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EXECUTIVE
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EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE SECRETARY

November 27, 1963

MEMORANDUM TO THE PRESIDENT

Subject: Chairman of the National Aeronautics and Space Council

The National Aeronautics and Space Act, as amended, designates the Vice President as Chairman of the Council and then goes on to state:

> "The President shall from time to time designate one of the members of the Council to preside over meetings of the Council during the absence, disability, or unavailability of the Chairman."

The above quoted provision was designed to take care of a temporary situation or temporary situations and then only for presiding over Council meetings. No provision is made for a Chairman other than the Vice President between meetings or for purposes other than presiding at meetings.

Until there is a Vice President or until the law is changed to provide for someone other than the Vice President to be Chairman, the President can instruct the Executive Secretary to carry out all functions of the Council except preside at meetings and designate for each Council meeting one of the members to preside. If such arrangement were made, it is suggested that added weight and prestige would be given the Executive Secretary if he were also designated as Special Assistant to the President for Space, or some such title.

If it is considered preferable to initiate an amendment to the Act to provide for the absence of a Vice President, several possibilities exist. Among them are:

(1) provide for one of the existing members to be Chairman. (This has the disadvantages of seeming to stress one area of the Council's responsibilities over others, providing a four-man Council, and overburdening individuals who already have large agencies to supervise.)

(2) provide for the head of another agency, not now represented on the Council, to be Chairman. (This selection would be difficult and once done would be somewhat awkward to undo once a Vice President has been elected.)

(3) provide that the Executive Secretary assume the duties of Chairman, only for such time and under such circumstances as there is no Vice President or in his temporary non-availability. (This would have merit, if the Executive Secretary were sufficiently qualified, and would bring no special agency interest or viewpoint to the assignment.)

E. C. Welsh

Name	
B. Morgan	9/14/66

EXECUTIVE

OS

"We must create a new world policy. Not just of 'open skies' -- but of open eyes, ears, and minds, for all peoples of the world.

"I call for the 'open curtain.' Let truth flow through it freely. Let ideas cleanse evil just as fresh air cleanses the poisoned, stagnant mass of a long-closed cavern.

"Mankind's only hope lies with men themselves. Let us insist that the case by submitted to the people of the world.

"a few years ago this would have been utterly impractical. But great events have recently stirred the world. We must seize the hopes they suggest. We must not be blinded to those hopes by rigid reflections of the past."

---June 8, 1957
"The Open Curtain"
United Jewish Appeal
New York City

"Within the short weeks since October 4, man has become master of horizons far beyond our imagination. We must respect this mastery. And from that respect, we must, more than ever, act to bring all men together in cooperative effort. The goals now within reach of the human race are too great to be divided as spoils, too great for the world to waste its efforts in a blind race between competitive nations. The conference table is more important now than ever it has been, and we should welcome to its chairs all men of all nations."

--January 7, 1958
Senate Democratic Conference

"We should, certainly, make provisions for inviting together the scientists of other nations to work in concert on projects to extend the frontiers of man and to find solutions to the troubles of this earth.

Our President, holding as he does the exteem of man throughout the world, has a real opportunity to lead in this labor boldly and forcefully and in the vigorous pursuit of peace he will find the nation undivided in his support.

unable to identify

Further, it would be appropriate and fitting for our nation to demonstrate its initiative before the United Nations by inviting all member nations to join in this adventure into outer space together."

--January 14, 1958
C.B.S. Affiliates
Shoreham Hotel, Washington

"To keep space as man has found it and to harvest the yield of peace which it promises, we of the United States see one course -- and only one --- which the nations of earth may intelligently pursue. That is the course of full and complete and immediate cooperation to make the exploration of outer space a joint adventure.

There is, I emphasize, no other course."

--November 17, 1958
United Nations, New York

Presentation at IKE'S request

EXECUTIVE

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January 18, 1964

Dear Charlie: A. HALLECK

You have indicated your great interest in locating a NASA electronics research center at Purdue University.

NASA has set up a committee to search out the best location for this project. They set up rigorous standards for their choice. The study is now complete and recommendations should follow shortly. It is my understanding that Dr. Frederick Hovde, President of Purdue, made an excellent presentation to this committee.

NASA has currently at Purdue some $623,000 in research grants and contracts. Thirty-three Indiana students are being financed in their doctoral studies in science (15 at Purdue, 10 at Indiana and 8 at Notre Dame). Also, there is located at Indiana University the first major pilot model project for technology utilization by industry.

Dr. Glenn Seaborg, Chairman of the Atomic Energy Commission, says that his agency is prepared to increase its program at Purdue in nuclear chemistry, biology, and medicine by about $100,000.

NASA anticipates increasing its research grants and contracts also.

I am considering calling in Herman Wells, former president of Indiana University, as an advisor to help determine the feasibility of further work among midwestern universities.

Dr. Seaborg is hopeful that an organization of midwestern universities be formed, including Purdue, to assist in the management of the Argonne National Laboratory, especially the ZGS high energy accelerator.

EXECUTIVE
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Brother Xavier

January 24, 1964

I am most pleased to convey through my friend, Congressman George Miller, my good wishes to all those participating in the Symposium which is being held at Saint Mary's College on "The American Businessman in Space."

From the beginning, ours has been a nation of pioneers. We have a proud history of meeting challenges whenever and wherever they arise.

A space flight from Cape Kennedy, Florida, may carry as much meaning for mankind as did the discoveries of Galileo and Copernicus, the voyages of Columbus and Magellan, or the signing of the Declaration of Independence.

It is essential, therefore, that every citizen of influence -- whether businessman, scientist, teacher, editor, government official, or military man -- study, analyze, and understand the principal reasons why a balanced, fast-paced space effort is imperative for the United States.

The scientist who thinks only of scientific results, or the businessman who looks only for economic results, or the writer who seeks only sensationalism will not be making constructive contributions to the process of national decision-making in this vital matter.

What is required, in the national interest, is a judicious evaluation of our opportunities in space and an efficient, sustained implementation of those opportunities we choose to pursue.

It is worth noting that the money our country is devoting to research and development to make the United States preeminent in space exploration is being spent right here on earth. For example, about 90 cents out of every dollar spent by the National Aeronautics and Space Administration

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EXECUTIVE
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THE WHITE HOUSE
WASHINGTON

Jan 27-1964

Copy of Report files
Oversize attachments

TO THE CONGRESS OF THE UNITED STATES:

In accordance with Section 206 (b) of the National Aeronautics and Space Act of 1958, as amended, I transmit herewith a report for the calendar year 1963, on this nation's aeronautics and space activities.

The year 1963 was a period of constructive development of our increasing space competence. It was also a period of searching evaluation of the national space program -- an evaluation which resulted in broad acceptance of the policy of our attaining and maintaining space leadership, with due regard for our national security.

Our space program, in both its civilian and military aspects, is peaceful in purpose and practice. Moreover, it combines such objective with a policy of international cooperation based upon a mutuality of participation and benefits as well as the wide dissemination of knowledge.

Space progress is essential if this nation is to lead in technology and in the furthering of world peace. Such progress requires the use of substantial resources, which must be employed efficiently and effectively in order that we obtain the maximum benefits with a minimum of waste.

In summary form, the accompanying report depicts the contributions of the various departments and agencies of the Government to the national space program during 1963.

LYNDON B. JOHNSON

Lyndon B. Johnson

Nothing else sent to Central Files as of 1/27/64

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Orig to Dr Welsh for Jan 27 presentation
12/23/63
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EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE SECRETARY

February 7, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities.

1. Congressional

a. The Joint Atomic Energy Committee has held hearings. Senator Pastore and Congressman Holifield are sending a joint letter to AEC, NASA, Budget, and the Air Force protesting cancellation of SNAP-10A (nuclear reactor for space power) flight test program. They indicate that they expect to authorize and recommend appropriations for this program to be continued.

b. Senator Fulbright plans to hold ratification hearings on the worldwide space Radio Communications Treaty. This Treaty is an important step toward the establishment of a global communications satellite system.

c. NASA authorization hearings before the House Space Committee have gone well during the week, with little criticism of the NASA program developing so far.

d. Chairman Miller of the House Space Committee has agreed to provide funds up to $50,000 for two years to support scientific advice to the Congress by the National Academy of Sciences.

e. The GAO has issued a report alleging some waste in the Orbiting Solar Observatory program. A major item in this alleged waste of NASA funds arose from the preparation of a backup spacecraft, which it turned out was not needed in view of the success of the initial spacecraft.

2. Executive

a. The President's Annual Report, required by the Communications Satellite Act, has been drafted and is being made ready for transmission to the Congress. The Communications Satellite Corporation also has a report ready for the Congress.

b. NASA has re-examined the need for an Electronics Research Center and has reported to the Congress that it should be located in Boston. Detailed studies of a number of sites were made prior to the decision in favor of Boston.

c. First scientific results have been reported regarding measurement of solar x-rays from a Navy pickaback launch made for the Naval Research Laboratory. Information obtained is expected to be important to man's space flight and earth-bound radio propagation.

d. Evaluation is being made of the pros and cons regarding a possible television broadcast (relayed by satellite) of portions of the Tokyo Olympics next October. The Japanese Foreign Minister has urged the Secretary of State that action be taken in this regard.

e. Three orbiting space station study awards have been made by the Department of Defense to Douglas, General Electric, and Martin. The total involved is about $1 million.

f. No explanation has yet been uncovered for the failure of the six TV cameras on the Ranger VI shot. The next launch was scheduled for the end of this month, but has been deferred until some explanation of the camera failure has been developed.

g. Technical evaluation of the SST proposals is expected to be completed by April 1. Major problems appear to lie in the financial rather than the technical area.

h. The 100th successful flight of an X-15 rocket plane was made last week.

i. An agreement was signed between NASA and the Weather Bureau leading to the establishment of an interim operational weather satellite system.

E. C. Welsh

UNITED STATES INFORMATION AGENCY
OFFICE OF THE DIRECTOR
WASHINGTON 25, D. C.

The White House
Washington

1964 FEB 8 PM 12 54

February 8, 1964

EXECUTIVE
OS
CO 303
FG 296

MEMORANDUM FOR: The President

Attached is an interesting and heartening report on foreign reaction to our recent space achievements.

Donald M. Wilson
Acting Director

Attachment

RECEIVED
FEB 12 1964
CENTRAL FILES

Research and Reference Service

FOREIGN REACTION TO
RECENT U.S. AND SOVIET SPACE ACTIVITIES

R-14-64

February 6, 1964

This is a research report, not a statement of Agency policy

TABLE OF CONTENTS

SUMMARY

The recent U.S. space successes received unanimous praise in the free world press, which gave the events moderate to heavy coverage. Leading papers throughout the world awarded the United States the "gold medal" in space weight-lifting for the first time since Sputnik. A few qualified their conclusion by admitting the lead may still be only temporary.

The more sophisticated papers in Europe and the Far East single out the technical feats that made the tests so successful -- precise mathematical calculations, superior guidance systems to permit rectifying Ranger's flight path, and the use of liquid hydrogen fuel. Most comment minimizes the failure of Ranger's cameras, explaining that corrections in later flights will certainly rectify the error.

Typically, papers term Saturn I a "sensational success", "a technological and scientific miracle", and "a decisive step toward the conquest of the moon." Papers in Europe and the Far East share the term "bulls-eye" to describe Ranger's success in hitting the small target on the moon. Papers throughout the world offer varying descriptions of the new American space lead, usually falling between the Japan Times "temporary lead" to Australia's conclusion of a "decisive lead."

The Saturn and Ranger shots drew widespread attention in both news and editorial sections of the press in Europe and the Far East, with Latin America reporting moderately. There was only light coverage reported from Africa and the Middle East. The inflated Echo and the two Soviet Elektrons drew little attention anywhere.

Comment acclaiming the U.S. space feats and resulting space lead dominated reaction in the free world. But the very success of the U.S. efforts produced the greatest attention ever to the prospects for U.S.-Soviet cooperation in space. Comment in Europe picked up the implication of Echo II for the hoped-for cooperation in space. A Dutch newspaper, for instance, termed it the first practical cooperative effort between the Americans and the Russians in space. A Brussels paper too termed this aspect the most "spectacular aspect" of Echo II.

Comment elsewhere in Europe, the Far East, the Middle East and Latin America quickly focused on the desirability of cooperation. Obvious free world relief that the United States had finally made the grade in space only served to remove obstacles to what many hoped would be favorable consideration of space cooperation.

A Canadian paper, for instance, observed that cooperation might be more likely now that U.S. honor had been satisfied with the launching of the largest pay load ever.

United States' allies in the Far East -- the Philippines and South Korea -- chose the occasion to advise cooperation. Manila papers assumed "the whole world" would benefit and a South Korean paper hoped for an end to the cold war as a result of space cooperation. Japan more soberly recommended exchange of data and other practical scientific cooperation, but saw military aspects of space exploration as a major obstacle. Papers in Latin America and the Middle East approved space cooperation.

There were some lamentations over the excessive cost involved in the competitive efforts of the U.S. and the USSR. Such comments either emphasized that cooperation would cut back the financial waste or that the resources could be put to better use in improving living conditions in less developed areas of the world.

The impact on the Soviet Union of the U.S. space successes was also the subject of varied speculation, with a British paper seeing U.S. success as an obstacle to Russian willingness to cooperate, and a French paper concluding, on the other hand, that Moscow might now see "new reasons for taking into consideration the suggestion of Presidents Kennedy and Johnson" for a joint assault on the moon.

The possibility of future space cooperation between Russia and the United States received implicit endorsement from Moscow in the marked approval it gave the Echo II experiment. In contrast, neither the Saturn nor Rangers shots drew more than perfunctory reports. On Echo, though, Moscow expressed the hope that it "would be long-lived, meet all the test objectives, and that thus the first Soviet-American space experiment would be a success." A Soviet scientist saw a strengthening of "friendly scientific ties".

Communist comment on Saturn I ranged from the Italian Communist Unita's grudging comment that it marked a "turning point in U.S. astronautics" to Cuba's plaint that Saturn carried "the most useless satellite" into space so far. East European comment noted defensively that Soviet rocketry was "still a match" for the United States, while Moscow only reported factually that the satellite weighed 17 tons. Peking reported, factually and without comment, the launchings of Saturn I and the Soviet Elektrons.

WESTERN EUROPE

The "great NASA week begun on 21 January" delighted West Europeans who saw the success of Saturn I and Ranger VI definitely putting the U.S. ahead in the "space race" and on its way to the moon. Saturn I was hailed for the magnificence of its thrust and heavy payload and the use for the first time of liquid hydrogen for fuel. Ranger VI was given accolades for the precision of its flight and landing, despite the disappointing last minute failure of its cameras. The successful launching of the Soviet Elektron 1 and 2, however, served to reinforce the view of many that the U.S. and USSR should cooperate rather than compete in space endeavors.

Banner headlines and extensive front-page articles gave detailed scientific coverage of the two American exploits.

Echo II and the Soviet Elektrons were given only moderate coverage and received little editorial comment.

U.S.-USSR: A Comparison

Media across the continent, with few exceptions, agreed that the U.S. had made a spectacular advance with the launching of Saturn I. It had surged ahead of the USSR in "this costly race which is still very much 'on'" (London's conservative Daily Telegraph) and had perfected the first step of the moon journey. Corriere della Sera, Italy's most influential paper, carried a 7-column headline proclaiming: "America gains a very great advantage over Russia." Other papers called Saturn a "sensational success", "a technological and scientific miracle," "a decisive step toward the conquest of the moon." Rightist Giornale d' Italia saw it as a great victory of President Kennedy's faith in scientific progress. "Americans are slow to start," Le Figaro said, "but when they acknowledge the necessity of an effort, they start powerfully."

The rightist L'Aurore in Paris editorialized:

> With their giant rocket the Americans have just outrun the Russians. In less than ten minutes, the NASA experts achieved a triple threat. They ran the most powerful rocket in the world ever fired: 17 tons of thrust. They placed in orbit the heaviest satellite ever

launched. They succeeded in using smoothly the most dynamic fuel ever used in a missile: liquid hydrogen. In so doing, they won the first lap in the race to the moon... The U.S. henceforth knows that the feat of the century is within its reach.

Unita, party organ of the Italian communist party, conceded that Saturn I marked a "turning-point in U.S. astronautics."

Amid the general acclaim, a few notes of caution were voiced. Without down-grading the U.S. achievements, Parisian Le Monde declared U.S. superiority relative because the currently operational Soviet rockets were "perfectly developed while the American device is still in an experimental phase." Independent-left Combat, Paris, pointed out that the record of "duration in orbit" belonged to the Soviets who seemed much nearer than the U.S. in "achieving a rendezvous in space."

With praise for the Saturn rocket still reverberating, Ranger VI further delighted West Europeans as a "U.S. technical achievement of the highest order," despite its disappointing failure to return photographs of the moon.

"We are happy," said Gaullist La Nation, "to pay tribute to American science and to welcome this success with the entire American people." The precision with which Ranger VI hit the selected moon spot -- the "bulls eye" -- and the ease with which its flight was corrected by a radio signal from the earth impressed the Daily Telegraph as a "triumph of navigation", a viewpoint shared generally by the West European press. The pro-Labor Daily Mirror found it a "dramatic and awe-inspiring achievement of earth-bound man."

Speculation on the last minute camera failure of Ranger VI, led most commentators to guess that it lay in the electronic equipment controlling the camera. There was confidence, however, that this was only a temporary set-back for the U.S. which would be corrected in future moon shots. The Laborite Daily Herald declared that despite its failure to take pictures, it was a "wonderful shot." The camera failure, according to center-right Il Resto del Carlino, Bologna, did not cloud the great success achieved in the "brilliant launching and the perfection of the calculations which took Ranger VI along a perfect route." Le Monde stated that, from a ballistic viewpoint, the Ranger test was "fully successful. This should be an encouragement to the Americans, despite camera disappointment, and a spur to NASA leaders to redouble their efforts."

Echo II received only moderate attention in the West European press. Brief factual accounts, as often as not on inside pages, told the story. Editorial comment was sparse. Some editors felt as did the Progressive Catholic Volkskrant, Amsterdam, that "technically there is little news in the ...test."

In Canada Echo II was praised because of its "clear visibility" from earth. The science editor of the Toronto Globe and Mail, declared that people around the world had gotten a new impression of the U.S. and "seemed automatically to assume that the nation which could add a new star to the heavens must also stand high in other accomplishments."

U.S.-USSR: Hopes for Cooperation

The separate successes of the U.S. and the USSR within the past week led many commentators to suggest and to hope for a future U.S.-USSR cooperative effort in space. For each nation separately to "grasp for the moon" led the conservative Daily Mail, London, to lament this "senseless duplication of effort and waste of resources." The conservative Daily Telegraph, London, pointed out that the current space efforts were complementary, even though not yet cooperative for the object of the American probe was to investigate the problem of landing on the moon while that of the Soviet stations -- Electron I and II -- was to study the radiation belts which may make it hazardous for a man to get there.

The matter of costs in the separate U.S.-USSR experiments concerned a number of commentators, particularly in Canada and in Britain. The Labour Daily Herald, London, as well as the independent Toronto Telegram felt that the money saved in cooperative efforts could well be used to raise living standards on the earth. Russian national pride was seen by the Daily Mail as the obstacle preventing the USSR from accepting the U.S. as a partner as the U.S. had suggested. Toronto's Daily Star hoped that, now that the U.S. had launched a larger pay-load than the Russians, perhaps the U.S. national honor had been satisfied and an appropriate time had arrived for the two nations to work together. Le Monde, sounding a somewhat more hopeful note, thought that perhaps Moscow might now see in the success of Saturn I "new reasons for taking into consideration the suggestion of Presidents Kennedy and Johnson of organizing a joint assault on the moon."

In commenting on Echo II, Volkskrant, Amsterdam, along with papers in other countries, placed emphasis on the fact that the first practical cooperative effort between the Ame rican and the Soviets in the area of space travel had been projected. The Flemish nationalist De Standaard, Brussels, termed it the "spectacular aspect" of the affair.

FAR EAST

Press reaction to the launching of Saturn I and Ranger VI was fairly widespread in the Far East, heavy in Japan. Little mention has been made of the Soviet Elektrons. All reports credit the United States with having caught up with the Soviet Union in space exploration. Most comments placed the United States in the lead. Most comment expressed hope for cooperation, rather than competition, in space exploration -- especially cooperation between the United States and the Soviet Union. Peking reported, factually and without comment, the launchings of Saturn I and the Soviet Elektrons.

U.S.-USSR: A Comparison

Japanese newspapers were enthusiastic over the recent spectacular achievements of the United States. Yomiuri, one of Japan's three leading national dailies, hailed Ranger VI's "spectacular bull's eye hit on the moon." Yomiuri said: "After traveling about 65 1/2 hours in deep space, the United States lunar probe rocket Ranger VI hit its moon target, the Sea of Tranquility. The designated target area and the time it cracked onto the moon surface were precise and as per schedule. This success confirms the steady progress the United States has been achieving in the field of rocket guidance technique." Commenting on the failure of the cameras to function, Yomiuri said: "It is indeed regrettable. We can understand the NASA people's disappointment over the failure." The tone was definitely one of complete sympathy, not criticism; and the paper went on to express confidence that the United States would analyze the cause of the failure and would correct the defect in future moon probes.

Turning to the success achieved by Saturn I, Yomiuri commented: "What is more significant to the progress made by the United States in space development is the recent success it has attained with the launching of a Saturn I super-rocket. On January 29, it succeeded in putting a 17-ton payload in orbit around the earth with the aid of the huge rocket. The 17-ton payload is three times heavier than the largest Soviet manned space capsule put in orbit."

A Japan Times (Tokyo) editorial hailed the successful launching of the Saturn I super-rocket and stated that "This success has not only

given the United States a temporary lead over the Soviet Union in development of rocket thrust power, but stimulated the dream of travel to the moon."

The Melbourne Age, (Australia), editorialized: "The giant rocket Saturn I has gained for America a decisive lead in the space race.... The successful Saturn firing is not an isolated achievement. It is only the first of a series in which bigger and bigger rockets will launch vehicles ultimately designed to land on the moon and return safely to earth."

U.S.-USSR: Hopes for Cooperation

Much of the editorial comment stressed the hope for cooperation in space exploration, especially cooperation between the United States and the Soviet Union.

The Manila Times editorial, "Reaching for the Moon," suggested there was more to the recent launchings than friendly rivalry. The editorial stated that:

> "The Russians could not have lofted their twin Elektron space stations just to steal the headlines from the Americans' giant Saturn metal balloon, biggest satellite ever orbited so far. Nor would the moon probing Ranger have been launched on the heels of the Saturn just so the United States could score twice in a row in the space derby.... Possibly, the United States and the Soviet Union are keeping each other posted in order to avoid needless duplication of what in the end might turn out to be a joint effort: lunar exploration by human beings.
>
> "The whole world would benefit from such cooperation, while the participants would spare themselves much anxiety, expense and possible tragedy by pooling their resources. For either of them to be the first on the moon would reduce the prestige of the other, to recover which he might have to employ other than scientific means."

In Korea, the Chosen Ilbo editorialized:

> "Ranger VI scored a triumphant first for the United States by landing at a pre-determined point on the moon.... Its successful mission...is a feat of which not only the United States but also the entire Free World can be proud.... The United States and the USSR have laid solid groundwork for materializing man's dream of making a trip to the moon. Effective United States and Russian cooperation in plans to conquer the moon would be important economically, would contribute to the realization of man's dream, and would also lead to an end of the cold war and peace for the world."

The Japan Times, following up an earlier editorial applauding the United States in launching Saturn I, noted the Russian experiment of putting two space satellite stations into different orbits from one rocket and commented: "These parallel developments remind us of the proposal made by the late President Kennedy in the United States last year. He said: 'In a field where the United States and the Soviet Union have a special capacity -- the field of space -- there is room for new cooperation for further joint efforts in the regulation and exploration of space. Include among these possibilities a joint expedition to the moon.' "

Japan's Yomiuri expressed the hope that exchange of data and other cooperation would be realized between the United States and the Soviet Union for the scientific exploration of outer space but added that such cooperation is thought to be difficult because it is largely related to military science.

The Singapore Straits Times struck a definitely negative note in its editorial. The paper contended that the chief result of the latest space success of the United States would be to put an end to its offers to cooperate with Russia in putting a man on the moon. The Times argued that, since the United States has trailed the Soviet Union for so many years in the space race, she will be less willing to cooperate now that she has the lead.

Side Issue: Space and U.S. Domestic Politics

The Straits Times also speculated that the launching of Saturn I has brought a new factor into the American Presidential election campaign. The paper noted that President Johnson has made "lavish provision" for the moon project. Paying for such a project and at the same time living up to his commitment to reduce spending are going to be difficult, according to the Times. The paper commented further that the American people are so elated over the recent space success, they will demand still more achievement. The Administration is well aware, the paper points out, "how greedily rocket research eats up money."

Side Issue: Japanese Critics of Local Program

Recent Russian and American achievements in the space field have stirred up dissatisfaction in Japan with its own proposed program. The Asahi and Mainichi, both influential Tokyo papers, expressed dissatisfaction with the space exploration program drafted by the Cabinet Space Development Deliberation Council. The Asahi pointed out that space science is linked in both the United States and the Soviet Union with military purposes. This is not true in Japan, the paper says, and therefore Japan should clarify what targets are to be emphasized in Japan's space exploration. The Mainichi deplored the fact that no plan has been made to establish a united research body to resolve the conflict of views within the council itself.

SOVIET UNION AND EASTERN EUROPE

Moscow reported the launching of Echo II as the first joint Soviet-U.S. space venture with marked approval, and expressed the hope that it would be the beginning of increased scientific cooperation between the two countries.

In contrast Moscow paid little attention to either the launching of a U.S. satellite by the Saturn I rocket, or to the Ranger VI moon shot. What little commentary there was tried to denigrate the achievement of Saturn I by implying that merely putting weight into orbit was not a great scientific feat, and brushed off the Ranger shot as hardly worth comment. The Soviet space stations Elektron 1 and 2, however, were given heavy coverage, and their scientific value was consistently stressed.

Initial Reaction -- Echo II

A TASS broadcast in English reported that Echo II would be "used as a means of communication via space," and quoted U.S. news agencies who described the new satellite as a "space ambassador." A Soviet scientist was quoted as saying that "Soviet scientists like their American colleagues, regard the launching as a token of the strengthening of friendly scientific ties between our countries." Finally, Moscow expressed the hope that Echo II "would be long-lived, meet all the test objectives, and that thus the first Soviet-American space experiment would be a success." Subsequent reports described the course of the satellite and its scientific mission.

Saturn I

Moscow's initial reaction to the announcement of the January 29 U.S. satellite launching was a single broadcast over the TASS International Service in English which quoted American news agencies as saying that "the new satellite is of limited scientific importance because most of its weight is comprised of 11,600 pounds -- five tons -- of Florida sand and the burned-out rocket engines of the second stage weighing 13,500 pounds -- about six tons." Moscow reported without comment that the total weight of the satellite launched into orbit was 17 tons.

Elektron 1 and 2

On the following day, TASS announced that "a space system -- two scientific stations Elektron 1 and Elektron 2 -- was put into orbit by the USSR by one powerful carrier-rocket." The broadcast then described in detail the course of the space station and its scientific value: "The fundamental task of the launching of the Elektron 1 and Elektron 2 space station is the simultaneous studying of the earth's internal and external radiation belts and physical phenomena connected with them."

Moscow also reported that U.S. news agencies had "marked as 'urgent' and 'flash'" the reports from Moscow on the Elektron launching.

At the same time, TASS reported President Johnson's statement on the Saturn rocket without comment, but there was no evidence that it was broadcast within the Soviet Union.

Ranger VI

Moscow reported the launching of Ranger VI with the single remark that the television cameras on board were to photograph the moon's surface "if Ranger VI does not stray off the fixed course."

When Ranger VI failed to photograph the moon, Moscow devoted only two brief news items to it. One reported factually the UPI statement that "the lunar experiment has ended in failure because the television equipment did not function." The other, a TASS broadcast in English, quoted the Vice President of the British Interplanetary Society that the Ranger's failure to relay pictures of the moon's surface "is one of the most bitter disappointments of the space age."

Meanwhile, Moscow continued extensive comment on its Elektron space stations, emphasizing their scientific importance.

East European Reaction

East European comment on the latest round of satellite launchings has been minimal. In taking note of the Saturn I launching,

a Czechoslovak domestic news service broadcast remarked that Soviet rocketry is "still a match for the United States." Soviet silence about the power of its own rocket boosters was attributed to military requirements.

Yugoslav reaction was limited to factual reporting of the Soviet and American launches, with the added observation that "the space race between the two countries continues undiminished."

LATIN AMERICA

There has been moderate coverage and favorable commentary on the recent U.S. space achievements, and virtually no reaction, other than Cuban, to the Soviet space shots. Newspaper editorials generally expressed the belief that the U.S. has surpassed the USSR in rocket thrust, and other commentaries minimized the partial failure of Ranger VI. In addition, some dailies stressed the advisability of U.S.-USSR cooperation in space exploration.

The Cuban media discounted the importance of the Saturn space shot and implied that the Soviet Union continued ahead of the U.S. in space technology as demonstrated by Elektron I and II.

U.S.-USSR: A Comparison

Lima's conservative Expreso called the launching of Saturn I "a feat which puts the United States ahead of the Soviet Union in the conquest of space /and one which should be/ a guarantee for world peace." Mexico's independent Novedades applauded the "extraordinary triumph of American space science. With this happy experiment of the Saturn I the United States surpasses the Soviets. /Its 17 tons/ triples the weight launched by the best efforts of the Soviet Union. This Saturn developed, in its first stage, the fantastic thrust of 34 million horsepower." The conservative La Nacion of Buenos Aires said that "whoever has followed U.S.-Soviet space competition must not be surprised with the change of tactics by the U.S. The launching now of a 17-ton satellite is not only progress, but a jump. The Americans have now confronted the Russians with the reality /that/ we are already in the moon decade."

As to Ranger VI, La Nacion commented that "while we await the results of this extraordinary probe, we may affirm that contrary to what it said, the Soviet Union has not abandoned the plan to send a manned vehicle to the moon. And, perhaps, Russia is now ready to accept proposed American cooperation." According to Lima's ultraconservative El Comercio, "yesterday's felicitous launching renews confidence in the American space program." The editorial deplored the Soviet refusal to accept the late President Kennedy's invitation to cooperate and avoid duplication of expense and effort in space research. El Mercurio of Chile, in an editorial entitled "The Myths Continue to Fall" said "the image of the /Soviet/ giant has been on the wane since /the first Sputnik/."

In a second editorial on recent U.S. space accomplishments, Novedades played down the failure of the television cameras in Ranger VI and emphasized the greater technical triumph of hitting the moon and even "rectifying" the rocket's direction in flight. More than half of the attempts to learn more about space have been failures, according to El Grafico of Guatemala City, and the partial failure of Ranger VI "will not be able to discourage the Americans who in one week have achieved such successes as the launching of Saturn I and Echo II." El Diario Ilustrado of Chile noted the U.S. space successes and spoke of the "free and creative collaboration of scientists, technicians, administrators and the mixture of public and private initiative" in the U.S. program, as compared to the rigid governmental control of the Soviet program which is always "surrounded with mystery and frequently accompanied by childish propaganda boasts."

Cuban Comment

Saturn I "is the most useless satellite the United States has put into space thus far," declared Radio Havana. The brief commentary said the vehicle carried nothing but junk and sand but did not give the payload weight. Radio CMQ added that the Saturn shot came after "eleven successive launching failures." The launchings of the Soviet's Elektron 1 and 2 were reported factually.

NEAR EAST AND SOUTH ASIA

Regional preoccupations in the Near East and South Asia presumably limited headline and editorial treatment of American space feats. The Soviet Elektron shot, however, appears to have received even less notice. Comment on the U.S. achievements was limited to a few Indian and Greek papers and one Lebanese paper and most of the comment dealt with Saturn I. All papers felt that the U.S. had, at least temporarily, forged ahead in space. Soviet-American space cooperation was urged.

U.S.-USSR: A Comparison

Editorial comment invariably mentioned that the U.S. was now ahead of the Russians in rocket power.

The Hindu of Madras said: "The news from the U.S. in recent days has been both encouraging and a little disappointing.... Saturn I...is twice as heavy and...the U.S. has also succeeded in landing an 800-pound spacecraft on the moon within twenty miles of a target.... Unfortunately the taste of success has been somewhat marred by the fact that the camera system failed to transmit any pictures back to earth."

Beirut's as-Safa found these recent U.S. space accomplishments "constitute a great guarantee for world stability because the world can feel more secure if technological superiority remains in the hands of the western democratic states."

In Greece, Saturn I was given good news play featuring U.S. superiority over the USSR but there were no banner headlines. Kathimerini of Athens hoped "this American success proving American leadership can result in lifting of Soviet reservations on a cooperative scheme unless the Soviet government has abandoned its space program for reasons of economy." The Economic Times of Bombay cautioned that, although the U.S. was ahead, "the Russians too may have one or two tricks up their sleeve."

U.S.-USSR: Competition and Economic Waste

The Economic Times pointed out the "crushing financial burden" the moon race involved for the two competitors, the growing criticism in the U.S. that "considerations arising from national prestige are not worth the /financial/ sacrifice, and the waning enthusiasm in the Soviet Union for a moon landing. The commentator added, however, that these considerations were "apparently not near enough to eliminate national rivalries.... The developing countries would in any case be far more impressed by financial and technical aid to improve living standards on earth than by the most spectacular attempts to blaze the trail to a heavenly body above."

AFRICA

Available African media comment on the recent space shots is exceedingly light. To date, Kenya's East African Standard and the Northern News in Northern Rhodesia, have commented.

U.S.-USSR: A Comparison

The Standard (European-controlled) called the Ranger VI lunar shot "a wonderful feat of space marksmanship," which "arrived exactly on time" with its point of impact. Noting that the probe was "technically a failure" because of the inoperation of its television cameras, the Standard said "nevertheless its mathematical precision was fantastic."

The Northern News (European-controlled) in Northern Rhodesia commented that "however disappointing was the failure to obtain pictures," the flight was "a real triumph for American scientists" and shows the U.S. is "certainly not lagging behind" in the (space) race. The News added it was "a phenomenal success in many ways."

Side Issue: Interest in Space

Indicative of African interest in space developments, record crowds of students and other visitors attended several lectures by an American space lecturer at Lovanium University (Congo-Leopoldville). Interest and curiosity were reportedly stimulated by the new U.S. space achievements.

EXECUTIVE (3)
OS
PR18
Chronicle, Houston

2/8/64

Questions from Everett Collier re President Johnson's Attitude on Space

1 Q. Does President Johnson think that time is a vital factor in the space program? Does he believe it important that the United States be the first to send a man to the moon, or to another planet? Does he believe 1970 is a satisfactory date as the target for the United States sending a man to the moon?

1 A. Timing is important in the space program. A sense of urgency is a necessary ingredient, if we are to be the world's leading nation in space. I do not favor a "crash program," however, with all the duplication, overtime, and high costs such a schedule would entail. Rather, I believe we can use our resources most efficiently and attain our objectives with a program conducted at about the currently planned speed. To go slower would cost more in the long run and at the same time delay our reaping the benefits from space accomplishments. The moon project is just a part of our national space program, but it is an important part. The United States should never strive for a position less than first, and that goes for the moon program as well as for our other national objectives. The scheduled date for our manned landing on the moon is in this decade and, if all goes well, I expect that we will meet that schedule. If we can not, we should certainly do it as soon as possible after that.

2 Q. Does the President favor cooperation with Russia in the space program. To what extent?

2 A. The National Aeronautics and Space Act requires that we cooperate with other nations in the peaceful application of space developments. This includes cooperation with the USSR. We already have space agreements with the Soviets, to cooperate on a mutually beneficial basis in an Echo communications experiment, in exchange of weather pictures obtained from space, and in exchange of geomagnetic satellite data. I have also reaffirmed our willingness to consider ways of cooperation with the USSR in aspects of the lunar venture. In all such cooperation we expect mutual benefits without impairment in any respect of our national security.

Filed by Press Office

EXECUTIVE (3)

OS
PR 18

Chronological

7/8/64

Questions from Everett Collier re President Johnson's
Attitude on Space

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Filed by Press Office

3 Q. Does the President believe that the National Space Agency, including Manned Spacecraft Center, is adequately geared from the viewpoints of science and technology to accomplish the program he desires?

3 A. Science and technology are evolutionary competences, and it is always difficult to judge whether the quantity and quality on hand are adequate for the challenging job of space. I do believe, however, that our scientific and technological competence is growing at a rate sufficiently fast to enable us to meet the established schedules. If we had even more such competence, we might be able to set even tighter schedules.

4 Q. Does the President think NASA is adequately geared personnel-wise?

4 A. The National Aeronautics and Space Administration is staffed with a remarkably able group of managers, engineers, and scientists. While it is a struggle to obtain and retain some of our best people, I am pleased with the current success in this regard. If appropriate salary adjustments are made in the Government, the continuity and quality of the NASA staff would undoubtedly be greater. I would not want to leave this question without expressing the view that other agencies with space responsibilities, such as the Department of Defense, also have able staffs.

5 Q. Does the President desire any additional or any fewer scientific advisory groups on the space program?

5 A. In dealing with a program as complex and difficult as space, the President needs all the competent advice he can get. There is no basis for complacency either as to knowledge or as to competitive position in this space responsibility.

6 Q. Does the President believe there are any other programs which need emphasis at the same time as the space program, such as Air Corps, offensive weapons, oceanography, aircraft carriers, submarines, etc. (I am thinking of defense and survival)?

6 A. As important as is the space program -- and I believe it to be one of the major challenges confronting this nation, there are other programs which also need priority attention. I have delineated such other areas in my messages to the Congress. I would simply add that our national security is always of prime importance and the national space program makes an important contribution to that objective.

THE WHITE HOUSE
WASHINGTON

Reedy,

All right. Go ahead and do it.

Walter Jenkins -
February 8, 1964

OFFICE OF THE VICE PRESIDENT
WASHINGTON

Walter:

I think this is O.K. but I would like to put it in the third person.

GER
feb 8

NATIONAL AERONAUTICS and SPACE COUNCIL

2/6/64

TO: George Reedy

You stated that Collier's questions of the President regarding space needed prompt answers. I have dictated the attached answers, which I believe will handled the situation.

E. C. Welsh

Attachment

THE WHITE HOUSE
WASHINGTON

Ed:

This is fairly urgent. We need the best answers we can get as soon as possible.

GER
feb 5

Everett Collier

Questions on President Johnson's Attitude on Space

1. Does President Johnson think that time is a vital factor in the space program? Does he believe it important that the United States be the first to send a man to the moon,or to another planet ? Does he believe 1970 is a satisfactory date as the target for the United States sending a man to the moon ?

2. Does the President favor cooperation with Russia in the space program ? To what extent ?

3. Does the President believe that the National Space Agency,including Manned Spacec raft Center,is adequately geared from the viewpoints of science and technology to accomplish the program he desires ?

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THE HOUSTON CHRONICLE
1/24/64

Dear Jack:

Here are the questions I sent you earlier on the President's attitude and athinking on outer space.

If you can get ~~xxxxxx~~ answers, please mail them to me at 1253 National Press Building.

Ever

EDC

EVERETT COLLIER
MANAGING EDITOR

a886

0

GENERAL

PR 18

Everett Collier
1253 National Press Building

Questions on President's Attitude and Thinking on Outer Space

1. Does President Johnson think that time is a vital factor in the space program? Does he believe it important that the United States be the first to send a man to the moon,or to another planet ? Does he believe 1970 is a satisfactory date as the target for the United States to send a man to the moon ?

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THE WHITE HOUSE
WASHINGTON

George Reedy:

Can you help on this?

Everett Collier has been sent up here by Bill Steven to be OUR FRIEND -- we need to help him if at all possible.

Ev will call you.

JV
Jan 30 1964
5:35 pm

Jack:

I have already talked to Everett Collier about this and its on the fire.

GER
feb 5

file

JESSE H. JONES
PUBLISHER 1926-1956

JOHN T. JONES, JR.
PRESIDENT

THE HOUSTON CHRONICLE

Houston's Family Newspaper

512-20 TRAVIS ST.
HOUSTON 2, TEXAS

GENERAL
PR18
051

1/22/64

Dear Jack:

I think the Outlook page on the HUMAN program is going to look elegant. I have asked Bill Steven to air special corrected page proofs to me,but since the page can't be finalized until I get to them the list of items and fund requests (Mr. Schultz said it would be ready late this afternoon or early tomorrow morning) I doubt if I get the proofs until Monday morning.

Jack,I now would like to start work on a piece that may or may not pan out. It would deal with the President's attitude and thinking on the space program. I enclose a list of questions. If someone could jot down answers and mail them back to me at 1253 National Press Building,then I would know if there is enough material to do a dig job for another interpretative piece.

Knowing how swamped you are,I am amazed that you have had time to talk to me as much as you have. I truly appreciate it and promise you I won't impose-- I will call only when I consider it necessary in line of business.

Late next week or early the next I hope to be able to get you and Mary Margaret (if she is here then),Albert and Lera,and Marie Ball out to the apartment for a couple of drinks. I'm real proud of the apartment--it's beautiful.

In my note the other day I sent you all of my phone numbers. You returned the note with the manuscript,so I am enclosing a couple of 3 x 5 cards with the info.

Many thanks.

Regards

Everett

Ev

EXECUTIVE
OS
FG 11-4

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE SECRETARY

February 14, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities

1. Congressional

a. Senator Russell has announced that both the Soviet Union and the United States are working on death rays. The fact is that both countries have investigated the space aspects of this for a number of years, but no real breakthrough seems imminent.

b. Chairman Miller plans to complete committee action on the NASA FY 1965 authorization bill by mid-March. Chairman Anderson has scheduled the NASA hearings to begin March 3.

c. Both the Senate and House space committees have approved the joint NASA-Defense plan for operating a national tracking ship pool.

d. The Ranger moon probe failures and the decision to locate NASA's Electronics Center in Boston are expected to stimulate debate in the Congress.

2. Executive

a. The Florida East Coast Railway strike continues to pose a threat to both NASA and Air Force construction work at Cape Kennedy, although a court injunction is delaying immediate stoppage after a couple of days of picket lines.

b. The third in a series of three navigational satellites powered by nuclear generators is scheduled for launch by DOD from the Pacific Missile Range next week. This is an area in which the U. S. is ahead of the USSR.

c. The Communications Satellite Corporation received bids from four companies or teams for the design of their basic communications satellite system: Hughes Aircraft; Philco; Space Technology Laboratories with IT&T; and Bell Telephone Laboratories with RCA. The design contracts are expected to be awarded within several weeks.

d. The Soviet Union reported preliminary observation data on the inflation of the 10-story Echo II, but NASA wants more precise data and also wants a two-way exchange of messages.

e. The 12-nation European Space Research Organization has submitted detailed scientific satellite proposals to NASA. Satellites would be built by Europeans and launched by NASA as part of the growing United States program for international cooperation in outer space.

f. BOX SCORE OF SUCCESSFUL SPACE PAYLOADS
(February 13, 1964)

	1964		1963	
	U.S.	USSR	U.S.	USSR
Orbital payloads	10	2	2	1
Escape payloads	1*	0	0	0

*Ranger VI flew successfully, but TV cameras failed in final minutes.

E. C. Welsh

EXECUTIVE
OS
PC
PU2-2/G
FG105

February 17, 1964

Dear Mr. Gardner:

Your article "Outer Space: A Breakthrough for International Law" has been read with interest. I appreciate receiving it.

The peace potential in space seems to me to be substantial.

Sincerely,

LYNDON B. JOHNSON

Mr. Richard N. Gardner
Deputy Assistant Secretary for
International Organization Affairs
Department of State
Washington, D. C.

LBJ/ECW/nj

Ed -----

See my note to Walter and his reply to me.

Juanita Roberts
Feb 17

Walter -----

See Mildred Zayac's note to me

Do you think it would be better to have Ed Welsh draft a short note for the President's signature?

mjdr
Feb 15

Juanita
I concur.
WJ

Mrs. Roberts:

This letter had been routed to Mr. Bundy, and we wonder if this is the sort of thing you acknowledge under your name?

Mildred Zayac
(in Mr. Bundy's office)

3

encl

ASSISTANT SECRETARY OF STATE
WASHINGTON

February 8, 1964

Dear Mr. President:

In view of your long-standing interest in outer space questions, I am taking the liberty of sending to you the enclosed reprint of my article in the current American Bar Association Journal which brings up to date the story of outer space cooperation in the United Nations.

Faithfully yours,

Richard N. Gardner

Richard N. Gardner
Deputy Assistant Secretary of State
for International Organization Affairs

Enclosure.

The President,
The White House.

Outer Space: A Breakthrough for International Law

Can the nations avoid an outer space stampede? Can they develop ground rules to prevent conflicting claims and international violence? Mr. Gardner asserts they can and outlines the constructive steps which have recently been taken to insure order in outer space. He suggests that the expanding network of co-operative arrangements in space will form the basis of further developments in this new field of international law.

by Richard N. Gardner • ***Deputy Assistant Secretary of State for International Organization Affairs***

AT TWELVE NOON on April 22, 1889, President Harrison threw open several million square miles of government land for settlement in the Oklahoma Territory. Some eager "sooners" sneaked into the territory too soon, but the vast majority crowded along the border. Long lines of trains nosed right up to the starting line. Detachments of cavalry held back the mob until the blast of a bugle at noon sent a wild stampede into the new territory. One train rider—the trains had to run at a set speed so their occupants didn't obtain an unfair advantage—described the scene:

> I saw excited men jump from the windows of crowded coaches even before the train stopped and rush off to stake out claims in a cornfield that by noon the next day was a busy tent city of 10,000 people.

As one historian quipped: "Within a few hours virtually every tract had one claimant, and most had three or four."

Seventy-four years after this event we find ourselves on the borders of space. We are now in year VII of the Space Age and each month brings more astounding progress in the conquest of outer space. Six years ago an orange-sized object in orbit filled the headlines. Today men live in orbit for days in spacecraft weighing thousands of pounds. Six years ago a vehicle launched hundreds of miles into space was a sensation. In 1962 the United States sent a vehicle to Venus to find out what the planet was like. After 110 days of flight at 15,000 miles per hour, the vehicle sent radio impulses 36,000,000 miles back to Earth with the following message:

> Venus is hot, 800 degrees Fahrenheit. There is heavy cloud cover; it is impossible to see the landscape. The atmosphere contains no oxygen or water. Life as we know it is generally impossible.

Clearly our scientific capacity is permitting us to rush into space with impressive speed. Is our capacity for law and organization in space equal to the challenge? The first "sooners", as it were, are already in outer space. Can we avoid a space "stampede" and achieve orderly progress?

The question of concern to lawyers and diplomats is whether nations, as they increase their activities and interests in outer space, can develop adequate ground rules to prevent conflicting claims and international violence.

Adlai E. Stevenson, United States Representative to the United Nations, speaking before the General Assembly on December 2, 1963, expressed the view that in the half dozen years of the age of space "there has been enough social invention to sustain the hope that outer space will not be chaotic".

On the desks of the 111 members of the United Nations as Ambassador Stevenson spoke was a draft Declaration of Legal Principles which the United Nations Committee on the Peaceful Uses of Outer Space had unanimously decided to submit to the General Assembly.

This declaration is a formal expression of the mutual restraints and reciprocal concessions which the members of the United Nations are prepared to accept in the sixth year of the space age. It does not include everything that every member of the Outer Space Committee would have wished. Rather it comprises the total area in which the interests of all members overlap. The declaration was approved by the First Committee of the General Assembly on December 5 by acclamation.

Change in Soviet Attitude Is Noted

Until recently the Soviet Union had refused to agree on a document embracing what was agreeable to all sides.

but rather had insisted on a comprehensive legal code along the lines of the Soviet "Declaration of Basis Principles", which contained a number of provisions which were totally unacceptable to non-Soviet countries. The Soviets had adopted a similar attitude in the nuclear test ban negotiations, insisting on a comprehensive ban on their terms. Happily, it has now changed its position and a limited treaty banning tests above ground had been signed.

In addition, on October 17 the General Assembly passed a resolution by acclamation which solemnly calls upon all states "to refrain from placing in orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction" and "installing such weapons on celestial bodies". This resolution and the limited test ban, which together prevent an extension of the arms race in space, reflected the change in Soviet attitude which was necessary for agreement on the limited common positions represented by the Declaration of Legal Principles.

The result is a significant step toward the creation of law in outer space. Ambassador Stevenson described the character and status which the United States ascribes to the principles in the declaration when he said: "We believe these legal principles reflect international law as it is accepted by the members of the United Nations. The United States, for its part, intends to respect these principles." Ambassador Fedorenko immediately afterwards stated: "The Soviet Union, for its part, will also respect the principles contained in this declaration if it is unanimously adopted."

Declaration's Operative Paragraphs Are Outlined

The declaration contains nine operative paragraphs, the first four of which were already contained in somewhat modified form in General Assembly Resolution 1721 (XVI). The declaration reaffirmed this resolution by declaring:

—That the exploration and use of outer space shall be carried on for the benefit and in the interests of all mankind,

—that outer space and celestial bodies are free for exploration and use by all states on a basis of equality and in accordance with international law,

—that outer space and celestial bodies are not subject to national appropriation, by claim of sovereignty, by means of use or occupation, or by any other means, and

—that activities of states in the exploration and use of outer space shall be carried on in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding.

The fifth principle is new. It declares:

> States bear international responsibility for national activities in outer space, whether carried on by governmental agencies or by nongovernmental entities, and for assuring that national activities are carried on in conformity with the principles set forth in this declaration. The activities of nongovernmental entities in outer space shall require authorization and continuing supervision by the state concerned. When activities are carried on in outer space by an international organization, responsibility for compliance with the principles set forth in this declaration shall be borne by the international organization and by the states participating in it.

The Soviet Union had originally insisted on the principle that space activities shall be carried out "solely and exclusively by states". This provision, which would bar private enterprise from space activities, was an attempt to impose socialist principles on an important sector of human activity and was an obvious attack on Telstar and our communication satellite legislation. The United States saw no reason why private enterprise should be prevented from flying in space any more than it is from sailing on international waters.

On the other hand, we were willing to reaffirm our view that a state bears international responsibility for its activities in space and for the activities of its nationals. We were also willing to reaffirm that space operations carried on by private parties require government authorization and continuing supervision. Accordingly, the fifth principle contains these two provisions.

The sixth principle declares:

> In the exploration and use of outer space, states shall be guided by the principle of co-operation and mutual assistance and shall conduct all their activities in outer space with due regard for the corresponding interests of other states. If a state has reason to believe than an outer space activity or experiment planned by it or its nationals would cause potentially harmful interference with activities of other states in the peaceful exploration and use of outer space, it shall undertake appropriate international consultations before proceeding with any such activity or experiment. A state which has reason to believe that an outer space activity or experiment planned by another state would cause potentially harmful interference with activities in the peaceful exploration and use of outer space may request consultation concerning the activity or experiment.

The Soviets had insisted that prior discussion and agreement must take place on any measures to be undertaken by a state which "might in any way hinder the exploration or use of outer space for peaceful purposes by other countries". This principle would have effectively extended the veto into space.

One can imagine the difficulties that would result from a multilateral clearance system. Space exploration could be slowed down or halted entirely by red tape or political obstructionism.

The principle finally agreed upon is fully in accord with existing United States practice as reflected in the handling of our West Ford experiment. Project West Ford placed a large number of tiny filaments in a shortlived orbital belt around the earth. The purpose was to determine the feasibility of using filaments as passive reflectors to relay communications.

Project West Ford was carefully considered in advance by both the President's Science Advisory Committee and the Space Science Board of the National Academy of Sciences. The full details of the experiment were made known well in advance and discussed with interested scientists from other countries. While some expressed concern, there was no serious scientific objection to the experiment on the

grounds that it would impede radio astronomy or other scientific research.

We are prepared to undertake similar consultation for other scientific experiments. With the passage of the partial test ban, testing in outer space has been, of course, eliminated from the list of possible experiments which might cause potentially harmful interference.

The seventh principle of the declaration deals with the status of objects launched into outer space. It states:

> The state on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and any personnel thereon, while in outer space. Ownership of objects launched into outer space, and of their component parts, is not affected by their passage through outer space or by their return to earth. Such objects or component parts found beyond the limits of the state of registry shall be returned to that state, which shall furnish identifying data upon request prior to return.

The analogies to maritime and aviation law in the earlier parts of that paragraph are obvious.

The eighth principle deals with the thorny problem of liability. Obviously no paragraph, however artfully drafted, could attempt to cope with all the issues of liability. But a beginning has been made. The principle states:

> Each state which launches or procures the launching of an object into outer space, and each state from whose territory or facility an object is launched, is internationally liable for damage done to a foreign state or to its natural or juridical persons by such object or its component parts on the earth, in air space, or in outer space.

This principle is broadly framed and covers personal injury, loss of life and property damage. It covers accidents occurring on the earth, in airspace, or in outer space.

The last principle covers return of astronauts, as the seventh had dealt with return of objects launched into space and their components. It declares:

> States shall regard astronauts as envoys of mankind in outer space, and shall render to them all possible assistance in the event of accident, distress, or emergency landing on the territory of a foreign state or on the high seas. Astronauts who make such a landing shall be safely and promptly returned to the state of registry of their space vehicle.

Some Soviet Principles Are Omitted

Several principles which the Soviets insisted upon earlier are not present in the operative sections of the declaration. They had sought to prohibit the use of outer space for "propagating war, national or racial hatred, or enmity between nations". The United States was understandably skeptical about discussing this subject in view of the fact that the Soviet Union, after initiating lengthy negotiations on war propaganda in the eighteen-nation disarmament conference in Geneva, refused at the last minute to sign the declaration which had been unanimously agreed upon. This issue was solved by inserting into the preamble a reference to General Assembly Resolution 110 (II), which condemned "propaganda designed or likely to provoke or encourage any threat to the peace, breach of the peace, or act of aggression". Resolution 110 (II), which the preamble declares as "applicable to outer space", contains a provision, important for democratic countries, which requests action by the government of each member "within its constitutional limits".

The most objectionable Soviet principle declared that the collection of intelligence from space is "incompatible with the objectives of mankind in the conquest of outer space". The United States made it clear from the outset that it would accept no principle along these lines. The fact is, of course, that observation and photography from outer space are consistent with international law and the United Nations Charter, as are observation and photography from the high seas. Moreover, space observation can contribute to the reduction of the risk of war by accident or miscalculation inherent in dealings with a closed society. Observation from space may someday help the United Nations monitor an armistice or patrol a border. It may play a part in the verification of a disarmament agreement. Even Premier Khrushchev, according to C. L. Sulzberger in the *New York Times* of July 15, 1963, admits that satellites can be used for disarmament inspection.

Department of State Photo

Richard N. Gardner received his B.A. degree from Harvard College in 1948 and his LL.B. degree from Yale University in 1951. As a Rhodes Scholar he earned a Ph.D. degree in economics from Oxford in 1954. In addition to his State Department post, he serves as the Deputy United States Representative to the United Nations Committee on the Peaceful Uses of Outer Space.

Military Space Programs Have Their Place

In the end, no provision on intelligence from space was inserted in the declaration. But discussion of this problem raises another and larger question. Should there be a principle that prohibits military activity of any kind in space? The United States Government believes not.

The attempt to build peaceful space co-operation and a regime of law for outer space does not eliminate the need for military space programs to maintain the security of the United States and the free world. There is no inconsistency in moving simultaneously on both fronts. For the foreseeable future, we need military space programs to help keep the peace and civilian space programs to help us live better in peace.

The test of the legitimacy of a par-

ticular use of outer space is not whether it is military or nonmilitary, but whether it is peaceful or aggressive. Russian cosmonauts are members of the Soviet Air Force, but this is no reason to challenge their activities. There is, in any event, no workable dividing line between military and nonmilitary uses of space. A navigational satellite in outer space can guide a submarine as well as a merchant ship. Thus the United States has military space programs, but all of our space activities will continue to be for peaceful, *i.e.*, nonaggressive and beneficial, purposes.

In the interest of the security of the free world, the United States cannot refrain unilaterally from all military activities in space until military activities on earth have been regulated by disarmament agreements. When the military problems on earth are solved, the military problems in space will be solved; they are part of the same problem.

The Declaration of Legal Principles does not ban military activities from outer space. This subject can and should be dealt with in our negotiations for general and complete disarmament.

Detailed Agreements Remain for the Future

As Ambassador Francis T. P. Plimpton stated before the United Nations Committee on the Peaceful Uses of Outer Space on November 22: "The declaration of legal principles is not the last word; it is one of the first. In the future, the United Nations may wish to formulate additional principles, as experience accumulates."

The first order of business is the formulation of detailed international agreements on the subjects of liability for space vehicle accidents and assistance to and return of astronauts and space vehicles. On December 5 the First Committee approved by acclamation a resolution which calls for the prompt preparation of these agreements and requests the Outer Space Committee to report the results to the next session of the General Assembly.

Beyond this, the area of international co-operation based on mutual interest will continue to grow:

—U. N. members have made an impressive beginning through the International Telecommunications Union to tackle the technical problems involved in using outer space for telephone, radio and television communication. The work recently completed in November by the Space Radio Conference of the I.T.U. provided sufficient allocation of frequency bands for space communications for the next ten or fifteen years and adopted procedures relating to the use of these allocations. The United States Government and the Communication Satellite Corporation have begun discussions with other governments and foreign communications entities on the creation of a single, global commercial system of communication via satellite—a system in which all members of the United Nations and the specialized agencies will have an opportunity to participate in ownership, management and use.

—The World Meteorological Organization has begun to lay the financial and organizational basis for an ambitious program of world weather forecasting and research, making use of both satellites and ground-based instruments.

—More than sixty countries have worked co-operatively with the United States in actual flight experiments, in terrestrial activities in direct support of orbiting experiments, or in co-operative training programs.

—The United States and the Soviet Union have concluded a bilateral agreement calling for the co-ordinated launching of weather satellites and the exchange of weather information, the co-ordinated launching of satellites to map the weather's magnetic field and co-operative experiments with communication satellites.

—And lastly, the United States offered a new possibility of co-operation with the Soviet Union and others when President Kennedy stated in the General Assembly on September 20: "Surely we should explore whether the scientists and astronauts of our two countries—indeed of all the world—cannot work together in the conquest of space, sending some day in this decade to the moon, not the representatives of a single nation, but the representatives of all humanity." On December 2, Ambassador Stevenson told the General Assembly: "President Johnson has instructed me to reaffirm that offer here today."

From these and other co-operative arrangements on specific functional problems, as well as from agreements on legal principles, we hope to develop a regime of law and order in outer space.

Reprinted from
American Bar Association Journal

January, 1964

EXECUTIVE (3)

PR 9-1
PR 15-7
OS
~~FG 115~~
PR 6-1

FILED - FEB. 19, 1964

I welcome you most cordially to the U.S. Space Park and am gratified that you can view the achievements of the United States in the scientific exploration of space. I sincerely hope that this exhibit will serve to broaden your understanding of our space programs.

We of the United States are determined that space shall be free and that our endeavors and accomplishments toward the peaceful mastery of space shall serve to benefit all mankind.

LYNDON B. JOHNSON

RECEIVED
FEB 19 1964
CENTRAL FILES

Memo. rec'd to Arthur Sylvester 2/15
Asst. Sec. of Defense
Dept. of Defense

Drafted by Defense Department
LBJ/PS/smv

Rec'd 11 am Feb 20, 1964

EXECUTIVE 05

FG 11-4

EXECUTIVE OFFICE OF THE PRESIDENT

NATIONAL AERONAUTICS and SPACE COUNCIL

WASHINGTON

EXECUTIVE SECRETARY

February 20, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities.

1. Over 3000 construction workers employed at Cape Kennedy and Merritt Island are staying off the job in support of the railway unions striking the rail line running into the Cape. The unions involved are given until next Monday to file a brief before the Federal Court regarding unfair labor practice charges brought by the NLRB.

2. A continued strike of electrical workers threatens to delay the opening of NASA's new facilities at the Clear Lake site near Houston.

3. A redesigned X-15 (research rocket plane) has been rolled out of the factory. It is 50% heavier and is expected to reach speeds close to 5000 miles per hour.

4. Launch of the third nuclear-powered satellite scheduled for this week has been postponed until early March because of the modifications to its electronic system.

5. NASA Administrator Webb has proposed the establishment of a Joint Navigation Satellite Board composed of representatives of the non-military agencies with interest in the navigation field.

6. The first GEMINI flight with two astronauts aboard is scheduled for late this year.

7. DOD has announced that SECOR, a geodetic satellite, is providing data for accurate mapping, which has military significance.

8. The Communications Satellite Corporation is expected shortly to announce a stock issue of about $200 million. Shares will be available to the general public and to the common carriers.

9. Canada has contracted to build a communications satellite ground station near Halifax in order to receive service from the Communications Satellite Corporation.

10. BOX SCORE OF SUCCESSFUL SPACE PAYLOADS
(February 19, 1964)

	1964		1963	
	U.S.	USSR	U.S.	USSR
Orbital payloads	11	2	4	1
Escape payloads	1*	0	0	0

*Ranger VI flew successfully, but TV cameras failed in final minutes.

E. C. Welsh

EXECUTIVE

OS
FG 11-4

7

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE SECRETARY

February 28, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities

1. Congress. House Space Committee action on NASA's FY 1965 authorization is expected by mid-March. After sharp debate, the Committee approved NASA's choice of Boston as the location for the Electronics Research Center. No action has been scheduled by the appropriations committees on NASA's 1964 supplemental request.

2. New satellites.

(a) Soviets report successful launch of Cosmos XXV into earth orbit on February 27.

(b) Two satellites have been successfully launched by the Air Force this week.

(c) A NASA satellite is scheduled to be launched March 5 from Point Arguello, California. This satellite is scheduled to obtain electronic density data as it travels in a polar orbit 620 miles above the earth.

3. Ranger. The television camera failure aboard Ranger VI was apparently due to an accidental activation of the camera system shortly after initial launch. Ranger VII will be delayed several months while rework and extensive ground testing is undertaken.

4. Tracking base in Cuba. The Soviet Union has confirmed reports that it will set up a satellite tracking base in Cuba. Current reports are that this base will be used primarily for tracking Soviet space vehicles rather than maintaining surveillance over U.S. launches from Cape Kennedy.

5. U.S.-Soviet cooperation. Initial transmission of signals between the United Kingdom and the USSR using our Echo II has been started. So far, results have been poor, due to the limitations of the Soviet equipment involved.

6. Supersonic transport. Technical evaluation of the SST proposals will be completed on schedule April 1. Government agency comments on the Black-Osborne report were submitted to the BOB today. The sonic boom tests over Oklahoma City are continuing with strong public support. In view of concern expressed by the City Council, however, top representatives of FAA will meet with that Council next week.

7. Communications satellites.

(a) Rather than deciding to develop a separate military system, DOD has taken up with the Communications Satellite Corporation ideas for joint military and civilian use of the commercial system. The ComSat Corporation Board of Directors plans to examine this next Monday.

(b) The Syncom II communications satellite, now located above Brazil, will be moved westward over the Pacific for use as a military link and as a back-up for Syncom III, which is scheduled for May.

8. European space activities.

(a) A delegation from the European Space Research Organization will meet next week with U. S. officials to discuss their construction of a tracking station in Alaska. Since the Federal Communications Act prohibits an alien transmitter to be stationed on U. S. territory, provisions will be considered for a U. S. contractor or NASA to handle the command and transmission functions of this facility.

(b) The Netherlands Committee on Space Research have made proposals to NASA for cooperative sodium vapor rocket experiments in Surinam.

9. BOX SCORE OF SUCCESSFUL SPACE PAYLOADS
(February 28, 1964)

	1964		1963	
	U.S.	USSR	U.S.	USSR
Orbital payloads	13	3	4	1
Escape payloads	1	0	0	0

E. C. Welsh

EXECUTIVE

OS

FG11-4

March 6, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities.

1. Congress

(a) Three Subcommittees of the House Space Committee are marking up the NASA authorization bill. Full Committee action is expected next week.

(b) No action has been taken by the House Independent Offices Appropriation Subcommittee on NASA's FY 1964 supplemental request.

(c) Senate Space Committee hearings on NASA's authorization bill began March 4. The Committee plans to take up the NASA Electronics Center issue in executive session on March 10. (The House Committee has already acted on this.)

2. Gemini. First launch (unmanned) is estimated for the first week in April. A boilerplate spacecraft will be inserted into a low elliptical orbit, will make between 5 and 45 orbits, and will burn up upon re-entry. The purpose of the flight is to check the structural integrity of the Gemini capsule and the Titan II launch vehicle.

3. Communications Satellite Corporation

(a) The first communications satellite financed by the ComSat Corporation will be based on the Syncom design. A request has been filed with FCC to authorize launch of this satellite early in 1965. It is expected to provide about 240 telephone channels over the North Atlantic. About 100 of these channels are expected to be leased by the AT&T.

(b) Officials of the ComSat Corporation, along with representatives of the State Department, are briefing members of the Congress (this week) and representatives of various interested nations (next week)

Nothing else sent to 6746

regarding the Corporation's plans. A major item for discussion and explanation is the proposed arrangement between the Corporation and the Defense Department regarding communications services.

4. SNAP Device. NASA has proposed that AEC develop a 50-watt nuclear power source to be known as SNAP 19 for weather and other application satellites scheduled to be launched in late 1965.

5. Flight Delay. A failure discovered in the checkout of the booster stage has delayed launch of the nuclear-powered navigation satellite for about six weeks.

6. BOX SCORE OF SUCCESSFUL SPACE PAYLOADS
(March 5, 1964)

	1964		1963	
	U.S.	USSR	U.S.	USSR
Orbital payloads	13	3	4	1
	1 *	0	0	0

* Ranger VI flew successfully, but TV cameras failed in final minutes.

E. C. Welsh

cc: Jenkins
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EXECUTIVE
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FG11-4

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE SECRETARY

March 13, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities

1. Congress

(a) The House Space Committee is scheduled to complete action on the NASA authorization bill on Tuesday, March 17. Relatively minor cuts are anticipated, amounting to less than 2 percent of the total.

(b) The House Space Committee may authorize some additions to the budget for nuclear and chemical propulsion.

(c) The NASA authorization bill is scheduled for House action on March 23.

(d) The Senate Space Committee plans to continue hearings on the NASA authorization bill, March 16-18.

(e) The Senate Space Committee approved the Boston Electronics Center by a 10 to 4 vote.

(f) Hearing on the Space Council FY 1965 budget is scheduled by the House Independent Offices Subcommittee, March 19.

2. Innosphere satellites. Two satellites designed to study the ionosphere are scheduled to be launched by NASA next week.

3. Weather satellites

(a) Pictures taken by the Tiros VIII provided on February 17 the first accurate estimate regarding the storm which developed sixteen inches of snow in New York City on February 19. Miami used the same pictures to improve forecasts for the Caribbean area. Incidentally, conventional weather observations did not supply weather men with such clear indications of the severity of the storm.

Nothing else sent to Central Files as of 6/15

(b) A weather station will be placed at the Federal Pavilion at the New York World Fair, operating 24 hours a day. This station will receive photographs from the Tiros weather satellite.

4. U.S.-USSR space cooperation. The first series of joint experiments with Echo II was completed March 9, with 33 transmissions taking place from Jodrell Bank. NASA is exploring Soviet interest in follow-on experiments, using higher frequencies, employing facilities other than Jodrell Bank, and requiring return transmissions from the USSR.

5. Space stations. Coordination arrangements have been made by NASA and the DOD so as to mesh technical planning for manned orbiting systems more advanced than the current DOD Manned Orbiting Laboratory.

6. French satellite. Agreement has been reached to launch a satellite constructed and financed by France, with a U. S. Scout rocket in 1965.

7. Japanese satellite. The Japanese are planning to design a navigation satellite, which they hope will be launched by a U. S. booster in 1967.

8. BOX SCORE OF SUCCESSFUL SPACE PAYLOADS
(March 13, 1964)

	1964		1963	
	U. S.	USSR	U. S.	USSR
Orbital payloads	14	3	4	1
	1*	0	0,	0

*Ranger VI flew successfully, but TV cameras failed in final minutes.

E. C. Welsh

EXECUTIVE

MF3/N*
FG 260
OS

March 16, 1964

Dear Mr. Baker:

The Robert H. Goddard Memorial Dinner is an annual event of major significance to all of us who are vitally interested in the goals and the success of our National Space Program.

On past occasions, I have been honored to have participated at the Dinner and regret that my schedule prevents my doing so this year. I am confident, however, that Dr. Ed Welsh will have an informative and stimulating message for you and the many guests who will be in attendance.

In addition to complimenting the National Space Club for sponsoring this Memorial, I want to congratulate the organization for paying special tribute to that esteemed space leader, Dr. Hugh Dryden.

Sincerely,

Lyndon B. Johnson

Mr. Norman L. Baker
President
National Space Club
1629 K Street, N. W.
Washington, D. C. 20006

LBJ/ECW/nj

delivered by hand

Invitation filed Gen. IV.1/1964/FG 216 1/8/64

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE
OS
FG 11-4

EXECUTIVE SECRETARY

March 20, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities.

1. Congress

(a) House floor action on NASA's FY 1965 authorization bill is expected next week.

(b) The House Government Operations Committee is conducting the hearings into the proposed arrangements between the Department of Defense and the Communications Satellite Corporation.

(c) The Senate Space Committee has completed hearings on the NASA authorization bill and is currently engaged in a preliminary markup.

2. Project West Ford. The National Academy of Sciences has concluded that the West Ford experiment, which orbited a belt of tiny dipoles around the earth, was not harmful to either radio or optical astronomy.

3. Communications. On command, our synchronous communications satellite, Syncom II, has been caused to move westward from its position over the Atlantic. It is expected to reach the mid-Pacific area in May in preparation for communications tests there.

4. European Space Organizations. Two European space groups are being formalized. They are ESRO (European Space Research Organization) and ELDO (European Launch Development Organization).

5. Launch Failures

(a) The Ionosphere Beacon Explorer, launched yesterday, failed to enter orbit because the Thor Delta's third stage rocket did not burn long enough. This is the first failure in a Thor Delta launch after 22 straight successes.

(b) An Air Force scientific Scout probe suffered a fourth stage failure last week and climbed only 200 miles of the intended 3000.

6. Goddard Dinner. Scheduled tonight at the Sheraton-Park Hotel, the Goddard Memorial Dinner is expected to be highlighted by the reading of a letter from the President of the United States, the award of the memorial to Dr. Dryden, and a formal address by the Executive Secretary of the Space Council.

7. BOX SCORE OF SUCCESSFUL SPACE PAYLOADS
(March 20, 1964)

	1964		1963	
	U.S.	USSR	U.S.	USSR
Orbital payloads	14	4	4	1
	1*	0	0	0

* Ranger VI flew successfully, but TV cameras failed in final minutes.

E. C. Welsh

EXECUTIVE

OS
FG 11-4

March 27, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities.

1. Congress

(a) The House passed an approximate $5.2 million NASA authorization bill by a 283-73 vote on March 25. The amount cut from the budget request was approximately $100 million or 2% of the total. During the floor debate, the main items were unsuccessful Republican efforts to kill the Boston Electronics Center and to raise the issue of a military space gap.

(b) The House Government Operations Committee is conducting extensive hearings on the contemplated plan of DOD and the Communications Satellite Corporation to enter into a contract for communications services. The probe appears aimed at ascertaining whether a separate military communications satellite system would be preferable from the standpoint of national security.

2. SST. The FAA evaluation team ranked Boeing first in airframe proposal and General Electric first in the engine proposal.

3. Communications. NASA has been requested by the Communications Satellite Corporation to perform further tests with Syncom II for the purpose of determining whether picture quality would be satisfactory for the televising of the Olympics from Japan.

4. European Space Research Program. The European Space Research Organization is reported as planning a $300 million space program for the next eight years. Nine nations already belong to this organization.

5. San Marco Test. As part of the U.S.-Italian space program, a sounding rocket was successfully launched on March 25 from a towable platform in equatorial Indian Ocean waters.

Nothing else sent to [illegible] of 6/15

6. Weather Satellites. April 1 will mark the fourth anniversary of successful weather satellite operations by the United States. Eight Tiros satellites have been successfully launched, producing over a quarter of a million usable weather photos and providing about 1400 storm warnings.

7. ASSET Failure. The second attempt to launch an ASSET wing glider system failed because the second stage of the usually reliable Thor Delta did not perform as expected.

8. British Satellite. NASA, on a Scout vehicle, launched a British satellite (UK-2) today, from Wallops Island.

9. BOX SCORE OF SUCCESSFUL SPACE PAYLOADS
(March 27, 1964)

	1964		1963	
	U.S.	USSR	U.S.	USSR
Orbital payloads	14	4	4	2
	1*	0	0	0

*Ranger VI flew successfully, but TV cameras failed in final minutes.

E. C. Welsh

cc: Jenkins ✓
Reedy
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Means

Rec'd 4-3-64

EXECUTIVE
OS
FG 11-4

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE SECRETARY

April 3, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities.

1. Congress

(a) NASA is scheduled to testify before the House Appropriations Committee, beginning Monday, April 6.

(b) The Executive Secretary of the Space Council is scheduled to testify on the Council's FY 1965 budget before the Senate Appropriations Committee on Monday, April 13.

(c) The House Space Committee plans hearings May 4-14 on the geographic distribution of Federal research and development funds.

2. Soviet Launch. On April 2, the Soviets launched a scientific payload (designated Zond I) into deep space, continuing their emphasis on planetary and lunar ventures. No specific mission for this payload was announced.

3. U.S. Launches. Two important launches in our manned space flight program are scheduled to take place soon:

(a) Project Fire - scheduled for launch Monday April 6. It will be the first comprehensive re-entry test at 25,000 miles per hour velocity in support of the Apollo mission.

(b) Project Gemini - The first launch of the Gemini spacecraft is scheduled for Wednesday, April 8. This will be an unmanned orbital flight test to see how well the spacecraft has been mated to its Titan II launch vehicle.

4. Centaur Launch Delay. The second attempt to orbit a payload with the high energy Centaur second stage has been delayed to retest certain components. The launch is expected soon.

5. Soviet ComSat Interest. The U.S. is prepared to discuss ComSat interests with the USSR sometime in June. Suggestion for such talks originated with the Soviets.

6. Antarctic Storms Detected. The Tiros VIII weather satellite is providing the Navy prompt storm spotting information for operation "Deep Freeze". Navy reports the satellite has been particularly useful for giving routine weather reports for aircraft flights between McMurdo Sound, Antarctica, and Christchurch, New Zealand.

7. Labor Difficulty. Picket lines of the United Plant Guard Union kept 1500-2000 men off their jobs at Cape Kennedy today. The Labor Board is seeking an injunction against the pickets and workers are expected back on the job Monday, April 6.

8. BOX SCORE OF SUCCESSFUL SPACE PAYLOADS
(April 2, 1964)

	1964		1963	
	U.S.	USSR	U.S.	USSR
Earth orbital	15	6	5	3
Escape	1*	1	0	1

*Ranger VI flew successfully, but TV cameras failed in final minutes.

E. C. Welsh

EXECUTIVE

OS

FG 11-4

EXECUTIVE OFFICE OF THE PRESIDENT

NATIONAL AERONAUTICS and SPACE COUNCIL

WASHINGTON

EXECUTIVE SECRETARY

April 10, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities

1. Congress. The House Government Operations Committee hearings on communication satellite systems have brought out opposition and a diversity of feelings regarding proposal of joint operations between Communications Satellite Corporation and Defense Department.

2. Launches

(a) Gemini - The first Gemini spacecraft was put into orbit Wednesday, April 8, by a Titan II rocket. This was the first space launch for both the spacecraft and the rocket. The whole project was a complete success with substantial data obtained. The 7000 pound spacecraft plus the 4500 pound stage are expected to reenter the atmosphere and be destroyed by Sunday, April 12.

(b) Soviet Satellite - Cosmos XXVIII, a scientific satellite was launched into earth orbit last week by the Soviet Union.

(c) Project Fire - An Apollo-shaped 200 pound payload is scheduled for launch this afternoon (April 10) by an Atlas rocket. It will plunge into the atmosphere at 25,000 miles per hour velocity. The purpose of the launch is to measure reentry heating.

3. Zanzibar Station. NASA and Bendix engineers are proceeding on the assignment to remove the equipment from the Zanzibar station. The job will take 45 to 60 days.

4. Zond I. The Soviet Union announced that its recent deep space probe's (Zond I's) course was corrected and speed accelerated while at a distance of 350,000 miles from earth. Western conclusion is that the spacecraft's unannounced destination is Venus.

5. Nimbus. Technical problems uncovered in the testing of the Nimbus weather satellite prototype have been resolved, and testing of the flight model is proceeding on schedule.

6. Operation Starwatch. Over 200 schools in the Washington, D. C. metropolitan area and many others in the Paterson, New Jersey area will perform ground weather observations April 20-June 6 during passages of the Tiros weather satellites overhead. Sponsored by the Weather Bureau, the educational program will aid research by helping to measure small-scale climatic differences.

7. Cuba Tracking Station. The Cuban radio has announced that the recently installed Soviet space tracking station is now in operation.

8. Ranger Improvements. NASA has undertaken an improvement program for the remaining Ranger moon shots. The June launch will incorporate recommended changes.

9. BOX SCORE OF SUCCESSFUL SPACE PAYLOADS
(April 9, 1964)

	1964		1963	
	U. S.	USSR	U. S.	USSR
Earth Orbit	16	7	6	3
Escape	1*	1	0	1

*Ranger VI flew successfully to Moon, but TV cameras failed.

E. C. Welsh

EXECUTIVE
FG 11-4
OS

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE SECRETARY

April 13, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Council Meeting.

As scheduled, a Space Council meeting was held Friday afternoon (April 10), on the subject of cooperation with the USSR in space.

Dr. Dryden accompanied Mr. Webb and made an orderly presentation of the whole subject, including a status report regarding the meteorology - communications - geomagnetic agreements which we now have with the USSR.

After the presentation a constructive discussion developed, with emphasis upon the merits of participation by other countries in space activities with us.

In addition to supporting staff, the meeting was attended by Webb (NASA), Seaborg (AEC), Harriman (State), Brown (DOD), and Welsh (NASC).

E. C. Welsh

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE SECRETARY

April 13, 1964

MEMORANDUM TO THE PRESIDENT

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E. C. Welsh

EXECUTIVE

FG 11-4

FG 260

EXECUTIVE OFFICE OF THE PRESIDENT

NATIONAL AERONAUTICS and SPACE COUNCIL

WASHINGTON

EXECUTIVE SECRETARY

April 17, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities

1. Congress

(a) NASA has concluded its FY 1965 hearings before the Independent Offices Subcommittee of the House Appropriations Committee.

(b) The Senate Space Committee has started its mark-up sessions on the NASA authorization bill for FY 1965.

(c) At the request of Chairman Miller, the Executive Secretary of the Space Council and four staff members appeared April 14 before the House Space Committee in executive session to brief the Committee on a wide range of aspects of the space program.

(d) The Executive Secretary of the Space Council testified April 13 on the Council's FY 1965 budget, before the Senate Appropriations Committee.

2. France. President de Gaulle held a Cabinet meeting April 14 reportedly devoted entirely to examination of France's long-term space program.

3. Spain. NASA and the Spanish National Telephone Company signed a memorandum of understanding for cooperation in the testing of experimental communications satellites.

4. Project Fire. A payload successfully launched by an Atlas April 14 slammed into the atmosphere at 25,000 miles per hour simulating the reentry of a returning Apollo spacecraft from the moon.

5. Soviet Spacecraft. The Soviet Union celebrated Cosmonautics Day April 12 by orbiting Polet II, purportedly belonging to a class of maneuverable spacecraft intended for rendezvous operations in space.

6. Gemini

(a) The Gemini spacecraft launched April 8 fell harmlessly into the South Atlantic April 12.

(b) Twenty-three experiments to be flown aboard Gemini spacecraft have been selected -- thirteen to be sponsored by NASA and ten by DOD.

7. Space Accident. Launch of the Orbiting Solar Observatory has been postponed indefinitely because of the inadvertent ignition of the third stage solid-fueled engine April 14, injuring eight persons.

8. NASA/DOD Cooperation. NASA and DOD have reached agreement on management relations and a stepped-up schedule for the national geodetic satellite program, with NASA as over-all manager.

9. Nuclear Powered Satellite. The last in a series of three SNAP 9-A powered navigation satellites is scheduled to be launched by DOD into a polar orbit from the Pacific Missile Range next week.

10. Olympics TV. NASA, the Hughes Corporation and NBC will test the TV picture quality of the Syncom II satellite next week. If the quality of the picture is deemed satisfactory, a Japanese group will try to arrange for televising the Olympics.

11. Weather Satellite System. The U. S. plans to have a weather satellite system in operation by the end of 1965. It will consist of two Tiros satellites in a cartwheel configuration at an altitude of 750 nautical miles in an 80-degree sun synchronous orbit.

12. BOX SCORE OF SUCCESSFUL SPACE PAYLOADS
(April 16, 1964)

	1964		1963	
	U.S.	USSR	U.S.	USSR
Earth Orbit	16	8	6	4
Escape	1*	1	0	1

*Ranger VI flew successfully, but TV cameras failed.

E. C. Welsh

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE
OS
FG 11-4

EXECUTIVE SECRETARY

April 24, 1964

MEMORANDUM FOR THE PRESIDENT

Subject: Space Activities

1. Congress.

a. Hearings on the Jet Propulsion Laboratory's conduct of NASA's Ranger Program, and its overall relationship with NASA, will be opened April 27 by the House Space Committee's Legislative Oversight Committee.

b. The House Space Committee is scheduled to conduct hearings in late June to examine NASA's long-range plans for space activities to follow the initial Apollo program.

c. The Senate Space Committee has completed its hearings and is now marking up the FY 1965 authorization bill. They have tentatively agreed to restore about half of the 110 million dollar cut by the House.

d. Representative Brademus has urged NASA to give informal off-the-record briefings to Congressmen not on the Space Committees. He feels most members are left in ignorance as to NASA objectives and accomplishments.

2. Launch Success. The Air Force successfully launched into orbit an Atlas Agena payload from Point Arguello, California, on April 23, 1964.

3. Launch Failure. The Department of Defense navigation satellite launched April 21 from Vandenburg Air Force Base, California, failed to achieve orbit and probably burned up in the earth's atmosphere. The satellite carried a small SNAP 9-A atomic generator as a power supply for auxiliary equipment. Previous safety analyses and tests have concluded the reentry would cause the plutonium 238 fuel to burn up into particles of about one millionth of an inch in diameter. These particles will be widely dispersed and diluted in the upper atmosphere and would not constitute a health hazard. (DOD and NASA are currently examining the merits of releasing this information.)

4. Launch Delay. Launch of the third Syncom communications satellite originally scheduled for an early May launch, has been delayed at least a month because of last week's accidental ignition of a Delta stage in the assembly shop at Cape Kennedy. Two of the men injured by the accidental ignition have now died.

5. Successful TV Test. A TV test of Syncom II was held April 23. NASA will make the satellite available to the ComSat Corporation and the National Broadcasting Company if they wish to carry the Olympics from Japan to the U. S. in October.

6. PAYLOAD FLIGHT SUCCESS BOX SCORE
(April 23, 1964)

	U. S.		USSR	
	1964	1963	1964	1963
Earth Orbital	17	6	8	5
Escape	1	0	1	1

E. C. Welsh

cc: Messrs. Jenkins
Reedy
Kilduff
Means

Rec'd Pres's 5-1-64 Ed w

P. wants to know anything that goes to Congr

Talked to Webb 5/2/64 JV

— Ed Welsh

EXECUTIVE

OS

FG 11-4

EXECUTIVE OFFICE OF THE PRESIDENT

NATIONAL AERONAUTICS and SPACE COUNCIL

WASHINGTON

EXECUTIVE SECRETARY

May 1, 1964

MEMORANDUM FOR THE PRESIDENT

Subject: Space Activities

1. Congress

(a) NASA Administrator Webb is scheduled to be the final witness Monday, May 4, in the House Space Committee's investigation of the Ranger moon probe project.

(b) The Independent Offices Appropriations bill, including appropriations for NASA and the Space Council, is scheduled to be taken up on the House floor about May 18.

2. African Tracking Station. Arrangements are being made with the Malagasy government to set up a communications and tracking facility there which will replace the one removed from Zanzibar. Using transportable rigs, the system will be ready to support upcoming Gemini and Apollo shots.

3. University Grants. Texas A & M and Georgia Tech have been awarded facilities grants of $1 million each by NASA.

4. ComSat. Indecision regarding the relationship between the ComSat Corporation and the Department of Defense is delaying action in the communications satellite field. Scheduled meetings with other nations interested in communications satellites are being delayed because of this situation.

5. Alaska Rescue Aided by Tiros. Photographs from Tiros VII weather satellite provided the only information on clearing storm conditions in the Alaskan mountain passes between Fort Wainwright and the Gulf of Alaska during the March 28 post-earthquake period, enabling Army troop transports to be dispatched to Valdez with urgently needed relief supplies.

6. Satellite Launches. An Air Force Thor Agena successfully launched a satellite into polar orbit from the Pacific Missile Range on April 27.

A Cosmos was successfully launched by the Soviet Union into a 65 degree low circular orbit, April 25.

7. Launch Cancellations. All launchings of Thor Delta and Scout vehicles have been suspended until completion of an investigation as to the cause of the recent accident at Cape Kennedy, in which two men were killed.

8. Venus. Telescopic studies from balloons at 87,500 feet altitude give evidence of the presence of water vapor in the atmosphere of Venus, in amounts comparable to that in our own upper atmosphere.

9. Vanguard I. The Vanguard I satellite launched on March 17, 1958 stopped transmitting last month after six years of continuous operation in orbit.

10. PAYLOAD SUCCESS BOX SCORE
(May 1)

	USA		USSR	
	1963	1964	1963	1964
Earth Orbit	6	18	6	9
Escape	0	1	1	1

E. C. Welsh

File

EXECUTIVE

OS ①

FG 11-4

EXECUTIVE OFFICE OF THE PRESIDENT

NATIONAL AERONAUTICS and SPACE COUNCIL

WASHINGTON

EXECUTIVE SECRETARY

May 2, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Public Reaction to Space.

According to the May 1 issue of SPACE DAILY, Trendex has completed a poll of six cities to ascertain the public reaction to the space program.

The six cities were: Memphis, Houston, Davenport, Boston, New Orleans, and Denver.

The net result of the poll was that there is strong support for the U.S. space program and that such support is growing at a steadily increasing rate.

Among the statistics from the study were the following:

a. 64% favored the program, with 31% opposing.

b. Last September, it was 59% favoring and 39% opposing.

c. 78% believed speed of program should be maintained or stepped up; only 17% favored a slowdown.

d. 57% thought cost of program was O.K. or too low, with 34% thinking cost too high.

e. 48% thought space spending should be equally divided between military and non-military.

E. C. Welsh

gpr

7

EXECUTIVE

OS

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EXECUTIVE OFFICE OF THE PRESIDENT

NATIONAL AERONAUTICS and SPACE COUNCIL

WASHINGTON

EXECUTIVE SECRETARY

May 8, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities

1. Congress

(a) The Senate Space Committee May 5 approved an FY 1965 authorization for NASA of $5.246 billion, which is $57 million less than requested and $52 million more than the House action.

(b) The House Space Committee hearings into Jet Propulsion Laboratory's conduct of NASA's Ranger program have concluded with clear indication that NASA should tighten its control over the program.

(c) The Joint Committee on AtomicEnergy recommends that the Atomic Energy Commission proceed with flight testing of the SNAP-10A despite the lack of a current mission requirement from either NASA or DOD. Scheduled for launch in April 1965, the device would be the first spaceborne nuclear reactor and would deliver 500 watts of electric power.

3. Communications Satellites

(a) Participants in the Army/Air Force "Desert Strike" maneuvers are using the Syncom II communications satellite for experimental military communications.

(b) A preliminary prospectus has been distributed by the Communications Satellite Corporation to the public by the underwriters. With the approval of the President, the Corporation filed for registration with the SEC on May 6. The stock will probably be issued to the public at $20 per share in early June.

4. Titan III Explosion. Lack of adequate insulation in the 12 story-high Titan III solid rocket caused it to blow up during a full-scale firing test May 2. The test facility at Edwards Air Force Base for the 120 inch diameter rocket received damage.

5. Apollo Safety Test. A test of the escape rockets designed to lift the Apollo mooncraft's astronauts out of danger in case of trouble during launching will take place May 12 at White Sands, New Mexico.

6. Future Transport. NASA is doing a study to define the possibilities of future rocket troop transport.

7. Space Program Support. Recent polls, not financed by the Government, indicate that the general public continues to give widespread support to the space program.

8. Launch Range Command Unified. A National Range Division to manage both the Atlantic and Pacific Missile Ranges and the Satellite Control Facility has been established by the Air Force. The new Division will have headquarters at Andrews Air Force Base and will be fully operational by June 1965.

9. Solar Winds. Recently evaluated data from the IMP satellite launched in late 1963 reveal that supersonic winds of particles emanating from the sun create shock waves upstream of the earth's magnetic field, similar to that of a high velocity bullet moving through the air.

10. University Grants. Rice University received $1.6 million and Maryland University $1.5 million for construction of space facilities.

11. PAYLOAD SUCCESS BOX SCORE
(May 8)

	USA		USSR	
	1963	1964	1963	1964
Earth Orbit	6	18	6	9
Escape	0	1	1	1

E. C. Welsh

EXECUTIVE

OS
FG 11-4

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE SECRETARY

May 15, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities

1. Congress

(a) Senator McGovern has proposed a new federal agency to minimize dislocations from Defense budget decreases by doing more in space, waterways, oceanography, weather control, and air pollution.

(b) The Independent Offices Subcommittee of the House Appropriations Committee plans to submit its appropriations report, including the budgets for the Space Council and NASA, to the full Committee on May 18. House floor action on this appropriation is expected shortly thereafter.

2. Apollo Test. The escape rockets designed to lift the Apollo astronauts out of danger in case of trouble during the launch phase were tested successfully Wednesday (May 13) at White Sands Missile Range. The rockets were fired at 21,000 feet lifting the "boiler plate" model of the Apollo spacecraft away from its Little Joe II booster. It landed safely, although one of its three parachutes failed to function.

3. Nuclear Propulsion Tests. A non-flyable test model of a nuclear propulsion device was tested May 13.

A walkout by the Teamsters Union at the AEC Nevada test site last week is not expected to delay the test of the Tory-II-C nuclear propulsion system, scheduled for May 20.

4. Saturn Delay. The Saturn I flight scheduled for May 20 has been postponed at least six days due to the failure of a screen in the S-IV stage LOX filler line.

5. Saturn Orbits. The first Saturn payload to be orbited, last January 29, has completed 1500 revolutions in orbit. The 37,000 pound last stage and payload are being photographed by tracking cameras.

6. SNAP 9-A Failure. The Atomic Energy Commission made public this week that the satellite carrying the SNAP 9-A nuclear power device failed to orbit. Pre-launch studies and tests determined that the device would burn up on re-entry.

7. Weather Satellites.

(a) Tiros VII, VIII to Join Hurricane Hunt. Tiros VII and VIII, both in orbit, are programmed to be available for the hurricane season this summer. Both satellites have far exceeded the nominal four-month life expectancy.

(b) Weather Picture Service Speeded Up. Satellite pictures taken over the U.S. mainland and nearby water areas are now available to users around the country within three hours. The pictures are attached to a weather depiction chart and transmitted over a national facsimile network.

(c) World Tribute to Tiros. A report to the UN Committee on the Peaceful Uses of Outer Space by the World Meteorological Organization (WMO) stated "Meteorological information from satellites has led in many parts of the world to improvements in day-to-day forecasting."

8. Communications Satellites. Initial demonstrations via the RELAY satellite with the new Spanish ground station at Robledo de Chavala, just west of Madrid, is expected to take place soon.

9. Ranger Delay. The next Ranger VII moon shot has been delayed from June until late summer.

10. Soviet Discussions. The U.S. and Soviet governments have agreed to begin bilateral discussions in Geneva on commercial communications satellites June 14.

11. PAYLOAD SUCCESS BOX SCORE
(May 15)

	USA		USSR	
	1963	1964	1963	1964
Earth Orbit	11	18	6	9
Escape	0	1	1	1

E. C. Welsh

EXECUTIVE
OS
FG 11-4

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE SECRETARY

May 22, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities

1. Anniversary. Monday, May 25, will mark the third anniversary of the national decision of 1961 to land a man on the moon during this decade. This decision was made on the recommendation of the Chairman of the National Aeronautics and Space Council.

2. Congress.

(a) The House Appropriations Committee lumped the $141 million 1964 supplemental for NASA with the requested 1965 total of $5.304 billion and then cut the amount by $245 million. This puts into further jeopardy the attainment of the landing on the moon in this decade.

(b) The House on May 21 eliminated from the Independent Offices appropriation bill the $5.2 billion NASA fund. The action came about through a technicality whereby without prior authorization legislation an appropriation can be blocked by a single member on a point of order.

3. Space Forecast. A National Academy of Science study will estimate 1970 expenditures for non-military space at $9.6 billion.

4. Soviets Fear Space Hazards. Soviet scientific papers at the COSPAR meetings in Europe put strong emphasis on the hazards of extended manned space flight.

5. Saturn/Apollo Launch. A Saturn is scheduled to launch 37,300 pounds into orbit on May 26. The payload includes a "boiler plate" Apollo capsule.

6. U.S./Soviet Space Talks. Talks between NASA's Dr. Dryden and the head of the Soviet Academy of Sciences Blagonravov will take place in Geneva this week to study implementation of existing agreements on geomagnetics and meteorology. Dr. Blagonravov will come to Boston to attend the Disarmament Study Meeting sponsored by the U.S. and USSR Academies of Sciences.

7. New Facility. NASA has just opened its new $14.6 million Space Flight Operations Facility at the Jet Propulsion Laboratories in Pasadena, California. This facility is principally designed to control unmanned missions to the moon and the planets.

8. Launches.

(a) The Soviet Union launched a Cosmos satellite into orbit May 18.

(b) The U.S. launched a military satellite into polar orbit May 19.

9. XB70. This supersonic military aircraft, shown publicly last week, is scheduled to make its first flight in June.

10. Maneuvering Astronauts. Equipment is being designed so that astronauts may leave the Gemini spacecraft and maneuver outside of it.

11. PAYLOAD SUCCESS BOX SCORE
(May 22)

	USA		USSR	
	1963	1964	1963	1964
Earth Orbit	14	19	6	10
Escape	0	1	1	1

E. C. Welsh

7. New Facility. NASA has just opened its new [illegible] million space flight operations facility at the Jet Propulsion Laboratories in Pasadena, California. This facility is primarily designed to control unmanned missions to the moon and the planets.

8. Launches.

(a) The Soviet Union launched a Cosmos satellite into orbit May 14.

(b) The U. S. launched a military satellite into polar orbit May 15.

9. MIRAS. This supersonic military aircraft, shown publicly last week, is scheduled to make its first flight in June.

10. Manoeuvrable Spacecraft. Equipment is being designed so that astronauts may leave the orbital spacecraft and maneuver outside it.

11. [illegible]

(Mr. [illegible])

Earth Orbit
Escape

T. C. Wyld

gpx

L File

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE
OS
FG 11-4

EXECUTIVE SECRETARY

May 28, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Space Activities

1. Congress. The Senate Space Committee plans to hold closed hearings in mid-June on NASA/DOD efforts to coordinate and eliminate duplication in the development of space boosters. Major congressional interest is in determining why both the Saturn IB and Titan IIIC must be built.

2. Saturn Launch. The sixth Saturn I flight vehicle was successfully launched from Cape Kennedy at 1:06 P. M. today. It carried the first unmanned boiler plate model of the Apollo spacecraft into orbit. The SA-6 flight will allow a test of the major ground tracking networks of the U. S. NASA, the Department of Defense, and the Smithsonian Astrophysical Observatory will take part in a global ground tracking exercise.

3. Space Object Count Now at 430. NORAD reports that there are 430 objects in space as of May 25. Of these, 90 are satellites or planetoids belonging to the U.S., 13 to the USSR, two to the United Kingdom, and one to Canada. The rest (324) constitute debris such as empty rocket cases and miscellaneous bolts, springs and clamps.

4. Upcoming 1964 Launches. Eight major launch attempts--including the first two-man orbital flight of the Gemini spacecraft--are scheduled during the rest of 1964 by NASA. The third Centaur high energy stage is scheduled for launch atop an Atlas Booster in June. The four major launches scheduled for later in the summer are: another Ranger B try at TV photos of the moon; launch of the first earth-oriented Nimbus weather satellite; the second unmanned test of the Gemini; and the launch of the third Syncom satellite for trans-Pacific communications. Fall flights include the orbiting geophysical observatory (OGO); a Mariner flight past Mars and the first two-man Gemini mission.

5. Blue Streak Launch. The British booster Blue Streak is scheduled for its first suborbital test flight today in Australia. It is possible that this booster may eventually be used as the first stage of a European satellite launch vehicle.

6. ComSat Corporation Stock. Sale of 5 million shares of ComSat Corporation stock to be sold to the general public through 350 underwriters is now planned to begin on June 2. The 5 million shares for carriers were overscribed by 27%, but the Corporation was able to sell each of the 163 carrier companies the amount of stock it had requested except for AT&T which was cut back from its offer to buy 4,250,000 shares to 2,895,750. Nevertheless, they become by far the largest stockholder. IT&T, the next largest, gets 1,050,000 shares.

7. Soviet Inter-planetary Probe. The Soviet press has reported the course of the "Zond-1" spacecraft launched April 2 has been altered twice, most recently on May 14. Western observers believe this craft may pass near Venus in late July or may impact.

8. Weather Satellites. NASA and Weather Bureau have completed studies for the world's first operational satellite system (TOSS). Initial flight is scheduled for late 1965 and will provide nearly complete daily coverage of the world's weather.

9. PAYLOAD SUCCESS BOX SCORE
(May 28)

	USA		USSR	
	1963	1964	1963	1964
Earth Orbit	14	20	8	10
Escape	0	1	1	1

for E. C. Welsh

NATIONAL AERONAUTICS and SPACE COUNCIL

fyi

6/12/64

TO: Mr. Douglas Cater

Herewith are excerpts from space speeches and articles by the President and by me.

E. C. Welsh

Attch.

SELECTED QUOTATIONS ON SPACE OF THE PRESIDENT

"Seldom in its lifetime is a country fortunate enough to be confronted with such a challenge as that of the national space program. It enables our people to devote their skills, their courage, their initiative, and their resources to a continuing series of projects which dwarf their imagination while enriching their country."

-- AEROSPACE (Aerospace Industries Association of America, Inc. Quarterly) Sept.-Oct. 1963 (Why Go to the Moon?), para. 1, p. 7.

"The space program is a test, in a sense, of our way of life -- a test of our confidence in our country. It is a situation where the people of a country--generally well fed, well clothed, well housed, and even fairly well endowed with leisure and luxury--are willing to undertake, not ordered to undertake, a difficult challenge and are willing to meet that challenge with their material and intellectual resources."

-- AEROSPACE (Same as above), p. 7, para. 4

"It is national policy to maintain a viable space program, not a separate program for NASA and another for Defense, and still another for each of several other agencies. Likewise, it is understood that the United States does not have a division between peaceful and nonpeaceful objectives for space, but rather has space missions to help keep the peace and space missions to improve our ability to live well in peace."

-- Vice President Johnson's Report to the President on Space Council's Accomplishments in 1961 (Chap. II, President's Report to the Congress, Jan. 31, 1962, 3rd para. (first four words omitted), p. 6.

"Due to the openness of our program, the world has become increasingly aware of U. S. space achievements, and our international prestige has been increased due to the mounting number of our space successes, our

positive efforts to cooperate with other nations, and our constructive sharing of information developed from space experiments."

-- Vice President Johnson's Report to the President on Space Council's Accomplishments in 1962 (Chap. II, President's Report to Congress, Jan. 28/63, last para. p. 7)

"It is my hope and my expectation that the space age will be an age of maturity in man's relationships -- an age of exploration, not exploitation."

-- AEROSPACE (same as above), last. para. p. 10

"From all our space programs, we may anticipate such measurable, tangible benefits enriching human life in our own land and in our own times and in all lands, for all time to come.

* * * * * * *

"It may be 10 generations--or it may be much sooner--before space science will enable man to reach the Milky Way. But it will not be 10 years--it may be very much sooner--before space science reaches into every home, every business, the life of every family on Main Street, U.S.A.

-- Goddard Memorial Banquet, Washington, D. C.
March 16, 1962

SELECTED QUOTATIONS ON SPACE OF
DR. E. C. WELSH, EXECUTIVE SECRETARY
NATIONAL AERONAUTICS AND SPACE COUNCIL

Today, this country is confronted with many challenges, which will take the dedicated efforts of the best, if we are to meet those challenges successfully. Among the challenges are those of maintaining adequate defense, eliminating poverty, destroying bigotry, improving our educational system, and overcoming the obstacles to full exploration of outer space. . . .

It should not be possible for anyone to take seriously assertions that there is no danger to this country if it finds itself in second place in the space race. Those who espouse such doctrine have a right to be heard, but, again, the general public is entitled to know the truth. Being second in space technology, in space competence, in space equipment, amounts to nothing less than endangering our freedom. Control of space for purposes of aggression could undermine the safety of peace-loving nations. . . .

Combining, as the space program does, the best talents in management, in engineering, and in science, with the most modern facilities available, the net result is the production of progress. A program which stimulates education, expands research and development, augments total productivity, increases employment, and improves our international relations is a program of the greatest economic significance. By increasing our total national income and gross national product, the national space program expands to a significant degree the size of the base on which our taxes are levied. It increases the profitability -- yes, the constructive profitability of the private sector of our economy.

-- Martin Company
Washington, D. C.
June 18, 1964

Can one name any activity more clearly identifiable with economic progress than exploration of outer space? From where do new materials, improved electronics, new processes, and improved management techniques flow more readily? In what activity do we discover greater stimulus to education and to increasing our gross national product? In fact, it appears reasonable to expect that increased space activity would actually accentuate the trend toward world peace by diverting the same skills and facilities from weapons systems to space systems. Also, a sincere interest in maintaining world peace would call for great expanded peace-keeping competence in space. For example, in the areas of inspection and detection systems, space competence has particular value. . . .

I prpose that the space planners within the Government with the help of those in industry strive to look forward with improved vision into the future. With space exploration still in its infancy, consider the many legitimate space fields that we have for extensive research activities. If the planning is basically sound and is kept under constant review and if industry is kept closely tied in, we can utilize effectively every added resource that might be made available to the space program.

I am an avid supporter of the private competitive enterprise system. I am also an avid supporter of a responsible government which creates a climate in which the private system can work efficiently. My proposal to accelerate space activity to offset decreases in weapons system activity does not conflict with my support of private enterprise. In fact, it supports it, even though the funds would pass through government hands in the process. The basic objective is to strengthen our country.

If we turned out attention for the moment to the USSR -- where there is very little private enterprise, but much interest and competence in space, I am confident that mutual disarmament would cause them to accelerate their space efforts. They are that practical and they tend to control the flow of their available resources where they think they will do their country the most good -- both economically and politically.

I do not suggest that there should be a sharp increase in spending for space. But I do believe space spending should increase at a rate at least consonant with the increase in our gross national product, not only because increase in the GNP makes resources available for more space activities, but also because space exploration itself stimulates the gross national product.

-- American Ordnance Association
Washington, D. C.
May 21, 1964

President Johnson continues to be the prime mover in our country's drive for space leadership. In January of this year, he told the Congress, "Space progress is essential if this country is to lead in technology and in the furthering of world peace." He did not say it would be desirable for us to lead in space. He said "essential" -- and that is the policy of this Nation.

We really have no choice except to move rapidly in the development of a broad space competence second to no other nation. While some try to avoid any reference to a space race, the fact is that -- like it or not -- we are in a serious competition which we dare not lose. What is more, even if there were no competitor at all in this business, I am certain that we would still have enough pioneering spirit to push vigorously in the field of space. . . .

In a philosophical sense, the most significant aspect of this national space program is that it disturbs the status quo. It makes obsolete those who think and act only in terms of the past. It inspires those who believe in the future of their country. It even puts stars in the eyes of those accustomed to judge progress solely by last year's profit and loss statements. The national space program is in a real sense a renaissance of the spirit of '76, the Declaration of Independence, and the Westward Movement. . . .

A few observations give perspective to the lunar program:

1. To attain preeminence in space, we would be doing practically all the things involved in the Apollo program anyway, even if we didn't have the lunar goal. We might not do them as well or as efficiently, but we would still be developing the boosters, the spacecraft, the launching and tracking facilities, and the other related competences.

2. As important as it is, the lunar project is not the whole space program. Last year, for example, all aspects of manned space flight, plus supporting unmanned launches, accounted for 47% of the U. S. expenditures on space. This year [1964], the estimate is 50%.

3. There are real hazards in the lunar project. As we know from experience, delay or failure can occur at any stage in such a complex venture. However, every reasonable effort is being taken to increase the likelihood of success.

4. Anyone who understands management, research and development, and production problems knows that slowing down the program would increase the total cost. Such deliberate delaying action might properly be called "fiscal irresponsibility." But, what is even more important, is that failure to carry our technological impetus to fruition would amount to "political irresponsibility." . . .

Our space activities have become the concern of the policy planner and the diplomat as well as of the scientist, the engineer, and the educator. To an increasing degree, our world posture will be affected by the manner in which we conduct our space program. Our growing space successes have enhanced the image of America as a progressive Nation and as a Nation seeking to increase the chance of world peace. To improve this image, we must continue to conduct our space program on as open a basis as possible.

We have taken some preparatory steps for cooperation with the Soviet Union in space activities. Certainly the Soviets have a highly developed technology -- we have no monopoly on space competence -- and hence cooperation with them might not only improve the prospects for peace, but we might well benefit from a mutual exchange of knowledge and experience. As for international cooperation on the lunar project, no details have been worked out, and perhaps none will be agreed to. That remains to be seen, but we must keep alert to its potential. It should be made clear, however, that we do not plan to enter into any one-sided agreements, any agreements which will impair our national security, or any agreements which will inhibit the development of our own capabilities. . . .

The space program is a catalyst, a stimulant, and a dynamic force. Its effects permeate the entire society. What other composite activity can one name which, with the application of only about one percent of our gross national product, helps maintain our national security, stimulates education, encourages the development of new industrial processes and new products, expands scientific knowledge, adds to our national wealth in new facilities, employs increasing amounts of manpower and other resources, and furthers world peace! . . .

The round trip to the moon will be just the first of a series of steps in moon exploration. I certainly doubt that the landing of two men for two

days on a surface almost as large as that of North and South America together will satisfy our lunar requirements.

Mars, and the other planets, will become objects of space exploration--both manned and unmanned. In fact, the most obvious assertion one can make about the space program is that its potential is unlimited and its future an unending series of new challenges.

Space stations will go through the evolutionary process from small to large, from short duration to permanent, and from special purpose to multi-purpose. Nuclear power and energy will gradually become a major factor in where we go and what we do in space.

While the immediate future is devoted to enhancing our national security, going to the moon, putting into operational status our communications and navigation and weather satellites, and standardizing our equipment, we must also devote a significant portion of our effort to the long-lead time requirements of the more distant future. To neglect this farsighted effort would be like burying our talents and vetoing progress.

--Goddard Memorial Dinner
Washington, D. C.
March 20, 1964

Private/Government Cooperation

I want to answer those who take the position that the space program is unwise because it involves government spending -- and that government spending is bad, or wasteful, or contrary to our private enterprise system. Such generalizations cannot survive the light of fact or of clear thinking. First of all, the space program is an excellent example of the very type of government spending that fits properly into a private enterprise system. It is the type which needs to be done and yet cannot be financed privately. The principle involve is a simple one: the Government should spend for those things which people need and want only when private enterprise either cannot do them, will not do them, or cannot do them in the public interest. The space program is clearly in the public interest and, since it cannot be financed or managed privately, it has to be done by the Federal Government. However, and this is the second phase of the analysis, the Government can and is carrying out the program through private enterprise. Approximately 90% of the money spent on our national space program goes to private companies through government contracts. Incidentally, this money is being spent right here in our country, not out on the moon!

Space vs. Other Investments

There is criticism from some -- many of whom should know better -- that we should not spend on space because we have so many other needs for the money, such as schools, slum clearance, and medical research. No realist believes that this country cannot afford to invest in our national security or in technological progess just because we are not investing enough in some other phases of our economy. Actually, investments stimulate other investments; they do not deter them. This is not an either/or proposition -- i. e. schools or space. Rather, the one helps the other. Both are needed, and both can be afforded. In fact, we cannot afford to neglect either if we are to continue to be the world's leading peace-loving and freedom-loving nation.

Incidentally, I have noted, and perhaps you have too, that even those who attack the space program as a waste of taxpayers' money seem to be less vehement in their criticism regarding that part of the money spent in their own communities, their own districts, or even their own states. Such so-called wasteful spending is usually in someone else's community, district, or state.

-- Texas City, Texas
January 30, 1964

Confidence in Our Country

There are still people who lack confidence in our country; who continue to underrate its economic strength and the constructive ability of its people and its systems. Their worry about our competence to produce and to pay our way is an unwitting but nevertheless clearly delineated doubt as to the advantages of our free private enterprise system. By favoring inaction, they would risk our having a second-rate nation with a second-rate growth and a second-rate space program.

Reasons for Lunar Project

For convenience of reference I present some of the outstanding reasons for a Lunar Project:

1. There is no other place so near in space where we can test the equipment and the men for future space travel.

2. Such a clear objective as that of the lunar project gives impetus, order, and efficiency to the program.

3. To go to the moon requires the development of powerful rocket engines, sophisticated spacecraft, trained astronauts, tracking systems, and capability to protect man against the multiple hazards of space -- all of which are useful and necessary for space progress in general.

4. Success in the lunar project will give prestige which will be invaluable at international negotiating tables.

5. The benefits to our standard of living, to education and employment, and to new methods and materials for our productive process will be great even though immeasurable.

6. While the moon itself is probably not a particularly significant military objective, the lunar project will have substantial defense spinoffs. Rendezvous technique, life-protective measures, control and guidance systems, and improvement in rockets, will all contribute to the basic objective of deterring aggression.

7. The moon has many scientific advantages. For example, it would be an excellent platform for mounting astronomical instruments. Moreover, it could be a relay point for communications and a refueling point for space travelers.

Predictions:

The space program will survive the criticism of the few and continue to expand;

There will be both disappointments and exciting successes on the way, but space exploration -- both manned and unmanned -- will become part of our established way of life;

Those who have confidence in building space competence now will be the leaders of the future;

The United States will, in fact, become the world's leading space-faring nation and it will devote such competence to improving and maintaining the peace.

-- Edwards Air Force Base
California
September 11, 1963

Diversion of Technical Manpower

It is worth noting that there was a shortage of able and highly skilled men and women before the space program began, and there probably will be a shortage even when the space program has become firmly established as a permanent characteristic of our economy. At the present time, however, there is no solid evidence that research and development in non-space activities is suffering from the diversion of technical manpower. Moreover, I believe that the university faculties are being enriched by the experiences of those who leave the campuses temporarily in order to contribute their knowledge and experience in the space program. . . .

Impact on World Peace

. . . Of importance is the potential impact the space program can have on world peace through substituting competition in space exploration for competition in building nuclear striking power. If sanity prevails, the path to the stars can be the path to peace.

-- The University of Oklahoma
Norman, Oklahoma
June 20, 1963

The national space program is an essential and dynamic feature of our economy. It benefits the many rather than the few. It strengthens the nation, both at home and abroad. It looks forward rather than backward. It highlights the contributions of the most able technologists and the most able managers and gives them an unprecedented peacetime opportunity to repay more fully the special bonus they have received by living in this great country.

We can afford the space program. We must afford it. We can be satisfied with nothing less than first place -- to the moon, to the planets, and throughout the solar system.

-- Dallas, Texas
April 24, 1963

Space leadership requires clear policy, long-range planning, and advance research if we are to avoid the penalties of disarmament by inaction and unplanned obsolescence. . . .

Activities to develop military competence in space can be, and in this nation's policy are, as peaceful as nonmilitary space activities, but it would be dangerous to attribute our policy and our intentions to others. . . .

There is a wide difference between satisfaction with our space progress and assertions minimizing what is actually being done.

-- Air Force/Space Digest
December 1963

Ability to defend ourselves in space and against threats from space is as essential as preparedness in any other of the defense dimensions. To be defenseless in space would be comparable to playing eleven men on the line in football because you do not expect the opposing quarterback to call a pass play. . . .

A nation which can orbit objects in space and recall or activate them on command can perform such feats for a variety of purposes--one of which

is to threaten or to attack another nation. If that is so, then it becomes somewhat academic to argue whether a hostile nation would do such a thing. It is only necessary to deal with the fact that it could and therefore it might. . . .

Our explorations and operations in space are peaceful in purpose but they have obvious applications to the deterrence of aggression and the United States would be remiss if it did not exploit them.

-- ORDNANCE Magazine (Article)
May-June 1963

EXECUTIVE

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

IN REPLY REFER TO: AF

JUN 5 1964

MEMORANDUM FOR Mr. George Reedy
The White House
Washington, D. C.

Subject: Background information on Dryden-Blagonravov talks in Geneva re implementation of the US-USSR Bilateral Space Agreement

Dr. Hugh L. Dryden, Deputy Administrator of NASA, has been in Geneva for the past two weeks as United States Delegate at the meetings of the Scientific and Technical Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space. During that time he held further discussions with Academician Anatoly A. Blagonravov, Chairman of the Commission on the Exploration and Use of Outer Space of the Academy of Sciences of the USSR, concerning implementation of the US-USSR Bilateral Space Agreement of June 8, 1962 (the so-called "Dryden-Blagonravov Agreement").

New

As a result of these discussions preliminary agreement was reached on exchange of information in the field of space biology and medicine, envisaging preparation of a series of volumes containing chapters on the same topics by Soviet and United States scientists which would review results and programs in each country. These volumes would be published in Russian and English. The preliminary agreement will be subject to review for some weeks before final approval.

Further discussions were held on implementation of the communications link between Washington and Moscow for the exchange of cloud pictures obtained from meteorological satellites. The Soviet Union now expects to be in a position to exchange satellite cloud pictures by 1965.

The original bilateral agreement, concluded on June 8, 1962, grew out of correspondence between President Kennedy and Chairman Khrushchev in February and March of 1962. Further meetings of joint US-USSR technical working groups in the spring of 1963 resulted in a Memorandum of Understanding which set forth a detailed plan for carrying out the joint activity in the three agreed fields:

1. Meteorological satellite project. The two sides agreed to share the results of their experiments with meteorological satellites and to work toward the eventual coordination of launchings of such experimental, and later of operational, weather satellites so as to maximize satellite coverage of the world weather situation.

For this purpose, the two countries agreed to establish and finance on an equal cost-sharing basis a full-time, facsimile-quality, two-way data transmission link between the U.S. Weather Bureau satellite facility in Suitland, Maryland, and the corresponding weather center in Moscow. Selected cloud cover pictures and nephanalyses gained from each country's weather satellites would be exchanged within six hours of receipt. In addition, extra capacity of this data link would be used to exchange selected conventional weather data useful in interpretation of the satellite data. This link was to have been installed and tested by January of this year. Prior to the current discussions, however, the Soviets were apparently not prepared to proceed.

2. Joint experiments with passive communications satellites. The agreement provided for joint tests of long distance telecommunications using the U.S. passive satellite ECHO II. The Zimenki Observatory of the Gorky State University in the Soviet Union was designated as the eastern terminal and the Jodrell Bank observatory of the University of Manchester in Great Britain was designated as the western terminal for experiments at 162 megacycles. These were to be two-way transmissions. The first tests under the agreement took place in February and March of this year but with reception only in the Soviet Union. NASA is now analyzing the final report of experimental results received from the Soviet Experimenters two weeks ago. The Soviet report included photocopies of instrumental records and tape recordings of audio signals

received. There was no discussion of further experiments with ECHO II at Geneva.

3. Geomagnetic survey by satellite. Each country is to fly a satellite equipped with comparable magnetometers during the International Year of the Quiet Sun. The results of each country's efforts will be analyzed and written up by the respective experimenters and then compared, in an effort to arrive at the best possible expression of the earth's magnetic field. If the results fail to dovetail, there is provision in the Memorandum of Understanding that the two sides will then jointly delve into the raw data in an effort to reconcile their differences. The Memorandum also provides for the exchange of certain ground magnetic observations which would be useful in interpreting the satellite measurements.

Further discussions of the technical details of this project took place between U.S. and Soviet scientists at Geneva.

Julian Scheer
Assistant Administrator
for Public Affairs

Dmy

File

EXECUTIVE OS FG11-4

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE SECRETARY

June 5, 1964

MEMORANDUM TO THE PRESIDENT

Subject: Weekly Report to the President

1. Congress.

(a) The Senate Space Committee's NASA authorization, which would restore approximately half ($52 million) of the House cut, was reported out June 2. Consideration awaits termination of the civil rights debate.

(b) Members of the Republican Critical Issues Council, which criticized the "crash" lunar program, have been invited to testify before a subcommittee of the House Space Committee by Congressman Teague. Thus far he has had no response.

(c) Senate Space Committee hearings into duplication in the development of space boosters are now set for June 17-18.

2. U. S./Soviet Space Cooperation. Talks between Dryden and Blagonravov at Geneva are scheduled to be concluded June 5. A joint communique is expected, with White House participation at this end.

3. Weather Satellites.

(a) Performance of the automatic picture transmission device (APT) aboard Tiros VIII has deteriorated and is now of little use. Next APT camera will be aboard the Nimbus polar orbiting weather satellite scheduled for midsummer launching.

(b) How to utilize Tiros weather photographs to detect hurricanes was the subject of a workshop at the National Weather Satellite Center at Suitland, Maryland. Civilian and military specialists in hurricane warning attended.

4. Communication Satellites.

(a) Meetings of U. S. and West European representatives to negotiate a charter for an international communications satellite system is planned

for June 12-13, and 18-20 in London. A meeting is also scheduled between the U. S. and the Soviets on cooperative communications satellite ventures in Geneva June 15-17.

(b) All the available public shares of ComSat Corporation stock were sold promptly on June 2. Some brokers indicated that it would have been easy to sell a billion dollars rather than the $200 million which was sold to carriers and the public.

5. Launches.

(a) Military payloads were orbited by a Blue Scout launch vehicle June 4 and by a Thor-Agena vehicle June 5, both from California.

(b) The long-delayed British-built Blue Streak rocket was a success in a suborbital first flight from Australia, June 4.

6. NASA Reorganization. An office for lunar exploration has been established by NASA's Office of Manned Space Flight. This reflects the increased activity in planning the missions after initial landings on the moon.

7. Nuclear Propulsion. Dismantling of the first successfully hot-fired nuclear propulsion system -- KIWI 3-4D on May 13 -- indicates a satisfactory performance. The reactor was run at full power for a full minute. The objective of the next test firings will be in late summer and will be longer duration full-rated runs (KIWI B-4E) and reduced power short-time operation of the first flight hardware system--NERVA.

8. Apollo Capsule Re-entry. The boilerplate version of the Apollo lunar mission capsule, which was launched May 28 on the Saturn I booster, re-entered and burned over the western Pacific Ocean May 31 after 50 orbits. The vehicle stayed up a day longer than anticipated, and caused no problems from falling debris.

9. Propulsion Tests.

(a) The first 156-inch segmented solid rocket motor underwenst a successful test May 28.

(b) The one and a half million pound thrust liquid hydrogen/liquid oxygen, M-1 rocket engine is due for preliminary tests June 6.

10. PAYLOAD SUCCESS BOX SCORE
(June 5, 1964)

	USA		USSR	
	1963	1964	1963	1964
Earth Orbit	14	21	8	10
Escape	0	1	1	1

E. C. Welsh

cc: Messrs. Jenkins
Reedy
Kilduff
Means

pa

BROUGHT FORWARD

Memo for Geo. Reedy

EXECUTIVE

O S 6/5/64

Previously Filed Date

NAME SCHEER, Julian

ORGANIZATION NASA

EXECUTIVE

O S 12/21/64

New File Symbol Date

FINAL ACTION Ltr to the President from NASA (James E. Webb)

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EXECUTIVE

EXECUTIVE OFFICE OF THE PRESIDENT

NATIONAL AERONAUTICS and SPACE COUNCIL

WASHINGTON

OS

FG 11-4

EXECUTIVE SECRETARY

June 12, 1964

MEMORANDUM FOR THE PRESIDENT

Subject: Space Activities

1. Congress.

(a) The House Space Committee Report on the Ranger program to land instruments on the moon is expected to recommend that the Jet Propulsion Laboratories strengthen their in-house management and that NASA supervise JPL programs more closely.

(b) The House Republican Conference's Space Task Force has criticized the lack of safety features in the manned Gemini program. This charge was previously made against the Mercury program. NASA has answered that step-by-step testing and complete redundancy in the re-entry control system assures the astronaut reasonable safety.

2. Soviet Launches. The USSR launched two satellites into orbit this week on June 6 and June 10. The latter was the first Soviet satellite placed into an orbit having a 51 degree inclination from the equator, which is an indication of increasing flexibility in their launch operations.

3. U.S.-Soviet Space Talks. The U.S. and the Soviet Union have added space biology and medicine to the areas in which joint space efforts and other forms of cooperation are being studied. A Memorandum of Understanding signed in Geneva by Dryden and Blagonravov, subject to governmental approval, provides for:

(a) Joint preparation and publication of work in space biology and medicine to be published in Russian and English;

(b) Opening of a weather satellite data communications link between Washington and Moscow during the third quarter of 1964; and

(c) Exchanges of ground-based observations in support of the existing project for a geomagnetic satellite survey.

4. Cape Kennedy Strike. The temporary restraining order issued June 10 resulted in a 75-80 percent return of construction trade workers to space projects at the Cape. Hearings on Monday, June 15 will consider renewing the order for 5 more days or the granting of a temporary injunction. A serious question has arisen as to the jurisdiction of the Federal Court and NLRB over Railway Labor Act strikes.

5. Centaur Delay. An explosion during a fueling test of a Centaur launch vehicle June 5 destroyed a liquid oxygen transfer pump and delayed its launch until late June. The relatively minor damage was confined to ground support equipment.

6. World Space Communication. International communication satellite talks opened in London June 12 with Western European nations, Canada, Japan, Australia and the U.S. in attendance. U.S.-Soviet talks on the same subject open Monday in Geneva. Talks with Latin American countries open later in June.

7. Moon Volcanoes. NASA's detailed search this week for active volcanoes on the moon was not successful, but more tests are planned to seek confirmation of earlier observations made in a number of countries.

8. Space Patents. NASA has initiated a new program for granting licenses to inventions for which the space agency has patent applications pending, allowing the commercial application of agency inventions to be speeded up. It is estimated that an additional 100 licenses will be issued as a result of this move.

9. Nuclear Power. The SNAP 10A auxiliary nuclear power system has successfully attained criticality in a ground test. This is the program whose flight test phase funds are in jeopardy.

10. ComSat Corporation. ComSat Corporation announced on June 8 its intention to award $1 million design contracts to each of three teams of contractors for different types of global communications satellite systems:

(1) Medium altitude spinning satellites - AT&T and RCA;
(2) Medium altitude stabilized satellites - Thompson Ramo Woolridge and IT&T;
(3) Synchronous altitude satellites - Hughes Aircraft.

11. PAYLOAD SUCCESS BOX SCORE
(June 12, 1964)

	USA		USSR	
	1963	1964	1963	1964
Earth Orbit	14	22	8	12
Escape	0	1	1	1

E. C. Welsh

June 18, 1964

EXECUTIVE (2)

FG 11-4
OS
MC

MEMORANDUM FOR
E.C. WELSH

The President cannot do this.
Will you please notify General
? X Hagan and express the President's
regrets?

Perhaps a written message would
be acceptable.

Jack Valenti

Ltr. to JV dated June 17, 1964 from E.C. Welsh, NASA Space Council
re National Colloquium on space.

X

ny

Nothing else sent to
Central Files as of 11/23/64

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL AERONAUTICS and SPACE COUNCIL
WASHINGTON

EXECUTIVE SECRETARY

EXECUTIVE
OS
FG11-4

June 19, 1964

MEMORANDUM FOR THE PRESIDENT

Subject: Space Activities.

1. Congress. NASA witnesses are scheduled to appear before the Senate Appropriations Committee on June 29 to reclama House cuts in their FY 1965 budget request.

2. Apollo. NASA has awarded a contract, expected to total $20,000,000, to the Collins Radio Company of Dallas, Texas, for the ground portion of a unified radio system for Apollo. This single "S-band" system will provide communications, telemetry, command, and tracking functions.

3. World Space Communications. Discussions in London this week on the proposed international commercial communications satellite system have centered on the U.S. proposal that this country initially own 63% of the stock, with a reduction to not less than 51% as other countries buy in. The Europeans are bargaining for a "permanent world organization" to control the venture. The talks will continue in Washington in mid-July.

4. NASA Contracting. NASA's procurement totalled $1.9 billion during the first six months of FY 1964 with 95% of the total in private contracts. About 57% was awarded on a competitive basis. Small business received 6% of the prime contracts and 20% of the sub-contracts. The prime contracts were distributed among 43 states.

5. Scientists/Astronauts. NASA expects to begin accepting applications for "scientist/astronaut" positions in September of this year.

6. University Grant. Cornell University has been awarded a $1,350,000 grant from NASA for construction of a four story space research facility.

7. Egyptian Space Effort. It has been reported that the Germans working for the United Arab Republic are designing and building a space vehicle and multi-stage launch vehicle. According to this report, the Egyptians tentatively plan to launch their first satellite late this summer after arrangements for tracking sites are concluded.

8. Weather Satellite. After one year in operation, Tiros VII has broken all records in furnishing over 65,000 useful photographs: 2500 cloud analyses, and 433 storm advisories. Both cameras continue to operate effectively.

9. PAYLOAD SUCCESS BOX SCORE
(June 19, 1964)

	USA		USSR	
	1963	1964	1963	1964
Earth Orbit	21	22	10	12
Escape	0	1	1	1

E. C. Welsh