I am hoping that every citizen in our communities, as well as the Nation, feel that they had had a great part in helping provide the finances and know-how for our youth, the Boy Scouts of America. And, at the same time, our Scouts and leaders return to their homes with added riches, new friends, new skills, and a fresh sense of responsibility that this Nation deserves the best they can give in payment for all that our Nation has given them.

Body Blow to Castro

EXTENSION OF REMARKS
OF
HON. PAUL G. ROGERS
OF FLORIDA
IN THE HOUSE OF REPRESENTATIVES
Monday, August 3, 1964

Mr. ROGERS of Florida. Mr. Speaker, the recent action taken against Communist Cuba by the Organization of America States ranks among the most significant steps yet instituted against Castro.

The real significance lies in the fact that the action was taken by the free nations of this hemisphere themselves, and put each of those countries squarely on record as against the Communist system in this hemisphere.

One of Florida's leading papers, the Palm Beach Post, has recognized the importance of the OAS sanctions and, in an articulate editorial, aptly termed the sanctions a "body blow" to Castroism.

I urge that the Palm Beach Post editorial be included in the RECORD at this point:

BODY BLOW TO CASTRO

Fidel Castro may rant till his beard smolders but all his invective will not change the fact that Latin America is beginning to recognize that he and the poisonous system he represents are inimical to the peace and security of the Western Hemisphere.

Foreign ministers of the Organization of American States, meeting in Washington last week, served notice that communism is unwelcome in this part of the world and that the Americas will not tolerate the Castro brand of aggression.

The OAS voted sanctions against the Cuban Communist regime that could result in its downfall if fully implemented. Member states are bound by the agreement to sever diplomatic relations with Cuba and suspension of all trade except food and medicines.

The OAS also served notice on Castro that military force may be used if aggression against Latin American nations does not cease.

Big question, of course, is the extent to which these "mandatory" sanctions will be honored by the signatory nations. Four voted against the agreement—Mexico, Chile, Uruguay, and Bolivia—the American nations which still have diplomatic relations with Cuba.

All of them, to some degree, are under Communist influence. Mexico, particularly, has been reluctant to rile its Red elements by breaking with Castro. But Mexico inaugurates a new President in December and the picture could change then.

In the meantime, Castro will find his water cut off in most of the other nations of South and Central America, leaving him no alternative but to stew in his own juice.

Editorial Comments on the "Ranger 7" Historic Flight

EXTENSION OF REMARKS
OF
HON. JOSEPH E. KARTH
OF MINNESOTA
IN THE HOUSE OF REPRESENTATIVES
Tuesday, August 4, 1964

Mr. KARTH. Mr. Speaker, Americans are rightly proud of the achievements of *Ranger 7*. They have followed with intense interest the details of this shot and studied the historic photographs of the moon's surface.

I would like to include in the Appendix of the RECORD some representative editorial comments from the Nation's press on this great scientific and technical achievement:

[From the Washington (D.C.) Post, Aug. 1, 1964]

Wow

Fie on those dullards who claim that the frequency and predictability of space shots has substituted routine for romance and taken the excitement out of man's explorations beyond the earth. The United States has just bundled up six television cameras into a capsule of numbing sophistication and fired the whole package through almost a quarter-million miles of uncharted vastness. This package, known as *Ranger 7*, had as its target a small body known commonly as the moon. Its mission was to turn on those cameras a thousand or so miles away, while going at about 10 times the speed of sound, and to transmit pictures of the moon's surface back to earth as it plummeted into the Sea of Clouds.

Well, sir, *Ranger 7* did it. Everything clicked in, snapped out, plugged on, kicked off, turned up, and locked down precisely the way the scientists and the computers had figured. This was like, well, like taking pictures of the moon. A few thousand frames from the television cameras came silently whirring back across a quarter-million miles of uncertainty, their homecoming surer than any pigeon's and their return as welcome as any prodigal son's. We're not the boasting sort, of course. We just think that an absolutely fantastic and flabbergasting job has been done, and we're thrilled.

[From the New York (N.Y.) Herald Tribune, Aug. 1, 1964]

RANGER, RAVEN TO THE MOON

Odin, according to the old Norse mythology, had two ravens, Hugen and Munin, who scouted the whole world for him every day, reporting on events that might interest the lord of Valhalla. These winged legmen have met their match; *Ranger 7* has crossed the seas of space to tell the world things hitherto only guessed about the surface of the moon.

Everyone who has fired off a Fourth of July rocket assembled a radio set, or taken snapshots with a box camera, has some appreciation of the elements that went into *Ranger 7*'s flight. Yet the vast power, the tremendous intricacy and sophistication, of an apparatus that can send itself to the moon, crashland there accurately, and supply a pictorial record of the unknown panoramas unfolding before it, can still, in an age of scientific miracles, evoke awe. It is as if the world had a detachable eye that could be sent roaming through space to observe its wonders.

Ranger 7's expedition is, of course, only a prelude to a greater, more daring, venture, when man himself shall cruise to the moon and, hopefully, bring back personal accounts of the great, white satellite. How many problems remain to be solved before some human Hugen or Munin can make this voyage may be suggested by the fact that *Ranger 7* was one success among a dozen American attempts at lunar observation by missile. And, after all, men cannot yet be sent back to the earth by TV; a spaceship that can encompass a trip back from the moon, without the benefit of the elaborate ground installations used for launchings from Cape Kennedy, will be something new under the sun—and moon.

Nevertheless, what has already been accomplished offers promise of what is yet to be. What the eye cannot see, the old adage has it, the heart does not desire. Now the eye is seeing the moon, in detail, and the heart can aspire to it.

[From the New York (N.Y.) Times, Aug. 1, 1964]

LUNAR MISSION ACCOMPLISHED

In the few minutes that its cameras operated yesterday morning, *Ranger 7* obtained and transmitted to the earth more detailed information about the moon than man has ever had before. Before the equipment on this rocket performed its historic mission, this planet's knowledge of its lunar satellite had come primarily from telescopes. But even the most powerful such instrument can see far less clearly and precisely across the nearly quarter million miles that separate us from the moon than could the cameras on *Ranger 7* taking pictures from a few hundred or tens of miles away. During the last quarter hour of its flight *Ranger 7* was in effect a mobile astronomical observatory gathering and transmitting lunar data that scientists have hitherto been unable to obtain by any means at their disposal.

The immediate purpose of the Ranger voyage was to gain information needed to plan equipment for use in the effort to send men to the moon. Until now the character of the lunar surface has been a subject of heated dispute. There has been no prior way to know in detail how regular or irregular that surface is, nor whether the moon's upper layer consists of hard rock or of a more or less thick mantle of dust. Now a major beginning has been made toward obtaining the vital data on these points.

Ironically, however, the *Ranger 7* success must again raise the question of how urgent it is to send a man to the moon. Many scientists who are dubious about the vast sums being spent on Project Apollo have pointed out that enormous amounts of information about the earth's nearest heavenly neighbor can be obtained far more cheaply by unmanned rockets like *Ranger 7*. These can bring instruments to the neighborhood of the moon, and can also land them softly on the lunar surface to take samples of the environment there, analyze it and radio the findings back to this planet.

Ranger's pictures of the moon will properly be made available to all nations and thus will aid the scientists of the Soviet Union and other lands as well as American researchers. This is as it should be. It follows the sound precedent the Soviet Union set almost 5 years ago when it released the historic pictures of the dark side of the moon taken by *Lunik 3*. Proud as this country has reason to be of *Ranger 7*'s accomplishment, we can only conjecture how much more rapidly and cheaply its photographs could have been obtained had Soviet and American scientists been able to pool their efforts and resources years ago, rather than being required to pursue their efforts in competitive—and costly—isolation. The case for a unified international effort to reach the moon—as urged by Presidents Kennedy and

Johnson—is strengthened by every consideration of the needless waste and duplication that have marked humanity's space exploration to date.

[From the Philadelphia (Pa.) Inquirer, Aug. 1, 1964]

BASIC STEP TO THE MOON

There is a subdued quality about elation of American space scientists over the thoroughgoing success of the 13th try by the United States to expand mankind's knowledge of the surface of the moon, which is understandable in the light of the disappointments that have resulted from all our previous efforts.

To be sure, Harris M. Schurmeier, Ranger project manager, is said to have looked ecstatic. And Dr. William H. Pickering, Director of the Jet Propulsion Laboratory in Pasadena, much criticized for past failures, has proclaimed that "this was a textbook operation." But we like much better the reaction of Kenneth Gatland, vice president of the British Interplanetary Society, who called the U.S. moonshot "a stupendous achievement."

That is exactly what it was, and nothing that has gone before can take away from its present and future importance.

President Johnson's message of congratulations to all who helped with this project reflects the pride of the whole country. The pictures transmitted back to the earth may not provide all the answers we need to go ahead full speed with preparations for landing a piloted space vehicle on the moon's surface, but they leave no room for doubt that the necessary information can be obtained—and soon will be.

It isn't only the U.S. moon experiments that have run into trouble, as President Johnson pointed out. The Russians have been as secretive about their moon failures as about the actual space knowledge they are accumulating. Our American space scientists have no such secrets.

That may well be one reason why this basic step, as President Johnson calls it, was finally accomplished—before anything nearly so impressive could be announced from Moscow. We expect that from this point on the prowess of our space scientists will look better and better.

One perfect shot in a baker's dozen may not seem like so much to boast about, but it isn't half bad for beginners, and the United States is only beginning in space. The world hasn't seen anything yet. Wait until that next moonshot.

[From the Chicago (Ill.) Tribune, Aug. 1, 1964]

ALL SYSTEMS WERE "GO"

From every indication, *Ranger 7* was a brilliant success. Its close-up photographs promise to teach us more about the surface of the moon than we have learned from all of our previous shots combined. We can all be justly proud of the many scientists and technicians whose skill and care helped to make the shot a success.

The six cameras of *Ranger 7* made and transmitted perhaps 4,000 photographs which Harris M. Schurmeier, Ranger project manager, said were "extremely good."

"I think the public will be able to distinguish quite a few details," he said. "If the pictures are sharply contrasted—with light and shadow—we ought to be able to see something the size of a few meters—say, the size of a Volkswagen."

This is an amazing achievement. But *Ranger 7's* success does not lie in any single achievement. It was not the first rocket to hit the moon; both Russian and American spacecraft have done that before. It was not the first shot to land with such precision on the planned target; *Ranger 6* did that last February. Nor was it the first to take photographs of the moon and transmit them back to earth; the Russians did that long ago.

But though *Ranger 6* hit right on target, its cameras didn't work. And while merely hitting the moon is an achievement which would have astonished our forefathers, there is no longer very much it can teach us that we don't already know. And although the Russian cameras worked, their rocket was 37,000 miles off course. While taking photographs from a spaceship a quarter of a million miles away and transmitting them back to earth is another achievement which would have seemed unbelievable a few years ago, the Russian photographs were taken from too great a distance to be of much use.

Thus the real achievement of *Ranger 7* was that all of its important instruments worked and that they all worked at once. This is the important thing in an endeavor where the tiniest flaw in any one instrument can spoil the flight and result in another $30 million fizzle.

When and if the time comes to send men to the moon, there will be all the more gadgets to go wrong and it will be all the more important that none of them do so. The odds that everything will work properly will be more remote than ever, and the costs will be greater than ever.

As President Johnson said, Ranger 7's success is "a basic step forward in our orderly progress" toward putting a man on the moon. But let's not forget that word "orderly," and let's also keep the moon in its proper perspective. Orderly progress means that when we study the photographs and other information gained from *Ranger 7*, we must not ask simply how we are to put a man on the moon; we must keep asking how much more can be learned by putting a man on the moon and whether it is as urgent and important as the last two administrations seem to think.

After all, there are a lot of ways to spend up to $40 billion right here at home, if it's going to be spent anyway, and many of them would be more constructive than reaching the moon.

[From the Washington (D.C.) Daily News, Aug. 1, 1964]

TELEVISING THE MOON

Seldom has the speed of events in this 20th century age been so dramatized as by America's successful picture-snapping lunar robot.

Most of us can recall the day, not so very long ago, when it was impossible to transmit an image even across a room. Yet here we are televising the moon from its front yard—a quarter-million miles from the earth.

The success of the Ranger mission not only reflects the rapidity with which scientific and technical knowledge is being accumulated and exploited. It also represents a significant milestone on a historic road to manned exploration of the moon—the first extraterrestrial object earthlings are destined to set foot on.

The closeup pictures of the moon are needed to help design the ship which some day will ferry astronauts to the lunar surface. For nobody down here really knows how hard or soft or smooth or craggy it is up there.

Getting closeups of the moon has not been easy. The United States had to try five times, over a period of 2½ years, before it succeeded. Many more attempts, to obtain even more detailed data on the lunar surface, will follow. And some more failures are certainly in store.

Nor is this undertaking cheap. The Ranger project itself carries a price tag of about $260 million, and it is only part of the overall program to land men on the moon—a program which will cost at least $20 billion before decade's end.

Since the late President Kennedy set a manned lunar landing as the prime goal of our space program, a goal endorsed almost unanimously by Congress, there has been some disenchantment—and growing discontent.

But the United States is so committed to the moon program it would be difficult to switch signals now, despite the second thoughts many people may be having about such an undertaking.

Actually, the lunar excursion is no mere exercise in technical highjinks. It is a demonstration of man's ceaseless, boundless quest for knowledge—and one which, in the end, is likely to pay off as well as similar past voyages into the unknown.

[From the Washington (D.C.) Sunday Star, Aug. 2, 1964]

JOURNEY TO THE MOON

It would be difficult to overstate the scientific importance of the flawless flight of *Ranger 7* our picture-taking mooncraft. No single event of the space age to date has unlocked so wide a door to the fuller understanding of the universe around us. It is not beyond the realm of possibility that close analysis of *Ranger's* pictures by the scientific community may provide priceless clues to the nature of creation itself.

As a space spectacular (and these, too, have a certain importance) *Ranger 7's* flight occupies a place in the front rank, alongside *Sputnik I*, the *Vostok I* flight of Yuri Gagarin, and the Venus fly-by exploit of *Mariner II*. It is interesting to note that two of these four space headliners are Russian and two American, which may be some measure of the status of the "space race" today.

But there are other aspects of the flight which are more worthy of mention than the ballyhoo phase. There is, for example, the matter of engineering management—the tying together of many advanced technologies into a supertechnology that can give the human race pictures, as from a low-flying plane, of the mysterious, lifeless, and remote surface of the moon. Just one facet of this technological achievement, *Ranger's* television camera and transmission system, is almost too marvelous for the average person to comprehend.

To the capable and hardworking staff of the Jet Propulsion Laboratory of California Institute of Technology, which organized and carried off this miracle of space science, the Nation owes a profound debt of gratitude. JLP has taken its share of criticism (more than its share, some people think) for delays, failures, and cost overruns in the *Ranger* program. The work of the week just past vindicates the good judgment and good management of Dr. William H. Pickering and his JPL crew, which no insiders ever seriously questioned.

Within minutes after *Ranger's* soul-satisfying crash on the sea of clouds Friday morning, President Johnson was on the phone to Dr. Pickering with a heartfelt "Well done." Every American might well echo the President's words. It will be a long time before anything as rewarding as *Ranger 7's* journey happens in space again.

[From the New York (N.Y.) Times, Aug. 2, 1964]

TRIUMPH FOR "RANGER 7"

Publication of the first sample of lunar pictures taken by *Ranger 7* confirms with extraordinary force that this rocket's flight has been one of the most successful and productive experiments in scientific history. The exquisite clarity of the closeups of the moon's surface transmitted to earth assure that this event will be recorded as the real beginning of serious human exploration of the moon from the neighborhood of that satellite.

The full exploitation and analysis of new information will take several years, but even the first preliminary study has cleared up major problems and dispelled previous ignorance on important matters. The principal conclusion, of course, is that much of the