## Apollo Program

Missions 1 and 7-17
Photographs and Statements

#### "The conquest of Space is worth the risk of life."

Gus Grissom, Projects Mercury, Gemini and Apollo

"A good man's life is never quite ended; something of it always remains to touch and illuminate other lives."

Ed White, Projects Gemini and Apollo

"Problems look mighty small from 150 miles up."

Roger Chaffee, Projects Gemini (CAPCOM/G3-4) and Apollo





"Feeling weightless - it's so many things together. A feeling of pride, of healthy solitude, of dignified freedom from everything that's dirty, sticky. You feel exquisitely comfortable - and you feel you have so much energy, such an urge to do things, such an ability to do things."

Wally Schirra, Commander, Apollo 7

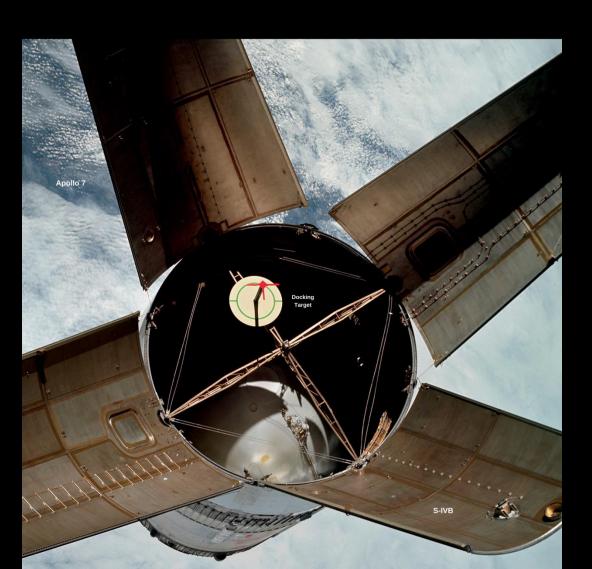
"The S-IVB loomed large and awesome in the front windows as Wally (Walter Schirra) moved closer. It looked like a large black-and-white tin can about 20 feet across and sixty feet long. On the end were four large tapered panels partly spread like petals on a flower, which had opened when we left it. The whole thing looked like a giant, four-jawed garfish, like some giant whale waiting to swallow us up if we got too close."

Don Eisele, Command Module Pilot, Apollo 7



"I find myself now preaching about the golden age of Manned Spaceflight, because something went on there, within us, that we're missing. When we went to the Moon, it was not only just standing on a new plateau for all mankind. We changed the way everybody in the world thought of themselves, you know. It was a change that went on inside of us. And we're losing that."

Walt Cunningham, Lunar Module Pilot, Apollo 7



## "Exploration is really the essence of the human spirit."

Frank Borman, Commander, Apollo 8



"We got to the Moon on Christmas Eve 1968, at the end of a poor year for this country. We had Vietnam. We had civil unrest. We had the assassinations of Robert Kennedy and Martin Luther King. But we went around the Moon and saw the far side for the first time. A script writer couldn't have done a better job of raising people's hope."

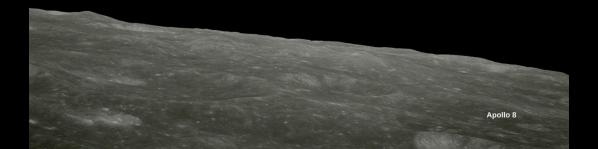
Jim Lovell, Command Module Pilot, Apollo 8



"We came all this way to explore the Moon, and the most important thing is that we discovered the Earth."

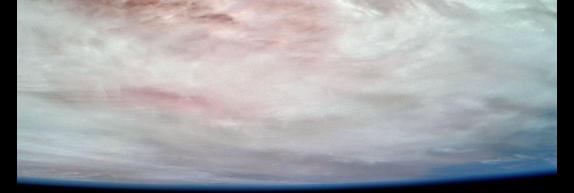
William Anders, Lunar Module Pilot, Apollo 8







NASA decided to make Apollo 8 a circumlunar flight, and offered it to Commander McDivitt and his crew (Schweickart, Lunar Module Pilot; Scott, Command Module Pilot), which they declined since they were training to fly the first Lunar Module (LM) since 1966. The Earth-orbital LM test flight became Apollo 9.





McDivitt (Commander): "It's a beautiful machine, Tom!"

Kelly: "It is, isn't it?"

Schweickart (Lunar Module Pilot): "You really think that thing is beautiful?"

McDivitt (Commander): "God no, it looks like a toaster oven with legs, but I'm not gonna tell him that."

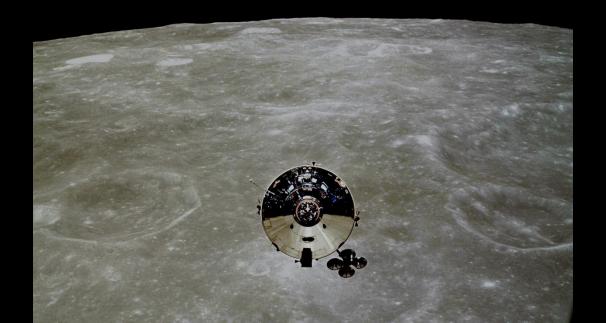
### "We're not passengers on Spaceship Earth. We're the crew."

Rusty Schweickart



#### "Good Grief, Charlie Brown!"

Because the Apollo 10 mission required the Lunar Module (LM) to skim the Moon's surface to within 50,000 feet and "snoop around" scouting the Apollo 11 landing site, the crew named it "Snoopy." Naturally, the Command Module (CM) was labeled "Charlie Brown" (NASA). The CM is seen from the perspective of the LM.



#### "Houston, this is Apollo 10. You can tell the world we have arrived."

Thomas P. Stafford, Commander, Apollo 10



"I marvel again at the precision of our path. We have missed hitting the Moon by a paltry 300 nautical miles, at a distance of nearly a quarter of a million miles from Earth, and don't forget that the Moon is a moving target and that we are racing through the sky just ahead of its leading edge. When we launched the other day the Moon was nowhere near where it is now; it was some 40 degrees of arc, or nearly 200,000 miles, behind where it is now, and yet those big computers in the basement in Houston didn't even whimper but belched out super-accurate predictions."

Michael Collins, Command Module Pilot, Apollo 11





"I am alone now, truly alone, and absolutely isolated from any known life. I am it. If a count were taken, the score would be three billion plus two over on the other side of the Moon, and one plus God knows what on this side."

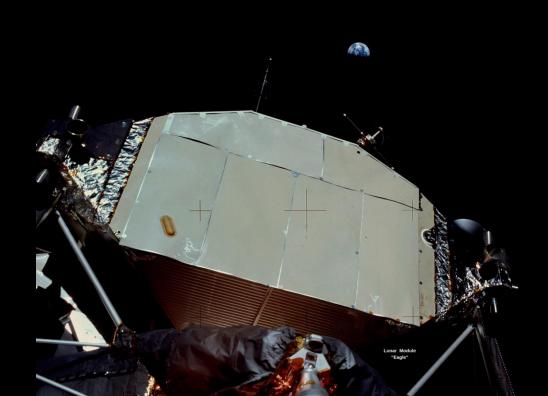
#### "Houston, Tranquillity Base here. The Eagle has landed."

Neil Armstrong, Commander, Apollo 11



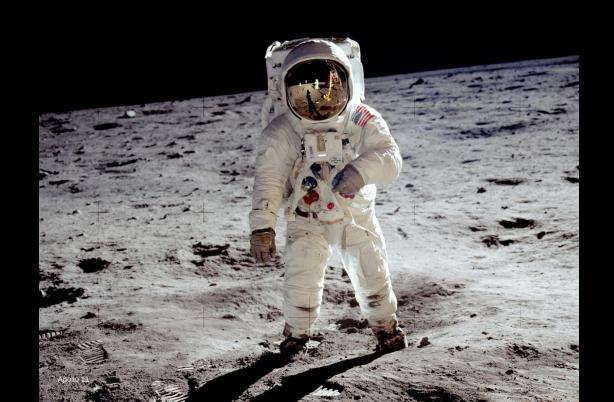
"It suddenly struck me that that tiny pea, pretty and blue, was the Earth. I put up my thumb and shut one eye, and my thumb blotted out the planet Earth. I didn't feel like a giant. I felt very, very small."

Neil Armstrong, Commander, Apollo 11



"The biggest benefit of Apollo was the inspiration it gave to a growing generation to get into science and aerospace."

Buzz Aldrin



#### "I want to keep on the move, keep stimulated and challenged."

Buzz Aldrin



# "Extraordinary observations require extraordinary evidence."

Buzz Aldrin



"It's a brilliant surface in that sunlight. The horizon seems quite close to you because the curvature is so much more pronounced than here on Earth. It's an interesting place to be.

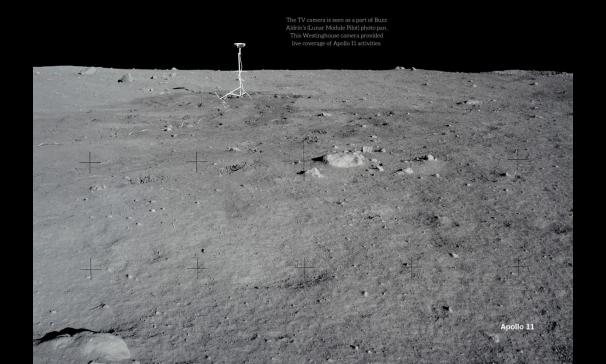
I recommend it."

Neil Armstrong



"There were a lot of things to do, and we had a hard time getting, them finished. We had very little trouble, much less trouble than expected, on the surface. It was a pleasant operation. Temperatures weren't high. They were very comfortable. The little EMU, the combination of spacesuit and backpack that sustained our life on the surface, operated magnificently. The primary difficulty was just far too little time to do the variety of things we would have liked. We had the problem of the five-year-old boy in a candy store."

Neil Armstrong, Commander, Apollo 11



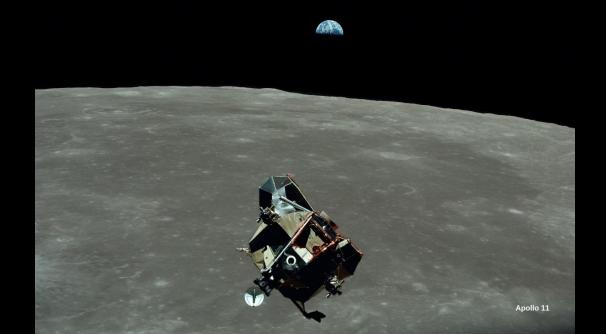
"At one point I remarked that the surface was 'Beautiful, beautiful. Magnificent desolation.' I was struck by the contrast between the starkness of the shadows and the desert-like barrenness of the rest of the surface. It ranged from dusty gray to light tan and was unchanging except for one startling sight: our LM sitting there with its black, silver, and bright yellow-orange thermal coating shining brightly in the otherwise colorless landscape."

Buzz Aldrin, Lunar Module Pilot, Apollo 11



"I can look out through my docking reticle and see that they are steady as a rock as they drive down the center line of that final approach path. I give them some numbers. 'I have 0.7 mile and I got you at 31 feet per second.' We really are going to carry this off. For the first time since I was assigned to this incredible flight, I feel that it is going to happen. Granted, we are a long way from home, but from here on it should be all downhill."

Michael Collins, Command Module Pilot, Apollo 11

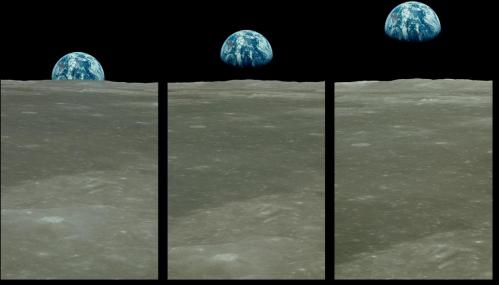


"I thought the attractions of being an astronaut were actually, not so much the Moon, but flying in a completely new medium."

Neil Armstrong, Commander, Apollo 11



Image of Earth taken during the trip home from the Moon (Apollo 11).



NASA, Apollo 11

"If you could see Earth illuminated when you were in a place as dark as night, it would look to you more splendid than the Moon."

Galileo Galilei

# "It is a beautiful and delightful sight to behold the body of the Moon."

Galileo Galilei



Apollo 11

"You know, it was always a fascination to look back at the Earth and see it getting smaller and smaller and smaller and the Moon getting bigger and bigger."

Richard Gordon, Jr., Command Module Pilot, Apollo 12



## "It's hard not to be excited when you're going to find a way to land on the Moon."

Alan Bean, Lunar Module Pilot, Apollo 12



"Whoopie! Man, that may have been a small one for Neil but that's a long one for me."

Pete Conrad



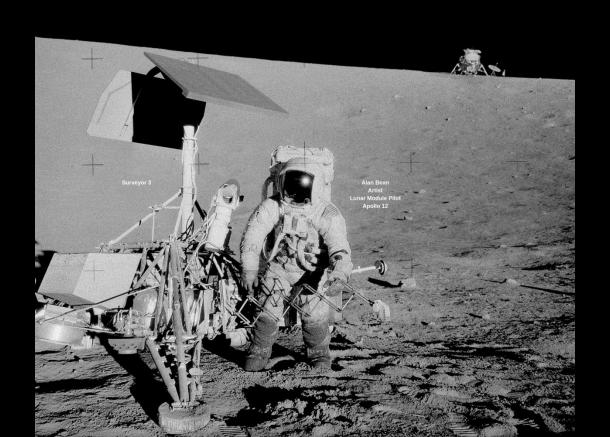
"We found some green rocks, and some gray soil that maintained its light color even below the surface, which is not common, and we finally reached the Surveyor crater. I was surprised by its size and its hard surface. We could have landed right there, I believe now, but it would have been a scary thing at the time. The Surveyor was covered with a coating of fine dust, and it looked tan or even brown in the lunar light, instead of the glistening white that it was when it left Earth more than two years earlier."

Pete Conrad, Commander, Apollo 12



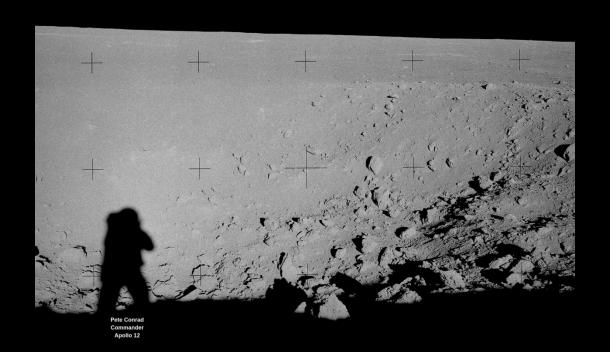
# "But I'm the only one who can paint the Moon, because I'm the only one who knows whether that's right or not."

Alan Bean



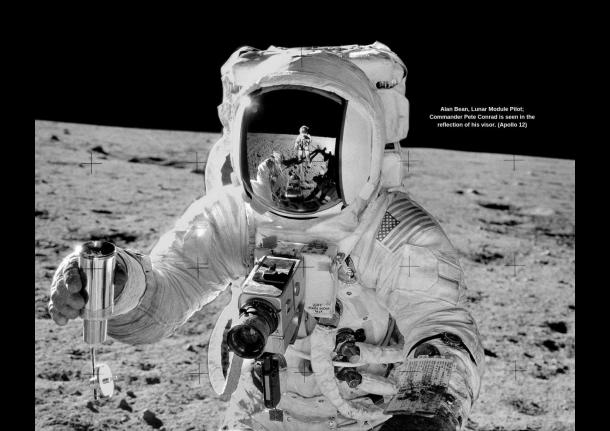
### "If you can't be good, be colorful."

Pete Conrad



"As I ran along, I remember - saying to myself - you know, this is really the Moon. We're really here - that's the Earth up there. And I said it two or three times to myself."

Alan Bean



"For some time, I thought Apollo 13 was a failure. I was disappointed I didn't get to land on the Moon. But actually, it turned out to be the best thing that could have happened."

Jim Lovell, Commander, Apollo 13



#### "I grew up on Buck Rogers and Flash Gordon. There wasn't a Space program or NASA when I was a kid."

Fred Haise, Lunar Module Pilot, Apollo 13



The Apollo 13 Lunar Module (LM) is seen tucked away with legs folded, inside the Spacecraft-to-LM Adapter (SLA) attached to the S-IVB third stage of the Saturn V rocket. The LM was used as a 'lifeboat' to bring the crew back safely to Earth.

## "So long, Earth. Catch you on the flip side."

Jack Swigert, Command Module Pilot, Apollo 13



Command Module Pilot Swigert made this statement as he and his crew members readied themselves for circumnavigation of the Moon to use its gravity to return their spacecraft to Earth.

(Image of Earth by Apollo 13.)



"I wish there was some other word besides 'fantastic' to describe it. But it does, it looks like somebody has made a cast and poured it out there." "Whether you are an astronomer or a life scientist, geophysicist, or a pilot, you've got to be there because you believe you are good in your field, and you can contribute, not because you are going to get a lot of fame or whatever when you get back."

Alan Shepard



"Space exploration must be undertaken not only out of simple human curiosity but also to further the survival of the species."

Edgar Mitchell, Lunar Module Pilot, Apollo 14



"Quietly, like a night bird, floating, soaring, wingless.

We glide from shore to shore, curving and falling

but not quite touching;

Earth: a distant memory seen in an instant of repose,

crescent-shaped, ethereal, beautiful,

I wonder which part is home, but I know it doesn't matter . . .

the bond is there in my mind and memory;

Earth: a small, bubbly balloon hanging delicately

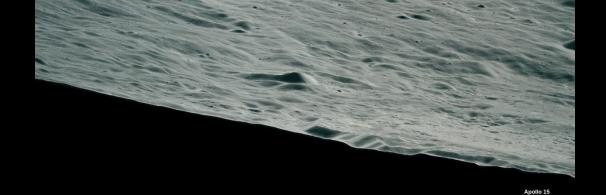
in the nothingness of Space."

Alfred Worden, Command Module Pilot, Apollo 15

"The Earth reminded us of a
Christmas tree ornament hanging in
the blackness of Space. As we got
farther and farther away it
diminished in size. Finally it shrank
to the size of a marble, the most
beautiful marble you can imagine."

Jim Irwin, Lunar Module Pilot, Apollo 15



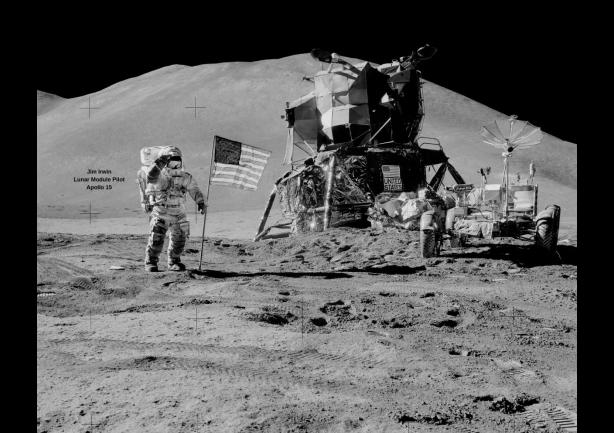


"For when I look at the Moon I do not see a hostile, empty world. I see the radiant body where man has taken his first steps into a frontier that will never end."

Dave Scott, Commander, Apollo 15

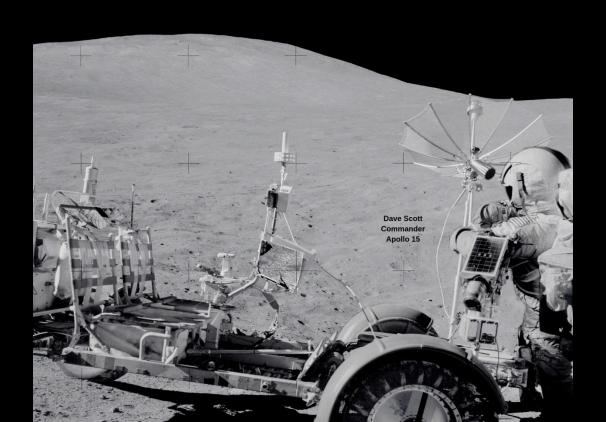
"Okay ... okay. That a boy. Okay. I've backed up here so I get all of that in there. There, that's good. Good. Got the mountain, got the LM. Great."

Dave Scott, Commander, Apollo 15



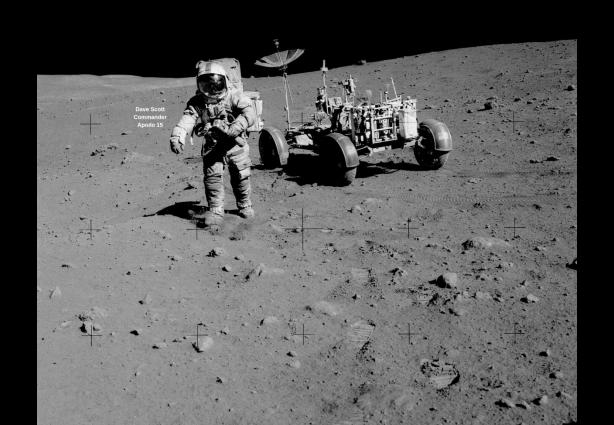
"Stand where you are and give me alignment on the antenna, and see if I can get pointed at Earth. You can turn to your right there; take about three steps right, and if you look up - don't fall back, just look up - you'll be able to align the antenna in your position relative to Earth. You'll have to take your visor up probably. Do you see Earth up there?"

Dave Scott to Jim Irwin, Apollo 15



"I sort of realize there's a fundamental truth to our nature. Man must explore. And this is exploration at its greatest."

Dave Scott



### Apollo 16

#### Command and Service Modules

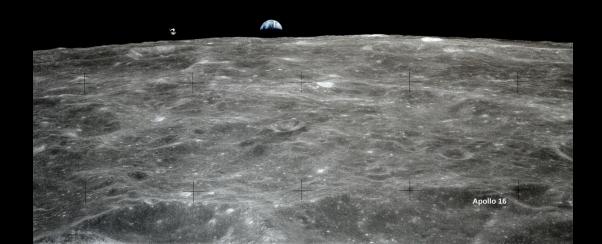


Command Module Pilot Ken Mattingly stayed in orbit around the Moon while Commander John Young and Lunar Module Pilot Charlie Duke walked on the Lunar surface. The Command and Service Modules are seen from the perspective of the Lunar Module (pre-landing).

"I had this very palpable fear that if I saw too much, I couldn't remember. It was just so impressive. And these things kept coming for the next 10 days. They never stopped."

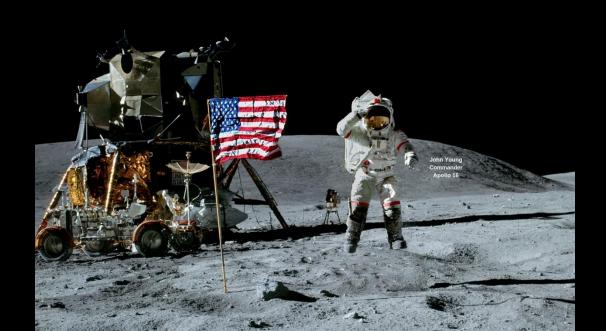
Ken Mattingly, Command Module Pilot, Apollo 16

The Command Module (CM) and Earth are seen from the perspective of the Lunar Module (LM) (pre-landing).



"Hey John, this is perfect, with the LM and the Rover and you and Stone Mountain. And the old flag. Come on out here and give me a salute. Big Navy salute. Come on, a little bit closer. Okay, here we go. A big one. Off the ground once more. There we go."

Charles Duke, Lunar Module Pilot, Apollo 16



"Again I'll say it, with that salute, I'm proud to be an American, I'll tell you. What a program and what a place and what an experience."

Charlie Duke



# "Moon Glory"



# "It was a texture. The blackness was so intense."

Charlie Duke



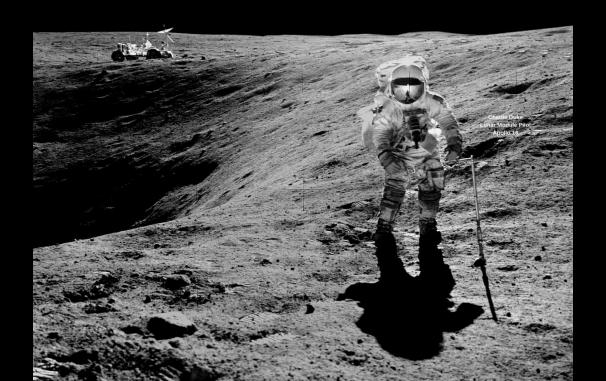
"Exploring Space is a hazardous line of work, always has been and always will be. But if you're going to make progress in aerospace, you've got to accept some risk."

John Young



"The Moon was the most spectacularly beautiful desert you could ever imagine. Unspoilt. Untouched. It had a vibrancy about it and the contrast between it and the black sky was so vivid, it just made this impression of excitement and wonder."

Charlie Duke



"Our ability to live and work on other places in the solar system will end up giving us the science and technology that we need to save the species. I'm talking about human beings. I'd hate to miss all that fun."

John Young

Apollo 16 Commander Young and the Lunar Roving Vehicle (LRV) are seen from the perspective of the Lunar Module (LM).



"I do believe there is life in Outer Space. Mathematically, there has to be, and if you believe as I do that there is a creator of the Universe, then how can we be so arrogant to believe he created life on Earth and nowhere else?"

Gene Cernan



# "Ah! You seen one Earth, you've seen them all."

Harrison Schmitt



"Okay. I can't see the rear ones, but I know the front ones turn. And it does move. Hallelujah, hallelujah, Houston! Challenger's baby is on the roll!"

Gene Cernan

Apollo 17 Commander Cernan test drives the Lunar Roving Vehicle (LRV), which was extracted from "Challenger", the Lunar Module (LM). The rover 's purpose is for greater surface mobility and range expansion.



### "I walked on the Moon. What can't you do?"

Gene Cernan



"By going back to the Moon, you accelerate your ability to go anywhere else — both in terms of experience and in terms of resources, and testing new hardware and navigation techniques, communication techniques and things like that. And it's only three days away."

Harrison Schmitt



# "Geologists have a saying - rocks\_remember."

Neil Armstrong, First Man on the Moon



#### "Nobody can take those footsteps I made on the surface of the Moon away from me."

Gene Cernan



"It's like trying to describe what you feel when you're standing on the rim of the Grand Canyon or remembering your first love or the birth of your child. You have to be there to really know what it's like."

Harrison Schmitt



"The Moon is bland in color. I call it shades of gray. You know, the only color we see is what we bring or the Earth, which is looking down upon us all the time. And to find orange soil on the Moon was a surprise."

Gene Cernan, Commander, Apollo 17



#### Lunar Roving Vehicle (LRV)

An operational constraint on the use of the LRV was that the astronauts had to be able to walk back to the Lunar Module (LM) if the "Moon car" were to fail at any time during the EVA - called the "walkback limit".



"Curiosity is the essence of human existence.
Who are we? Where are we? Where do we come from? Where are we going? I don't know.
I don't have any answers to those questions. I don't know what's over there around the corner. But I want to find out."

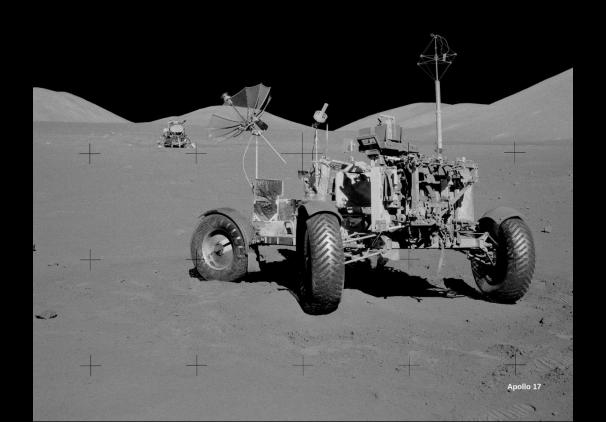
Gene Cernan, Commander, Apollo 17



"Okay, let me get one parting shot, one of the finest running little machines I've ever had the pleasure to drive. Oh, what a nice little machine! Parked on a little downslope."

Gene Cernan

Commander Gene Cernan parked the Lunar Roving Vehicle (LRV) in its 'final resting place' (VIP site), so there would be live TV coverage from the rover's camera of the Lunar Module (LM) ascent stage liftoff. He also made this photograph.

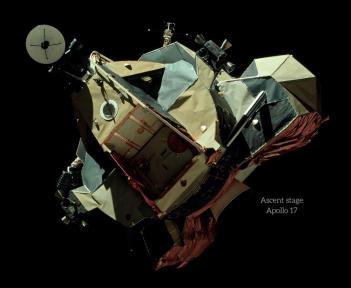


### "I'm quite disappointed that I'm still the last man on the Moon."

Gene Cernan, Commander, Apollo 17



The Lunar Module was the first manned spacecraft to operate exclusively in the airless vacuum of space. It was the first crewed vehicle to land anywhere beyond Earth.

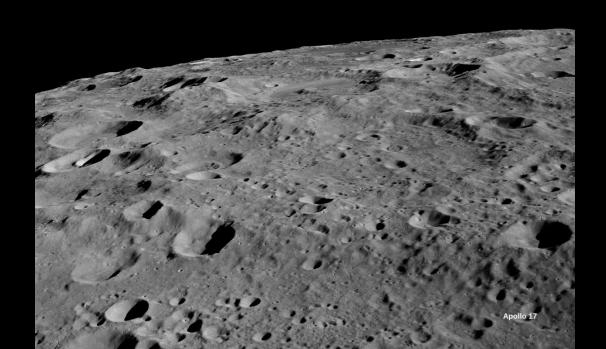


## "Hot diggity dog!"

Ron Evans



Apollo 17 Command Module
Pilot Ron Evans is seen
performing extravehicular
activity during the spacecraft's
trans-Earth coast. During his
EVA, he retrieved film
cassettes from the lunar
sounder, mapping camera and
panoramic camera. He uttered
the phrase, "Hot diggity dog!"
when he first stepped into
Space.



"The last Apollo flight to the Moon has been called 'the end of the beginning'. It represented more than just the end of a program to me. It brought to a close a phase of my career. Apollo had become intimately interwoven in the fabric of the waking hours of my life and often caused the remaining hours to be fewer than they should have been. Now, with Apollo 17, I found it difficult to accept the finality of that landing on December 19, 1972, near the USS Ticonderoga in the Pacific Ocean. The challenge would never again be quite the same. Apollo was like an intoxicating wine and certainly the last of the vintage."

Christopher C. Kraft, Jr., Director, Flight Operations, NASA, 1961-1972



Images courtesy of NASA.

Text courtesy of NASA (administrators/astronauts).

Image enhancement, poster production, and presentation by Tom R. Chambers (former research analyst at the Lunar Receiving Laboratory during the Apollo program).

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