States space effort) is that of practi-

cal application -- turning the lessons we learn in space to the

early benefit of life on Earth. Examples of such lessons are manithe ability to send color television across the oceans, fold; they range from new incdical insights to (new incthods of and better weather forecasts to and 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 com-

munity.

.-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 merely 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.

work in

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 (m) 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:

(Insert "C") 1. We should continue to <u>explore the Moon</u>./ Future Apollo will manned lunar landings (should) be spaced so as to maximize our

-4-

with the warden warden and the

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

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2. We should move ahead with bold explorations of the planets, building on our impressive successes with ummanned spacecraft. During the next decade, we plan to launch unmanned spacecraft which will observe the planets of our solar system and explore the Work is underway on vast space between them. (We-also-plan-to-send)an unmanned spacecraft to land on the planet Mars and investigate its surface. Scientific satellites of many types will be launched into Earth orbit to bring us new information about the Earth, the solar system, and the even more distant universe.

(Insert "D") We should work to reduce substantially the cost of space. 3. (porations) 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 rocket 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 cconomics 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.

the use of

4. We should seek to <u>extend man's capability to live and work</u> An which can serve as <u>in space</u>. (The) Experimental Space Station, a large orbiting workis are building shop, (can-be) an important part of this effort. We (plan-to-build) now named "SKYLAB"-and-launch) such a station -- using systems originally developed for

the Apollo program -- and (should begin, during the next few years, will be ready

to use it for manned operational missions. We expect that men

will be working in space for months at a time during the 1970s. "SKYLAB"

Building on our experience with (the Experimental Space Station, and develop 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, I believe that 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 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 <u>international cooperation</u> 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 In the long run, 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

\*Suggest omission of this paragraph.

(Insert "E")

-7-

find a new balance for space in our national priorities. The space have sent budget I(will-oond) to Congress for Fiscal Year 1971(will) therefore (be) A 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.

# # # # #

-8-

## Insert "A"

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(Add at end of first par. on p. 2)

My FY 1971 Budget recommendations now before Congress are based on these conclusions and support the first step in the long range plan I believe we should follow in the decade of the Seventies and beyond.



Space

Thursday 2/26/70

MEETING 2/27/70 3:00 p.m.

# 12:05 We have scheduled the meeting with

George Hage, Corporate Vice President, Boeing Gene Bradley, Space Shuttle Program, Boeing Dr. F. C. E. Oder, Vice President, Lockheed

for 3 o'clock tomorrow afternoon (2/27). They had wanted to meet with Mr. Flanigan and he asked us to handle the meeting. However, Mr. Hage wants very much to meet Mr. Flanigan so we have advised Mr. Flanigan's office of the time of the meeting and will check tomorrow to see if Mr. Flanigan would be available to meet with them for a couple of minutes after your meeting.

Subject of the meeting. Space transportation system

We have invited Mr. Kriegsman to the meeting.

#### THE WHITE HOUSE

WASHINGTON

#### February 10, 1970

#### MEMORANDUM FOR HERB KLEIN

From: Lee Huebner

Mr. Keogh has asked me to apprise you of the progress on the President's Space Message. Dr. Paine is now in London but Mr. Farley of NASA reports that they are preparing a new draft of the message which will be to us by early next week. The scheduled release date apparently is February 28.

Keogh was enthusiastic about casting the message as a call for more international cooperation in space. If this were the central theme, the message would take on a novel and exciting quality which the present draft is lacking. Farley indicates that NASA's drafters are placing "greater emphasis" on internationalization -- announcing an "expanded" effort in this area. In the past, we cooperated with European countries, for example, in smaller projects, providing rockets while they provided the spacecraft and then sharing in the data. In the future, we will bring other nations into major projects such as the shuttle and space station. Farley also noted that Paine will be on a trip to Japan and Australia at the time the President's message is released.

On the whole, Farley's discussion of the international dimension sounded a bit less dramatic than what Mr. Keogh envisioned -- but it will be hard to judge what can and should be said in this regard before we see NASA's revision. Farley indicated that Paine had also stayed away from discussing the "grand tour" so that the President could play that up if he wanted to.

<u>Caution</u>: Tom Whitehead, who has handled this all along for Flanigan, is very skeptical about over-selling internationalization. He believes that there has been little substantive progress in this field, that it is wrought with pitfalls, and that the President could easily overpromise without being able to deliver. He suggests NASA is engaging in some wishful thinking, trying to create new realities through public relations even though the tough questions in the area have not yet been hammered out.

I have attached a summary of the most recent draft of the Space Message as done by our shop in early January. The central theme of the message as it now stands is "putting space in perspective."

Space

Summary of Proposed Statement On U. S. Space Program Draft of January 8, 1970

#### I. Theme

Our accomplishments last year helped us gain a new perspective on ourselves and our world; they should also help us gain a new perspective on our space program. Without allowing it to stagnate, we should not try to do everything at once. We should recognize problems which have a higher priority and strive for a balanced, reasonable approach to space. "Space expenditures must take their proper place within a rigorous system of national priorities."

#### II. Discussion of Three General Guiding Principles

A. Exploration;

B. Scientific Knowledge; and

C. Practical Application.

#### III. Specific Objectives

A. Exploring the Moon.

B. Exploring the planets.
(Grand Tour, unmanned Martian landing, earth orbitting satellites -- but no hard dates given.)

C. Reducing costs. (Re-usuable space shuttle.)

D. Extending man's ability to live and work in space. (Experimental Space Station -- and, later, a Space Station Module. Eventually, manued exploration of Mars.) Expanding practical applications. (Earth resources satellites, etc.)

F. Greater international cooperation. (Using quotation from UN speech.)

#### IV. Conclusion

E.

Let us act so that we can be proud both of the planet from which we come and of our ability to travel beyond it.

Space

January 28, 1970

#### MEMORANDUM FOR DR. PAINE

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The tentative date for the Space Statement is now Saturday, February 28. This is within the time frame that you suggested being the latter part of February or the early part of March.

If this date is not appropriate would you please let me know. Please be sure that the changes that you think should be incorporated in the statement are discussed with us early enough so that we can staff them through Jim Keogh's shop. I'd appreciate your sending your ideas directly to Tom Whitehead.

> Peter M. Flanigan Assistant to the President

Ubcc: Tom Whitehead

NASA

Wednesday 1/21/70

Hazel in Mr. Flanigan's office has just had a call 5:05 from Dr. Paine's office.

> They want to know if Dr. Paine should be here ahead of time tomorrow -- appointment with the President is at 4 o'clock.

They can't get to Mr. Flanigan right away but thought you might know whether Mr. Flanigan wanted him to be here early.

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In answer to our question of what Paine was seeing the President about, Hazel sent the attached.



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

January 15, 1970

IN REPLY REFER TO:

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

Dear Mr. President:

John Ehrlichman and Bob Mayo have advised me that you have found it necessary to make further reductions in the FY 1971 budget estimates of the Government and that a figure of \$200 million in outlays has been suggested as a further reduction that NASA might be required to make.

As you know, NASA has already accepted drastic reductions in the FY 1971 budget process, resulting in our lowest budget in eight years, with a reduction of 50,000 people out of our current work force of 190,000. At the same time, we appreciate the current fiscal pressures and will do everything within our power to reduce expenditures consistent with a minimal space program. By making a series of reductions across the board, including reductions of the NERVA nuclear rocket program, advanced research and technology items, applications programs, and other areas, we can, and will if absolutely necessary, effect a further reduction of \$51 million in FY 1971 budget authority and outlays. Further reductions in the space program to approach the suggested \$200 million would require actions which you have specifically instructed me you do not wish us to take -- actions which would cripple the space goals of your Administration and dissipate the Apollo team. This would mean terminating lunar missions after Apollo 16 in 1971 and all space flight by U.S. astronauts at the end of 1972. Such a decision would mean the immediate closure of major facilities in California, Louisiana, Mississippi, and Alabama for an additional reduction of 15,000 people. It would also make it impossible, in my judgment, for you to make a strong statement in support of a vigorous and forwardlooking space program.

If it is now necessary to consider making this additional reduction, I feel that I must discuss the problems involved with you personally so that you and I will have a clear common understanding of all of the implications. I am, of course, prepared to meet with you at Camp David or in Washington at any time that you wish.

Respectfully yours,

T. O. Paine Administrator

cc: Mr. Robert P. Mayo Mr. John D. Ehrlichman Mr. Peter M. Flanigan

Keep Freedom in Your Future With U.S. Savings Bonds

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Space

## 1/14/70

To: John Campbell

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From: Tom Whitehead

I have prepared this in two parts so that you can provide the President with the very short summary or a somewhat longer exposition.

# Summary of Proposed Space Statement

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The primary objectives of the proposed space statement are:

(1) placing space in the role of a continuing activity that must be fitted into a reasonable place among all other national priorities;

(2) setting forth six specific objectives for our future in space and describing major associated program decisions;

(3) identifying the President with future accomplishments in space.

Three goals for space are set out as: exploration, science, and applications.

The six objectives and program decisions are:

(1) Explore the moon: Apollo landings stretched out to increase scientific value and spread existing hardware further into the seventies.

(2) Explore the planets: "Grand Tour" to make scientific observations of all the outer planets; ". . . we will eventually send men to explore the planet Mars."

(3) <u>Reduce the cost of space operations</u>: Use present rocket technology for now; later development of a reusable space shuttle.

(4) Extend man's capability in space: Build an Experimental Space Station for 1972 launch; later on, begin to design the longerlived space station.

(5) Expand practical applications: Earth resources satellites plus continued programs in many other fields.

(6) Encourage greater international cooperation in space.

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Tuesday 1/13/70

### 2:10 Checked with John Campbell to see if there was anything urgent he needed to discuss with you.

He would like to have a summary of the Space Report -just 10 lines or so that they can put on the President's desk tomorrow morning. Would like to have it today.

FOR RELEASE 9:00 a.m. EST Tuesday, Jan. 13, 1970

#### <u>Statement by Dr. Thomas O. Paine</u> Administrator, National Aeronautics and Space Administration

An exciting and vigorous space program has a continuing place in our national priorities. However, it is with full and sympathetic recognition of the many other pressing problems we face here on earth that I am outlining for you today at the President a more austere U.S. space program for the 1970's. We accept the fact that NASA must find new ways to economize, stretch our programs and reduce our operational base to move forward under an austere budget. This is the management challenge which we in NASA face, and we are confident that we can meet the challenge. NASA will press forward in 1971 at a reduced level, but we have developed what I believe to be an excellent new space program for the 1970's to lay before the Congress. Our confidence is based on the strong base from which we proceed. While we will be reducing our effort, we will not dissipate the strong teams that sent men to explore the moon or instruments to observe the planets.

America's space achievements in the 1960's have rightly raised hopes that this country and all mankind can effectively overcome pressing problems of society here on earth. The space program should inspire bolder solutions and help suggest new approaches. Our earthly problems are indeed many and urgent, but a strong space program will help solve them. Social advance is, however, far more complex than landing a man on the moon. But both require national will, strong leadership, and the application of adequate resources of money and competent, dedicated people.

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Today I wish to announce changes in NASA's present programs and discuss our future plans.

The President 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 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 recommended "that this Nation accept the basic

goal of a balanced manned and unmanned space program conducted for the

benefit of all mankind." It recommended 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."

The President accepts the recommendations of the Space Task Group as our basic space plan for the 1970's. However, he must balance all of our national needs against available resources in the 1971 budget. We are faced with severe fiscal constraints and cannot afford to fund our mational space effort on the same level in 1971 as in the past when we were working intensively to accomplish the first lunar landing. Therefore, the President will send to Congress a space budget for Fiscal Year 1971 which will be the space agency's lowest in seven years. Within this budget, however, we have fashioned a sound future-oriented program.

In support of this new budget level and new program for Fiscal Year 1971, today I am taking the following actions:

1. We will effect necessary economies in the NASA institutional

base, NASA's support on university campuses, and our contractor activities.

We have announced the closing of our Electronics Research Center in Cambridge,

Massachusetts, and we will be making additional reduction in other parts of NASA. Under our very austere 1971 budget we estimate that the total number of Americans working in NASA programs will decline from 190,000 at the end of 1970 to 140,000 at the end of 1971. This is far below our peak

2. We will suspend production of the Saturn V launch vehicle after the completion of Saturn V 515 for an indefinite period.

3. We will stretch-out the Apollo lunar missions to six-month launch intervals, and defer lunar expeditions during the AAP space station flights in 1972.

4. We will postpone the launch of the Viking/Mars unmanned lander from 1973 to the next Mars opportunity in 1975.

These are major changes in our current programs, but they do not reflect a lessening interest in or support of our long term space program

by the President.

He and I great that We must see our space effort not only as an adventure of today but also as a sound investment in tomorrow. We must

realize that space travel has become a part of our lives for the rest of

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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.

We are fortunate that great opportunities lie ahead of us in space, but we obviously cannot seize upon all of them simultaneously with all the capability and vigor at hand. Space must take its proper place in our national priorities.

We can and we will, therefore, fit our space program into the required budget constraints, and accept the challenge of restructuring the program without losing our forward momentum. Let me describe the specific thrusts we have selected for a vigorous and economical U.S. space effort in the

Seventies. There are seven principal areas:

1. We will continue to explore the moon. We will seek to maximize the scientific returns and increase our capabilities for lunar surface Beginning with exploration as we gain experience. A Apollo 16 we will utilize jeep-like electric vehicles on the moon to enable our astronauts to explore exciting new regions and formations unlike those previously reached. We plan to carry out a total of nine Apollo expeditions to the moon through Apollo 19. The Saturn V previously scheduled for the twentieth Apollo flight will be used to launch our first experimental space station into earth orbit in 1972. -2. We will move ahead with bold unmanned exploration of the planets. During the decade of the 1970's we hope to launch an automated spacecraft to observe the surface of every planet in the solar system and to explore the vast spaces between them. We will orbit Mars with two unmanned spacecraft in 1971, send our first probe to Jupiter in 1972, send a spacecraft past Venus and Mercury in 1973, and launch the unmanned Viking lander to Mars in 1975. In the latter half of the decade we plan to launch a "grand" tour" of the outer planets, taking advantage of the unique alignment of the Flanets which will not occur again for 179 years. We will also launch new

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5. 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. The 1971 budget will allow us to continue work on the joint NASA-AEC NERVA project.

6. We will <u>hasten practical earth applications</u> of space technology. The development of new earth resource satellite instruments 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 will be helping man improve the quality of life in his home planet earth.

7. We will <u>expand international cooperation in space</u>. In his address to the United Nations in September, the President 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." He believes 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, although economical, 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 in spite of reduced funding. I want to emphasize that the austere level of expenditures still permits our space effort to make steady progress in a manner which is consistent with meeting other important national objectives.

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As the space program enters the new decade of the 1970's, we are conscious of the fact that man is moving forward into a new historic era. For the first time, terrestrial life has reached beyond its home planet, man can now think of himself as <u>from</u> the planet earth. I believe that the new U.S. space program I have described within our national system of priorities 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.



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

OFFICE OF THE ADMINISTRATOR

January 12, 1970

Recen'd 6 p. m.

1/12/70

MEMORANDUM FOR: Honorable Peter M. Flanigan Assistant to the President

In accordance with our conversations this morning, here is the statement I propose to make at a press conference at 9:00 a.m. tomorrow. We will release it to the Hill simultaneously. It follows closely the earlier drafts you have seen. Please advise Julian Scheer immediately of any changes you propose, since we cannot further delay a release without incurring more and more unconstructive press speculation and comment of the kind you saw on the front page of yesterday's Washington Post.

T. O. Paine Administrator

Enclosure



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# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



OFFICE OF THE ADMINISTRATOR

9 Jan. 70



If the President prefers to make no statement on space now, here is an alternative that will still let NASA account for its actions. He could release The attached short statement, while I give the longer statement to the press. Both are attached. Or I could simply, release The long statement. We have concelled our Viking review scheduled for Monday, so the word is out, and we should issue some statement. The Phole dent issue the release I sent you yesterday. you

#### Statement by the President

Just six months ago two explorers from our planet Earth set foot on the surface of the Moon and unveiled a plaque which read: "We came in Peace for all Mankind."

It was a proud moment not only in our own history but in the history of all peoples, a moment which we shared with pride and humility.

In the months that have passed, I have pondered the meaning of this event. It appears clear to me that as we move forward in space we will draw closer to unlocking the secrets of the universe, of man's past, and of his future destiny. This nation will continue to lead in this endeavor.

The lunar landing has also inspired us to look much more thoughtfully at this planet. There are untold future values to be developed here on earth.

As President it is my responsibility to strive for a balance between the long-range opportunities which lie beyond earth and the immediate problems which lie within our national boundaries. I have consulted a broad range of expertise to help me reach the final decisions.

This Administration's 1971 Budget will be its first step toward better balancing our national priorities. One result will be a careful reshaping of our space effort--a reshaping to maximize returns, take advantage of opportunities, yet keep in perspective all we have to do at home. We have reached some basic conclusions about the future of the space program and today I have asked NASA's Administrator, Dr. Thomas O. Paine, to begin management actions which will lead the way for an economical but exciting and forward-looking U.S. space effort in the Seventies.

#### Statement of Dr. Paine

The space program has shown what this country can do when national will, strong leadership, and adequate resources are applied vigorously. America's space achievements have rightly raised hopes that this country and all mankind can effectively overcome pressing problems of society here on earth.

Our earthly problems are indeed many and urgent. Many are far more complex than landing a man on the moon. Their solution also requires national will, strong leadership, and the application of adequate resources.

It is with full and sympathetic recognition of the many other pressing problems we face here on earth that I am outlining for you today, at the President's request, the position of the Administration on the future of our space program. An exciting and vigorous space program has a continuing place in our national priorities. At the same time we must find new ways to economize, stretch our programs and reduce our operational base to move forward in a more austere fashion. We have laid our plans accordingly. We will press forward at a reduced level in 1971, but we have developed what I believe to be an excellent program to lay before the Congress.

Let me begin by placing our future plans in perspective.

Just thirteen months ago, 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.

At the first Lunar Science Conference last week, scientists were described as "almost bursting with excitement and enthusiasm" as they examined the lunar samples from Apollo 11 which are "rolling back the curtain of history of our solar system and our own planet."

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 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, but that we did not overlook the other pressing requirements of our society. And history should record that we displayed the required leadership, selected the correct course, and set the right pace. This is a major responsibility to the future which this Administration accepts.

The President 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 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."

The President accepts the basic recommendations However he must of the Space Task Group, <u>how we have must</u> our national needs against of resources. We are faced with severe fiscal constraints and cannot afford <u>in 1971</u> to fund our national space effort on the same level as in the past.

Therefore, the President will send to Congress a space budget for Fiscal Year 1971 which will be the space agency's lowest in seven years.

In support of this new budget level for Fiscal Year 1971, today I am taking the following actions:

1. We will continue to reduce the NASA institutional base, our support on university campuses and our contractor support. We have announced the closing of the Electronics Research Center in Cambridge, Massachusetts, and we will be examining other parts of the NASA system for additional reductions. Under the very austere budget the President will send forward, the total number of Americans working in the National Aeronautics and Space Administration programs will be reduced from 190,000 to 140,000.

2. We will suspend production of the Saturn V launch vehicle after the completion of Saturn V 515.

 We will stretch-out the Apollo lunar missions to six month launch centers.

4. We will delay the launch of the Viking/Mars lander from 1973 to 1975.

These are major changes in our program, but they do not reflect a lessening interest in or support of our efforts by the President. In my discussions with him, the President has emphasized that three major purposes 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</u> <u>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 this week 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 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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We are fortunate that great opportunities lie ahead of us, but it is obvious that it is not only not possible but it would not be wise to seize upon each of them with all the capability and vigor at hand.

We can and we will reshape our space program along more modest lines and move ahead with a determined start and begin to prepare the way.

Whan then of the future? What does the future hold for this nation in space? Where will we go from here?

The thrust of our space effort in the Seventies will be:

1. We will continue to explore the moon.

We will seek to maximize the scientific returns and increase our capabilities for lunar surface exploration as we gain experience. Later we will even have a jeeplike, electric vehicle on the moon, to enable our astronauts to explore exciting new formations unlike those previously reached. We will fly Apollos through Apollo 19 and the previously scheduled Apollo 20 hardware will be used to fly our first, 2000 space station in earth orbit.

2. We will move ahead with bold <u>explorations of</u> <u>the planets</u>. During the next decade we launch an automated spacecraft to observe every planet in the solar system and to explore the vast space; between them. We will orbit Mars with unmanned spacecraft in 1971, send a spacecraft past Venus and Mercury in 1973, send our first probe to Jupiter in 1972, and launch the unmanned Viking lander to Mars in 1975. 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 reduce the cost of space operations A. 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 man 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. The FY 1971 budget will have funds to enable us to move ahead with the space shuttle.

4. We will <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. The 1971 budget submission will enable us to move ahead with work on the space station.

5. We will move ahead to provide <u>nuclear power for</u> <u>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.

6. We will <u>hasten practical earth applications</u> of space technology. The development of finew earth resources satellites-S-instruments 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 spacerelated 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 will <u>expand international cooperation in</u> <u>space</u>. In his address to the United Nations in September, the President 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." He believes 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 resits. 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 in spite of the reduced funding levels. We are proposing an austere 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.

As we enter the new decade of the 1970's, we are conscious of the fact that man is entering a new historic era in space. 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.

Friday 1/9/70

Space manage

12:00 Ken Cole advises that the date of the release of the Space Message is definitely indefinite. It won't be until after the State of the Union Message -possibly the first week of February. However, it will not be definite until some time next fifthe week.

## January 9, 1970

To: Lee Huebner

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From: Tom Whitehead

Copy of proposed draft Space Message from Paine to Flanigan NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



OFFICE OF THE ADMINISTRATOR

8 Jun. '70

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Peter:

Here's our proposed Judget of The President's statement on space. I think it balances economy and -forward vision. It can be quoted for years. Could we get it out as soon as Saturday?

Yen Paris



Suggested Draft: "A New Space Program--Challenge and Opportunity" January 8, 1970

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 but that we did not overlook the other pressing requirements of our society. 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.

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 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."

While I accept the basic recommendations of the Space Task Group, it is my responsibility as President to balance our national needs against our resources. We are faced with severe fiscal constraints and 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 bring into balance our national priorities.

Therefore, I will send to Congress a space budget for Fiscal Year 1971 which will be the space agency's lowest in seven years.

In my judgment, there are three purposes which 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</u> <u>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 this week and Mars within a few weeks last Summer than had been learned in all the centures 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 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 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.

We are fortunate that great opportunities lie ahead of us, but it is obvious that it is not only not possible but it would not be wise to seize upon each of them with all the capability and vigor at hand.

We can and we will reshape our space program along more modest lines and move ahead with a determined start and begin to prepare the way.

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</u> <u>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 1975. 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 reduce the cost of

space operations. 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 man and supplies to and from a space station. This space transport will be suitable also for a wide range of scientifc, defense and commercial uses.

4. We will move ahead to provide <u>nuclear power for</u> <u>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.

We must extend man's capability to live and work 5. 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 expand international cooperation in <u>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.

'As we enter the new decade of the 1970'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 from the planet Earth. I believe that the new space program I have described will make us proud both of the planet from which we come and of man's increasing ability to travel beyond it.

December 19, 1969

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Space

## MEMORANDUM FOR THE STAFF SECRETARY

**Comments on Proposed Presidential** Subject: Statement on Space Log No. 2530

I am in full agreement with the draft space statement, with the minor suggestions noted on the attached.

> Clay T. Whitehead Staff Assistant

Attachment

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

CTWhitehead:jm

DECLASSIFIED E.O. 13526, Sec. 3.3h By MW, NARA, Date 11/24

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Comments on Proposed Presidential Statement on Space

- Page 4, line 8: Change to "During the next decade we will launch spacecraft..." since several spacecraft, not just one, will be involved.
- 2. Page 5, line 1: Add "---both manned and unmanned." for clarity and to please NASA.
- 3. Page 5, lines 8 and 9: Change to "provide a space platform for the longer-range future." for clarity and to avoid any interpretation that the President is committing himself to early development of this very expensive system.
- Page 5, line 12: Change to "We should expand..." for consistency.
- 5. Page 5, lines 17 and 18: Change to "...space-related technology in a wide range of fields such as..." for more scope.
- 6. Page 6, 4 lines from bottom: Change to "... our planet; for the rest of time, " to carry out the theme set in the introduction.

### CONFIDENTIAL

#### THE WHITE HOUSE

WASHINGTON

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### ACTION MEMORANDUM

Date: Thursday, December 18, 1969 Vice President Agnew FOR ACTION: Peter Flanigan Thomas Paine Tom Whitehead Dr. DuBridge Dir. Mayo Herb Klein Bill Anders FROM THE STAFF SECRETARY

DUE: Date: Monday, December 22, 1969 Time: 9:00 A.M.

SUBJECT: Proposed Presidential statement on space.

1. 1

ACTION REQUESTED:

----- For Necessary Action

\_\_\_\_ For Your Recommendations

\_ Prepare Agenda and Brief

X For Your Comments

\_\_\_\_ Draft Remarks

Draft Reply

REMARKS:

#### CONFIDENTIAL

PLEASE ATTACH THIS COPY TO MATERIAL SUBMIT

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

K.R. COLE, JR.

(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

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. With 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 these who watch or launch powerful rockets in a burst of flame. Much watch or launch powerful rockets in a burst of flame. Meet of our scientific progress comes in laboratories and offices, where countless duicted and is a burst of our 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.

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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

-2-

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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question: "Where do we go from here?"

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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 alm to and the solar system. During the next decade we will launch H spacemake scientific observations of craft to observe every planet and to explore the vast space between for A73 launch to land on the format In 1973 them. We plan to land an unmanned spacecraft on Mars in 1973. & effetter observe the surface of our neighbor 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 informaout the universe beyond. [continuing of part mining free faither for the cost of space faunches. Our present tion about the universe beyond. 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, a rocket that can be fired, returned to earth, and used again for, later, launchings. This space launching capacity will be snifable for a wide disignato accommodate

range of scientific, defense, and commercial uses.

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We should develop an extended space capability for man -first in Earth orbit and later in space beyond. We will launch an Ex-systeme any 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 tonger-range space platform. Such a Station also will serve as a building block for We will manned interplanetary travel, an effort which will ultimately includesending men to explore the planet Marson a part faur - proce program. 5. We must expand earth applications of space technology. The development of in earth resources satellites -- 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 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 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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December 16, 1969

To: Marge

From: Eva

Mr. Whitehead has discussed the attached with Magruder and they are in basic agreement and think either Mr. Flanigan or Mr. Whitehead should call Tom Paine immediately so that he knows this is in the mill and doesn't hear from other sources.

Mr. Whitehead thinks this reflects the comments Mr. Flanigan had -- if not, ask him to call Tom as soon as possible.

Also, Tom wanted me to remind you that he is meeting with Governor Scranton at 6 o'clock and he needs to talk with Mr. Flanigan before that meeting -- on the phone is O.K.

> DECLASSIFIED E.O. 13526, Sec. 3.3h

By MW, NARA, Date 11/29



December 16, 1969

#### PLAN

### SPACE STATEMENT

#### Description:

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### Objective:

President:

Press Coverage:

### Follow-up:

A Presidential statement on the general planning for the next decade in space and general coverage of important FY 71 space decisions, Thursday, December 18th.

To state to the public the general direction of the future space program, to announce several Administration initiatives, and to associate the President with the future of the space program -- see attached briefing paper.

A short statement by the President for the press in the Roosevelt Room immediately prior to the release.

In addition to the President's statement, the Vice President should accompany the President. Drs. Paine, DuBridge and Flanigan should be available to answer questions. -- Ziegler

Strong endorsement from AIA, EIA, major contractors, etc. -- Colson

Have series of statements for Astronauts to use in public appearances. -- Klein

Have Astronauts and Dr. Paine on news shows after message. -- Klein

Advance briefing for space committees in Congress. Harlow

Have NASA give a special briefing for space writers. Do in both Washington and Houston. -- Klein

Have short speeches prepared for comment on Hill. -- Nofziger

Prepare for wide distribution information on the application of space technology to earth technology. Klein

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Preparation of a draft for the President's use in his 10-minute appearance. -- Keogh

#### DRAFT OUTLINE 12/12/69

# 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 major program goals and initiatives for the next decade in space:

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.

#### 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.

-3-

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

FOR:

TOM WHITEHEAD

FROM:

JEB MAGRUDER

Attached are three examples of our planning. If you could outline your plan in this form I would like to go over your ideas with you on Monday.

DECLASSIFIED E.O. 13526, Sec. 3.3h

Attached

By (hw, NARA, Date 11/29)/0

December 11, 1969

### PLAN

M. C. M. Star

### ANNUAL REPORT 1969

Description:

CONFIDENTIAL

A series of events and activities calculated to demonstrate and depict the accomplishments of the Nixon Administration in their first year of office.

To expose the public to an Administration interpretation of its successes and failures in 1969.

Live television broadcast with the President being interviewed by representatives from each of the networks. Duration, one hour. Questioning to be limited to subjects germain to 1969.

Arrange with networks for time and panel. --Ziegler

 Hold a press backgrounder in the White House on December 11th or 12th to discuss year-end accomplishments of the Administration. Select specific representatives of the press to attend. Utilize Kissinger on foreign affairs and Ehrlichman, Garment, and Harlow on domestic affairs. -- Ziegler/Klein

Develop a year-end report on the Administration's accomplishments. This will be in two forms: (a) a detailed report of approximately 25 pages for use by speakers, editors and columnists who want information in considerable depth; and (b) a brief hard-hitting summary of no more than six pages. -- Keogh

 Develop a briefing book for the President's live television broadcast with network commentators to cover their questions about failures as well as discussion of accomplishments. -- Keogh

Objective:

President:

Press Coverage:

Follow-up:

- Prepare several speeches or speech inserts or outlines for use by Administration spokesmen. -- Keogh/Klein
- Modify briefing book to serve as summary to be mailed to editors and commentators. --Keogh/Klein
- During period December 15th-30th, arrange National and local television appearances for key Cabinet members to discuss end of year summary. -- Klein
- During period December 15th-30th, develop regional and local television opportunities for sub-Cabinet level officials. -- Klein
- During period December 15th-30th, arrange National television appearances for key White House staff. -- Klein/Ziegler
- During period December 15th-30th, place a large number of White House staff and sub-Cabinet officers as speakers addressing various assemblies and forums. -- Klein/ Ziegler
- 10. Arrange to have wrap-up done by AP, UP, and news magazines. -- Klein
- Make special effort to get high level women and ethnic appointees speaking about the Administration from their point of view. --Klein/Brown
- Prepare a movie from available footage and illustrate the Administration in action. - Klein

CONFIDENTIAL

 Deliver facts kits to Republican Congressmen and encourage them to write and speak on the accomplishments of the Administration. Select key members and arrange speaking engagements for them. -- Nofziger/Klein/ Keogh

- 14. Create a press kit with photos and summaries of the "year in review" for the First Family, with the firsts of the social year included, by Wednesday. -- Stuart
- Mobilize the Republican Governors to promote the deeds of the Nixon Administration at the Republican Governors Conference, Hot Springs, Arkansas, December 11th-13th. -- Dent
- Deliver facts kits to all State party organizations. -- Dent
- Utilize the Vice President to press the more partisan accomplishments of the President and to explain the achievements with the inference that the "Democrats couldn't have done this". -- Blair
- Have year-end report included in a special issue of The Republican. -- Klein

Project Manager -- Magruder

-CONFIDENTIAL

CONFIDENTIAL

December 11, 1969

#### PLAN

# PRESIDENT'S TROOP WITHDRAWAL ANNOUNCEMENT

November 3rd speech.

Description:

The President will provide a report on Vietnam developments since his November 3rd speech and announce the next troop withdrawal increment of his Vietnamization program.

To capitalize on the support generated by the

Objectives:

To provide a direct Presidential report to the people on Vietnam developments since November 3rd -- both the bad news and the good.

To emphasize the President <u>does have a plan</u> which is working, and that his troop withdrawal decisions are based on thorough, methodical investigation and evaluation of all relevant factors (3 criteria, etc.).

To focus attention on the progress (Vietnamization and Pacification) being made by the South Vietnamese in assuming a larger share of the burden.

To reemphasize that it is the inflexibility and intransigence of the Communists which is blocking a negotiated settlement; that the President remains convinced that negotiations represent the quickest and best path to peace but lacking a willingness by the Communists to enter meaningful negotiations, he will continue to actively pursue the Vietnamization alternative.

#### President:

Press Coverage:

The President will deliver the statement from his Oval Office. Dr. Kissinger will give a 30 minute backgrounder for the press in the Roosevelt Room ahead of time. - Ziegler

10 minutes.

Follow-up:

#### Immediate:

Prepare material from statement for Hill distribution. - Nofziger

Have laudatory statements from Senators and Congressmen heralding President's decision and expressing confidence that announcement should dispel any doubts that the President is following a well thought out plan. - Nofziger

Arrange interviews by the networks with Secretary Laird which can be used on the evening news shows following a replay of the President's statement. - Klein

Schedule Secretary Laird on the TODAY Show the day after the statement. - Klein

Have South Vietnamese Ambassador Bui Diem appear on news shows to emphasize cooperative nature of Vietnamization Program and South Vietnamese resolve to assume that portion of the burden carried by the U.S. - Klein/Kissinger

#### Future:

Do special letter to Douglas Committee and members of Freedom Foundation group which recently visited Vietnam, enclosing statement and encouraging speeches and statements by members of groups, emphasizing their own eye-witness knowledge of progress being made in Vietnamization and pacification. - Colson

Have Dick Garbett run statement as feature in next issue of RNC's "Monday". - Klein

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Highlight change in Vietnam policy and situation after one year of RN leadership with news columnists, news magazines and editors. - Klein

Have Dr. Kissinger's office update Vietnam fact sheet (e.g., Situation on January 20, 1969/ Situation Today) for wide distribution on Hill. -Hodek

Project Managers - Hodek/Butterfield

- ADMINISTRATIVELY CONFIDENTIAL

### GAME PLAN

#### GOVERNORS CONFERENCE

#### Description:

Governors' Conference on December 3, 1969, including families, on narcotics and drugs. Collateral discussions with Governors on foreign affairs/domestic affairs generally.

To demonstrate great Presidential concern with problem of drug abuse and alert Governors and their families to the facts about drug abuse and the Administration's efforts to stop drug abuse.

25 minutes. (Hopefully adjusted to include all of morning session.)

Full coverage, plus press conference by Governor Chairman and GOP Governor Chairman. - Ziegler

#### Immediate:

- Have Justice Department develop speech outline to be made available to Administration spokesmen speaking prior to the Conference. -Krogh and Klein
- Have packet prepared for each Governor, including proposed press release on why the Governor is coming; a letter to the Governor from Governor Boe pointing out that this is a non-partisan meeting on a vital subject and urging their maximum support and publicity. -Boe and Klein
- Ask 25 women's editors from major newspapers to attend to write the family aspect of the event. - Klein
- 4. Ask 25 newspapers to send their most qualified reporters in this area. Klein

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**Objective:** 

President:

Press Coverage:

Follow-up:

- Make press conference facilities available for attending Governors after the session and urge them to make use of them. - Ziegler
- Make available to Governors and to Administration spokesmen immediately after the conference a summary of what was discussed and what was decided. - Klein
- Ask Department of Defense to make special effort to get wide showing of its film on narcotics between now and the end of the Congressional session. - Krogh
- 8. As part of pre-conference effort to point out the need for the conference, it is suggested that some hard news be supplied in the period between now and the conference, i.e., major narcotics raid, progress report on dealings with dope centers such as Turkey and Mexico, release of new statistics. - Krogh
- 9. Put remarks Linkletter made at White House regarding his daughter's death into pamphlet form and distribute at the conference. - Klein
- Advance speeches and information for Congressional use. - Nofziger
- Have cameras and pool coverage for morning session and Vice President's remarks. -Ziegler

#### Future:

- Have follow-up conference with youth after the Governors' Conference on narcotics. - Krogh and Garment
- Continue working with Linkletter on outside appearances. - Klein

 Have copies of morning session sent to editors, Congressmen, Senators, and Governors with a cover letter from the President. - Klein

4. Have outside groups concerned with narcotics mailed copy of morning session with copy of letter from President. - Colson

Project Manager - Krogh