ADDRESS

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Robert C. Seamans, Jr.
Deputy Administrator, NASA

In 1961, President Kennedy challenged America to reach the Moon by the end of the decade. To meet that challenge, the United States is still building a major space capability. The lunar challenge still stands, and we intend to meet it.

The Moon itself must be looked upon as a milestone in the development of space power, rather than as a final goal. We, this Nation, have developed boosters, ranging from the Delta to the Titan, Scout to Saturn. Our spacecrafts circle the Earth, the Moon, and the Sun, and others probe the planets. A team of some 400,000 people is at work on the present projects and is available and ready to press forward in the mastery of space.

We have begun in ernest to explore the universe on a broad scale and to understand the role of the Earth and of man within this vast system. We have, through the application of this new capability and new dimensions, the answers to many of man's needs, both old and new. We are beginning to understand a good deal about the Earth and the environment of which it is a part. We are now able to describe not only the shape of the Earth but also the shape and topography of the Moon and a majority of the planets. As we learn about the Sun, the driving force of life on this planet, we begin to understand the inner actions of the solar system and their effect upon us here. Coupled with worldwide coverage of the Earth's weather patterns provided by operational weather satellites, this information begins to let us probe into the forces that control and affect the Earth's atmosphere.

Within a few months, NASA will become a major customer of the first truly commercial communication satellite system. Now again, the United States has taken the first steps in the use of satellites in navigation. For these missions and for those yet to come, new technology continues to be required. A once exotic fuel, liquid hydrogen, is now a standard element of our booster system. New stabilization stationkeeping techniques have

been developed for our satellites. For the future - we have had our first experience with nuclear power supplies in space and successful tests with nuclear propulsion on the ground.

So, as we look backward over the short 9 years of the space age, we can all be proud of what we have accomplished and how far we have come. As we look forward, however, we can now see more clearly how far we still have to go and how much there is left to be done in turning our developing space power toward the needs and aspirations of mankind. We are at a point where it is our responsibility to apply the new strength we have been developing in response to the new challenges.

This Nation has many commitments that it must meet; freedom and liberty, abroad and at home, are priorities that cannot be slighted. Respect for human dignity is far from assured even at home. We must manage our resources with ever greater care as they diminish and become even more precious and as our soil, air, and water become increasingly contaminated. We must ensure that activities in space are devoted to these and other purposes for the benefit of all mankind. And we must also ensure that our national defenses are strong and are kept strong. The science and technology of our aeronautic and space capability provides a basic power that contributes importantly to both of these goals. We intend to see this power used. For example, we have decided to build a telescope mount for the Apollo capsule that will permit nationally and internationally known experimenters to conduct solar and astronomical investigations.

Inspections, such as the one here at Lewis, are another example of our intentions to see this power utilized. Prior to the formation of NASA, these inspections were annual occurrences. Since then we, that is, industry, universities, government, and individuals have all been scrambling to assimilate and to prosecute the Nation's desire for accelerated aeronautics and space activity. Here at Lewis, the shift was first heavily toward rocket propulsion and power systems, both chemical and nuclear. Then, in addition, we asked Lewis to take on the responsibilities for major developments such as Centaur and SNAP 8. And more recently we have asked Lewis to reactivate a broad airbreathing propulsion research program. Similar patterns exist at our other research centers. Both the Ames and Langley

Research Centers have active and continuing research and development programs. Consequently, our inspection programs have been limited, the most recent, $2\frac{1}{2}$ years ago at Langley. However, we believe these interchanges are important, for as Mr. Webb says, it is essential that leaders inevery facet of life recognize the growth in science and technology and take full advantage of it. Gentlemen, we are happy to have you here today.