

# SCIENTIFIC AMERICAN Space & Physics

## The Universe in Glorious X-rays

A NEW TELESCOPE IS POISED  
TO CREATE A MAP  
OF BLACK HOLES  
AND HUNDREDS OF  
THOUSANDS OF STARS

*Plus:*

Next stop: Venus

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The imminent  
quantum  
Internet

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Rarely seen  
*Apollo 11*  
images

WITH COVERAGE FROM

**nature**



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# The Unseen *Apollo 11*

**Much of the treasure trove  
of *Apollo 11* images  
is rarely shown**

*By Caleb A. Scharf*

IN THE 50 YEARS SINCE JULY 20, 1969, and the first humans landing on the moon, we've grown accustomed to seeing the same pictures of the *Apollo 11* mission again and again. But there is a wealth of material beautifully archived at NASA. In honor of Neil Armstrong, Edwin "Buzz" Aldrin and Michael Collins, as well as the thousands of people who contributed to this extraordinary—and provocative, moving, controversial, epoch-making, tear-jerking and outrageous—undertaking, here are a few selected images that don't often see the light of day—or space.

Lunar module after separation.



On July 12, 1969, *Apollo 11* astronauts Buzz Aldrin, Neil Armstrong and Michael Collins take their final press conference from inside their semi-isolated NASA quarters (done to minimize the odds of getting sick and to allow for a period of intense last-minute training). Deke Slayton is seen on the stool at the far left.



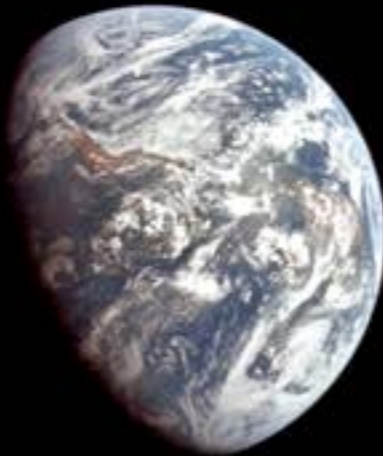


On the day of the launch, on July 16, 1969, Armstrong and Collins cross the walkway to the command module atop the Saturn V rocket. It will be an early-morning launch.

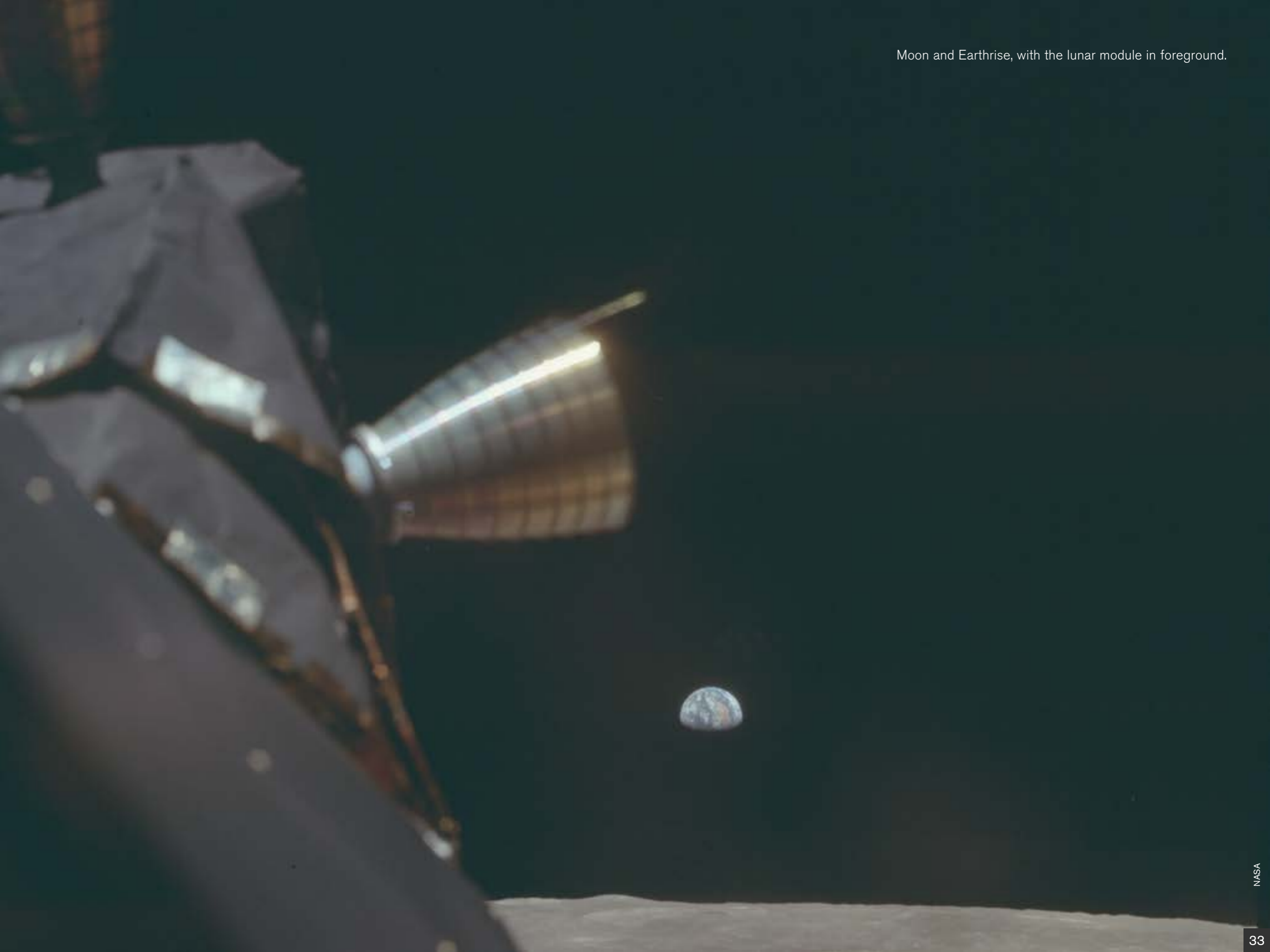


Saturn V launches, as seen from the Kennedy Space Center control room.

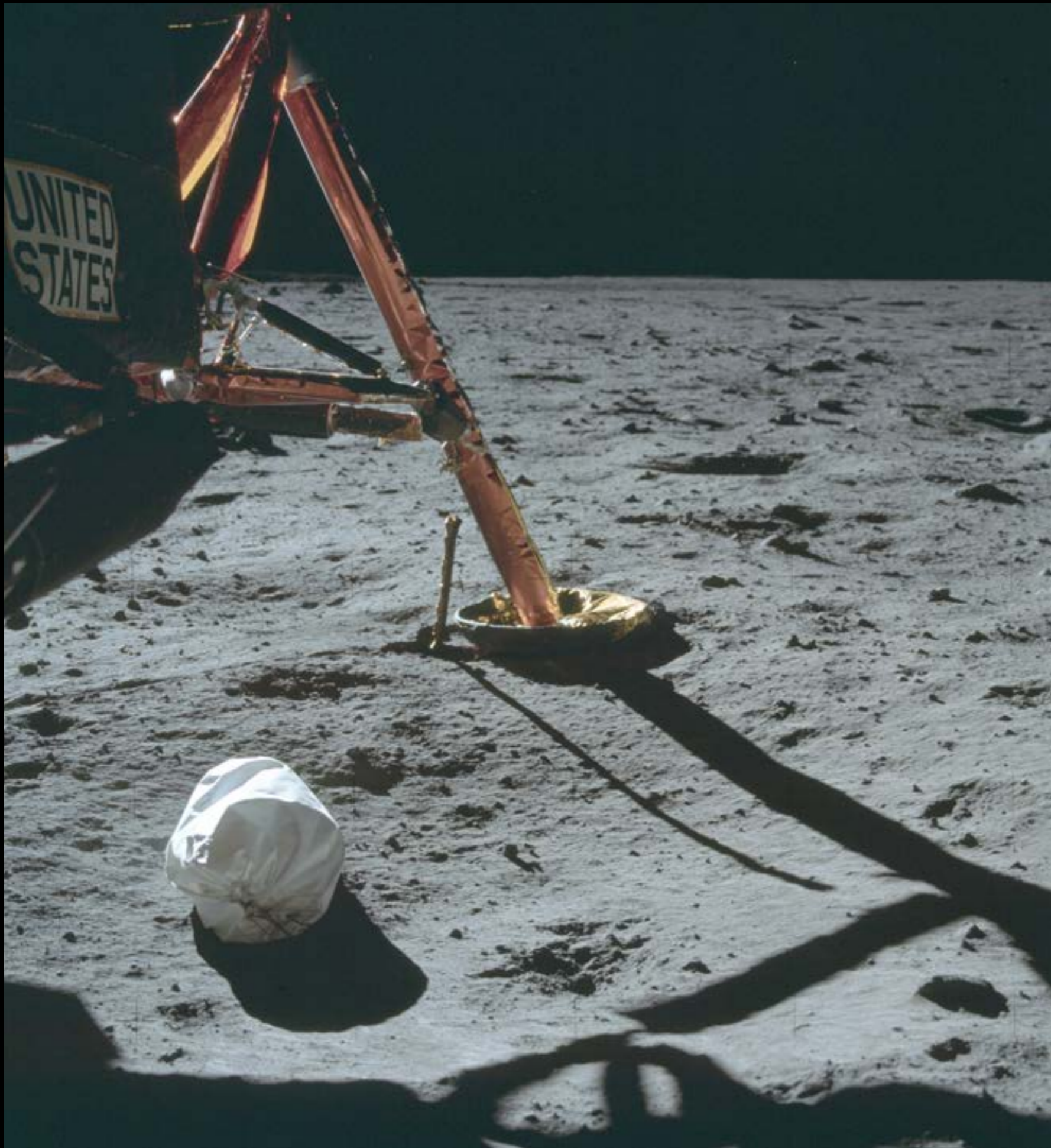
Leaving Earth behind.



Moon and Earthrise, with the lunar module in foreground.







Plaque left on the moon.

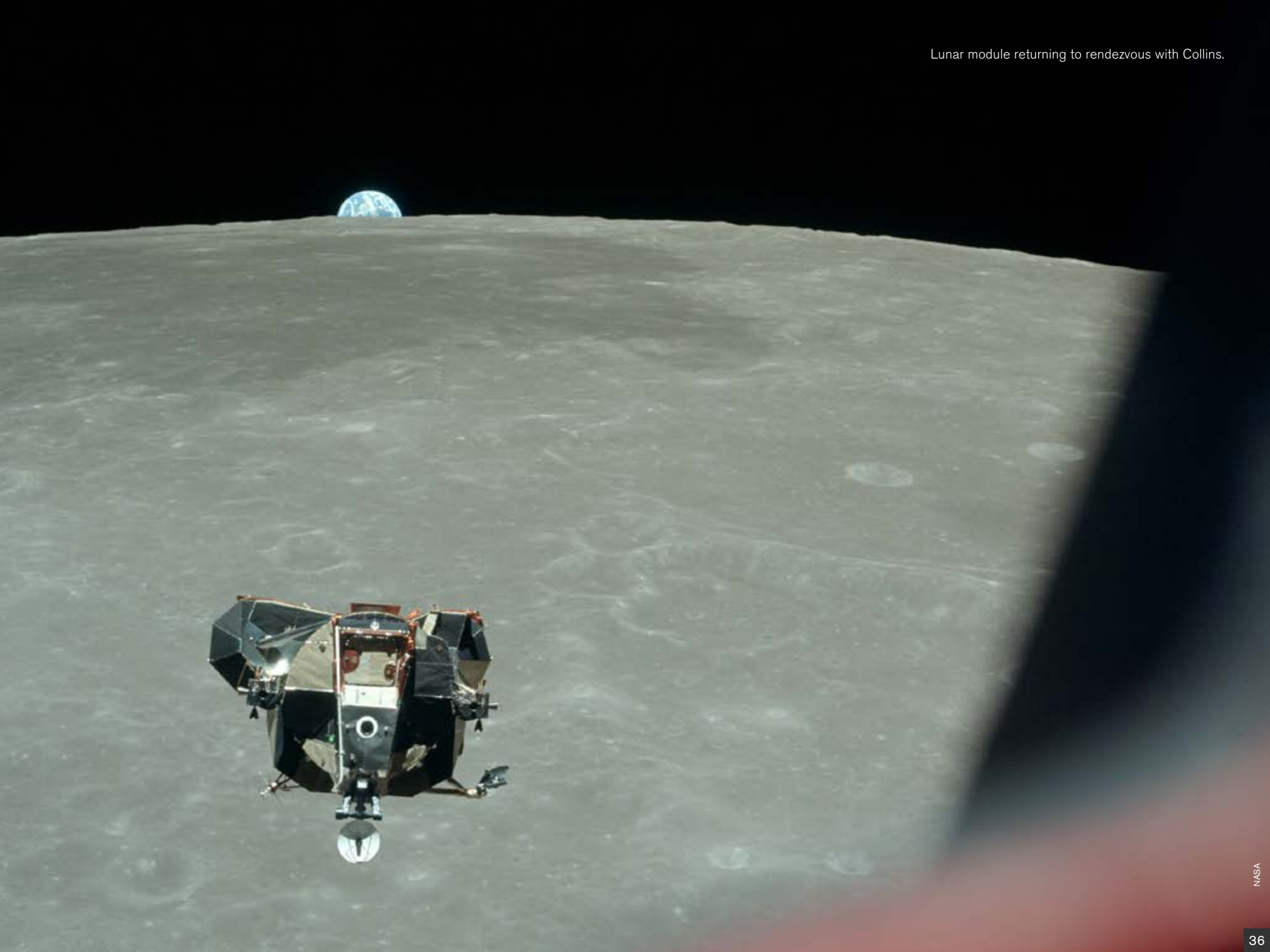
First image taken by Armstrong after setting foot on the moon.



Aldrin moving to place some of the mission's experiments and devices.









View of the moon after trans-Earth injection and the start of the astronauts' return to Earth.

