

SIXTIETH ANNUAL CONVENTION OF ROTARY INTERNATIONAL

Honolulu, Hawaii

25-29 MAY, 1969

More than 14,600 Rotations and guests from 66 countries are gathered for the 60th annual convention of Rotary International in the Honolulu International Center in Honolulu, Hawaii, U.S.A.

Convention Highlights

PEOPLE of Hawaii have in their language one of those musical words which seems to express a myriad of meanings, among them "hello" and "goodbye," love, affection, fond memories, to name a few.

The word is *aloha*, and it had a very personal meaning for each of the 14,684 Rotarians, their families and guests who came to these verdant islands for the 60th annual convention of Rotary International, 25–29 May, 1969.

None could have left this Pacific paradise untouched by the events of these crowded days, by new friendships made, and by a deeper appreciation for the purposes of the organization which brought this family of 66 nations to the city of Honolulu on the island of Oahu, which means "the gathering place."

Although sun and surf and azure skies, balmy nights and nodding palms, made the leisure hours pleasant ones, a serious and purposeful theme pervaded this convention week. The theme said, hopefully, that those who came to this Pacific crossroads will return with a resolve to make Rotary a more meaningful force for good in a world filled with needs.

In general sessions, in small meetings, and in face-to-face encounters men from East and West talked of service through Rotary, how to make it more responsive to the problems of local communities and of a community of nations. Rotary's efforts to help youth, to promote law and order and justice, to raise business and professional standards and to ease international discords were the sub-themes explored by distinguished speakers who had accepted President Kiyoshi Togasaki's invitation to participate in this convention. The full text of these addresses begins on page 98.

Rotary's president, a man whose life has been devoted to bridging barriers between men, said in his opening address, "Today many strong men have come from the ends of the earth to stand face to face, to meet together, to think and plan and work together in the common interest of building a harmonious world, of developing the kind of civilization that distinguishes these fortunate islands."

FOURTH PLENARY SESSION

Thursday Morning, 29 May, 1969

Thursday Plenary Session

The night before the final plenary session of the convention, the moon had shone down on thousands of Rotarians gathered for Hawaiian luaus, traditional feasts of roast pig and poi and other native delicacies. On Thursday, 29 May, they got a remarkable new view of the moon as Astronaut Frank Borman, command pilot of the Apollo 8 lunar mission, gave a graphic word and picture account of the historic space mission in which men orbited the moon for the first time.

The motion pictures gave stunning views of the earth. Said Astronaut Borman, "The greatest emotional impact was looking back at earth, not looking at the moon from the lunar orbit, because the earth is blue, it is beautiful, it looks very fragile and everything we associate with goodness was clear back there 240,000 miles away. And I could not help but have the sincere question, "Why is it that the human genius that built the hardware that put us there ... (cannot) be captured and put to work for really more cooperative and better conditions here on earth?"

A member of the Rotary Club of Space Center, Houston, Texas, U.S.A., he presented a plaque displaying a club banner which he had carried on the Apollo 8 flight, and a photograph of the earth rising over the moon's horizon. Its inscription reads in part: "... to Rotary International in gratitude and remembrance of Rotarians everywhere who strive through selfless service to bring closer the day of universal understanding and peace on the Good Earth."



Astronaut Frank Borman receives an R.I. plaque of appreciation Thursday from President Togasaki, then in return presents to R.I. the banner of his Rotary Club of Space Center, Texas, which he carried around the moon during his historic Apollo 8 flight.

Fourth Plenary Session

The fourth and final plenary session convened at 10:00 o'clock, President Togasaki presiding. Community singing was led by Song Leader Robert Biggs.

PRESIDENT TOCASAKI: Good morning, ladies and gentlemen. The fourth, and final, plenary session of the 1969 convention of Rotary International is called to order.

Let us all take just a moment to give thanks for the wonderful fellowship we have experienced this week. Will you please rise for a moment of silence?

This past week, the total number of human beings to orbit the moon doubled—from three to six—with the fantastically successful completion of the Apollo 10 flight.

It is difficult to conceive of man actually achieving so much in so short a time in space, but he has. Today—and, in large measure, due to the effective intercession of our able 1969 convention committee chairman, "Pat" Gilchrist—we are privileged to have with us one of these space pioneers who will tell us and show us what future space travelers can expect in the void beyond our planet.

He commanded the three-man team which made the first human circumnavigation of the moon last December. With James A. Lovell, Jr., and William A. Anders, he circled the moon ten times in the 147-hour, 590,000-mile flight in Apollo 8.

Recently, he stepped out of the astronaut corps to head a National Aeronautics and Space Administration program of the U.S.A.

Ladies and gentlemen: It is indeed a pleasure to present, from the Rotary Club of Space Center (Houston), Texas, U.S.A., Frank Borman. [Applause]

Frank Borman delivered his address and narrated a film, the full text of which begins on page 175.

PRESIDENT TOGASAKI: Thank you, Frank. Will you now please join me at the lectern at this time?

I would like to read to you aloud the inscription on this Certificate of Appreciation:

The President and members of the board of directors of Rotary International, acting in behalf of Rotarians worldwide, recognize and desire to acknowledge the outstanding service to his fellowmen, and in particular to his fellow Rotarians, rendered by Rotarian Frank Borman of the Rotary Club of Space Center (Houston) who, in commanding the spaceship Apollo 8 in the first manned circumnavigation of the moon, not only achieved a technological triumph, but brought to his mission a demonstrable humility and a sense of the eternal values which have set an unique pattern of excellence amid a disturbed and restless society.

We, your 660,000 fellow Rotarians, salute you for selfless service far beyond the call of duty. Honolulu

May, 1969

Signed, and on behalf of the board Kiyoshi Togasaki, President of Rotary International

[Applause]

FRANK BORMAN: If I may, I have here a little item, part of which was carried around the moon with us on Apollo 8 that I would like to present to Rotary International, sir. It is a little banner of our Space Center Club; it is a small but well traveled one. It has been around the moon. I would like to read the inscription, if I may:

> This banner, carried across the threshold of space to orbit the moon December 21, nineteen hundred and sixty-eight through December 27, nineteen hundred and sixty-eight, is presented by the crew of APOLLO 8

to

ROTARY INTERNATIONAL in gratitude and remembrance of Rotarians everywhere who strive through selfless service to bring closer the day of universal understanding and peace to the Good Earth.

Frank Borman James Lovell William A. Anders

[Applause]

PRESIDENT TOGASAKI: Thank you, Frank. This is a memento which I indeed, all of Rotary International—will cherish. Sincerely, we thank you. You will find it in the archives of Rotary International in the days to come. Thank you very much. [Applause]

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By COLONEL FRANK BORMAN Houston, Texas, U.S.A.

ASTRONAUT, **U.S.A. NATIONAL AERONAUTICS** AND SPACE ADMINISTRATION

'HANK YOU ALL very much. I am very happy to be with you. I mentioned, when I arrived in Hawaii, I had one problem-I guess the younger generation would call it a hang-up. I never get to stay in Hawaii. I have to leave again right after the talk. But I am very happy to be here today with fellow Rotarians because I think that the experience I have had, and I would like to share with you in a few minutes, will cast a new light on some of the meanings and ideals of Rotary. I hope you will have that feeling after we take our short trip to the moon.

What I would like to do now is invite you to accompany me on Apollo 8 and, after the travelogue, we will have a short discussion of where we have been. This is in keeping with the technique in the Army: To tell people what you are going to tell them; tell them, and then tell them what you told them. Let's blast off to the moon.

[Slide] The first shots you will see are the Saturn V booster sitting on the launch pad at the Cape. The Saturn V, you see, weighs 6.2 million pounds. It is propelled by 7½-million pounds of thrust. Right now it is burning fuel at the rate of 15 tons per second.

None of our crew had ever seen one of these things launched before, and I think that is part of NASA's training plan. They never let you see one until they have you strapped in. [Laughter] Probably not a bad idea, when you think about it.

As we are riding along, approaching the umbilical capsule, the noise within it, the inter-crew communication is really unaffected.

[Slide] Now you are looking at the Saturn V as it struggles to carry its 6 million pounds to the upper fringes of the atmosphere.

Please notice the rocket exhaust. It starts to over-expand or spread out quite dramatically. We had experienced that in other



flights, and we expected it, but you will also notice on the Saturn V it starts to crawl forward. We hadn't noticed it and we didn't expect it.

HEN I noticed it on the unmanned, I talked to Dr. von Braun over at Huntsville, Alabama, he looked at the picture and finally turned to me and said, "Don't vorry." So, we didn't "vorry" about it and, sure enough, he was right.

[Slide] We get into the first stage of the Saturn V, accompanied by one million pounds—there it is—of thrust of solid rockets. We are now on our way, propelled by a million pounds of thrust from five hydrogen oxygen engines. In a moment we will jet into the escape tower. That takes with it the protective cover, and we will be able to see outside for the first time.

There goes the escape tower. Here is the view we had. Actually, these pictures were shot after we had ejected on our way to the moon.

There is a large piece of aluminum which once held the spacecraft to it. It is jettisoned.

. The colors here are a little too green. The earth is really a beautiful blue. The altitude of these pictures varies from 550 to 1,200 miles. You will notice that even at this relatively low altitude, none of the earths are visible.

We are now pitching to line our longitudinal axis with it. You can see Africa in the lower left-hand side of the film. You can see the intertropic convergence zone, the long string of clouds. And I submit this is rather good proof the earth is really round, although when I showed the film in London to a member of the London Society he didn't agree. He thought it was shaped like a coin.

Now we would like to welcome you to the interior of our home. I am over on the left; Jim Lovell in the center; Bill Anders, unfortunately, was the cameraman for the film, so we don't see too much of him.

Jim is demonstrating for you the ease of maneuvering in zero gravity here as he moves gracefully throughout the cabin. You really can't appreciate this unless you realize how clumsy he is in 1G.

Now he moves to lower equipment bay, to demonstrate the use of a sector. He was able to measure with an accuracy of one hundred thousandth of a degree. That is not bad, when you consider he is left-handed, and in the Navy to boot.

Now, we traveled some three days on our way to the moon without really seeing it. We burned our large rocket engine for some four minutes. We looked down and 60 miles away is the landscape

you are seeing before you.

These films were shot at six frames a second with an engineering camera. We have expanded the number of frames, but we are still playing them back considerably faster than exposed. Consequently, the apparent rate of motion over the lunar surface is exaggerated.

As we progress along toward the noon, lunar noon, you notice the shadows. The terrain features become less distinct, and we encounter the phenomenon known as washout. In actuality, our eyes were able to function much better than the camera. We found that we could distinguish marine terrain features even in the shadow areas.

That is quite a place, the moon. As we said, it is a different thing to each one of us. Before the presidential inauguration in the States we looked at these films and thought they looked exactly like the. Mojave Desert in California. But since then, the more we look at them now, we are sure they look just like West Texas. There is an area right up south of Austin.

OW I WANT you to notice that we changed the top stop setting on our camera in order to point out features. We changed the f-stop setting in order to point out features that are relatively young, geologically speaking. These features stand out now as the white impact surface that you see with recurring frequency in the film.

You are looking at the far side of the moon, the area ordinarily not seen from the earth. Some people refer to it as the dark side of the moon but, in reality, on our flight, it was the light side of the moon, because the area nearest the earth was dark.

You will notice in the upper part of the screen the stark nature of the lunar horizon, absolutely no evidence of an atmosphere.

Now we are panning along into the lunar night. We spent ten lunar days and nights, if you will, around the moon. Each one of the nights about 45 minutes, and the most impressive sighting we had always occurred at sunrise.

In a minute we will go to the lunar sunrise. There it is. Notice how long the shadows are, and how terribly rough the surface of the moon really is.

There, incidentally, is a large impact crater that had not been seen before, appearing in the upper right-hand part of the screen.

We have now burned a large rocket engine. We are starting home—fortunately at work—and these are the scenes that we had as we left the moon and headed back for the good earth.

Now we would like to welcome you back inside of Apollo 8. We still have to return home. Of course, in any situation there is a certain requirement for housekeeping.

Jim Lovell here is demonstrating for you one of the routine tasks we had, that of changing the lithium hydroxide canister. We use it to scrub breathing apparatus and remove its carbon dioxide content. Jim is removing one from the environment control unit. Now he closes the door on the unit.

N ORDER TO keep from putting a used one back in the unit, we always marked it with tape, put tape on and wrote on it with ballpoint pen. But, unfortunately, Jim has lost the tape here.

He looks around, can't find it. So he finally took the umbilical tape. There came the tape. It is a little bit out of synchronization. The tape is coming right now on this one.

One of the nice things about the Apollo orbit, you never drop anything. By the same token it is rather difficult to stabilize an article.

Bill did a good job on this. Now he gives a flip of the wrist, so you can get a pretty good demonstration of zero gravity.

Now we pan the camera around the spacecraft to show you the instrument panel. Our control handle is in the lower right.

Here is a shot taken from a tracking ship over the Pacific, a shot • of our entry. In a minute you will see the Apollo 8 after it landed in

² the water some hour and one-half before sunrise, into what the Navy called a calm sea. I am always thankful it wasn't a rough sea, when I see these pictures.

The frogmen were right there at sunrise. They put the flotation collar around the spacecraft, and we prepared to leave by helicopter.

Really, now that I look at it again, it is just like a mill pond. Of course, one of the more interesting parts of any one of the spacecrafts is the ride back in the helicopter. I couldn't help thinking, when I looked at the thin cable, 500,000 miles, and that thing is liable to break at any minute! But it didn't.

People ask what is the most memorable part of the flight. Of course, quite frankly, the most wonderful part of it is the completion, when you step out after a successful flight.

Watch this gentleman as it comes up. He acts like he is very nonchalant and quite calm, but we were all very excited.

There he goes on the other screen. He almost broke his leg. [Laughter and prolonged applause]

I am glad you enjoyed the trip. Now I would like, if I may, to just briefly give you a little background of how Apollo 8 came into being.

The title of the talk is sort of "Apollo—A Reality." Just about last June, Bill and Jim and I were sitting in a spacecraft in Downey, California, preparing for a flight that would have occurred this

Address by Colonel Frank Borman

May. We originally were scheduled to fly around the earth with a lunar module in an earth orbital demonstration, really a repeat of Apollo 9. However, the lunar module that was scheduled for the first manned flight was slipping badly, because of development problems.

So, were called back to Houston and asked if we would like to fly around the moon with a different spaceship in December.

After thinking it over, and the problems involved and the changes involved in the spacecraft, we decided it was feasible.

We then sat down in Houston on August 19 with about twelve people and made the following decisions: First of all, we decided we would fly Apollo 8 around the moon for ten orbits; that we would launch at 7:51 on the morning of December 21, that we would return to the Pacific and land about one and one-half hours before sunrise.

I mention all this to you just to point out how things really occurred on Apollo 8. We did, in fact, do everything precisely as scheduled at that meeting on the 19th of August except for the fact that, after returning from the moon, we landed in the Pacific 42 seconds later than they had predicted then.

Of course, I would like to say that that was due to the skill and cunning of the flight crew but, in actuality, it was due to the combined efforts of several hundred thousand people.

One of the interesting facts that I have learned since the flight is that the average age of the engineers that computerized the trajectory was 23 years.

W E ARE NOW to another aspect of Apollo 8. We talk about Apollo 8 as a peculiar American triumph. In a way it was. After all, it was built in America, and I am an American; the crew and the support crews were Americans. But, in a very real way, Apollo 8 drew on the combined knowledge of all of civilization. As Newton said, we stood on the shoulders of a giant. Without the Keplers and the Newtons, we couldn't have gone.

And the most significant thing to me of the whole flight, the greatest emotional impact, was looking back on the earth—not looking at the moon but looking back on the earth from the lunar orbit, the shot that you saw on the screen. Because, as I am sure you all realized as you viewed it with me, the earth is blue; it is beautiful; it looks very fragile, and everything we associate with God was clear back there, 240,000 miles away. I couldn't help but have the sincere and remarkable feeling, really a question, why is it that the human genius that could build the hardware for us to go further than man had ever been from the earth before—why

there weren't some way to be able to capture this to work for really more cooperative and better conditions here on earth? [Applause]

I think this is one of the reasons that I am so proud to be able to speak to this group today, because I know you share those sentiments.

Now I also would like to end by reading to you, if I may, along the same lines, a poem that was written since the flight or during the flight by Archibald MacLeish, and which has captured, to me, the true meaning of Apollo 8. It is: "To see the earth as it truly is, small and blue and beautiful, and that eternal silence were close, is to see ourselves as riders on the earth together; brothers on that bright loveliness in the eternal cold—brothers who now know that they are truly brothers."

Thank you.