Icons of the Space Age
A Visual Legacy

Photographs from the Victor Martin-Malburet Collection

ONLINE ONLY

Bidding June 20 – July 15, 2021
Auction ends on July 15th, from 3 pm on (GMT+2)

KETTERER KUNST

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A visual legacy

More than 250+ vintage original photographs
from the Victor Martin-Malburet Collection
The untold story of mankind's greatest adventure.

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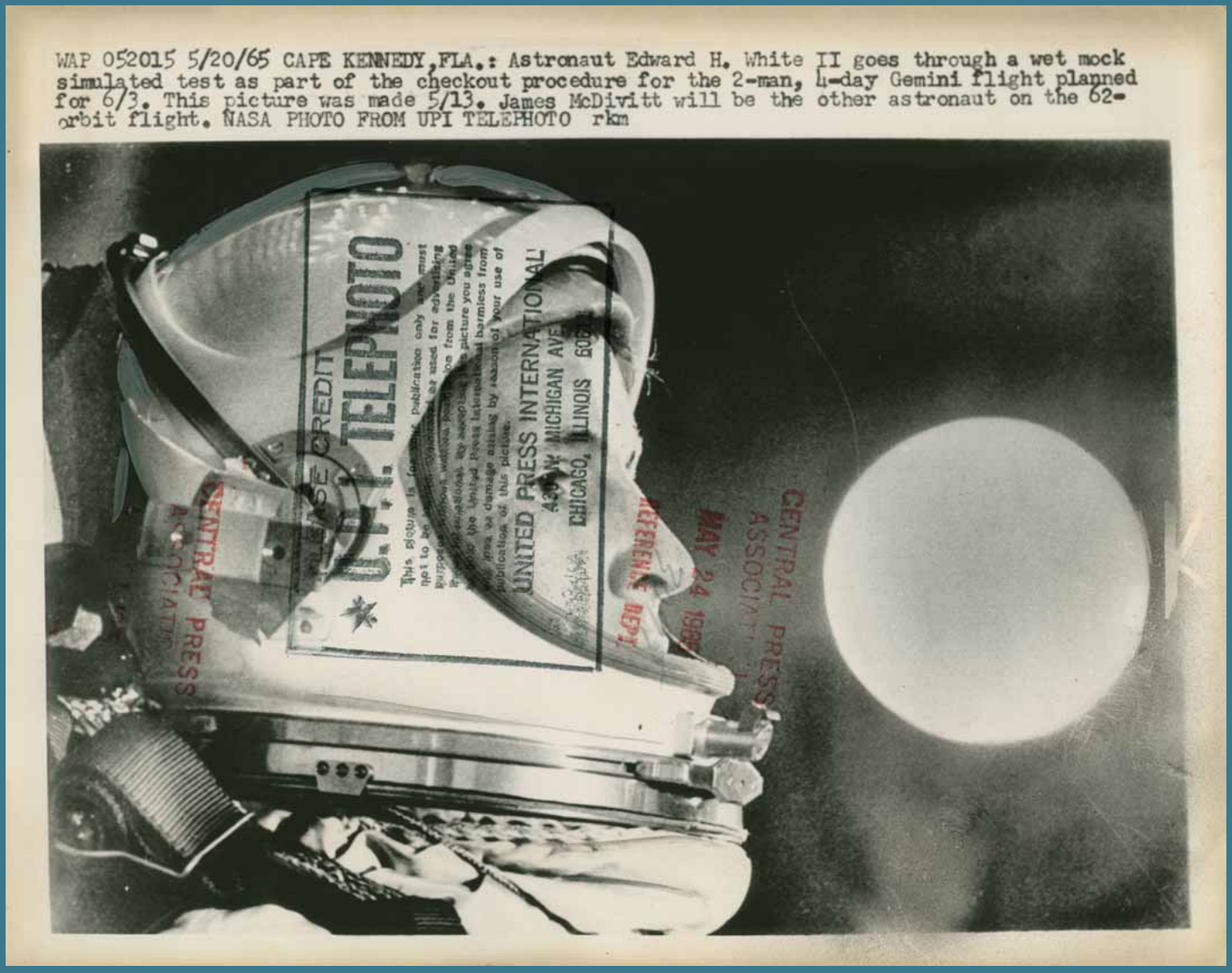
Cover: Lot 27. James Mcdivitt (Gemini IV). Cover of LIFE: the first US spacewalk of Ed White over the Earth, 3-7 June 1965.

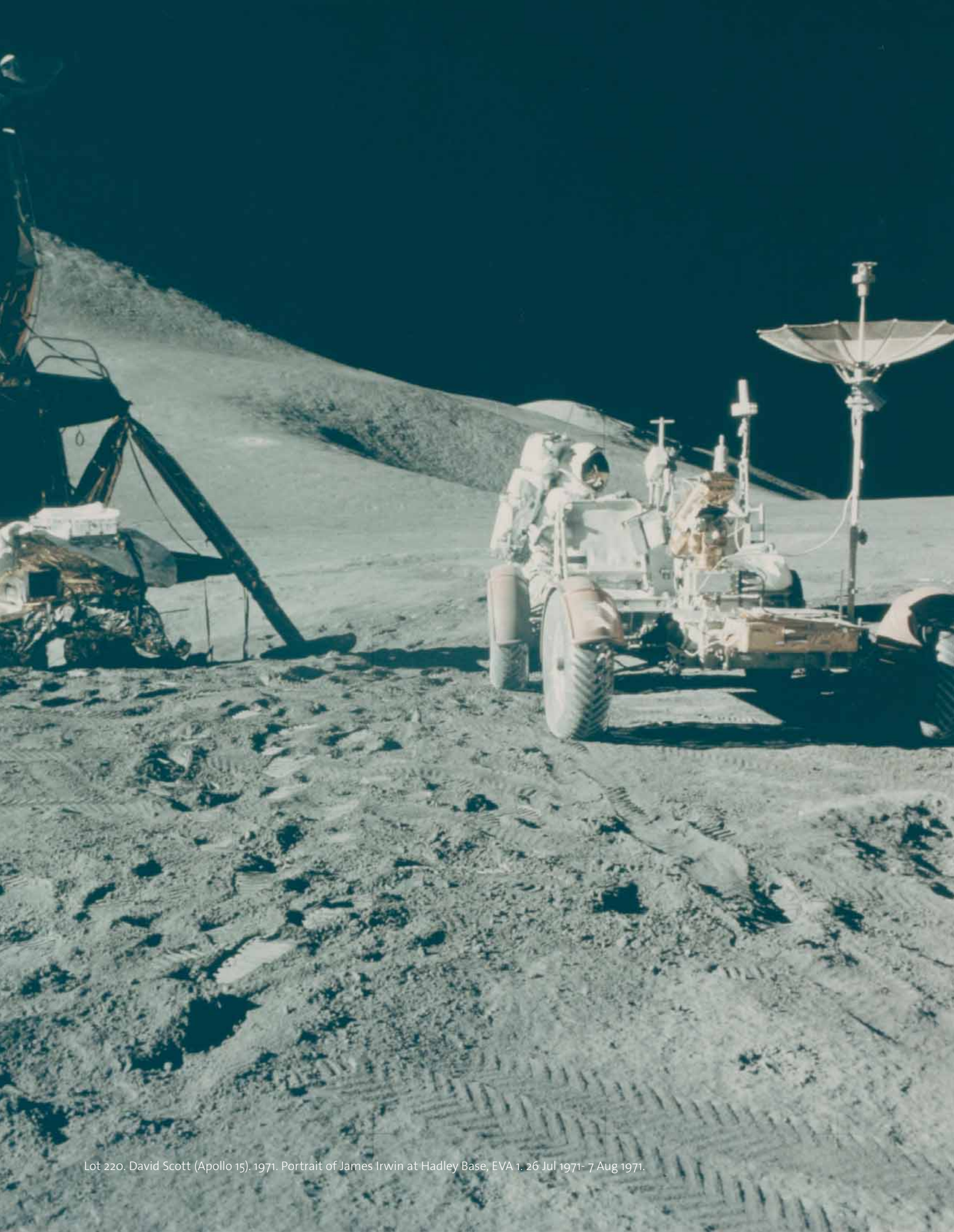


Thomas Ruff, press++01.16, 2015, Chromogenic Print

“I have been working...

with magazine and newspaper photo archives for over 30 years now – its an almost inexhaustible source of visual information, that receives far too little attention. At the beginning of the 1990s, I searched for the informative visual content behind cut-out newspaper articles and assembled photographs. Once the first photo archives of American newspapers and magazines were dismantled and auctioned on eBay, around 2010, I began to collect them. The first images included space travel photos – I had envisioned these more as part of my ever-growing collection on Astronomy, Outer Space and Space Travel. Once I held them in my hands for the first time, I realized that the backsides, with their comments, short press releases and inscriptions, were just as fascinating as their respective front sides of astronauts, spaceships, missiles or satellites. **The backsides are what turn the ‘space shots’ into one-of-a-kind sources of the history of space exploration."**

Thomas Ruff, *one of the most internationally recognized and significant photographers of his generation*



Lot 220. David Scott (Apollo 15). 1971. Portrait of James Irwin at Hadley Base, EVA 1. 26 Jul 1971- 7 Aug 1971.

FOREWORD

Victor Martin-Malburet

Icons of the Space Age
A visual legacy

For almost two hundred years photography has allowed us to seize the light of historic events and freeze them over time. Photography has also boosted astronomy. Then came the Space age which brought about extraordinary photography serving science and allowing the world to participate.

The Space age started just more than 60 years ago and was the most disruptive period of exploration in the history of mankind. The astronauts brought back four treasures from their voyages to the unknown: samples of lunar rock, scientific data, historic words, and photographs.

In our digital age, it is often difficult to remember that photography at the time was still analog, requiring light-sensitive chemistry, film and photographic papers. Paper was still the preferred medium for the dissemination of images and their scientific study.

Each film exposed in space was developed, once the mission returned to Earth, by the photographic technology laboratory of the Manned Spacecraft Center in Houston. Duplicated in the form of a “master”, the precious original film was immediately archived and preserved for future generations. From the “masters”, the photographs were printed, numbered and analyzed by NASA specialists. These prints, final products of the photographic chain, were documents for study, presentation and communication – and the visual legacy of an era that saw man leave the limits of our planet for the first time, explore another world and initiate the process of space exploration.

The astronauts benefitted from entirely new sensory experiences and lighting conditions: in space, the notion of horizontality and verticality disappears with gravity, there is no longer day or night, and nothing filters the sunlight...

However, the public was only aware of very few of the images: After each mission, NASA released only a selection of the photographs taken by the astronauts for publication - preferably those which had a strong impact and celebrated the mission’s success. They were intended for scientific circulation, media publication and history books. Many of these photographs have become icons of our visual culture.

The unreleased photographs were accessible only to accredited researchers in the archives of the various NASA centers. For thirty years, until their progressive online publication on the Internet, these “unreleased photographs” remained almost unknown to the general public, like the spectacular Hasselblad panoramic views taken in orbit and on the surface of the Moon.

Most pictures had no indication as to when in the mission the photograph was taken and the photograph was not credited to the astronaut who took it but to NASA itself.

A passionating challenge for the collector was to combine the photographs published at the time and the "unreleased" photographs and place them in their original context. This allows not only to better apprehend the wealth of NASA's photographic heritage but also to bestow a new reading of mankind's greatest adventure.

NASA was indeed at the forefront of photographic technology and closely collaborated with Kodak, Hasselblad and others to manufacture films, cameras and lenses adapted to the extreme constraints of space.

Everything was put in place so that the astronauts, even in a state of weightlessness and wearing a bulky space suit, could capture precision images in space. Cameras were modified and automated to speed up and facilitate shooting, fitted with high resolution 70mm medium format films, specially designed by Kodak on a very fine Estar polyester support allowing to take more pictures per film. The emulsion was also specially adapted for the vacuum of space. On the Moon itself, a removable mechanism (a contribution to photography of Neil Armstrong) made it easier for astronauts to fix the Hasselblad on their chest and operate the camera while engaging in other activities. Finally, a glass reseau plate engraved with a grid of crosses placed just in front of the film allowed scientists to subsequently extract information on lunar distances.

Photography proved to be a fundamental tool in reaching and exploring the Moon, but NASA quickly realized that it was also an exceptional asset to promote its space program and "sell" the lunar goal to the American taxpayer (demanding 4% of the federal budget for ten years and the combined efforts of 400,000 engineers and workers).

Today, it seems fair to say that the beauty of the images from space justifies the voyage itself.

At the start of the space program, only images of astronauts or rocket liftoffs from the ground illustrated the newspapers. On February 20, 1962, John Glenn became the first human to take photographs in space and the first American to orbit. Taking first shots from orbit was an experiment as no one knew for sure that weightlessness would even allow an astronaut to move, see and breathe. The priority was to bring him back alive. But Glenn's photographs appeared in color in LIFE Magazine and National Geographic and revealed to the people on Earth the beauty of space.

Each mission provided new firsts to be photographed. While artists of the time favored black and white (color prints were very expensive and the photographers had no control over their films which were sent directly to Kodak), the astronauts, supported by the best laboratory technicians and photo developers at NASA, extensively used color.

From then on, sublime images were created, like the photographs of Jim McDivitt showing Ed White floating freely in space during the Gemini IV mission in June 1965 (first American Extravehicular Activity).

Lot 81. William Anders (Apollo 8). 1968. The first human-taken color photograph of Earthrise. 21-27 Dec 1968.

These photographs, the very first showing “man in space”, appeared on front pages of newspapers around the world.

The astronauts found in photography the best medium for sharing the magic and exaltation of space travel, the profundity of their experience in space, their perception of the unreal beauty of another world and the meaning of their exploration of the unknown.

Between December 1968 and December 1972, twenty-four astronauts from Apollo 8 and Apollo 10 to 17 missions were the only humans in history to leave the gravitational field of planet Earth and travel to the Moon.

From their spacecraft in lunar orbit, they photographed the visible face from Earth with a resolution and an angle of view radically different from those from Earth, revealing ghostly landscapes of craters, plains and mountains whose appearance was threatening or appealing depending on the inclination of sunlight. The photographs of the dividing line between the light and dark part of a planetary body, were particularly striking.

Lot 37. Thomas Stafford (Gemini VI). 1965. First rendezvous in space: Gemini VII spacecraft orbiting the blue Earth. 15-16 Dec 1965.

The astronauts captured on film the dramatic moonscape of the far side, eventually unveiling to earthlings the secrets and the three dimensions of this yet familiar celestial companion; notably a tortured landscape, unlike the visible face, with a surface bombarded by meteorites and very few lunar Seas.

They also photographed a full Moon as it cannot be seen from Earth (since the Moon only shows us one face). They also saw the Earth for the first time as a sphere in space. For their eyes only, the Home Planet became a celestial body like any other, the only island of life in the middle of the dark void of space.

Few visions in the history of mankind were as exhilarating and moving as Bill Anders' pictures from Earth rising over the lunar horizon. The photographs of the new lunar world and its hidden side were already fascinating, but the photographs of the "spaceship Earth" were an unexpected revelation from the voyage.

When the twelve astronauts who explored the surface of the Moon wrote a new page of human history, they discovered and photographed a raw and virgin world, with canyons, mountains, plains but also a strange dust.

Their photographs show a world where the horizon seems very close as the Moon's diameter is almost four times smaller than that of the Earth. It is a world with an absolute clarity, a colorless world, with only shades of gray depending on the inclination of the Sun's rays.

It is also a lifeless world where the absence of vegetation, erosion or human structure causes the explorer to completely lose the notions of distance, scale or horizon. It is also a world where the notion of time itself is clouded since the lunar day and night each last fourteen Earth days.

In this environment, the astronauts themselves looked like aliens with their bulky spacesuits and their gold-plated visors. Their movements were awkward and slow, as well as aerial; their photographs recorded unusual poses for our earthly eyes. On foot or on board the Lunar Rover, they explored unknown lands. At each of their "stations", they set up scientific experiments or collected rock samples, documenting their activities thanks to the Hasselblad camera mounted on their chest.

These stations were also an opportunity to take the famous panoramic shots. The individual frames making up the panoramic mosaics were later printed and assembled to form the final image. Initially made so that scientists on Earth could reconstruct the location and geological characteristics of the stations, these panoramas reveal the surreal beauty of the landscapes of the Moon. During the last three lunar missions, the astronauts also used a telephoto 500mm lens to detail the topography of the landscape, creating composite images of the places they could not explore.

The photographs of the astronauts, still studied today by geologists and planetologists, offered valuable data and a long scientific legacy to the agency. But their impact far exceeds the scientific framework.

From the point of view of their social and historical impact, these images can be compared to those of the great American photographers Mathew Brady, Margaret Bourke-White, Dorothea Lange and Ansel Adams.

When published in the turbulent period of the late 1960s and early 1970s, the photographs of the astronauts immediately transcended terrestrial, cultural and political barriers. It's still the case today while the Soviet space program, whose officials did not understand that extraordinary space achievements required extraordinary photographs, occupies a reduced place in our collective memory, despite its great firsts; so much so that we can wonder whether NASA landed on the Moon not only thanks to its rockets, of course, but also thanks to its photographs.

At the crossroads of scientific investigation and creative inspiration, the photographs of the astronauts are an expression of human curiosity, of man's desire to explore, to question its origins and to push its limits.

They have changed our understanding of the human condition and our place in the universe.

This text is a shortened version of the introduction for the exhibition Lune: Du Voyage Réel aux Voyages Imaginaires, Grand Palais, Paris, April-July 2019. An exhibition commemorating the 50th anniversary of the Moon landing.

INTERVIEW | VICTOR MARTIN-MALBURET

A Ketterer Kunst interview with Victor Martin-Malburet

Conducted by Dr. Rainer Ohler

NASA photographs demonstrate a radical evolutionary milestone

In an interview with Ketterer Kunst, art collector and curator Victor Martin-Malburet (VMM) talked about "Icons of the Space Age – A Visual Legacy". More specifically, he explained how his enthusiasm for space travel gave rise to a large collection, how the camera traveled to space, and the role the latter played in the conquering space and the moon.

Collection highlights have been shown in exhibitions at the Louisiana Museum for Modern Art in Copenhagen, the Grand Palais in Paris, the Kunsthaus Zürich, the Museum der Moderne in Salzburg and the Onstad Kunstcenter in Oslo.

Mr. Martin-Malburet, in front of me are 277 lots of NASA photographs that tell the adventure of American spaceflight from 1958–1976. You are auctioning off more than ten percent of your collection through our auction house. How did you get the idea to collect space photos, of all things?

Even though the golden age of space travel's pioneers was over once I was born, the adventure of space always stayed present in my life thanks to the International Space Station, the space shuttles and now SpaceX. Even with Star Trek and Star Wars. And then there was my childhood home – a milieu of science and art.

Tell us about that...

My parents Marc and Ursula Martin-Malburet were art collectors who were fascinated, of all things, by modernism and the disruptive. My father was also a scientist, a biologist and a passionate admirer of space travel. He gave me the writings of Jules Vernes at a very early age, which I devoured. Explorers, conquerors, adventurers – that fascinated me from an early age. Every week, my father toured me around art galleries and auction houses in Paris. In 1987, when I was 15, we experienced a small auction of astronaut-taken photographs and collectible autographs at the Drouot auction house in Paris. One photo showed Buzz Aldrin on the moon, with Neil Armstrong and the lunar module Eagle reflected on his visor. The photo bore the NASA stamp and had a caption on the back.

That sparked your interest...

Yes, even more so, however, my father's interest. It took him back to the day of the moon landing in July of 1969. Like so many of his generation, he had witnessed it in front of the television. My father spoke of a human event that mankind would resonate much more with than the war-torn years and the atomic bomb- due to its radical evolutionary milestone, where man had succeeded in transcending the boundaries of his own planet. He bought me the photograph as a memento. When my father died in 2005, I decided to continue his passion for collecting disruptive things. And what is more disruptive than space travel? That was the starting point for Icons of the Space Age.

What was your next step as a young collector, with hardly any photo-art?

A few days after my father's death, I happened to find NASA photos again at Drouot, offered by a journalist. I stayed in the exhibition all day long and studied the photos. I was deeply impressed, because these were almost all photos hardly anyone had ever seen. I realized then that photographs were perhaps the most valuable souvenir astronauts brought back from space. The next day, I purchased my first photograph as a collector.

But weren't all photographs known long ago? For decades, we have seen pictures from space and the moon in newspapers, magazines, books, posters and much more?

We all only ever recognize NASA's well-known press photos. However, the astronauts had taken many thousands of pictures in space. For NASA, these were scientific photographs, historical documents, without any value in themselves. Even though they were made available through NASA's archives, hardly anyone knew anything about them.

How should one imagine astronaut's photography?

In the beginning, photographs were not a priority. What we have from the early 60's were pictures of the ground – before launch and after landing. Remember, in the early years it was a matter of survival. No one could guarantee you could breathe, see, swallow, eat and drink in a zero gravity environment. Once NASA succeeded in bringing people safely back to Earth, photographic documentation was tremendously professionalized. The first photographer in outer space was John Glenn, also recognized as the first American to orbit the Earth. Glenn still had to fight back much resistance from NASA officials in order to obtain a camera. However, his slightly modified photos, taken with a privately purchased Minolta camera, brought about a breakthrough: Now NASA was also convinced of its potential. The world's best cameras were adapted to conditions in space and astronauts received professional photographic training.

With that, high quality images suddenly landed on Earth.

Indeed. The photos also allowed people on Earth to discover a new space, a new landscape. During mankind's quest to unravel the mysteries of space, photography helped much more than words ever could.

But weather satellites had already shown what photos from space could do...

...Weather satellites in the 1960s, and their photos of cloud formations, allowed for a much more precise weather forecast than ever before. This saved countless lives and saved millions of dollars....

...and triggered a wave of investment in space photography and radar technology. Even in the 1960s, thanks to this development, satellites began mapping out the entirety of planet Earth and calculating its natural resources. The Earth's surface, in its entirety, was surveyed as early as 1966, and the first color photographs of planet Earth were taken in 1967.

In fact, in 1964, space probes ("rangers") already took photos of the Moon, in order to find possible landing sites for the Lunar Module. The first probes plunged onto the Moon and sent photographs back to Earth up until a few seconds before landing. In 1966, the first probe ("Surveyor") landed on the Moon and transmitted the first images of the Moon. The "Lunar Orbiter" systematically photographed the lunar surface. In this case, it was a matter of measuring, counting and determining: is a human landing of a lunar module possible?

Lot 135. Buzz Aldrin (Apollo 11). 1969. The footprint on the Moon. 16-24 Jul 1969.

These photos must have had special scientific meaning?

Yes, they are real premieres: the first close-up photographs, the first photographs of the far side of the Moon, the first photographs of lunar craters, as well as the first pictures of Earth, of a solar eclipse, and even the first photos of Mars from the Mariner probe....

...the photographs of Mars mainly caused disappointment on Earth: Mars looked more like the Moon and less like Earth.

These photographs are technological marvels- they were taken with automatic cameras, which had to be developed and scanned autonomously on board, before being transferred back to Earth via radio. In the digital age, we often forget how extremely demanding this accomplishment was back then.

How did the images get to you then?

At the beginning, NASA used the images very selectively: there were a few commemorative photos for the scientists, astronauts and suppliers involved, as well as many press photos for magazine and book publishers. Over time, they increasingly recognized what strategic impact the photos had on the public. For example, they helped NASA gain popular and voter's support for this extremely costly adventure. However, the great bulk of the images remained in the archives and were available to scientists at no cost. NASA employees, friends of astronauts, journalists, and scientists or their heirs later turned into my primary sources for rare original prints.

How did you obtain the sources?

First, I immersed myself in the space missions. Then my passion as a collector grew. I spent hours and days reading reports, watching documentaries – and putting myself more and more in the astronauts' shoes. It extended to the point where spoke of them on a first name only basis. Furthermore, through this work, I became more and more familiar with the published photos and the desire to own them grew. I guess I was almost a little moonstruck (laughs). Passionate collectors know what I mean. I made it my mission to collect all the important images from space: from the founding of NASA and the start of the Mercury program in 1958, to the last lunar landing mission in late 1972, Apollo 17. I guess, originally, there were many hundreds of printed photographs, but there are hardly any left in the archives of the press and television. After all, most of the images were never printed, and after placing its archives on the Internet, NASA destroyed many prints..

I always thought that the original negatives that survived a trip to space and to the moon were kept forever in NASA's cold rooms as the heritage of mankind?

That's right. All the printed prints are from copies of the original films – and produced with the technology available at the time. Each print was an enormous expense back then. On offer now at Ketterer Kunst are these photos pulled from NASA at the time, which were reserved for NASA and its environment, for the public or for science.

Did you ever edit the photos?

No, all the photos are original. Because that's the only way they are real contemporary witnesses. Some now show small signs of patina, which is part of the process.

Didn't you have any help at all with your work?

Yes, I did. My father had an old friend who had worked at NASA in Pasadena at the beginning of the space program. He told anecdotes and put me in touch with an old collector who had an impressive archive himself. His main interest was autograph photos of astronauts and he enjoyed assisting me in my search for NASA photo prints. With his help, I found real treasures and won one contact after another. Step by step, my collection grew.

In your collection you always talk about "firsts"...

...from the first weather satellite photos to the first astronaut photos of the Earth, from the first spacewalks, the first photos of the Moon and its backside, the first photos of the lunar surface, the first astronaut photos of the Moon, the first pictures of people on the Moon and even the first pictures of Mars.

Your list alone shows the enormous technological breakthroughs achieved in the pioneering days of spaceflight. What do you see as the core of the core of your collection?

My collection commemorates man's departure into space. The photos are like a homage to the pioneers, to the scientists and the engineers. When the astronauts set out into space and to the moon, it was very questionable whether they would return safely back to Earth. Going to the moon was mankind's old dream. Even years after it occured, there were and still are people who do not believe it to be true: twelve men have been on the moon. In a few years time, man will finally land on the moon again, and this time with photographic technology that was unthinkable a mere 50 years ago.

I'm also fascinated by the beauty of the photographs – the play of colors, the pictures of people in space and on the moon. Especially, the photos of the moon's surface and the play of light amid craters, rubble and dust. I'm sure others feel the same way, don't you?

Oh, yes, the pictures have been shown many times with great success in important museums on the the moon landing's 40th and 50th anniversary. There were large exhibitions of my pictures in Paris, in Copenhagen, in Oslo, Zurich, St. Etienne and Salzburg. My "Icons of the Space Age" allows you to experience the adventure of space travel with your own eyes. Without these photos, only be the great quotes "The Eagle has landed" and "One small step for men, one giant leap for mankind" would remain of the spectacular journey to the moon.

Mr. Martin-Malburet, thank you very much for this interview.

The ESA Astronaut, Dr. Ulf Merbold, during his training for the IML-1 Mission

INTERVIEW | ULF MERBOLD

A Ketterer Kunst interview with Ulf Merbold
Conducted by Dr. Rainer Ohler

Let's go back to the moon and then to Mars.

Ulf Merbold is a man of many records: No German has ever been to space more often than he has. He has flown into outer space three times – for a total of almost 50 days: with the Columbia Space Shuttle in 1983, with Discovery in 1992 and with Soyuz on the MIR space station in 1993. Ulf Merbold was the first European on a NASA spaceflight, as well as the first ESA cosmonaut on a Russian flight. In 1984, on physicist and rocket pioneer Herman Oberth's 90th birthday, Merbold met his East-German compatriot Sigmund Jähn – the first German to fly into space on a Soyuz rocket in 1978.

In light of Ketterer Kunst's exclusive Online-only auction "Icons of a Space Age – A visual legacy", Ulf Merbold spoke with us about his experience in outer space, the impact of images photographed in space and his vision on the future of space travel.

How did you come across the idea to become an astronaut?

Through a job ad in the Frankfurter Allgemeine Zeitung (FAZ)'s weekend edition.

Really?

Yes, it was April of 1977 and I had been working as a physicist in experimental research at the Max Planck Institute for ten years. It was a great job, but it had one drawback: You get caught up in your own specific field of research and lose sight of what's happening in other fields of science. I was too curious to become a specialist. I wanted something new and when I came across newspaper ads for the first time, I noticed an advertisement for ESA astronauts.

From the lab straight into space

Not exactly. My job application had to get accepted first.

Flying didn't play a role?

Oh, yes it did. I had been enthusiastic about flying since childhood and had long been an active glider and motor pilot.

Your wife must have been thrilled when you showed her the ad....

No, she was smart. She lowered my expectations. So many people applied, and ESA certainly wouldn't be waiting for me.

What happened next?

ESA received 2.000 applications. The selection process initially took place at national level, where each national space agency nominated five applicants. From there, ESA selected three astronauts: the Dutchman Wubbo Ockels, the Swiss Claude Nicollier and me.

The mission into space must have been about much more than just flying along on a spacecraft. What was it?

Our mission was the European Spacelab program's final test. A laboratory was to fly on board the Space Shuttle for the first time, for a vierty of different experiments. Europe wanted to prove itself as NASA's partner and desired to qualify for and contribute to human spaceflight on its own terms.

You must have been successful with that, because the Europeans later built the Columbus module for the International Space Station (ISS)...

...right. Spacelab allowed us to we prove our space exploration potential to the world. The effects of this success are still being felt today. After all, the reason we Europeans were selected as an indispensable partner

for NASA's ORION program – founded by the Americans in order to to return to the moon and later travel to Mars - can be traced back to Spacelab and Columbus. Now we're building a highly complex propulsion module and ORION would just be like a tin can without it.

That sounds like you are quite proud...

...yes, we Europeans can really be proud of that. Spacelab tested our maturity, and with Columbus, we passed the practical test.

But the mission began on Earth first...

...exactly. I had the task of preparing a total of 72 experiments in the fields of astronomy, atmospheric physics, biology, medicine, observations of Earth, materials science, as well as a number of technological tests. This was a unique opportunity to shift ones own knowledge and expand ones horizon! It was all about meticulously planning and preparing the Spacelab mission, at the limits of knowledge, in different disciplines.

In 1983, the mission finally launched...

...and that was something very emotional. You sit in a tin box, on a rocket filled to the brim with fuel, for two hours during countdown. Everyone else has left the site, and sits a seven kilometers away in safety.

What kind of experience is the "lift off"?

It's a sensory experience that I can't describe using language. I'll give you numbers: In 8 minutes and 30 seconds, you cover 250 kilometers. Vertically. And you reach a speed of 27,000 km/h.

The following melody and lyrics comes to my ears: "Ground control to Major Tom..."

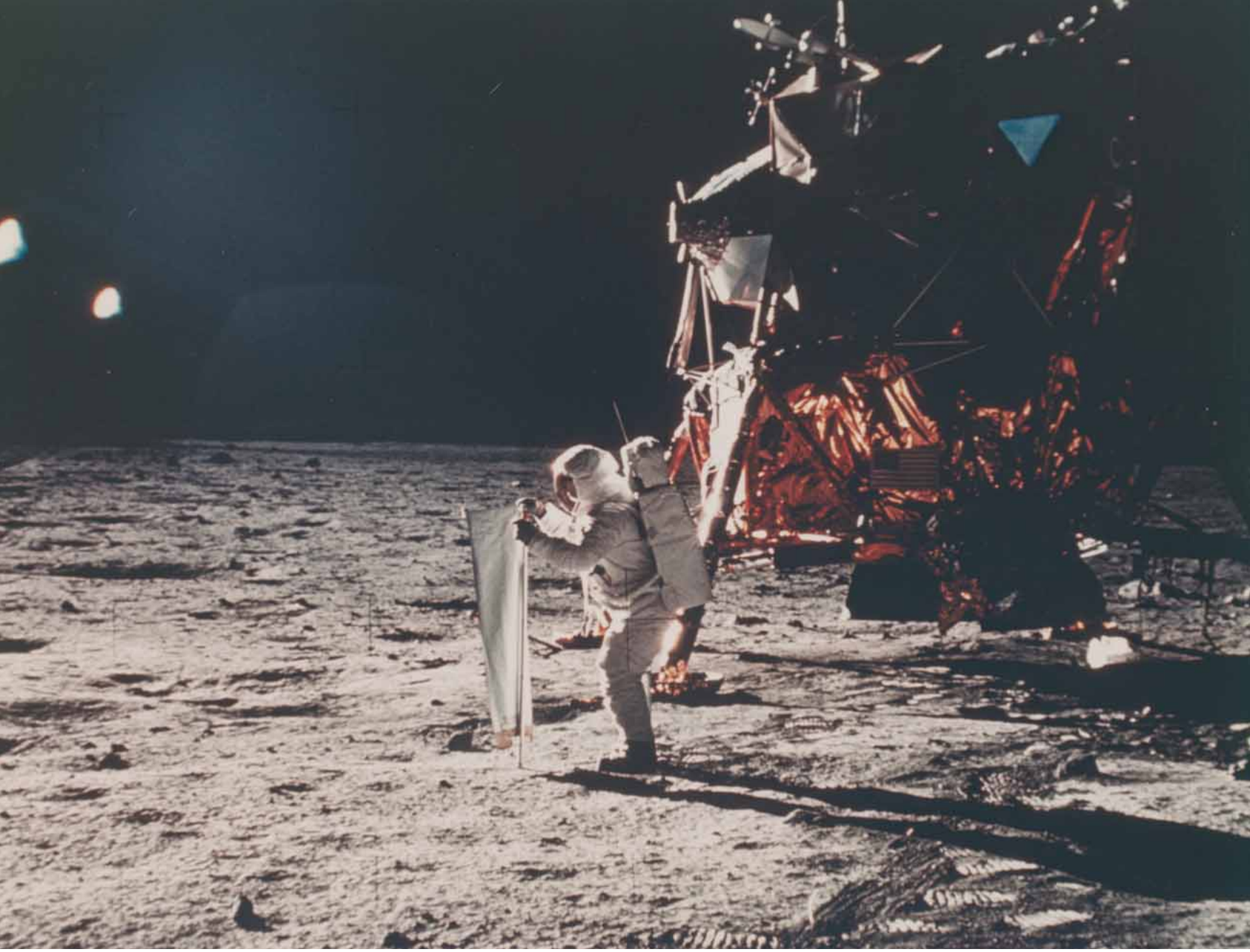
A nice and catchy tune but it can't express my feeling, because the most emotional moment comes after the launch phase, when you take your first look outside. That is overwhelming. I'm not alone with this feeling – most astronauts feel the same.

What do you see then?

First you see the Earth's horizon as a curved line. The sky is pitch black, everything seems empty, the sun shines out of the dark background. And then you really see it: The earth's horizon is lined with a thin, royal blue layer – ravishingly beautiful.

What goes through your mind?

These images turn our big planet into what it truly is: a small spaceship called Earth. This shakes up deeply rooted views we humans have. As a physicist, I know that the color blue is the result of a scattering process and hence, where there is blue, there is only air. As a physics student, I was able to calculate that 50 percent of our air lies below 5,500 meters. However, I only realized how thin the atmosphere protecting us really was when I saw the fragile fringe around the horizon with my own eyes.



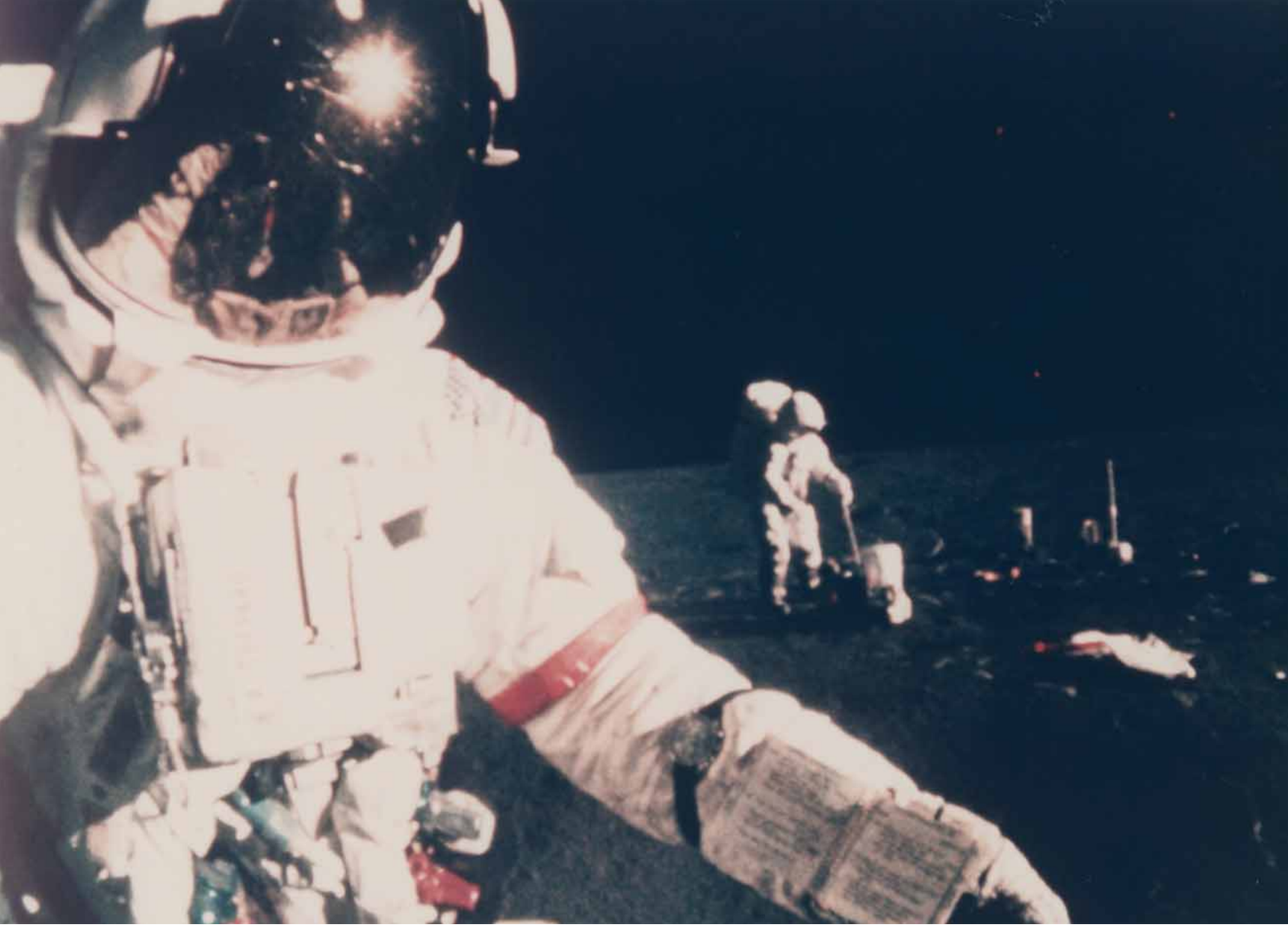
Lot 131. Neil Armstrong (Apollo 11). 1969. First photograph of a man standing on the surface of another world. 16-24 July 1969.

This core experience is reported by astronauts time and time again, and you can also see it in the photos of Gemini and Apollo...

...the photos from space already give a good impression of what astronauts experience and see in space: the beauty, the uniqueness, the vulnerability. Our Earth seems big to us, because over here, in the best of cases, you can get from Stuttgart to Munich in 90 minutes. In space, however, you can circle the entire planet in 90 minutes. In one minute, you've flown over Germany.

Did man really have to go into space to understand that? Wouldn't have digital photos been enough?

Never ever. Manned space flight is the difference between measuring and recognizing. Machines can measure and determine numbers. But us humans, we can only recognize things when we perceive them with our own senses. The photographs helped us astronauts share our impressions with mankind on Earth. Therein lies their great value.



Lot 210. NASA (Apollo 14). 1970. Close up of Alan Shepard at the lunar science station, EVA 1. 31 Jan 1971–9 Feb 1971.

What do you consider the most beautiful picture taken in space?

There are many, but there is a very special photo that Michael Collins took from Apollo 11. You can see the dead mineral world of the moon, as well as the capsule Armstrong and Aldrin used to return from the moon to Collins in the Apollo mothership. Under the black backdrop, the earth shines blue-white. Now one realizes: Armstrong and Aldrin will only make it back to beautiful mother earth if they succeed in docking with the mother ship again.

What was the impact of space travel? What effect did the images the astronauts took have on Earth?

First and foremost, it furthered our knowledge and provided us with new understandings. The images of Earth from space also made us aware of the vulnerability of our planet, which also clearly fueled the environmental, and later on, climate protection movements. The impact was even felt much further. Let me give you a concrete example: Space and atmospheric research led scientists to suggest to politicians, that the use of CFCs in refrigerators and elsewhere should be banned. The German Bundestag was one of the first parliaments to turn this proposal into law.

Did you also take pictures in space?

Of course! Photos are part of every flight. We had to firstly get the shuttle in the right position, aiming towards deep space or vertically downward, in order to photograph the Earth. One of our 72 experiments included a metric camera, used to take distortion-free photographs. These images were later on used to create highly accurate maps. Especially in more remote regions, there was a great demand thereof. On board Spacelab, there was even a camera weighing 80 kg at an optical window still from the Apollo time. The precision was exciting. On 24 x 24 cm photographs, we documented areas of 190 x 190 km. I often showed photos of the Swiss mountain region, taken with this camera, in lectures and talks.

But photography was a secondary matter for you besides your work at Spacelab?

Officially, I didn't have any time for photos. We were the first mission to work 12-hour shifts, in order to keep to the tight schedule of our experiments. I carved out many hours every day from my rest periods just to look outside and take photos: the beauty of the earth with its coastlines, the lights of big cities, the lightning of storms or the northern lights. It was stunning. We brought back 10,000 photos from our mission, and all are still available at NASA today.

Your last trip took you on the Soyuz rocket to the MIR space station. What do you associate with it in retrospect?

Russian spaceflight gave humanity the first permanently manned outpost in space's hostile environment. A space station is a tin can in which technical systems create and maintain the surroundingshumans need to survive. Today, logistics and more than 20 years of permanent human presence in space seem almost normal to us. Back then, only Russia could do that. Without the Russians, without their experience and routine in supply and transport, the International Space Station would never have existed. With regards to data transport, the Russians could not keep up with the Americans. That alone shows the logic of cooperation on the International Space Station (ISS).

And now we want to go back to the moon and then to Mars. Do you want to colonize Mars? Live on Mars?

I certainly don't. Because we humans will probably only find quality of life on Earth: seasons, forests, wind and weather, lakes and sun, children and music. However, as a researcher, I'd like to go there – right away!

But isn't it enough to send robots, rovers and helicopters like Ingenuity up there?

No. I'll say it again: It's in our genes to want to explore the unknown, to absolutely want to go around the corner no man has been before. That's what makes us human. And for Mars in particular: We can only understand an unknown world if we expose ourselves to it completely.

What do you expect from Mars?

No one knows what we will learn when we fly to Mars. Water seems to have existed there. But where is it? What happened? What do we learn from it that will benefit us?

It's hard to calculate a return on investment from that.

Indeed. You also couldn't do that when Columbus discovered America, or when Marco Polo made his voyages to Asia – at that point in time the foreign and unknown world. The discovery of new countries and continents first disrupted our view of the world and then changed it. It was and is the same with space travel. And only with these human events can the journeys into space, to the moon and soon to Mars be compared.

Speaking of Columbus and Marco Polo. Who do you consider to be the five pioneers or trailblazers of space travel?

There are probably a few hundred to name, but I'll make a distinction between the visionaries, the founders of astronautics, and the implementers. Jules Vernes envisioned almost everything that later became reality, including takeoff in Florida and landing in water. The scientific foundations of astronautics were laid by Hermann Oberth and Konstantin Tsiolkovsky. Without their formulas, we would not be in space today. And then came men with charisma and expertise like Wernher von Braun, who persuaded political leaders to give them the means to actually venture into space with rockets. Of course, my heroes include those who sat on the rockets. Yuri Gagarin, Neil Armstrong, and John Young are, to me, the brightest stars in the firmament of astronautics.

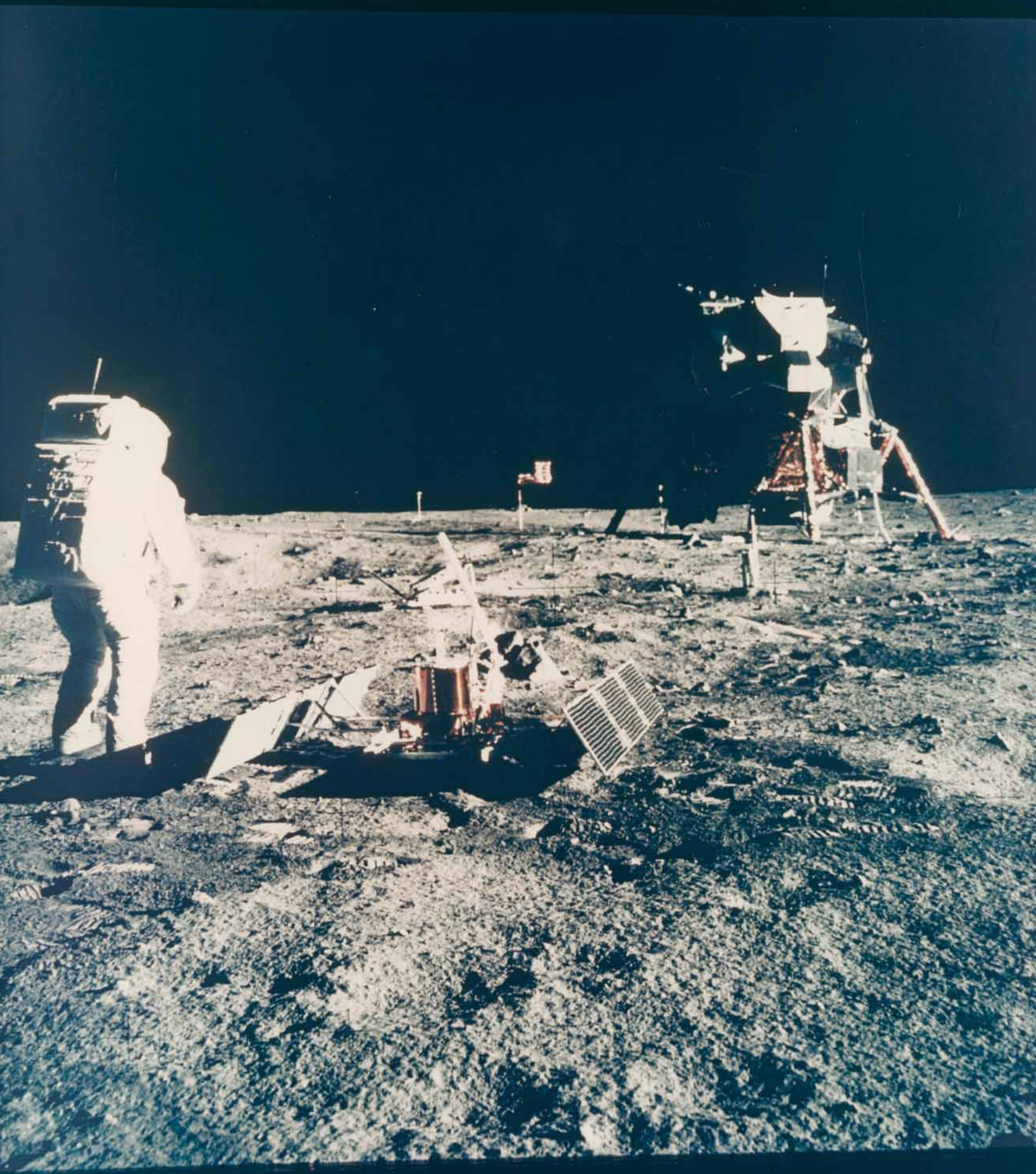
These pioneers and the investment in spaceflight have brought tremendous returns on new knowledge, new insights, research....

...there are many examples of that. Just think of the miniaturization of electronics and materials technology.

If, according to your statement, we don't do spaceflight for the economic return: Then what is the nucleus of the core knowledge spaceflight brought us?

That planet Earth is just a small, very vulnerable spaceship in space and that we must do everything we can to keep the wonderful Earth intact. Moreover, it is our responsibility to treat it with care and preserve it for future generations. Because we have already learned so much, it is also our duty to continue with our spaceships where our ancestors started. Instead of overburdening it, we must recognize the stress limits, as well as understand and support the planet's ability to cleanse itself. It is our cultural task to increase the depth of our knowledge, in order to better understand what holds the world together. These are also the messages evoked by the great NASA images auctioned by you. I wish you every success, because each picture is a special testimony of time, that reminds the viewer of the adventures of space travel. This is perhaps only just beginning! Therefore: Let's go back to the moon and then to Mars.

Thank you very much for this interview, Mr. Merbold.



Lot 165. Neil Armstrong (Apollo 11). 1969. Buzz Aldrin looking at Tranquillity Base. 16-24 Jul 1969.

HOW TO BID IN OUR ONLINE AUCTIONS

1 Register and Bid

Many exciting pieces of art can easily be found by clicking through the offer or searching for a specific artwork in the upper right hand corner.

In order to place a bid, you will have to register your name, address and email under the “New” button below the search bar. You will receive an email asking you to confirm your details. It is quick and easy!

Upon confirming, you can log on and enter your maximum bid. The bid is a net amount, upon which the additional premium, resale right levy and sales tax cost are added after purchase. If shipping is desired, please let us know and we can offer you a proposal. Your maximum bid will only be applied to the amount needed to beat all other bidders.

In case another bidder places a higher bet, you will get notified by email and will be able to track this on your bids list. However, shortly before an auction ends, bids move quickly and you can only react if you are logged on. The thrilling feeling auction participation provides is an experience like no other!

2 You won!

The auction is over and you are the winner? Congratulations! You will shortly receive an email and will be able to see it in your list of objects. An invoice will follow by Mail, where the invoiced amount be paid via bank transfer.

3 Insured shipment – no risk

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If you are considered a consumer within the parameters of the German Civil Code’s [BGB] Sect. 13, you have an unrestricted revocation right within 14 days of receiving notification of our cancellation policy and shipment. In order to request this, we simply ask you fill in the Sample Cancellation Form contained within the Cancellation Policy, or send us an email, letter or fax to this regard.

CONTACT

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Icons of the Space Age
A Visual Legacy

Photographs from the Victor Martin-Malburet Collection

"Everything in space obeys the laws of physics. If you know these laws, and obey them, space will treat you kindly. And don't tell me man doesn't belong out there. Man belongs wherever he wants to go—and he'll do plenty well when he gets there."

Wernher von Braun (TIME Magazine, February 17, 1958)

1

U.S. ARMY

1958

Birth of NASA: Wernher von Braun in his office at the U.S. Army Ballistic Missile Agency U.S. Army. 1958.

Vintage Gelatin silver print on fiber-based paper, printed 1958.
25,4 x 20,3 cm (10 x 7.9 in), with U.S. Army Ballistic Missile Agency (ABMA) caption on the verso, with two filing holes in top margin not affecting image.
This photograph was taken in von Braun's office at the U.S. Army Ballistic Missile Agency in Huntsville, or ABMA, which was commanded by General John Medaris with Wernher von Braun serving as its technical director.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.00 pm (GMT+2)

In response to the Soviet Union Sputnik launched on October 4, 1957, the first US satellite Explorer I was launched on a Jupiter C rocket designed by von Braun's team at ABMA on January 31, 1958.

President Dwight Eisenhower signed the National Aeronautics and Space Act, establishing NASA, on July 29, 1958.

Following the creation of NASA, Von Braun predicted manned circumlunar flight within ten years, and a manned lunar landing and return mission a few years thereafter.

ABMA was transferred to NASA on July 1, 1960 forming the George C. Marshall Space Flight Center (MSFC).

Von Braun served as its director and chief architect of the Saturn V launch vehicle, the superbooster that propelled the Apollo spacecraft to the Moon.

Lot 11. John Glenn. (Mercury Atlas 6) 1962 The very first human-taken photograph from space. 20 Feb 1962.

MANNED SPACE MISSIONS

+ MERCURY REDSTONE 3

Crew: Alan Shepard
May 5, 1961
Spacecraft: Freedom 7
Launch vehicle: Redstone

+ MERCURY REDSTONE 4

Crew: Gus Grissom
July 21, 1961
Spacecraft: Liberty Bell 7
Launch Vehicle: Redstone

+ MERCURY ATLAS 6

Crew: John Glenn
February 20, 1962
Spacecraft: Friendship 7
Launch Vehicle: Atlas D

+ MERCURY ATLAS 7

Crew: Scott Carpenter
May 24, 1962
Spacecraft: Aurora 7
Launch Vehicle: Atlas D

+ MERCURY ATLAS 8

Crew: Walter Schirra
October 3, 1962
Spacecraft: Sigma 7
Launch Vehicle: Atlas D

+ MERCURY ATLAS 9

Crew: Gordon Cooper
May 15–16, 1963
Spacecraft: Faith 7
Launch Vehicle: Atlas D

The Mercury Era

"I had the privilege to be there to record it. I made sure I recorded it to the best of my ability, because I have a sense of history. But you've got to remember I was an artist, and I was an amateur photographer, more than that, and I loved to take pictures, so I was looking to take pictures that were different, and that's how that came about, you know, to have a sense of the artistry to them."

Bill Taub (NASA HQ oral history project)

2

BILL TAUB (PROJECT MERCURY)

1961

The "Right Stuff" astronauts: portrait of the first Original Mercury Seven at Langley Air Force Base. 20 Jan 1961.

Vintage Gelatin silver print on fiber-based paper, printed 1961.
20,3 x 25,4 cm (7.9 x 10 in), numbered „NASA G-61-301" in black top margin (NASA Goddard).

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.01 pm (GMT+2)

The Mercury Seven astronauts stand beside a Convair 106-B aircraft at Langley Air Force Base. They are, left to right, Scott Carpenter, Gordon Cooper, John Glenn, Virgil "Gus" Grissom, Walter Schirra, Alan Shepard, and Donald "Deke" Slayton.

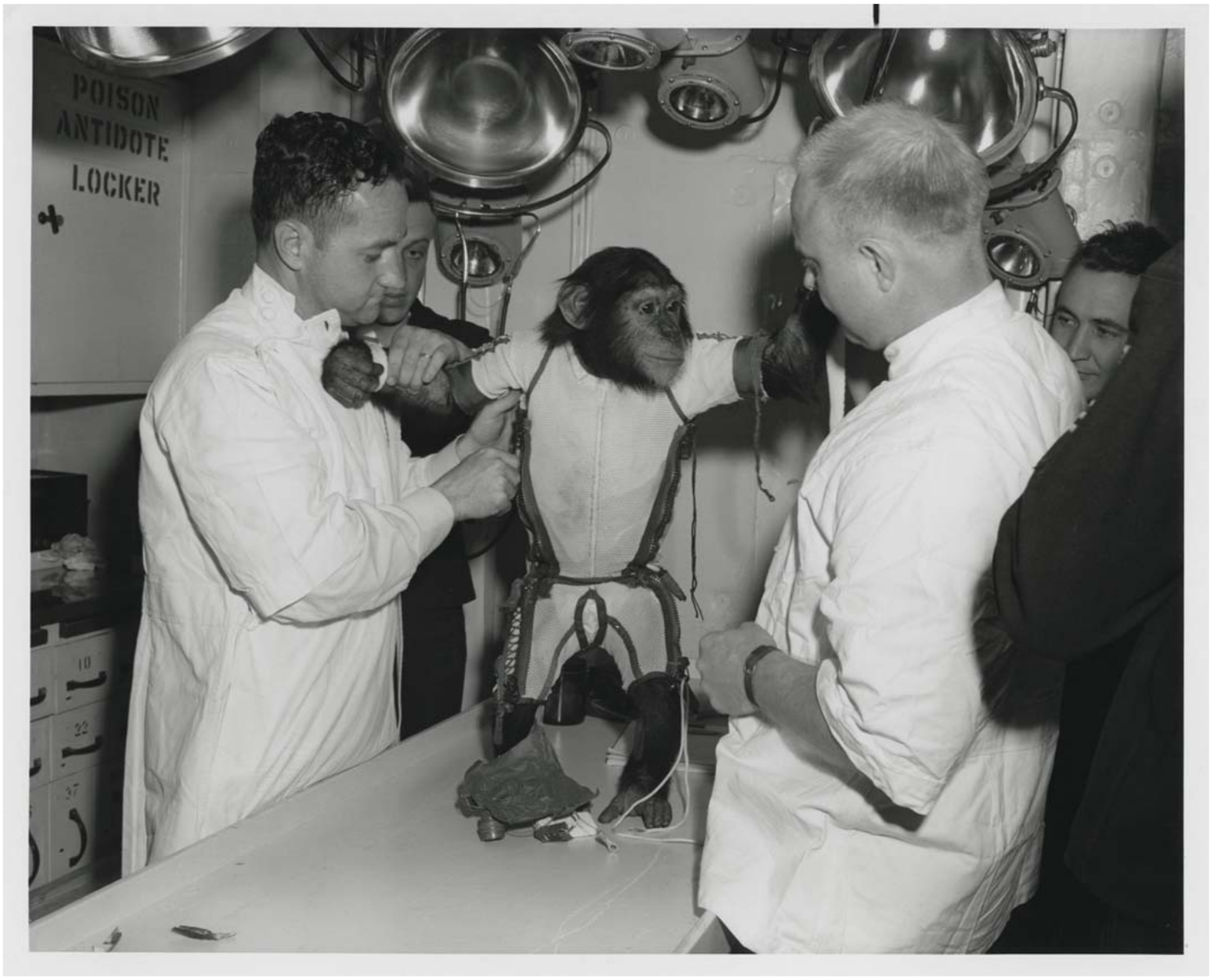
The Original Seven immediately became national heroes and were compared by TIME magazine to "Columbus, Magellan, Daniel Boone, and the Wright brothers".

They personified the Thomas Wolfe–coined term, "the Right Stuff."

This famous photograph was taken by NASA's first senior photographer Bill Taub the day Alan Shepard was selected by Space Task Group Director Robert Gilruth as the first astronaut to ride through space.

Taub then photographed every mission from Mercury to Apollo and was often one of the last people to see the astronauts before liftoff, earning the nickname "Two More Taub" for his insistence on snapping just a couple more shots.

NASA
G-61-301



3

NASA (MERCURY REDSTONE 2)

1961

Ham, the first hominid in space, back to Earth alive. 31 Jan 1961.

Vintage Gelatin silver print on fibre-based paper, printed 1963. 20,3 x 25,4 cm (7.9 x 10 in), with NASA HQ caption numbered „61-MR2-19“ on the verso.

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.02 pm (GMT+2)

MR-2 launched on January 31, 1961, carrying Ham, a four-year-old male chimpanzee.

Ham was trained at Holloman AeroMedical Research Laboratories and before the mission was known as „Number 65“. The name, an acronym of the research facility, was given to him after the completion of the mission. Ham responded very well to training and became the first primate to survive a 16-minute and 39-second sub-orbital flight which carried the spacecraft 420 nautical miles from Launch Complex 5 at Cape Canaveral and reached a maximum altitude of 157 statute miles.

4

BILL TAUB (MERCURY REDSTONE 3)

1961

First American in space: portrait of Alan Shepard inside Freedom 7. May 1961.

Vintage Gelatin silver print on fiber-based paper, printed 1961.
25,4 x 20,3 cm (10 x 7.9 in).
A great photograph of Alan Shepard in the tiny cabin of Freedom 7, the first crewed US spacecraft, during a countdown demonstration test.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.03 pm (GMT+2)

On the morning of launch on May 5, 1961, as technicians prepared to install the craft's side hatch, Shepard had a long wait. Technical problems delayed the launch for four hours. Shepard's patience eventually wore out and he famously snapped, "Why don't you fix your little problem and light this candle?"

5

NASA (MERCURY REDSTONE 3)

1961

First liftoff: the historic launch of the first rocket carrying an American into space (2). 5 May 1961.

Two vintage Gelatin silver print on fibre-based paper, printed 1961. 25,4 x 20,3 cm (10 x 7.9 in), the second with RCA Quality Control stamp and US Air Force/ NASA Cape Canaveral caption numbered „PL-61-95191" on the verso.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

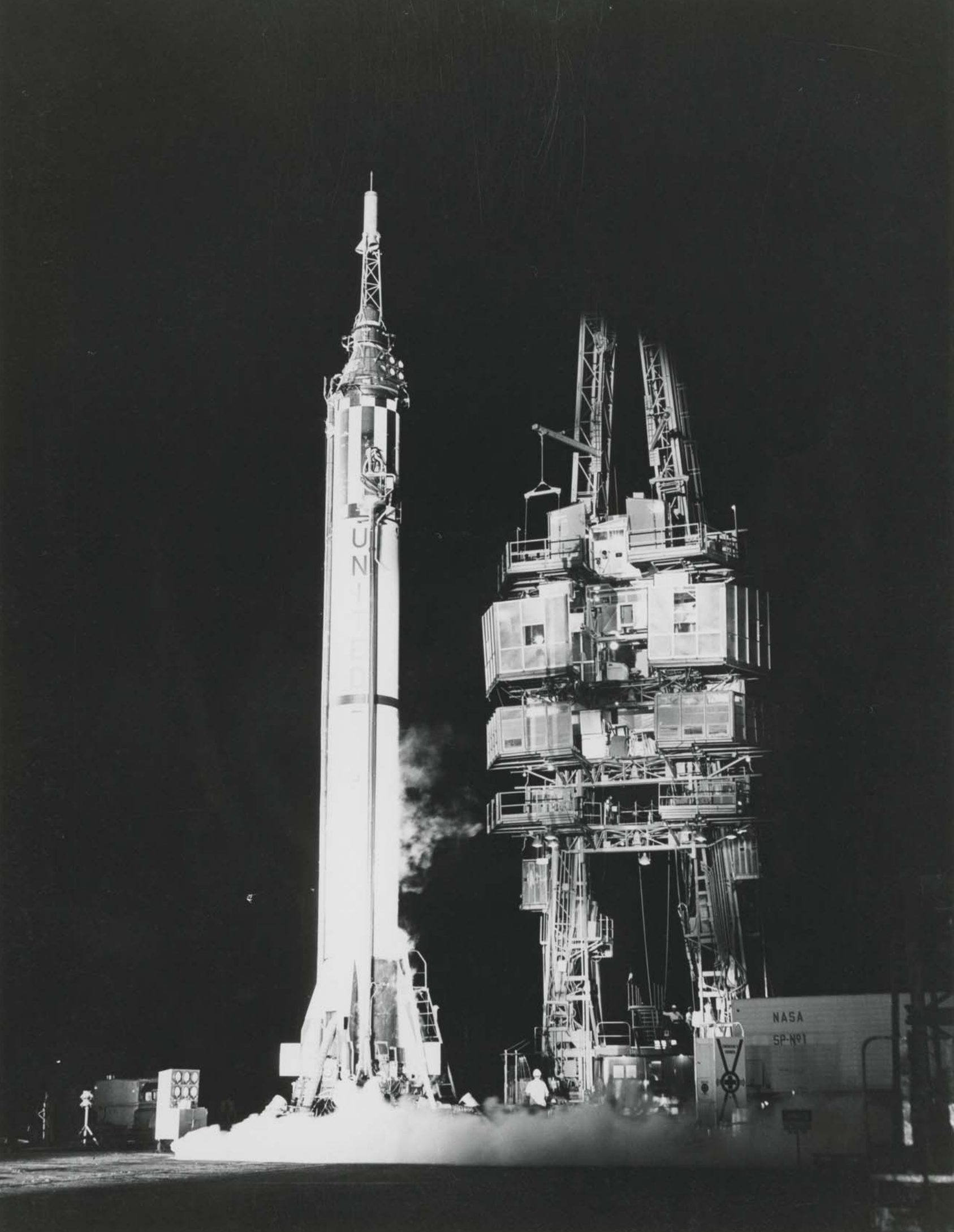
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.04 pm (GMT+2)

On the morning of May 5th at Cape Canaveral Launch Complex 5, the Mercury Redstone 3 is seen in a glow of floodlights and clouds of vapor as liquid oxygen is being pumped into the rocket (first photograph).

After hours of delay, 500,000 people gathered near Cape Canaveral watched the liftoff of the rocket carrying Alan Shepard (second photograph).

Alan Shepard became the first American in space.

His 15-minute suborbital hop took him to a height of 116 miles at more than 2 km (1.5 miles) per second before splashdown near Bermuda, 302 miles downrange from Cape Canaveral.


UNITED
NASA
SP-N°1

6

NASA; DEAN CONGER (MERCURY REDSTONE 3)

1961

"AOK!" the US is in space: Alan Shepard's pioneering view from space and triumphant return to Earth (2). 5 May 1961.

Two vintage Gelatin silver prints on fiber-based paper, printed 1961. Each 25,4 x 20,3 cm (10 x 7.9 in), the second with NASA HQ caption numbered „61-MR3-107" on the verso.

€ 800 – 1.200

$ 960 – 1.440

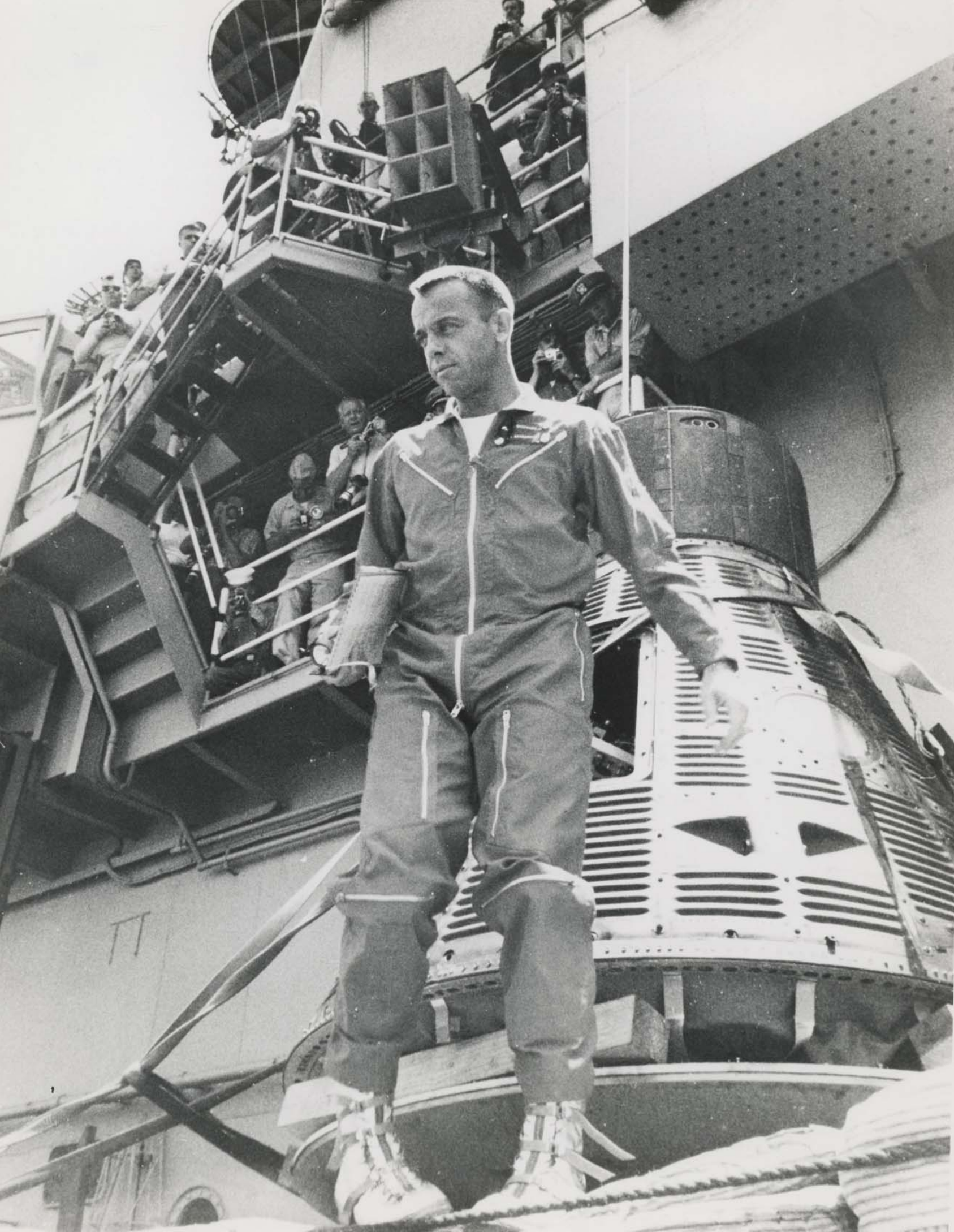
Bidding starts at € 100

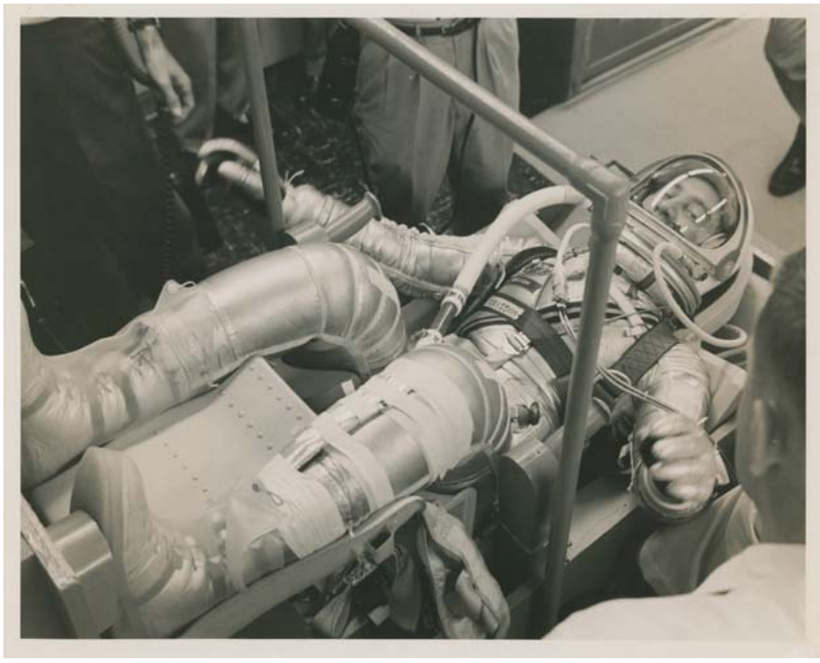
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.05 pm (GMT+2)

From LIFE magazine ("AOK!" the U.S. is in space, 12 May 1961):
"While the whole nation watched with a gripping sense of personal and emotional involvement, Shepard soared off into space for the most grueling ride any American has ever taken. The man and the machine returned safely to Earth. Then, apparently unaffected by the extreme forces of his flight, Shepard trotted easily across the carrier deck with the manner of the fighter pilot he used to be rather than that of a national hero. But Alan Shepard was a heroic figure. He did not fly as far, fast or high as Russia's Yuri Gagarin. However, he controlled the flight of his capsule, which Gagagrin did not, and carried out his fantastic mission under the relentless pressure of television and worldwide publicity."

First photograph:
Shepard had a view of Earth that no American had seen before, looking down on the Home Planet from the Freedom 7 Mercury capsule on his history-making suborbital flight.
This photograph of the black sky of space and cloudy Earth surface below was recorded at about peak altitude down the Atlantic Missile Range by the automatic Maurer 220G camera mounted on the spacecraft. The original film was in color. There is a gleam from the light reflected off the capsule window in the lower right side of the frame.
"What a beautiful view!" Shepard said during the flight, adding later that "the sky itself is a very deep blue, almost black, because of the absolute lack of light-reflecting particles" (National Geographic, September 1961, p. 441).

Second photograph:
"Everything AOK [all perfect]. . Dye marker out," Shepard said after the capsule hit the water. Only a half hour after liftoff, the space pioneer came triumphantly aboard the carrier Lake Champlain after the pickup helicopter had deposited his capsule on deck. His first words were "Man, what a ride!"





Reclining in a contour couch in the Personal Equipment Room in Hangar S at Cape Canaveral, Gus Grissom undergoes his final pressure suit checks before his launch the next day on July 21, 1961 (first photograph).

The second photograph shows the dramatic unsuccessful helicopter recovery of the Liberty 7 spacecraft after the second US spaceman effort. "Marine helicopter appears to have Liberty 7 in tow after Virgil Grissom's successful flight of 305 miles down the Atlantic Missile Range. Minutes after "Gus" Grissom got out of the spacecraft it sank" (NASA caption).

"From lift-off to re-entry, operational sequences were similar to those of the first manned suborbital flight and Grissom's flight experience was similar to Shepard's in that there was a five minute period of weightlessness. The main configuration differences from the MR-3 spacecraft was the addition of a large viewing window and an explosively actuated side hatch. During the flight, the spacecraft attained a maximum velocity of 8,270 km/hour and an altitude of 189 km. The duration of flight was 15 minutes and 37 seconds" (https://nssdc.gsfc.nasa.gov/nmc/spacecraftDisplay.do?id=MERCR4).

However the spacecraft was lost "during the post landing recovery period as a result of premature actuation of the explosively actuated side egress hatch. The capsule sank in 15,000 feet of water shortly after splashdown. The astronaut egressed from the spacecraft immediately after hatch actuation and was retrieved after being in the water for about 3 to 4 minutes" (https://www.nasa.gov/mission_pages/mercury/missions/libertybell7.html).

As a result, no photographs of the flight survived.

7

NASA (MERCURY ATLAS 5)

1961

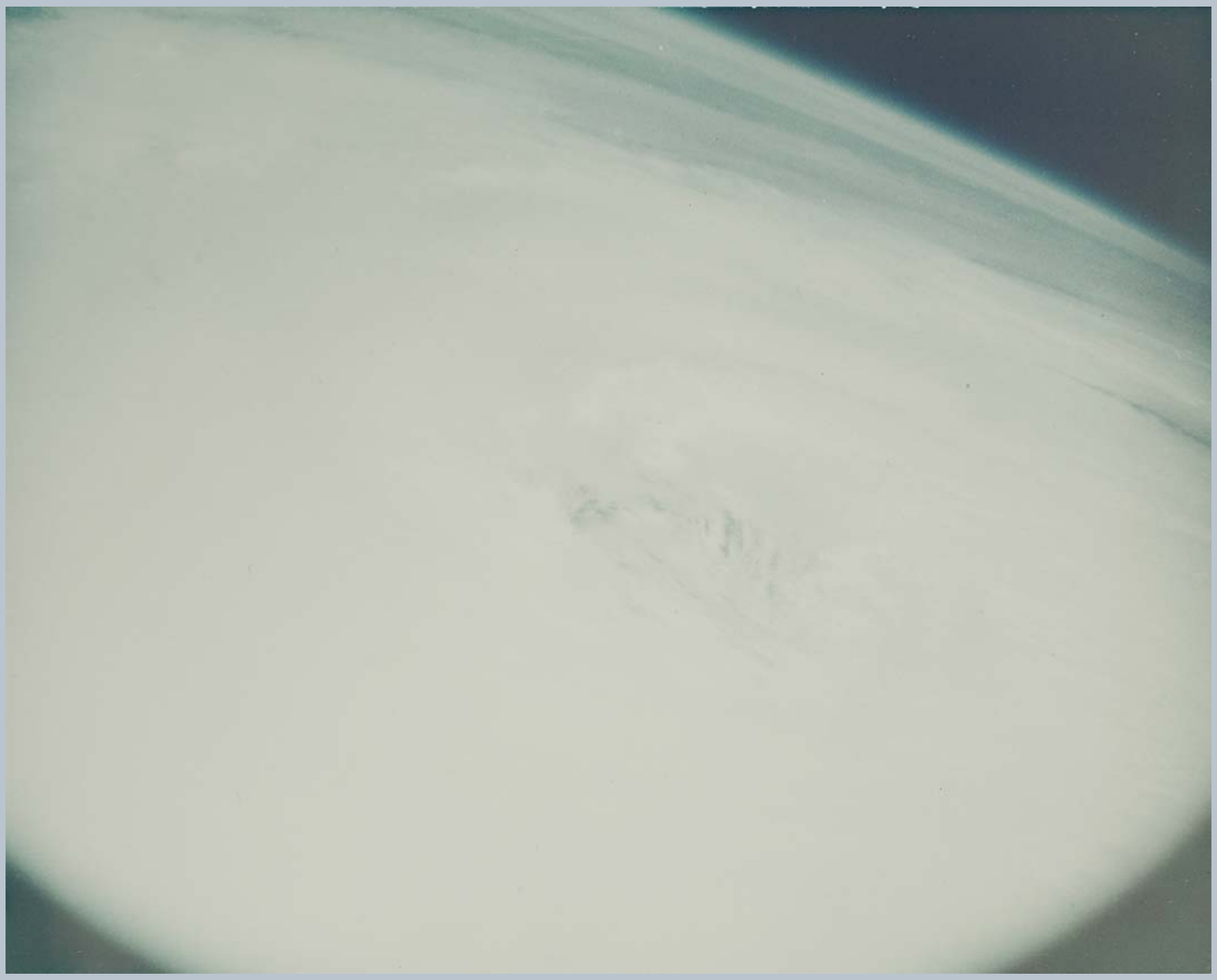
Second US man in space: Gus Grissom and his dramatic recovery (2). 20-21 Jul 1961.

Two vintage Gelatin silver prints on fiber- based, printed 1961. Each 20,3 x 25,4 cm (7.9 x 10 in), the second with NASA caption numbered „61-MR4-100" on the verso.

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.06 pm (GMT+2)



8

NASA (MERCURY ATLAS 4)

1941

First photograph from space from an orbiting unmanned spacecraft. 29 Nov 1961.

Large-format presentation vintage Chromogenic print on fiber- based Kodak paper, printed 1961, [NASA 61-MA4-134]
28,3 x 35,8 cm (11.1 x 14 in), with „A Kodak Paper" watermarks on the verso.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.07 pm (GMT+2)

Mercury Atlas 4 was the first successful unmanned orbital flight of Project Mercury.

An automatic camera was mounted on the unmanned capsule, a 70mm Maurer Earth sky Maurer 220G camera equipped with a 75mm lens and GAF Super Anscochrome T-100 Superior ASA 64 color reversal film.

This extremely rare photograph of Earth and space was taken during the 1-orbit flight (apogee of 248 km; perigee of 156 km).

Cosmonauts Gagarin and Titov were the only humans who orbited the Earth prior to the Mercury Atlas 4 mission but none of them took still photographs from their orbiting spacecraft (Gherman Titov had exposed a small amount of motion picture film during his August 1961 flight).

9

NASA (MERCURY ATLAS 6)

1962

First American in orbit: the glorious launch of John Glenn (2). 20 Feb 1962.

Two vintage Gelatin silver prints on fiber-based paper, printed 1962. Each 25,4 x 20,3 cm (10 x 7.9 in), the first with NASA HQ caption numbered „62.-MA6-102“, the second with US Air Force/ NASA Cape Canaveral caption numbered „PL-62-77405“ on the verso.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

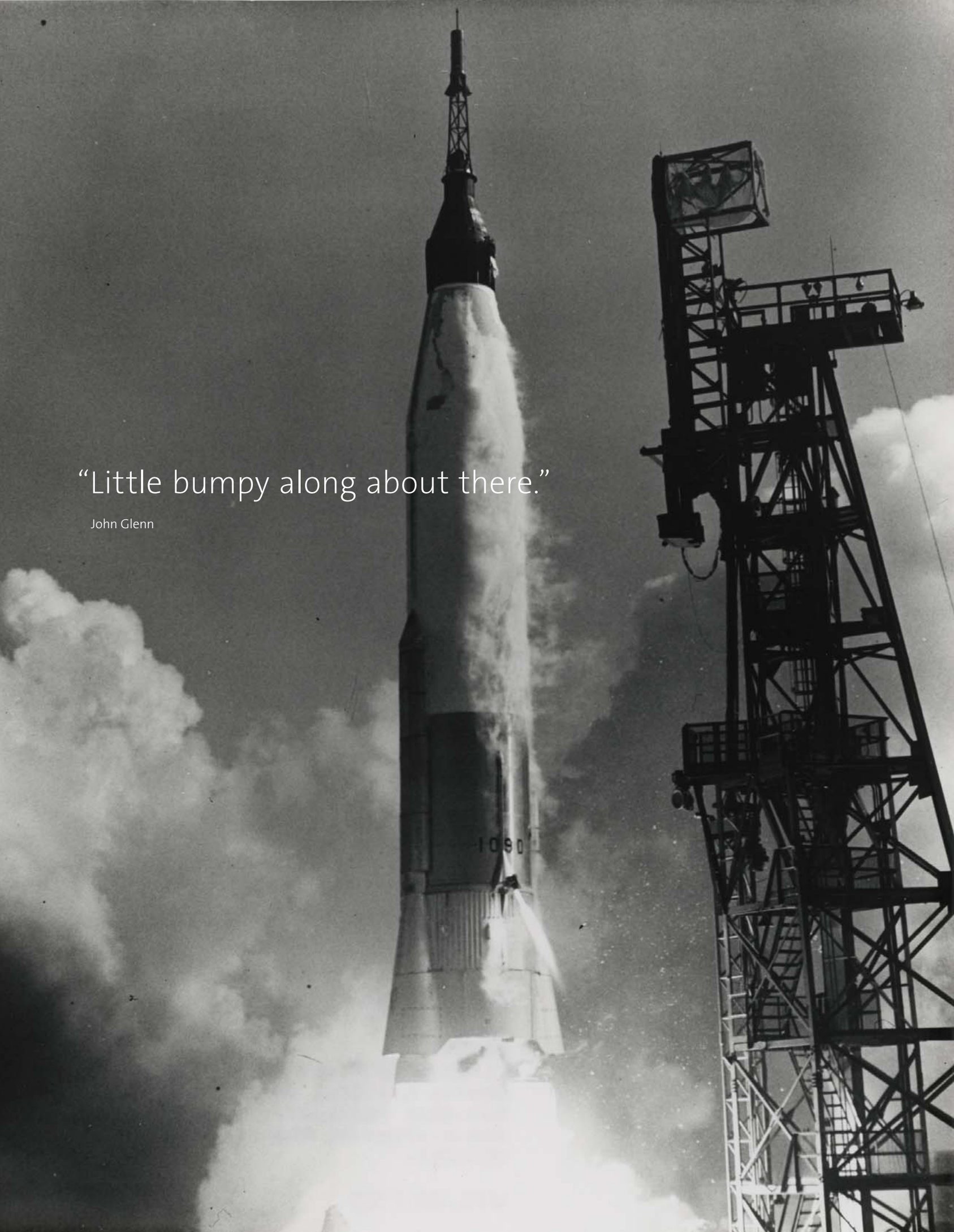
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.08 pm (GMT+2)

“Following the trail blazed by Yuri Gagarin, John Glenn rode an Atlas booster into Earth orbit on February 20, 1962. His success was a blaze of glory for the American public, whose adulation approached that given to Charles Lindbergh following his solo transatlantic flight in 1927” (Chaikin, Space, p. 29 and p. 43).

The first photograph shows the first American in orbit adjusting his helmet prior to launch from Cape Canaveral’s Launch Complex 14.

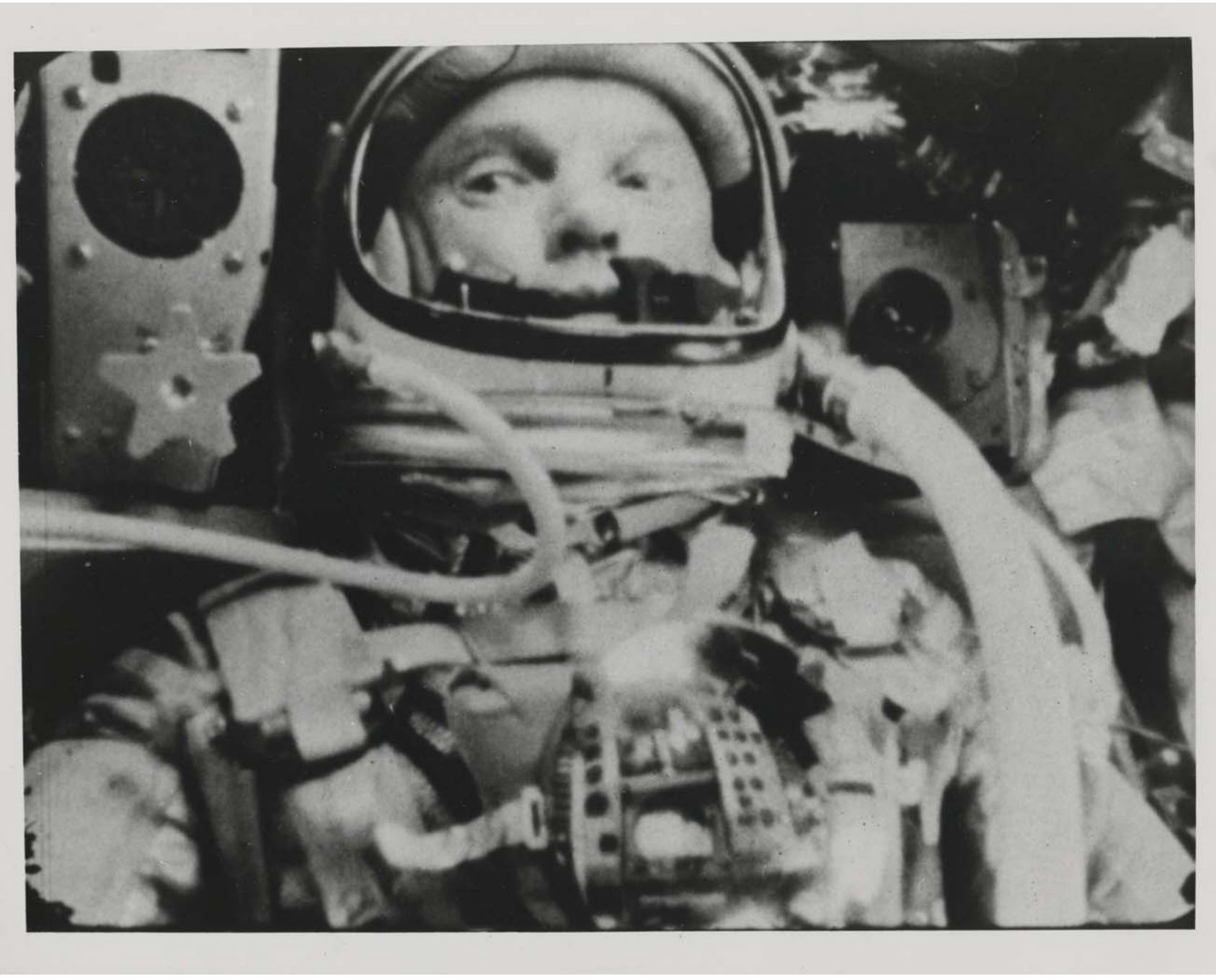
The second photograph shows the liftoff of the Atlas rocket carrying John Glenn and the Friendship 7 spacecraft on a historic 3-orbit ride through space.

From the mission transcript during liftoff:
Capcom (Mission Control): 3, 2, 1, 0
000:00:03 Glenn: Roger. The clock is operating. We’re underway.
000:00:07 Capcom: Hear loud and clear.
000:00:08 Glenn: Roger. We’re programing in roll okay.
000:00:13 Glenn: Little bumpy along about there.



“Little bumpy along about there.”

John Glenn



10

NASA (MERCURY ATLAS 6)

1962

First picture of a US astronaut in orbit: John Glenn weightless inside Friendship 7. 20 Feb 1962.

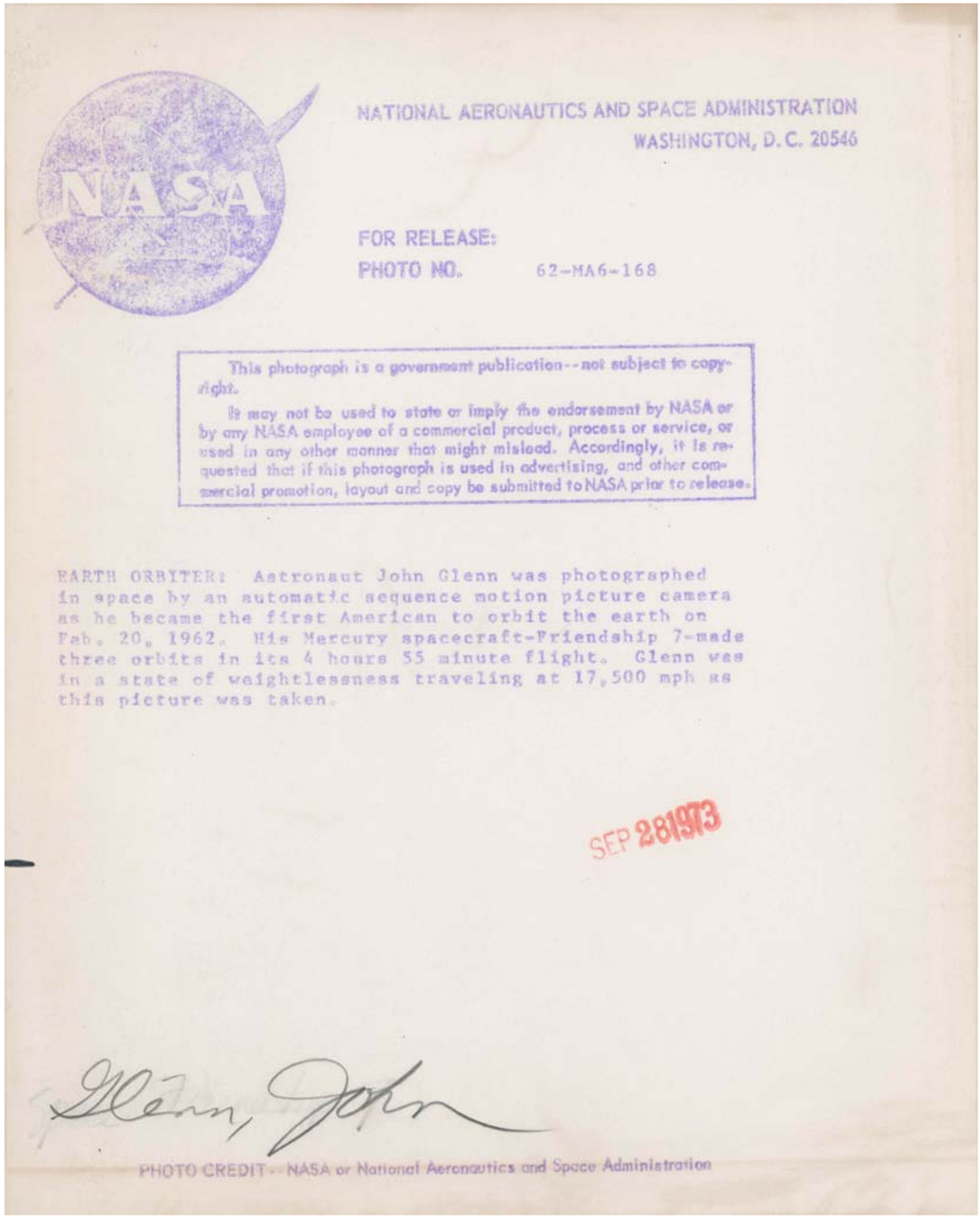
Vintage Gelatin silver print on fiber-based paper, printed 1963.
20,3 x 25,4 cm (7.9 x 10 in), with NASA HQ caption numbered „62-MA6-168" on the verso.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.09 pm (GMT+2)

[NASA caption] EARTH ORBITER Astronaut John Glenn photographed in space by an automatic sequence motion picture camera as he became the first American to orbit the Earth on February 20, 1962. His Mercury spacecraft Friendship 7 made three orbits in its 4 hours 55 minute flight. Glenn was in a state of weightlessness traveling at 17,500 mph as this picture was taken.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
WASHINGTON, D.C. 20546

FOR RELEASE:
PHOTO NO. 62-MA6-168

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EARTH ORBITER: Astronaut John Glenn was photographed in space by an automatic sequence motion picture camera as he became the first American to orbit the earth on Feb. 20, 1962. His Mercury spacecraft-Friendship 7-made three orbits in its 4 hours 55 minute flight. Glenn was in a state of weightlessness traveling at 17,500 mph as this picture was taken.

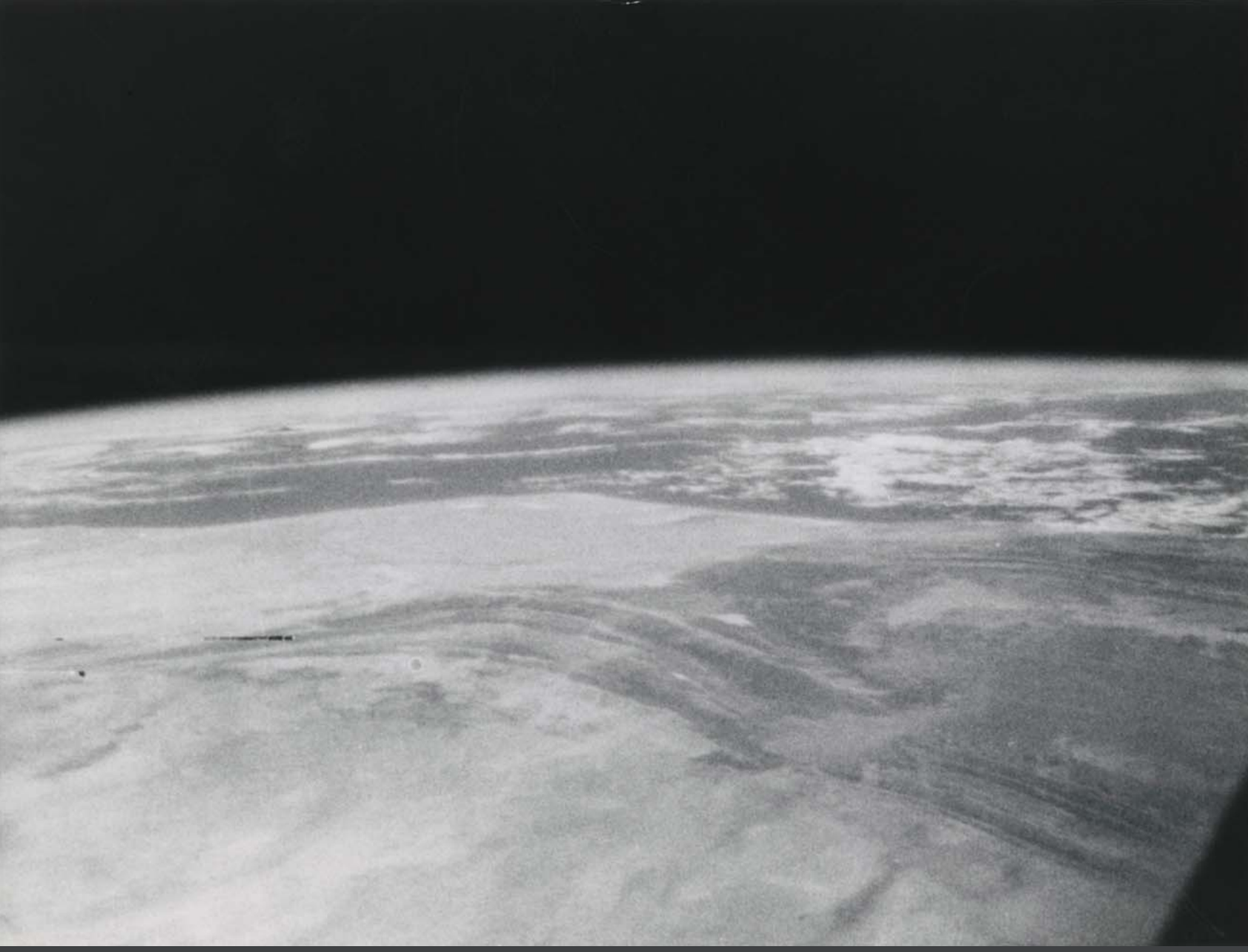
SEP 28 1973

Glenn, John

PHOTO CREDIT - NASA or National Aeronautics and Space Administration

"Weightlessness was a pleasant experience. I reported I felt fine as soon as the spacecraft separated from the launch vehicle, and throughout the flight this feeling continued to be the same."

John Glenn (Pilot's Flight Report)



11

JOHN GLENN (MERCURY ATLAS 6)

1962

The very first human-taken photograph from space. 20 Feb 1962.

Vintage Gelatin silver print on fiber-based paper, printed 1962.
20,3 x 25,4 cm (7.9 x 10 in), with NASA HQ caption numbered „62-MA6-195" on the verso.
The first and extremely rare photograph taken by a human being in space, taken by John Glenn during the first orbit of Friendship 7.

€ 4.000 – 6.000
$ 4.800 – 7.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.10 pm (GMT+2)

The suborbital missions of Alan Shepard and Gus Grissom prepared the way for the first orbital flight. John Glenn became the first American to circle the Earth making three orbits in his Friendship 7 Mercury spacecraft.

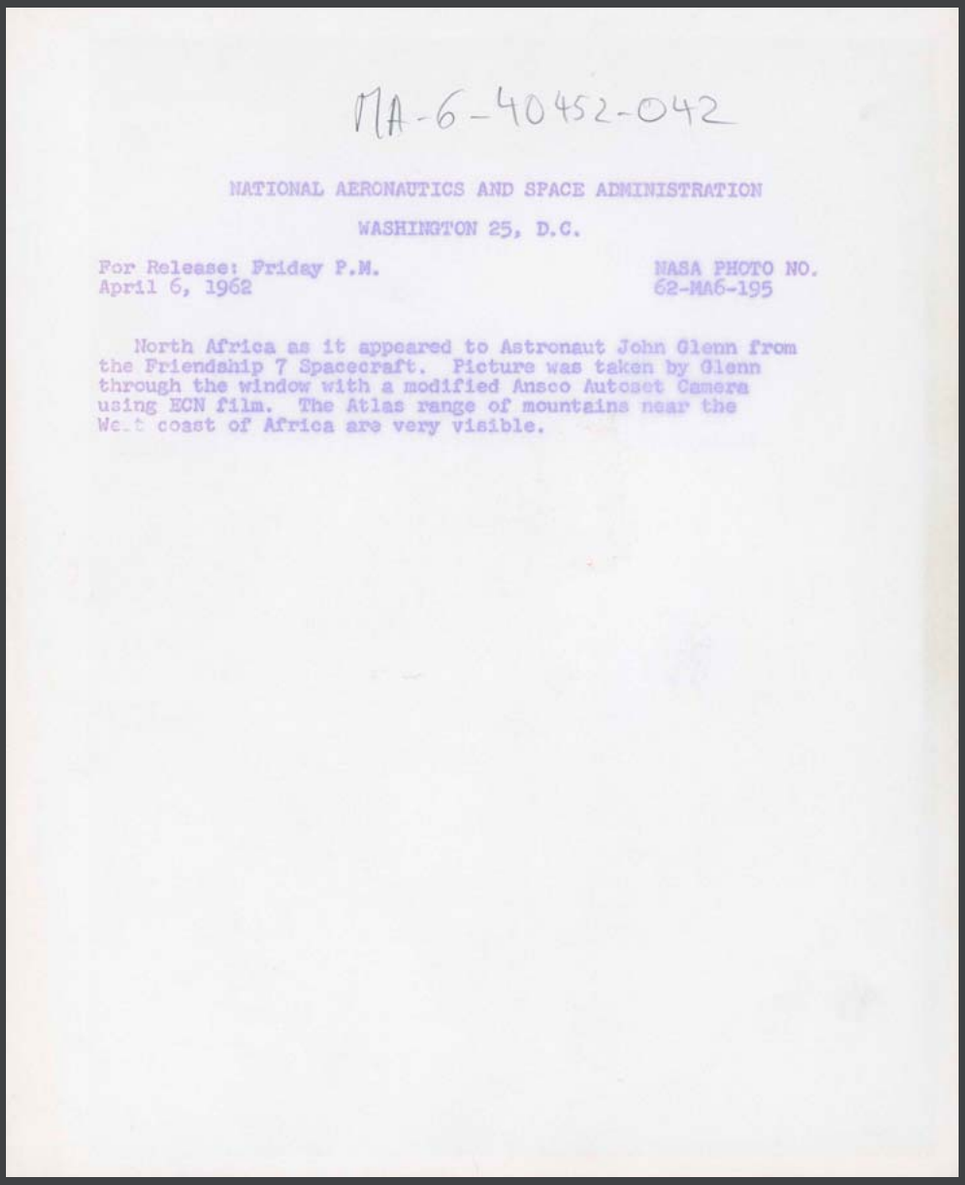
He also became the first human being to photograph Earth from space using a hand-held 35mm Ansco Autoset (modified Minolta) camera and Eastman Color Negative Film 5250.

The malfunction of his spacecraft's automatic control system during the second orbit limited Glenn's opportunities to make use of his camera.

Nevertheless, he did manage to document his time in space and snapped this first ever human-taken photograph from space on the first orbit of Friendship 7. The Atlas range of Mountains near the West Coast of Africa are clearly visible. „'Have beautiful view of African coast', Glenn reported, looking back 900 miles over Spanish Sahara 19 minutes after liftoff. Capes Bojador (left) and Juby hump the shoreline beyond the Anti Atlas mountains" (NATIONAL GEOGRAPHIC, June 1962, p. 811).

NASA officials initially vetoed Glenn's idea of taking a camera aboard his spacecraft for fear it would distract him from the mission's primary goals. After an appeal to NASA Director Robert Gilruth, Glenn ultimately received permission to use a camera during his space flight.

However, the lack of a space photography department in NASA's infant manned space program required Glenn to obtain his own camera. He needed to locate a model he could operate in zero gravity while wearing the bulky gloves of his



MA-6-40452-042

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WASHINGTON 25, D.C.

For Release: Friday P.M.
April 6, 1962

NASA PHOTO NO.
62-MA6-195

North Africa as it appeared to Astronaut John Glenn from the Friendship 7 Spacecraft. Picture was taken by Glenn through the window with a modified Ansco Autoset Camera using ECN film. The Atlas range of mountains near the West coast of Africa are very visible.

"This picture is to the best of my knowledge the first hand-held camera picture ever taken from space. I took it during the first orbit of my Friendship 7 flight on February 20, 1962, during the early stages of our first effort to accomplish manned orbital flight. NASA knew that pictures from orbit were an important part of showing the public the beauty of space, as well as the importance of exploring it. The camera I used was a very simple Minolta Hi-Matic, which was one of the first of the automatic cameras."

John Glenn (TIME Magazine; https://time.com/4558781/john-glenn-influential-photo/)

spacesuit. After asking advice to famous Life photographer Ralph Morse, Glenn eventually discovered such a camera, a 35mm Ansco Autoset with a 50mm lens (actually a Minolta Hi-Matic, repackaged by the New Yorkbased Ansco Company), in a drug store in Cocoa Beach, just outside of Cape Canaveral, Florida. One of the first models that automatically advanced the film roll between shots, NASA technicians rigged the camera with a trigger mechanism Glenn could operate while in space.

"In the dacade of Gemini and Apollo that followed Glenn's historic flight, others used more sophisticated equipment and flew higher and farther. Yet Glenn's pioneering achievement retains. His success helped convince NASA management of the feasibility of astronaut photography" (Schick and Van Haaften, p. 16).

"We choose to go to the Moon. We choose to go to the Moon in this decade and do the other things, not because they are easy, but because they are hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win, and the others, too."

President Kennedy (Rice University, September 12, 1962)

12

ROBERT KNUDSEN (MERCURY ATLAS 6)

1962

Space Race is ON: President Kennedy congratulating John Glenn at the White House after the first US orbital flight. 26 Feb 1962.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1962. 19 x 24 cm (7.4 x 9.4 in), with „By R.L. Knudsen PHC, USN Office on the Naval Aide to the President" credit stamp, „FEB 26 1962" stamp and „A Kodak Paper" watermarks on the verso.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.11 pm (GMT+2)

Glenn's successful orbital flight ten months after Yuri Gagarin confirmed Kennedy's goals for the nation's space effort that he would detail six months later in the famous "Moon speech" at Rice university.

Robert LeRoy Knudsen was a White House photographer, where he served for 28 years.

13

NASA (MERCURY ATLAS 7)

1962

Space pioneer: „Original Seven“ Scott Carpenter and the Aurora 7 mission (4). May 1962.

Four Vintage Chromogenic prints on fiber-based Kodak paper, printed 1962.
Each 12,6 x 18 cm (4.9 x 7 in), with „EKC“ watermarks on the verso.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.12 pm (GMT+2)

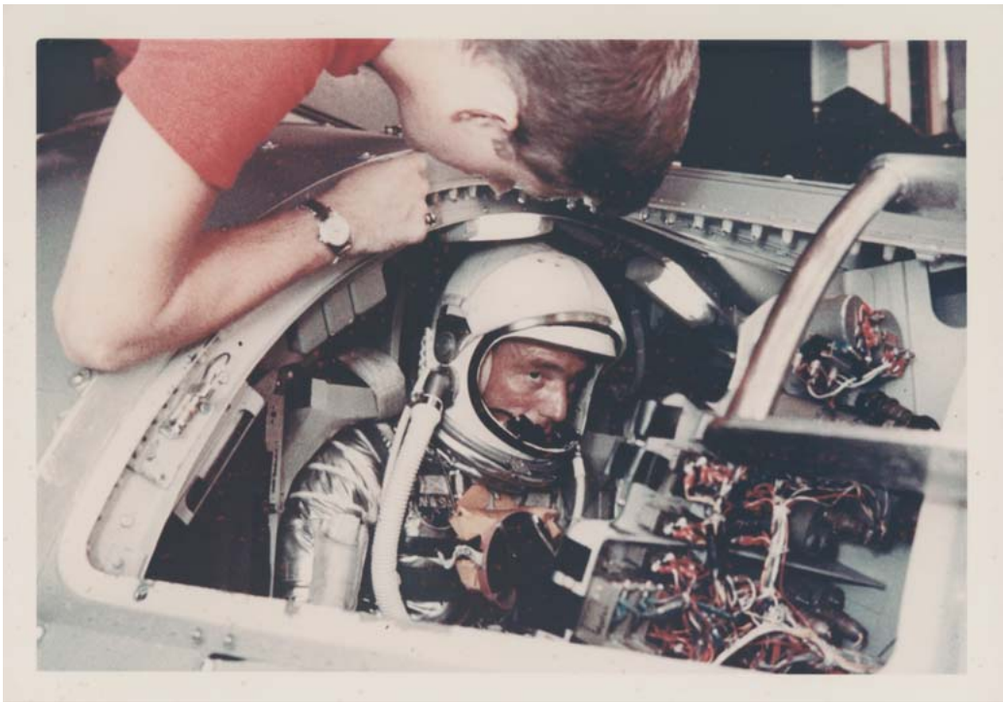
Mercury Atlas 7 was the second orbital flight of an American rocket with a human on board. The pilot was originally planned to be Donald Slayton but was changed to be Scott Carpenter after a medical examination of Slayton revealed an irregularity in his heartbeat.

The first three photographs show Astronaut Scott Carpenter wearing a Mercury pressure suit during pre-flight training with the Aurora 7 spacecraft.

The fourth photograph shows Carpenter in the recovery helicopter following Aurora 7 perilous splashdown in the Atlantic Ocean on May 24, 1962.

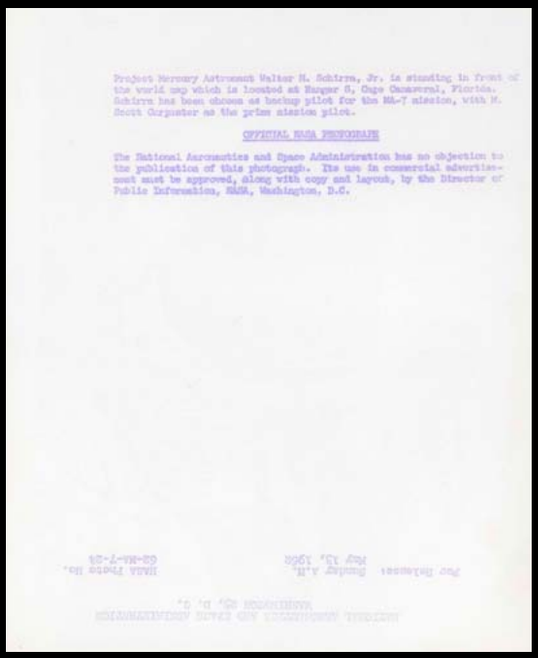
“The capsule reentered after completing 3 orbits, coming down in the Atlantic Ocean some 200 km northeast of Puerto Rico, about 400 km beyond the planned impact point. The overshoot was traced to a 25 degree yaw error at the time the retrograde rockets were fired. Retrofire was also about 3 s late, accounting for about 20 miles of the overshoot. The duration of the flight was 4h 56 min 5 s during which Carpenter travelled over 121,600 km. Carpenter was picked up after 2 h 59 min in the water and returned by helicopter to the aircraft carrier USS Intrepid.” (https://nssdc.gsfc.nasa.gov/nmc/spacecraft/display.action?id=1962-019A).

Flight transcripts and the testimony of Christopher Kraft, NASA flight director at the time, indicated that Carpenter frequently operated his camera during his three orbits, and Kraft attributed the 400-km off target landing in part to the distraction of taking photographs.



"Overall, I believe the MA-7 flight can be considered another successful step on the road to the development of a useful and reliable manned spacecraft system. The good performance of most of the spacecraft systems gave me confidence in the vehicle itself, while the spectacular novelty of the view from space challenged me to make the most of my opportunity, and lured me into an unwise expenditure of fuel early in the flight. [...] For me, this flight was a wonderful experience, and I anxiously await another space mission."

Scott Carpenter (Pilot's Flight Report)



Project Mercury Astronaut Walter M. Schirra, Jr. is standing in front of the world map which is located at Hangar S, Cape Canaveral, Florida. Schirra has been chosen as backup pilot for the MA-7 mission, with M. Scott Carpenter as the prime mission pilot.

OFFICIAL NASA PHOTOGRAPH

The National Aeronautics and Space Administration has no objection to the publication of this photograph. Its use in commercial advertisement must be approved, along with copy and layout, by the Director of Public Information, NASA, Washington, D.C.

"Astronaut Schirra called his mission a 'textbook flight', the only difficulty having been attaining the correct temperature adjustment on his pressure suit. During the flight, the spacecraft attained a maximum velocity slightly higher than previous flights (28,092 km/hour) and an altitude of about 281 km. The capsule reentered after completing six orbits, landing 440 km northeast of Midway Island in the Pacific Ocean, about 8.2 km from the prime recovery ship, USS Kearsarge. The duration of the flight was 9 hours 13 minutes and 11 seconds during which Schirra travelled over 230,000 km (https://nssdc.gsfc.nasa.gov/nmc/spacecraft/display.action?id=1962-052A).

14

NASA (MERCURY ATLAS 8)

1962

Space pioneer: „Original Seven" Walter Schirra and the Sigma 7 mission (4). May-Sept 1962.

Four vintage Gelatin silver prints on fiber-based paper, printed 1962. Each 25,4 x 20,3 cm (10 x 7.9 in), the first two numbered „NASA S-62-1187" and „NASA S-62.-1451" in black in top margin and with NASA captions on the versos.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.13 pm (GMT+2)

Walter Schirra was the only NASA astronaut to fly into space during the Mercury, Gemini and Apollo missions (Mercury Atlas 8, Gemini VI-A, Apollo 7). He also made the first use of the Hasselblad camera in space during the Sigma 7 mission but captured mostly overexposed photographs.

A fine portrait of Schirra at Hangar S at Cape Canaveral with a world map in the background (photograph to the right).

Schirra undergoing pressure checks on his suit in the contour couch at Langley Air Force Base prior to training on the procedures trainer facility (second photograph).

Schirra on the weight and balance scale during pre-flight checks in the White Room in Hangar S at Cape Canaveral in September 1962 (third photograph).

Schirra inside Sigma 7 spacecraft during a 6.5 hours full scale simulated flight high atop Pad 14 at Cape Canaveral (fourth photograph).

Mercury Atlas 8 was launched from Cape Kennedy's Launch Complex 14 on October 3, 1962.


W. M. SCH

15

NASA (MERCURY ATLAS 9)

1963

The last space pioneer: "Original Seven" Gordon Cooper and Faith 7, NASA's last solo mission (4). May 1963.

Four Vintage Gelatin silver prints on fiber-based paper, printed 1963. Each 20,3 x 25,4 cm (7.9 x 10 in), the first two with NASA HQ captions numbered „63-MA9-33" and „63-MA-17" on the versos, the last two with NASA MSC captions on the versos and numbered „NASA S-63-6124" and „NASA S-63-6127" in black in top margin.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.14 pm (GMT+2)

Faith Seven was the last one-man crew mission of the American space program.

Gordon Cooper became the first US astronaut to spend more than a day in space and made the first successful use of the Hasselblad camera, taking great photographs from space. Cooper was the last US astronaut to fly solo into space.

Before his 22-orbit ride through space, Gordon Cooper is checking out his spacecraft flight couch during weight and balance test in the White Room at Hangar S at Cape Canaveral (photographs top left, bottom left) and checking out the Faith 7 spacecraft in the White Room at the top of the gantry at Pad 14 during a simulated mission (photographs top right, bottom right).

During the high g loads on the astronaut at lift off and reentry the couch will support his body, a perfect fit is very important, in particular for the helmet, which consists of a resinous impregnated fiberglass hard shell; an individually molded crushable impact liner; a ventilation exhaust outlet; a visor sealing system; and a communication system.

NASA
S-63-6124

NASA
S-63-6127

"What an afterburner."

Gordon Cooper

16

NASA (MERCURY ATLAS 9)

1963

Launch of NASA's last solo (and first one-day) mission. 15 May 1963.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1963. 25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper" watermarks on the verso, numbered „NASA S-63-7633" (NASA MSC) in black in top margin.

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.15 pm (GMT+2)

Gordon Cooper's Faith 7 mission was the first one-day mission of the US space program.

Mercury Atlas 9 was launched From Cape Canaveral's Pad 14 on May 15, 1963, at 8:04 a.m. (EST) with a perigee of 161 km and an apogee of 267 km. The last Mercury mission was successful. Total time weightless was 34 hours, 3 minutes, 30 seconds. Faith 7 completed 22 orbits to evaluate effects of one day in space. Gordon Cooper was the last US astronaut to ride solo through space.

From the mission transcript during liftoff:
0, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0.
000:00:01 Capcom (Mission Control): Lift off.
000:00:02 Cooper: Roger. I have a lift-off and the clock is operating.
000:00:05 Capcom: Roger, clock.
000:00:07 Cooper: Sigma Seven, Faith Seven on the way. [...]
000:00:23 Cooper: And the backup clock is running.
000:00:25 Capcom: Roger. You look good here, Gordo.
000:00:27 Cooper: Roger. Feels good buddy.
000:00:29 Capcom: Good Sport.
000:00:31 Cooper: Thirty seconds, and fuel is go. Oxygen is go. Cabin pressure on the top peg. Altimeter is working.
000:00:38 Capcom: Roger. You're looking beautiful.
000:00:48 Cooper: What an afterburner.

17

GORDON COOPER (MERCURY ATLAS 9)

1963

Birth of space photography: first high quality Hasselblad photograph from space; orbital view over China. 15-16 May 1963.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1963. 20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso, numbered „NASA S-63-6438" (NASA MSC) in black in top margin.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.16 pm (GMT+2)

A superb photograph of the dark sky of space and Earth horizon over Changsha area in China, showing Tung Ting lake region, taken by Gordon Cooper with the first NASA-modified Hasselblad 500C camera and its 80mm lens, and GAF anscochrome reversal film.

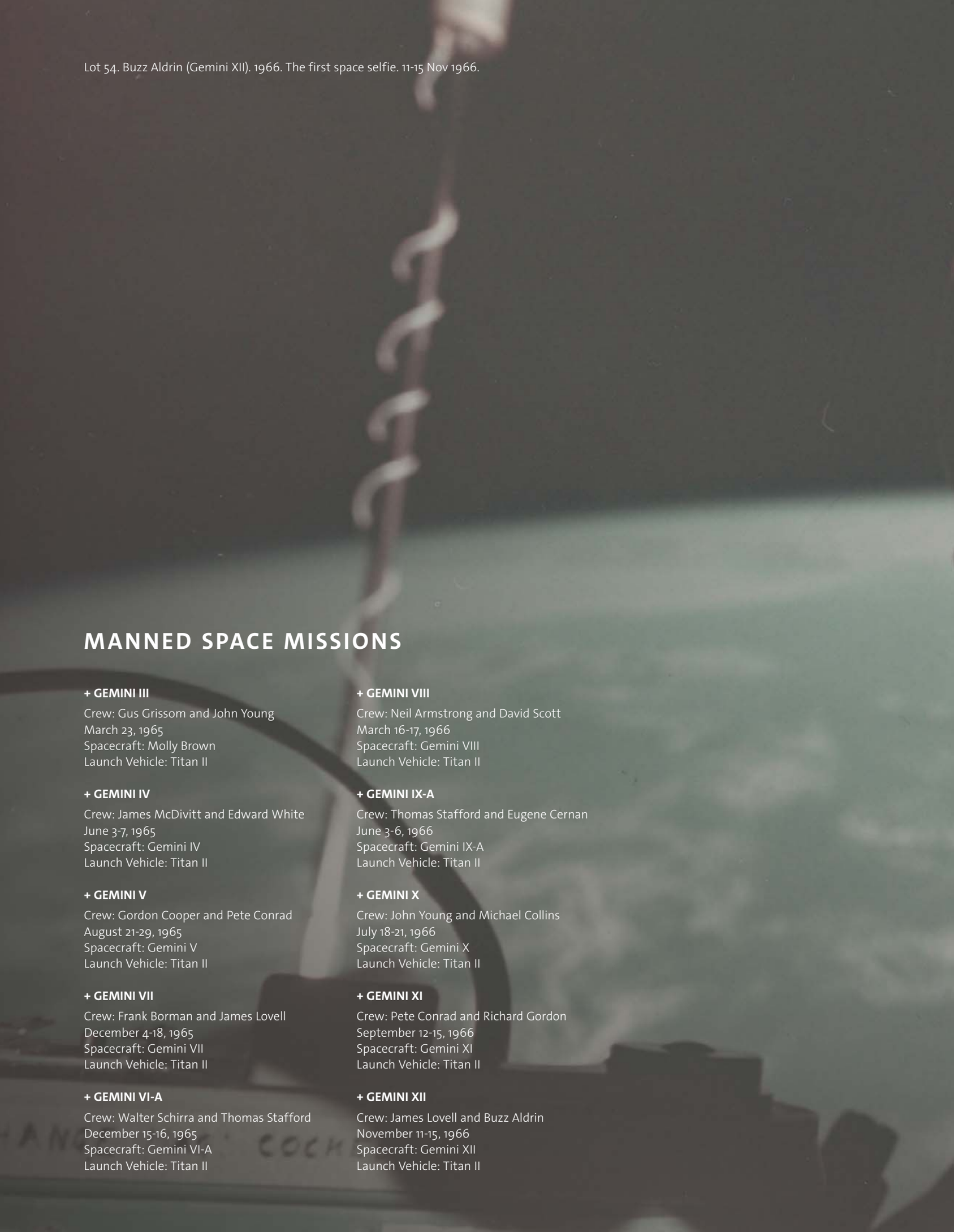
Prior to the introduction of the Hasselblad, NASA lacked a defined photography program. It was not until Walter Schirra, a known camera enthusiast, sought a precision instrument to accompany him on his Mercury-Atlas 8 mission that NASA's photographic identity began to take shape.

Schirra's experiments on MA-8 paved the way for Gordon Cooper's use of the same NASA-modified Hasselblad camera in space. His longer flight (22 orbits) allowed him to carefully frame his photographs.

Cooper's film was the first by an astronaut to be analyzed and described frame by frame by NASA, in effect launching the agency's photographic technology department in Houston.

Cooper recalled a NASA memo stating that: "'If an astronaut desires, he may carry a camera.' That's the importance they gave to photography... It was great to be able to bring home some of those images to people who couldn't be up there in orbit and see those kind of things. I think NASA finally swung around to realizing the importance of photography; even the diehards finally came around, admitting it had about the greatest impact of anything going"(Schick and Van Haaften, pp. 26-30).

From then on the Hasselblad became the camera equipment of choice for NASA's space explorers.



Lot 54. Buzz Aldrin (Gemini XII). 1966. The first space selfie. 11-15 Nov 1966.

MANNED SPACE MISSIONS

+ GEMINI III

Crew: Gus Grissom and John Young
March 23, 1965
Spacecraft: Molly Brown
Launch Vehicle: Titan II

+ GEMINI IV

Crew: James McDivitt and Edward White
June 3-7, 1965
Spacecraft: Gemini IV
Launch Vehicle: Titan II

+ GEMINI V

Crew: Gordon Cooper and Pete Conrad
August 21-29, 1965
Spacecraft: Gemini V
Launch Vehicle: Titan II

+ GEMINI VII

Crew: Frank Borman and James Lovell
December 4-18, 1965
Spacecraft: Gemini VII
Launch Vehicle: Titan II

+ GEMINI VI-A

Crew: Walter Schirra and Thomas Stafford
December 15-16, 1965
Spacecraft: Gemini VI-A
Launch Vehicle: Titan II

+ GEMINI VIII

Crew: Neil Armstrong and David Scott
March 16-17, 1966
Spacecraft: Gemini VIII
Launch Vehicle: Titan II

+ GEMINI IX-A

Crew: Thomas Stafford and Eugene Cernan
June 3-6, 1966
Spacecraft: Gemini IX-A
Launch Vehicle: Titan II

+ GEMINI X

Crew: John Young and Michael Collins
July 18-21, 1966
Spacecraft: Gemini X
Launch Vehicle: Titan II

+ GEMINI XI

Crew: Pete Conrad and Richard Gordon
September 12-15, 1966
Spacecraft: Gemini XI
Launch Vehicle: Titan II

+ GEMINI XII

Crew: James Lovell and Buzz Aldrin
November 11-15, 1966
Spacecraft: Gemini XII
Launch Vehicle: Titan II

The Gemini Era

18

NASA

President Kennedy visiting NASA days before his death and President Johnson with the first Gemini astronauts (2). Nov 1963- Sept 1964.
Two vintage Gelatin silver prints on fiber-based paper, printed 1963 and 1964.
Each 20,3 x 25,4 cm (7.9 x 10 in), the second with NASA HQ caption numbered „64-H-2365“ on the verso.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.17 pm (GMT+2)

President John F. Kennedy visited NASA administrator James Webb at Cape Canaveral on November 16, 1963, six days before his assassination, to survey the advancement of the Saturn launch system.

This was the last visit of the President to the Florida Space Center.

In a speech at Brooks AFB in San Antonio, Texas, on November 21, 1963, the day before he was assassinated, Kennedy identified the launch of Saturn I SA-5 as the one which would place US lift capability ahead of the Soviets, after being behind for more than six years since Sputnik.

He said: “And in December, while I do not regard our mastery of space as anywhere near complete, while I recognize that there are still areas where we are behind – at least in one area, the size of the booster – this year I hope the United States will be ahead.”

After Kennedy’s assassination on November 23, 1963, his widow, Jacqueline Kennedy, suggested to President Johnson that renaming the Cape Canaveral facility would be an appropriate memorial for the President who had set the goal of landing on the Moon. From 1963 to 1973, Cape Canaveral became Cape Kennedy when President Lyndon Johnson by executive order renamed the area, announced in a televised address six days after the assassination, on Thanksgiving evening.

JOHN F. KENNEDY SPACE CENTER,
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION,
KENNEDY SPACE CENTER, FLORIDA 32899
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LOC-63P-133 UNCL. 11-16-63

NASA/PIO
PRESIDENT J.F. KENNEDY AND NASA ADMINISTRATOR JAMES T. WEBB AT SKID STRIP DURING THEIR TOUR OF NASA FACILITIES.

19

NASA (PROJECT GEMINI)

1964

Portrait of the first Gemini astronauts. Apr 1964.

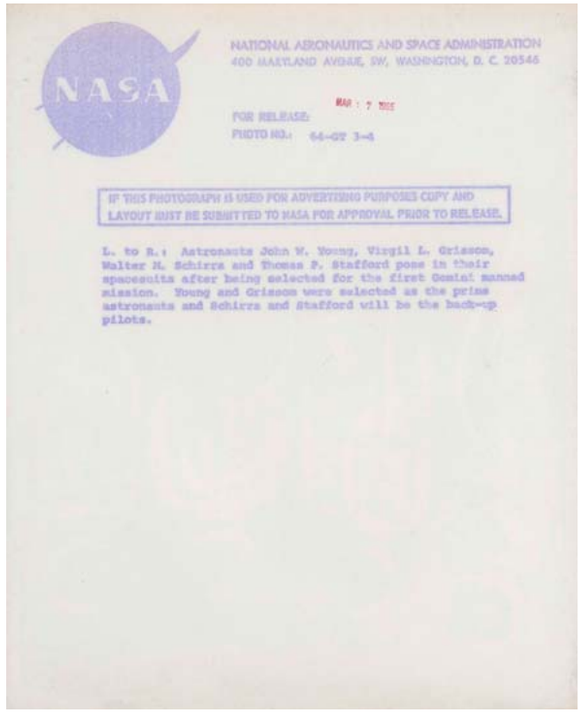
Vintage Gelatin silver print on fiber-based paper, printed 1964.
25,4 x 20,3 cm (10 x 7.9 in), with NASA HQ caption numbered
„64-GT3-4" on the verso.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.18 pm (GMT+2)

[NASA caption] Left to right: Astronauts John W. Young, Virgil I. Grissom, Walter M. Schirra Jr. and Thomas P. Stafford pose in their spacesuits after being selected for the first Gemini manned mission. Young and Grissom were selected as the prime astronauts and Schirra and Stafford will be the back-up pilots.



20

NASA (GEMINI I)

1964

The first launch of project Gemini. 8 Apr 1964.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1964. 27,8 x 21 cm (10.9 x 8.2 in), with „A Kodak Paper“ watermarks on the verso.

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

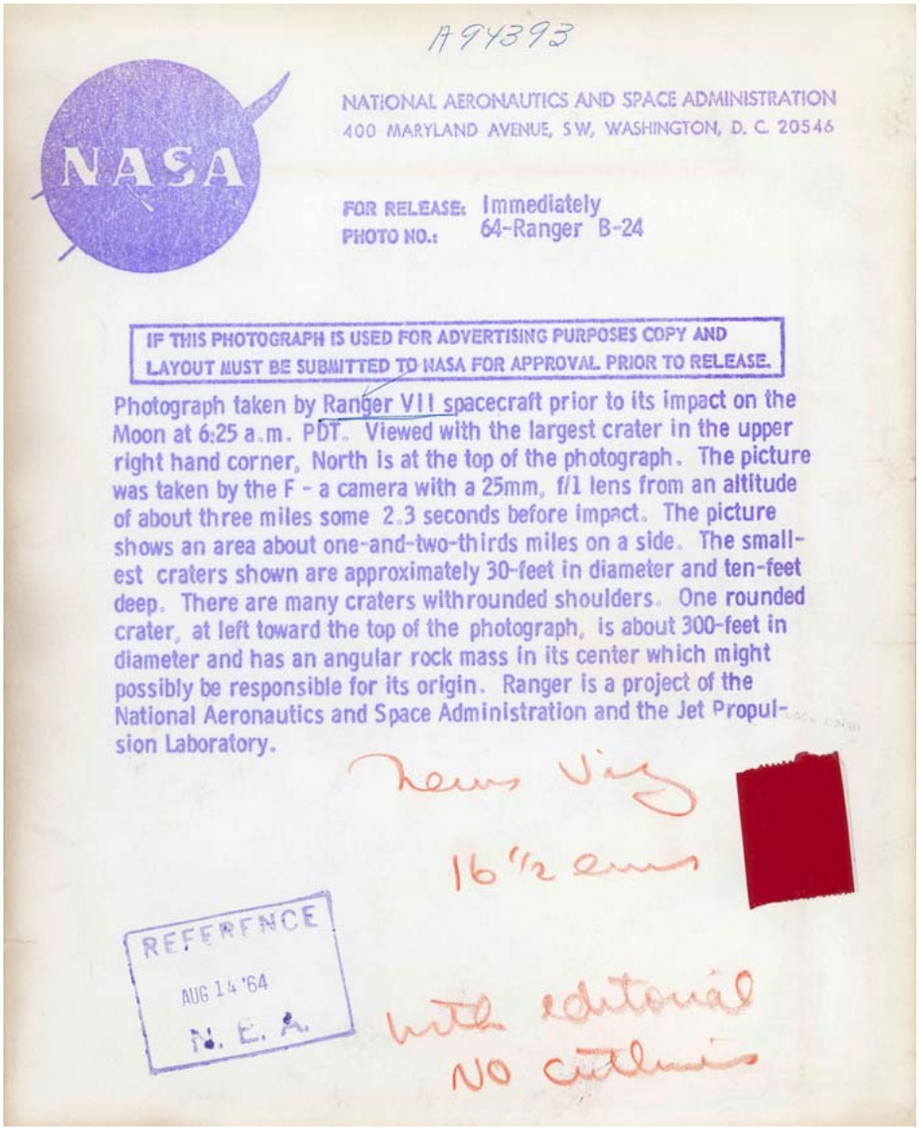
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.19 pm (GMT+2)

Project Gemini was NASA's second human spaceflight program, conducted between projects Mercury and Apollo. The Gemini spacecraft carried a two-astronaut crew.

"The Gemini program defined and tested the skills NASA would need to go to the Moon. Gemini had four main goals: to test an astronaut's ability to fly long-duration missions (up to two weeks in space); to understand how spacecraft could rendezvous and dock in orbit around the Earth and the moon; to perfect re-entry and landing methods; and to further understand the effects of longer space flights on astronauts" (https://www.nasa.gov/specials/gemini_gallery/).

Gemini I was the first unmanned test flight of the program.

"The main objectives of Gemini I were to test the structural integrity of the new spacecraft and the Titan-II-GLV launch vehicle. The planned mission of this capsule lasted only three orbits. The spacecraft itself remained intentionally attached to the second stage of the rocket and there were no plans for recovery. The Gemini I capsule was built specifically for this mission and differed significantly from the later operational capsules (Gemini II to XII). It lacked life support systems and had ballast instead. A heat shield was mounted, but four large holes drilled in it to make sure that the spacecraft was destroyed during reentry" (http://space.skyrocket.de/doc_sdat/gemini-1.htm).



21

RANGER VII

1964

First lunar impact: the final photograph transmitted by the first spacecraft to send close-up pictures of the Moon. 31 Jul 1964.

Vintage Gelatin silver print on fiber-based paper, printed 1964. 25,4 x 20,3 cm (10 x 7.9 in) with NASA HQ caption numbered „64-Ranger B-24“ on the verso.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

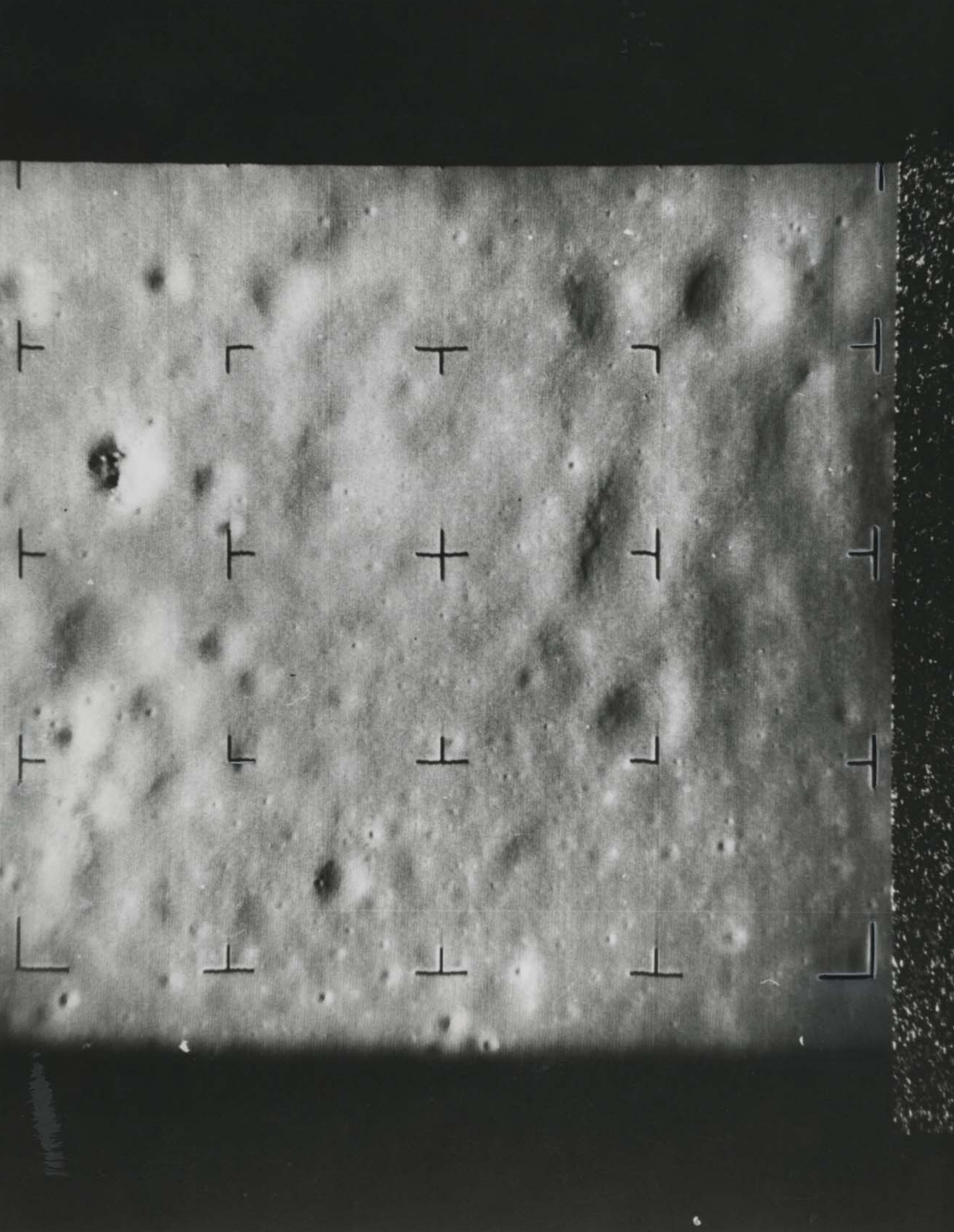
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.20 pm (GMT+2)

NASA's lunar assault began with a spectacular breakthrough: the "crashlander" Ranger VII was the first space probe to send close-up pictures of the Moon before it impacted on the lunar surface.

Ranger VII photographed its way down to target in a lunar plain, named Mare Cognitum (the Known Sea) following the success of the mission, south of the Crater Copernicus, at latitude 10.35°S and longitude 20.58°W. It sent pictures from six cameras to waiting scientists, engineers and astronomers which "were delighted at the clarity of the images which confirmed that there were lunar areas topographically suitable for manned landing sites" (Cortright, p. 46).

This historic final photograph was transmitted by the F-A camera and its 25mm, f/1 lens some 2.3 seconds before Ranger VII's impact on the lunar surface from an altitude of about three miles. This image has an incredible resolution of .5 meters. The smallest craters seen are approximately 30-feet in diameter and ten-feet deep. The spacecraft was destroyed while transmitting, resulting in the receiver noise pattern.

"The Ranger VII lunar lander was the first true success in the United States' early quest to explore the Moon and heralded a new era of exploration that saw dramatically more mission successes than failures. [...] The images, which showed the lunar surface in stunning detail, were the harbinger of future human exploration of the Moon" (https://www.jpl.nasa.gov/missions/ranger-7/).




GRISSOM

22

RALPH MORSE; NASA (GEMINI III)

1965

NASA's first two-man crew: Gus Grissom and John Young inside the Molly Brown spacecraft (2). Mar 1965.

Two vintage Gelatin silver prints on fiber-based paper, printed 1965. Each 25,4 x 20,3 cm (10 x 7.9 in), the first with NASA KSC caption numbered „65 H 445" on the verso, the second with NASA HQ caption numbered „65-H-375" on the verso.

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.21 pm (GMT+2)

Gus Grissom, hoping to avoid duplication of the experience with his Mercury flight Liberty Bell 7 in which the capsule sank after splashdown, named the Gemini III spacecraft Molly Brown, in a playful reference to the Broadway musical The Unsinkable Molly Brown. NASA management did not like this name, and asked him to change it. Grissom replied, "How about the Titanic?" The managers relented and allowed Grissom to keep Molly Brown, but this was the only Gemini flight they allowed the astronauts to name.

The first photograph was taken by famous LIFE magazine photographer Ralph Morse through the window of the open hatch on Grissom's side of the Gemini spacecraft just before the hatches were closed.

Ralph Morse spent so much time with the Mercury Seven (and with the Gemini and Apollo crews as well) that John Glenn himself fondly dubbed him "the eighth astronaut" (Ben Cosgrove, TIMEmagazine, http://time.com/3879356/mercury-seven-photos-of-nasa-astronauts-in-training/).

The second photograph was taken as John Young was checking out the Gemini spacecraft during a simulated test at Launch Complex 19 at Cape Kennedy.

The Gemini capsule was tiny, astronauts had less space than a driver and passenger in a sports car.

23

NASA (GEMINI III)

1965

Mission Control and the launch of the first crewed Gemini mission (2). 19-23 Mar 1965.

Two photographs comprising: one vintage Gelatin silver print on fiber-based paper, printed 1965.
20,3 x 25,4 cm (7.9 x 10 in), the first with NASA HQ caption numbered „65-H-413" on the verso; and one vintage chromogenic print on fiber-based Kodak-paper, printed 1965, 20,3 x 25,4 cm (8 x 10 in), with „A Kodak Paper" watermarks on the verso, numbered "NASA-S-65-4192", dated "March 23, 1965" and captioned "GT-3 Launch" next to image.

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.22 pm (GMT+2)

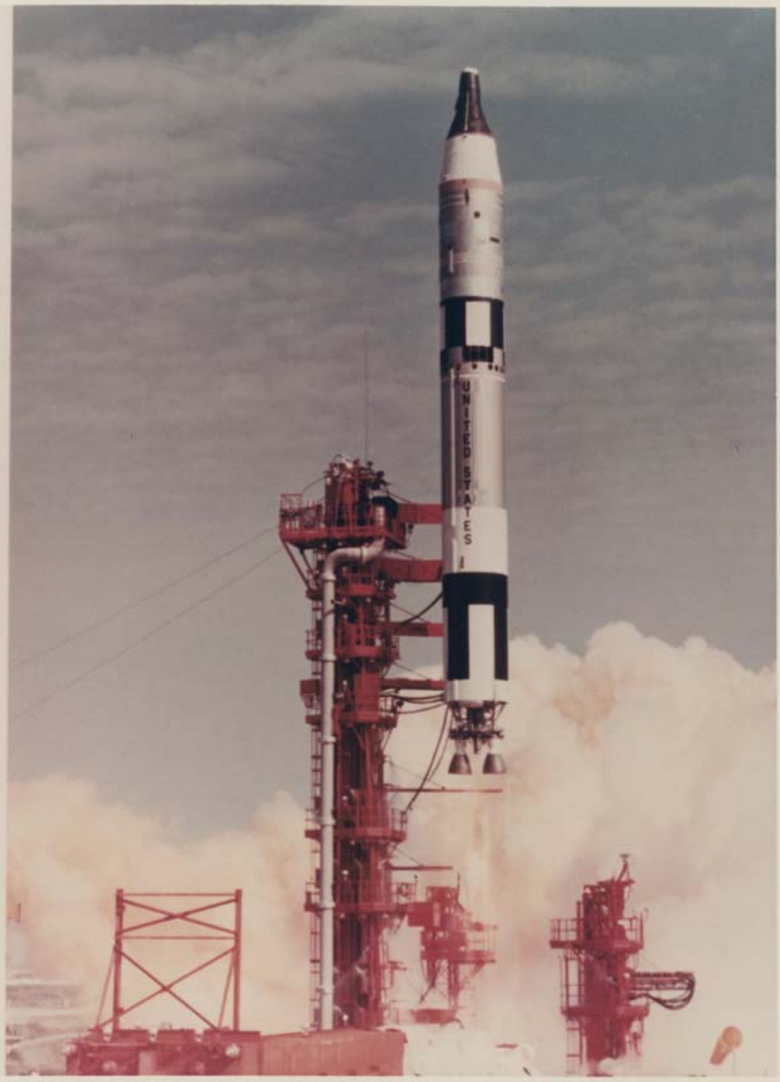
Mission Control Center at the Kennedy Space Center during flight simulations (first photograph). The flight controllers are shown at their consoles. In the background is the animated display map of the Gemini III orbital track as seen from the viewing room at the rear of the Control Center.

Gemini III was the last mission monitored from Cape Kennedy's Mission Control Center. After liftoff, the following Gemini and Apollo space flights were monitored from Houston's Mission Control at the Manned Spacecraft Center.

Gemini Titan III lifted off from Pad 19 at KSC on March 23, 1965 (second photograph) and successfully completed three orbits. Unlike Redstone or Atlas of the Mercury Project, Gemini Titan's rocket was two rockets in one. The first stage lifted the rocket from the launch pad to a height of 64 km (40 miles), before dropping away to allow the second stage to blast off into orbit. The flight had an apogee of 140 miles and perigee of 100 miles.

NASA-S-65-4192 MARCH 23, 1965

GT-3 LAUNCH



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
400 MARYLAND AVENUE, SW, WASHINGTON, D. C. 20546

FOR RELEASE: March 19, 1965
PHOTO NO.: 65-H-413

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Cape Kennedy, Florida -- The flight controllers are shown at their consoles in the Mission Control Center during GT-3 flight simulations. In the background is the animated display map of the Gemini-3 orbital track as seen from the viewing room at the rear of the Control Center. The National Aeronautics and Space Administration's GT-3 flight is scheduled for no earlier than Tuesday, March 23.

"These photographs represented a new era in the study of the Earth and its resources, just as Gemini IV represented the beginning of a new era in long duration manned space flight."

Christopher Kraft, Director of Flight Operations at NASA MSC and father of Mission Control (Cortright, p. 149).

24

E. WHITE OR J. MCDIVITT (GEMINI IV)

1965

Birth of the environmental consciousness: Earthscapes from space (4). 3-7 Jun 1965.

Four vintage Chromogenic prints on fiber-based Kodak paper, printed 1965.
Each 25,4 x 20,3 cm (10 x 7.9 in), the first three numbered „NASA S-65-34764", „NASA S-65-34644, „NASA S-6524673"(NASA MSC) in red in top margin and with „A Kodak Paper" watermarks on the versos (the third with NAS caption on the verso), the fourth (NASA S-63-34660) with „A Kodak Paper" watermarks on the verso (NASA MSC).

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

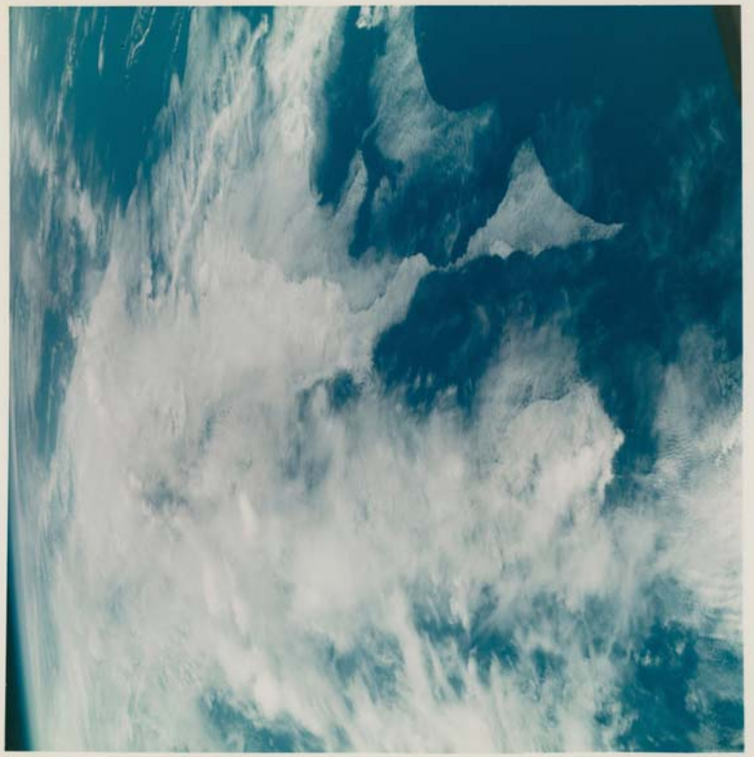
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.23 pm (GMT+2)

Gemini IV marked a turning point in NASA's photographic history.

The longer mission (62 revolutions of the Earth in a four-day period) and perfected photographic equipment allowed the astronauts to record wonderful photographs of the Earth, definitely confirming the potential of photography from space.

These very rare photographs taken with the 70mm Hasselblad 500C NASA-modified camera loaded with Kodak film show a wonderful vivid-blue view of Florida Straits, Great Bahama Bank (first photograph), the magnificent blue cloud-covered Earth from space (second photograph), a superbly detailed view of the Gulf of California, mouth of the Colorado River (third photograph), and an abstract Earthscape from space over Southern Saudi Arabia, Muscat and Oman (fourth photograph).

"During the four-day mission, McDivitt and White conducted 11 scientific experiments. [...] One focused on photography with a 70-millimeter Hasselblad camera taking images of the weather and terrain on Earth. From the agency's earliest efforts, NASA has been an innovative leader in studies of Earth science" (https://www.nasa.gov/feature/gemini-iv-learning-to-walk-in-space).



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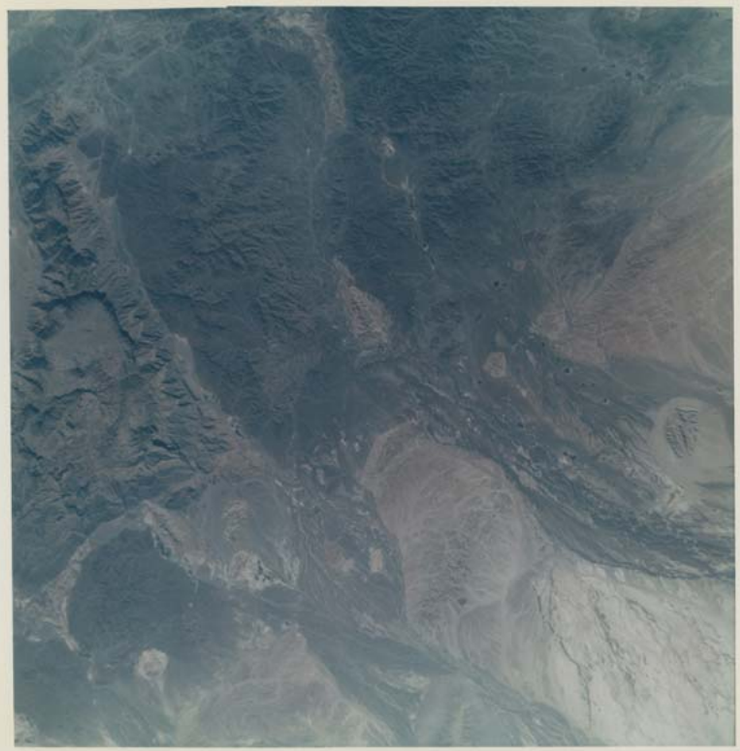
S-65-34644



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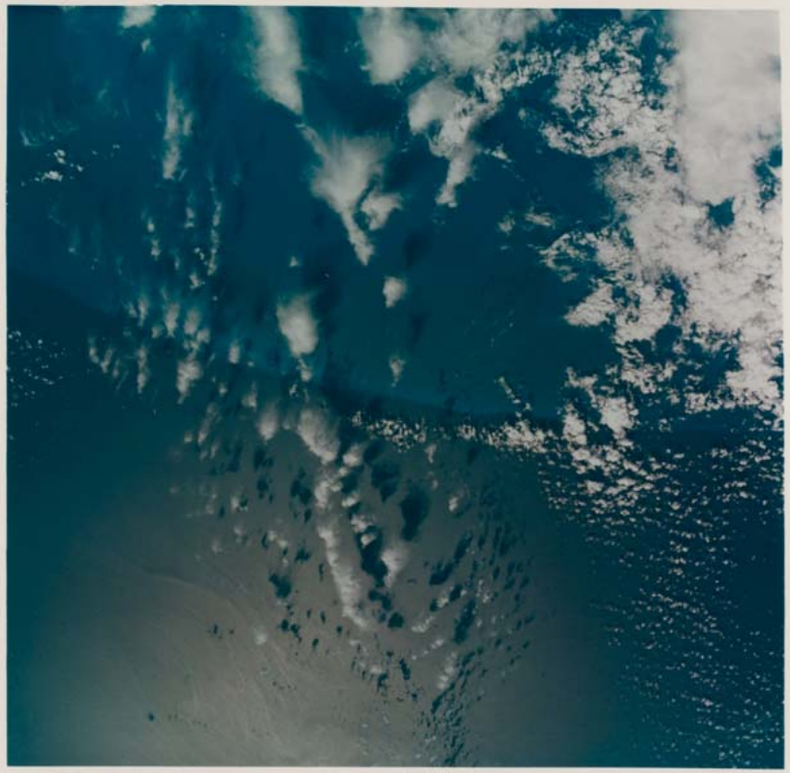
S-65-34764



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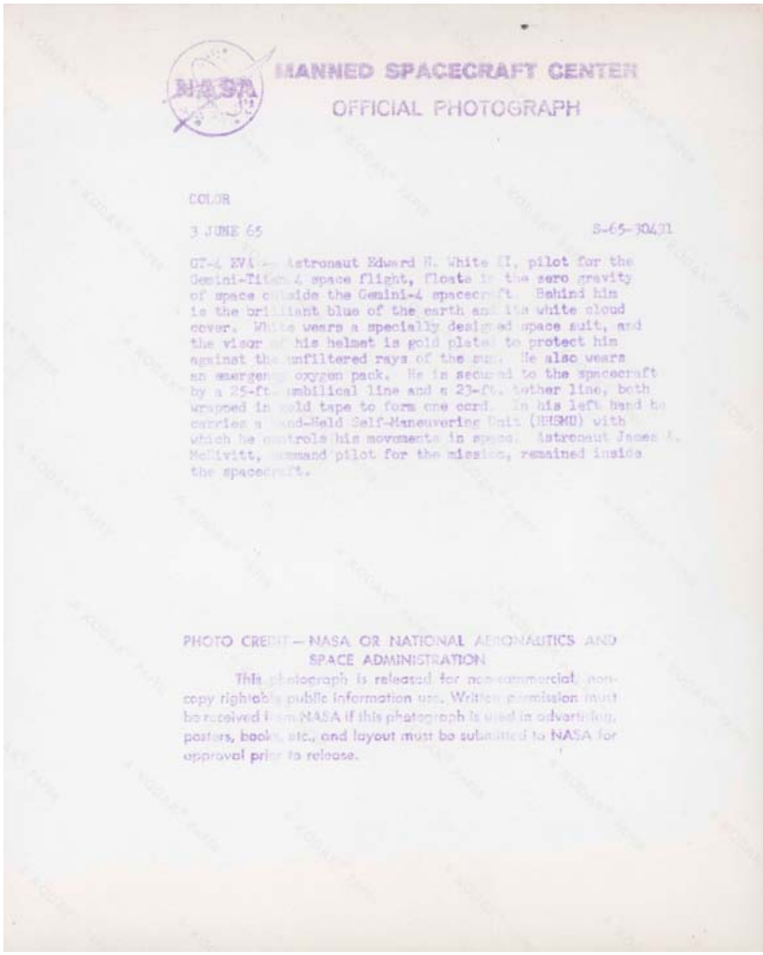
S-65-34673



25

JAMES MCDIVITT (GEMINI IV)

1965

The first photograph of a human being in space: Ed White during the first American EVA. 3-7 Jun 1965.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1965. 20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso, numbered „NASA S-65-30431" (NASA MSC) in red top margin.

€ 5.000 – 7.000
$ 6.000 – 8.400

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.24 pm (GMT+2)

This extraordinary photograph of Edward White floating freely in space over Hawaii is the first taken during the first American EVA and the first ever still photograph showing a human being in space.

James Mcdivitt captured the photograph from the Gemini capsule with the 70mm Hasselblad 500C NASA-modified camera loaded with Kodak film.

Before this historic photograph, only a few images showing American astronauts or Russian cosmonauts in the space environment had been recorded by on-board movie or TV cameras.

From the mission transcript when the photograph was taken:
004:30:36 White: Okay. I 'm out.
004:30:38 McDivitt: Okay. He's out. He's floating free. [...]
004:31:28 White: All right. Now, I've come above the spacecraft and I'm under my own control. [...]
004:31:50 White: Yes. Okay, I'd better get over. Okay, I'm coming over.
004:32:00 McDivitt: Okay. Stand by.
004:32:02 White: See me yet?
004:32:04 McDivitt: No, sure don't.
004:32:05 White: Huh?
004:32:07 White: Oh, there you are. I can spin around now.
004:32:12 McDivitt: Okay. Just a second. You're right in front, Ed. You look beautiful.
004:32:16 White: I feel like a million dollars. All right we'll pitch up and yaw left. I'm coming back to you. [...]
004:32:31 White: Okay. I put in a little bit too much pitch there.
004:32:36 White: The gun works real great, Jim.
004:32:38 McDivitt: Let me get over where I can see you, Ed.
004:32:40 McDivitt: Take it easy now. You're in a vacuum. [...]
004:32:50 White: Okay. I'll come in and take a look at you now.
004:32:52 McDivitt: Wait a second. Let me take your picture.

"I feel like a million dollars."

Edward White

“The sky sure is black.”

Edward White

“I took most of these photographs without being able to see what I was shooting at. The Gemini spacecraft was quite small, and I have a very tall sitting height. My head was against the canopy when I wasn’t pressurized, and when I was pressurized I was really crunched up in there and I couldn’t move around much. So I’d take the camera down and look to see where Ed was, and then put the camera up, point in that direction and take the picture. I’m a good pistol and rifle shot. Maybe that helped”

James McDivitt (Schick and Van Haaften, p. 33).

26

JAMES MCDIVITT (GEMINI IV)

1965

First US spacewalk: Ed White floating in zero gravity over the Earth. 3-7 Jun 1965.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1965 [NASA S-65-30433]
25,4 x 20,3 cm (10 x 7.9 in), with RCA quality Control stamp (NASA KSC) and „A Kodak Paper“ watermarks on verso.

€ 2.000 – 3.000
$ 2.400 – 3.600

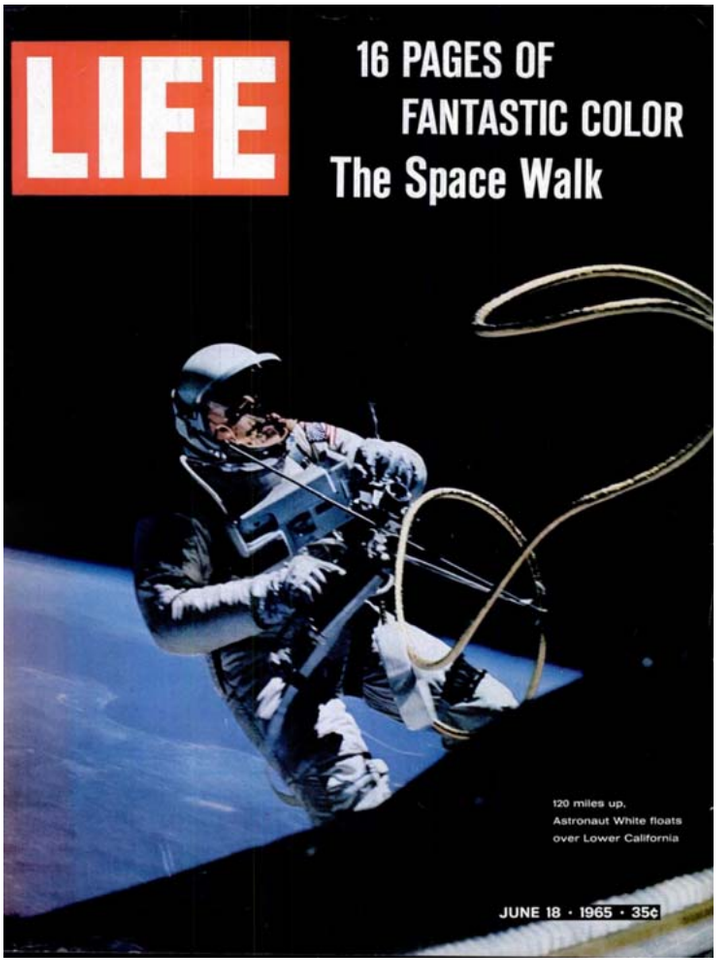
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.25 pm (GMT+2)

One of the most fantastic photographs of Ed White’s EVA as he was spacewalking over New Mexico.

James McDivitt took the photograph facing southwest from his Command Pilot left seat of the capsule with a Hasselblad model 500 C (NASA modified) and 70mm Eastman Kodak Ektachrome MS film. Visible over Ed White’s left shoulder are the Gulf of California and Baja California.

From the mission transcript during the EVA:
004:38:12 McDivitt: Okay. Ed, just free-float around. Right now we’re pointing just about straight down at the ground.
004:38:14 White: Okay, now I’m taking a look back at the adapter and equipment back there. I can see the separation plane; it’s quite clean. The thrusters are clean. The thermal paint, the thermal stripping looks quite good. Also, the velcro that we put on seems to be in good shape right by the camera. I’m coming back down on the spacecraft. I can sit up here and see the whole California coast.
004:38:58 White: Okay. Now I’m going to go out and see how much .... if I’ve got enough harness.
004:39:26 White: The sky sure is black.



27

JAMES MCDIVITT (GEMINI IV)

1965

Cover of LIFE: the first US spacewalk of Ed White over the Earth. 3-7 June 1965.

Vintage Chromogenic print on fiber-based, printed 1964
[NASA S-65-30428]
17,8 x 15,2 cm (7 x 5.9 in), mounted on original 25,2 x 20,3 cm (9.8 x 8 in) NASA card.

€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.26 pm (GMT+2)

"Within days of splashdown, McDivitt's pictures appeared in newspapers and magazines around the world, marking a turning point in the role photography played in the space program and in the popular conception of manned space exploration" (Schick and Van Haaften, p. 13).

"I wasn't the only one who felt the power of those images from space," noted space historian Andrew Chaikin. "Countless people saw them and understood their basic message: this was the edge of human experience" (Chaikin, Space, p. 12).

Edward White was spacewalking over Texas when the photograph was taken from the Gemini orbiting capsule.

"Astronaut Edward H. White II, Pilot of the Gemini IV four-day Earth-orbital mission, floats in the zero gravity of space outside the Gemini IV spacecraft. White wears a specially designed spacesuit; and the visor of the helmet is gold plated to protect him against the unfiltered rays of the Sun. He wears an emergency oxygen pack, also. He is secured to the spacecraft by a 25-feet umbilical line and a 23-feet tether line, both wrapped in gold tape to form one cord. In his right hand is a Hand-Held Self-Maneuvering Unit (HHSMU) with which he controls his movements in space. Astronaut James A. McDivitt, Command Pilot of the mission, remained inside the spacecraft" (original NASA caption for the present photograph).

“Ed, smile.”

James McDivitt

28

JAMES MCDIVITT (GEMINI IV)

1965

First US spacewalk: Ed White with the reflection of the space-craft in his visor. 3-7 Jun 1965.

Vintage Chromogenic print on fiber-based Kodal paper, printed 1965 [NASA S-65-3042] 20,3 x 25,4 cm (7.9 x 10 in), with RCA Quality Control stamp (NASA KSC) and „A Kodak Paper“ watermarks on the verso.

€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.27 pm (GMT+2)

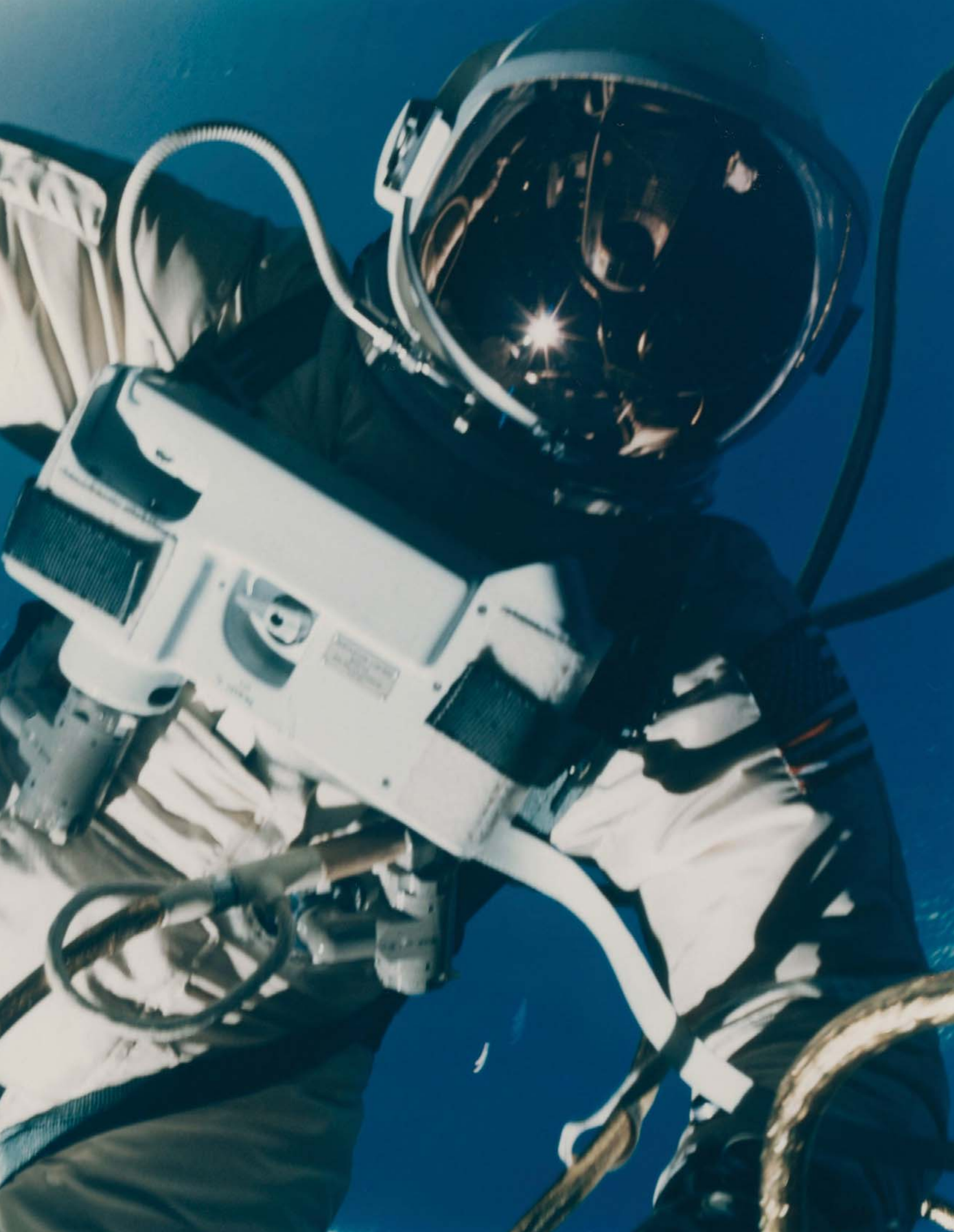
Edward White was spacewalking over Texas.

In the reflection of Ed White’s visor, the black sky of space and the spacecraft’s window through which McDivitt took the photograph are visible.

“When I saw these photographs for the first time I couldn’t believe it. I thought of Buck Rogers. It was scary to look at that stuff in the dark room with the lights out. When you saw those pictures gleaming up from a light table it gave you goose bumps.”

Les Gaver, former photography director, Public Affairs, NASA (Schick and Van Haaften, p. 34)

From the mission transcript during the EVA:
004:42:19 McDivitt: Ed, smile.
004:42:26 White: I’m looking right down your gun barrel. All.
004:42:28 McDivitt: Let me take a closeup picture of you.
004:42:30 White: Okay. Just a minute.
004:42:31 McDivitt: You smeared up my windshield, you dirty dog!
004:42:34 White: Did I really?
004:42:35 McDivitt: Yes.
004:42:37 White: Well, hand me out a kleenex and I’ll clean it.
004:42:40 McDivitt: Ha! See how it’s all smeared up there?
004:42:44 White: Yes.
004:42:45 McDivitt: It looks like there is a coating on the outside and you’ve rubbed it off.



29

ED WHITE (GEMINI IV)

1965

First EVA photograph: Gemini spacecraft and black sky of space. 3-7 Jun 1965.

Vintage chromogenic print on fiber-based Kodak paper, printed 1965. 25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper“ watermarks on the verso, numbered „NASA S-65-30550“ (NASA MSC) in red bottom margin, with restoration at bottom left of image.

€ 1.500 – 2.500
$ 1.800 – 3.000

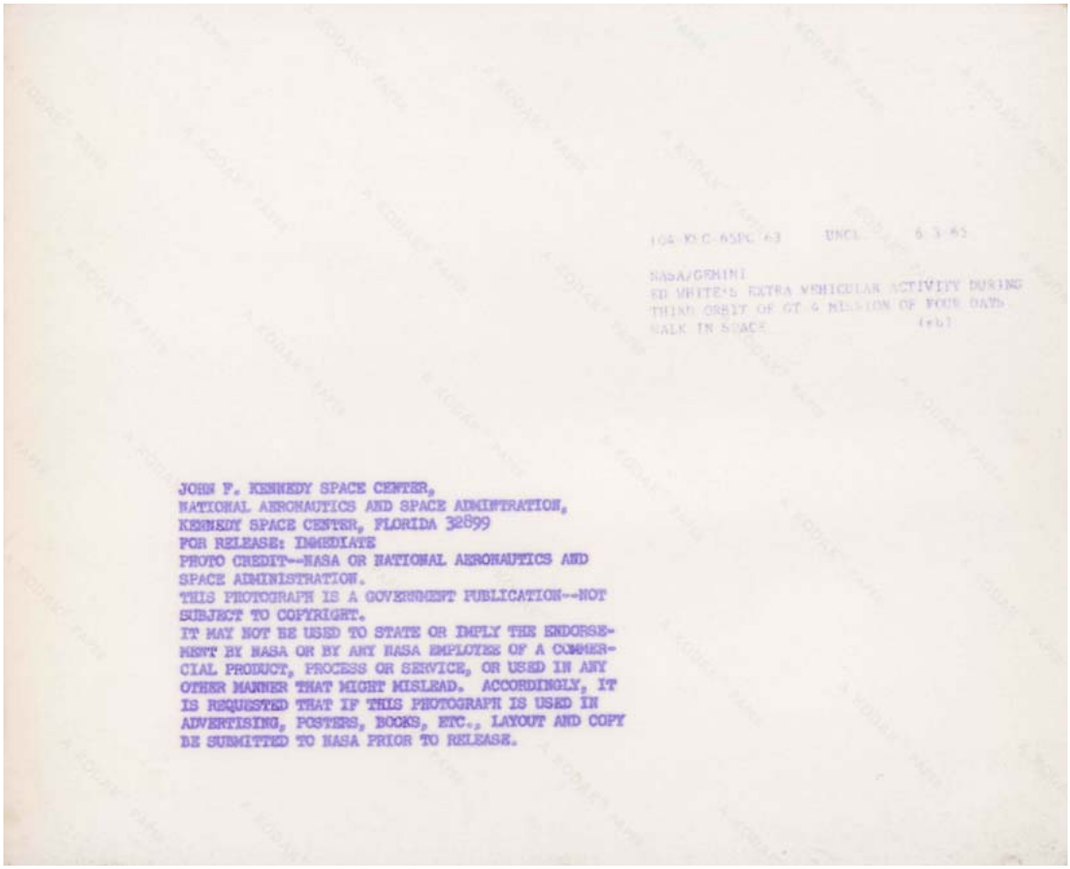
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.28 pm (GMT+2)

“In addition to the Hasselblads, on the second Gemini mission, history was made when the first picture of a spacecraft in orbit was taken by astronaut Ed White as he floated outside his spacecraft. He used a Zeiss Contarex 35mm camera mounted atop his gas-powered maneuvering gun” (https://history.nasa.gov/apollo_photo.html).

The nose of the Gemini spacecraft and the Command Pilot left window of the capsule (through which McDivitt took his photographs of the spacewalk) are visible.

From the mission transcript during the EVA:
004:37:47 McDivitt: Okay, do you want me to maneuver for you now, Ed?
004:37:50 White: No, I think you’re doing fine. What I’d like to do is get all the way out, Jim, and get a picture of the whole spacecraft. I don’t seem to be doing that.
004:38:00 McDivitt: Yes, I noticed that. You can’t seem to get far enough away. [...]
004:41:10 White: Okay, I’m going to free drift a little bit, and see if I can drift into some good picture-taking position.
004:41:16 McDivitt: Okay. Here, let me control the spacecraft ....



30

ED WHITE (GEMINI IV)

1965

First US spacewalk: Ed White returning to the spacecraft. 3-7 Jun 1965.

Vintage Chromogenic print on fiber based Kodak paper, printed 1965 [NASA S-65-29766]
20,3 x 25,4 cm (7.9 x 10 in), with NASA KSC caption numbered „104-KSC-65PC-63“ and „A Kodak Paper“ watermarks on the verso.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.29 pm (GMT+2)

This view was captured by the 16mm camera (whose shadow appears on the open hatch door at lower right) that White had mounted outside the spacecraft just before his EVA.

Tethered by a looping, golden umbilical cord, Ed White moved freely 100 miles above Earth for 21 minutes. Using the guidance gun in his right hand, he maneuvered at will until its compressed oxygen ran out. He thus became the world's first propelled space man. Though orbiting at 17,500 miles an hour, the space walker "had little sensation of speed and no sensation of falling, only a feeling of accomplishment" (National Geographic, September 1965, p. 440).

Completely entranced by the experience, he resisted repeated calls from Houston to get back to the spacecraft.

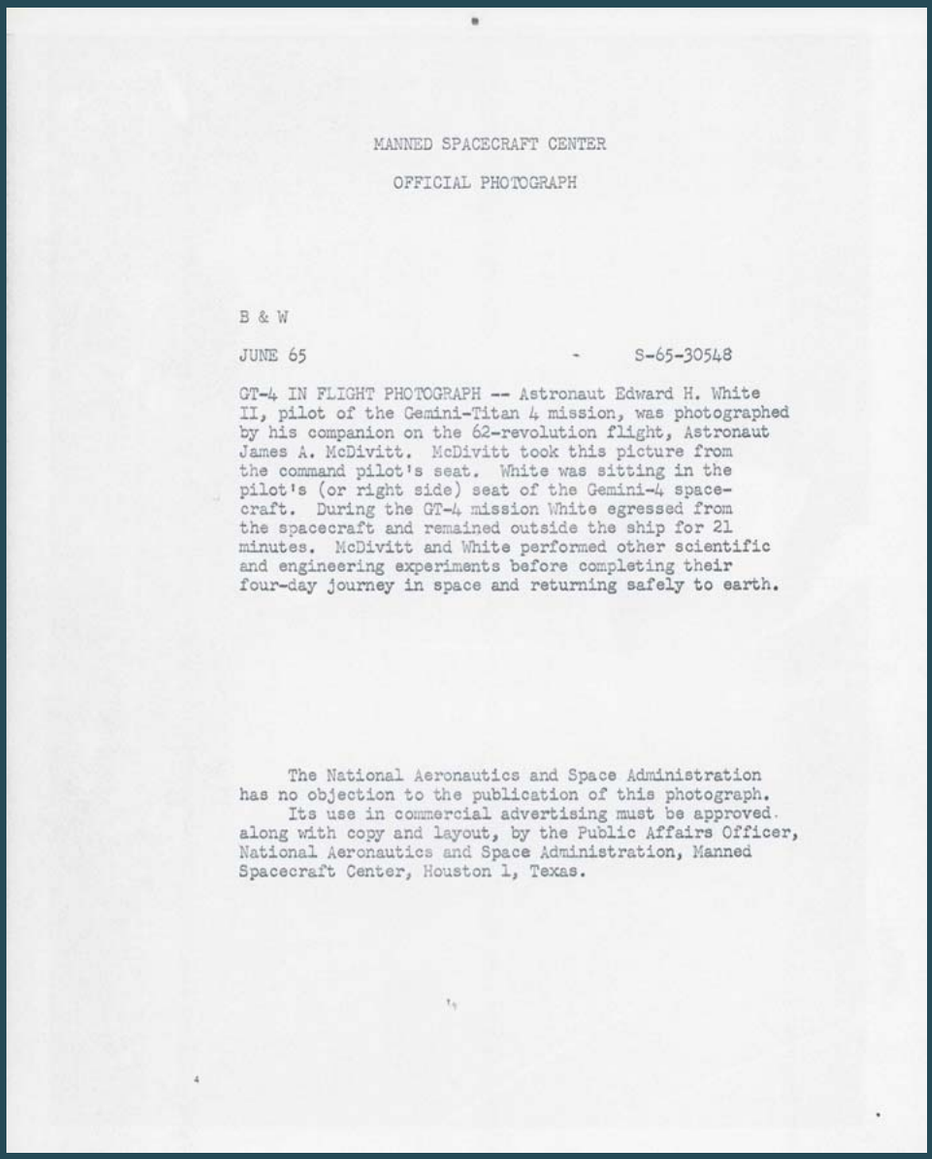
Describing his experience as the first spacewalker (on Voskhod I, three months before Ed White), cosmonaut Alexei Leonov exclaimed, "I felt absolutely free, soaring like a bird... as though I had wings, as though I was flying by my own efforts" (Chaikin, Space, pp. 54-55).

Leonov's spacewalk was recorded by a motion picture camera but no still photograph was taken.

From the mission transcript during the EVA:
004:48:26 McDivitt: Okay. Let's not lose that camera now. I don't quite have it. A little bit more, but easy, easy, easy.
004:48:32 White: Got it?
004:18:35 McDivitt: Okay, I've got it.
004:18:34 White: Okay, now I can enter
004:18:34 McDivitt: Okay, now I can enter .... It's just like we said ....
004:48:40 McDivitt: Yes, we sort of talked about that. But we sort of talked about that but they didn't have any place for the camera. Come on, let's get back here before it gets dark.
004:48:46 White: Okay. This is the saddest moment of my life.
004:48:53 McDivitt: Well you're going to find a sadder one when we have to come down from this whole thing.
004:49:00 White: I'm coming.

"This is the saddest moment of my life."

Edward White



MANNED SPACECRAFT CENTER

OFFICIAL PHOTOGRAPH

B & W

JUNE 65 - S-65-30548

GT-4 IN FLIGHT PHOTOGRAPH -- Astronaut Edward H. White II, pilot of the Gemini-Titan 4 mission, was photographed by his companion on the 62-revolution flight, Astronaut James A. McDivitt. McDivitt took this picture from the command pilot's seat. White was sitting in the pilot's (or right side) seat of the Gemini-4 spacecraft. During the GT-4 mission White egressed from the spacecraft and remained outside the ship for 21 minutes. McDivitt and White performed other scientific and engineering experiments before completing their four-day journey in space and returning safely to earth.

The National Aeronautics and Space Administration has no objection to the publication of this photograph. Its use in commercial advertising must be approved along with copy and layout, by the Public Affairs Officer, National Aeronautics and Space Administration, Manned Spacecraft Center, Houston 1, Texas.

31

JAMES MCDIVITT (GEMINI IV)

1965

The historic first space portrait: Ed White in weightlessness at the pilot's seat of the capsule. 3-7 Jun 1965.

Vintage Gelatin silver print on fiber-based paper, printed 1965. 20.3 x 25,4 cm (7.9 x 10 in), with NASA MSC caption on the verso, numbered „NASA S-65-30548" in black in top margin.

€ 2.500 – 4.000
$ 3.000 – 4.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.30 pm (GMT+2)

James McDivitt photographed Ed White's first American successful EVA with great skill.

He also took the portrait of the first American spacewalker in weightlessness in the capsule, the first in-flight portrait of an astronaut, showing his face.

He used the Zeiss Contarex 35mm camera loaded with space-qualified color film that White carried during the EVA to take photographs from outside the spaceship.

"I was the happiest man in the world that day" said McDivitt, "except possibly for Ed." White admitted, "I felt so good I didn't know whether to hop, skip, jump, or walk on my hands" (National Geographic, September 1965, p. 447).

Astronaut White died two years later, with Astronauts Virgil "Gus" Grissom and Roger Chaffee, when fire swept the interior of an Apollo spacecraft at Cape Kennedy.

"Ed was on a long string, so to speak, and when he'd get outto the end of the line the tension in it slowed him down, then pulled him back toward the point where the spacecraft was fastened. As he was floating away from the spacecraft and as he moved around I could look out the hatch and see him against the background of the Earth. That was rather impressive."

James McDivitt (Schick and Van Haaften, p. 35).

[LARGE FORMAT]

32

JAMES MCDIVITT (GEMINI IV)

1965

First US spacewalk: Ed White with the reflection of the spacecraft in his visor. 3-7 Jun 1965.

Large-format presentation vintage Chromogenic print on fiber based Kodak paper, printed 1965 [NASA S-65-30429]
28 x 35,5 cm (11 x 13.9 in), with „A Kodak Paper" watermarks on the verso (NASA MSC).

€ 4.000 – 6.000
$ 4.800 – 7.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.31 pm (GMT+2)

"McDivitt's pictures of Ed White floating in space created a sensation and remain among the most compelling images produced in space. McDivitt portrayed the expansive freedom of man in space so lyrically that it is easy to understand why Edward White had to be coaxed back into the confinement of his spacecraft. Ed White's death two years later in the fatal Apollo 1 fire has given the photographs added poignancy" (Schick and van Haaften, p. 32).

"At 00:18:33.1 GMT on July 15, the first closeup B&W photograph of Mars was taken from the spacecraft through a red filter."

Dan Schneiderman (Mariner Project Manager, Jet Propulsion Laboratory)

33

NASA (MARINER IV)

1965

Mars: the historic first close-up photograph. 15 Jul 1965.

Vintage Gelatin silver print on fiber-based paper, printed 1965. 25,4 x 20,3 cm (10 x 7.9 in), captioned „M IV 01 EX" in bottom margin (NASA Goddard).

€ 2.000 – 3.000

$ 2.400 – 3.600

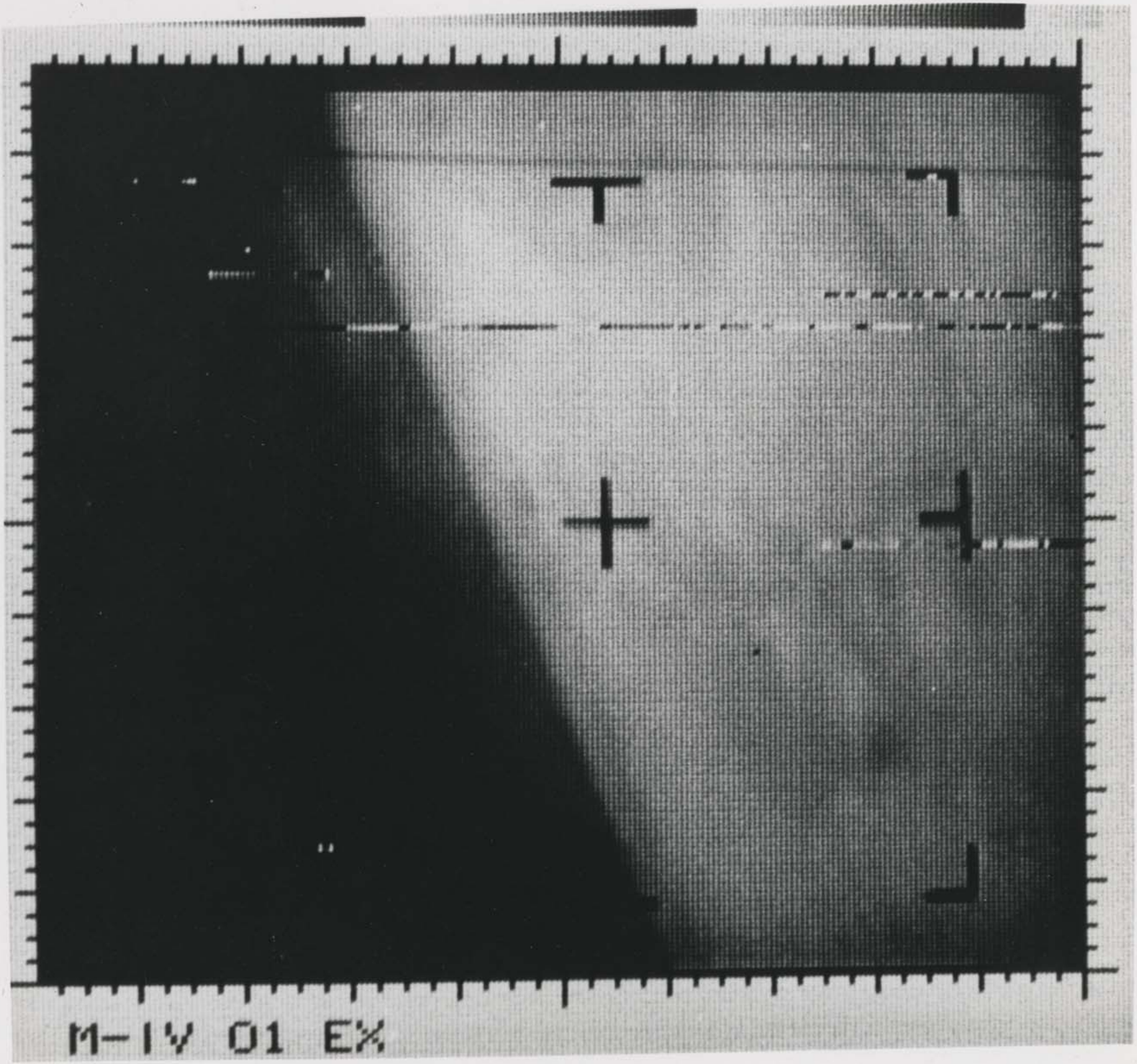
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.32 pm (GMT+2)

This famous photograph was reproduced on front pages of newspapers all over the world. It shows an area of Mars near the boundary of Elysium Planitia to the west and Arcadia Planitia to the east, about 330 km across by 1200 km from limb to bottom of frame.

"At 00:18:33.1 GMT on July 15," said Dan Schneiderman, Mariner Project Manager, Jet Propulsion Laboratory, "the first closeup B&W photograph of Mars was taken from the spacecraft through a red filter. The image center is approximately at 33° N, 171.6° E, and about 17 000 kilometers from Mariner IV. The spacecraft velocity relative to Mars was 4.913 km/sec. Surface features are not readily distinguished because of what appears to be a haze or cloud layer, which is enhanced by the oblique view. There is an uncertainty as to the condition of the lens at this time, and some glare may be present. The upper right-hand region corresponds with the area known as Phlegra. Because of the cloud layer, it cannot be determined whether the light and dark areas are due to changes in aspect of the surface, a series of breaks in the clouds, or a combination of these effects" (Cortright, p. 130).

"This first image of the Red Planet sent back from space from the probe of Mariner IV caused as much mixed consternation and satisfaction as any photograph on record. [...] For multitudes of human beings the idea of being alone in the universe is intolerable and the Mariner IV picture of the martian surface, more arid and hostile than the wastes of Gobi, surely caused tremendous dismay. For others, including myself, content to be forever solitary in this remote galactic backwater and not caring much one way or another about fellow beings in the cosmos, the portrait of Mars was comforting in a bleak way. Confirming our loneliness, at least in the solar system, the scarred landscape caused us to cherish all the more intensely the luxuriant, sweetly habitable globe we live on. And it let us turn our attention to those amazing undertakings in space, already being prepared, that were closer to home yet no less awesome for that," wrote American writer William Styron (Schick and Van Haaften, foreword, p. 6).


M-1V 01 EX

“Roger. Feels mighty good.”

Gordon Cooper

34

NASA (GEMINI V)

1965

Launch of the Titan rocket carrying Pete Conrad and Gordon Cooper into space. 21 Aug 1965.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1965. 25,4 x 20,3 cm (10 x 7.9 in), with RCA Quality Control stamp, NASA KSC caption numbered „104-KSC- 65PC-101“ and „A Kodak Paper“ watermarks on the verso.

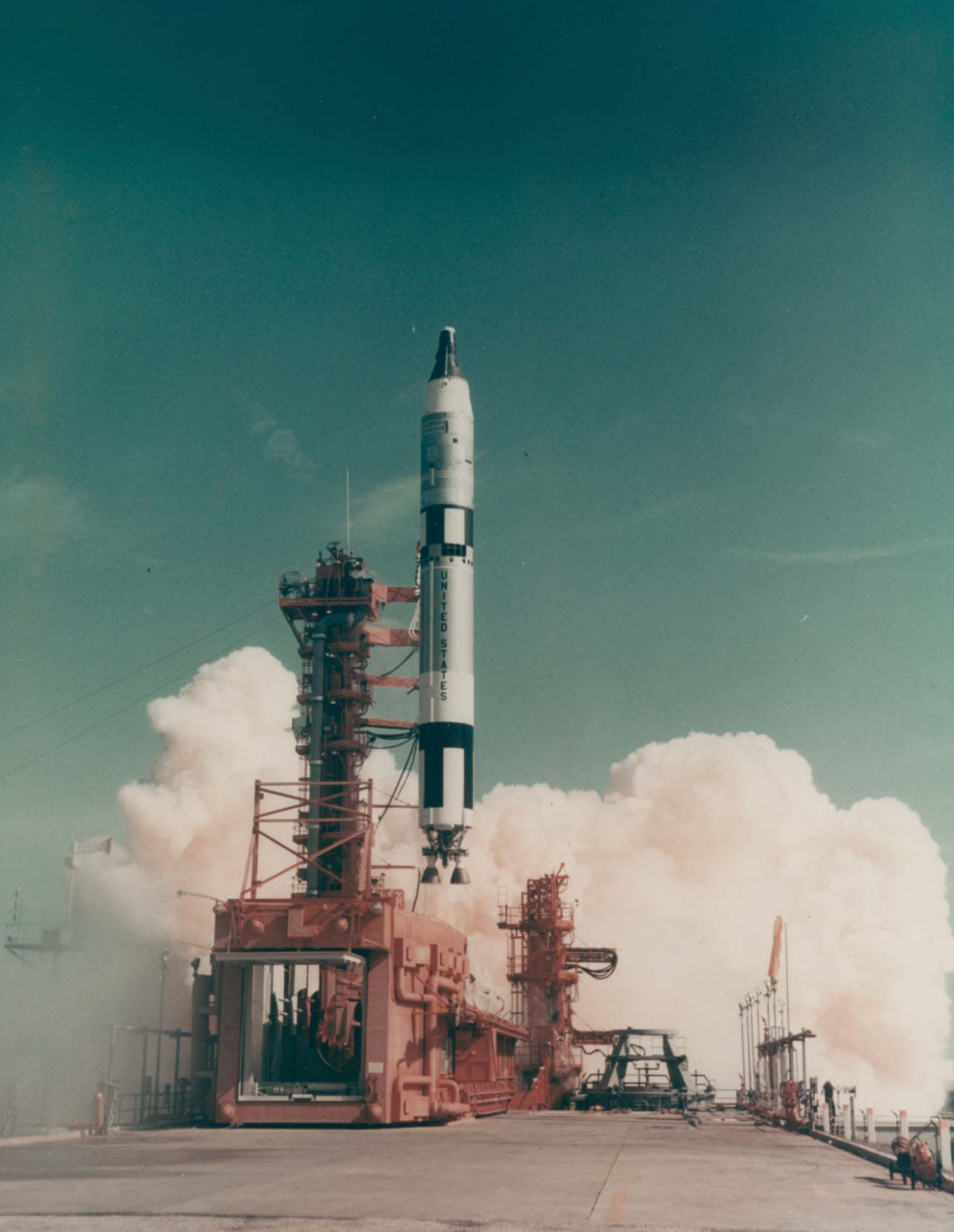
€ 600 – 800
$ 720 – 960

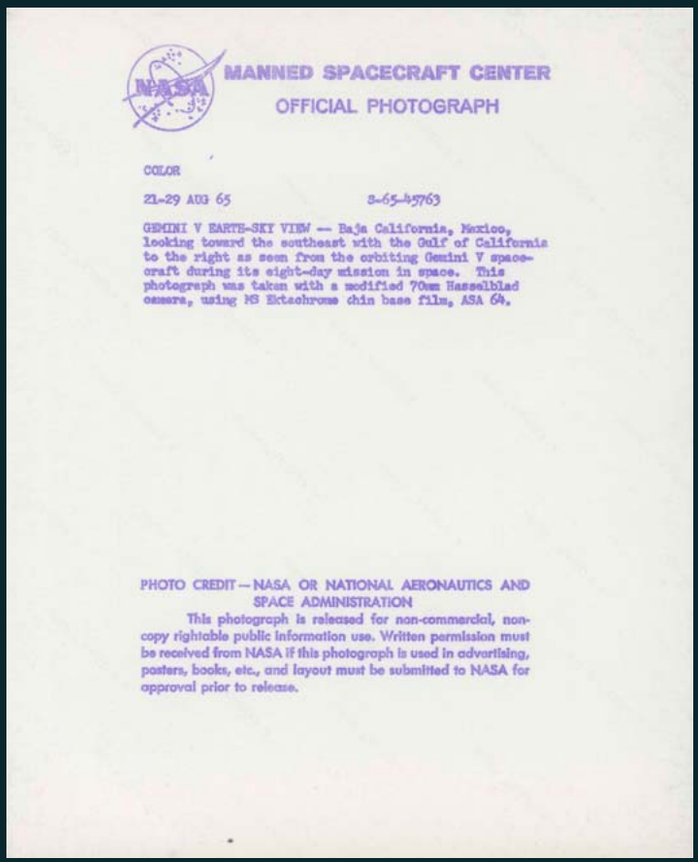
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.33 pm (GMT+2)

The National Aeronautics and Space Administration launched the Gemini V spacecraft from Pad 19 at 9 a.m. (EST) Aug. 21, 1965, on a planned eight-day orbital mission.

From the mission transcript during liftoff:
10, 9, 8, 7, 6, 5, 4, 3, 2, 1.
Capcom (Mission Control): IGNITION!
000:00:01 Capcom: LIFT-OFF!
000:00:02 Cooper: ... started.
000:00:05 Cooper: We’re on our way.
000:00:05 Capcom: Lift-off 13:59:59 (GMT). Lift-off 13:59:59.
000:00:11 Cooper: Roll Program initiate.
000:00:12 Cooper: Roger on the roll.
000:00:14 Capcom: Plus 10 seconds.
000:00:22 Cooper: Roll program is finished.
000:00:23 Capcom: Roger.
000:00:24 Cooper: Pitch initiate.
000:00:26 Capcom: Roger on the pitch. You’re looking good.
000:00:27 Cooper: Roger. Feels mighty good. Been a long time getting back.


UNITED STATES



MANNED SPACECRAFT CENTER
OFFICIAL PHOTOGRAPH

COLOR

21-29 AUG 65 S-65-45763

GEMINI V EARTH-SKY VIEW -- Baja California, Mexico, looking toward the southeast with the Gulf of California to the right as seen from the orbiting Gemini V spacecraft during its eight-day mission in space. This photograph was taken with a modified 70mm Hasselblad camera, using NS Ektachrome chin base film, ASA 64.

PHOTO CREDIT -- NASA OR NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

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35

G. COOPER OR P. CONRAD (GEMINI V)

1965

Cover of LIFE: Earth from space over Baja California. 21-29 Aug 1965.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1965. 20,3 x 25,4 cm (7.9 x 10 in), with NASA MSC caption and „A Kodak Paper" watermarks on the verso, numbered „NASA S-65-45763" in red in top margin.

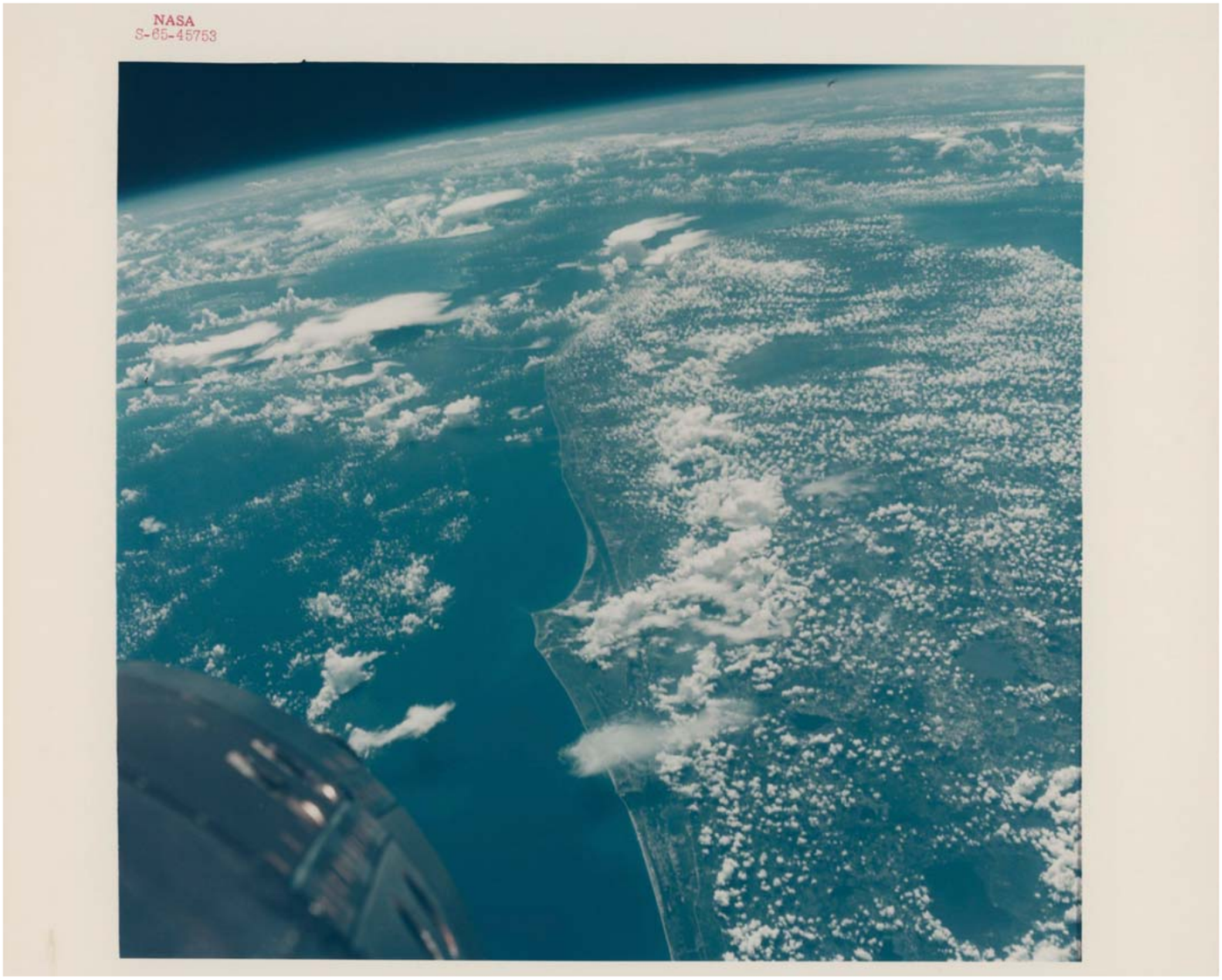
€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.34 pm (GMT+2)

This splendid photograph graced the cover of LIFE Magazine (Most remarkable photos from Earth ever recorded, September 24, 1965).

Baja California in Mexico looking southeast with the Gulf of California to the left as seen from the Gemini V spacecraft.



"Everybody is interested in the Earth we live on. The astronauts just brought it home visually. Nobody could ever draw or paint it. I think their missions will live forever through photography."

Les Gaver, former photography director, Public Affairs, NASA (Schick and Van Haaften, p. 12)

36

G. COOPER OR P. CONRAD (GEMINI V)

1965

The beautiful Home Planet: "most remarkable photos of Earth ever recorded" (4). 21-29 Aug 1965.

Four vintage Chromogenic prints on fiber-based Kodak paper, printed 1965.
Each 20,3 x 25,4 cm (7.9 x 10 in), numbered „NASA S-65-45753", „NASA S-65-45737, „NASA S-65-45622", „NASA S-65-45750" (NASA MSC) in red in top margin and with „A Kodal Paper" watermarks on the versos, the third with NASA caption on the verso.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.35 pm (GMT+2)

LIFE magazine titled his September 24, 1965 issue "Most remarkable photos from Earth ever recorded".

These very rare photographs were taken with the hand-held NASA-modified 70mm Hasselblad 500C and its 80mm lens, using MS Ektachrome thin base film, ASA 64. Anscochrome D-50 film was also used during the mission.

Flight durations grew longer in 1965. On Gemini V, astronauts Gordon Cooper and Charles Conrad circled the world 120 times in 190 hours and 55 minutes, returning with dramatic color photographs of the surface of the Earth. Apogee was 215 miles and perigee 100 miles.

The first photograph shows Cape Kennedy and Florida looking south.

The second Straits of Gibraltar; looking northeast, Morocco in foreground, Spain in background, seen through the window of the spacecraft.

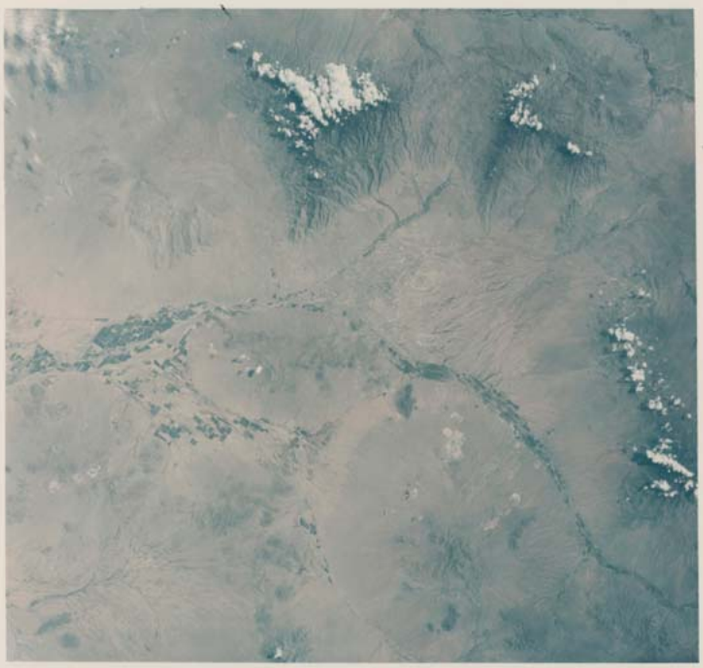
The third a superb vertical view over Tibet and its snowy mountains.

The fourth "Tucson on the Santa Cruz River near the center of this photograph of Arizona. The Tucson Mountains, at bottom center, are surrounded by a pediment with a few Quaternary lava flows" (NASA SP-129, p. 167)

NASA
S-65-45737

NASA
S-65-45623

NASA
S-65-45750



37

THOMAS STAFFORD (GEMINI VI)

1965

First rendezvous in space: Gemini VII spacecraft orbiting the blue Earth. 15-16 Dec 1965.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1965 [NASA S-65-63221]
19,5 x 25,4 cm (7.6 x 10 in), with „A Kodak Paper" watermarks on the verso (NASA MSC).

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

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Call time: July 15th, 3.36 pm (GMT+2)

"After the hard work and effort of over a year, we finally achieved the key step that will lead us to the lunar-landing mission."

Thomas Stafford (Cortright, p. 165)

"Our intent was to photograph what a spacecraft looked like in orbit, separate from its reentry condition."

Walter Schirra (Schick and Van Haaften, p. 50)

"We reviewed the pictures after we got back. When we saw their clarity – the lighting, the Sun angle, and everything – we realized that they described it very well. The mission will be there in history forever."

Thomas Stafford (Schick and Van Haaften, p. 50).

History's first space rendezvous, a crucial milestone for the planned lunar missions of Project Apollo, was accomplished by Walter Schirra and Tom Stafford in Gemini VI-A, who chased down the orbiting Gemini VII.

This superb photograph was taken with a Hasselblad 500C camera and its 80mm lens using Kodak SO 217 film with an ASA of 1964. The two spacecraft are some 37 feet apart here. Earth can be seen about 160 miles below.

38

JAMES LOVELL (GEMINI VII)

1965

First Moonrise: full Moon rising over the Earth. 4-18 Dec 1965.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1965 [NASA S- 65-63872]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper“ watermarks on the verso, numbered „NASA S- 65-12773A“ in black in top margin (NASA MSC).

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.37 pm (GMT+2)

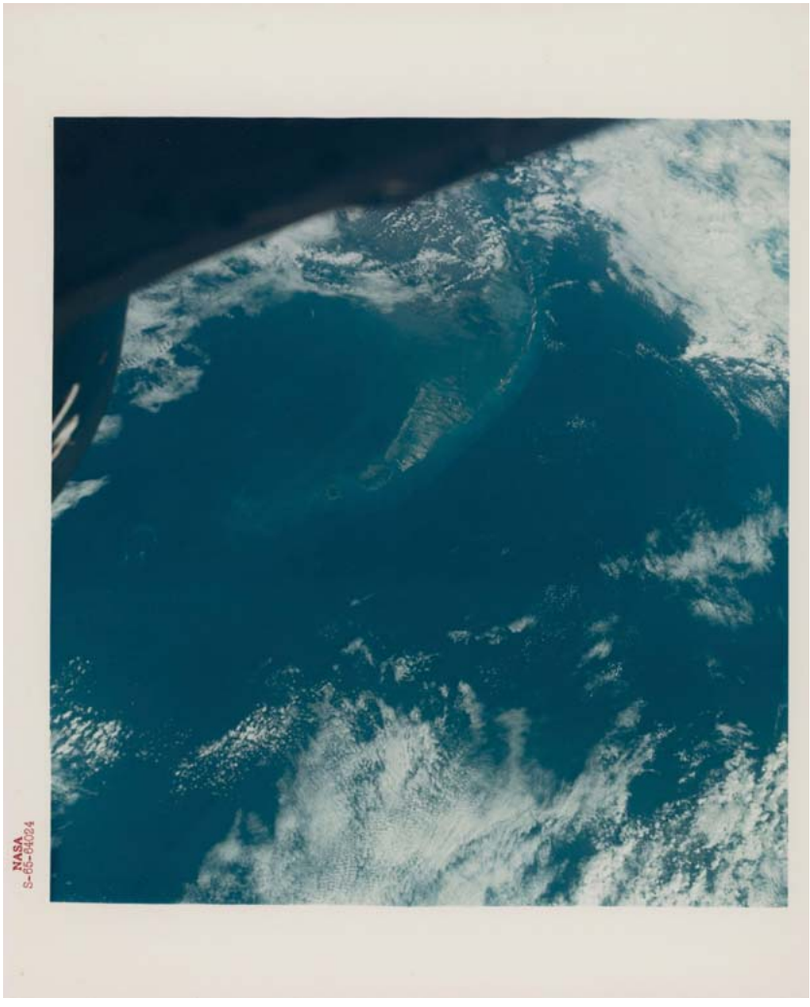
“Once the Apollo program was under way, it dawned on me that soon somebody was going to be taking a picture of the Earth from the Moon, so I took this picture of the Moon. When we got there on Apollo 8, we took the Earthrise photograph; they were like before-and-after pictures.”

James Lovell (Schick and Van Haaften, p. 55)

“The Moon varied greatly during the 2 weeks of flight. Jim [Lovell] took this picture of the full Moon as a symbol of our next goal in manned space flight, the lunar landing. I think it also dramatizes the difference between mere orbital flight and the future adventures that will take Man a quarter of a million miles into the ocean of space.”

Frank Borman (Cortright, p. 155).

A fantastic photograph of the full Moon over the Pacific Ocean, seen from the Gemini VII spacecraft during its historic 14-day mission in space. The nose of the spacecraft is at lower left. The picture was taken with a 70mm handheld Hasselblad 500 C camera and its 80mm lens, using Kodak (SO217 medium) speed film.



39

J. LOVELL; F. BORMAN (GEMINI VII)

1965

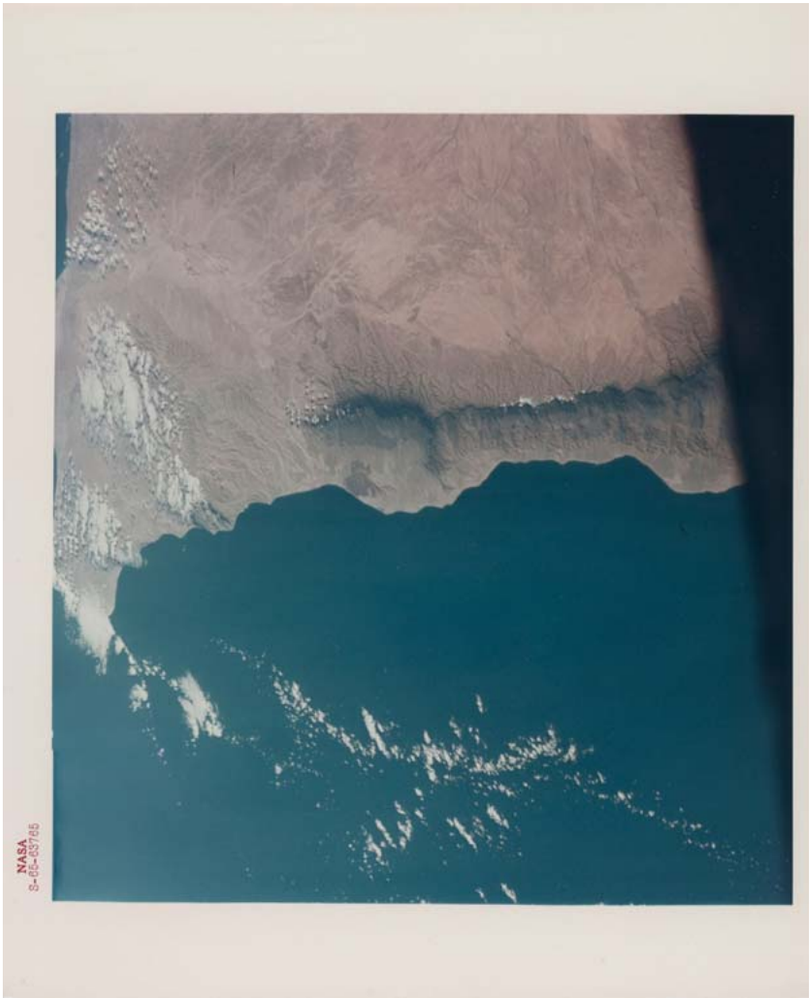
The beauty of the Earth: four views from space during the record breaking 14-day mission (4). 4-18 Dec 1965.

Four Vintage Chromogenic prints on fiber-based Kodak paper, printed 1965.
Each 25,4 x 20,3 cm (10 x 7.9 in), numbered „NASA S-65-63830", „NASA S-65-64024, „NASA S-65-63765", „NASA S-65-63885" (NASA MSC) in red top margin and with „A Kodak Paper" watermarks on the versos (the first with NASA caption on the verso).

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.38 pm (GMT+2)



The Gemini VII spacecraft was scheduled for a 14-day mission in space including rendezvous with the Gemini VI-A spacecraft launched eight days later. The astronauts had plenty of time to see their reaction to the space environment and also capture these superb and very photographs from space.

"Gemini VII basically was an effort to better understand how humans adapt to microgravity. It's the culmination of our efforts to double man's exposure to the space environment with a 14-day flight. The mission will show us that man, indeed, can adapt. That his body does not show changes that increase with his exposure to that environment. The additional data will allow us to medically commit man to a lunar mission" (https://www.nasa.gov/feature/dual-gemini-flights-achieved-crucial-spaceflight-milestones).

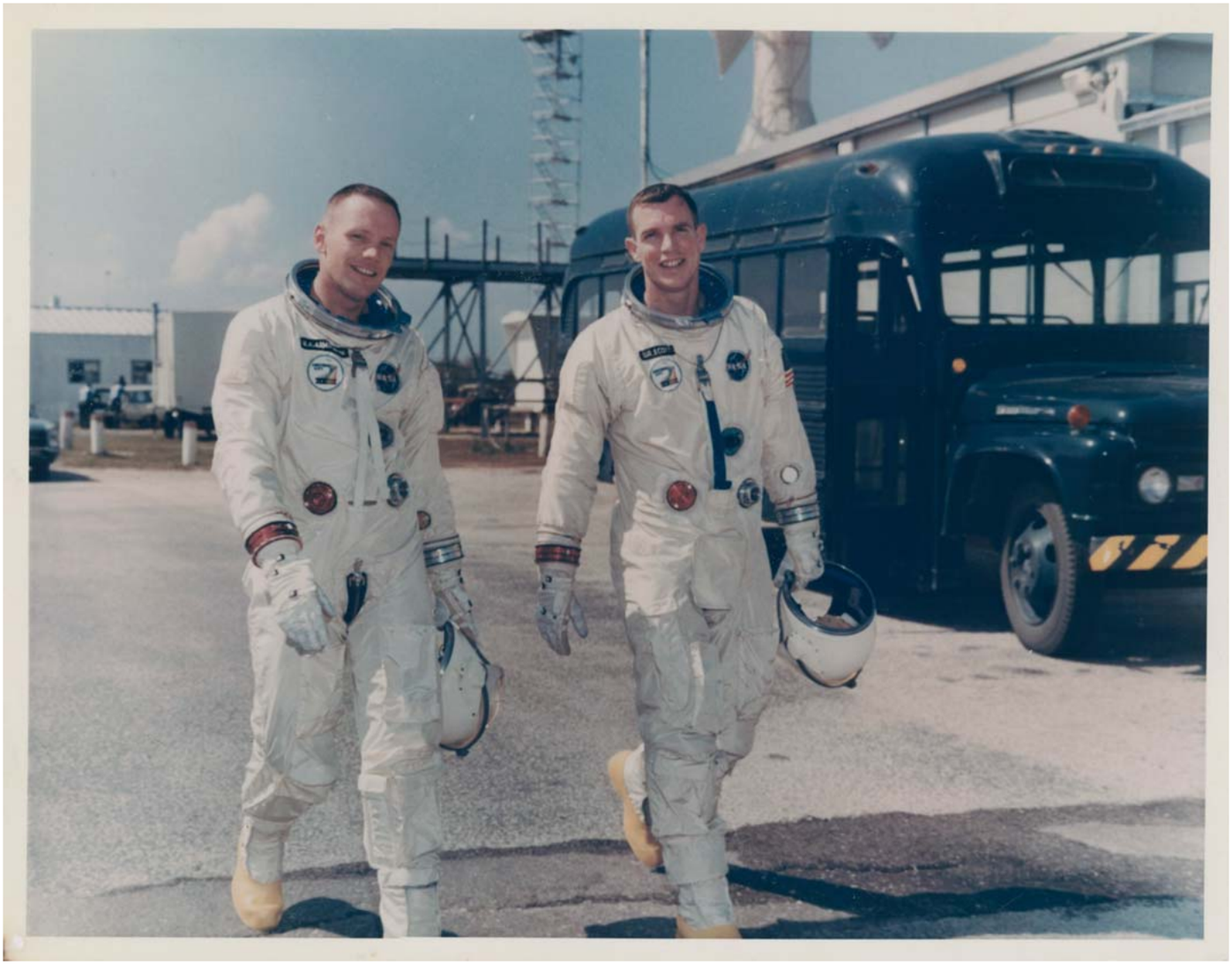
The first photograph is a superb view over Africa taken with the Hasselblad 500C and a 250mm telephoto lens used for the first time on Gemini VII.

"Algeria, south-southeast of the Colomb Bechar area, as seen from the Gemini VII spacecraft. Sand dunes are 200 to 300 feet high in the Grand Erg Occidental area. The Quod Sacura River can be seen in the upper left corner. The white spot in the middle of the picture is the Sebcha el Malah salt beds. It should be noted that the area had just experienced very heavy rains (first in many years) and the stream and salt flat are inundated" (NASA caption).

The second photograph (Florida Keys, Cape Sable, with underwater detail clearly shown) third photograph (Earth over Ras Azir, Somali Republic looking East) and fourth photograph (Cloud-covered Earth over Mexico, Sonora) taken with the 80mm lens show the variety of extraordinary Earthscapes witnessed from space.

"There is some absolutely magnificent photography by the Gemini VII team, guys who had to endure 14 days in a machine where their heads wouldn't ever be more than a foot or so apart."

NASA chief of photography Richard Underwood (Schick and Van Haaften, p. 55).



40

NASA (GEMINI VIII)

1966

Neil Armstrong and David Scott preparing
for their first space mission at Cape Kennedy.
Mar 1966.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1967
[S-66-27511]
21,8 x 27,8 cm (8.5 x 10.9 in), with McDonnell Douglas credit stamp,
„DC 71474“ stamp abnd „A Kodak Paper“ watermarks on the verso
(NASA/ McDonnell Douglas).

€ 700 – 1.000
$ 840 – 1.200

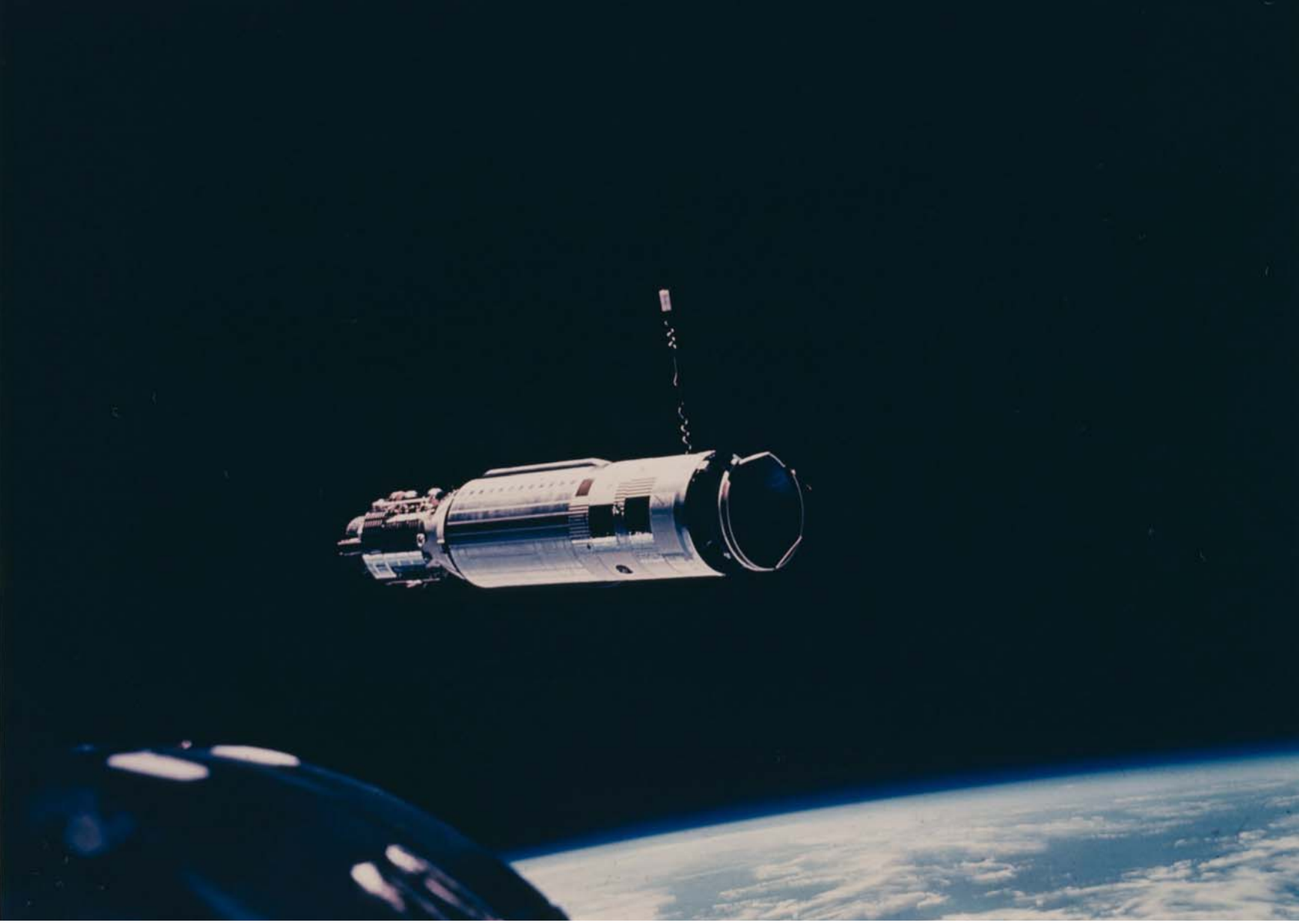
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.39 pm (GMT+2)

“Astronauts Neil Armstrong (left), Command Pilot, and David Scott, Pilot, the Gemini VIII prime crew, during a photo session outside the Kennedy Space Center (KSC) Mission Control Center. Both men are wearing full spacesuits and carrying their helmets”

(original NASA caption for the present photograph).

Gemini VIII was the first space mission for both astronauts; they were later to land on the Moon with Apollo 11 and Apollo 15.



"Man, it flies easy: I'd love to let you do it, but..."

Neil Armstrong

41

DAVID SCOTT (GEMINI VIII)

1965

First photograph of an unmanned satellite from space: the Agena over the Earth. Mar 1965.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1966 [NASA S-66-25781]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.40 pm (GMT+2)

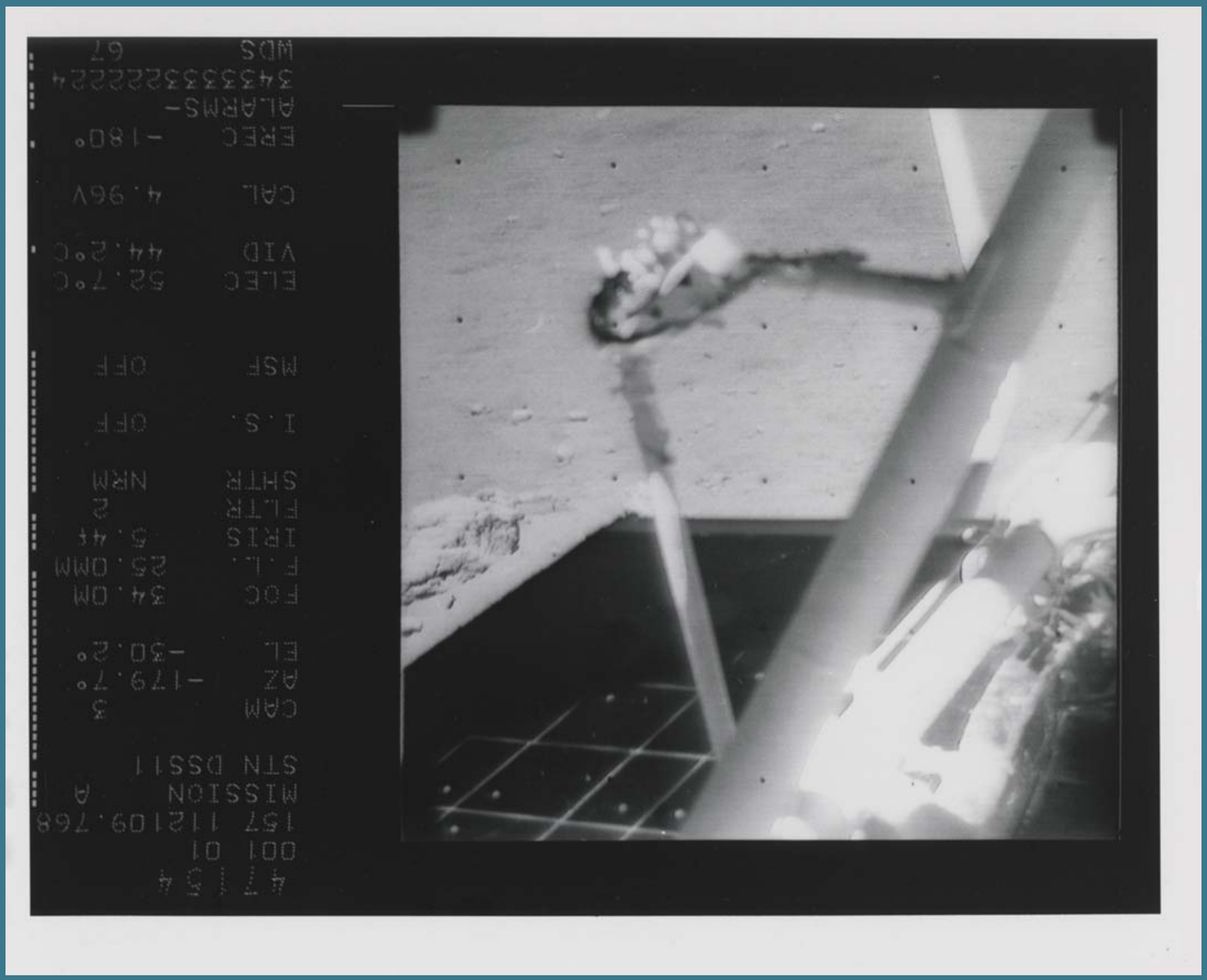
"This Agena target vehicle was the first unmanned satellite successfully photographed from space. It clearly indicates the detail in which one satellite can be observed from another. The photographs are a particularly good replica of the actual view seen with the eye, with the exception of the brilliance of the white and metallic parts of the Agena, never yet captured on film"

Neil Armstrong (Cortright, p. 172).

Highlighted by the Sun, the unmanned Agena Target Vehicle (ATV) seems to hang motionless, seen at a range of 55, 45 and 44 feet, as the spacecraft was station-keeping with the ATV over the Pacific Ocean off the west coast of Mexico.

An eight-foot L-band radar antenna rises just aft of the docking cone, which is fitted to receive Gemini VIII's nose.

From the mission transcript as the spacecraft was station-keeping with the Agena:
06:03:52 Armstrong: Man, it flies easy: I'd love to let you do it, but...
006:03:56 Scott: Oh no!
006:03:57 Armstrong: I think I better get my practice while I can.
006:03:59 Scott: Man, I'll have my chance.!
006:04:00 Armstrong: Get yours later. [...]
006:04:52 Armstrong: Man, this is easy!
006:04:53 Scott: Is it really?
006:04:54 Armstrong: This Stationkeeping, there's nothing to it.



42

SURVEYOR I

1966

First US robot on the surface of another world: self-portrait of the lander and view of lunar surface (2). Jun 1966.

Two Vintage Gelatin silver print on fiber-based paper, printed 1966. Each 20,3 x 25,4 cm (7.9 x 10 in)and with NASA JPL caption and technical information in black margin.

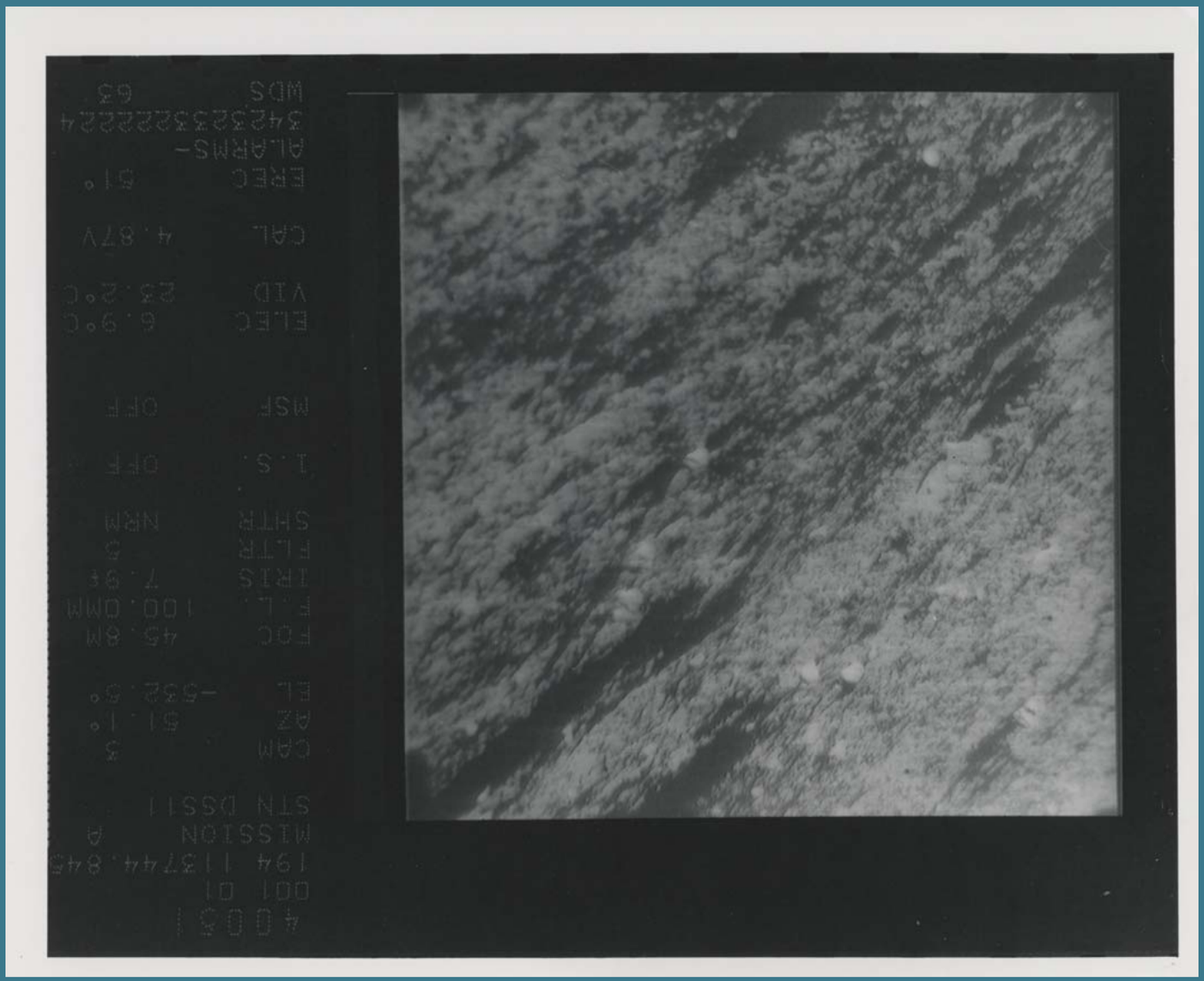
€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.41 pm (GMT+2)

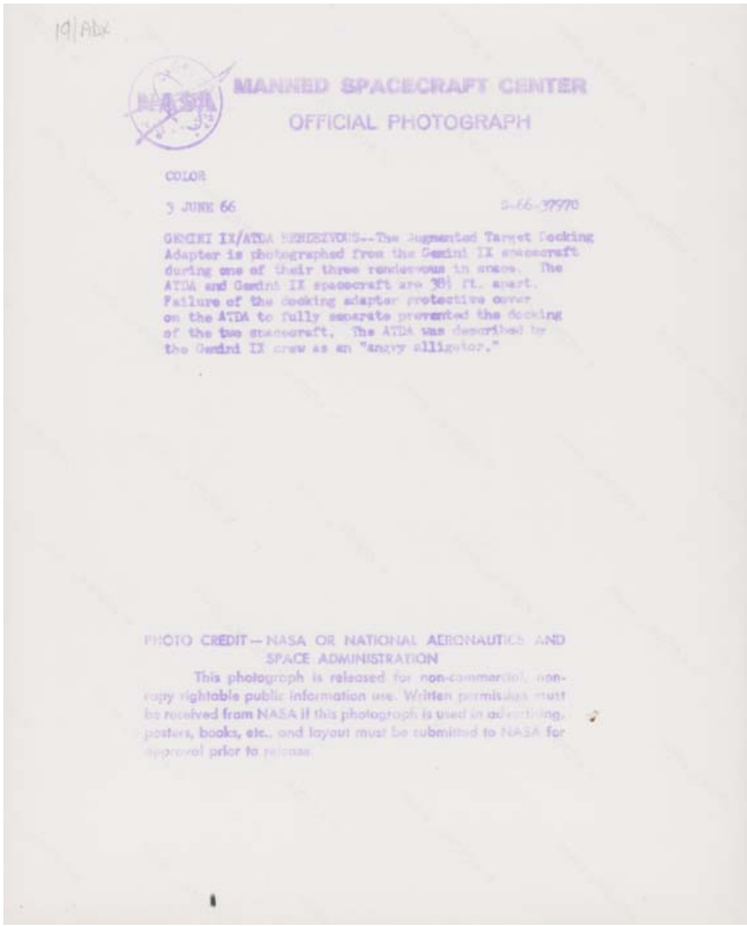
The Soviet Luna 9 was the first space probe to soft land on the Moon in February 1966 and sent crude pictures from the surface. A few months later on June 2, 1966, Surveyor I joined it and landed on a dark, relatively smooth, mare surface north of the Crater Flamsteed, in the Ocean of Storms. The geographic coordinates of the site, encircled by hills and low mountains, were 2.41° S, 43.34° W. The robot spacecraft transmitted these unpublished high resolution pictures, showing closeups of the lunar surface and of the robot spacecraft, confirming that the lunar surface was strong enough to support an astronaut.

"Surveyor I's camera system had a variable iris, changeable filters, and a rotating mirror assembly, which allowed the camera to look in almost any direction and take pictures under various lightin conditions, in either B&W or in color. Video pictures with 200-line resolution and with 600-line resolution were possible; the first with a quick-look mode



and the capability of transmission with a low gain antenna; the second for use with the directional antenna and the high data rate. Surveyor I's camera had a lens of variable focal length and could be pointed by radio command from Earth. This allowed scientists to choose their subject and the most suitable light and lens setting for photographing it. Surveyor's scanning of its horizon, afforded man his first look around the landscape of another world" (Cortright, pp. 51-56).

"Surveyor I stands physically on the Moon, an enduring monument to its creators, a solitary artifact of men who live on another body of the solar system, a quarter of a million mile away, but its true resting place is in the page of history, where even now is being inscribed man's conquest of space."
Homer Newell, Associate Administrator, NASA (Cortright, p. 62)



43

EUGENE CERNAN (GEMINI IX-A)

1966

The Angry Alligator. 3-7 Jun 1966.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1966. 25,4 x 20,3 cm (10 x 7.9 in) with „A Kodal Paper“ watermarks on the verso, numbered „NASA S-66-37970“ (NASA MSC) in red in top margin.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.42 pm (GMT+2)

“It just came to my mind that it looked like an Angry Alligator. I called it a few other things too when I saw what it was. They wanted Cernan to go extravehicular and take a pair of snippers and try to unsnap it, but the more we looked at it we decided it was not a wise idea. The lines were loaded with some pretty heavy springs and some sharp edges.”

Thomas Stafford (Schick and Van Haaften, p. 52)

“We were hoping not to see that shroud at all. Every time we activated that docking target, the collar that we were to dock with, it would relieve tension on that band and the jaws would open and close.”

Eugene Cernan (Schick and Van Haaften, p. 61).

A fantastic view of the Augmented Target Docking Adapter (ATDA), side view, photographed with the Hasselblad 500C and its 80mm lens from an altitude of about 300 km at a range of 45 feet during the third rendezvous over the Earth.

Failure of the docking adapter protective cover to fully separate on the ATDA prevented the docking of the two spacecraft.

From the mission transcript:
022:42:51 Stafford: Roger, Canary. We're about 3 feet away from the Monster taking some pictures. Go ahead.
022:42:55 Capcom (Mission Control): Okay. We'd like for you to do a 3-foot-per-second Retrograde Maneuver at your convenience and give us the time, please.
022:43:03 Stafford: Roger. We're still snapping pictures.
022:43:06 Capcom: Okay. We're standing by. All systems look good.
022:43:16 Cernan: Except the one we're taking a picture of.


“We’re about 3 feet away
from the Monster
taking some pictures.”
Thomas Stafford

44

T. STAFFORD; E. CERNAN (GEMINI IX-A)

1966

The fragility of Earth: Earthscapes from space (4). 18 Jul 1966.

Four Vintage Chromogenic prints on fiber- based Kodak Paper, printed 1966.
Each 20,3 x 25,4 cm (7.9 x 10 in), numbered „NASA S-66-3811“, „NASA-S-66-38279“, „NASA S-66-38407“, „NASA S-66-38298“ (NASA MSC) in red in top margin and with NASA caption on the verso.
These very rare photographs were taken with the Hasselblad 500C and its 80mm lens.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.43 pm (GMT+2)

The above photograph shows areas of Peru (upper right), Chile (top center) and Bolivia. The large body of water at lower right is Lake Titicaca. The salt basin Salar de Uyuni is the large light-colored area at upper left. The Pacific coastline of Peru and Chile is at upper right. The range running parallel with the coastline is the Cordillera Occidental.

The first photograph to the right shows the Galapago Islands, clouds over the Ocean.

The second photograph to the right was taken looking east toward the Atlantic coast of Morocco and Spanish Sahara with the Canary Islands in the foreground.

The fourth photograph to the right of “nearly 250 miles of Peru’s coast suggests how helpful spacecraft may be to surveyors. [...] The snowline toward the upper left is more than 16000 feet above the sea. [...] One of the most prominent snow covered peaks is the 22 505-foot Huascaran volcano. A thin white line can be seen running down its western slope toward the Sea. This is the scar left in 1962 by an avalanche that killed several thousand persons in the Rio Santo Valley” (NASA SP-171, p. 178).

"The color of many of the [Gemini photographs] is outstanding and ground resolution remarkably high. [...] Photos of shorelines, river courses, and details never before seen by man are included. [...] These photographs and other Gemini experiments are the beginning of a vast increase in man's useful knowledge of Earth and its environment."
Robert Gilruth, Director of the Manned Spacecraft Center (NASA SP-129, preface)

"Photographs of terrain and weather taken during Gemini flights showed that both geological and manmade landmarks and storms in the Earth's atmosphere could be viewed advantageously from orbital altitudes. The many spectacular color photographs of the Earth brought back by the astronauts have both heightened men's appreciation of their environment and increased scientists' knowledge of it."
NASA associate Administrator George Mueller (NASA SP-171, foreword)

45

NASA (GEMINI X)

1966

Leaving for space: Michael Collins and John Young arriving at Pad 19 for launch. 18 Jul 1966.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1966. 20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso, numbered „NASA S-66-42753" (NASA MSC) in red in top margin.

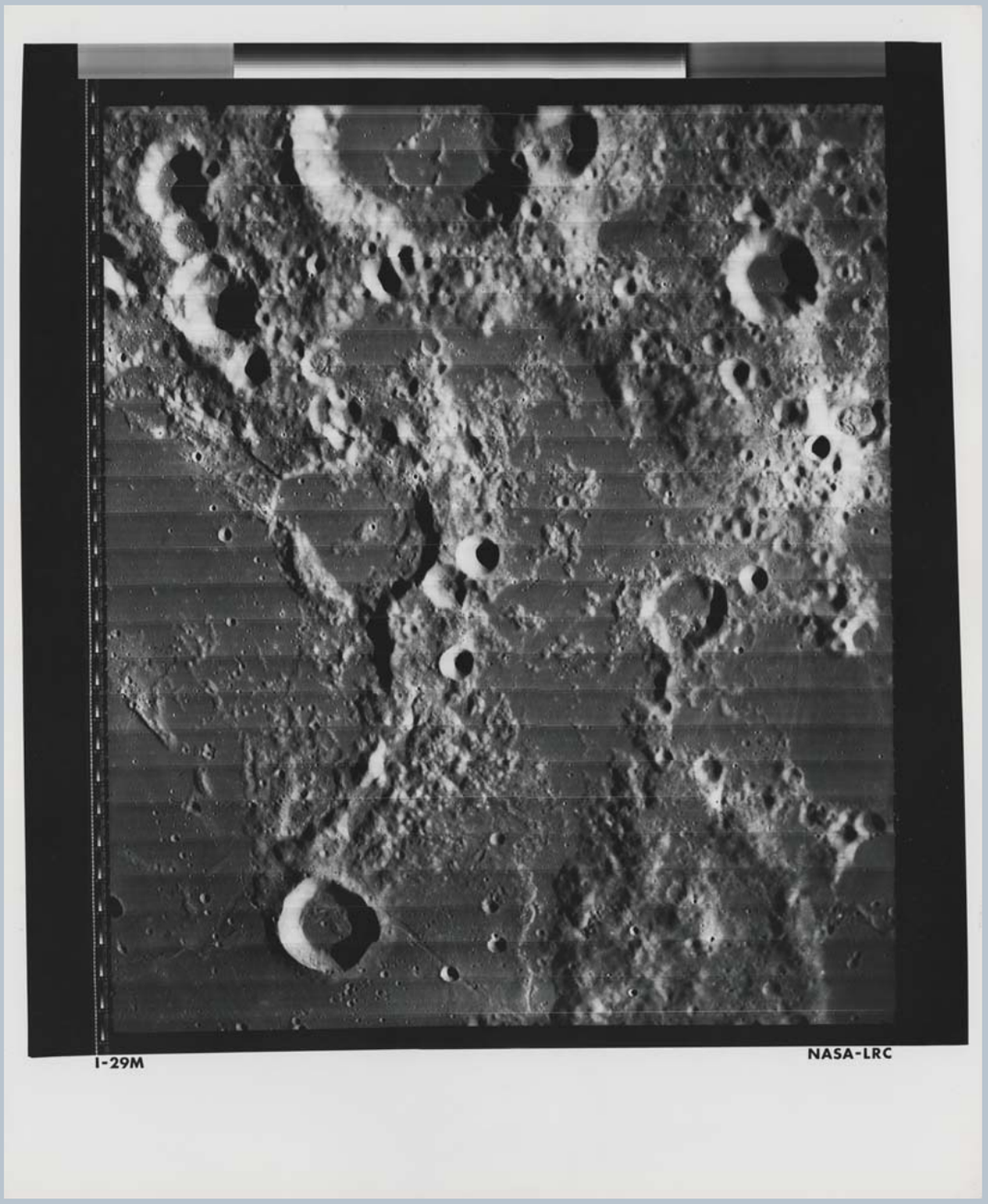
€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.44 pm (GMT+2)

"Astronauts John W. Young (leading), Command Pilot, and Michael Collins, Pilot, walk up the ramp at Pad 19 after arriving from the Launch Complex 16 suiting trailer during the prelaunch countdown. Moments later they entered the elevator which took them to the white room and the waiting Gemini X spacecraft. Liftoff was at 5:20 p.m. (EST), July 18, 1966" (NASA original caption for a variant of the photograph, S-66-42754).

Gemini X was Michael Collins' first space mission, later Command Module Pilot on Apollo 11; and John Young's second space mission after Gemini III, later Commander on Apollo 16.



[LARGE FORMAT]

46

LUNAR ORBITER I

1966

The Moon first seen from lunar orbit:
Sea of Fertility. Aug 1966.

Large-format vintage Gelatin silver print on fiber-based paper, printed 1966.
61 x 51 cm (24 x 20 in), numbered „NASA LRC I-29M" (NASA Langley) on the recto in right margin.

€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.45 pm (GMT+2)

Lunar Orbiter I sent the first high quality images of the Moon from orbit.

Lunar Orbiter was essentially an interplanetary photographic studio and laboratory which developed then scanned pictures from a specially engineered camera before sending them as radio signals to the Deep Space Network station at Goldstone, California where they were reassembled.

The extremely advanced technology of the Kodak-developed camera allowed to transmit absolutely fantastic photographs, which could be compared to the finest abstract art.

The photograph was taken from an altitude of 230 km with the 80mm lens over the north eastern shore of the Sea of Fertility, showing Crater Apollonius (latitude: 1.58°; longitude: 61.41°).

"By this reversal of viewpoint, we here on the Earth have been provided a sobering glimpse of the spectacle of our own planet as it will be seen by a few of our generation in their pursuit of the manned exploration of space. We have achieved the ability to contemplate ourselves from afar and thus, in a measure, accomplish the wish expressed by Robert Burns: 'To see ourselves as others see us!'"

Floyd Thompson, NASA Langley Research Center (Cortright, pp. 84-85)

47

LUNAR ORBITER I

1966

The first Earthrise in human history. 23 Aug 1966.

Vintage Gelatin silver print on fiber-based paper, printed October 1966.
25,4 x 20,3 cm (10 x 7.9 in), with NASA HQ caption numbered „66-H-1380" and dated „October 24, 1966" on the verso.

€ 3.000 – 5.000
$ 3.600 – 6.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.46 pm (GMT+2)

An extremely important photograph of space exploration showing for the first time our planet from the vantage point of another world.

It is a sight that has only ever been seen by the later Apollo astronauts as they came around the farside of the Moon and faced the Earth.

This high resolution photograph (partial view of Lunar Orbiter frame I-102H2) was photographed with the 610mm lens from an altitude of 1198 km above the Moon over the 233-km Crater Pasteur (center background) and the 173-km Crater Hilbert at the left. The 87-km Crater Meitner (unnamed at the time of the mission) is in the center foreground. The view is centered on a point of latitude: 14.68° S, longitude 104.34° E.

This photograph is the re-enhanced version of the image which was transmitted to Earth on August 23, 1966 and first released a few days later. It was released again by NASA on October 24, 1966.

[NASA caption] Langley Research Center, Hampton, Va. The world's first view of the Earth taken by a spacecraft from the vicinity of the Moon. The photo was transmitted to Earth by the United states Lunar Orbiter I and received at the NASA tracking station at Robledo De Chavela near Madrid, Spain. This crescent of Earth was photographed August 23, 1966 at 16:35 GMT when the spacecraft was on its 16th orbit and just about to pass behind the Moon. This is a view the astronauts will have when they come around the backside of the Moon and face the Earth. The Earth is shown on the left of the photo with the U.S. east coast in the upper left, southern Europe toward the dark or night side of Earth, and Antarctica at the bottom of Earth crescent. The surface of the Moon is shown on the right side of the photo. Re-enhanced photograph - October 24, 1966.

"The photographs I remember best from Gemini XI were those taken during the high-altitude portion of the flight. We were in two revs going from a low point of about 160 nautical miles all the way up to 740 over Australia. I particularly remember that very famous one of the subcontinent of India in its entirety."

Richard Gordon (Schick and Van Haaften, p. 80).

"This picture has been asked for almost as frequently as the full disk of the Earth. It was framed the way a painter would frame it."

Les Gaver, former photography director, NASA Public Affairs (Schick and Van Haaften, p. 80)

48

RICHARD GORDON (GEMINI XI)

1966

First photograph from space of a subcontinent: India from record breaking high altitude orbit. 12-15 Sept 1966.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1966
[NASA-S-66-54675]
28 x 22 cm (11 x 8.6 in), with „A Kodak Paper" watermarks on the verso.

€ 700 – 1.000
$ 840 – 1.200

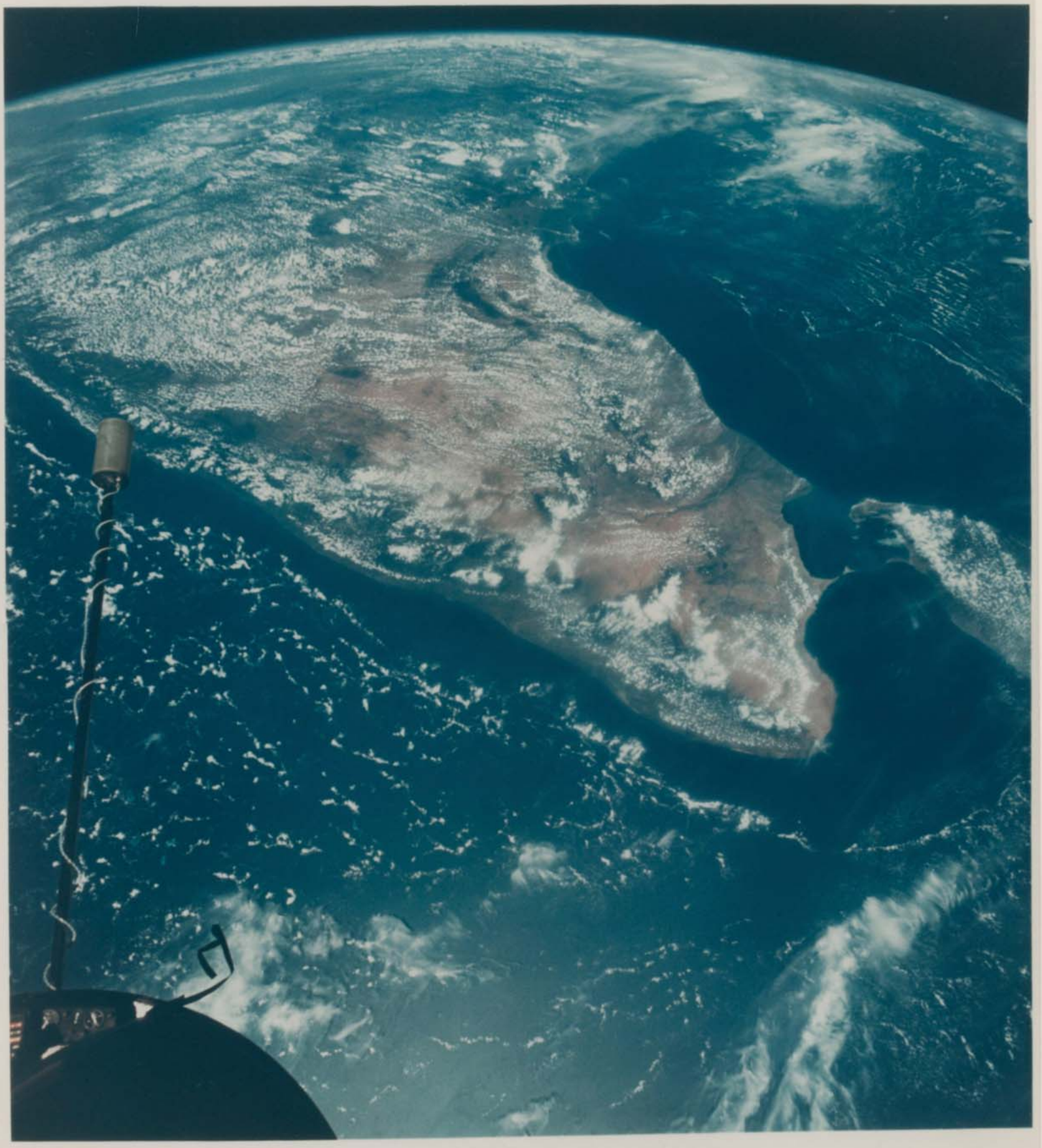
Bidding starts at € 100

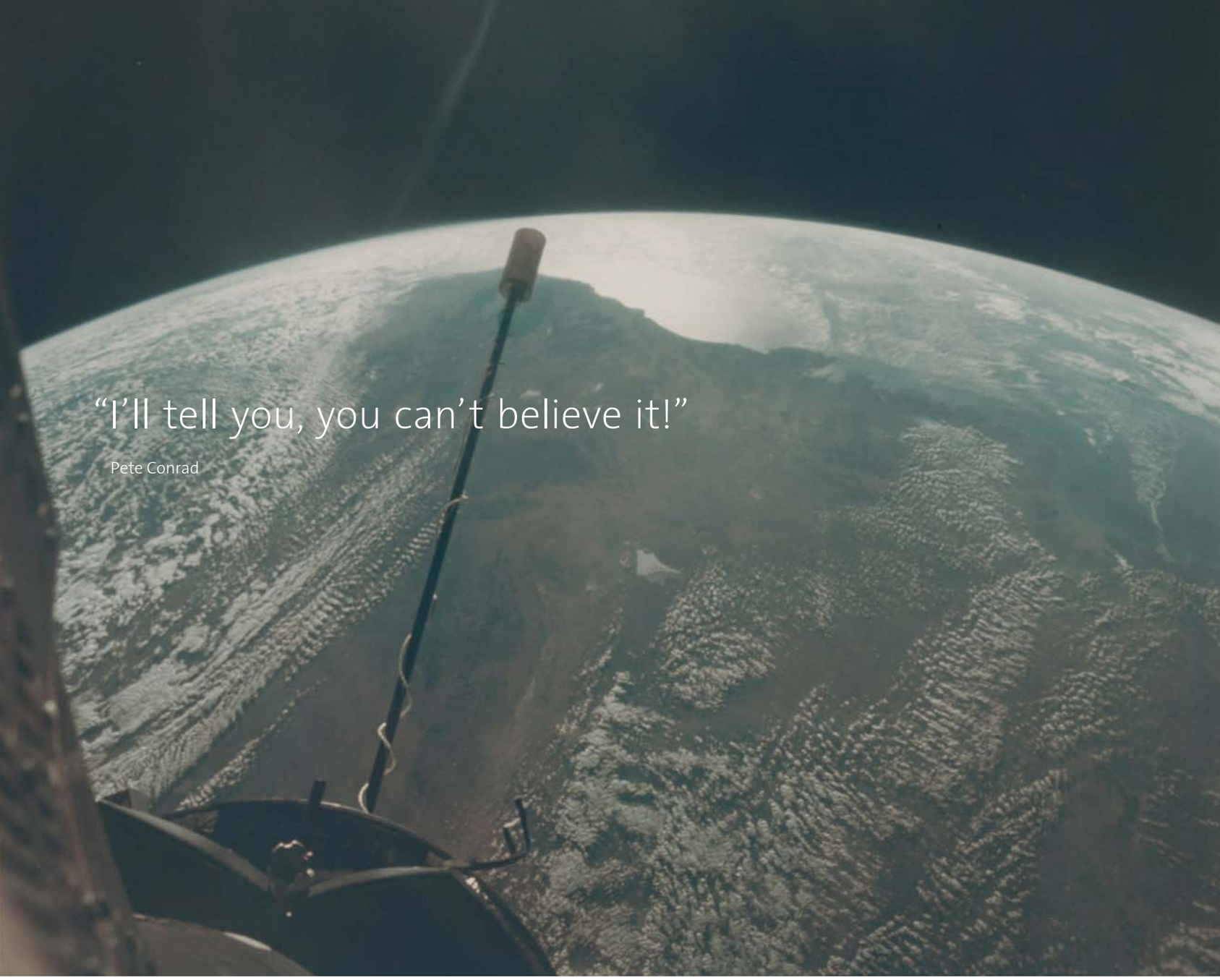
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.47 pm (GMT+2)

"Gemini XI rose farther above the Earth's surface on September 14, 1966, than men ever had gone before. The astronauts first realized how high they were when the whole subcontinent of India came into view. Commander Conrad was so impressed by 'how small the world is' that the sight always will be one of his sharpest memories of the flight.

When photographed, India's whole coast was nearly cloudless. A small low-pressure system lay in the north, the wind was toward the shore on all coasts, and there for India's people it was a pleasant sea breeze" (NASA SP-171, p. 121).

A stunning and majestic view of the entire subcontinent of India looking north northeast, Ceylon, Maldive Islands, Arabian Sea left, Bay of Bengal right seen from an altitude of 380 nautical miles in this photograph taken with the Hasselblad Super Wide camera and its 38mm lens.





49

RICHARD GORDON (GEMINI XI)

1966

The highest photograph ever taken from manned orbit: the illuminated Earth at the record high altitude of 740 nautical miles. 12-15 Sept 1966.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1966. 20,3 x 25,4 cm (7.9 x 10 in), with NASA MSC caption and „A Kodak Paper“ watermarks on the verso, numbered „NASA S-66-54706“ in red in top margin.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

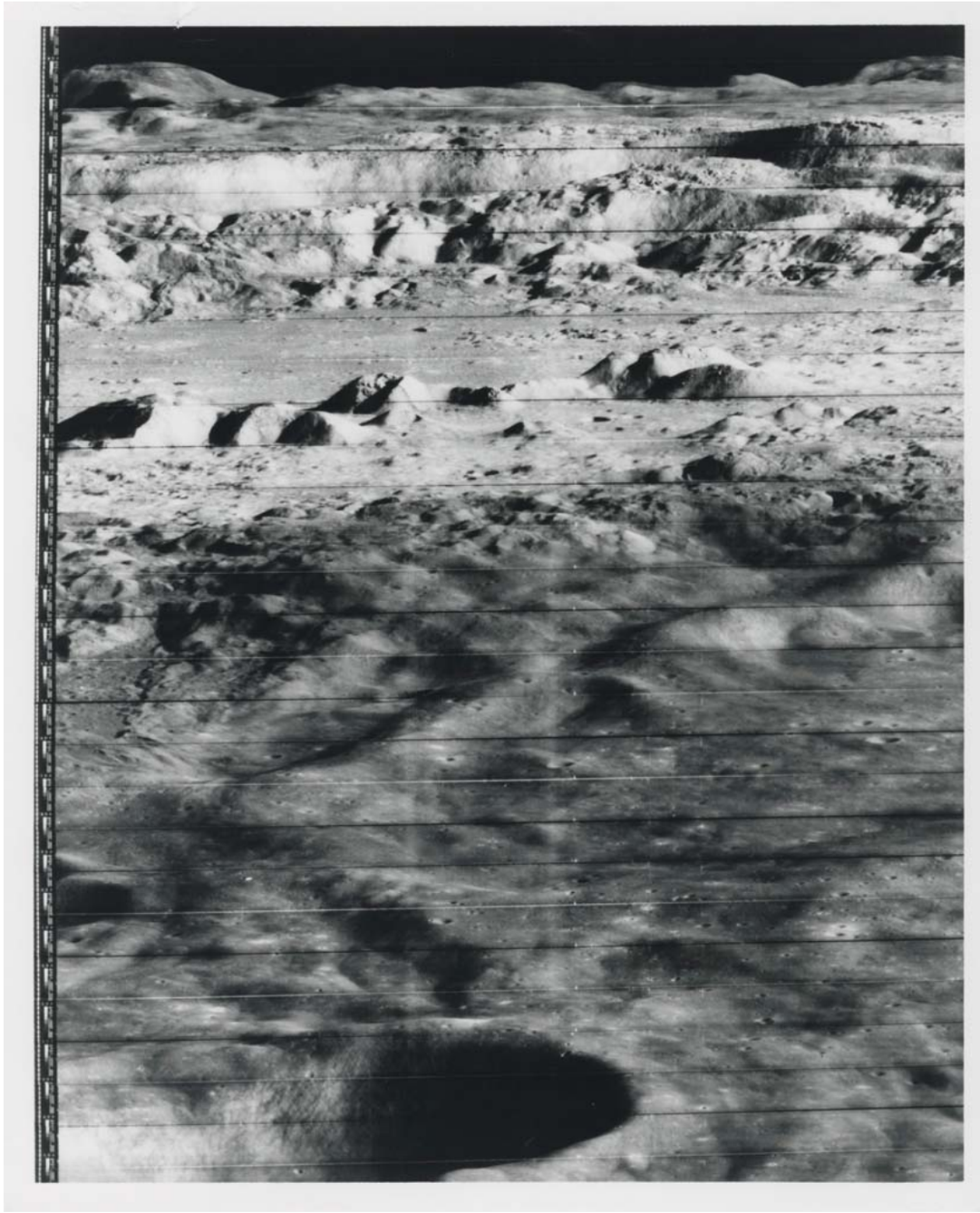
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.48 pm (GMT+2)

“The Sun was slowly settling into the west, causing an angular reflection in the glass window of the spacecraft. Dick Gordon and I were looking at western Australia. This picture was taken approximately when we reached the high point of our high-altitude orbit. This was the view from 739.4 miles. We were excited and although we had planned the high orbit for months, we never realized what a sight we would see. Fifty minutes earlier we had ignited our Agena rocket engine for the longest burn ever made to change an orbit.”

Pete Conrad (Cortright, p. 195).

This historic photograph taken with the Hasselblad Super Wide camera and its 38mm lens shows the western half of Australia looking west, with the coastline seen from Perth to Port Darwin and the illuminated ocean above, from the record high apogee of 740 nautical miles.

From the mission transcript when the photograph was taken:
041:04:36 Conrad: I’ll tell you, you can’t believe it!
041:04:42 Conrad: Just out of my left window I can see all the way from - -
041:04:47 Conrad: - - the end, around the top of the world all the way around about 150 degrees, including the horizon all the way around.



50

LUNAR ORBITER II

1966

The "Picture of the Century": oblique high resolution view into the heart of Crater Copernicus. 24 Nov 1966.

Vintage Gelatin silver print on fiber-based paper, printed 1966.
25,4 x 20,3 cm (10 x 7.9 in).

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.49 pm (GMT+2)

This medium resolution oblique photograph [Lunar Orbiter frame II-162H3] taken with the 610mm telephoto lens featuring a dramatic view looking into the heart of the 93-km Crater Copernicus (10°N, 20° W), was hailed at the time by LIFE Magazine as "The Picture of the Century".

The central mountains rise some fifteen hundred to thousand feet above the crater floor and are ten miles long.

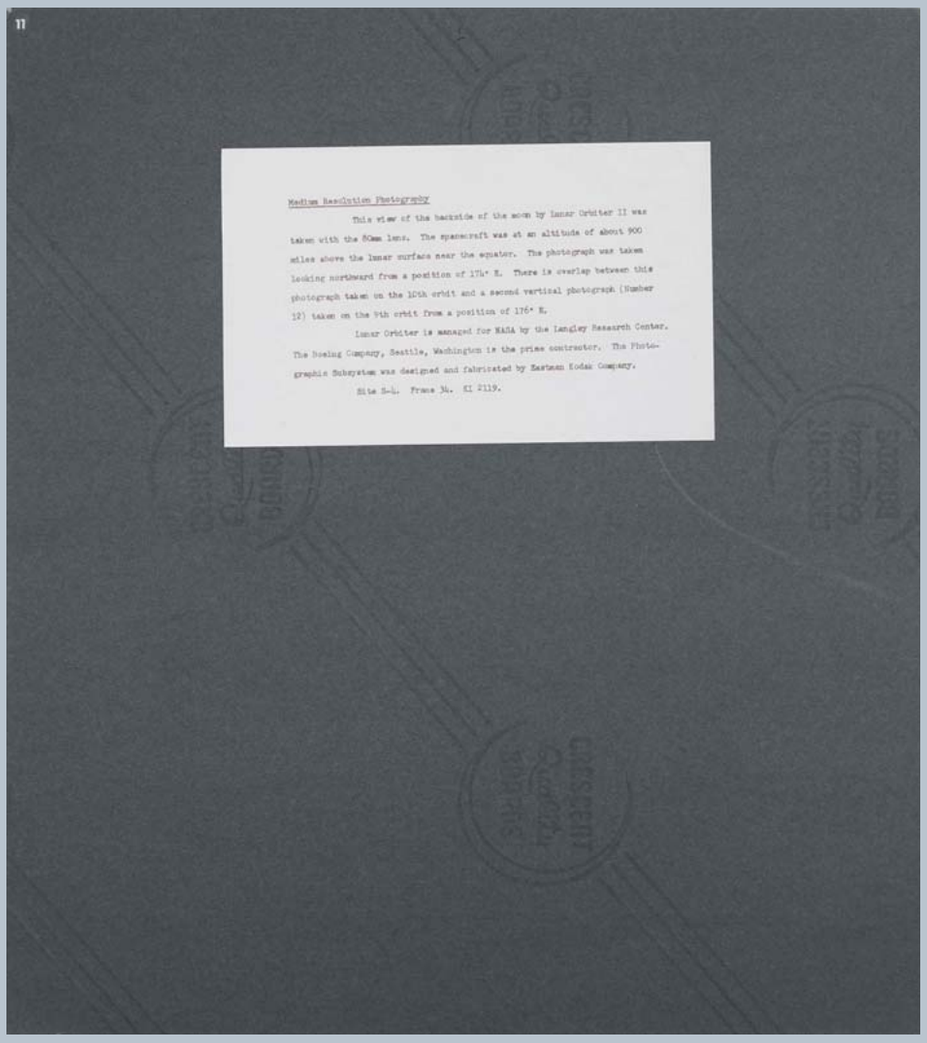
The remarkable clarity is attributable to the absence of atmosphere. Until this moment, the few images of the lunar surface were taken from perpendicular to the surface - this was the first time that an image was taken at an oblique angle, providing the first ever glimpse of the rugged and foreboding lunar surface.

Truly an astonishing image, a direct parallel can be drawn to the images produced by Galileo after viewing the surface of the moon through his telescope.

"On first seeing this oblique view of the crater Copernicus I was awed by the sudden realization that this prominent lunar feature I have often viewed by telescope is a landscape of real mountains and valleys, obviously fashioned by tremendous forces of nature."

Oran Nicks, NASA office of Space Flights and Applications (Cortright, p. 88)

[LARGE FORMAT]



51

LUNAR ORBITER II

1966

The backside of the Moon: first high quality wide angle view. Nov 1966.

Large-format photograph comprising two large-format vintage Gelatin silver prints mounted together on original 45,7 x 40,6 cm (18 x 16 in) board.
37 x 32,4 cm (14.5 x 12.7 in), printed 1966 (NASA / Langley / Kodak).
This print comes from the collection of George Keene, an optical engineer who headed the team responsible for reconstructing the Lunar Orbiter images at Kodak laboratory in Rochester.

PROVENANCE:

· The former collection of George Keene. Similar prints are in the collection of the MET in New York (https://www.metmuseum.org/art/collection/search/717463)

€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.50 pm (GMT+2)

"This photograph was made as part of the Lunar Orbiter program, a series of five unmanned spacecraft launched into orbit around the Moon in 1966 and 1967. Each spacecraft was equipped with a sophisticated imaging system provided by Eastman Kodak, which consisted of a dual-lens camera, film processing and handling units, and a readout scanner for transmitting the images back to Earth. The main purpose of the program was to select lunar landing sites for NASA's manned Apollo Missions.

Over the course of one year, the Lunar Orbiters photographed 99 percent of the Moon's surface, producing more than 2,000 images of unprecedented clarity and precision. After the film was processed on board the spacecraft, it was scanned in strips and transmitted to Earth via radio. Technicians at Eastman Kodak in Rochester, New York, created the final images by transferring the strips onto sheets of large-format film, from which prints were produced" (https://www.metmuseum.org/art/collection/search/717463).

Lunar Orbiter II took this photograph with the 80mm lens from an altitude of about 900 miles looking northward from a position of 174° E near the equator during its tenth orbit around the Moon.

Launched on November 6, 1966, Lunar Orbiter II was tasked with completing a photographic survey program for Apollo landing sites. It produced 211 photographs during 40 orbits.

52

LUNAR ORBITER II

1966

The "Picture of the Century": Crater Copernicus. 24 Nov 1966.

Large-format vintage Gelatin silver print on fiber-based paper
[Lunar Orbiter II- 162H3]
40,5 x 51 cm (15.9 x 20 in), with a „US Army Corps of Engineers Army Map Service" original card labelled „CRATER COPERNICUS LUNAR ORBITER PROJECT MISSON II PHOTOGRAPHED 27 NOV. 66" affixed to a seperate sheet (NASA / US Army).
A very rare large format of this extraordinary Lunar Orbiter photograph.

€ 4.000 – 6.000
$ 4.800 – 7.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.51 pm (GMT+2)

It was taken with the 610mm telephoto lens featuring a dramatic northward view inside the majestic 93-km wide and 3.8 km deep Crater Copernicus (latitude 10° N, longitude 20° W).

The 12-km keyhole shaped Crate Fauth is at the bottom of the photograph, the Carpathian Mountains at the top. Characteristics of the landscape are clearly shown by the shadows produced by the rising Sun, whose elevation was approximately 10 degrees above the horizon. Numerous mounds are visible on the floor of Copernicus, in addition to the central peaks.

"The view that left millions in awe when it was released. The central peaks are in the middle of the image, rising as high as 1.2 km above the crater floor, and stretching for about 15 km. The northern wall of the crater is in the background.

Between 1966 and 1967 NASA sent five Lunar Orbiter spacecraft to the Moon. Their job was to survey the surface to help determine landing sites for the upcoming Apollo missions. In addition to their recon role, these spacecraft also significantly contributed to our scientific understanding of the Moon. They also captured photos of this nearby world that human eyes had never seen before.

One such image was taken of crater Copernicus on 24 November 1966 by the Lunar Orbiter II spacecraft. What made this photo so unique was the oblique angle it was taken at as well the close proximity of the spacecraft to its target. The image was taken at an altitude of 45 km (27.1 miles) at a distance of approximately 207.7 km (125 miles) from the center of the crater. Instead of looking down, the spacecraft looked sideways at the Moon. For the first time people saw the Moon as a world with mountains and boulders and other features (some of them strange) that were not apparent from photos where the view was looking straight down. Life Magazine called the photo 'The Picture of the Century.' Along with the equally famous Earthrise image taken by Lunar Orbiter I, the Moon went from being a distant sight in the sky to a world waiting to be explored" (https://sservi.nasa.gov/articles/iconic-lunar-orbiter-image-of-copernicus-re-released/).

53

BUZZ ALDRIN (GEMINI XII)

1966

EVA photograph: Gemini docked with Agena over the Pacific Ocean. 11-15 Nov 1966.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1966. 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA S-66-62870" (NASA MSC) in red in top margin.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.52 pm (GMT+2)

"What a beautiful view"

Buzz Aldrin

The photograph was taken by Aldrin with the Super-Wide Hasselblad camera and its 38mm lens as he stood in the open hatch of the spacecraft docked to the Agena during his stand up EVA over the Earth. The L-band antenna of the Agena satellite is in the foreground.

From the mission transcript during the EVA:
019:34:04 Aldrin: I imagine there's a little bit of tension on my hoses now, but otherwise I'm floating now, completely free. My feet are just above the seat.
019:34:25 Lovell: Okay.
019:34:28 Aldrin: What a beautiful view. [...]
019:35:08 Aldrin: What a thrill!

“Now let me raise my visor and I’ll smile.”

Buzz Aldrin

54

BUZZ ALDRIN (GEMINI XII)

1966

The first space selfie. 11-15 Nov 1966.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1966. 25,4 x 20,3 cm (10 x 7.9 in), with “A Kodak Paper” watermarks on the verso, numbered “NASA S-66-62926” (NASA MSC) in red in top margin.

€ 10.000 – 15.000
$ 12.000 – 18.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.53 pm (GMT+2)

During his stand up EVA, Aldrin lowered his gold-plated visor for a rare self-portrait that clearly shows his features.

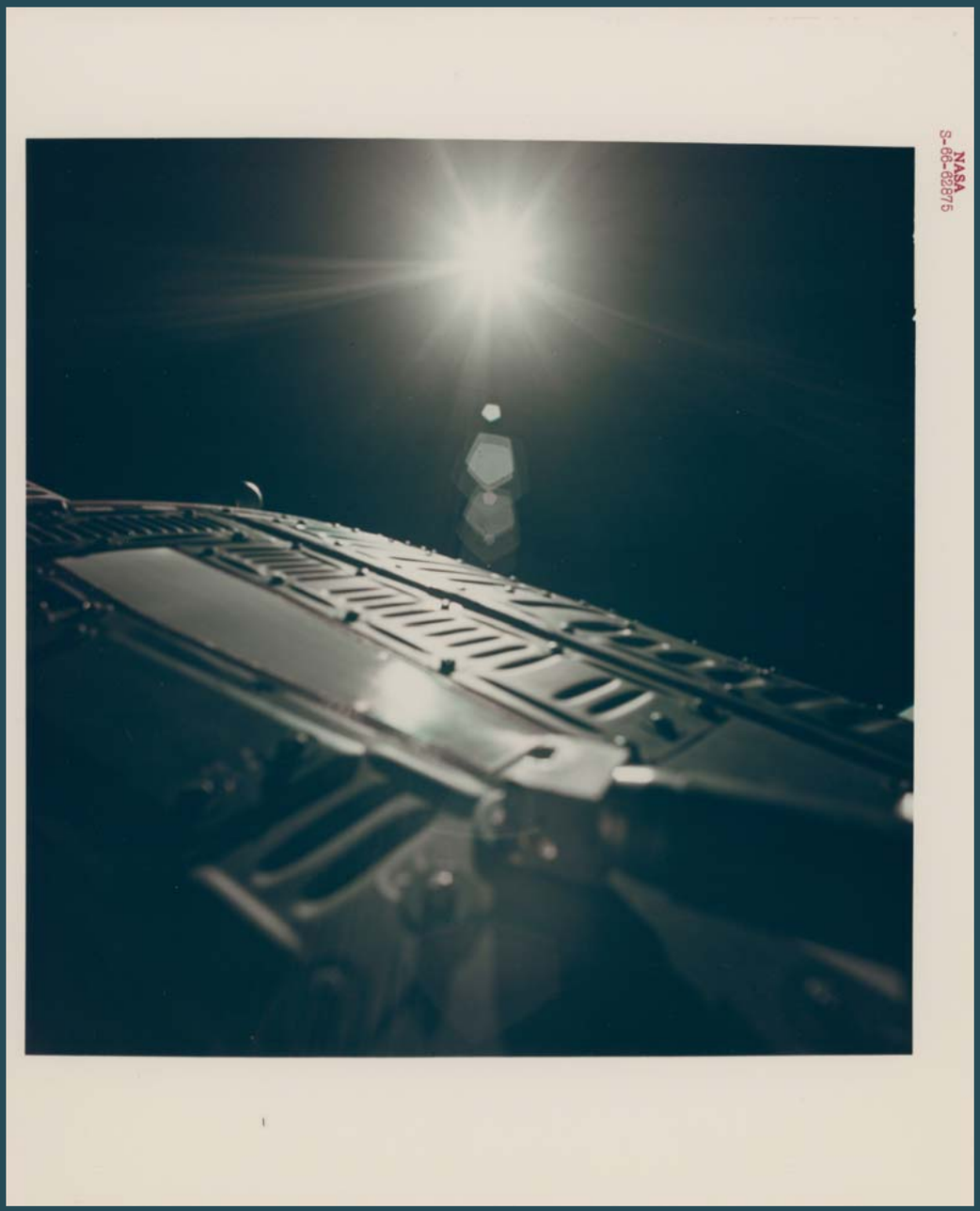
In previous pictures of spacewalkers, sunlight reflecting off the visor obscured their faces.

Aldrin himself described the photograph as the first selfie in space.

The back of the blue Maurer 70mm space camera can be seen at the lower left-hand side. The L-band antenna of the Agena target docking vehicle docked to the Gemini spacecraft and the Atlantic Ocean with the coast of Africa are in the background. Aldrin used the Super-Wide Hasselblad camera and its 38mm lens to take the photograph.

From the mission transcript when the photograph was taken:
020:59:01 Aldrin: Now let me raise my visor and I’ll smile. [...]
020:59:28 Lovell: Okay. It’s 35 minutes. Do you want to start bringing the camera in and getting it all squared away? [...]
020:59:52 Aldrin: Well, we still have a lot of daylight. [...]
021:00:33 Aldrin: Which camera do you mean you want to get in?
021:00:35 Lovell: I want to get in the EVA 16mm.
021:00:40 Aldrin: Okay.
021:00:42 Aldrin: Well, the Hasselblad’s just about empty.
021:01:06 Aldrin: I never did think about taking a picture of myself.

HANGE MAG
E, COCK CAMERA.
IVE OR ATTACH
-COCK CAMERA.
L-10-S-18



55

BUZZ ALDRIN (GEMINI XII)

1966

EVA photograph: the Sun illuminating the space-craft as seen from space. 11-15 Nov 1966.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1966. 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA S-66-62875" (NASA MSC) in red in top margin.
A very rare unpublished photograph.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.54 pm (GMT+2)

"When you were outside of the spacecraft, [...] you had the whole world in front of you to photograph."

Gemini IX-A astronaut Eugene Cernan (Schick and Van Haaften, p.62).

Aldrin took this amazing photograph with the Super-Wide Hasselblad camera and its 38mm lens as he floated freely in zero gravity in the open hatch of the spacecraft during his stand up EVA.

56

NASA (GEMINI XII)

1966

Buzz Aldrin spacewalking near the spacecraft during his EVA over the Earth. 11-15 Nov 1966.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1966. 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA S-66-62937" (NASA MSC) in red in top margin.

€ 1.200 – 1.800

$ 1.440 – 2.160

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.55 pm (GMT+2)

"The whole purpose of Buzz Aldrin's Extravehicular Activity was to see how well you can work in space. You can operate very nicely out there if you know what you're doing and just slow down. You have to let zero gravity work for you, not against you."

James Lovell (Schick and Van Haaften, p. 59).

Buzz Aldrin conducted two stand up EVAs staying in the open hatch of the spacecraft and one more complex EVA during the Gemini XII mission.

This photograph captured by a 16mm Maurer camera mounted by Aldrin on outside of the spacecraft shows him at the Agena work station as he "moved to the target vehicle adapter area and carried out a series of tasks, including use of a torque wrench while tethered. He attached a 30 meter long tether stowed in the Agena adapter to the Gemini adapter bar. About a dozen two-minute rest periods were scheduled during the EVA to prevent Aldrin from becoming overtaxed as happened to previous spacewalkers. All tasks were accomplished and total EVA time was 2 hours 6 minutes" (https://nssdc.gsfc.nasa.gov/nmc/spacecraft/display.action?id=1966-104A).

"Working hard at the Agena work station, 'Buzz' Aldrin did not know when I took this picture of him through the left-hand window of Gemini XII. It occurred during his second trip outside and Buzz was already establishing new milestones in man's ability to complete useful tasks in the void of space. The successful completion of the 5 1/2 hours of EVA during the Gemini XII mission helped to pave the way for future space missions."

James Lovell (Cortright, p. 183).

57

JAMES LOVELL (GEMINI XII)

1966

Spacewalker: Buzz Aldrin floating in zero gravity over the Earth. 11-15 Nov 1966.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1966. 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA S-66-62782" (NASA MSC) in red in top margin.

€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

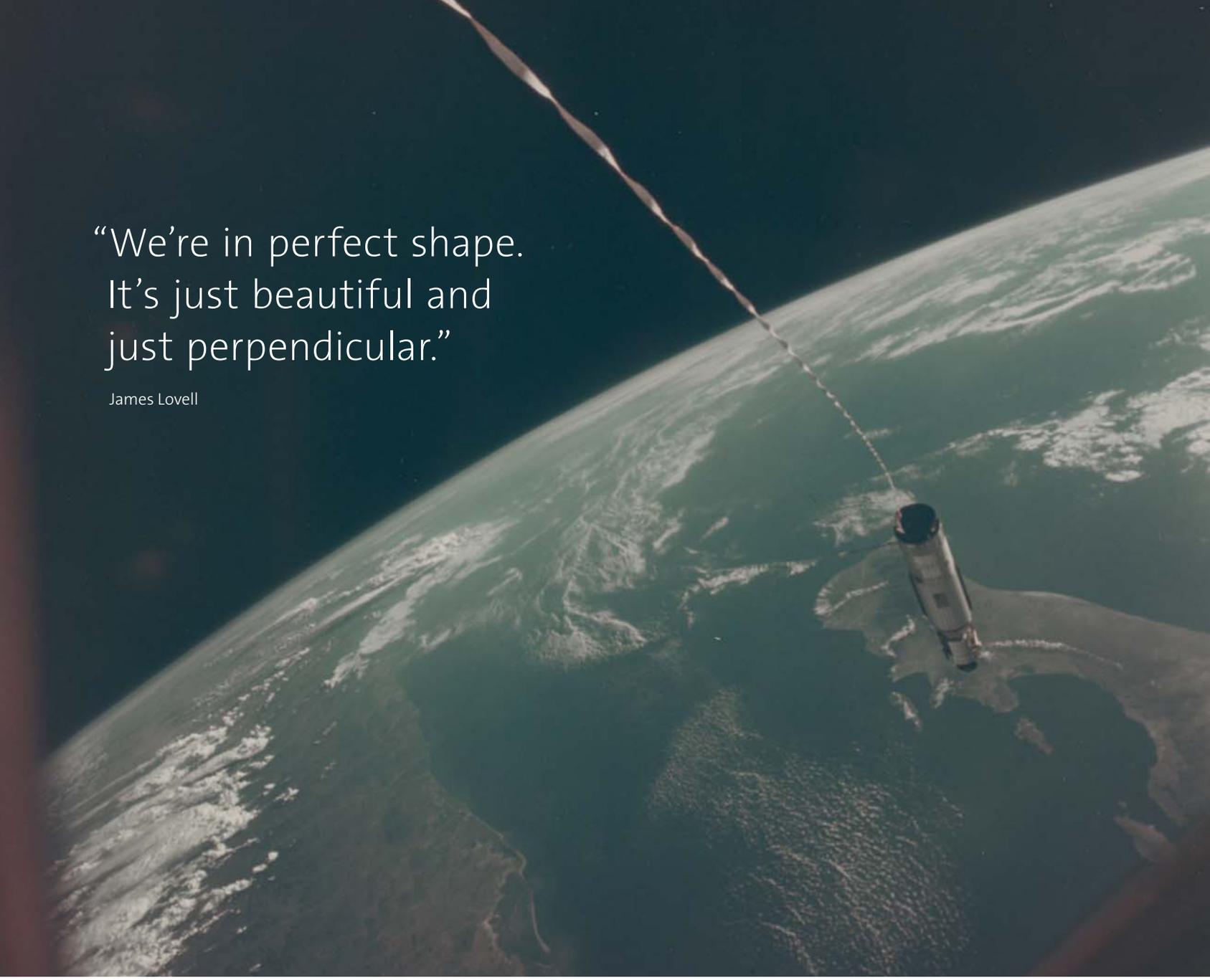
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.56 pm (GMT+2)

On Gemini XII Aldrin performed the first completely successful spacewalk in human history.

Lovell took this great photograph from the window of the Gemini spacecraft with the Maurer space camera and its 80mm lens. The L-band antenna of the Agena and the EVA umbilical cord are visible near Aldrin.

"During the spacewalk, Aldrin attached a tether to Agena 12 for a two-vehicle rotation maneuver. In his right hand is one of the Velcro handholds that allowed him to move like a human fly around the outside of both craft" (Mason, p. 120).

From the mission transcript during the EVA:
043:07:30 Lovell: Listen. While you're resting, why don't I just try and get a picture on the 70mm (Maurer camera) here?
043:07:35 Aldrin: All right.
043:07:40 Lovell: We are ahead of the game anyway so - I know that you'd like to have your picture taken.
043:07:54 Aldrin: Well, let me batten down here. Have you got the camera out?
043:07:59 Lovell: Yes.
043:08:01 Aldrin: Okay.
043:08:04 Aldrin There. How's that?
043:08:06 Aldrin Did you get it?
043:08:07 Lovell: Just stand by.
043:08:28 Lovell: One more ... [...]
043:22:12 Lovell: Okay. This Maurer camera sure beats the Hasselblad for taking pictures in EVA. Here I can get up to the window.



58

B. ALDRIN OR J. LOVELL (GEMINI XII)

1966

Agena tethered to Gemini over the Earth. 11-15 Nov 1966.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1966. 20,3 x 25,4 cm (7.9 x 10 in), with “A Kodak Paper” watermarks on the verso, numbered “NASA S-66-63504” (NASA MSC) in red in top margin.
This superb photograph was taken looking south with the Hasselblad Super Wide camera and its 38mm lens.

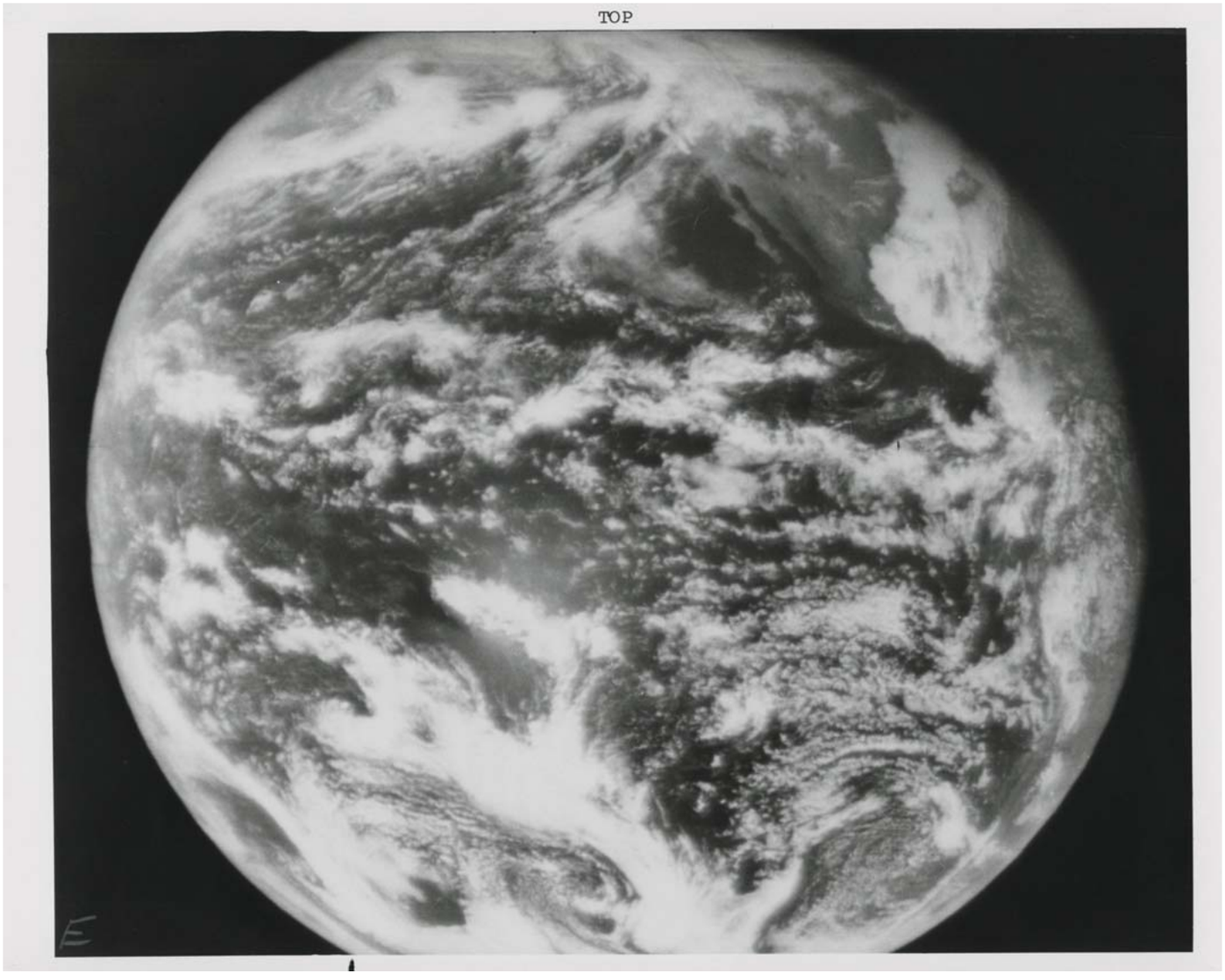
€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.57 pm (GMT+2)

“The Gulf of California area as seen from the Gemini XII spacecraft during its 30th revolution of Earth. Baja California Sur is the peninsula on the right. At lower left is the mainland of Mexico. A 100-foot tether line connects the Agena Target Docking Vehicle with the Gemini XII spacecraft” (original NASA caption for the present photograph).

From the mission transcript when the photograph was taken:
047:42:01 Lovell: We’re in perfect shape. It’s just beautiful and just perpendicular. If we only had a control system, I’m sure we could do this much better than even in the simulator.
047:42:12 Capcom (Mission Control): Yes. We’re showing you’re hanging in pretty good in pitch and yaw. [...]
047:42:45 Capcom: Okay. What we’d like to have you do, if you’re willing, is Just to let the roll go and see if it will damp out after a while here. [...]
047:43:11 Lovell: As long as that tether doesn’t wrap around us, we’ll do it.
047:43:16 Capcom: Okay.
047:43:18 Capcom: Flight doesn’t really think you’ll damp out in roll.
047:43:24 Aldrin: Well, we’ve stayed well above him now for quite a while. We’re out in front of him just a little bit.



59

ATS I

1966

First B&W photograph of the full Earth.
11 Dec 1966.

Vintage Gelatin silver print on fiber-based paper, printed 1966.
20,3 x 25,4 cm (7.9 x 10 in).
, with NASA HQ caption numbered "66-H-1635-C" on the verso.

€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.58 pm (GMT+2)

On December 11, 1966 the first Applications Technology Satellite (ATS I) transmitted the first detailed B&W whole Earth photographs and relayed from 22,300 miles images at various hours showing the "phases of the Earth", as the Planet was waxing and waning.

The Soviet Molniya I had transmitted crude whole Earth pictures in May 1966 but these were of very poor quality.

ATS I was launched with a revolutionary B&W camera on board, the "spin scan cloud camera" invented by Dr. Verner Suomi and Professor Robert Parent of the University of Wisconsin. Designed to take high resolution weather photographs through a spinning geostationary satellite orbiting as fast as the Earth was spinning, and therefore apparently stationary, it revealed for the first time detailed B&W photographs of the whole Planet Earth. The camera was pronounced "a roaring success, with performance beyond my wildest dreams" by Dr. Suomi (Poole, p. 85).

[LARGE FORMAT]

60

LUNAR ORBITER III

1967

Spectacular lunar horizon: Ocean of Storms.
Feb 1967.

Large-fomat vintage Gelatin silver print on fiber-based paper, printed 1967 [Lunar Orbiter III-213M]
61 x 51 cm (24 x 20 in), with NASA Langley / US Army map service caption below the image.

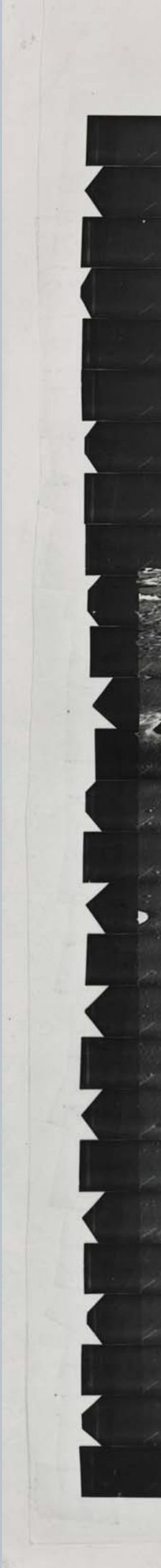
€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 3.59 pm (GMT+2)

A fantastic view looking south west toward the southwest rim of the Ocean of Storms including Crater Damoiseau taken with the 80mm lens from an altitude of 58.98 km (latitude: 3.33°S; longitude: 59.78°W).

One of the rare and beautiful oblique views showing the lunar horizon taken by the Lunar Orbiter spacecraft. The low altitude of the spacecraft, high oblique view and the low Sun elevation near the terminator emphasize details of the relief.



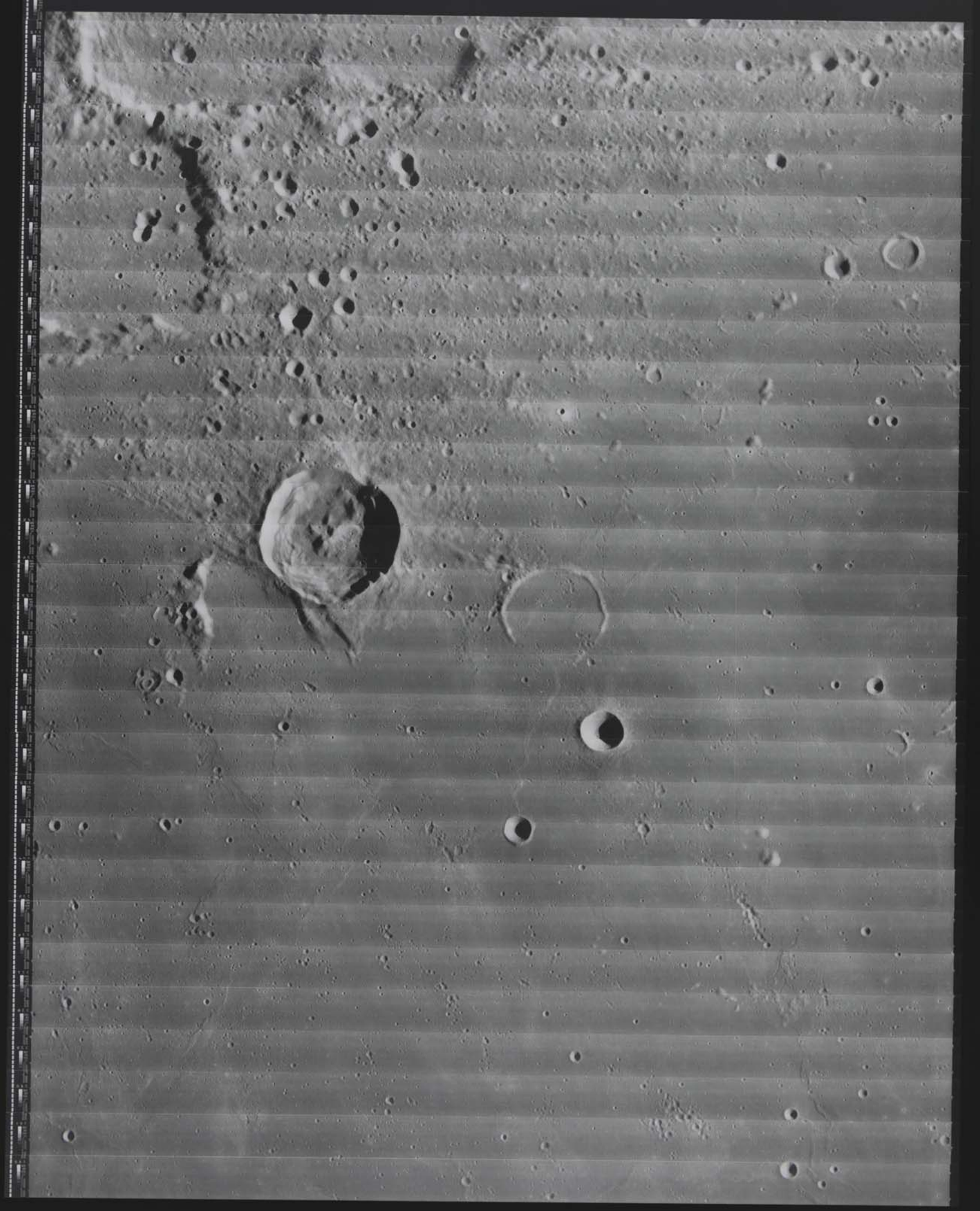
NASA-LRC LUNAR ORBITER PROJECT-MISSION III

SPACECRAFT FRAME NO. 213 , 1 OF 1, MEDIUM RESOLUTION

SITE III-529 GRE0603057O ,KI NO. 3057

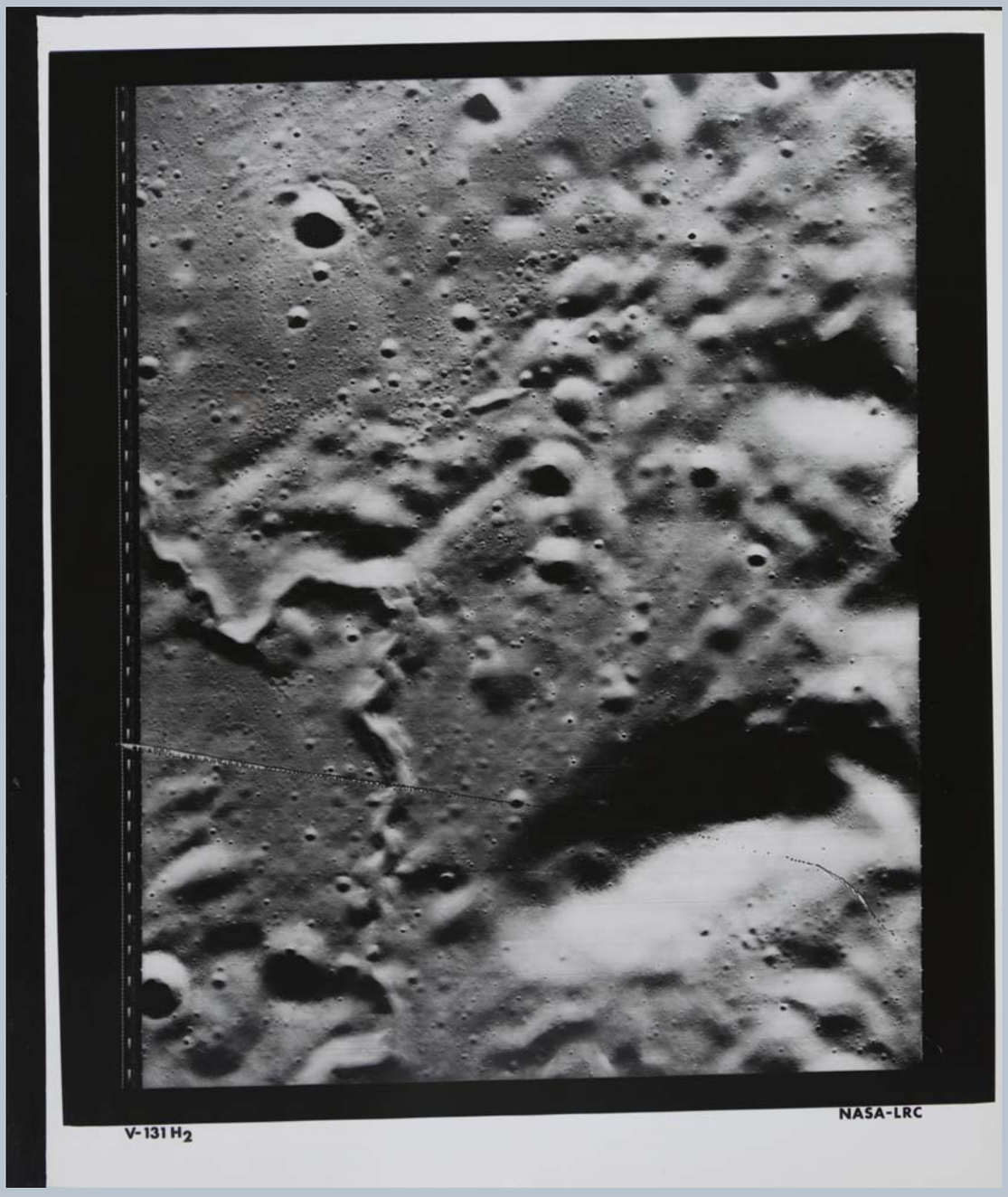
PHOTOGRAPHED: DATE FEB 22 1967 TIME:15:46:56.47 READOUT: FEB 23 ,1967 SHUTTER.02 SECOND

REASSEMBLED BY: ARMY MAP SERVICE, CORPS OF ENGINEERS, U.S. ARMY, MARCH 16 ,1967



IV-175H3

NASA-LRC



61

LUNAR ORBITER IV AND V

1967

The abstract beauty of the Moon: high resolution photographs over the Ocean of Storms and the Alpes of the Moon (2), Lunar Orbiter IV and V. May-Aug 1967.

Two large-format vintage Gelatin silver prints on fiber-based paper, printed 1967. The first 55,3 x 43,2 cm (21.7 x 17 in), the second 51 x 61 cm (20 x 24 in), numbered "NASA LRC IV-175-H3" and "NASA LRC V-131-H2" in black in bottom margin.

€ 1.200 – 1.800
$ 1.440 – 2.160

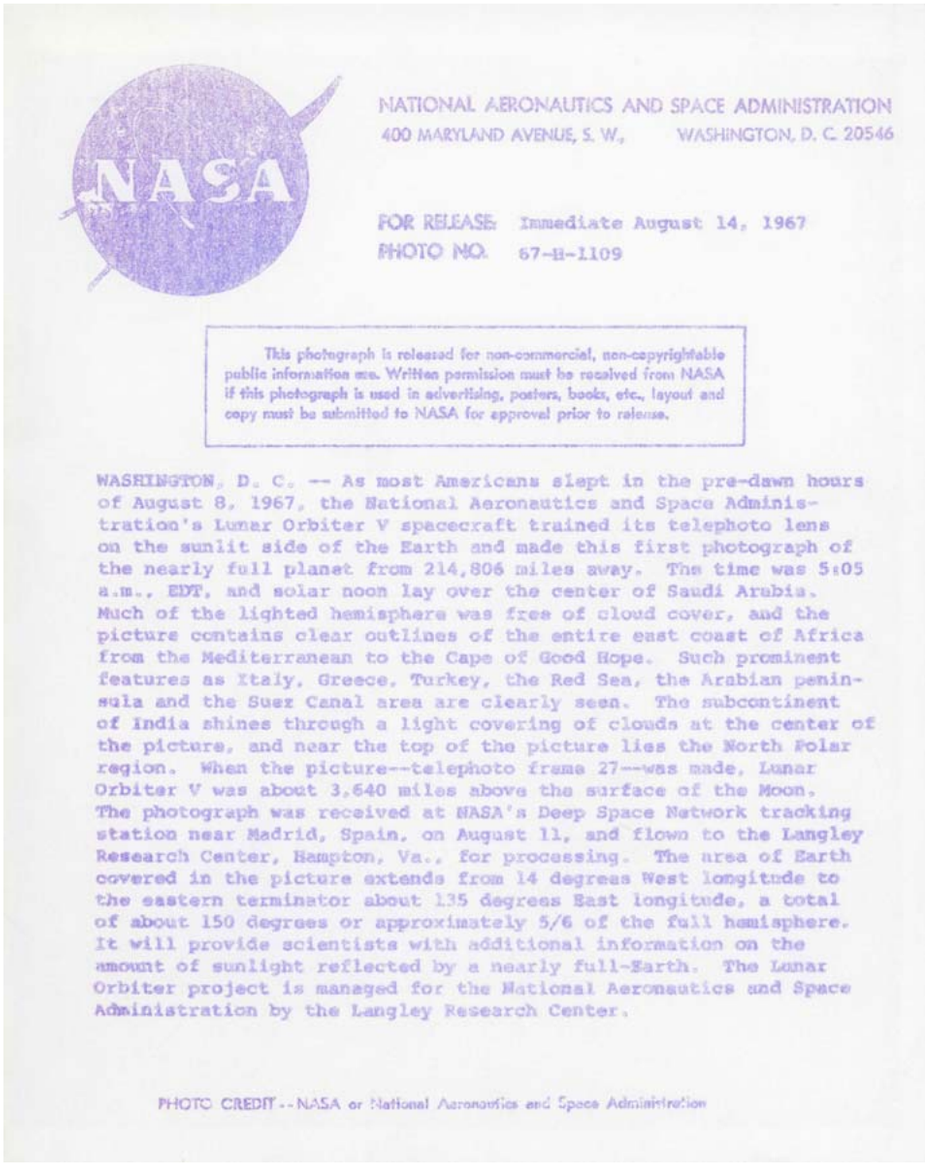
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.00 pm (GMT+2)

The objective of Lunar Orbiter IV and V was to provide an expanded photographic survey of the lunar surface, offering far higher resolution imagery than was available from ground based telescopes. The two last orbiters brought the cumulative photographic coverage by the five Lunar Orbiter craft to 99% of the Moon's surface and amazing detailed views of the Moon's surface.

The first Lunar Orbiter IV photograph was taken from an altitude of about 2870 km over the northwestern Ocean of Storms (latitude / longitude: 50°N; 70.79°W).

The second Lunar Orbiter V photograph was taken from an altitude of about 240 km over the Alps Mountains of the Moon on the northeastern rim of the Sea of Rains (latitude / longitude: 50°N; 2.58°W).



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
400 MARYLAND AVENUE, S. W., WASHINGTON, D. C. 20546

FOR RELEASE: Immediate August 14, 1967
PHOTO NO. 67-H-1109

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WASHINGTON, D. C. -- As most Americans slept in the pre-dawn hours of August 8, 1967, the National Aeronautics and Space Administration's Lunar Orbiter V spacecraft trained its telephoto lens on the sunlit side of the Earth and made this first photograph of the nearly full planet from 214,806 miles away. The time was 5:05 a.m., EDT, and solar noon lay over the center of Saudi Arabia. Much of the lighted hemisphere was free of cloud cover, and the picture contains clear outlines of the entire east coast of Africa from the Mediterranean to the Cape of Good Hope. Such prominent features as Italy, Greece, Turkey, the Red Sea, the Arabian peninsula and the Suez Canal area are clearly seen. The subcontinent of India shines through a light covering of clouds at the center of the picture, and near the top of the picture lies the North Polar region. When the picture--telephoto frame 27--was made, Lunar Orbiter V was about 3,640 miles above the surface of the Moon. The photograph was received at NASA's Deep Space Network tracking station near Madrid, Spain, on August 11, and flown to the Langley Research Center, Hampton, Va., for processing. The area of Earth covered in the picture extends from 14 degrees West longitude to the eastern terminator about 135 degrees East longitude, a total of about 150 degrees or approximately 5/6 of the full hemisphere. It will provide scientists with additional information on the amount of sunlight reflected by a nearly full-Earth. The Lunar Orbiter project is managed for the National Aeronautics and Space Administration by the Langley Research Center.

PHOTO CREDIT -- NASA or National Aeronautics and Space Administration

62

LUNAR ORBITER V

1967

The first photograph of the nearly full Earth from lunar orbit. 8 Aug 1967.

Vintage Gelatin silver print on fiber-based paper, printed 1967.
25,4 x 20,3 cm (10 x 7.9 in), with NASA HQ caption numbered "67-H-1109" on the verso.
This photograph (close-up of Lunar Orbiter high resolution frame V-27H2) was taken with the 610mm telephoto lens from an altitude of about 5872 km.

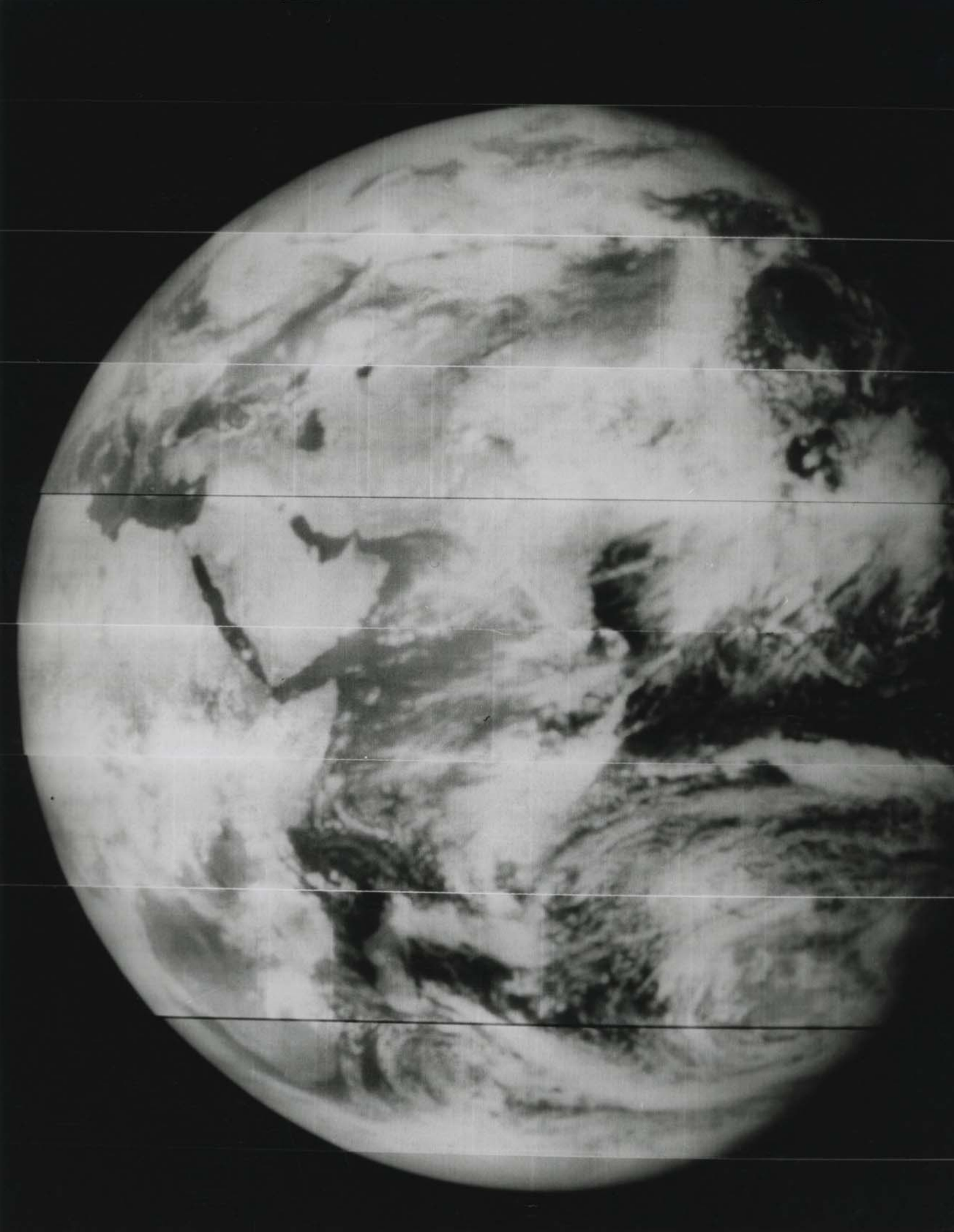
€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.01 pm (GMT+2)

"As most Americans slept in the predawn hours of August 8, 1967, NASA's Lunar Orbiter V spacecraft trained its telephoto lens on the sunlit side of the Earth and made this first photograph of the nearly full Planet from 214,806 miles away. Lunar Orbiter V was about 3,640 miles above the surface of the Moon. The area of the Earth covered extends from 14°W longitude to the eastern terminator about 135°E longitude, a total of about 150° or approximately 5/6 of the full hemisphere. It will provide scientists with additional information on the amount of light reflected by a nearly full-Earth" (NASA caption).

"To the philosopher, this picture is close to man's soul, since it allows him to look back upon his own world," observed Lunar Orbiter program manager Lee Scherer, "and thus fosters the feeling of man's emancipation from the bounds of Earth. Perhaps to most of us the interest is due to human vanity, which dictates that self-portraits are always the best portraits" (Cortright, p. 114).



63

LUNAR ORBITER V

1967

The ghostly backside of the Moon. Aug 1967.

Vintage Gelatin silver print on fiber-based paper, printed 1967 [Lunar Orbiter V-103M]
25,4 x 20,3 cm (10 x 7.9 in), with NASA Langley caption in bottom margin.

€ 700 – 1.000
$ 840 – 1.200

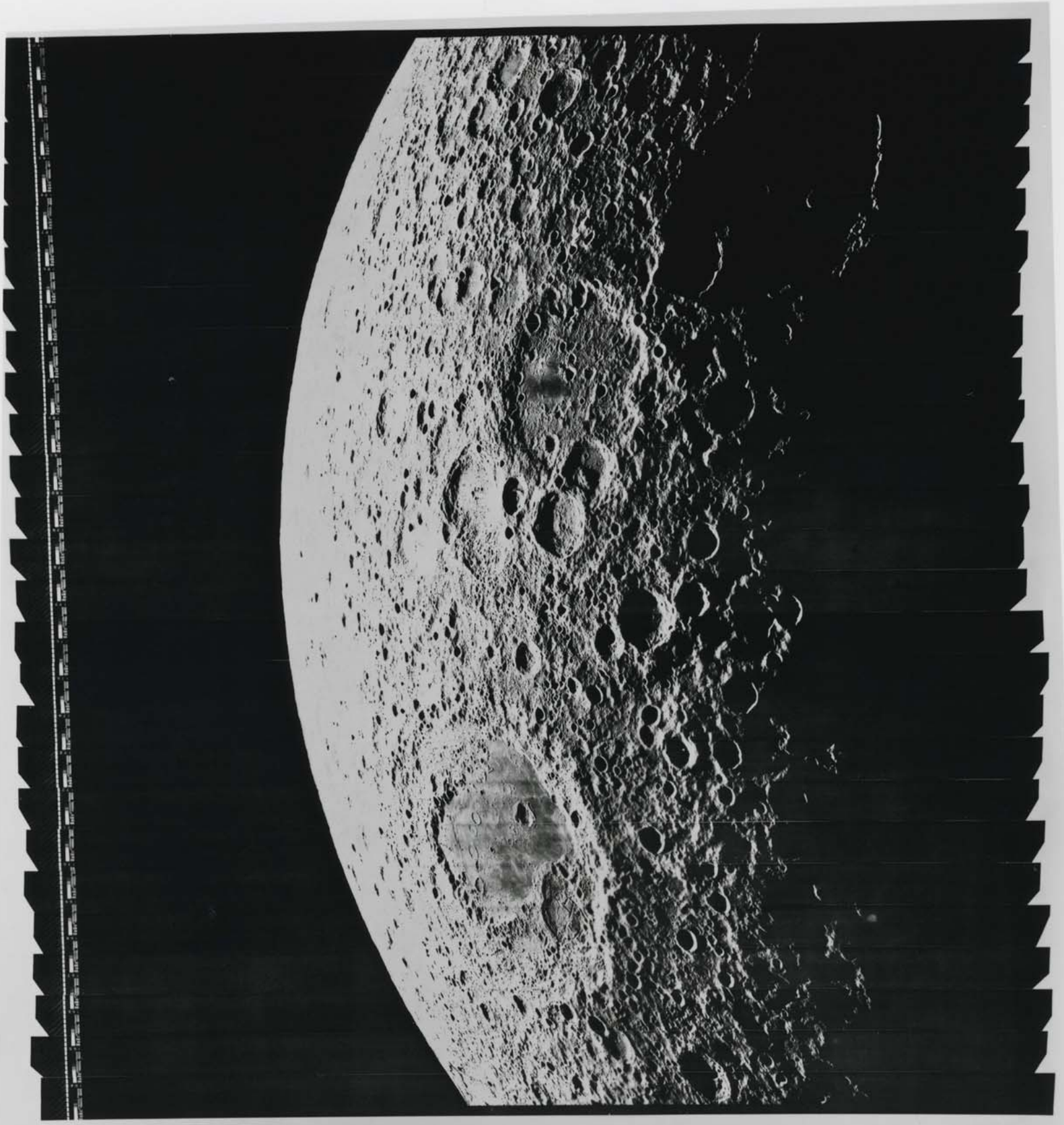
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.02 pm (GMT+2)

This superb medium resolution photograph (Lunar Orbiter frame V-103M) showing a great expanse of the Moon's backside was taken with the 80mm lens from an altitude of 1236 km. It reveals a very impressive surface bombarded by meteorites. The Sea of Moscow is well visible at the bottom (latitude: 37.85° N, longitude: 178.75° E).

Lunar Orbiter was the first robotic spacecraft to take high resolution photographs of the whole Moon from lunar orbit, offering amazing never before seen views of Earth's satellite, from a perspective different from Earth. Soviet spacecrafts had already sent back whole Moon images, but mostly very crude.

The Lunar Orbiters had an ingenious imaging system which consisted of a dual-lens camera, a film processing unit, a readout scanner, and a film handling apparatus. The film was processed, scanned, and the images transmitted back to Earth with incredible resolution for the time.



NASA-LRC LUNAR ORBITER PROJECT-MISSION V

SPACECRAFT FRAME NO. 103 1 OF 1 MEDIUM RESOLUTION

SITE A 21 GRE 08051190 KI NO. 5119

PHOTOGRAPHED: DATE 14 AUG 1967 TIME: 1024:50.72 READOUT AUG 23 1967 SHUTTER .04 SECOND

REASSEMBLED BY: ARMY MAP SERVICE, CORPS OF ENGINEERS, U.S. ARMY SEPT 11 1967

103

Lot 131. Neil Armstrong (Apollo 11). 1969. First photograph of a man standing on the surface of another world. 16-24 July 1969.

MANNED SPACE MISSIONS

+ APOLLO 7

Crew: Walter Schirra (Commander),
Walter Cunningham (Lunar Module Pilot)
and Donn Eisele (Command Module Pilot)
October 11-22, 1968
Spacecraft: Apollo 7 CSM
Launch Vehicle: Saturn IB

+ APOLLO 8

Crew: Frank Borman (Commander),
James Lovell (Command Module Pilot)
and William Anders (Lunar Module Pilot)
December 21-27, 1968
Spacecraft: Apollo 8 CSM
Launch Vehicle: Saturn V

+ APOLLO 9

Crew: James McDivitt (Commander),
David Scott (Command Module Pilot)
and Russell Schweickart (Lunar Module Pilot)
March 3-13, 1969
Spacecraft: Apollo 9 (CSM Gumdrop
and LM Spider)
Launch Vehicle: Saturn V

+ APOLLO 10

Crew: Thomas Stafford (Commander),
John Young (Command Module Pilot)
and Eugene Cernan (Lunar Module Pilot)
May 18-26, 1969
Spacecraft: Apollo 10 (CSM Charlie Brown
and LM Snoopy)
Launch Vehicle: Saturn V

+ APOLLO 11

Crew: Neil Armstrong (Commander),
Michael Collins (Command Module Pilot),
Buzz Aldrin (Lunar Module Pilot)
July 16-24, 1969
Spacecraft: Apollo 11 (CSM Columbia
and LM Eagle)
Launch Vehicle: Saturn V

+ APOLLO 12

Crew: Pete Conrad (Commander),
Richard Gordon (Command Module Pilot),
Alan Bean (Lunar Module Pilot)
November 14-24, 1969
Spacecraft: Apollo 12 (CSM Yankee Clipper
and LM Intrepid)
Space Vehicle: Saturn V

+ APOLLO 13

Crew: James Lovell (Commander),
Jack Swigert (Command Module Pilot),
Fred Haise (Lunar Module Pilot)
April 11-17, 1970
Spacecraft: Apollo 13 (CSM Odyssey
and LM Aquarius)
Launch Vehicle: Saturn V

+ APOLLO 14

Crew: Alan Shepard (Commander),
Stuart Roosa (Command Module Pilot),
Edgar Mitchell (Lunar Module Pilot)
January 31-February 9, 1971
Spacecraft: Apollo 14 (CSM Kitty Hawk
and LM Antares)
Launch Vehicle: Saturn V

+ APOLLO 15

Crew: David Scott (Commander),
James Irwin (Lunar Module Pilot),
Alfred Worden (Command Module Pilot)
July 26-August 7, 1971
Spacecraft: Apollo 15 (CSM Endeavour
and LM Falcon)
Launch Vehicle: Saturn V

+ APOLLO 16

Crew: John Young (Commander),
Ken Mattingly (Command Module Pilot),
Charles Duke (Lunar Module Pilot)
April 16-27, 1972
Spacecraft: Apollo 16 (CSM Casper
and LM Orion)
Launch Vehicle: Saturn V

+ APOLLO 17

Crew: Eugene Cernan (Commander),
Ronald Evans (Command Module Pilot),
Harrison Schmitt (Lunar Module Pilot)
December 7-19, 1972
Spacecraft: Apollo 17 (CSM America
and LM Challenger)
Launch Vehicle: Saturn V

The Apollo Era

“‘Go, baby, go,’ Wernher von Braun,
the chief architect of the Saturn V rocket,
was heard to shout”

Poole, p. 85

64

NASA (APOLLO 4)

1967

The first liftoff of the Saturn V rocket. 9 Nov 1967.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1967.
25,4 x 20,3 cm (10 x 7.9 in), with “A Kodak Paper” watermarks on the verso.

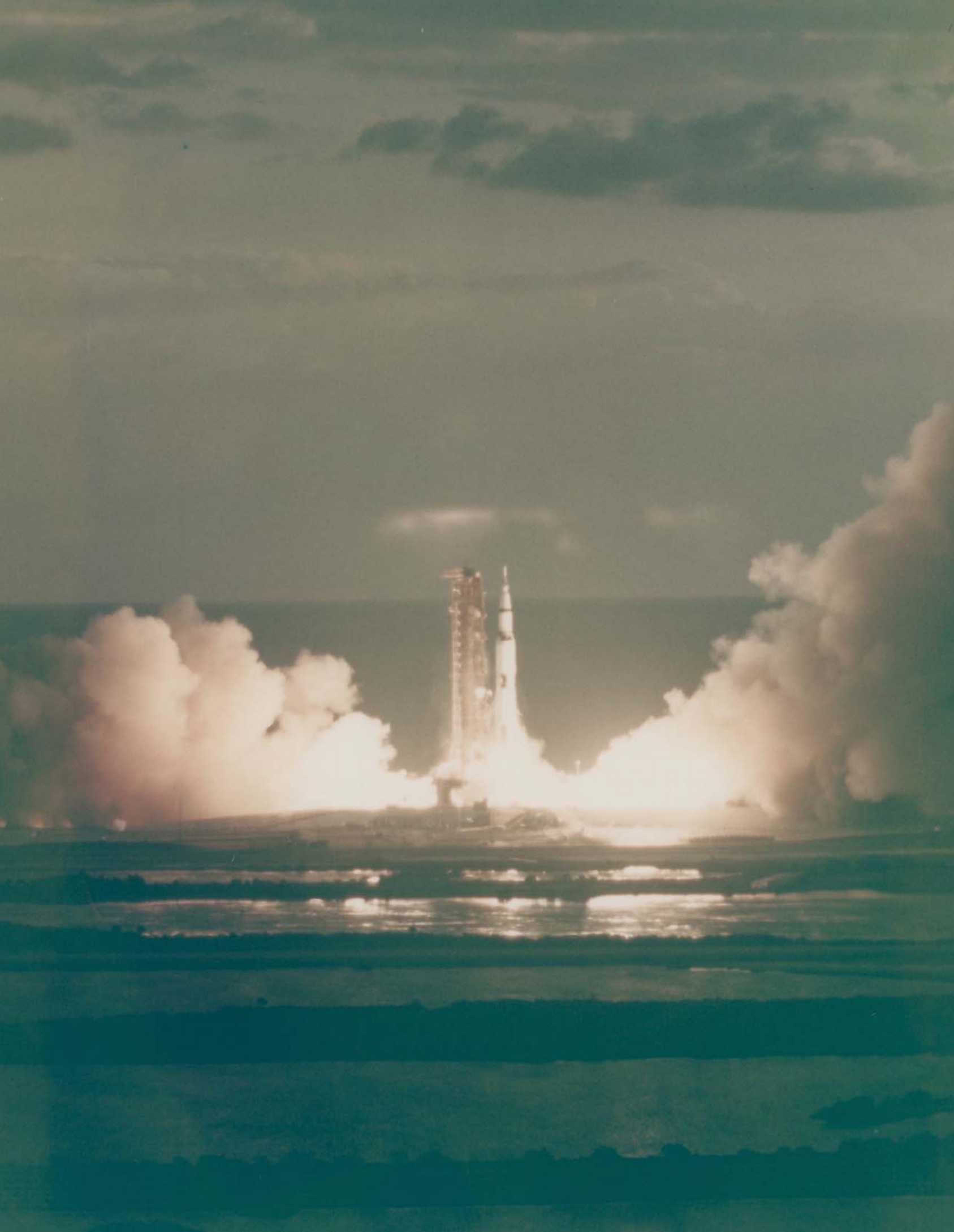
€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.03 pm (GMT+2)

On the morning of November 9, 1967, the ambitious effort to develop the Saturn V space vehicle was achieved. At 7:00 a.m. EST, NASA’s Kennedy Space Center experienced the roar of a rocket.

The mission was the first to lift off from Launch Complex 39, specially constructed for the giant Moon rocket, representing a major milestone in NASA’s efforts to land humans on the Moon.



65

NASA (APOLLO 4)

1967

First color photograph of Earth seen as a planet.
9 Nov 1967.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1967 [NASA AS4-1-200]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).

€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.04 pm (GMT+2)

The photographic mission of Apollo 4 was the acquisition and return of the highest altitude color imagery ever made of the Earth.

Until then the highest altitude color photographs of the Earth had been recorded by the Gemini 11 crew using the rocket on their Agena target vehicle to raise their apogee to 741 nautical miles (1,373 km), the highest Earth orbit ever reached by a crewed spacecraft.

The Saturn V rocket made two orbits of the Earth before the third stage booster fired to send the capsule out in a vast ellipse peaking at 9,767 nautical miles.

Located in the capsule of the spacecraft, looking out of the window, was not an astronaut but an automatic 70mm Maurer 220 G camera which took this fantastic photograph of the Earth seen in a beautiful crescent, providing a new perspective on our planet.

"Coastal Brazil, Atlantic Ocean, West Africa, Sahara, looking northwest, as photographed from the unmanned Apollo 4 (Spacecraft 017/Saturn 501) Earth-orbital space mission. This picture was taken when the Spacecraft 017 and the Saturn IVB stage were orbiting Earth at an altitude of 9,060 nautical miles" (original NASA caption for AS4-1-200).

"This is a sight astronauts will see on the way to the Moon."

Samuel Phillips, Director of the Apollo Program, NASA (Cortright, p. 198)

66

NASA (ATS 3)

1967

The self portrait of mankind: historic color photograph of the full Earth. 18 Nov 1967.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1967. 20,3 x 25,4 cm (7.9 x 10 in), with "Sylvania Electronic Systems" stamp and "A Kodak Paper" watermarks on the verso (NASA / Sylvania).

€ 5.000 – 7.000
$ 6.000 – 8.400

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.05 pm (GMT+2)

A very important image in the history of all of photography.

Beginning on November 10, 1967, ATS III, a geostationary satellite equipped with a revolutionary color camera, transmitted the historic first color photographs of the entire disc of our Home Planet from an altitude of about 22,300 miles. ATS III was stationed over the Equator at approximately 47° W. Most of America and West Africa are clearly visible.

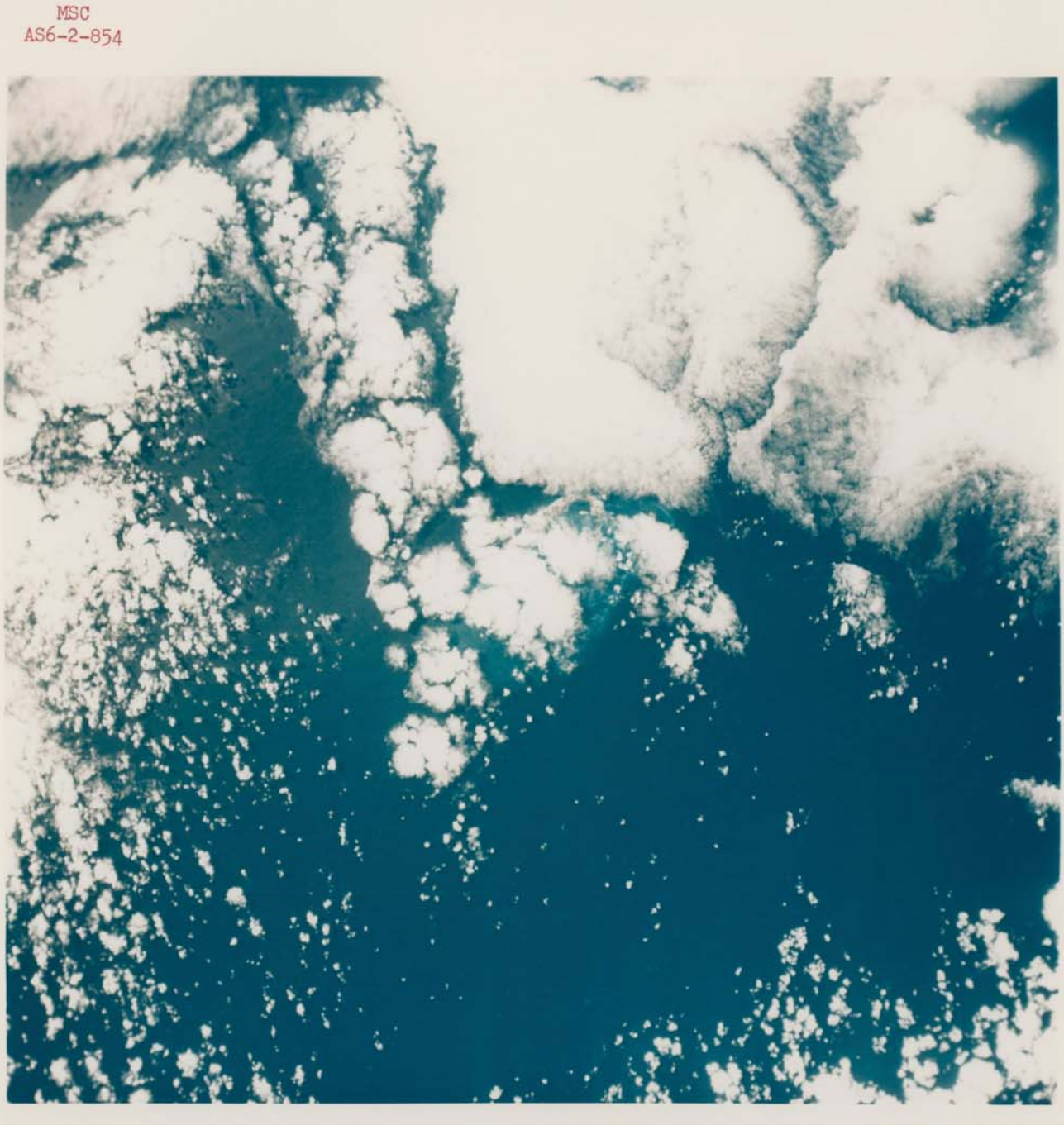
These long-awaited images could be described as mankind's first self-portraits.

Edgar Cortright, then NASA Langley director, selected this photograph taken on 18 November 1967 as the frontispiece for the landmark NASA publication "Exploring Space with a Camera" published the following year.

Even at this relatively short distance in time, it is difficult to imagine the impact it had on the public who responded with real emotion to the first images of their planet in its true colors.

Twenty-four Apollo astronauts from 1968 to 1972 were the only men to witness their planet as a globe in space and Apollo 17 the only crew to photograph such a fully illuminated view of the Earth.

Sylvania Electronic Systems was one of the NASA contractors for ATS III.



67

NASA (APOLLO 6)

First Apollo orbital views of the Earth: abstractions of clouds over the Atlantic Ocean (4). 4 Apr 1968.

Four vintage Chromogenic prints on fiber-based Kodak paper, printed 1968.
Each 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "MSC AS6-2-854", "MSC AS6-2-910", "MSC AS6-2-922", "MSC AS6-2-930" (NASA MSC) in red in top margin.
Four very rare unpublished photographs.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

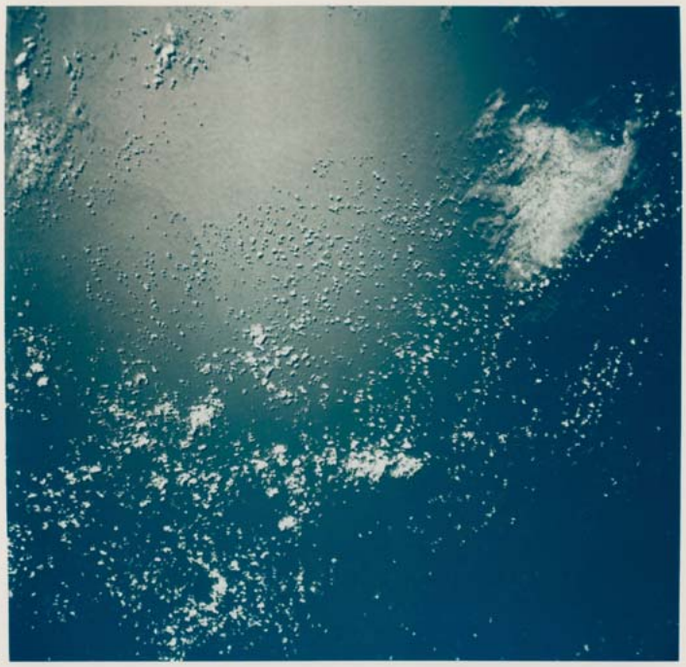
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.06 pm (GMT+2)

Apollo 6 was the final unmanned Apollo test mission of the Saturn V rocket that would take astronauts to the Moon. An automated 70mm Maurer still camera was mounted in the Command Module of the Apollo 6 vehicle to take photographs of the Earth; the camera was recovered with the capsule in the Pacific Ocean. The photographic mission of Apollo 6 was to photograph a whole orbit of the Earth in a vertical sequence, which would begin at the end of the first orbit near New Orleans and terminate at the end of the second orbit over Baja California.

These photographs were taken during the first orbit over the Atlantic Ocean showing clouds, waves and Sun glint.

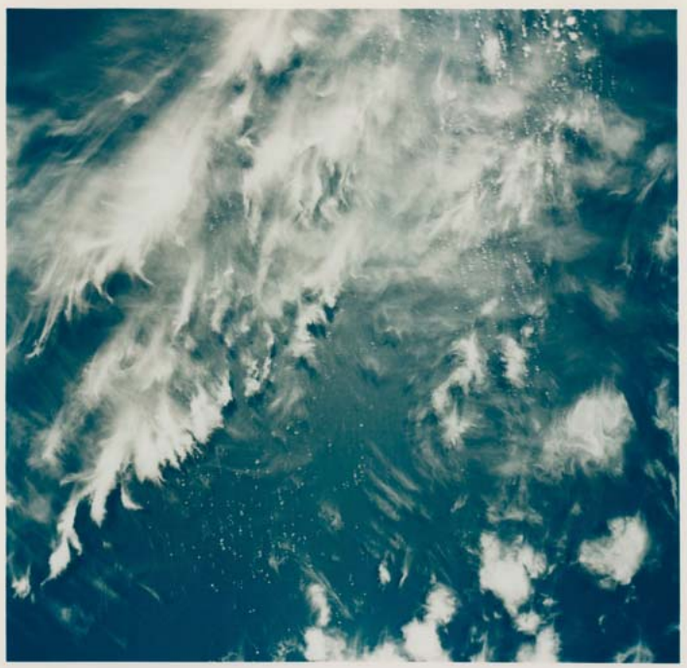
"While Apollo 6 was orbiting the Earth, the spacecraft's special 70-millimeter camera obtained some spectacular color stereo photographs. These were later found to be excellent for cartographic, topographic, and geographic studies of continental areas, coastal regions, and shallow waters. The camera photographed sections of the United States, the Atlantic Ocean, Africa, and the western Pacific Ocean, and had a haze-penetrating film and filter combination that provided better color balance and higher resolution than any photographs obtained during the Mercury and Gemini flights"
(https://www.nasa.gov/mediacast/the-legacy-of-apollo-6).

MSC
AS6-2-910



MSC
AS6-2-922

MSC
AS6-2-930



“We’re looking right down at the Cape.”

Walter Cunningham

68

WALTER CUNNINGHAM (APOLLO 7)

1968

First Apollo rocket stage photographed from space: the SIVB stage orbiting the Earth over Cape Kennedy. 11-22 Oct 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968 [NASA AS7-3-1545] 25,4 x 20,3 cm (10 x 7.9 in), with “A Kodak Paper” watermarks on the verso (NASA / North American Rockwell).

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.07 pm (GMT+2)

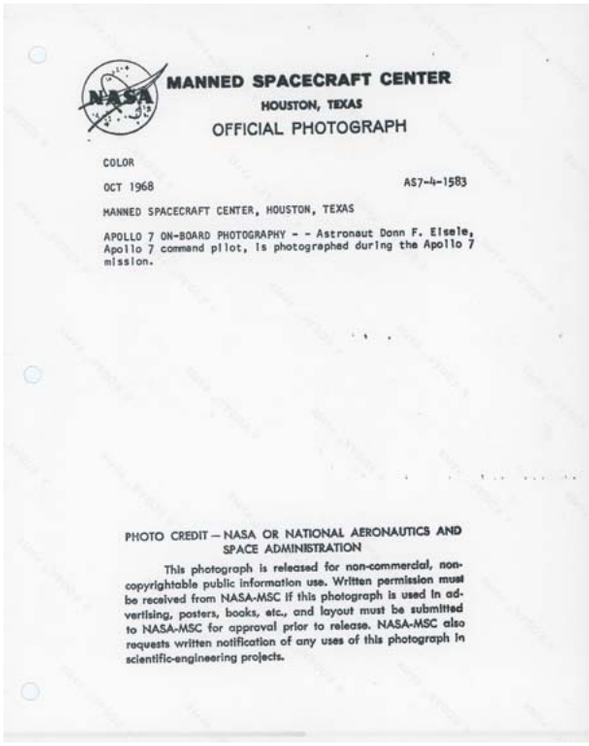
“Probably my favorite picture is of Cape Canaveral shown through the petals of the SIV-B, Cunningham took the picture but I had to fly the Apollo Command Module to get in position so he could sight down between the petals and see Cape Canaveral in the background.”

Walter Schirra (Schick and Van Haaften, p. 89).

The distance between the spacecraft and the expended Saturn SIVB stage is approximately 100 feet. Behind the open Spacecraft Lunar Module Adapter panels of the SIVB is the Gulf of Mexico. The panels had not fully deployed, which would have been problematic on a mission that carried a LM, but the panels would be jettisoned explosively on future flights.

From the mission transcript when the photograph was taken:
003:15:36 Cunningham: We’re looking right down at the Cape. We can get a picture of it in the background.
003:15:40 Stafford (Mission Control): Roger. You got a picture of them over the Cape in the background.
003:15:42 Cunningham: The Cape’s not clear.
003:15:44 Stafford: Roger.
003:15:45 Schirra: Now it’s starting to clear. [Pause.]
003:15:56 Stafford: Roger. You on top of the booster this time, Wally?
003:15:58 Schirra: Say again.
003:15:59 Stafford: You on top of the booster?
003:16:01 Cunningham: [Garble] we got some real great stuff here.
003:16:04 Stafford: Good show. Okay. In about a minute, the booster should start its retrograde maneuver.
003:16:10 Schirra: The booster is - engine is set up facing down toward the Atlantic Ocean - to straight down. We’re pointing straight down.


USA



MANNED SPACECRAFT CENTER
HOUSTON, TEXAS
OFFICIAL PHOTOGRAPH

COLOR
OCT 1968
AS7-4-1583

MANNED SPACECRAFT CENTER, HOUSTON, TEXAS

APOLLO 7 ON-BOARD PHOTOGRAPHY - - Astronaut Donn F. Eisele, Apollo 7 command pilot, is photographed during the Apollo 7 mission.

PHOTO CREDIT — NASA OR NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

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69

W. CUNNINGHAM OR W. SCHIRRA (APOLLO 7)

1968

First Apollo space portrait: Donn Eisele in weightlessness in the Command Module. 11-22 Oct 1968.

Vintage Chromogenic print on fiber-based Kodak Paper, printed 1968. 20,3 x 25,4 cm (7.9 x 10 in), with NASA MSC caption numbered "AS7-4-1583" and "A Kodak Paper" watermarks on the verso, with three filing holes in top margin not affecting image.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.08 pm (GMT+2)

"On Apollo 7, we had more film, and more time to kill," said Walter Schirra. "The Gemini spacecraft wasn't so spacious inside that you could get a good picture without a superwide-angle lens. But with the Apollo spacecraft, you had room to get some distance or depth of field. So we started studying the spacecraft contents, where before we had been fascinated by the view outside"

(Schick and Van Haaften, p. 21).

The mission signaled a new potential for on-board space photography, made possible by the relative spaciousness of the Apollo Command Module. For the first time, cameramen were free to move about the cabin and select framing and perspective.


NASA

70

WALTER CUNNINGHAM (APOLLO 7)

1968

"Victory at Sea": Sunrise from space over Florida Peninsula. 11-22 Oct 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968
[NASA AS 7-8-1933]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).
The morning Sun illuminating the Earth over the Florida Peninsula.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.09 pm (GMT+2)

"One of my favorite pictures," stated Schirra, "is one where the light reflects off the peninsula of Florida. I call it the 'Victory at Sea' effect"

(Schick and Van Haaften, p. 85).

"Everything came together on day nine, and we found ourselves looking at the Florida Peninsula, which had been our home for much of the preceding three years. Grabbing the Hasselblad camera. I perpetrated a photographic no-no, taking this picture looking into the Sun."

Walter Cunningham (Jacobs, p. 27).

71

WALTER CUNNINGHAM (APOLLO 7)

1968

The highest mountains of Earth from space (Himalayas including Mt Everest). 11-22 Oct 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968
[NASA AS7-7-1748]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper“ watermarks on the verso (NASA / North American Rockwell).

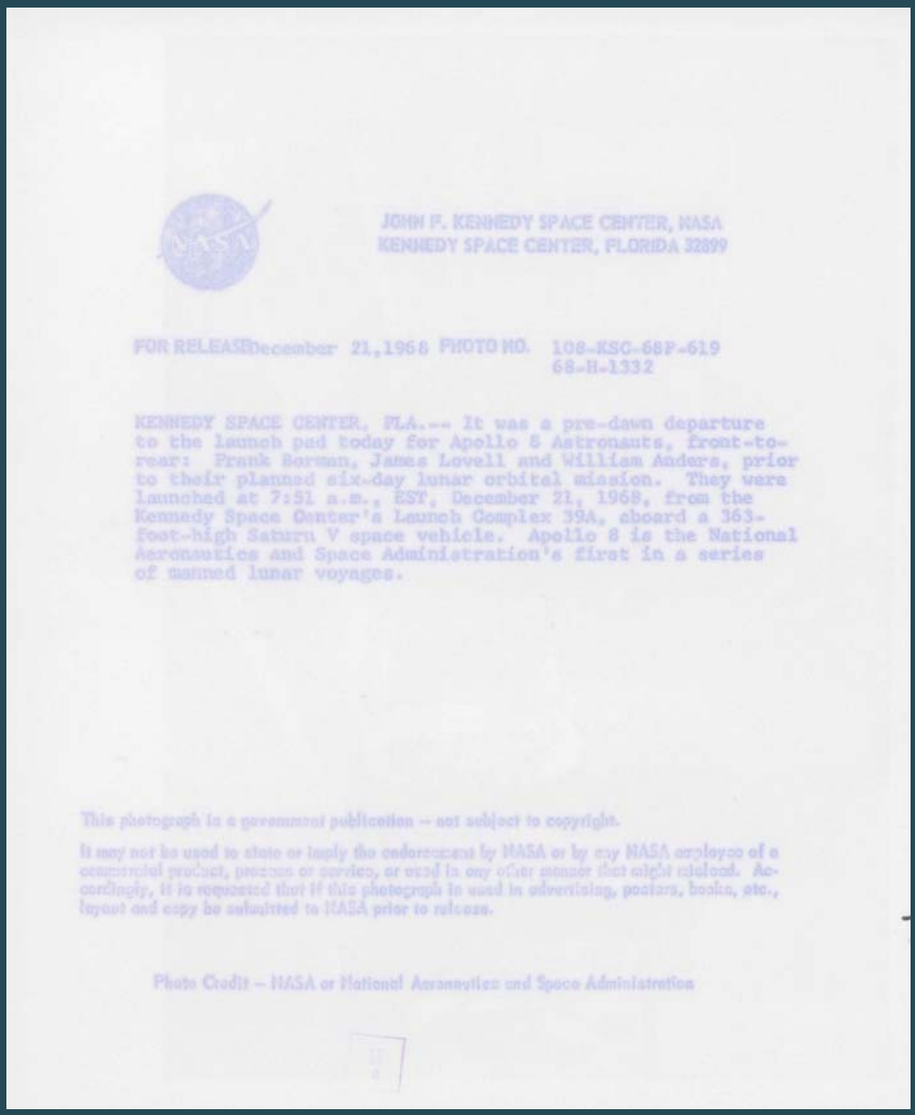
€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.10 pm (GMT+2)

Etched with remarkable clarity, the Himalayas pass beneath the high-flying Apollo 7 at an altitude of 130 nautical miles. “With at least one window in the spacecraft always facing such dazzling sights, Cunningham grew a bit blasé. Already on the eleventh or twelfth pass he found himself thinking, ‘Oh, it’s the Himalayas again’” (Mason, p. 144).

“The world’s dozen peaks which reach a height greater than five miles above sea level are visible with the 29,028 ft. high Mount Everest at lower center. On the central horizon can be seen the 28,250 ft. high Mount K-2 some 800 miles northwest of Mount Everest. In the lower right, Mount Kanchenjunga rises 28,208 ft. to separate Nepal from Sikkim. The snow line on the peaks was at 17,500 ft. In the upper right the lake-studded highlands of Tibet are visible” (original NASA caption for the present photograph).



JOHN F. KENNEDY SPACE CENTER, NASA
KENNEDY SPACE CENTER, FLORIDA 32899

FOR RELEASE December 21, 1968 PHOTO NO. 108-KSC-68P-619
68-H-1332

KENNEDY SPACE CENTER, FLA.-- It was a pre-dawn departure to the launch pad today for Apollo 8 Astronauts, front-to-rear: Frank Borman, James Lovell and William Anders, prior to their planned six-day lunar orbital mission. They were launched at 7:51 a.m., EST, December 21, 1968, from the Kennedy Space Center's Launch Complex 39A, aboard a 363-foot-high Saturn V space vehicle. Apollo 8 is the National Aeronautics and Space Administration's first in a series of manned lunar voyages.

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72

NASA (APOLLO 8)

1968

Leaving the Home Planet for the first time: the crew departing for the Moon. 21 Dec 1968.

Vintage Gelatin silver print on fiber-based paper, printed 1968. 20,3 x 25,4 cm (7.9 x 10 in), with NASA KSC caption numbered "68-H-1332" on the verso.

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.11 pm (GMT+2)

Apollo 8 marked the extraordinary moment in history when humans truly left their Home Planet for the first time. "We changed our plans on Apollo 8. They changed the mission from an Earth orbital type to a flight to the Moon. And it was a bold move. It had some risky aspects to it. But it was a time when we made bold moves."

James Lovell (from the 2007 documentary In The Shadow of the Moon).

"The Apollo 8 crew leaves the Kennedy Space Center's (KSC) Manned Spacecraft Operations Building (MSOB) during the Apollo 8 prelaunch countdown. Astronaut Frank Borman (waving to well-wishers), commander, leads followed by astronauts James A. Lovell Jr., command module pilot; and William A. Anders, lunar module pilot. The crew is about to enter a special transfer van which transported them to Pad A, Launch Complex 39, where their Apollo 8 (Spacecraft 103/Saturn 503) space vehicle awaited them. Liftoff for the lunar orbit mission was at 7:51 a.m. (EST). Holding the door to the transfer van is Charles Buckley, KSC security chief" (original NASA caption for NASA S-68-55999, a variant of the present photograph).


NO SMOKING
NO SMOKING
HE-702-014

73

NASA (APOLLO 8)

1968

Man's first liftoff to the Moon. 21 Dec 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968
[NASA S-68-56050]
25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso (NASA KSC).

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.12 pm (GMT+2)

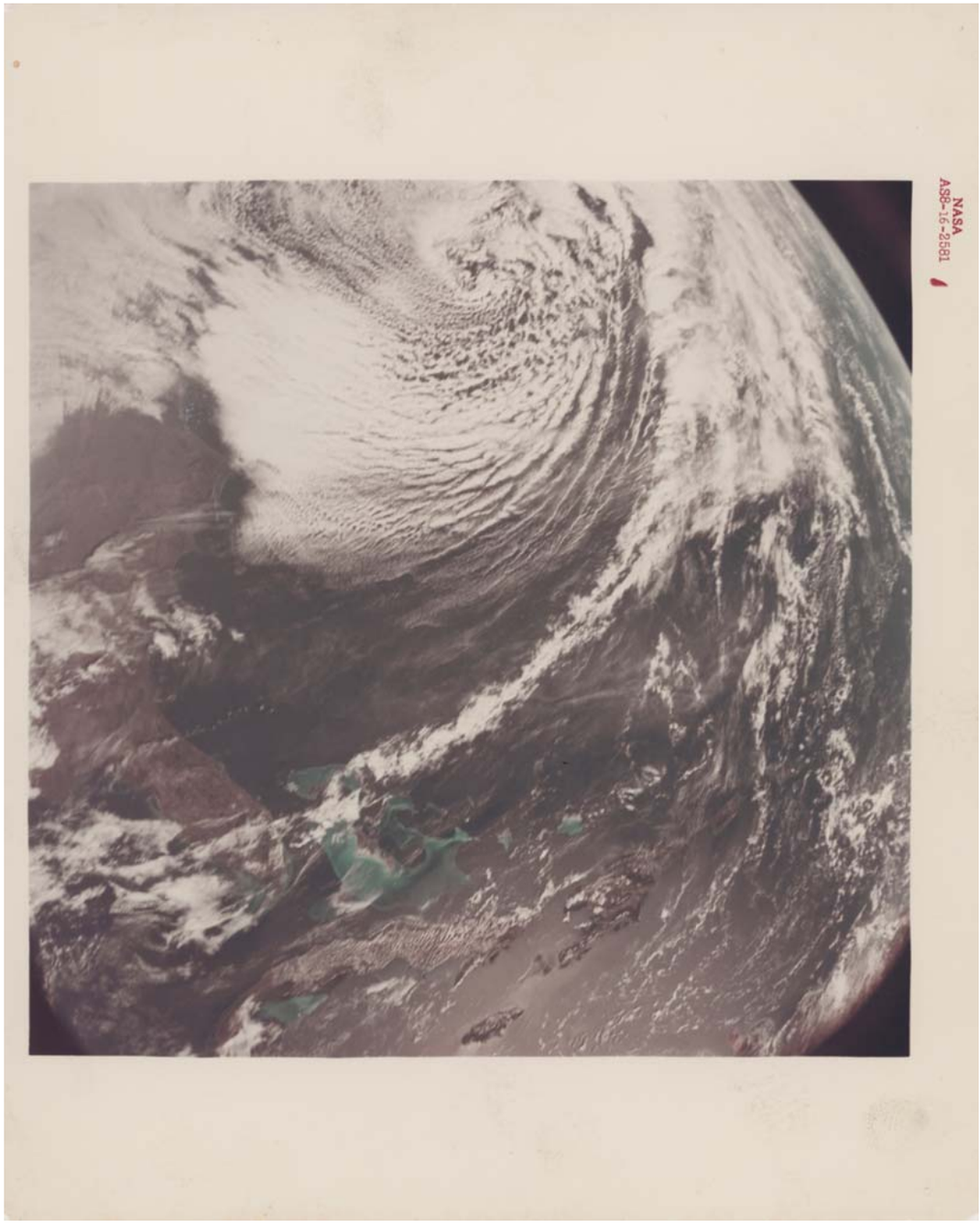
"We had a lot of acceleration just prior to first stage cutoff. We were really being squashed back... We were up to four and a half g's or whatever it was. And, you know, your chest compressed down. You're panting,"

remembered William Anders (Chaikin, Voices, p. 23).

The Apollo 8 (Spacecraft 103/Saturn 503) space vehicle was launched from Pad A, Launch Complex 39, Kennedy Space Center (KSC), at 7:51 a.m. (EST), Dec. 21, 1968.

Trailing an immense column of flame, the mighty Apollo 8 Saturn V speeded out of the atmosphere, next stop the Moon.

It was the first manned flight of the Saturn V and first manned flight to the Moon.



74

JAMES LOVELL (APOLLO 8)

1968

First human-taken photograph of Earth after translunar injection. 21-27 Dec 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968. 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS8-16-2581" (NASA MSC) in red in top margin.

€ 1.000 – 1.500
$ 1.200 – 1.800

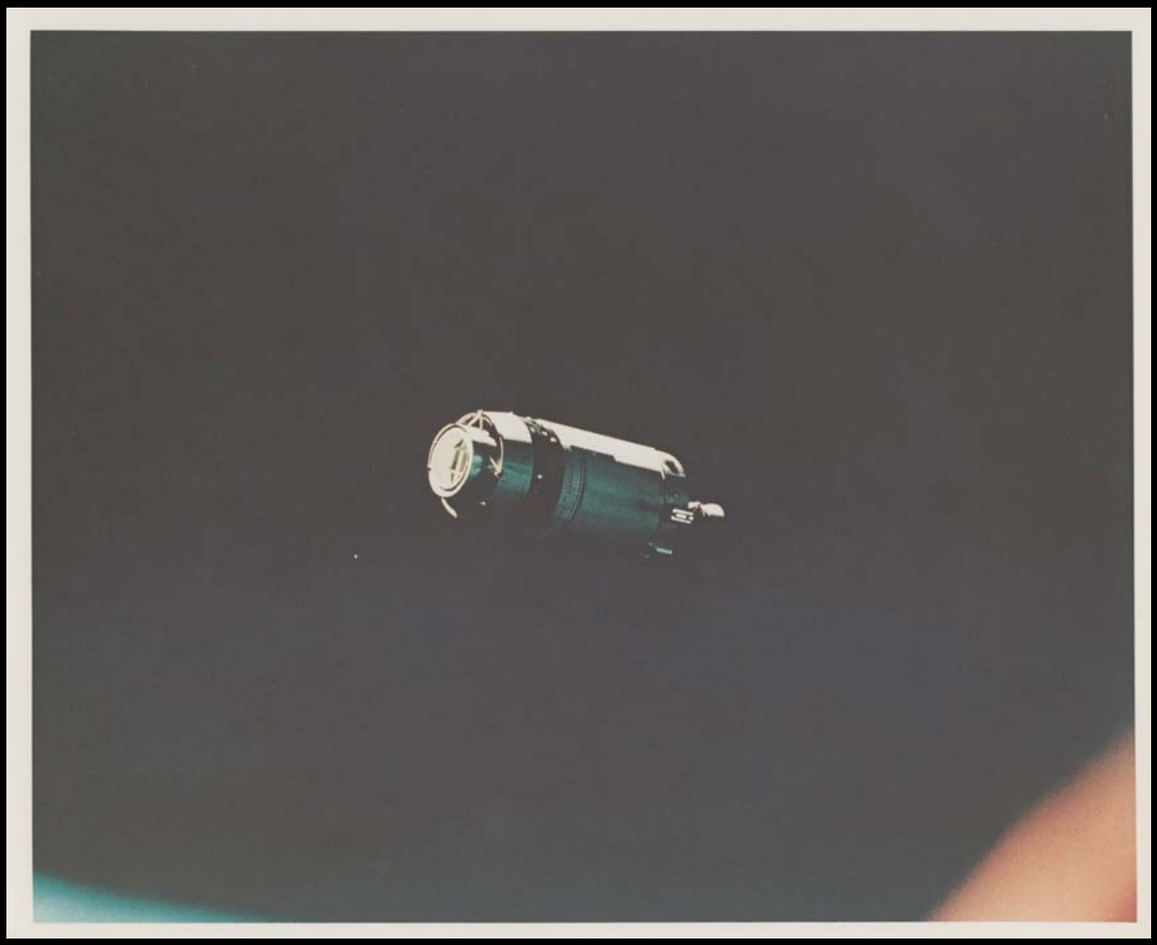
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.13 pm (GMT+2)

After orbiting the Earth twice, Apollo 8 fired the Saturn V third stage and broke free of Earth's gravitational pull on a trajectory for the Moon. The photograph was taken with the 80mm lens after separation from the expended SIVB third stage.

"Already farther out in space than man has ever flown, Apollo 8's crew at 3,500 miles gaze down on the shallow Bahama Banks (bottom of picture), turquoise against the darker, deeper Atlantic. Few clouds veil the southeastern coast of the United States and the West Indies (left of picture), but to the northeast a huge storm system swirls over the ocean. The spacecraft has now kicked out of Earth orbit toward the Moon" (NATIONAL GEOGRAPHIC, May 1969, p. 609).

"The other thing [...] was that this particular spot, the Bahamas lowland, was a turquoise jewel that you could see all the way to the Moon," observed William Anders. "It was like it was illuminated, like a piece of opal. And you could see that all the way. And I kept being amazed about that" (Chaikin, Voices, p. 26).



75

J. LOVELL; W. ANDERS (APOLLO 8)

1968

First translunar photographs: SIVB stage abandoned in space and Earth from 6,500 nautical miles (2). 21-27 Dec 1968.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1968 [AS8-14-2584 and AS8-14-2585]
Each 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.14 pm (GMT+2)

After translunar injection, the Command Module separated from the expended S-IVB third stage. Attached to the SIVB is the Lunar Module Test Article (LTA) which simulated the mass of a Lunar Module (LM) on the Apollo 8 lunar orbit mission.

The 29-feet panels of the Spacecraft LM Adapter (SLA) which enclosed the LTA during launch have already been jettisoned and are out of view.

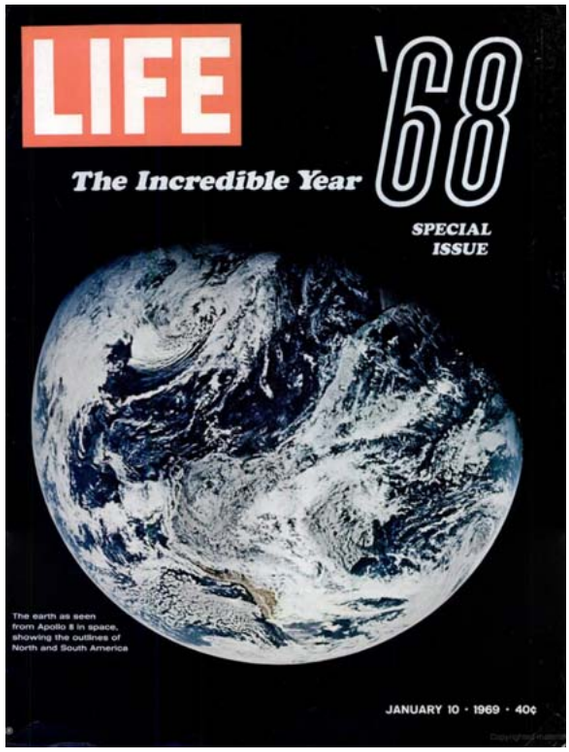
While the SIVB was drifting through space (first photograph), the crew experienced a fantastic view of the curvature of the Earth from 6,500 nautical miles away with the Atlantic Ocean and the west coast of Africa clearly visible (second photograph, taken with the 80mm lens).

They still had to cross the vast translunar gulf for 66 hours.

From the mission transcript:
003:35:44 Borman: We see the Earth now, almost as a disk.
003:35:49 Collins (Mission Control): Good show. Get a picture of it.
003:35:51 Borman: We are.
003:35:54 Borman: Tell Conrad he lost his record.
003:35:59 Lovell: We have a beautiful view of Florida now. We can see the Cape, just the point.
003:36:05 Collins: Roger.
003:36:06 Lovell: And at the same time, we can see Africa. West Africa is beautiful. I can also see Gibraltar at the same time I'm looking at Florida.
003:36:20 Collins: Sounds good. Get a picture of it. What window are you looking out?
003:36:29 Lovell: The center window.
003:36:30 Collins: Roger. [Pause.]
003:36:39 Collins: Are your windows clear so far? [Long pause.]
003:36:39 Public Affairs Officer (Mission Control): This is Apollo Control, Houston. The crew seems to be pretty settled down after their Translunar Injection burn and they are getting some time on the window. We just heard Jim Lovell report he could see Florida perfectly. By the way, they are at about 6,500 [nautical] miles [12,000 km] above the Earth now. He said he had a beautiful view of Florida and then his gaze roamed a little bit to the other side of the window and he could also see Gibraltar. The crew reminded the Control Center here that Pete Conrad and Dick Gordon would have to step aside. Their altitude record(1,368 km on Gemini 11) has been exceeded.

“We see the Earth now, almost as a disk.”

Frank Borman



"To see the Earth as it truly is, small and blue and beautiful in that eternal silence where it floats, is to see ourselves as riders on the Earth together, brothers on that bright loveliness in the eternal cold – brothers who know now they are truly brothers."

Archibald McLeish (The New York Times, December 25, 1968)

William Anders and his crewmates James Lovell and Frank Borman became the first human beings to see the Earth as a sphere hanging in space. The photograph was taken 4 hours and 36 minutes after launch with the 80mm lens from about 27,000 km out in space.

The photograph graced the cover of Life magazine (The incredible year 1968; January 10, 1969).

"A striking view from the Apollo 8 spacecraft showing nearly the entire Western Hemisphere, from the mouth of the St. Lawrence River, including nearby Newfoundland, extending to Tierra del Fuego at the southern tip of South America. Central America is clearly outlined. Nearly all of South America is covered by clouds, except the high Andes Mountain chain along the west coast. A small portion of the bulge of West Africa shows along the sunset terminator" (original NASA caption for AS8-16-2593).

From the mission transcript after translunar injection:
003:38:00 Lovell: Roger. Well, Mike, I can see the entire Earth now out of the center window. I can see Florida, Cuba, Central America, the whole northern half of Central America, in fact, all the way down through Argentina and down through Chile.
003:38:25 Collins (Mission Control): They picked a good day for it. [...]
004:06:36 Collins: How close to a radial burn can you get without losing sight of the S-IVB (booster), Frank?
004:06:41 Borman: Well, I don't know because I can't see the Earth now, Mike. [...]
004:06:51 Borman: We can pitch down some. Jim has the Earth in the optics so we could pitch some and get pretty close to one (a radial burn), I guess. [...]
004:17:11 Collins: Roger, Frank. You could help us out if you would explain where you are relative to the booster. In other words, with respect to the Earth and the radius back there, are you above or below or one side, or where exactly is the booster relative to you?
004:17:27 Borman: Well, it's as I said before. We can't definitely find the Earth. I think we are in front and a little bit above - a little bit above the - almost in front of the - directly in the front of the booster. [...]
004:36:00 Anders: Roger. If it will help you any, Mike, the Earth is plus-Y about 45 degrees in a minus-X. I can see it out my side window, and it's a beautiful view with numerous cloud vortex. [...]
004:36:51 Anders: It's behind us to the right, if that will help.
004:36:54 Collins: Roger. [Long pause.]
004:37:15 Borman: I can still see the Cape and isthmus of Central America.

76

WILLIAM ANDERS (APOLLO 8)

1968

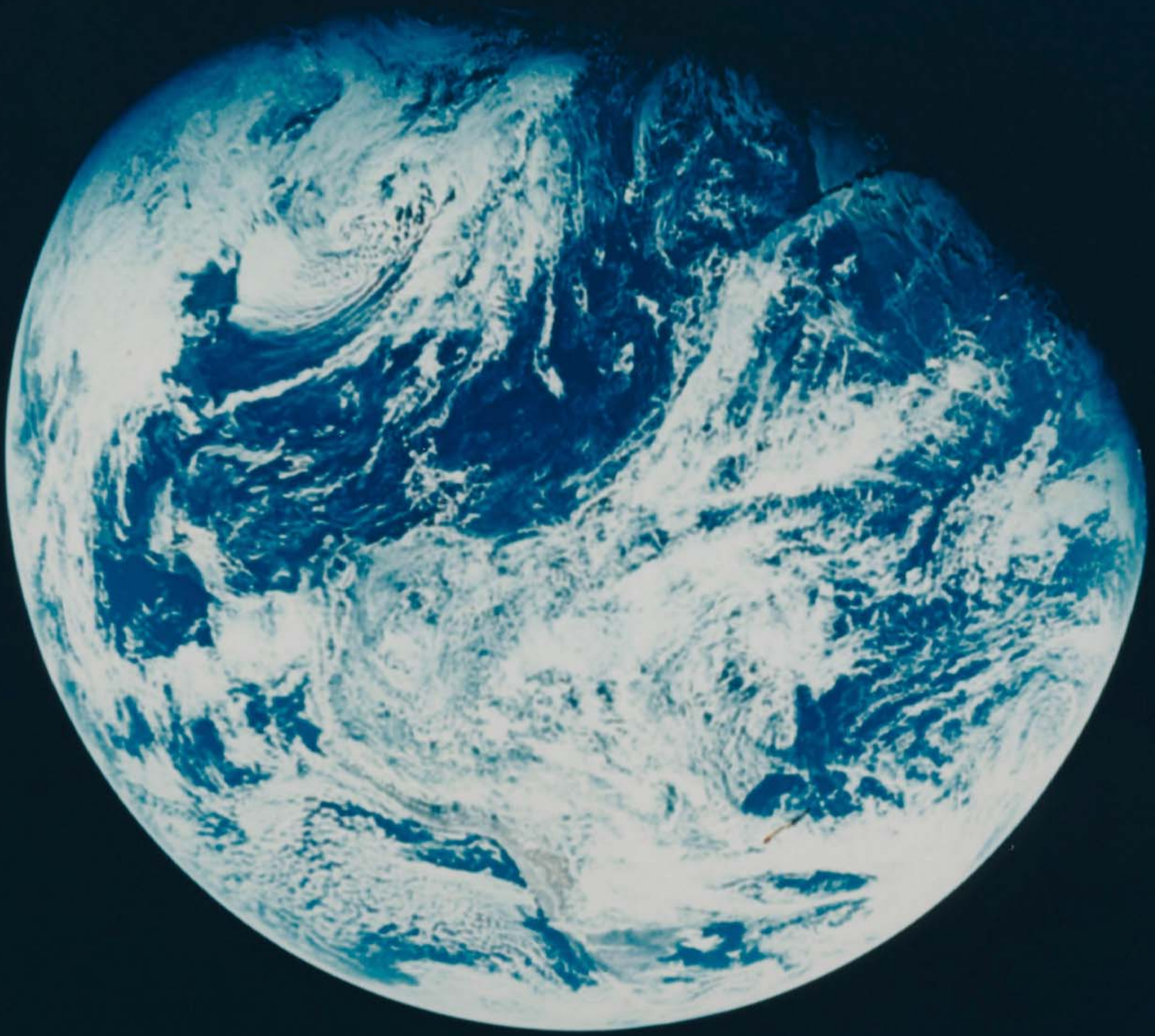
First human-taken photograph of the Planet Earth: cover of LIFE. 21-27 Dec 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed January 1969 [NASA AS8-16-2593] 25,4 x 20,3 cm (10 x 7.9 in), with McDonnell Douglas credit stamp dated "1-7-69", "D4C 5779" stamp and "A Kodak Paper" watermarks on the verso (NASA / McDonnell Douglas).

€ 5.000 – 7.000
$ 6.000 – 8.400

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.15 pm (GMT+2)



"I can see the entire Earth now
out of the center window."

James Lovell

77

ANDERS, BORMAN OR LOVELL (APOLLO 8)

1968

The Earth seen by the first human beings who left their Home Planet. 21-27 Dec 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968 [NASA AS8-16-2640]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).
A very rare unpublished photograph taken with the 80mm lens from about 60,000 miles out in space on the homeward journey to Earth. The frame of the spacecraft's window is at top left.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.16 pm (GMT+2)

"When those views came back by television and in photographs, mankind could see for the first time that it existed on a very small, fragile, finite Earth."

William Anders (Schick and Van Haaften, p. 95)

"The Earth [...] captured my attention. It was the only object in the universe that we could see that had color. It was beautiful, blue with white clouds, serene and majestic. It was home."

Frank Borman (Jacobs, p. 34)

"Photography brought home the real meaning of our space activity, a grasp of what we can accomplish, and a view of the Earth as it really is: a small planet in a common type of planetary system around a rather normal, nondescript star."

James Lovell (Schick and Van Haaften, p. 54).

From the mission transcript on the way to the Moon:
055:18:22 Lovell: Mike (Collins at Mission Control), what I keep imagining is, if I'm a - some lonely traveler from another planet, what I think about the Earth at this altitude, whether I think it'd be inhabited or not.
055:18:31 Collins: Don't see anybody waving; is that what you are saying?
055:18:36 Lovell: I was just kind of curious whether I would land on the blue or the brown part of the Earth.
055:18:44 Anders: You better hope that we land on the blue part.

"The Moon is essentially grey, no color; looks like plaster of Paris or sort of a grayish beach sand."

James Lovell

"We were there. I mean, if things didn't work going to the Moon, we were going to get a free ride home, on a free-return trajectory" noted William Anders. "Maybe the reentry wouldn't be perfect, but at least we'd have a shot at it. Once that rocket worked and got us to lunar orbit, then it had to work again, or we were stuck"

(Chaikin, Voices, p. 42).

78

FRANK BORMAN (APOLLO 8)

1968

First human-taken photograph in lunar orbit: Crater Langrenus. 21-27 Dec 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968 [NASA AS8-16-2615]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.17 pm (GMT+2)

For three days the Apollo 8 astronauts journeyed outward toward a goal they could not see. The Moon would fill their view once they slipped into orbit around it.

This historic photograph of the 132-km Crater Langrenus was taken by Borman from an altitude of 240 km looking southwest with the 80mm lens and color magazine 16/A after acquisition of signal with Earth on the lunar nearside following the successful lunar insertion burn. Latitude / longitude: 9° S / 61° E.

From the mission transcript during the first revolution around the Moon:
069:33:52 Lovell: Go ahead, Houston, (This is) Apollo 8. Burn complete. Our orbit (is) 169.1 by 60.5; 169.1 by 60.5 (nautical miles).
069:34:07 Carr (Mission Control): Apollo 8, this is Houston. Roger, 169.1 by 60.5. Good to hear your voice. [...]
069:49:47 Lovell: For information, we're passing over just to the side of the crater Langrenus at this time, going into the Sea of Fertility. [...]
069:51:04 Carr: Apollo 8, Houston. What does the ole Moon look like from 60 miles? Over.
069:51:16 Lovell: Okay, Houston. The Moon is essentially grey, no color; looks like plaster of Paris or sort of a grayish beach sand. We can see quite a bit of detail. The Sea of Fertility doesn't stand out as well here as it does back on Earth. There's not as much contrast between that and the surrounding craters. [Pause.] The craters are all rounded off. There's quite a few of them, some of them are newer. Many of them look like - especially the round ones - look like hit by meteorites or projectiles of some sort. [Pause.] Langrenus is quite a huge crater; it's got a central cone to it. [Long pause.] The walls of the crater are terraced, about six or seven different terraces on the way down.

79

WILLIAM ANDERS (APOLLO 8)

1968

Man‘s first orbit around the Moon: Crater Gloclenius. 21-27 Dec 1968.

Vintage Gelatin silver print on fiber-based paper, printed 1968
[NASA AS8-13-2225]
20,3 x 25,4 cm (7.9 x 10 in), (NASA MSC).
The photograph was taken by Anders looking southeast with the 250mm telephoto lens and B&W magazine 13/E.

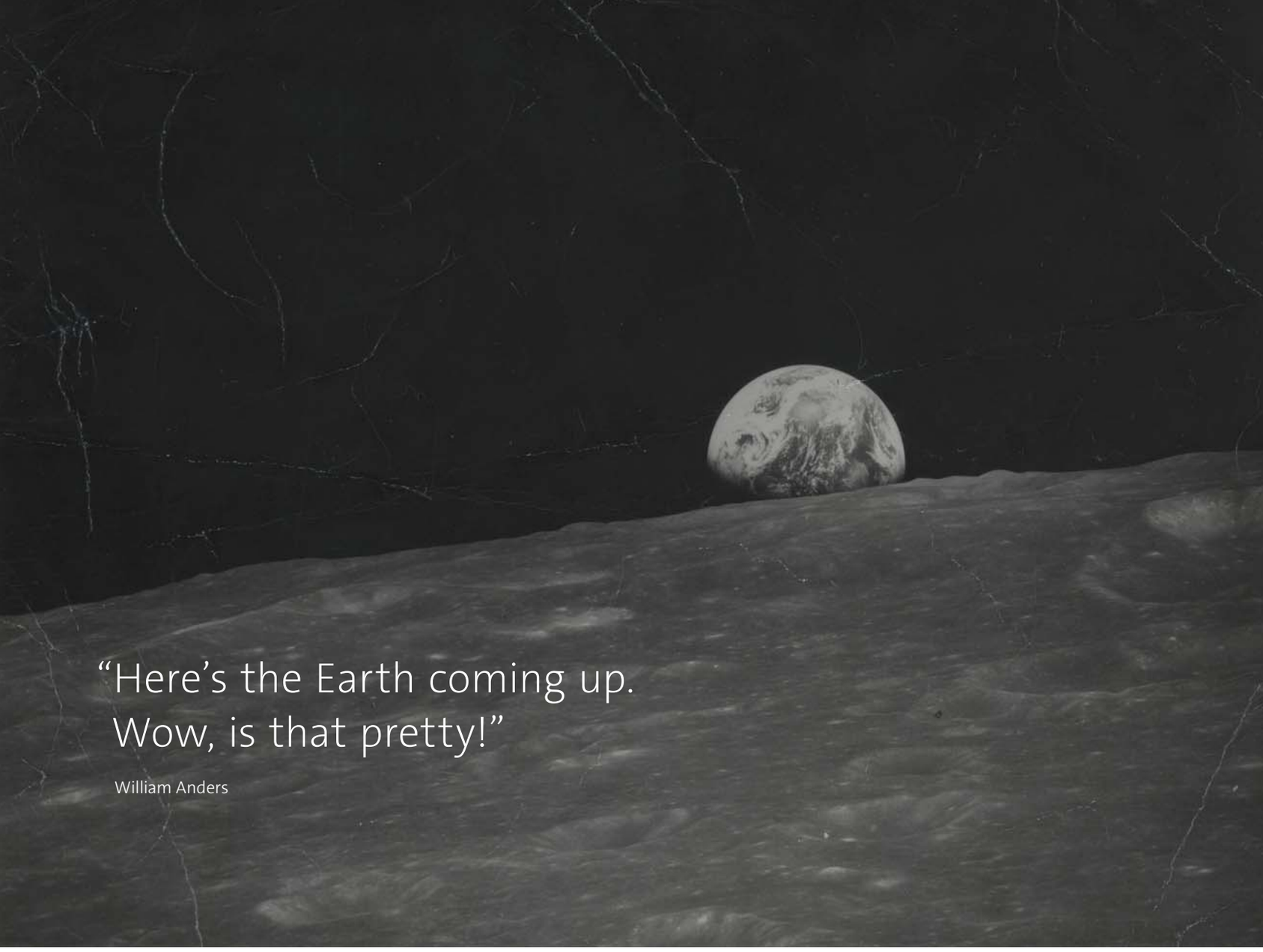
€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.18 pm (GMT+2)

The 70-km Crater Goclenius (latitude / longitude: 10.0°S 45.0°E) lies on the southern edge of the Sea of Fertility. Numerous rilles scarring its floor can be seen; one rille extends across the entire crater floor, over the central peak, and across the rim into the smooth mare. In the background, the two large craters with smooth floors are the 41-km Craters Colombo A (left) and Magelhaens. Magelhaens A, the crater with the irregular floor, is about 35 kilometers in diameter.

From the mission transcript when the photograph was taken:
069:56:33 Anders: Now we’re coming upon the craters Colombo and Gutenberg. Very good detail visible. We can see the long parallel faults or grabens. [Pause.] And they run through the mare material right into the highland material.



80

WILLIAM ANDERS (APOLLO 8)

1968

The extraordinary rare first human-taken photograph of Earthrise. 21-27 Dec 1968.

Vintage Gelatin silver print on fiber-based paper, printed 1968.
20,3 x 25,4 cm (7.9 x 10 in), numbered “AS8-13-2329” in black in bottom margin, with NASA Goddard space Flight Center credit stamp on the verso, with multiple creases and restorations throughout the print.

€ 15.000 – 20.000
$ 18.000 – 24.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.19 pm (GMT+2)

“There was nothing in the plan for an Earthrise photo. Indeed, we didn’t even see an actual Earthrise until, on our third orbit, we changed the spacecraft’s orientation to heads up and looking forward. As we came round the back side of the Moon, where I had been taking pictures of craters near our orbital track, I looked up and saw the startlingly beautiful sight of our home planet ‘rising’ up above the stark and battered lunar horizon. It was the only color against the deep blackness of space. In short, it was beautiful, and clearly delicate.”

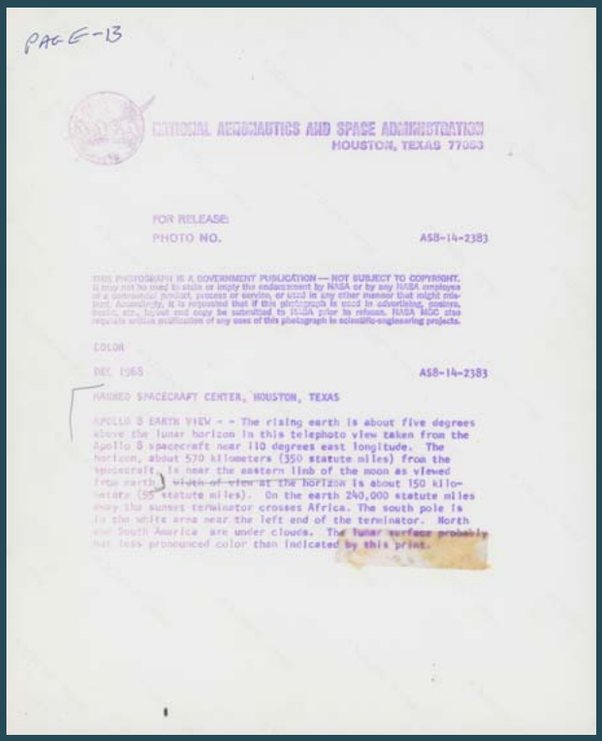
William Anders (Jacobs, p. 33).

The first photograph of the first Earthrise ever witnessed by human beings.

This historic, extraordinary rare photograph was not released by NASA after the mission and lay uncelebrated for decades until NASA’s Scientific Visualization Studio confirmed in 2013 that this was humanity’s first photograph of Earthrise, the most awesome view witnessed by man.

Caught off guard by the amazing sight during Apollo 8’s 4th orbit of the Moon, Anders took this historic shot using B&W film before changing his camera’s magazine to capture the now iconic color Earthrise.

From the mission transcript (photograph taken 075:47:44 after launch):
075:47:30 Anders: Oh, my God! Look at that picture over there! Here’s the Earth coming up. Wow, is that pretty!
075:47:37 Borman: Hey, don’t take that, it’s not scheduled. (Chuckle.)
075:47:39 Anders: [Laughter.] You got a color film, Jim?



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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
HOUSTON, TEXAS 77053

FOR RELEASE:
PHOTO NO. AS8-14-2383

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COLOR

DEC 1968 AS8-14-2383

MANNED SPACECRAFT CENTER, HOUSTON, TEXAS

APOLLO 8 EARTH VIEW - - The rising earth is about five degrees above the lunar horizon in this telephoto view taken from the Apollo 8 spacecraft near 110 degrees east longitude. The horizon, about 570 kilometers (350 statute miles) from the spacecraft, is near the eastern limb of the moon as viewed from earth. ~~Width of view at the~~ HORIZON is about 150 kilometers (95 statute miles). On the earth 240,000 statute miles away the sunset terminator crosses Africa. The south pole is in the white area near the left end of the terminator. North and South America are under clouds. The lunar surface probably has less pronounced color than indicated by this print.

81

WILLIAM ANDERS (APOLLO 8)

1968

The first human-taken color photograph of Earthrise. 21-27 Dec 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968. 20,3 x 25,4 cm (7.9 x 10 in), with NASA MSC caption and "A Kodak Paper" watermarks on the verso, numbered "NASA AS8-14-2383" in red in top margin, with a small tear in bottom right margin not affecting image.

€ 8.000 – 12.000
$ 9.600 – 14.400

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.20 pm (GMT+2)

The first color photograph of the first Earthrise ever witnessed by human beings.

Anders took this iconic photograph of the Earth (240,000 statute miles away) rising over the lunar horizon with the 250mm telephoto lens and color magazine 14/D looking west across the western shore of the farside Crater Pasteur.

[NASA caption] The rising Earth is about five degrees above the lunar horizon in this telephoto view taken from the Apollo 8 spacecraft near 110 degrees east longitude. The horizon, about 570 kilometers (350 statute miles) from the spacecraft, is near the eastern limb of the Moon as viewed from Earth. Width of the view at the horizon is about 150 kilometers (95 statute miles). On Earth the Sunset terminator crosses Africa. The South Pole is in the white area near the left end of the terminator. North and South America are under the clouds. The lunar surface has less pronounced color than indicated by this print.

From the mission transcript (photograph taken 075:48:39 GET after launch):
075:47:46 Anders: Hand me that roll of color quick, will you...
075:47:48 Lovell: Oh man, that's great!
075:47:50 Anders: ...Hurry. Quick.
075:47:54 Borman: Gee.
075:47:55 Lovell: It's down here?
075:47:56 Anders: Just grab me a color. That color exterior.
075:48:00 Lovell: [Garble].
075:48:01 Anders: Hurry up!
075:48:06 Borman: Got one?
075:48:08 Anders: Yeah, I'm looking for one. 075:48:10 Lovell: C 368. [Anders is handed color magazine 14/D; 368 refers to film type, SO-368, an Ektachrome-type transparency film manufactured by Kodak]
075:48:11 Anders: Anything, quick.
075:48:13 Lovell: Here.
075:48:17 Anders: Well, I think we missed it.
075:48:31 Lovell: Hey, I got it right here! [In the hatch window.]
075:48:33 Anders: Let - let me get it out this window. It's a lot clearer.
075:48:37 Lovell: Bill, I got it framed; it's very clear right here.
075:48:40 Lovell: You got it?
075:48:41 Anders: Yep.

“Oh man, that’s great!”

James Lovell

82

WILLIAM ANDERS (APOLLO 8)

1968

The first human-taken color photograph of Earthrise. 21-27 Dec 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968 [NASA AS8-14-2383]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).
The first color photograph of the first Earthrise ever witnessed by human beings.
The celebrated view of planet Earth appearing over the bleached lunar horizon.

€ 8.000 – 12.000
$ 9.600 – 14.400

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.21 pm (GMT+2)

"The happy combination of a long lens, color film, my varying f-stops as I shot, and a much cleaner window on my side of the spacecraft, all resulted in one of the pictures from my camera's magazine being selected by NASA as what has since become the iconic 'Earthrise'. "

William Anders (Jacobs, p. 33).

Different versions of Earthrise (with different contrasts and tones) were published by NASA, including this one matching closely the photograph published in LIFE Magazine on January 10, 1969.

The Apollo 8 astronauts saw the first Earthrise ever witnessed by human eyes during the fourth revolution of the spacecraft around the Moon. William Anders took three photographs with the 250mm telephoto lens during the event. The first was black and white, followed by two color photographs.

"Oh, that's a beautiful shot."

James Lovell

83

WILLIAM ANDERS (APOLLO 8)

1968

First Earthrise: the second color photograph of the first Earthrise witnessed by human beings. 21-27 Dec 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968
[NASA AS8-14-2384]
20,3 x 25,4 cm (7.9 x 10 in).

€ 4.000 – 6.000
$ 4.800 – 7.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.22 pm (GMT+2)

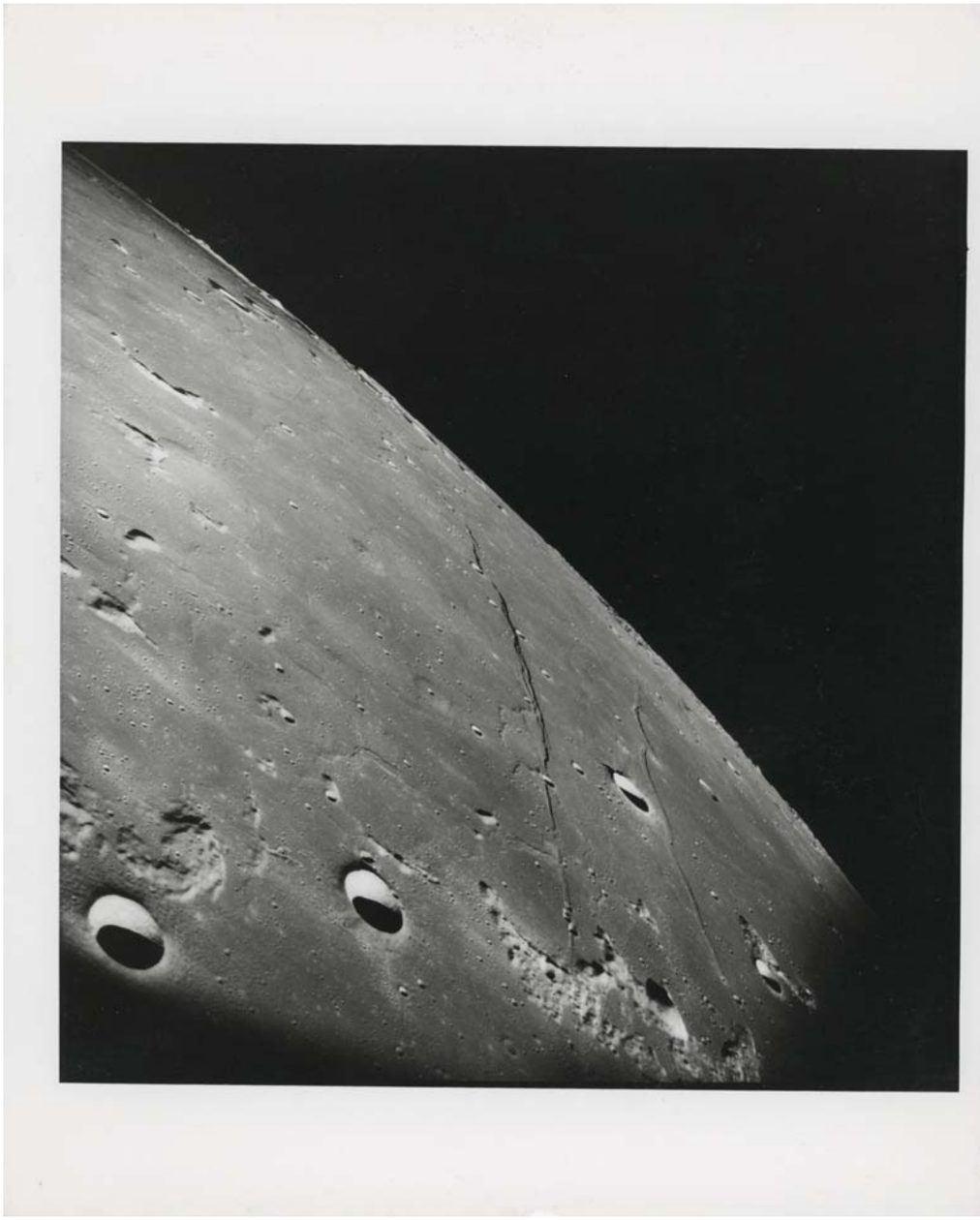
"That was the most beautiful thing I'd ever seen. The Earthrise. Totally unanticipated. Because we were trained to go to the Moon. [...] We were trained to get there. So, getting there was the big event. [...] It wasn't going to the Moon and looking back at the Earth. I never even thought about that!"

William Anders (Chaikin, Voices, p. 45).

The very rare second color photograph of the first Earthrise witnessed by human beings.

While the first Earthrise photograph was selected by picture editors around the world, this second photograph of the first Earthrise witnessed by human beings (taken a few seconds later on the same orbit) is very rare.

From the mission transcript (photograph taken 075:49:09 after launch):
075:48:42 Borman: Well, take several of them.
075:48:43 Lovell: Take several of them! Here, give it to me.
075:48:44 Anders: Wait a minute, let's get the right setting, here now; just calm down. Calm down, Lovell.
075:48:49 Lovell: Well, I got it ri - Oh, that's a beautiful shot.
075:48:54 Lovell: 250 at f/11.
075:49:07 Anders: Okay.
075:49:08 Lovell: Now vary the - vary the exposure a little bit.
075:49:09 Anders: I did. I took two of them.
075:49:11 Lovell: You sure we got it now?
075:49:12 Anders: Yes, we'll get - we'll - It'll come up again, I think.



84

ANDERS, BORMAN OR LOVELL (APOLLO 8)

1968

First seen by humans: Sea of Tranquillity from lunar orbit. 21-27 Dec 1968.

Vintage Gelatin silver print on fiber-based paper, printed 1968
[NASA AS8-13-2344]
25,4 x 20,3 cm (10 x 7.9 in), (NASA MSC).
A fantastic oblique view of the mare surface of the northern Sea of Tranquillity seen for the first time from manned lunar orbit.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.23 pm (GMT+2)

This oblique photograph of the northeastern portion of the Sea of Tranquillity taken between orbits 5 and 7 with the 250mm telephoto lens "looks generally northwest from the Apollo 8 spacecraft. The lower (nearest) linear feature is the Cauchy Scarp. The upper linear feature is the Cauchy Rille. The Prominent Crater Cauchy lies between the rille and the scarp" (original NASA caption for the present photograph).

Cauchy is located at latitude / longitude 9.6°N 38.6°E. Taruntius F is in the lower right corner; Taruntius E in the right center. Each of the three prominent craters is 10 to 15 km (6 to 9 statute miles) across.

One of the major objectives of the mission was to return photography of the proposed Apollo landing areas, specifically around the Sea of Tranquillity which included two possible landing sites.

Unfortunately the fogging of the windows made it difficult for Anders to obtain many photographs of the sites themselves. However their observations favored Apollo landing site 2 in the Sea of Tranquillity for the lunar landing.

85

FRANK BORMAN (APOLLO 8)

1968

The Earth emerging above the lunar horizon: third Earthrise witnessed by human beings. 21-27 Dec 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968 [NASA AS8-14-2392]
20,3 x 25,4 cm (7.9 x 10 in), with “A Kodak Paper” watermarks on the verso (NASA / North American Rockwell).
Borman took this photograph looking west across the 233-km Crater Pasteur with the 80mm lens during the 7th revolution around the Moon.

€ 2.500 – 4.000
$ 3.000 – 4.800

Bidding starts at € 100

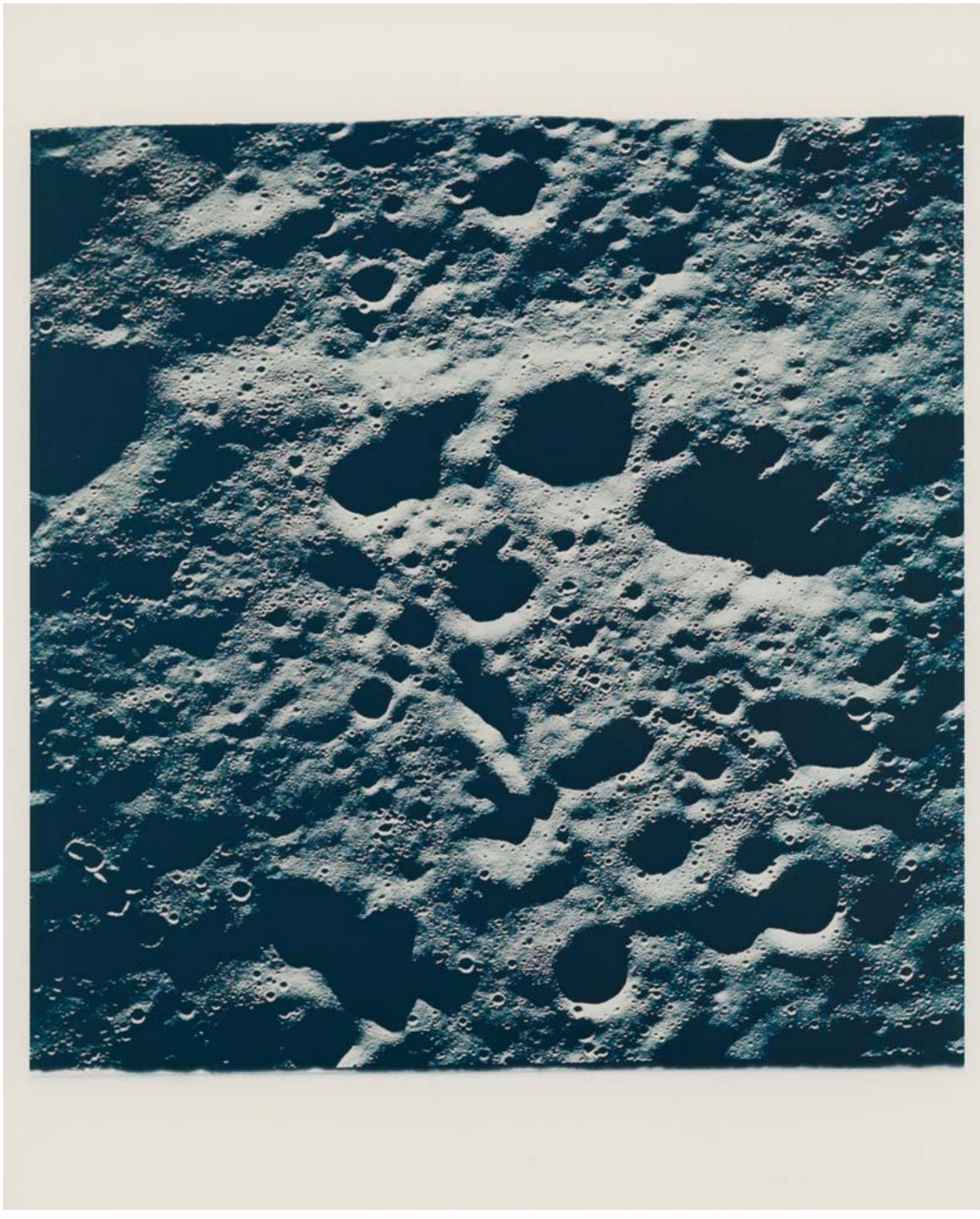
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.24 pm (GMT+2)

“The view of the Earth from the Moon fascinated me, a small disk, 240,000 miles away. It was hard to think that that little thing held so many problems, so many frustrations. Raging nationalistic interests, famines, wars, pestilence don’t show from that distance.”

Frank Borman (LIFE, January 17, 1969).

“For the astronauts, the most electrifying sight was the Earth rising behind the Moon’s bleached and lifeless horizon; indeed, all three felt that they had come all the way to another world to discover the one they had left behind” (Chaikin, Space, p. 52).

From the mission transcript (photograph taken 081:43:21 after launch):
081:21:41 Anders: Tell you what - Why don’t I give you that other camera?
081:21:45 Anders: You’ve got color film; why don’t you get a picture of the Earth as it comes up next time? [...]
081:28:47 Lovell: Still try to get a series, Frank, if you have a - [garble] you using 70-millimeter?
081:28:51 Borman: Yes [...]
081:43:06 Borman: Oh, brother! Look at that!
081:43:16 Lovell: What was it?
081:43:18 Borman: Guess.
081:43:20 Lovell: Tsiolkovsky?
081:43:21 Borman: No, it’s the Earth coming up.
081:43:22 Lovell: Oh.
081:43:29 Anders: Augh! Quit rocking the boat!



86

FRANK BORMAN (APOLLO 8)

1968

First seen by humans: the forbidding farside terminator. 21-27 Dec 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968
[NASA AS8-14-2402]
25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.25 pm (GMT+2)

Borman took this impressive photograph on orbit 8 as he enjoyed a lonely view of the backside of the Moon during Lovell and Anders' sleep period.

He captured his vertical view over the floor of the 437-km walled plain Crater Korolev (named America by the astronauts) with the 250mm telephoto lens and color magazine 14/D as the Sun was setting over the lunar farside.

"The deep shadows near the terminator emphasize the relief which appears forbidding because of the accentuation of detail at the low Sun elevation" (from NASA SP-246, p. 20).

"We flew to the Moon as pathfinders for future

Apollo missions. The first view of the Moon was mesmerizing, as we were aware that no other humans had seen the far side of the Moon directly."
Frank Borman (Jacobs, p. 34)

The area covered by the photograph is approximately 20 miles on a side. Latitude / longitude: 3°S 156.5°W.

87

FRANK BORMAN (APOLLO 8)

1968

First seen by humans: Tsiolkovsky, the most prominent farside crater. 21-27 Dec 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968
[NASA AS8-14-2447]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).
Borman took this very rare photograph on orbit 8 looking southeast with the 250mm telephoto lens as he enjoyed a lonely view of the spectacular backside of the Moon during Lovell and Anders' sleep period.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.26 pm (GMT+2)

"Tsiolkovsky is a large, 200-km crater on the far Moon's side which was first photographed by the Soviet probe Luna 3 on 7 October 1959. In the poor imagery of the time, its dark, mare-like interior made it stand out from the other craters that pepper the farside. The triumphant Soviets, in the manner of all explorers, promptly and appropriately named it after the Polish-Russian pioneer of spaceflight theory, Konstantin Tsiolkovsky (1857-1935). A dominant, W-shaped central peak of light colored highland material rising out of the dark material makes this crater particularly distinctive and striking" (from the Apollo 15 Flight Journal at 083:16:51).

"We were like three schoolkids. The most aweinspiring sight. Looking back at the back side of the Moon [...] for the very first time."
James Lovell (Chaikin, Voices, p. 36)

88

WILLIAM ANDERS (APOLLO 8)

1968

The Moon after the first transearth injection in history. 21-27 Dec 1968.

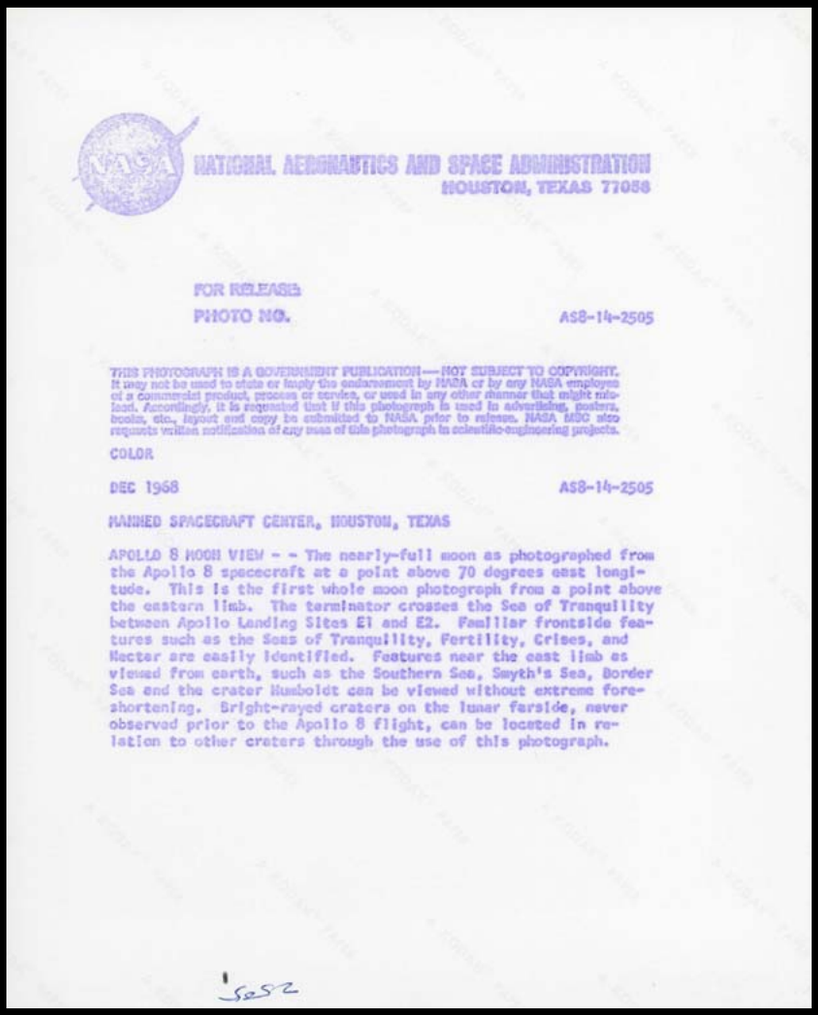
Vintage Chromogenic print on fiber-based Kodak paper, printed 1968 [NASA AS8-14-2474]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell), minor tear at upper right in black sky of space.
This superb and very rare photograph taken with the 250mm telephoto lens shows features of both the lunar nearside and farside from a perspective not visible from Earth.
Smyth's Sea is at the bottom center, the Sea of Crises at the top left and the bright ray Crater Giordano Bruno with the dark-floored Crater Lomonosov are at the top right.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.27 pm (GMT+2)

From the mission transcript after transEarth injection:
089:36:33 Borman: You get the sensation that you're climbing, Ken.
089:36:35 Mattingly (Mission Control): Say again, Apollo 8.
089:36:41 Borman: I say, this gives you the sensation that you're climbing.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
HOUSTON, TEXAS 77058

FOR RELEASE:
PHOTO NO. AS8-14-2505

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COLOR

DEC 1968 AS8-14-2505

MANNED SPACECRAFT CENTER, HOUSTON, TEXAS

APOLLO 8 MOON VIEW - - The nearly-full moon as photographed from the Apollo 8 spacecraft at a point above 70 degrees east longitude. This is the first whole moon photograph from a point above the eastern limb. The terminator crosses the Sea of Tranquility between Apollo Landing Sites E1 and E2. Familiar frontside features such as the Seas of Tranquility, Fertility, Crises, and Nectar are easily identified. Features near the east limb as viewed from earth, such as the Southern Sea, Smyth's Sea, Border Sea and the crater Humboldt can be viewed without extreme foreshortening. Bright-rayed craters on the lunar farside, never observed prior to the Apollo 8 flight, can be located in relation to other craters through the use of this photograph.

5852

89

WILLIAM ANDERS (APOLLO 8)

1968

The Moon first seen by man from a different perspective from Earth. 21-27 Dec 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968. 20,3 x 25,4 cm (7.9 x 10 in), with NASA MSC caption numbered "AS8-14-2505" and "A Kodak Paper" watermarks on the verso, numbered "AS8-14-2505" in pencil in black in top margin.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.28 pm (GMT+2)

During the previous 20 hours in lunar orbit the crew had photographed the desolate world from an altitude of about 60 nautical miles.

However, due to their arrival in the shadow of the Moon, it is only at the beginning of their homeward journey that they were offered unprecedented views of the Moon's sphere in an orientation that is not seen by terrestrial observers.

They took photographs using different magazines, including this great photograph taken with the 250mm telephoto lens.

"The eastern portion (right) contains features which were unknown until recently before the mission and were still unnamed. In the western portion (left), the Sea of Crises and just below it the Sea of Tranquillity predominate. Near the center the smaller Border Sea and Smyth's Sea are in sharp contrast to the surrounding terrain" (from NASA SP-246, p. 3).

From the mission transcript during the homeward journey to Earth:
109:23:54 Collins (Mission Control): Howdy, Jim. Dick Underwood (NASA's chief of photography)'s over here. They're getting their film processing all prepared for your film when you get back and tentatively, can you give us some idea of how much you exposed?
109:24:08 Lovell: Let me introduce you to the great film man. He'll tell you all about it.
109:24:12 Collins: Thank you.
109:24:15 Anders: Tell him I hope he can account for haze through the windows. We - on our departure from the Moon, we tried to burn up as much as - of what we had left over, which was quite a bit, and tell him I hope he can develop the high-speed film taken at normal film settings.

"We were fighter pilots and test pilots out to do a job. But all of us either transcended that or were jerked out of it by the view of the Earth as a sphere about the size of your fist at the end of your arm."

William Anders (Schick and Van Haaften, p. 95).

90

ANDERS, BORMAN OR LOVELL (APOLLO 8)

1968

The Earth seen by the first human beings who left their home planet. 21-27 Dec 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968. 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso [NASA AS8-15-2561] (NASA / North American Rockwell).
The photograph was taken with the 250mm telephoto lens during the homeward journey from about 133,000 nautical miles out in space.

€ 1.500 – 2.500
$ 1.800 – 3.000

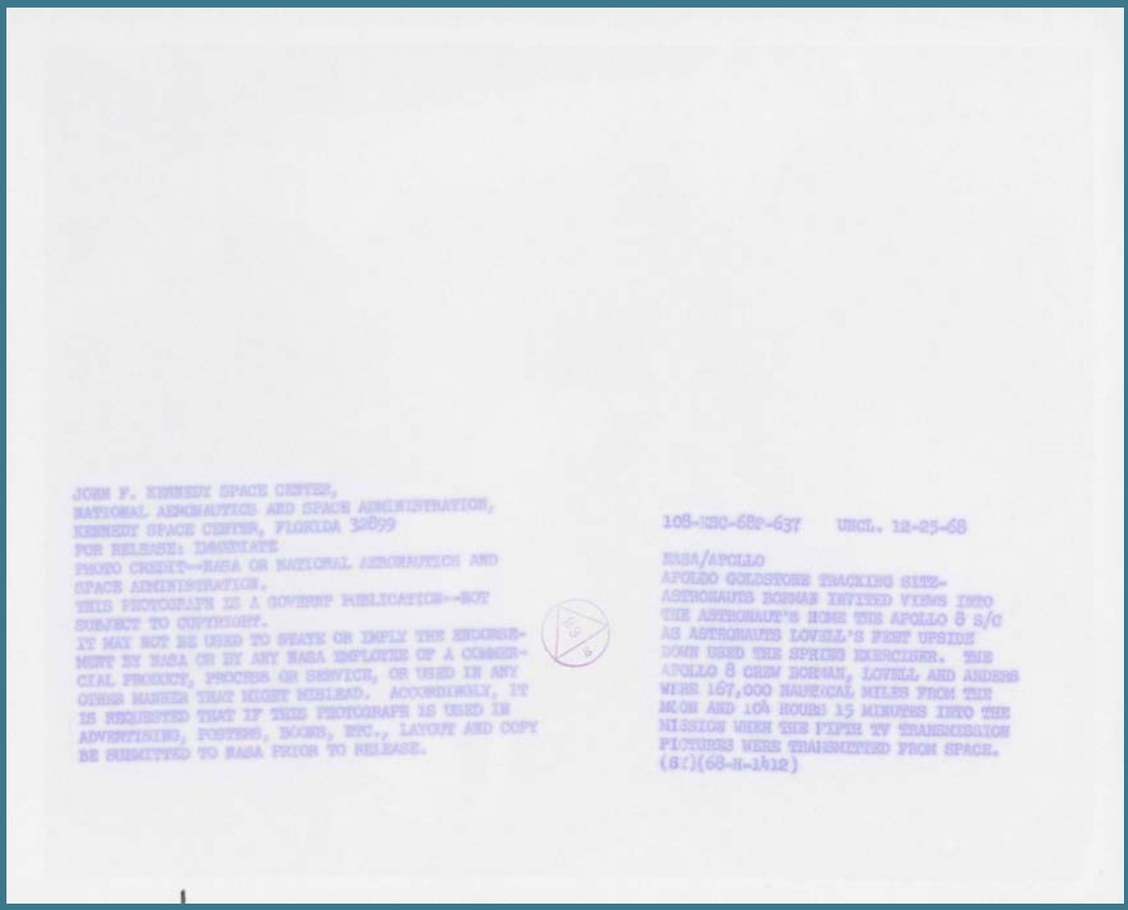
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.29 pm (GMT+2)

"The fact that you can put your thumb up to the window of the spacecraft and completely put the Earth behind your thumb is a concept that gives you the insignificance of your own existence with respect to the universe."

James Lovell (Chaikin, Voices, p. 45).

"View of Earth as photographed by the Apollo 8 astronauts on their return trip from the Moon. Note that the terminator is straighter than on the outbound pictures. The terminator crosses Australia. India is visible. The Sun reflection is within the Indian Ocean" (original NASA caption for AS8-15-2561).



91

NASA (APOLLO 8)

1968

First human beings in deep space: Frank Borman and James Lovell upside down in zero gravity inside the spacecraft. 21-27 Dec 1968.

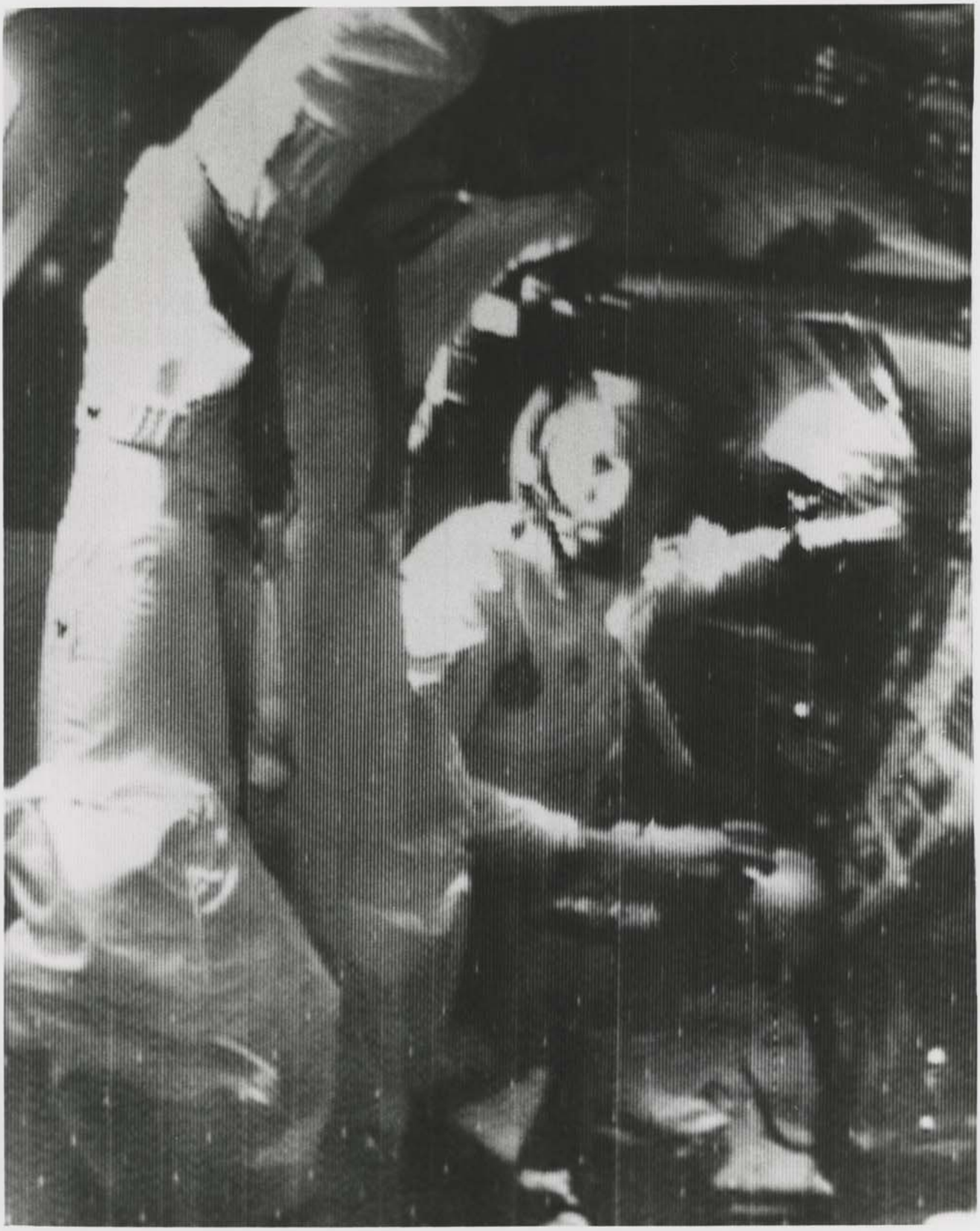
Vintage Gelatin silver print on fiber-based paper, printed 1968.
25,4 x 20,3 cm (10 x 7.9 in), with Technicolor Quality Control stamp and NASA KSC caption numbered "68-H-1412" on the verso.
The Apollo 8 crew was 167,000 nautical miles from the Earth at the time the picture was transmitted from space during the fifth TV transmission from the spacecraft.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.30 pm (GMT+2)

From the mission transcript when the picture was transmitted:
104:24:48 Collins (Mission Control): It looks like you're okay, but somebody else is upside down.
104:24:54 Borman: Okay. That's right. That's Jim Lovell. What we thought we'd do today was just show you a little bit about life inside Apollo 8. We've shown you the scenes of the Moon, the scenes of the Earth, and we thought we'd invite you into our home. It's been our home at least for four days as you can see on the instrument panel. We mark off each day on the instrument panel. We're four down, and we're working on the fifth day. Of course, we're all looking forward to the landing on Friday. Down here in the parts of the spacecraft that we call the lower equipment bay, we have the President's adviser on physical fitness, Captain Jim Lovell, about to undergo an exercise program that we do every day. You notice that he floats around very freely. He just bumped his head on the optics, used for our navigating. He's working with an exercise device that's designed to keep the muscles in shape.



92

WILLIAM ANDERS (APOLLO 8)

1968

First human-taken photograph of the whole Moon from a perspective not visible from Earth. 21-27 Dec 1968.

Vintage Chromogenic print, on fiber-based Kodak paper, printed 1968. 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell) [NASA AS8-14-2506].

€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.31 pm (GMT+2)

As the crew began the homeward journey, Anders photographed for the first time the whole Moon from a perspective not visible by terrestrial observers from above its eastern limb: familiar frontside features such as the Sea of Tranquility, Fertility, Crises, and Nectar are easily identified. Features near the east limb as viewed from Earth, such as the Southern Sea, Smyth's Sea, Border Sea, and the Crater Humboldt, can be viewed without extreme foreshortening. Lunar farside features occupy most of the right half of the picture.

93

ANDERS, BORMAN OR LOVELL (APOLLO 8)

1968

This island Earth: the blue planet from deep space. 21-27 Dec 1968.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1968. 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell) [NASA AS8-15-2578]
A truly astonishing photograph of the Earth seen by the first humans who left their Home Planet.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.32 pm (GMT+2)

"The biggest philosophy, foundation-shaking impression was seeing the smallness of the Earth. [...] Even the pictures don't do it justice because they always have this frame around them. But when you put your eyeball to the window of the spacecraft, you can see essentially half of the universe."

William Anders (Chaikin, Voices, p. 159).

As the crew were far out in deep space about 97,000 nautical miles away from home, they sent the last TV transmission from the spacecraft and took a series of photographs of the Earth through different lenses, including this superb photograph taken with the 250mm telephoto lens. South America is visible in the center.

94

WILLIAM ANDERS (APOLLO 8)

1968

First Earthrise. 21-27 Dec 1968.

Large-format presentation vintage Chromogenic print on fiber-based Kodak paper, printed 1968 [NASA AS8-14-2383]
40,6 x 50,8 cm (15.9 x 20 in), with "A Kodak Paper" watermarks on the verso.

€ 8.000 – 12.000
$ 9.600 – 14.400

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.33 pm (GMT+2)

"We were looking down at a rough, stark lunar surface with the long shadows of lunar sunset. It looked very desolate, colorless, monotonous, even unfriendly. We had no sooner taken in this somewhat disappointing scene than up popped the Earth. We all saw it at once, and there we were looking back at our Home Planet, the place where we evolved. Our Earth was quite colorful, pretty, and delicate comparedto the very rough, rugged, beat-up, even boring lunar surface.
I think it struck everybody that here we'd come 240,000 miles to see the Moon and it was the Earth that was really worth looking at."

William Anders (Schick and Van Haaften, p. 92).

Vintage color prints of this size are exceptionally rare and were expensive to produce. The glorious nostalgia of this golden era and the patina of time is reflected in this incredible photograph.

The celebrated view of planet Earth rising above the bleached lunar horizon (the first taken by human beings on color film). The crew had completed three lunar orbits before emerging from the farside and witnessing this sight for the first time, surely one of the most astounding ever photographed in all of human history.

[LARGE FORMAT]

“Man, look at that son of a gun go!”

James McDivitt

95

J. MCDIVITT OR R. SCHWEICKART (APOLLO 9)

1969

First photograph of the LM in space: Spider stowed in the Saturn SIVB third stage orbiting the Earth. 3-13 Mar 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS9-19-2919]
25,4 x 20,3 cm (10 x 7.9 in), with “A Kodak Paper” watermarks on the verso (NASA / North American Rockwell).

€ 700 – 1.000
$ 840 – 1.200

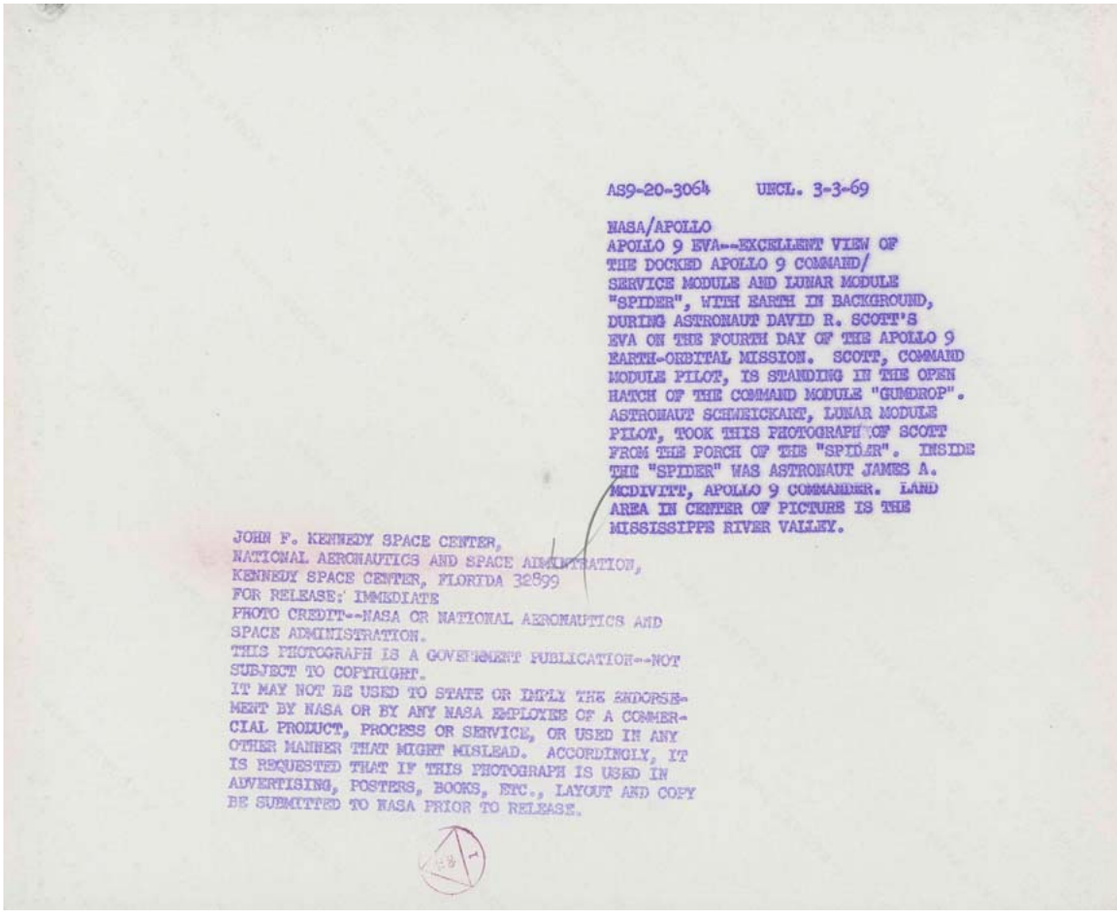
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.34 pm (GMT+2)

The photograph was taken after the first Apollo CSM/ LM-SIVB separation in Earth orbit.

The CSM Gumdrop had revolved to examine the LM Spider, still attached to its garage atop the Saturn third stage (SIVB). The Spacecraft LM Adapter (SLA) panels which protected the LM during launch and connected the CSM to the Saturn launch vehicle had already been jettisoned. The CSM was then to perform the first docking with the exposed LM in order to withdraw it from its shell.

From the mission transcript after CSM/LM-SIVB separation:
002:41:12 Schweickart: Okay. 3, 2, 1 - Bang! It’s gone. [...]
002:42:14 Schweickart: Hey, David, there goes the (garbled) on the panel. See it?
002:42:18 Scott: Yes.
002:42:19 McDivitt: Man, look at that son of a gun go!
002:42:20 Schweickart: Okay, Dave, (garbled) is just beautiful. Just halfway around. Okay, just right there, Davey. Just leave it like it is (garbled) nice and bright there. [...]
002:42:40 McDivitt: Is the camera running?
002:42:42 Schweickart: Turn it on! [...]
002:43:23 Scott: Well, our pitch angle isn’t exactly right - it doesn’t look right.
002:43:27 McDivitt: Okay.
002:43:31 Schweickart: That’s alright; we’re going to fly around a little bit, Dave. [...]
002:43:54 Scott: Roger. It (the LM-SIVB)’s out there, and we’re turned around and proceeding with the station-keeping and docking.



96

RUSSELL SCHWEICKART (APOLLO 9)

1969

First US two-man EVA: David Scott in the open hatch of the CSM Gumdrop. 3-13 March 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks and NASA KSC caption numbered "NASA AS9-20-3064" on the verso.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.35 pm (GMT+2)

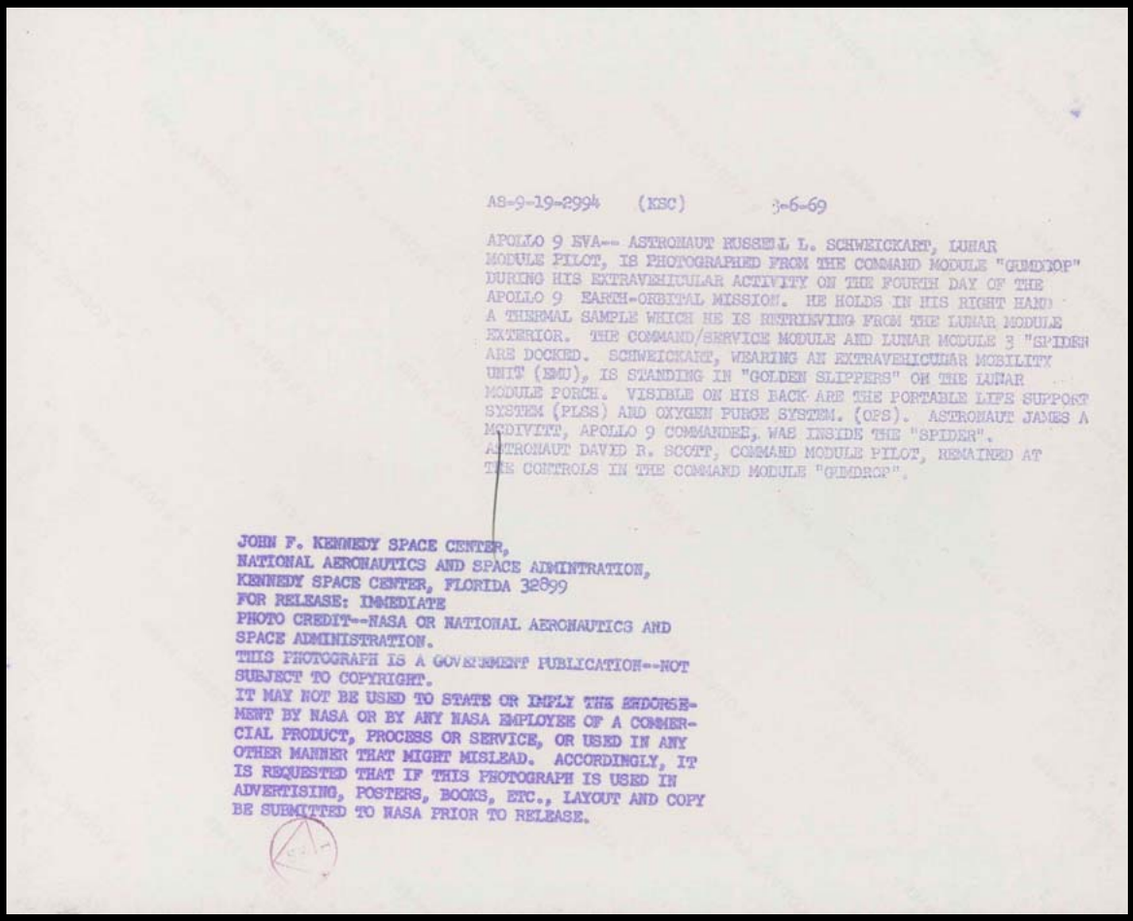
"I took this shot of Dave Scott taking a picture of me at the beginning of my EVA on Apollo 9. It captures just a bit of the fantastic beauty of the Earth juxtaposed against the infinite black of space. In the foreground is that amazing combination of human and machine that is enabling us to emerge into the universe out of the womb of Earth."

Russell Schweickart (Jacobs, p. 42).

A very famous photograph showing Scott taking photographs with the Hasselblad in the open hatch of the CM Gumdrop docked with the LM Spider during his stand-up EVA.

Schweickart took the photograph from the porch of the LM during his own EVA.

The first two-man EVA was performed by cosmonauts Khrunov and Yeliseyev, conducting a spacecraft transfer from Soyuz 5 to Soyuz 4 two months before in January 1969.



AS-9-19-2994 (KSC) 3-6-69

APOLLO 9 EVA-- ASTRONAUT RUSSELL L. SCHWEICKART, LUNAR MODULE PILOT, IS PHOTOGRAPHED FROM THE COMMAND MODULE "GUMDROP" DURING HIS EXTRAVEHICULAR ACTIVITY ON THE FOURTH DAY OF THE APOLLO 9 EARTH-ORBITAL MISSION. HE HOLDS IN HIS RIGHT HAND A THERMAL SAMPLE WHICH HE IS RETRIEVING FROM THE LUNAR MODULE EXTERIOR. THE COMMAND/SERVICE MODULE AND LUNAR MODULE 3 "SPIDER" ARE DOCKED. SCHWEICKART, WEARING AN EXTRAVEHICULAR MOBILITY UNIT (EMU), IS STANDING IN "GOLDEN SLIPPERS" ON THE LUNAR MODULE PORCH. VISIBLE ON HIS BACK ARE THE PORTABLE LIFE SUPPORT SYSTEM (PLSS) AND OXYGEN PURGE SYSTEM. (OPS). ASTRONAUT JAMES A MCDIVITT, APOLLO 9 COMMANDER, WAS INSIDE THE "SPIDER". ASTRONAUT DAVID R. SCOTT, COMMAND MODULE PILOT, REMAINED AT THE CONTROLS IN THE COMMAND MODULE "GUMDROP".

JOHN F. KENNEDY SPACE CENTER,
NATIONAL AERONAUTICS AND SPACE ADMINTRATION,
KENNEDY SPACE CENTER, FLORIDA 32899
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97

DAVID SCOTT (APOLLO 9)

1969

First US two-man EVA: Russell Schweickart spacewalking next to the LM Spider.
3-13 March 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969.
20,3 x 25,4 cm (7.9 x 10 in), with NASA KSC caption numbered "AS9-19-2994" on the verso.

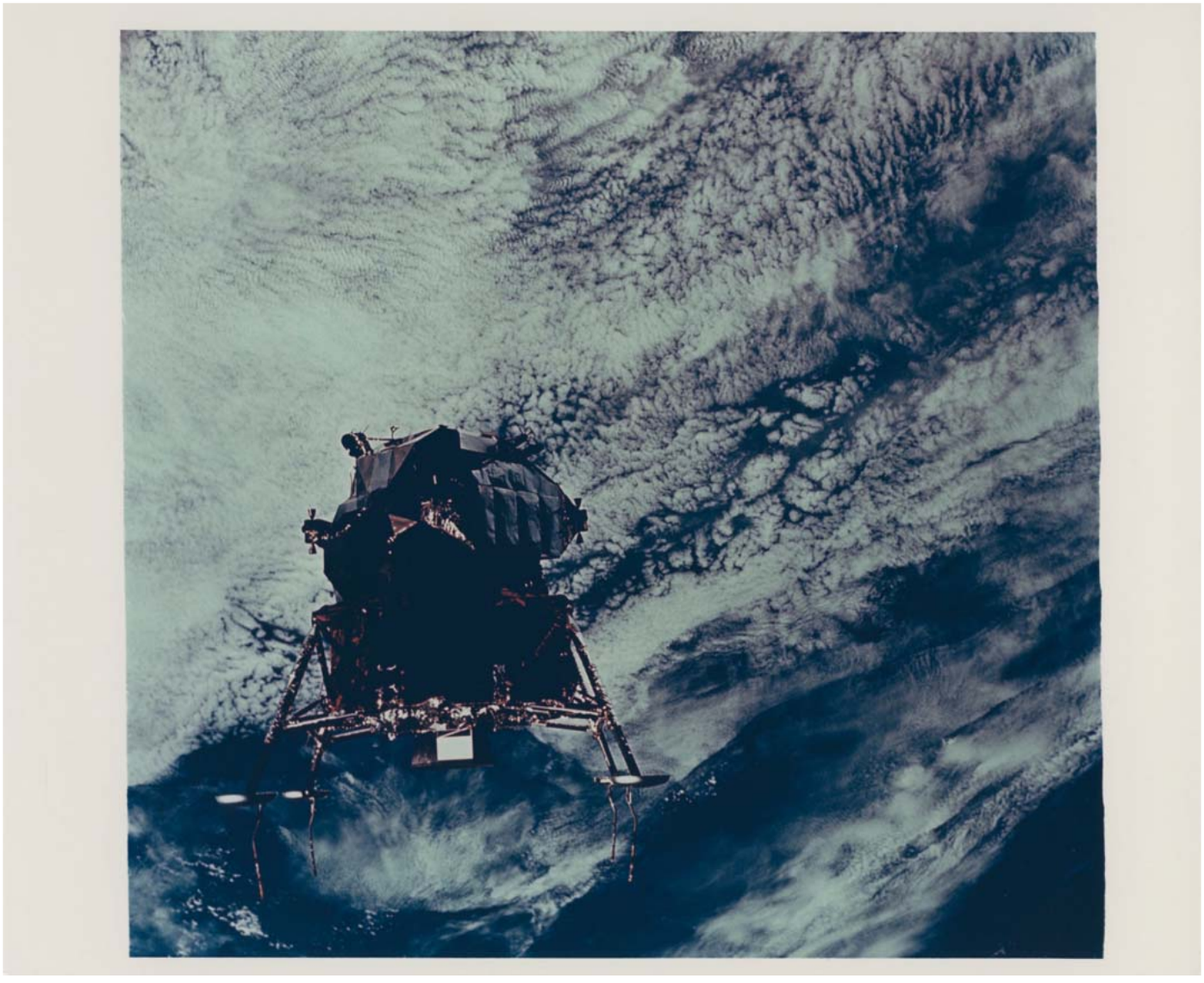
€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.36 pm (GMT+2)

Schweickart is photographed by Scott from the open hatch of the CM Gumdrop docked with the LM Spider. Schweickart is wearing an Extravehicular Mobility Unit (EMU) and standing in "golden slippers" on the LM porch. He holds, in his right hand, a thermal sample which he is retrieving from the LM exterior. Extravehicular transfer handrails on the LM are in the foreground. The LM ladder and footpad is visible at the bottom of picture.

From the mission transcript during the EVA:
073:38:40 McDivitt (Spider): Why don't you come over and get the thermal sample and get it in so we won't have to mess around with it.
073:38:44 Schweickart (PLSS): That's a good idea; coming up. [...]
073:39:25 Schweickart (PLSS): Okay, hook it on down there and lock it. Dave, have you taken any pictures yet?



98

DAVID SCOTT (APOLLO 9)

1969

First manned spaceflight of the LM: views of Spider orbiting the Earth (2). 3-13 March 1969.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1969 [NASA AS9-21-3182 and AS9-21-3201]
20,3 x 25,4 cm (7.9 x 10 in)and with "A Kodak Paper" watermarks on verso (NASA / North American Rockwell).

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.37 pm (GMT+2)

Apollo 9 was the first manned test flight of the Lunar Module or the "ugly bug" as it was often called. It was built of wafer-thin metal: "a vehicle intended solely for use in space, it was so frail that its flanks would crumple if subjected to flight in Earth's lower atmosphere" (Mason, p. 152).

It was the first time astronauts were flying in a spacecraft not designed to reenter the Earth's atmosphere – redocking with the CSM Gumdrop was essential. Photographed in lunar landing configuration with landing gear deployed, Spider is piloted by Schweickart and McDivitt. The LM ladder, forward hatch and the "golden slippers" affixed to the front porch of the LM are clearly visible.

"Attempting to describe the cool courage of McDivitt and Schweickart when they went off for the first time over the horizon in the unlandable LM, some observers declared it the bravest act since man first ate a raw oyster" (NASA SP-350, p. 194).

99

J. MCDIVITT OR R. SCHWEICKART (APOLLO 9)

1969

The first CSM photographed from space: Gumdrop over the Earth horizon. 3-13 March 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell) [NASA AS9-24-3634].

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.38 pm (GMT+2)

The CSM and the LM were tested in Earth orbit conditions before going to the Moon on later missions.

The mission afforded the opportunity to take the first photographs of the Command Module spacecraft in space (from the LM Spider).

Strong but light, the Command and Service Module would protect the crew during their launch and journey, and on their fiery return to Earth.

100

D. SCOTT; J. MCDIVITT OR R. SCHWEICKART (APOLLO 9)

1969

First Apollo rendezvous: The ascent stage of the LM Spider and the CSM Gumdrop preparing for docking over the Earth (2). 3-13 March 1969.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1969 [NASA AS9-21-3236 and AS9-24-3657]
20,3 x 25,4 cm (7.9 x 10 in), and with "A Kodak Paper" watermarks on the versos (NASA / North American Rockwell).

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.39 pm (GMT+2)

Apollo 9 was the only mission when the beauty of the Earth served as a backdrop for both the Lunar Module and the Command Module in flight.

These photographs were taken simultaneously after the crew of the LM had "jettisoned the descent stage, and then fired the ascent engine for the first time in space. From their adjusted position about 10 miles below and 80 miles behind the Command Module, they had approached for rendezvous and docking, much the same as the actual event to take place later on Apollo 11. The first phase of their rendezvous terminated temporarily with about a 100 ft separation, so that both spacecraft could be photographed," according to NASA associate administrator George Muller (NASA SP-350, p. 192).

From the mission transcript as the two spacecrafts re-joined for rendezvous:
098:21:45 Scott (Gumdrop): Oh, I see you out there coming in the sunlight.
098:21:48 Schweickart (Spider): Great.
098:21:51 Scott (Gumdrop): You're the biggest, friendliest, funniest looking spider I've ever seen. [...]
098:33:50 McDivitt (Spider): Okay, Davey. It says 100 feet on the radar tape. It looks a little closer to that to me, but what do you say we stop here?
098:33:58 Scott (Gumdrop): Okay. That's a good idea. [...]
098:34:34 McDivitt (Spider): Let me take a couple of pictures of your nose; then I'll start pitching around.

"You're the biggest, friendliest,
funniest looking spider I've ever seen."

David Scott

101

D. SCOTT; J. MCDIVITT OR R. SCHWEICKART (APOLLO 9)

1969

Earth, our home: four Earthscapes from space (4).
3-13 Mar 1969.

Four vintage Chromogenic prints on fiber-based Kodak paper, printed 1969.
20,3 x 25,4 cm (7.9 x 10 in), the first three numbered "NASA AS9-20-3177", "NASA AS9-22-3441" and "NASA AS9-23-3568" (NASA MSC) in red in top margin and with "A Kodak Paper" watermarks on the versos, the fourth [NASA AS9-26A-3781A, image inverted in error during printing] with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell). These superb and very rare photographs were taken with the Hasselblad 500 EL and its 80mm Zeiss lens.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.40 pm (GMT+2)

The photograph above: the Earth horizon over the Nile River and the Red Sea including Soudan, United Arab Republic from an altitude of 97 nautical miles.

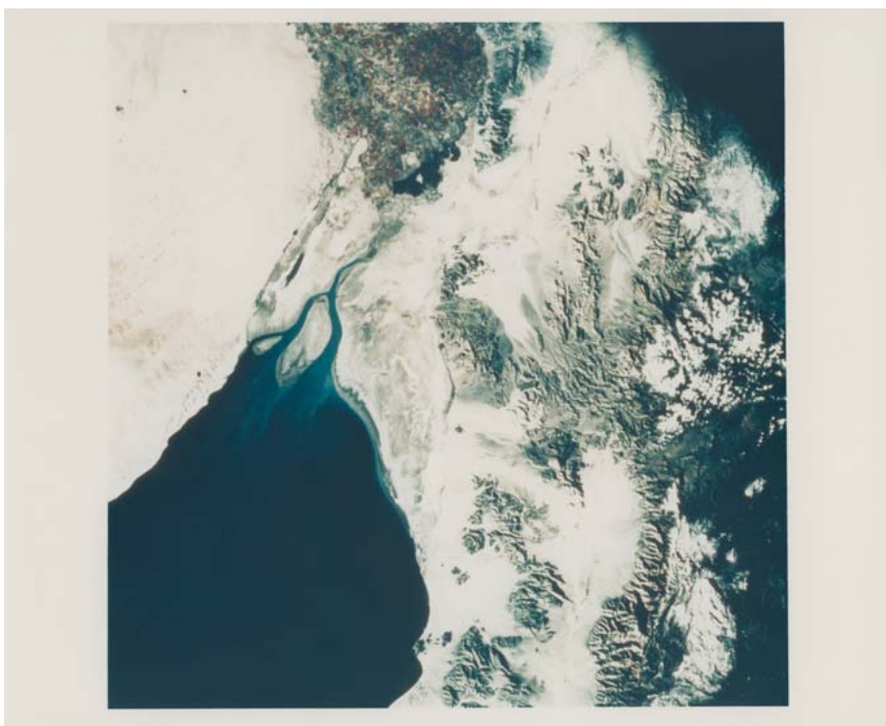
First photograph to the right: near vertical view of Phoenix and Arizona from an altitude of 106 nautical miles including volcanic and complex mountain ranges in Arizona. Farmland pattern checkerboard the area along the Gila River.

Second photograph to the right: U.S. East coast, South Carolina from an altitude of 104 nautical miles.

"The visible coastline extends from the mouth of the Savannah River northeastward to the mouth of the Santee River. The city of Charleston is on the coast in the center of picture.

Lake Moultrie is at top center edge of picture" (original NASA caption for the present photograph).

Third photograph to the right: color infrared view of the mouth of the Colorado river and the Gulf of California. Green vegetation shows red in infrared photographs; the photograph shows green and red irrigated farmlands at the right along the river bed.



"What took no analysis [...] was the overwhelming beauty, the contrast between bright colorful home and stark black infinity, the unavoidable and awesome personal relationship, suddenly realized, with all life on this amazing planet... Earth, our home."

Russell Schweickart (Kelley, preface).

"As you pass from sunlight into darkness and back again every hour and a half, you become startlingly aware how artificial are thousands of boundaries we've created to separate and define. And for the first time in your life you feel in your gut the precious unity of the Earth and all the living things it supports."

Russell Schweickart (upon his return from Apollo 9).

102

NASA (APOLLO 10)

1969

Mission to the Moon: portraits of the crew-members (3). May 1969.

Three vintage Gelatin silver print on fiber-based paper, printed 1969.
25,4 x 20,3 cm (10 x 7.9 in), with NASA KSC captions on the verso.

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.41 pm (GMT+2)

These close-ups of the astronauts wearing their space helmets were taken during a Count-down Demonstration Test.

Stafford and Cernan (right) will descend in the Lunar Module spacecraft to within eight nautical miles above the Moon's surface while Young (left) orbits overhead in the Command Module.

103

NASA (APOLLO 10)

1969

Liftoff to the Moon. 18 May 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso (NASA KSC).

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.42 pm (GMT+2)

"The Apollo 10 (Spacecraft 106/Lunar Module 4/Saturn 505) space vehicle is launched from Pad B, Launch Complex 39, Kennedy Space Center at 12:49 p.m. (EDT), May 18, 1969. Aboard the spacecraft are astronauts Thomas P. Stafford, commander; John W. Young, command module pilot; and Eugene A. Cernan, lunar module pilot. The eight-day, lunar orbit mission will mark the first time the complete Apollo spacecraft has operated around the Moon and the second manned flight for the Lunar Module. Two Apollo 10 astronauts, Stafford and Cernan, are scheduled to descend within eight nautical miles of the Moon's surface in the LM" (original NASA caption for S-69-17809, a variant of the present photograph).

"You know, in Earth orbit the horizon is barely curved. All of a sudden you move out at 25,000 miles per hour, and the first few hours, things really happen... I mean you can really see yourself leave the Earth at a tremendous rate of speed. You can see the horizon begin to close in upon itself. You can begin to see the continents. You begin to see things from the top down."

Eugene Cernan (Chaikin, Voices, p. 25).

104

E. CERNAN, T. STAFFORD, OR J. YOUNG (APOLLO 10)

1969

"The world is fading away": Earth after translunar injection. 18-26 May 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969 [NASA AS10-34-5010] 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).

€ 800—1.200
$ 960—1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th—July 15th, 2021
Call time: July 15th, 4.43 pm (GMT+2)

This photograph of Earth was taken through the 80mm lens from the Apollo 10 spacecraft shortly after trans-lunar insertion. The counter-clockwise arrangement of the cloud formations indicates a northern hemisphere view, with Alaska and western Canada at the right.

From the mission transcript after translunar injection:
002:44:19 Duke (Mission Control): Hello. Apollo 10, Houston through Hawaii. How do you read? Over.
002:44:23 Stafford: Roger. Houston, Apollo 10. Would you believe the world is starting to fade away?

“We’ve got the whole globe there.”

005:07:03 Young

“Charlie, you know, you blink your eyes and you look out there and you know it’s three dimensional, but it is just sitting out there in the middle of nowhere and it’s unbelievable.”

005:11:53 Cernan

105

THOMAS STAFFORD (APOLLO 10)

1969

The unbelievable view of Planet Earth.
18-26 May 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969 [NASA AS10-34-5014]
25,4 x 20,3 cm (10 x 7.9 in), with “A Kodak Paper” watermarks on the verso (NASA / North American Rockwell).

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.44 pm (GMT+2)

The crew took this amazing Hasselblad photograph through the 80mm lens as they were also sending a color TV transmission to Mission Control from about 21,000 nautical miles away.

The black sky of space was cropped by NASA photo editors so that the Earth appears bigger in the picture.

From the mission transcript as the crew and Mission Control (watching the TV transmission from the spacecraft) commented this exhilarating view of Earth:
005:04:00 Public Affairs Office (Mission Control): Apollo 10 is going to try to bring up another live color TV show, showing the Earth. We’ll stand by for this transmission. Apollo 10’s distance from the Earth now 21,119 nautical miles. Velocity; 13,170 feet per second.
005:05:27 Cernan: Charlie, if you see this, it’s going to be out of this world, literally. [...]
005:06:54 Stafford: I figure right there you should be able to see the United States, Mexico, Baja California.
005:06:57 Duke (Mission Control): Hey, it’s really beautiful, Tom. It (the TV)’s coming in great.
005:07:01 Stafford: You ought to see it up here, Charlie.
005:07:03 Young: We’ve got the whole globe there. [...]
005:08:10 Stafford: Okay. And it looks like the Rocky Mountains are orange colored to me. The rest of U.S., Baja California, that really stands out as all brownish, and the oceans are blue; but there are so many clouds out to the northeast of the United States, you can’t believe it. Covers the Far East over to Europe as far as you can see. [...]
005:10:05 Duke (Mission Control): Okay, this has got to be the greatest sight ever.
005:10:08 Stafford: You ought to see it up here. [...]
005:10:57 Cernan: Charlie, this is - It’s so hard to describe. You can go right up past Alaska, and you can see the polar caps. It’s incredible. [...]
005:11:12 Cernan: That’s great. And the blackest black that you ever could conceive is the setting for all this. [...]
005:11:53 Cernan: Charlie, you know, you blink your eyes and you look out there and you know it’s three dimensional, but it is just sitting out there in the middle of nowhere and it’s unbelievable.

106

EUGENE CERNAN (APOLLO 10)

1969

First spacecraft photographed over another world: the CSM Charlie Brown orbiting the lunar farside. 18-26 May 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS10-27-3873]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).

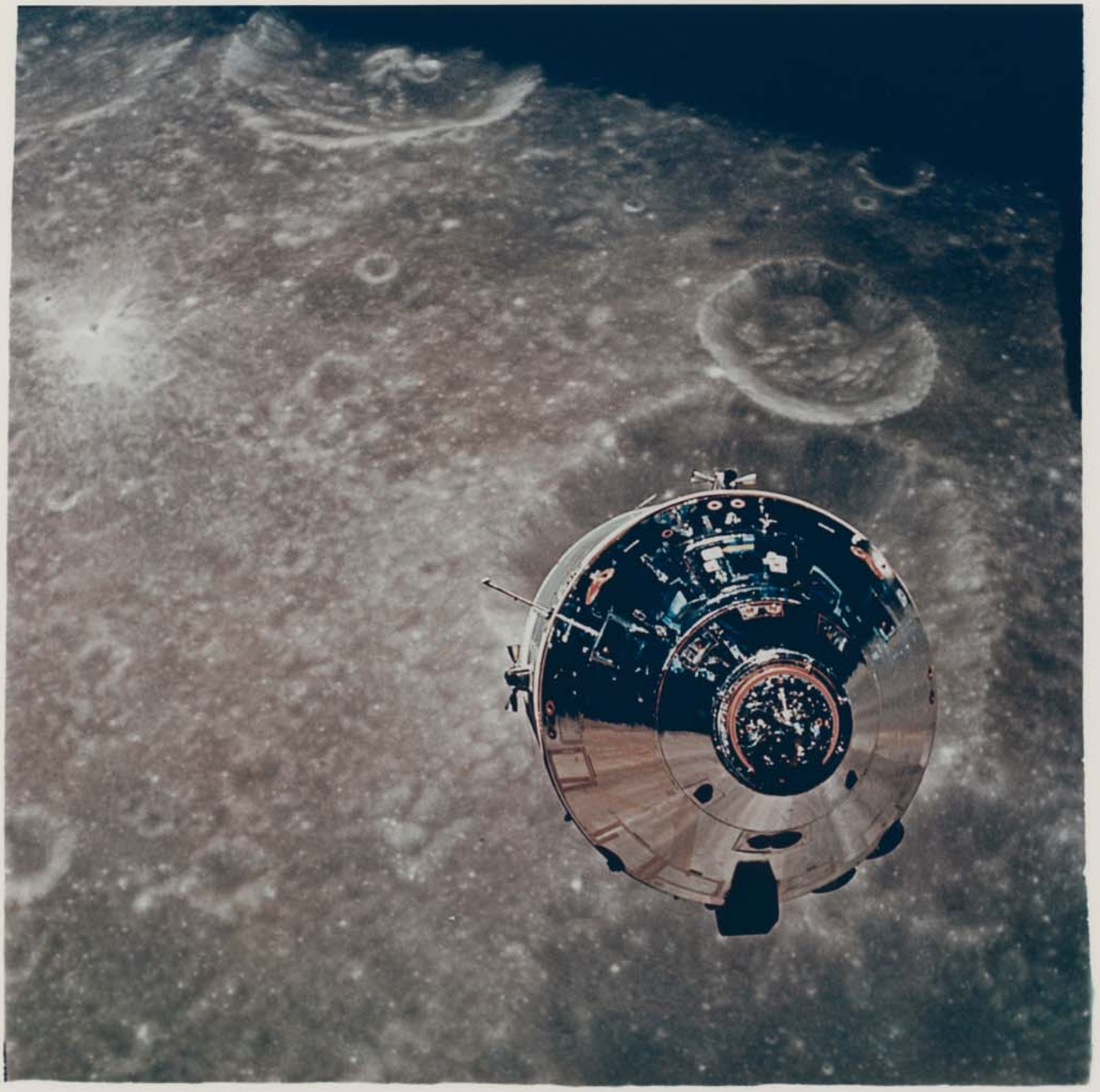
€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.45 pm (GMT+2)

The reflective nature of the outer layer of the Command Module can be seen in this photograph taken from the LM with the Sun directly above. The view is looking east over the lunar farside between craters Saha and Saenger. The lunar surface is reflected as light tones, and the dark portion mirrors the blackness of outer space.

From the mission transcript after separation of the LM and CSM in lunar orbit:
098:17:24 Stafford (Snoopy): You're out a little bit too far. I'll try to thrust in a little bit, but I - it really offsets me in pitch, as you can see. Can you thrust toward me?
098:17:35 Young (Charlie Brown): Roger, I'm thrusting towards you.
098:17:39 Stafford (Snoopy): Man, that fuel is going down like mad, too.
098:17:59 Stafford (Snoopy): I'll take care of the up and down, John.
098:18:21 Cernan (Snoopy): Take some at f:8 and f - oh, you're putting that up there. Taking you, John, babe, you're a weird-looking machine.



107

EUGENE CERNAN (APOLLO 10)

1969

First spacecraft photographed over another world: close-up of the CSM Charlie Brown. 18-26 May 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS10-27-3880]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.46 pm (GMT+2)

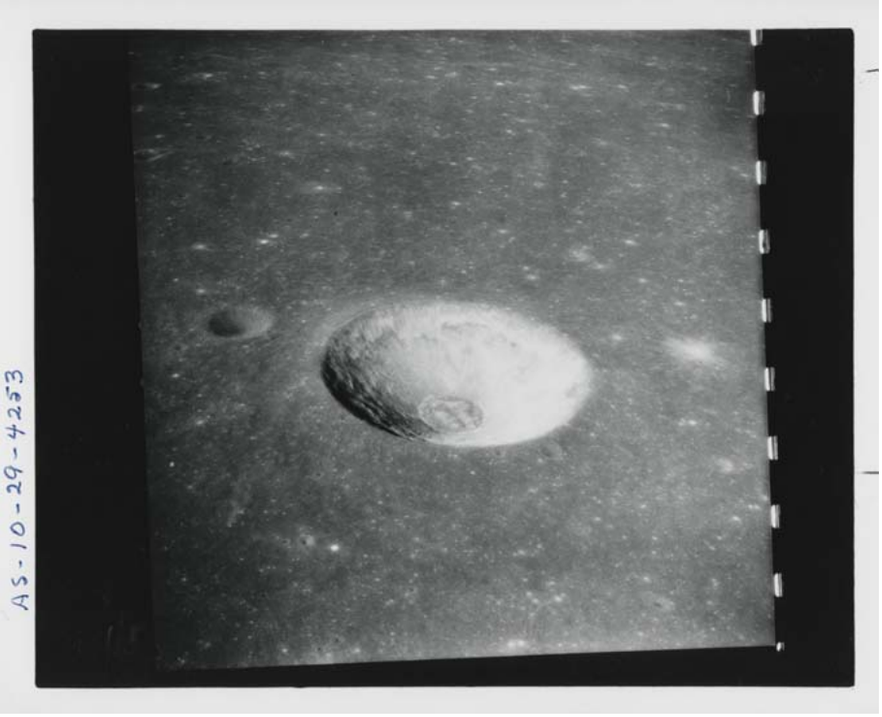
The primary mission of the crew was to fly the LM within fifty thousand feet of the Moon's surface in order to inspect landing site 2 on the Sea of Tranquillity, tentatively selected as the landing spot for Apollo 11.

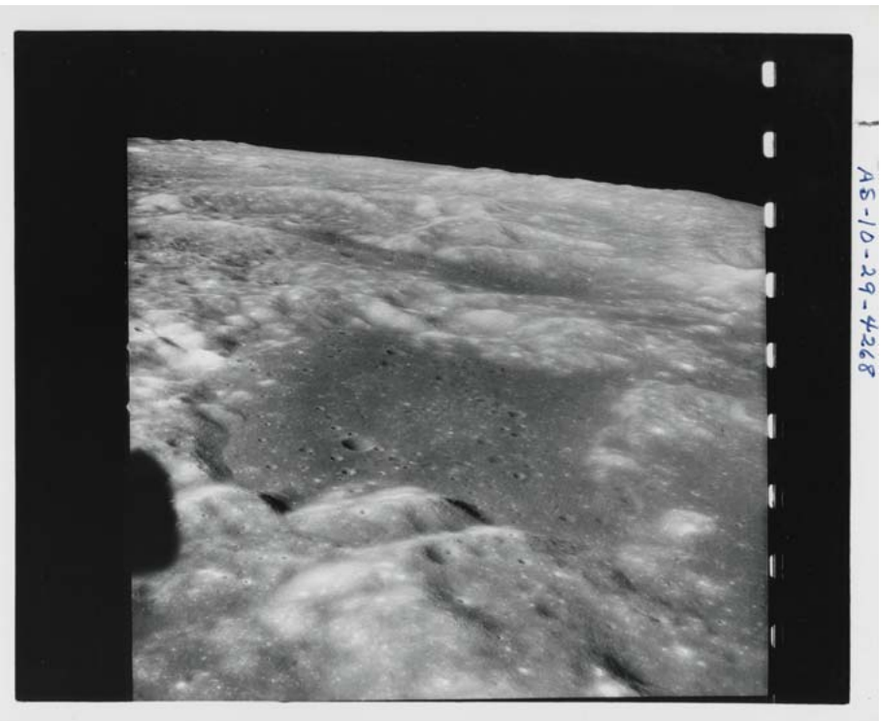
These photographs (from left to right and top to bottom) were taken from low altitude with the 80mm lens and magazine 29/P as the crew was flying westward and show amazing details of the lunar surface. The LM finally came to within 15.6 km of the surface, confirming that the area was suitable for the Moon landing.

A great photograph of the CSM Charlie Brown station-keeping with the LM at an altitude of 69 miles above the lunar surface over highlands and craters on the west rim of Smyth's Sea between Craters Gilbert and Schubert. Parts of the LM window are visible at top right.

The Command Module, about 12 feet in diameter and weighing 12,500 pounds, had about "as much habitable volume as a walk-in closet" (Light, caption 106).

From the mission transcript after separation of the LM and CSM in lunar orbit:
098:20:11 Cernan (Snoopy): John, you're the first vehicle photographed by another around the Moon. How does that grab you?
098:20:16 Young (Charlie Brown): That grabs me good.
098:20:49 Stafford (Snoopy): Can you come in a little ways here just slowly.
098:20:52 Young (Charlie Brown): Yes. I'm coming in.





108

E. CERNAN OR T. STAFFORD (APOLLO 10)

1969

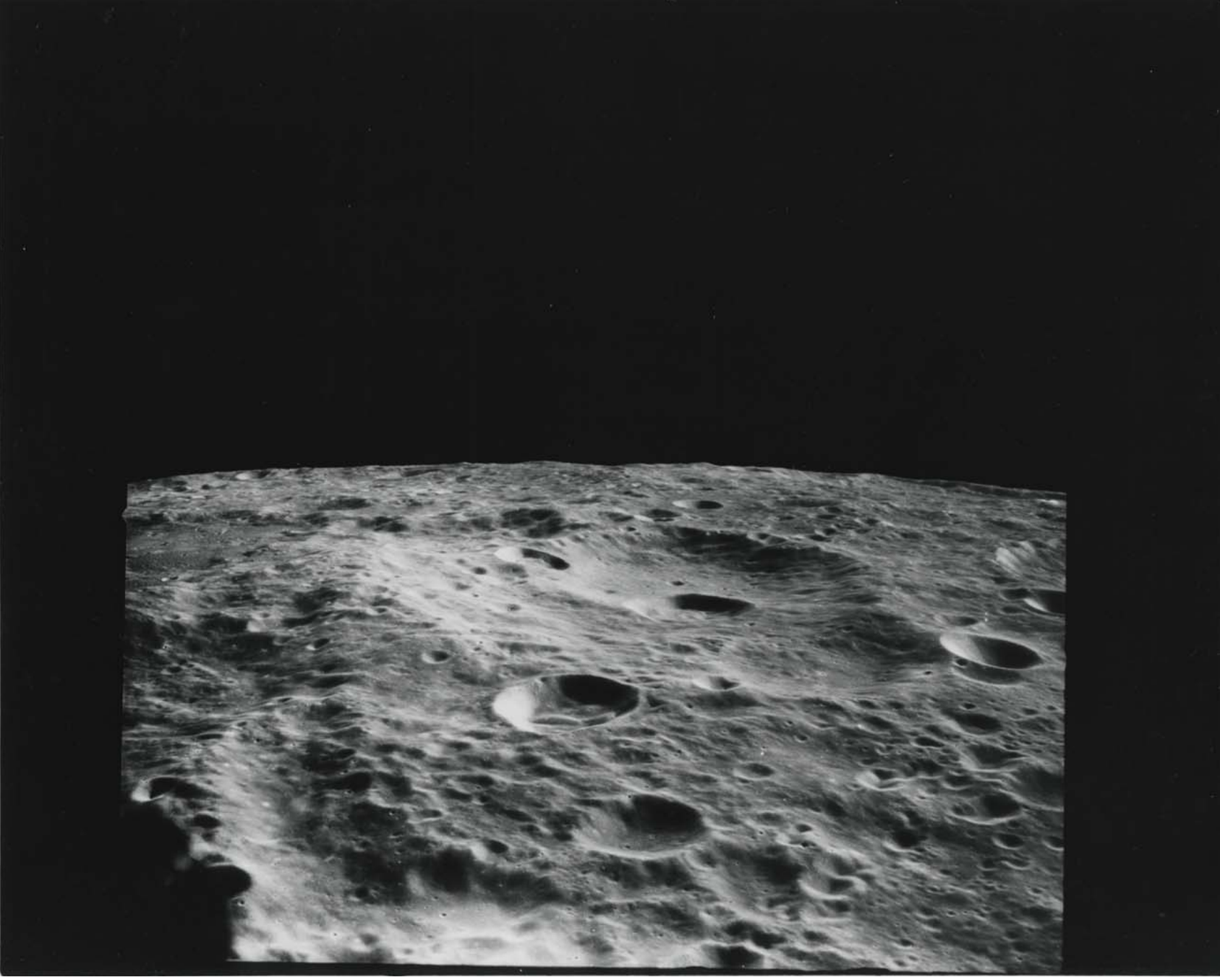
First LM descent to the lunar surface: four spectacular low altitude moonscapes (4). 18-26 May 1969.

Four vintage Gelatin silver prints on fiber-based paper, printed 1969 [NASA AS10-29-4176, AS10-29-4253, AS10-29-4268, AS10-29-4285]
Each 20,3 x 25,4 cm (7.9 x 10 in), with respective negative numbers written in blue pencil in margin.
Four extremely rare unpublished photographs.
First photograph: Lunar horizon over the 96-km Crater Ventris in the center of image (latitude / longitude: 6° S / 157.5° E).
Second photograph: the 10-km and 1,300m-deep Crater Messier in the Sea of Fertility (latitude / longitude: 1° S / 48° E).
Third photograph: highlands between the Sea of Fertility and the Sea of Tranquillity (latitude / longitude: 0.2° N / 40.5° E).
Fourth photograph: highlands on the south rim of the Sea of Tranquillity (latitude / longitude: 0.5° N / 34° E).

€ 1.200 – 1.800
$ 1.440 – 2.160

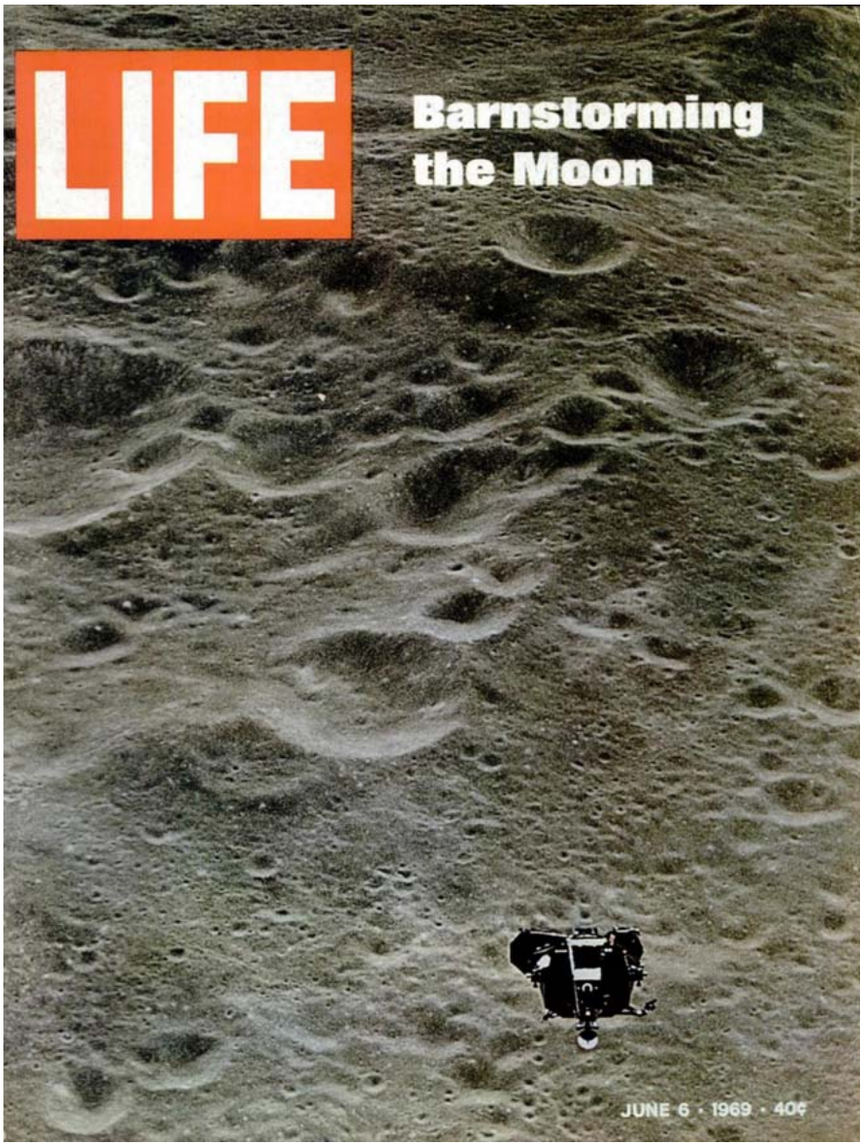
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.47 pm (GMT+2)



The primary mission of the crew was to fly the LM within fifty thousand feet of the Moon's surface in order to inspect landing site 2 on the Sea of Tranquillity, tentatively selected as the landing spot for Apollo 11.

These photographs (from left to right and top to bottom) were taken from low altitude with the 80mm lens and magazine 29/P as the crew was flying westward and show amazing details of the lunar surface. The LM finally came to within 15.6 km of the surface, confirming that the area was suitable for the Moon landing.



109

JOHN YOUNG (APOLLO 10)

1969

Ascent stage of the LM Snoopy returning from the Moon. 18-26 May 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS10-34-5110]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).

€ 1.000 – 1.500
$ 1.200 – 1.800

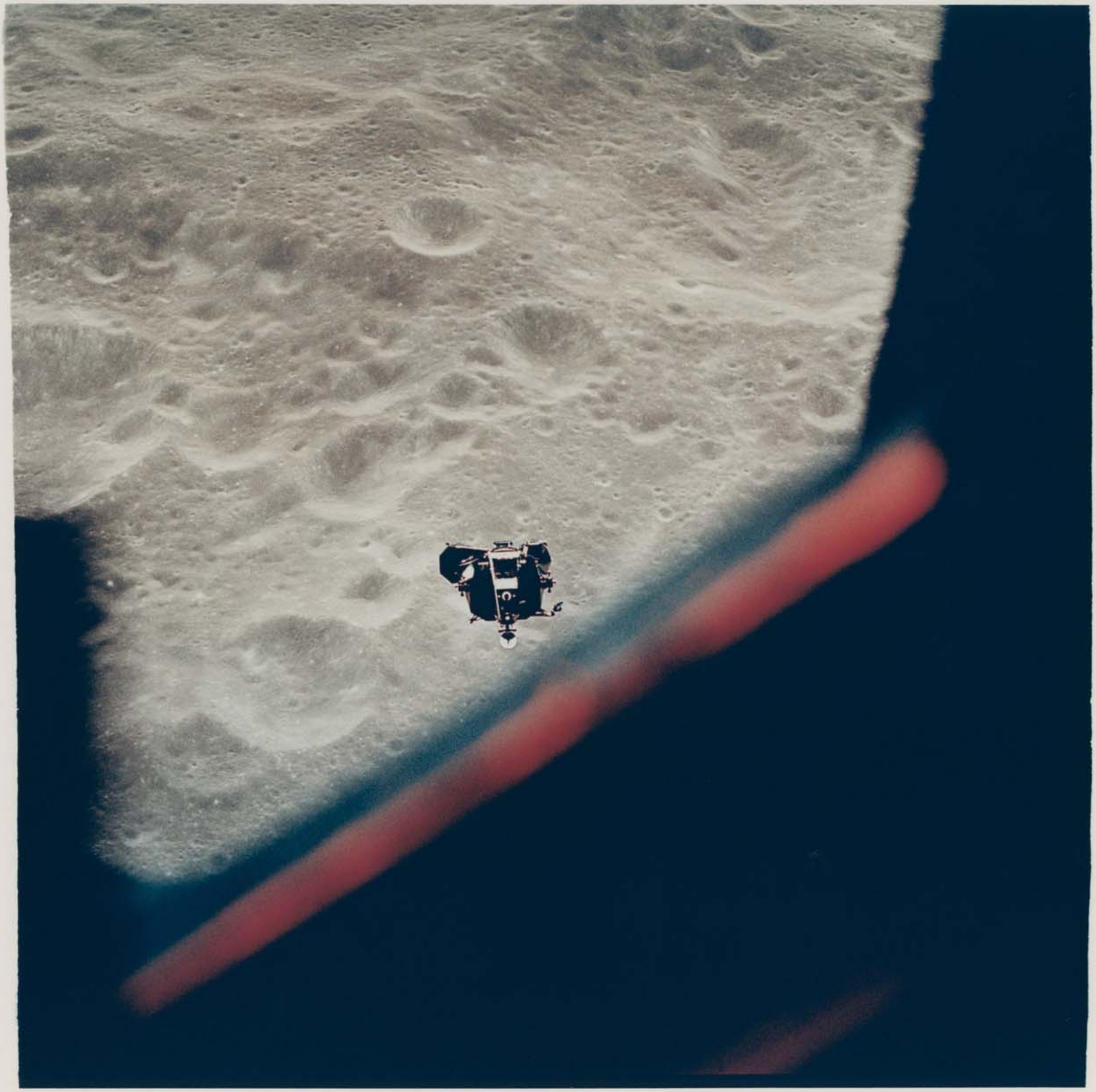
Bidding starts at € 100

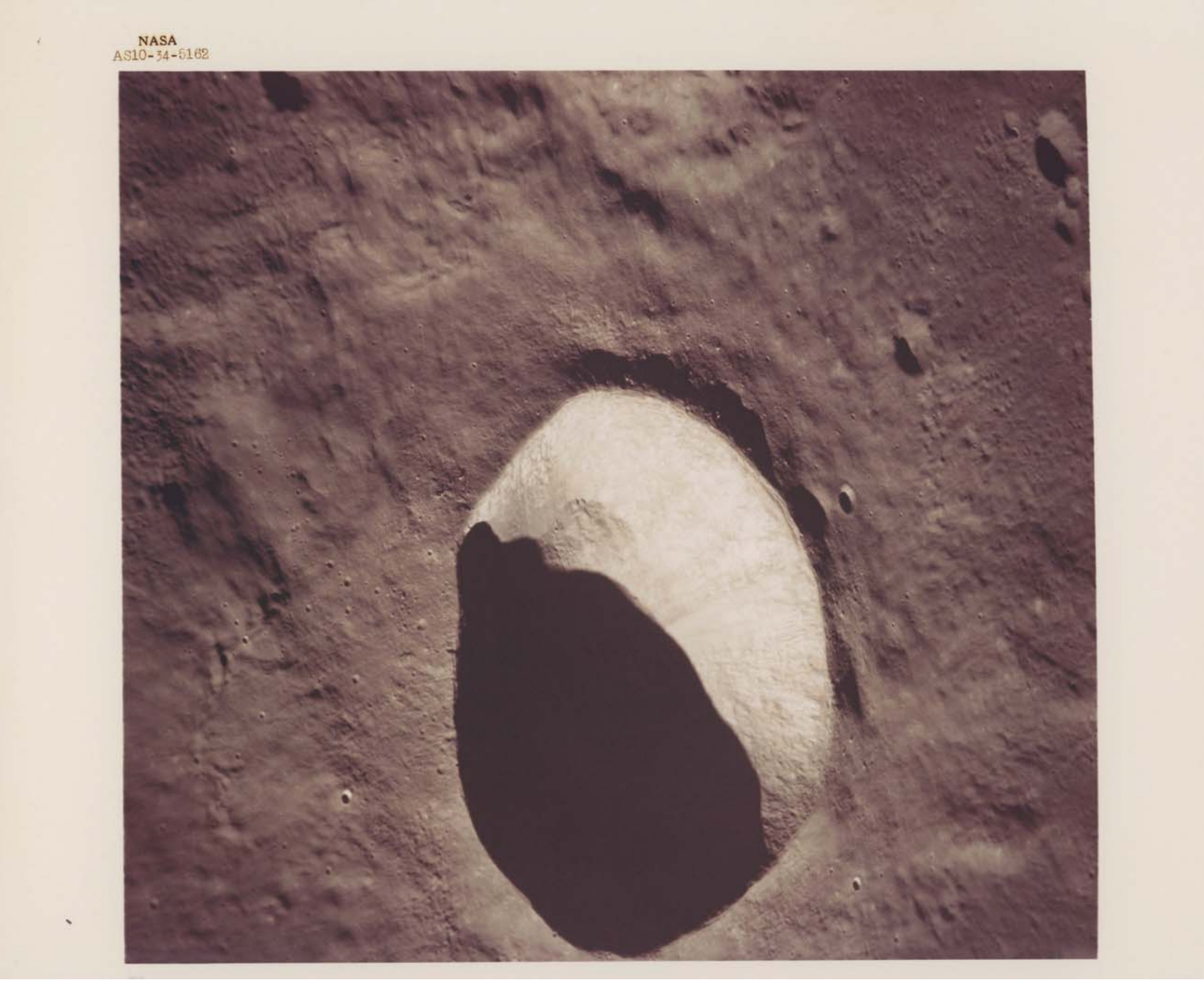
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.48 pm (GMT+2)

Stafford and Cernan flew Snoopy to within 9 miles of the Moon's surface testing systems and procedures before they jettisoned the LM's descent stage.

The photograph was taken with the 80mm lens from the window of the orbiting Command Module Charlie Brown over the 64-km farside Crater Gregory (visible in the right background) and its surrounding area (latitude / longitude: 1.2° N / 128.5° E). The red/blue diagonal line is the Command Module's window.

Unlike the subsequent Apollo 11 ascent stage (and all that followed it), which was left in lunar orbit to eventually crash into the lunar surface, Snoopy's ascent stage was sent on a trajectory past the Moon into a heliocentric orbit. This was not tracked after 1969, and Snoopy's location remained unknown until 2011, when a group of amateur astronomers based in the UK started a project to search for it. The Royal Astronomical Society announced a possible rediscovery of Snoopy in 2019, positing that asteroid "2018 AV2," which is roughly the size of a school bus, is likely the capsule. The Apollo 10 LM is the only once-manned spacecraft still in outer space without a crew.





110

EUGENE CERNAN (APOLLO 10)

1969

Diptych: Sunrise over craters Schmidt and Godin (2). 18-26 May 1969.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1969. Each 20,3 x 25,4 cm (7.9 x 10 in), the first numbered "NASA AS10-34-5162" (NASA MSC) in red in top margin and with "A Kodak Paper" watermarks on the verso, the second [NASA AS10-34-5165] with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.49 pm (GMT+2)

The two photographs were successively taken during the 18th revolution around the Moon as the spacecraft was approaching the nearside terminator. The Sun was rising over craters Schmidt (first photograph) and Godin (second photograph) whose western walls are illuminated.

The 11-km long and 2.3-km deep Crater Schmidt seen through the 250mm telephoto lens lies to the west of the landing site chosen for Apollo 11 (latitude / longitude: 1° N / 19.5° E). Its wall is dramatically lit by a low-sun angle.

"The most notable features of Schmidt are the sharp rim, ray pattern, relatively rough floor, and surrounding hummocky terrain. Numerous boulders, easily resolvable on a photograph of this scale and quality, can be seen in the area surrounding the crater and on the crater floor. Most of these boulders range in size from 68 to 122m" (NASA SP-246, p. 81).

One side of the Crater Godin (35 km in diameter) seen through the 250mm telephoto lens glints starkly in the low Sunlight (latitude / longitude: 2.2°N / 10° E).

From the mission transcript when the photographs were taken:

110:43:14 Stafford: OK, Houston. If Jack Schmitt's still there, we're passing over the crater. We got it named after him. It's right past Ritter and Sabine, and right here you can see some tremendous boulders down on the outside rim, there. They're great big white ones. I'd say they're, oh, to see it from this altitude here - and they got long shadows on them, they're at least about a hundred feet or more in diameter. And down near the bottom, you can see where the sides are slumping in. It's more like the tailings off a mine. And the sides are white and gray. You can see fractured structure in there, too. We got some pictures of it. Over.

“There it is [the Earth].”

Eugen Cernan

111

EUGENE CERNAN (APOLLO 10)

1969

Earthrise. 18-26 May 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in), with “A Kodak Paper” watermarks on the verso, numbered “NASA AS10-27-3890” (NASA MSC) in red in top margin.
This amazing photograph was taken looking west over Smyth’s Sea through the 250mm telephoto lens.

€ 2.500 – 4.000
$ 3.000 – 4.800

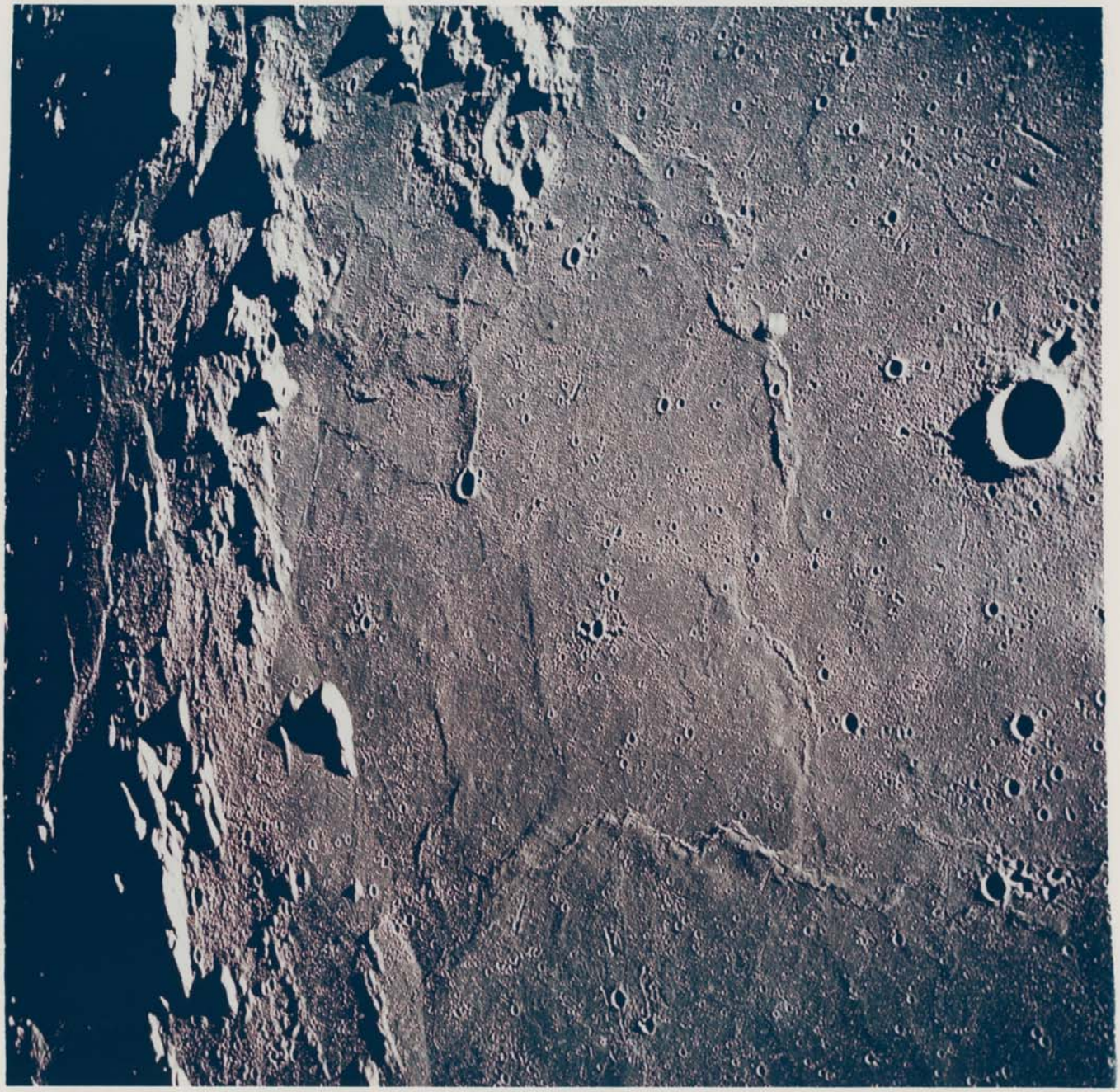
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.50 pm (GMT+2)

“To see our home planet from this point of view was absolutely awesome. It was nearly breathtaking. I was reminded of Socrates’s saying in 399 B.C., before flight above the ground was theorized: ‘A man must rise above the Earth to the top of the atmosphere and beyond, and only thus will he fully understand the world in which he lives”

Thomas Stafford (Jacobs, p. 53).

From the mission as the photograph was taken:
122:01:58 Stafford: We’ll have acquisition from the Earth soon.
122:02:27 Stafford: Now. if that isn’t a tan color, absolutely tan, I don’t know what the hell is. [...]
122:05:52 Cernan: There it is [the Earth].
122:05:53 Stafford: Hit it, quick. Go, baby, go.
122:05:56 Young: What?
122:05:57 Stafford: The Earth. Hit it. Again, baby...
122:06:00 Young: Jesus Christ.
122:06:02 Stafford: Are you aiming at it right now?
122:06:05 Cernan: I know where this one is.
122:06:14 Stafford: Beautiful, Gene-o.
122:06:16 Cernan: Think I can get...
122:06:17 Young: Sounds like we’re about to acquire (radio signal with the Earth).
122:06:28 Cernan: Yes, we are.
122:06:36 Stafford: Might shoot an f:8 - 80 on it. Oh, 250 (mm lens) will be good.



"Joe, this is incredible.
That thing [the Moon]
is getting rounder and
rounder and rounder
and smaller all the time."

Eugen Cernan

112

J. YOUNG, E. CERNAN OR T. STAFFORD (APOLLO 10)

1969

Diptych: last photograph in lunar orbit and Moon after translunar injection (2). 18-26 May 1969.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1969 [NASA AS10-27-3907 and AS10-27-3948]
Each 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.51 pm (GMT+2)

The first photograph was taken looking west near the lunar terminator (boundary between day and night on the Moon) across landing site 3 (one of five proposed Apollo landing sites locatel on Central Bay) with the 80mm lens. Topographic features on the surface of Central Bay are accentuated by the low Sun angle and undulations occuring in an apparently smooth mare area are emphasized. The small 6.7-km craters Bruce lies in the middle of the mare surface. Landing Site 3 is in the middle distance at the left margin of the pronounced ridge in the top half of the second photograph. Latitude / longitude: 1.1° N / 4.3° E and 1.4° N / 1° E.

This sequence ended the orbital lunar photography of the mission and the astronauts

prepared for the TransEarth injection burn over the lunar farside and a fantastic view of the Moon (second photograph taken through the 80mm lens).

From the mission transcript after TransEarth injection:
138:02:36 Cernan: Joe, this is incredible. That thing [the Moon] is getting rounder and rounder and rounder and smaller all the time.
138:02:40 Engle (Mission Control): Rog, Gene-o. Understand.
138:02:46 Cernan: The real show is on the inside here; it's like three monkeys in a string pod. [...]
138:04:49 Cernan: Hey, Joe, the Moon is almost small enough now where I can see the whole thing from the top, one corner of my forward window to the other corner of my forward window. [...]
138:05:32 Engle: You guys are really hauling the mail out there. [...]
138:08:33 Cernan: Hey, Joe, down at 9 miles [16.7 km] has to be exciting, but this has got to be unbelievable. The wind - the Moon now is well within the boundaries of my forward rendezvous window. [...]
138:10:21 Cernan: See what I mean about size, Joe. It just about fills up, roundwise, right smack in the hatch window. Boy, and is this a full Moon, I'll tell you.
138:10:39 Engle: You're just about 1,400 [nautical] miles [2,600 km] out now, Gene.

113

J. YOUNG, E. CERNAN OR T. STAFFORD (APOLLO 10)

1969

Diptych: Earth and Moon during the homeward journey (2). 18-26 May 1969.

Two vintage Chromogenic prints on fiber-based GAF paper, printed 1969.
Each 20,3 x 25,4 cm (7.9 x 10 in)the first [NASA AS10-27-3976] numbered "NASA G-69-6588" in black in bottom margin (NASA Goddard), the second with NASA HQ caption numbered "AS10-27-3956" on the verso.

€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.52 pm (GMT+2)

The Moon (photograph by John Young) seen through the 250mm lens after the first night of sleep on the way back to Earth, from a perspective not visible from Earth as the spacecraft was high above the equator near 27° E longitude.

The Earth seen through the 250mm telephoto lens after the astronauts' second night of sleep from about 240,000 km away in deep space. Northern Africa and the Middle East are clearly visible.

From the mission transcript after the first night of sleep of the crew following transEarth injection:
147:27:35 Young: The Moon is a - The Moon is a very bright body from here. [...] Our window system on the vehicle right now is in excellent condition. We can see just as clearly as anyone could ask for, on all five windows. [...]
148:49:00 Public Affairs Officer (Mission Control): Apollo 10 did pass the equal potential point between the Earth and the Moon. Has now left the lunar sphere of influence, and is in the Earth's sphere. That occurred at 148 hours, 39 minutes, 3 seconds. We copied the distance from the Earth at that time of 179,524 nautical miles [332,478 km]. Velocity, 4,869 feet per second [1,484 m/s]. Distance from the Moon at that time was about 33,820 nautical miles [62,635 km]. [...]
149:18:11 Stafford: Roger. Just wanted to describe [garble] kind of the total situation here internal. We've got all the spacecraft restowed. Got the music playing, got a beautiful view out here as we rotate around slowly. We've got the Moon in one window and the Earth in the other window. We got it worked out where no thrusters are firing and we just feel in great shape. Over.

"We've got all the spacecraft restowed.
Got the music playing, got a beautiful
view out here as we rotate around slowly.
We've got the Moon in one window
and the Earth in the other window."

Thomas Stafford

114

NASA (APOLLO 11)

1969

The historic first Moon landing mission: official portrait and emblem (2). 1969.

Two vintage Chromogenic prints on fiber-based Kodak paper,
printed 1969 [NASA S-69-34875 and S-69-31740]
Each 20,3 x 25,4 cm (7.9 x 10 in), and with "A Kodak Paper"
watermarks on the verso (NASA / North American Rockwell).

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.53 pm (GMT+2)

"We felt Apollo 11 was no ordinary flight, and we wanted no ordinary design."

Michael Collins (from his 1974 book Carrying the Fire).

"It's human nature to stretch, to go, to see, to understand. Exploration is not a choice really, it's an imperative."

Michael Collins.

These official photographs of the crew and mission emblem before humankind's first voyage to the surface of another world are now iconic.

First photograph: the emblem depicts an eagle descending toward the lunar surface with an olive branch, symbolizing America's peaceful mission in space.

Second photograph (left to right): Neil A. Armstrong, Commander; Michael Collins, Command Module Pilot; and Edwin E. "Buzz" Aldrin, Jr., Lunar Module Pilot.

The first explorers of another world.


NASA
COLLINS
NASA
ALDRIN

115

NASA (APOLLO 11)

1969

First Man: Neil Armstrong preparing to become the first human being to walk on the Moon (3). Apr 1969.

Three vintage Gelatin silver prints on fiber-based paper, printed 1969. Each 20,3 x 25,4 cm (7.9 x 10 in), with NASA KSC captions numbered „69-H-1076" and „NASA-HQ caption numbered „69-H-694" on the versos.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.54 pm (GMT+2)

"I don't focus on self-satisfaction, and being first, and those kind of things. [...] I take certain pleasures in the achievements, the technical achievements. And not just in an overall sense, but little details here and there. Finding ways to accomplish the job."

Neil Armstrong (Chaikin, Voices, p.165).

Close-up of Armstrong making final adjustments to lunar spacesuit during a countdown demonstration test (first photograph); simulating lunar surface activities with the chest-mounted Hasselblad camera (second photograph); practicing the first step on the Moon from the footpad of the LM (third photograph).

116

NASA (APOLLO 11)

1969

Leaving for the Moon: the crew on the way to pad 39A for launch (2). 16 Jul 1969.

Two vintage Gelatin silver prints on fiber-based paper, printed 1969. Each 20,3 x 25,4 cm (7.9 x 10 in), the first with NASA KSC caption numbered „69-H-1166" on the verso, the second numbered „S-69-35306" (NASA MSC) in black in top margin.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.55 pm (GMT+2)

"I wasn't chosen to be first. I was just chosen to command that flight. Circumstance put me in that particular role. That wasn't planned by anyone."

Neil Armstrong (2005 interview with CBS).

The crew of Apollo 11, led by Commander Neil Armstrong, leave the Kennedy Space Center's Manned Spacecraft Operations Building during the prelaunch countdown (first photograph) and before the drive to their Saturn V rocket at Launch Complex 39A (second photograph).

Their mission was the dramatic end to a massive effort. Though trained to be self-reliant, they had the support of a huge team. Altogether it took the work of some 350,000 people to launch their mission.

A photograph taken at the same moment (Armstrong waving to well-wishers) graced the cover of LIFE magazine (Leaving for the Moon; July 25, 1969).

NASA
S-69-35306

JOHN F. KENNEDY SPACE CENTER, NASA
KENNEDY SPACE CENTER, FLORIDA 32899

FOR RELEASE JULY 16, 1969 PHOTO NO. S-69-[illegible]

KENNEDY SPACE CENTER, Fla.--The Apollo 11 crew leaves the Manned Spacecraft Operations Building and prepares to enter a van which will take them to pad 39A, at the launch pad astronauts Neil A. Armstrong, Edwin E. Aldrin, Jr. and Michael Collins entered their Apollo 11 space vehicle, which lifted off at 9:32 A.M. EDT to begin the first manned Lunar Landing mission.

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Photo Credit -- NASA or National Aeronautics and Space Administration

"It was so much different from any other flight. You knew darned good and well that this was real history in the making. The thing that made this one particularly gripping was that sense of history, that if this was successful this was a date that was going to be in all the history books for time evermore – everything else that happened in our time is going to be an asterisk."

Walter Cronkite, CBS television commentator (from Hamish Lindsey, Tracking Apollo to the Moon, Springer, London, 2001, p. 214).

117

NASA (APOLLO 11)

1969

The historic liftoff of the first manned Moon landing mission. 16 Jul 1969.

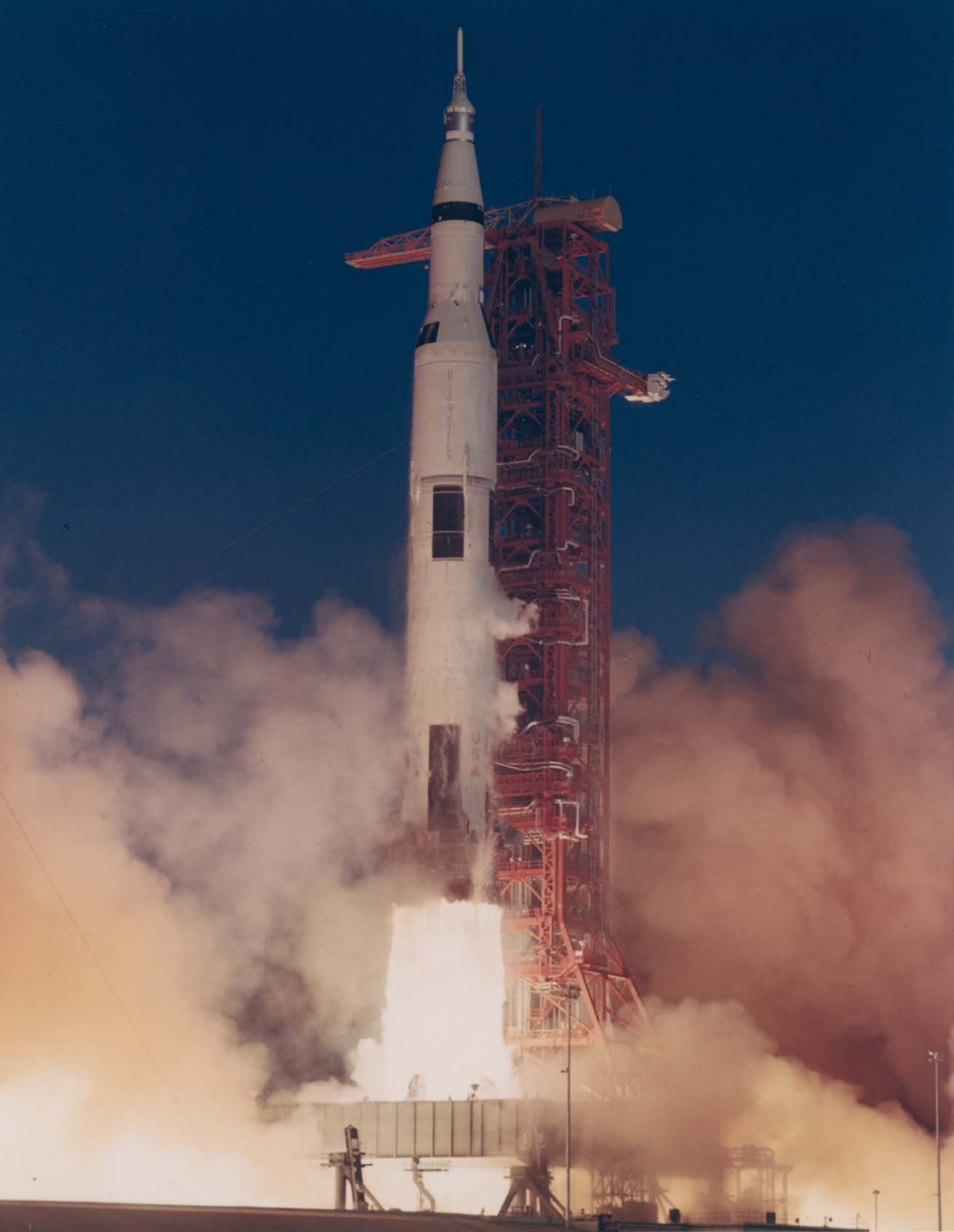
Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).

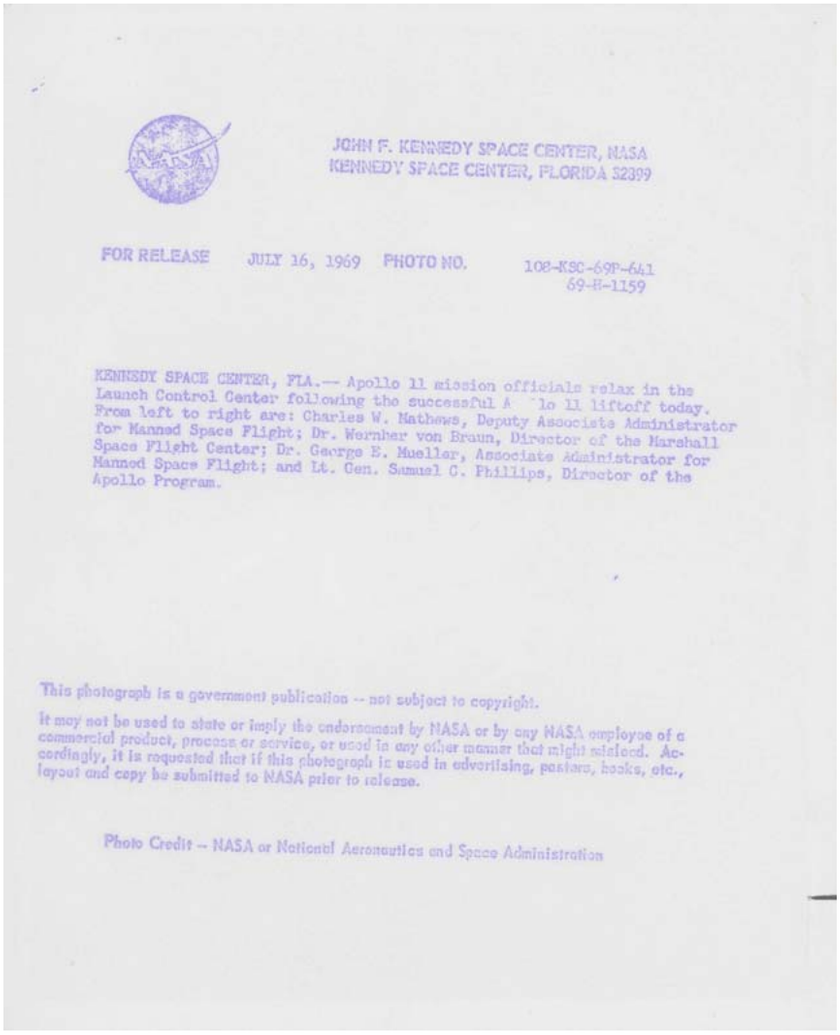
€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.56 pm (GMT+2)

The huge, 363-feet tall Apollo 11 (Spacecraft 107/Lunar Module 5/Saturn 506) space vehicle as launched from Pad A, Launch Complex 39, Kennedy Space Center (KSC), at 9:32 a.m. (EDT), July 16, 1969.





JOHN F. KENNEDY SPACE CENTER, NASA
KENNEDY SPACE CENTER, FLORIDA 32899

FOR RELEASE JULY 16, 1969 PHOTO NO. 108-KSC-69P-641
69-H-1159

KENNEDY SPACE CENTER, FLA.-- Apollo 11 mission officials relax in the Launch Control Center following the successful A lo 11 liftoff today. From left to right are: Charles W. Mathews, Deputy Associate Administrator for Manned Space Flight; Dr. Wernher von Braun, Director of the Marshall Space Flight Center; Dr. George E. Mueller, Associate Administrator for Manned Space Flight; and Lt. Gen. Samuel C. Phillips, Director of the Apollo Program.

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Photo Credit -- NASA or National Aeronautics and Space Administration

118

NASA (APOLLO 11)

1969

Wernher von Braun and NASA officials celebrating the historic launch. 16 Jul 1969.

Vintage Gelatin silver print on fiber-based paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in), with NASA KSC caption numbered „69-H-1159“ on the verso.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.57 pm (GMT+2)

NASA caption] Kennedy Space Center, FLA. Apollo 11 mission officials relax in the Launch Control Center following the successful Apollo 11 liftoff today. From left to right are: Charles W. Mathews, Deputy Associate Administrator for Manned Spaceflight; Dr. Wernher von Braun, Director of the Marshall Space Flight Center; Dr. George Mueller, Associate Administrator for Manned Space Flight; and Lt. Gen. Samuel C. Phillips, Director of the Apollo Program.

"Since the dawn of history man had been chained to this planet. No matter what the species of Homo Sapiens would accomplish, it seemed to be preordained to share the ultimate fate of its earthly abode, extinction. With the flight of Apollo 11 the fateful chain was broken. For man now showed that he could land on other heavenly bodies and that he could live and work there."

Wernher Von Braun (Thomas, p. 179).

119

N. ARMSTRONG, B. ALDRIN, OR M. COLLINS (APOLLO 11)

1969

The Earth, as seen by the first men on the Moon during the outbound journey. 16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper“ watermarks on the verso, numbered „NASA AS 11-36-5355“ (NASA MSC) in black in top margin.

€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.58 pm (GMT+2)

Apollo 11 was already about 98,000 nautical miles (182,500 km) from Earth when the crew witnessed this “out of this world” view of their Home Planet.

This photograph taken through the 250mm telephoto lens has been widely reproduced as one of the most famous Earth photographs taken during the Apollo program and was extensively used by the environmental movement.

The black sky of space was cropped by NASA photo editors so that the Earth appears bigger in the picture.

From the mission transcript as the astronauts were gazing at the Earth a couple hours after this photograph was taken:
024:45:35 Collins: It’s really a fantastic sight through that sextant. A minute ago, during that Auto maneuver, the reticle swept across the Mediterranean. You could see all of North Africa, absolutely clear; all of Portugal, Spain, southern France; all of Italy, absolutely clear. Just a beautiful sight.
024:45:54 McCandless (Mission Control): Roger. We all envy you the view up there. [...]
027:17:09 Aldrin: I’m looking through the monocular now, and I guess to coin an expression, the view is just out of this world.

120

MICHAEL COLLINS (APOLLO 11)

1969

Stunning twin craters from lunar orbit: Messier and Messier A. 16-24 Jul 1969.

Vintage Gelatin silver print on fiber-based paper. printed 1969.
25,4 x 20,3 cm (10 x 7.9 in), numbered „NASA AS11-42-6304" in black in top margin.

€ 800 – 1.200
$ 960 – 1.440

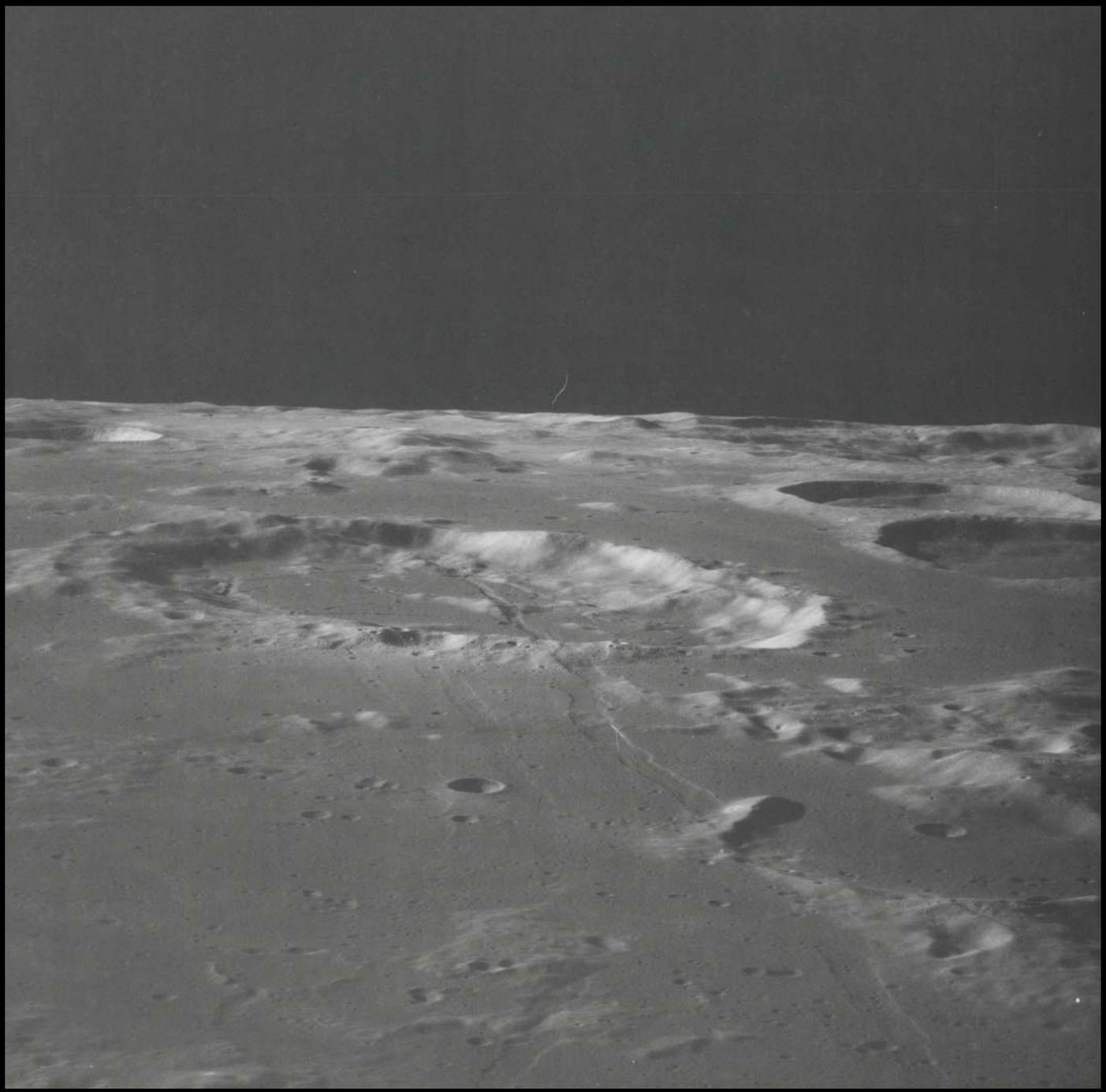
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 4.59 pm (GMT+2)

This extremely rare photograph from magazine 42/U was not released by NASA after the mission.

Collins captured this magnificent view during the third revolution of the spacecraft around the Moon through the 250mm telephoto lens.

These very distinctive conical craters located in the Sea of Fertility, Messier (top) and Messier A (bottom), are about 10 km in diameter. Latitude / longitude: 1.6° S / 48.1° E.



121

MICHAEL COLLINS (APOLLO 11)

1969

Spectacular lunar horizon from the orbiting spacecraft: crater Gloclenius. 16-24 Jul 1969.

Vintage Gelatin silver print on fiber-based paper, printed 1969.
25,4 x 20,3 cm (10 x 7.9 in), numbered „NASA AS11-42-6311" in black in top margin.

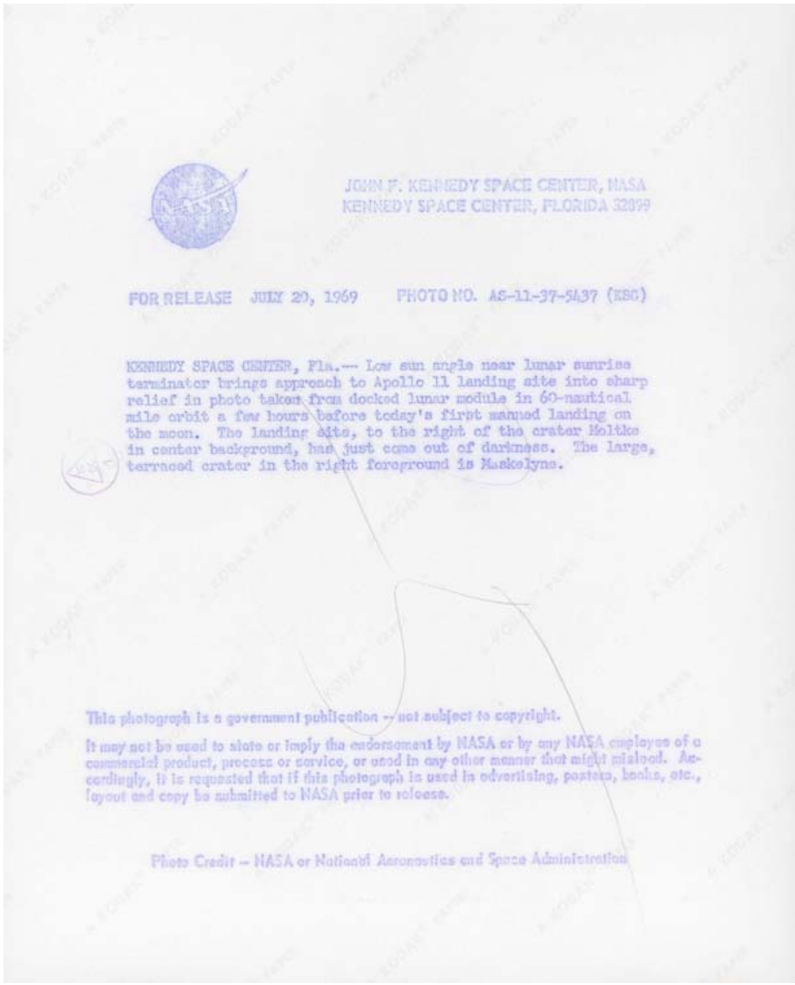
€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.00 pm (GMT+2)

This extremely rare photograph from magazine 42/U was not released by NASA after the mission.

Collins captured this spectacular oblique photograph looking south east through the 250mm telephoto lens of the 70-km crater Goclenius (center) and 28-km Gutenberg E (right) located on the southern edge of the Sea of Fertility (latitude / longitude: 11° S / 46° E). Numerous rilles scarring the floor of Gloclenius can be seen; one rille extends across the entire crater floor, over the central peak, and across the rim into the smooth mare.



JOHN F. KENNEDY SPACE CENTER, NASA
KENNEDY SPACE CENTER, FLORIDA 32899

FOR RELEASE JULY 20, 1969 PHOTO NO. AS-11-37-5437 (KSC)

KENNEDY SPACE CENTER, Fla.— Low sun angle near lunar sunrise terminator brings approach to Apollo 11 landing site into sharp relief in photo taken from docked lunar module in 60-nautical mile orbit a few hours before today's first manned landing on the moon. The landing site, to the right of the crater Moltke in center background, has just come out of darkness. The large, terraced crater in the right foreground is Maskelyne.

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It may not be used to state or imply the endorsement by NASA or by any NASA employee of a commercial product, process or service, or used in any other manner that might mislead. Accordingly, it is requested that if this photograph is used in advertising, posters, books, etc., layout and copy be submitted to NASA prior to release.

Photo Credit – NASA or National Aeronautics and Space Administration

“And I got a beautiful view of the whole landing area.”

Buzz Aldrin

122

BUZZ ALDRIN (APOLLO 11)

1969

Sunrise over Tranquillity Base from Moon orbit. 16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 25,4 x 20,3 cm (10 x 7.9 in), with Technicolor Quality Control stamp and NASA KSC caption numbered „AS11-37-5437“ as well as „A Kodak Paper“ watermarks on the verso.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.01 pm (GMT+2)

This picture was taken on orbit 4 looking west with the 80mm lens from the window of the LM Eagle as Armstrong and Aldrin were in the midst of activating the LM docked to the CSM Columbia.

The crew was approaching the nearside terminator (boundary between day and night on the Moon) and the Sun was just rising over the Tranquility Base landing site, which can be seen near the shadow line, a little to the right of center. The jagged shape to the left is one of the LM thruster engines. The 22-km Crater Maskelyne is the large one at the lower right. Latitude / longitude: 0.2N / 24.5E.

From the mission transcript when the photograph was taken:
082:54:01 Armstrong: Man, this is really something, you ought to look at this. You want to watch our approach into the landing site. You got to watch right through this window. We're coming over - we just passed Mount Marilyn. We're coming up on Maskelyne series here - straight out ahead, coming into the landing area.
082:54:23 Collins: Houston, we're holding inertial a little while to study the approach to the landing zone. [...]
082:56:50 Aldrin: Houston, this is Apollo 11, in the Eagle. Apollo 11 in the Eagle. And I got a beautiful view of the whole landing area.

123

MICHAEL COLLINS (APOLLO 11)

1969

The rough backside from the Apollo 11 spacecraft in lunar orbit: badlands near Crater Chaplygin. 16-24 July 1969.

Vintage Gelatin silver print on fiber-based paper, printed 1969.
25,4 x 20,3 cm (10 x 7.9 in), in numbered „NASA AS11-43-6501“ in black in top margin.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.02 pm (GMT+2)

“I have done things and been places you simply would not believe, and I keep that inside me.”

Michael Collins (Chaikin, Voices, p. 169).

This extremely rare photograph from the B&W magazine 43/T used only in the CM Columbia while in lunar orbit was not released by NASA after the mission.

Collins captured this mesmerizing view from a photographic sequence looking west over the backside of the Moon through the 80mm lens after the first night of sleep of the crew in lunar orbit, showing lunar badlands north of Crater Chaplygin. Latitude / longitude: 0.5° N / 152° E.

124

N. ARMSTRONG OR B. ALDRIN (APOLLO 11)

1969

The CSM Columbia with Michael Collins solo on board. 16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper.
25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper" watermarks on the verso (NASA/ North American Rockwell) [NASA AS11-37-5446]
The photograph was taken from Eagle through the 80mm lens as both spacecraft were stationkeeping over the Sea of Tranquillity (latitude / longitude: 1.0N / 38.0E) approaching the area of the landing site.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.03 pm (GMT+2)

The photograph was taken from Eagle through the 80mm lens as both spacecraft were stationkeeping over the Sea of Tranquillity (latitude / longitude: 1.0N / 38.0E) approaching the area of the landing site

While Armstrong and Aldrin descended to the lunar surface aboard the LM, Collins was left on a 22-hour solo voyage to orbit the Moon alone in Columbia, and part of his responsibility during those orbits was to take photographs of the lunar surface (and with any luck identify Tranquillity Base).

"I guess the question that everyone has in the back of his mind is how do I feel about having to leave them on the lunar surface?..." said Collins. "They know and I know, and Mission Control knows, that there are certain categories of malfunction where I just simply light the motor and come home without them" (Life magazine, July 4, 1969).

"The Eagle has landed."

Neil Armstrong

125

N. ARMSTRONG AND B. ALDRIN (APOLLO 11)

1969

"The Eagle has landed!": shadow of Eagle and Sea of Tranquillity from both windows of the LM after touchdown (2). 16-24 Jul 1969.

Two Vintage Gelatin silver prints on fiber-based paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in)numbered „AS11-39-5790" and „AS11-39-5778" (NASA/ USGS) in margin.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.04 pm (GMT+2)

"In my view, the emotional moment was the landing. That was human contact with the Moon, the landing."

Neil Armstrong (Chaikin, Voices, p. 58).

Two of the first photographs taken by humans on the surface of another world.

These extremely rare photographs from the B&W magazine 39/Q were taken with the Hasselblad EVA camera and its 60mm (focal length) lens. It had a reseau plate, so images taken with it show a grid of crosses.

Frames from magazine 39/Q were not released by NASA after the mission.

From the mission transcript just after landing:
102:45:40 Aldrin: Contact Light.
102:45:43 Armstrong: Shutdown
102:45:44 Aldrin: Okay. Engine Stop.
102:45:45 Aldrin: ACA out of Detent.
102:45:46 Armstrong: Out of Detent. Auto.
102:45:47 Aldrin: Mode Control, both Auto. Descent Engine Command Override, Off. Engine Arm, Off. 413 is in.
102:45:57 Duke (Mission Control): We copy you down, Eagle.
102:45:58 Armstrong: Engine arm is off. (Pause) Houston, Tranquility Base here. The Eagle has landed.
102:46:06 Duke: Roger, Twan...(correcting himself) Tranquility. We copy you on the ground. You got a bunch of guys about to turn blue. We're breathing again. Thanks a lot.
102:46:16 Aldrin: Thank you.

“That’s one small step for (a) man; one giant leap for mankind.”

Neil Armstrong

126

NASA (APOLLO 11)

1969

Neil Armstrong’s giant leap for mankind.
16-24 July 1969.

Vintage Gelatin silver print on fiber-based paper, printed 1970. 20,3 x 25,4 cm (7.9 x 10 in), numbered „NASA G-70-685“ (NASA Goddard) in black in top margin.

€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.05 pm (GMT+2)

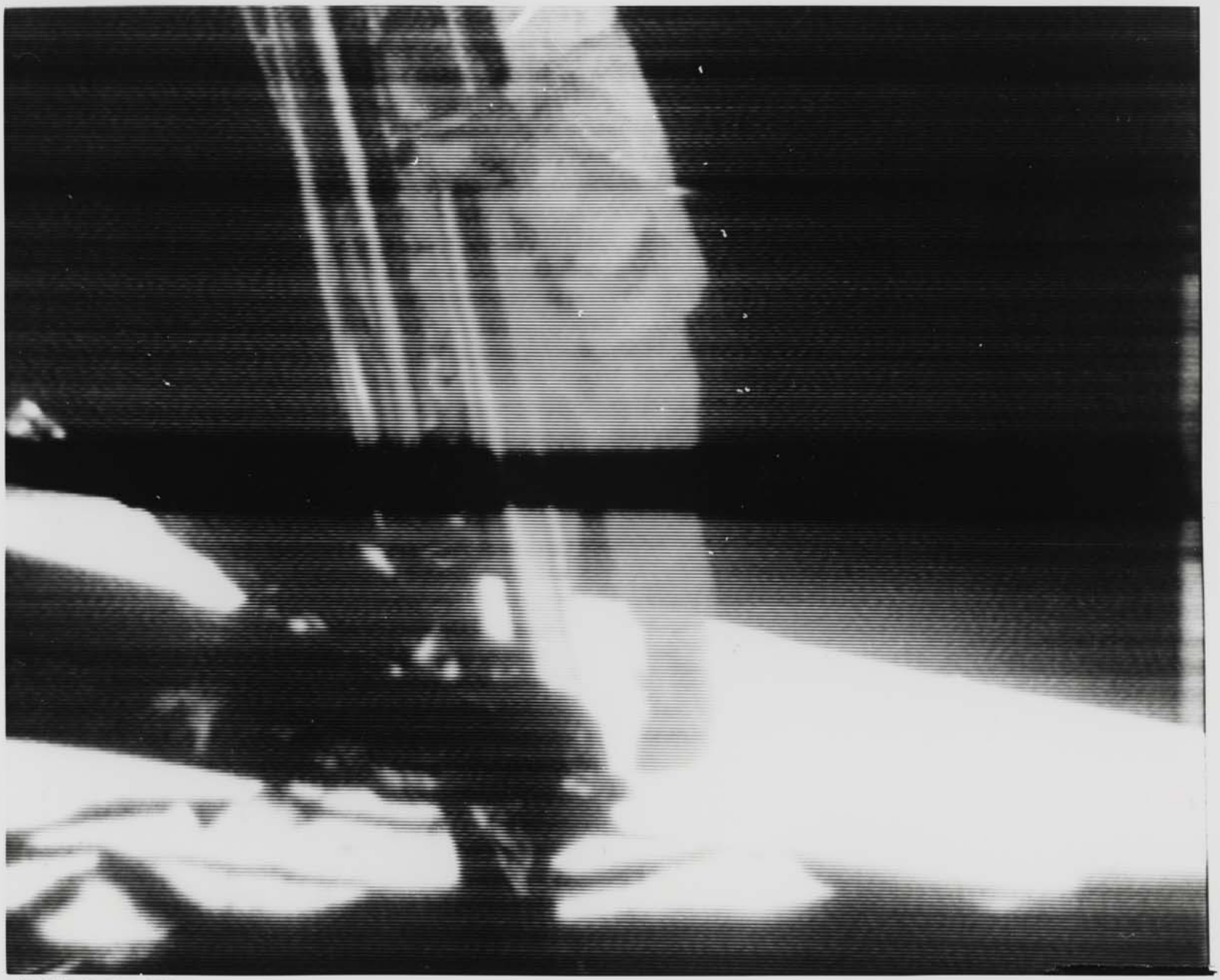
One of the most historic images of all time. Neil Armstrong is coming down the ladder just prior to being the first human on the Moon.

The camera was stored in the Modularized Equipment Stowage Assembly (MESA) on the LM porch. Armstrong released the MESA when he first looked out the window of the LM, so that the camera could be in a position to capture his slow descent down the ladder and onto the lunar surface.

The decision to start the EVA procedure was made a few hours after the landing. At 02:56 GMT (09:56 p.m. Houston time) on the 21st of July, 109 hours and 24 minutes after launch, Neil Armstrong set foot on the Moon.

In addition to the Hasselblad photographs are the B&W TV still images of Apollo 11.

The first TV transmission from another world was transmitted live to an Earth-bound audience estimated at 600 million people. Armstrong’s historic descent from the LM was captured by the Westinghouse camera. The downlink was being transmitted to Earth from this remote slow-scan, B&W video camera to the Honeysuckle Creek tracking station in Canberra, Australia.



"The ethereal look of these "live" B&W TV images mixed with the silver-grain textures of B&W film belongs to our collective memory. In some respects, both the aesthetics and the nature of how and where these B&W images were made complement Armstrong and Aldrin's Hasselblad surface photography. Moreover, they document the first human to descend to the surface of another celestial world on film through video. These "mixed media" images made it possible to photograph and participate in an historic event as it happened off of a live TV broadcast without even being there" (Dick, p.279).

From the mission transcript:

109:23:38 Armstrong: I'm at the foot of the ladder. The LM footpads are only depressed in the surface about 1 or 2 inches, although the surface appears to be very, very fine grained, as you get close to it. It's almost like a powder. (The) ground mass is very fine.

109:24:12 Armstrong: Okay. I'm going to step off the LM now.

109:24:23 Armstrong: That's one small step for (a) man; one giant leap for mankind.

127

NEIL ARMSTRONG (APOLLO 11)

1969

Buzz Aldrin climbing down the LM ladder. 16-24 July 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper“ watermarks on the verso (NASA / North American Rockwell).

€ 1.500 – 2.500
$ 1.800 – 3.000

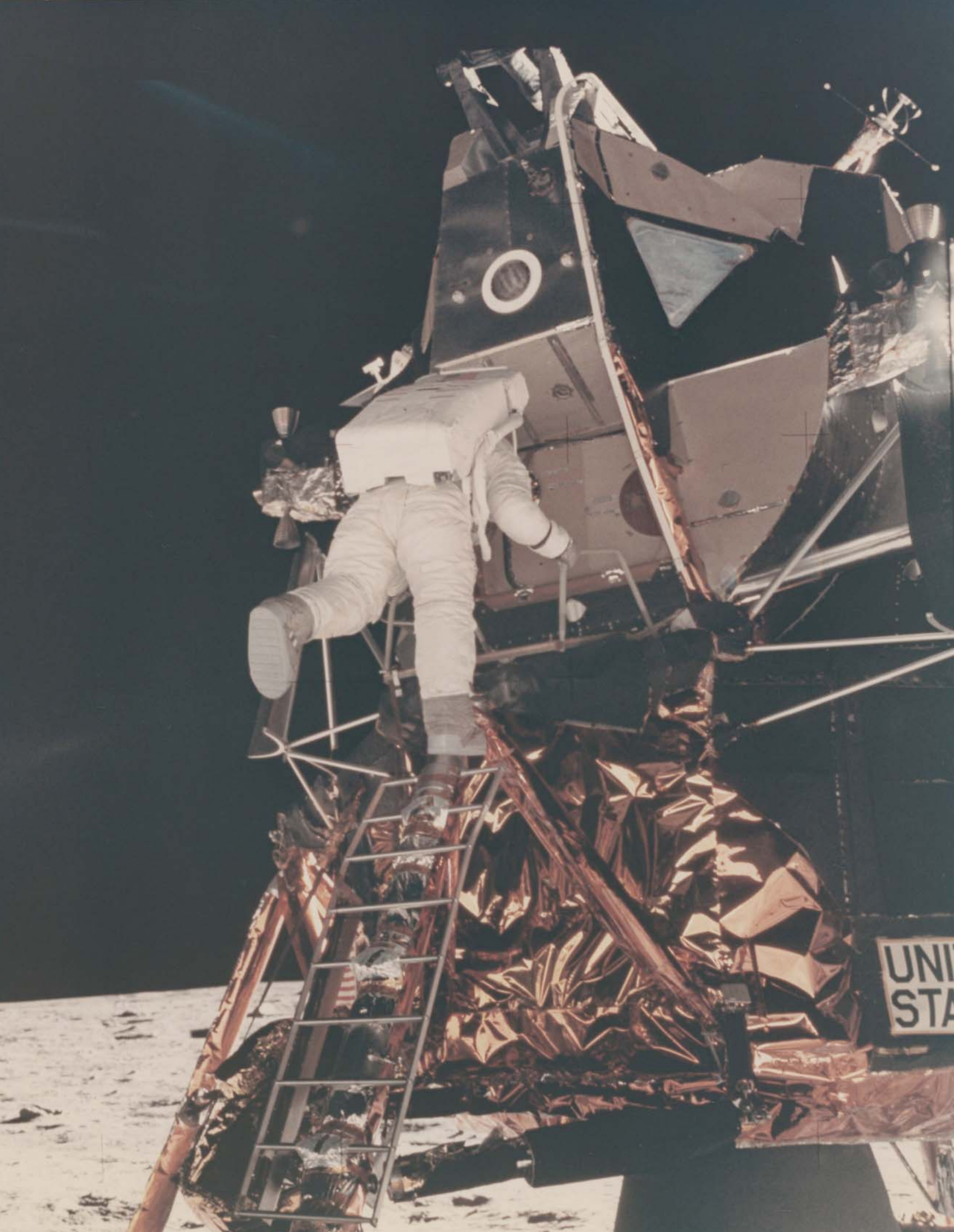
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.06 pm (GMT+2)

An eager Aldrin joins Armstrong on the Moon 19 minutes later.

He is jumping down to the top rung of the ladder. On his back rides a Portable Life Support System (PLSS) with oxygen for breathing, water for cooling, an electric power supply, and radio equipment

From the mission transcript when the photograph was taken:
109:41:28 Aldrin: Okay. Now I want to back up and partially close the hatch. (Long Pause) Making sure not to lock it on my way out.
109:41:53 Armstrong: (Laughs) A particularly good thought.
109:41:56 Aldrin: That's our home for the next couple of hours and we want to take good care of it. (Pause) Okay. I'm on the top step and I can look down over the RCU (Remote Control Unit) and (garbled) landing gear pads. It's a very simple matter to hop down from one step to the next.
109:42:18 Armstrong: Yes. I found I could be very comfortable, and walking is also very comfortable.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STA

“You’ve got three more steps and then a long one.”

Neil Armstrong

128

NEIL ARMSTRONG (APOLLO 11)

1969

Buzz Aldrin jumping down to the LM footpad. 16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper“ watermarks on the verso, numbered “NASA AS11-40-5868” (NASA MSC) in red in top margin.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.07 pm (GMT+2)

“We opened the hatch and Neil, with me as his navigator, began backing out of the tiny opening. It seemed like a small eternity before I heard Neil say, ‘That’s one small step for man… one giant leap for mankind.’ In less than fifteen minutes I was backing awkwardly out of the hatch and onto the surface to join Neil, who, in the tradition of all tourists, had his camera ready to photograph my arrival.”

Buzz Aldrin (NASA SP-350, p. 215).

Leaving the ninth step of the ladder, Aldrin jumps down to the Moon.

“On Earth his weight, including the spacesuit and mechanism-filled portable life-support system, would have totaled 360 lbs., but here the gross came only to a bouncy 60 lbs” (NASA SP-350, p. 11.4).

From the mission transcript when the photograph was taken:
109:42:28 Armstrong: You’ve got three more steps and then a long one.
109:42:42 Aldrin: Okay. I’m going to leave that one foot up there and both hands down to about the fourth rung up.

129

NEIL ARMSTRONG (APOLLO 11)

1969

Buzz Aldrin prior to being second human being to set foot upon the Moon. 16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS11-40-5868]
25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper" watermarks on verso.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.08 pm (GMT+2)

"We opened the hatch and Neil, with me as his navigator, began backing out of the tiny opening. It seemed like a small eternity before I heard Neil say, 'That's one small step for man... one giant leap for mankind.' In less than fifteen minutes I was backing awkwardly out of the hatch and onto the surface to join Neil, who, in the tradition of all tourists, had his camera ready to photograph my arrival."

Buzz Aldrin (NASA SP-350, p. 215).

"Isn't that something! Magnificent sight out here."

Neil Armstrong

130

NEIL ARMSTRONG (APOLLO 11)

1969

"Magnificent desolation!": Buzz Aldrin on the footpad of the LM Eagle. 16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969 [AS11-40-5869]
25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper" watermarks on verso.

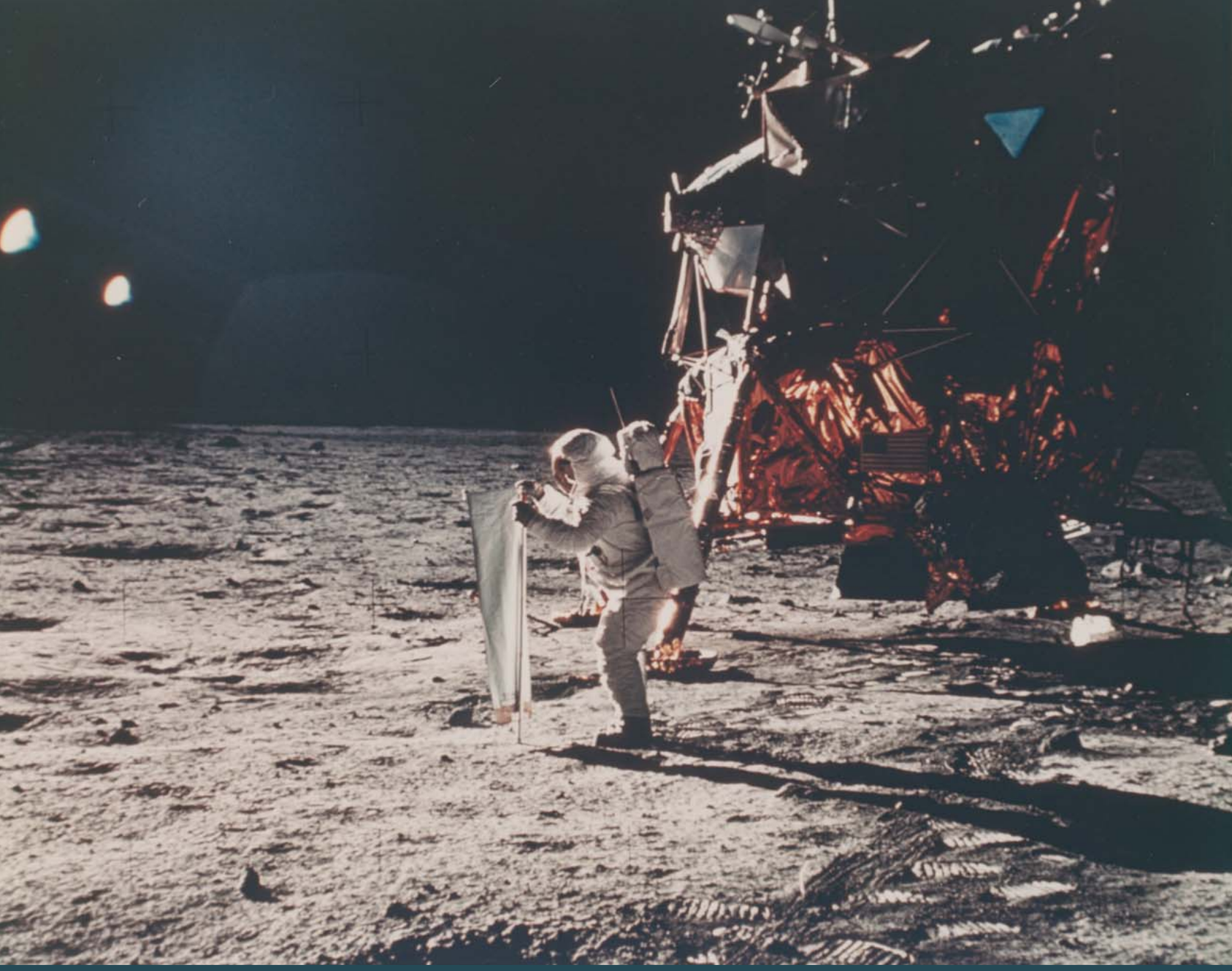
€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.09 pm (GMT+2)

Before making his first step on the Moon, Aldrin (with both feet on the footpad of the LM) tried to jump up to the bottom rung to check if there was no difficulty returning inside Eagle (he made it only on the second try). Then he and Armstrong walked where no man had gone before for more than two hours.

From the mission transcript when the photograph was taken:
109:42:53 Aldrin: Okay. Now I think I'll do the same (garbled) [Aldrin tries to jump up to the bottom rung and doesn't quite make it on the first try.]
109:43:01 Armstrong: A little more. About another inch. [Aldrin jumps up to the bottom rung.]
109:43:06 Armstrong: There, you've got it.
109:43:08 Aldrin: That's a good (last) step.
109:43:10 Armstrong: Yeah. About a 3-footer [Aldrin jumps back down to the footpad.]
109:43:16 Aldrin: Beautiful view!
109:43:18 Armstrong: Isn't that something! Magnificent sight out here.
109:43:24 Aldrin: Magnificent desolation.



131

NEIL ARMSTRONG (APOLLO 11)

1969

First photograph of a man standing on the surface of another world. 16-24 July 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS11-40-5872]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on theverso (NASA/ North American Rockwell).

€ 2.500 – 4.000
$ 3.000 – 4.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.10 pm (GMT+2)

As requested per his checklist, Armstrong took this historic first photograph of Aldrin on the lunar surface in order to document the Solar Wind Experiment.

"Many of the pictures taken by Armstrong will always be considered as classics of lunar surface photography. Here, rim-lit by the Sun to the left, Aldrin unfurls the aluminium sheet of the Solar Wind Experiment; behind him is the Lunar Module. Footprints can be seen in the foreground, also the linear tracks which were formed by the cable of the lunar surface TV camera. The shapes of light on the left were caused by the Sun shining almost directly into the camera lens" (Arnold, plate 17).

"Stepping out of the LM's shadow was a shock. One moment I was in total darkness, the next in the Sun's hot floodlight. From the ladder I had seen all the sunlit moonscape beyond our shadow but with no atmosphere, there was absolutely no refracted light around me. I stuck my hand out past the shadow's edge into the Sun, and it was like punching through a barrier into another dimension."
Buzz Aldrin (from his 1973 book Return to Earth)

132

NEIL ARMSTRONG (APOLLO 11)

1969

Portrait of Buzz Aldrin on the Moon. 16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969 [NASA AS11-40-5873]
25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper“ watermarks on the verso, with minor restorations at bottom right and top right white corners not affecting image.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.11 pm (GMT+2)

“I quickly discovered that I felt balanced comfortably upright only when I was tilted slightly forward. I also felt a bit disorientated – on the Earth when one looks at the horizon, it appears flat; on the Moon, so much smaller than the Earth and quite without high terrain, the horizon in all directions visibly curved away from us.”

Buzz Aldrin (from his 1973 book Return to Earth).

On the Moon at last, Aldrin stands in front of the LM Eagle, next to the Solar Wind Experiment after its successful deployment.

From the mission transcript when the photograph was taken:
110:03:20 Aldrin: Okay. You can make a mark, Houston. (Garbled)
110:03:24 McCandless (Mission Control): Roger. Solar Wind. (Pause)
110:03:36 Aldrin: And, incidentally, you can use the shadow that the staff (of the Solar Wind Collector) makes to assist you getting it perpendicular (to the Sun line) (garbled).

133

NEIL ARMSTRONG (APOLLO 11)

1969

Buzz Aldrin posing for a photograph beside the US flag. 16-24 July 1969.

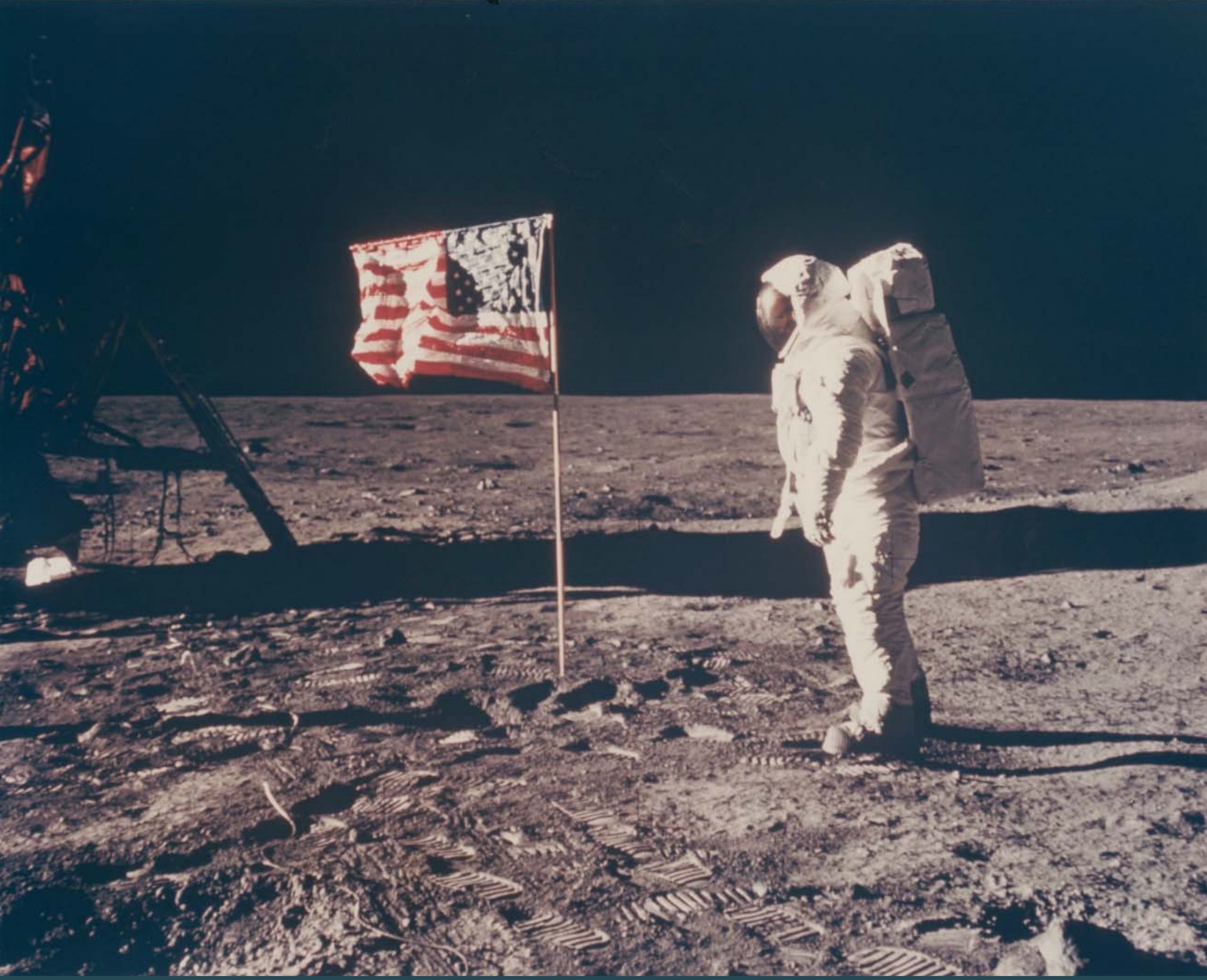
Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in), with NASA MSC caption and „A Kodak Paper" watermarks on the verso, numbered „NASA AS11-40-5875" in blue in top margin.

€ 2.500 – 4.000
$ 3.000 – 4.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.12 pm (GMT+2)

In one of the 20th century's most iconic images, Aldrin posed with the American flag. Aldrin's face is visible through his helmet as he looks over at Neil Armstrong. This is one of the few Apollo lunar surface photographs where it is possible to distinguish the astronaut's face. Normally, the high reflectivity of the gold visor would block visibility but in this case "his face is directly illuminated by the sunlight from the front and at a right angle to the observer's point of view, so it literally shines through the visor, especially because he's sticking his head forward" (ALSJ caption for AS11-40-5875)



134

NEIL ARMSTRONG (APOLLO 11)

1969

Buzz Aldrin beside the US flag. 16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS11-40-5875]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper“ watermarks on the verso.

€ 2.500 – 4.000
$ 3.000 – 4.800

Bidding starts at € 100

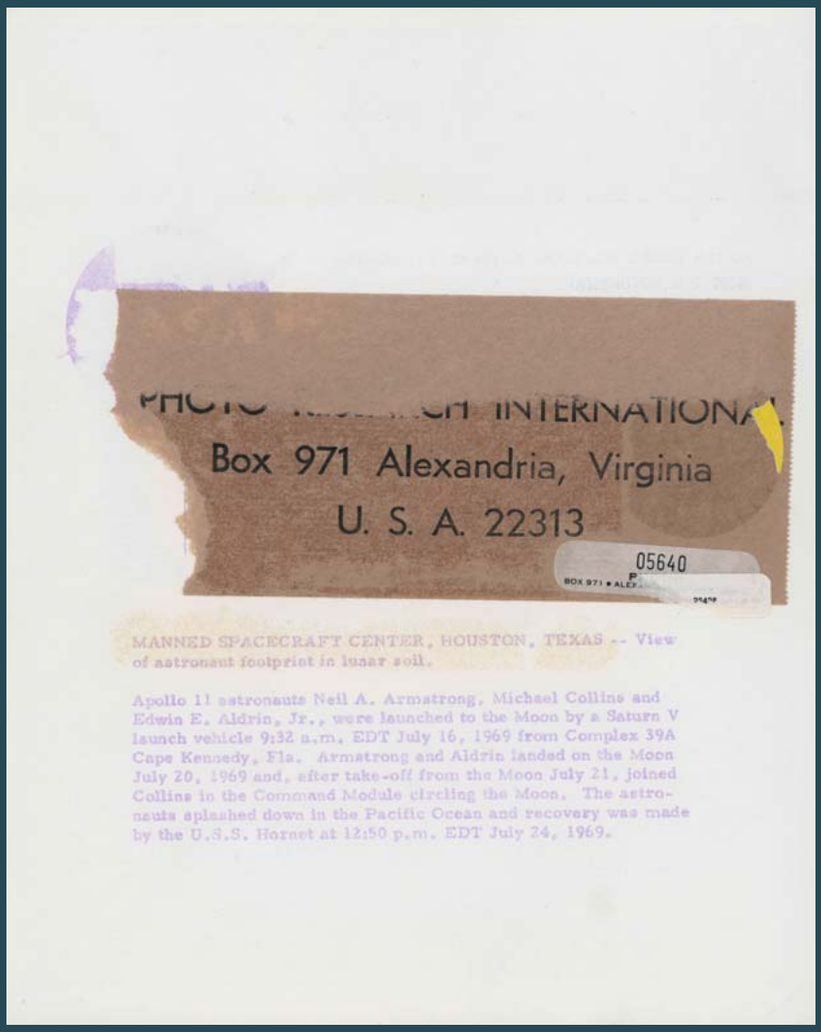
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.13 pm (GMT+2)

“The pictures were of such clarity and startling starkness. I thought ‘Not only did we do this, but we brought back amazing documentation’. These weren’t grainy B&W photos. You could see every rivet, every fold in the flag.”

Michael Collins (Jacobs, p. 15).

“Nothing can replace the pictures that were taken on the first visit to the lunar surface. Those are always going to stand out.”

Buzz Aldrin (Jacobs, p. 15).



135

BUZZ ALDRIN (APOLLO 11)

1969

The footprint on the Moon. 16-24 Jul 1969.

Vintage Gelatin silver print on fiber-based paper, printed 1969
[NASA- AS11-40-5877, originally shot on color film]
25,4 x 20,3 cm (10 x 7.9 in), with NASA HQ caption on the verso.
The photograph has come to be regarded as iconic of space exploration.

€ 5.000 – 7.000
$ 6.000 – 8.400

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.14 pm (GMT+2)

"'Most iconic' is the mark of a boot on a surface unlike any found at home. Not a rocket, dazzling in its technology and power; not some beautiful, distant nebula; but a simple sign of man's arrival on a surface beyond the Earth. Evidence that we have walked further. A step into that magnificent desolation."

Buzz Aldrin (Foreword, Space the first 50 years, Mitchell Beazley, Octopus Publishing Group, London, 2007).

136

BUZZ ALDRIN (APOLLO 11)

1969

The astronaut's boot on the Moon. 16-24 July 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS11-40-5880]
25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper" watermarks on the verso (NASA/ North American Rockwell).
This famous photograph was taken to provide a visual record of the relative density of the surface in a "soil mechanics test".

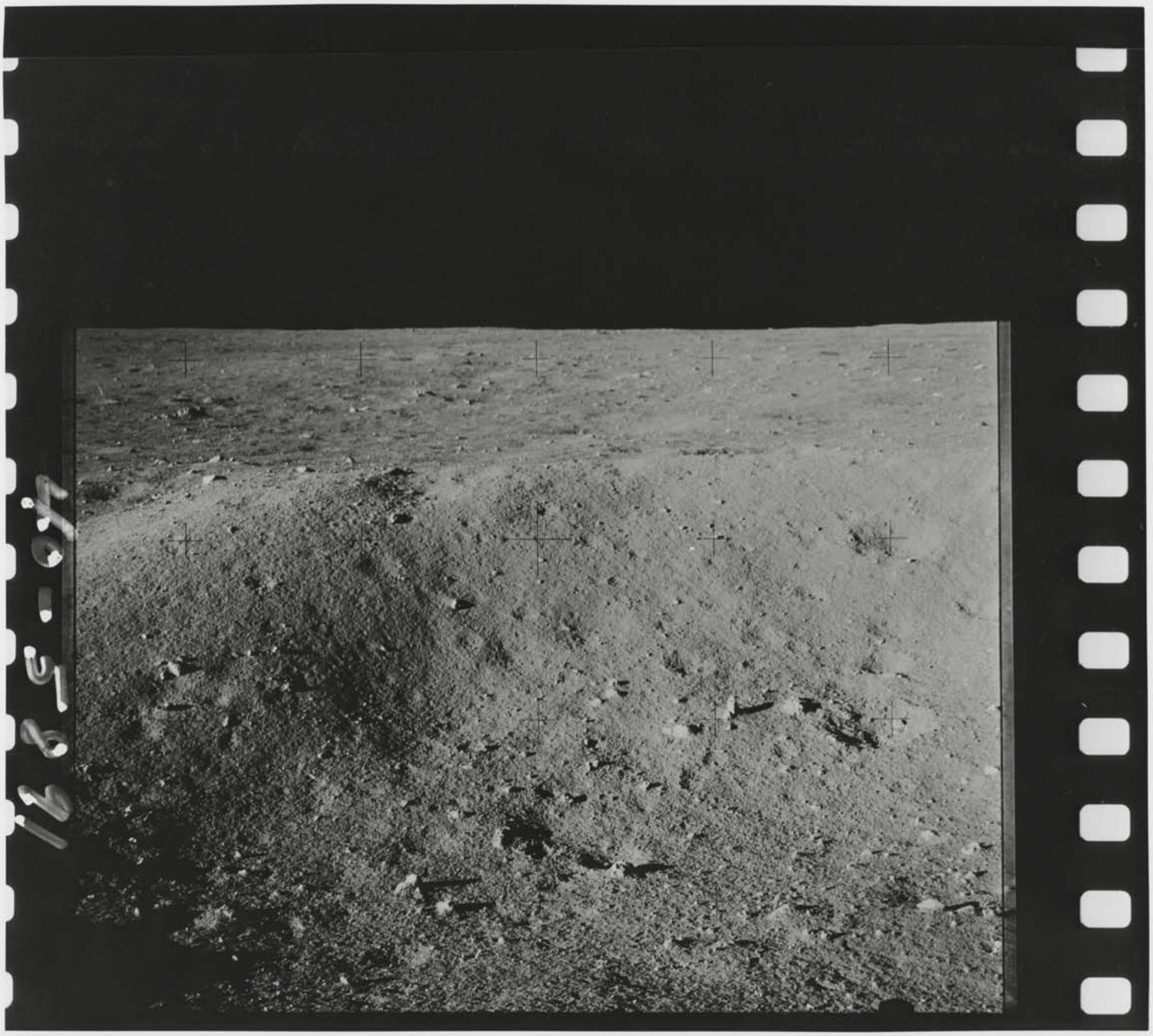
€ 3.000 – 5.000
$ 3.600 – 6.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.15 pm (GMT+2)

After taking his first step on the Moon (which he didn't photograph), Armstrong reported (at 109:24:48 GET): "Yes, the surface is fine and powdery. I can kick it up loosely with my toe. It does adhere in fine layers, like powdered charcoal, to the sole and sides of my boots. I only go in a small fraction of an inch, maybe an eighth of an inch, but I can see the footprints of my boots and the treads in the fine, sandy particles."

Aldrin said later: "I felt buoyant and full of goose pimples when I stepped down on the surface, I immediately looked down at my feet and became intrigued with the peculiar properties of the lunar dust" (NASA SP-350, p. 11.4).



137

BUZZ ALDRIN (APOLLO 11)

1969

Moonscapes near the LM Eagle at Tranquillity Base (2). 16-24 Jul 1969.

Two vintage Gelatin silver prints on fiber-based paper, printed 1969. Each 20,3 x 25,4 cm (7.9 x 10 in), numbered „AS11-40-5891“ and „AS11-40-5914“ (NASA/ USGS) in margin.

€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.16 pm (GMT+2)

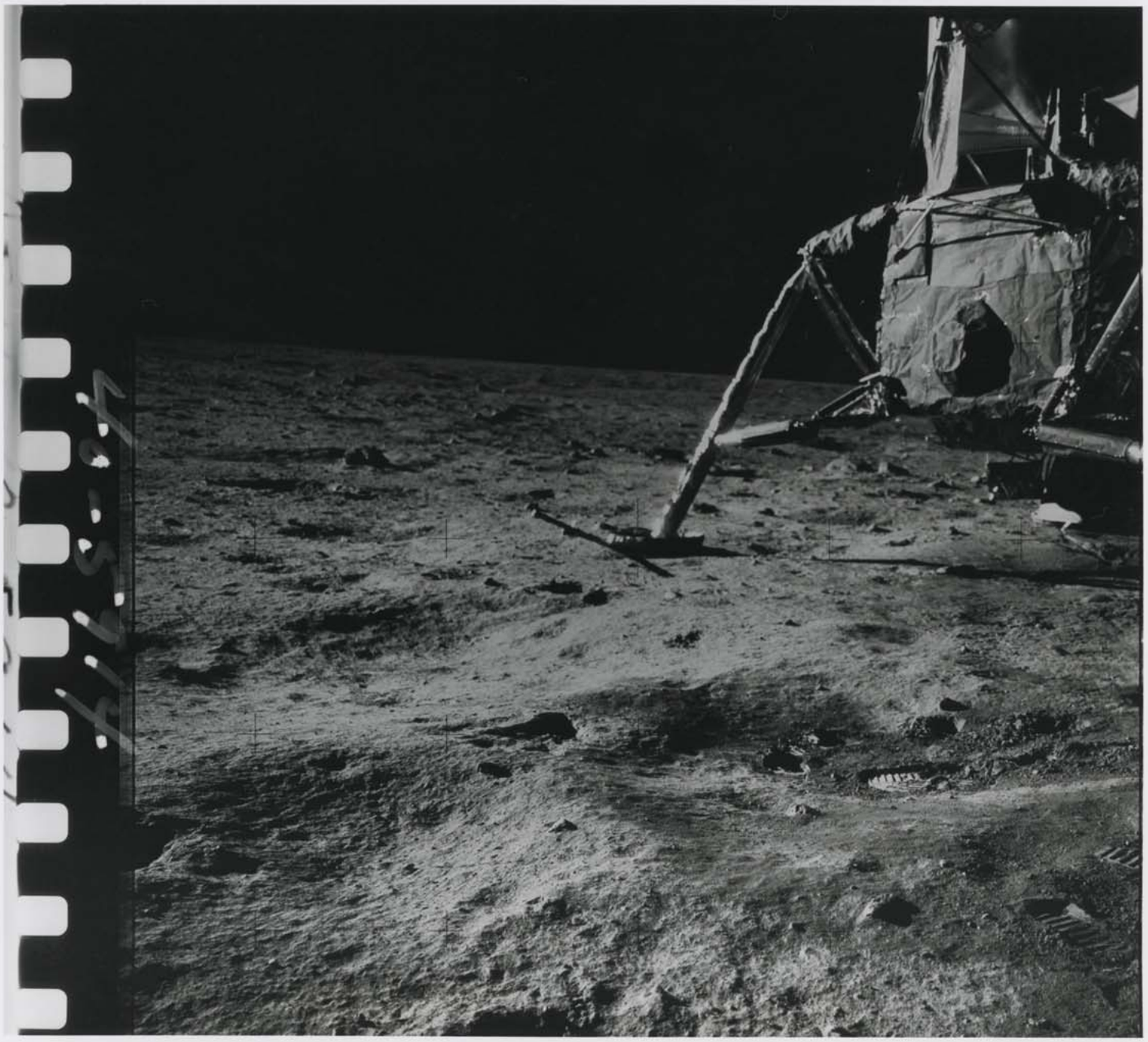
Two extremely rare photographs from two panoramic sequences (originally shot on color film) taken by Buzz Aldrin on the lunar surface as requested per checklist sewn on the wrist cover of his glove.

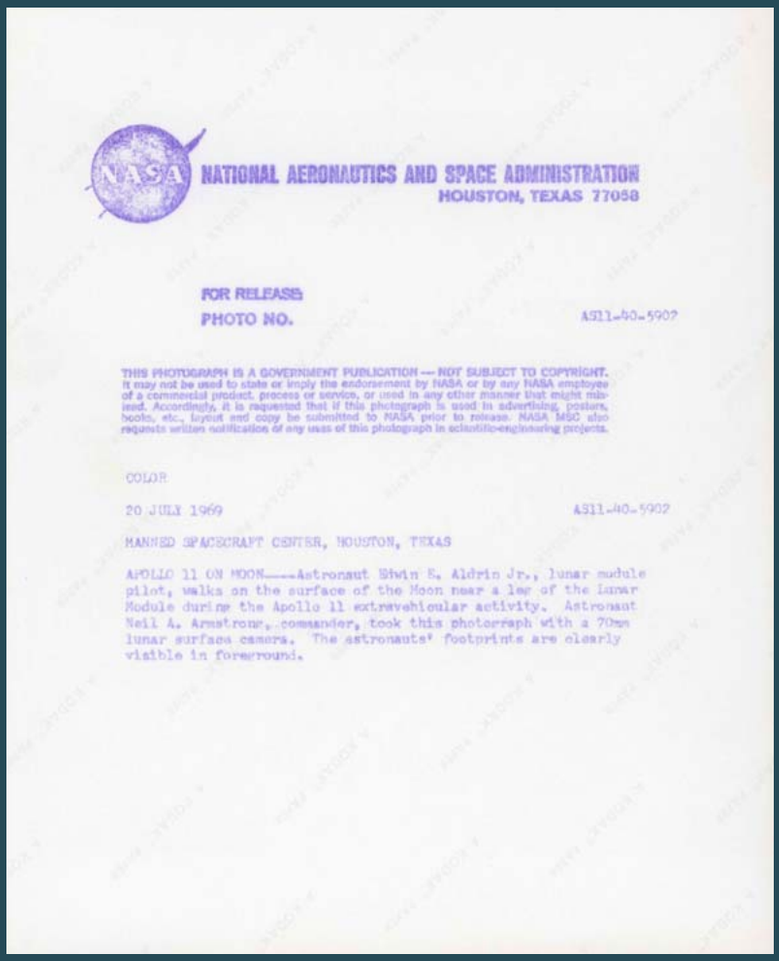
On the lunar surface, all Apollo astronauts took photographs using a 500 EL Hasselblad.

Data Camera equipped with a transparent glass reseau plate engraved with grid markings and specially designed lenses and Kodak films. Crosses on each picture enabled geologists to make photogrammetric measurements of all objects recorded.

Aldrin took the first photograph from the rim of Double Crater on a position 7 m west of the LM ladder. The interior and wall of the younger (and largest, 12 m) eastern component of Double Crater are visible in detail.

He took the second photograph from a position just a few meters north of the LM near the rim of a shallow crater.





NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
HOUSTON, TEXAS 77058

FOR RELEASE:
PHOTO NO. AS11-40-5902

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COLOR

20 JULY 1969 AS11-40-5902

MANNED SPACECRAFT CENTER, HOUSTON, TEXAS

APOLLO 11 ON MOON----Astronaut Edwin E. Aldrin Jr., lunar module pilot, walks on the surface of the Moon near a leg of the Lunar Module during the Apollo 11 extravehicular activity. Astronaut Neil A. Armstrong, commander, took this photograph with a 70mm lunar surface camera. The astronauts' footprints are clearly visible in foreground.

"We felt very comfortable. It was, in fact, in our view both preferable to weightlessness and to the Earth's gravity."

Neil Armstrong.

138

NEIL ARMSTRONG (APOLLO 11)

1969

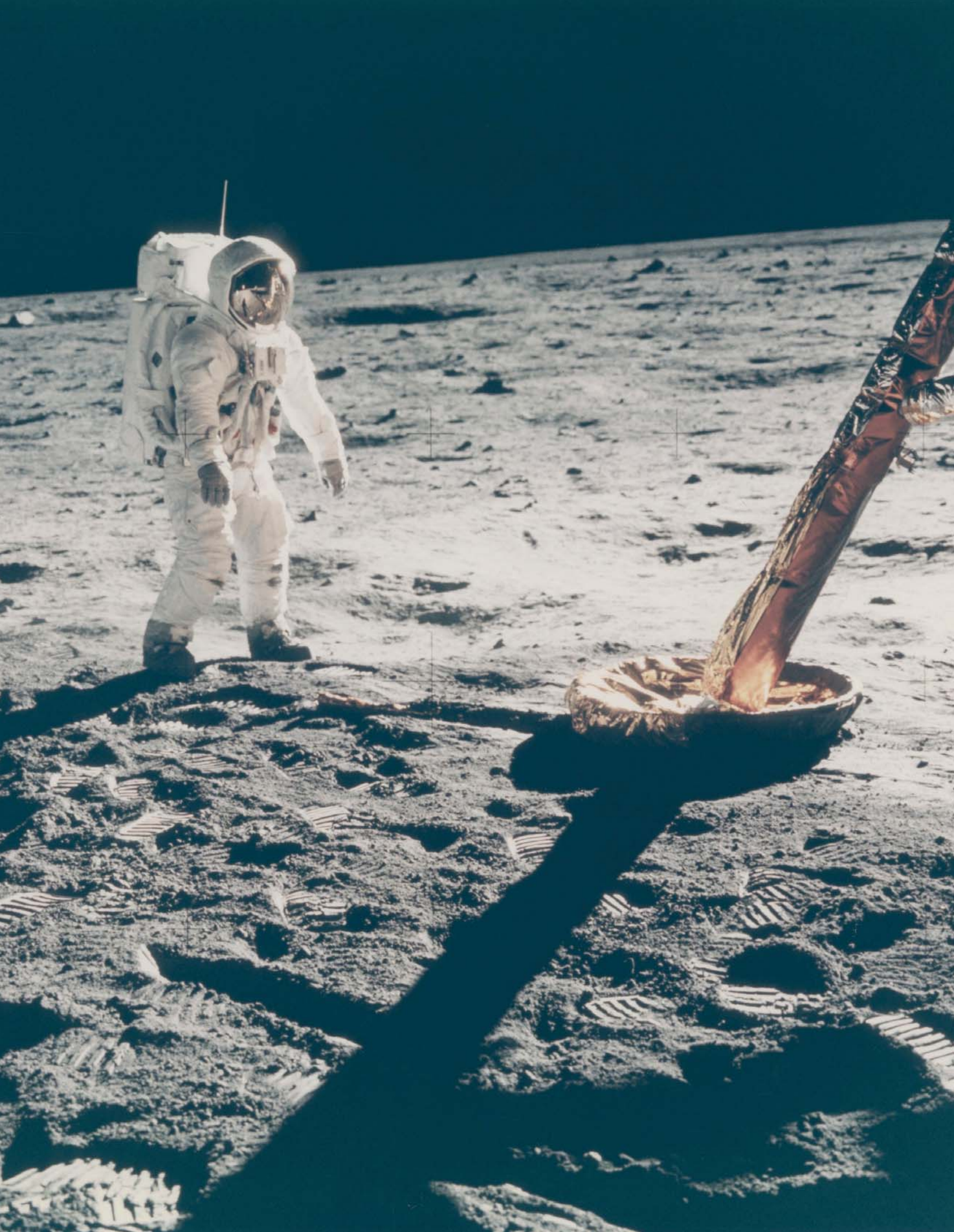
Buzz Aldrin walking on the Moon. 16-24 July 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks and NASA MSC caption on the verso, numbered „NASA AS11-40-5902" in blue in bottom right margin.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.17 pm (GMT+2)



139

NEIL ARMSTRONG (APOLLO 11)

1969

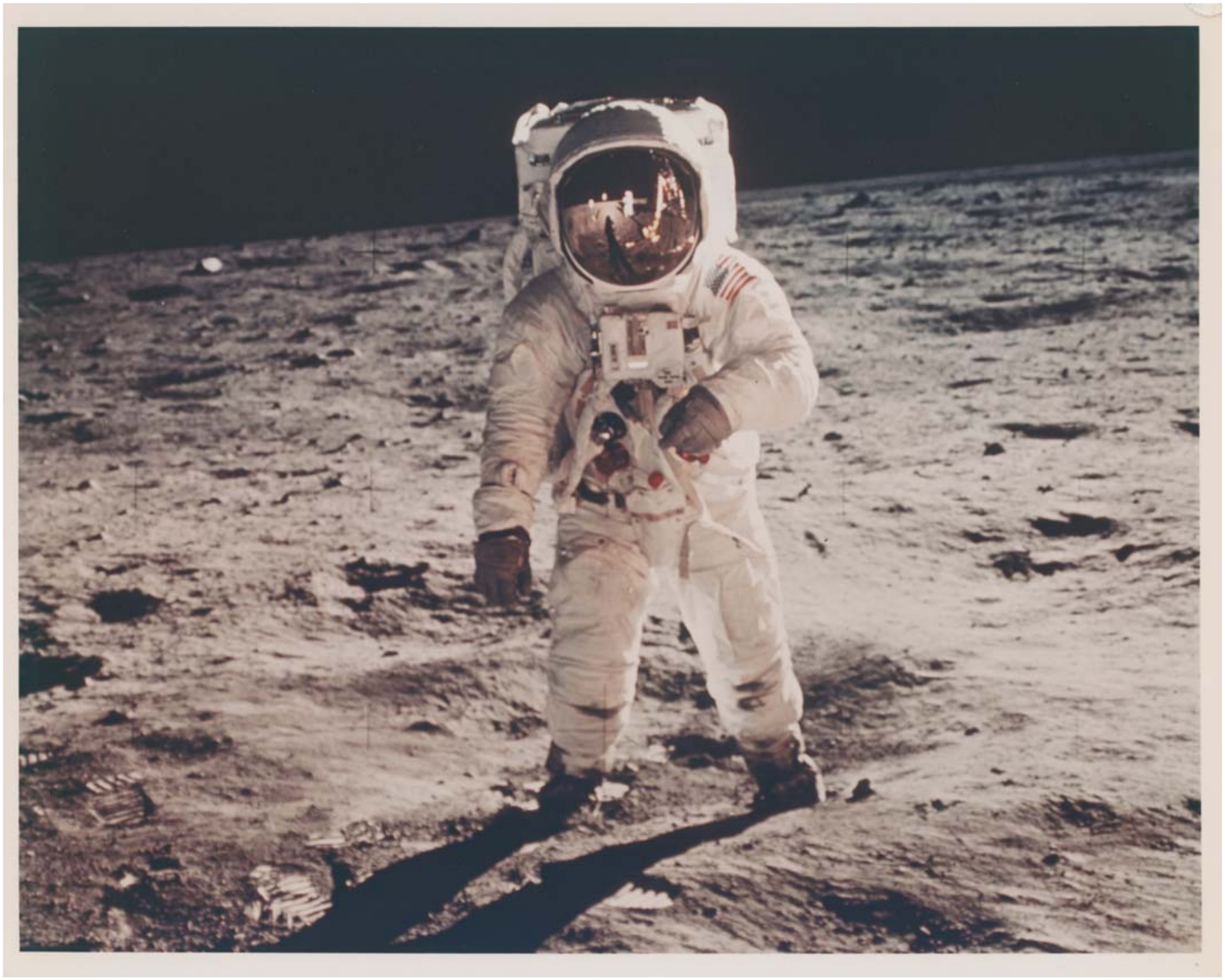
Buzz Aldrin's gold-plated sun visor reflects the photographer and the LM Eagle. 16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso, numbered „NASA AS11-40-5903" (NASA MSC) in red in top margin.
The full Hasselblad frame of the most famous image of a man on the Moon.

€ 5.000 – 7.000
$ 6.000 – 8.400

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.18 pm (GMT+2)



140

NEIL ARMSTRONG (APOLLO 11)

1969

The moonwalker: Buzz Aldrin's gold-plated visor reflects the photographer and the LM Eagle. 16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969 [NASA AS11-40-5903]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).
A superb version of Armstrong's famous image.

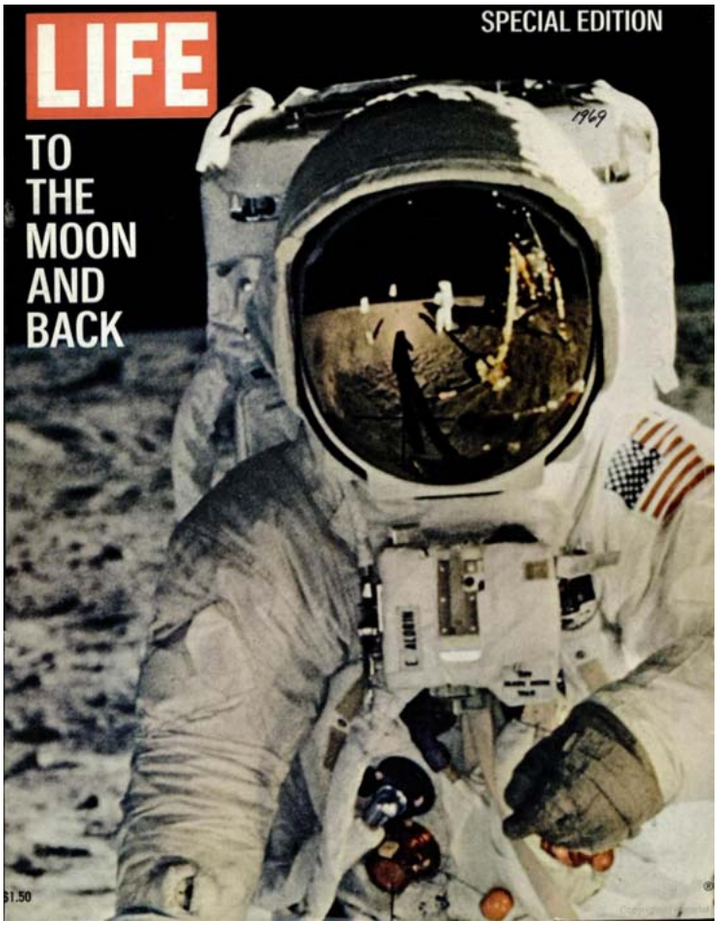
€ 5.000 – 7.000
$ 6.000 – 8.400

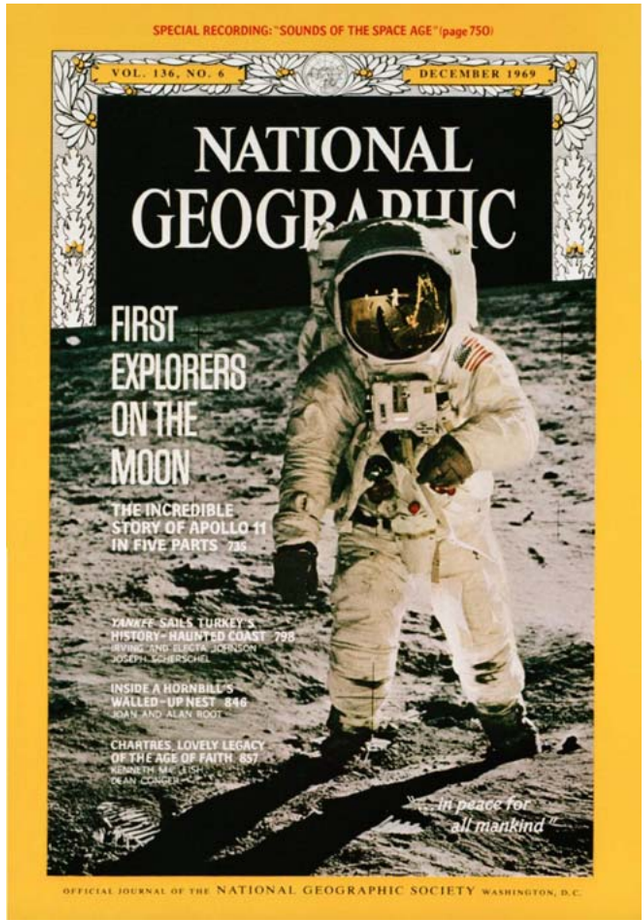
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.19 pm (GMT+2)

"As I walked away from the Eagle Lunar Module. Neil said, 'Hold it, Buzz.' So I stopped and turned around, and then he took what has become known as the 'Visor' photo. I like this photo because it captures the moment of a solitary figure against the horizon of the Moon, along with a reflection in my helmet's visor of our home away from home, the Eagle, and of Neil snapping the photo."

Buzz Aldrin (Jacobs, p. 63).





141

NEIL ARMSTRONG (APOLLO 11)

1969

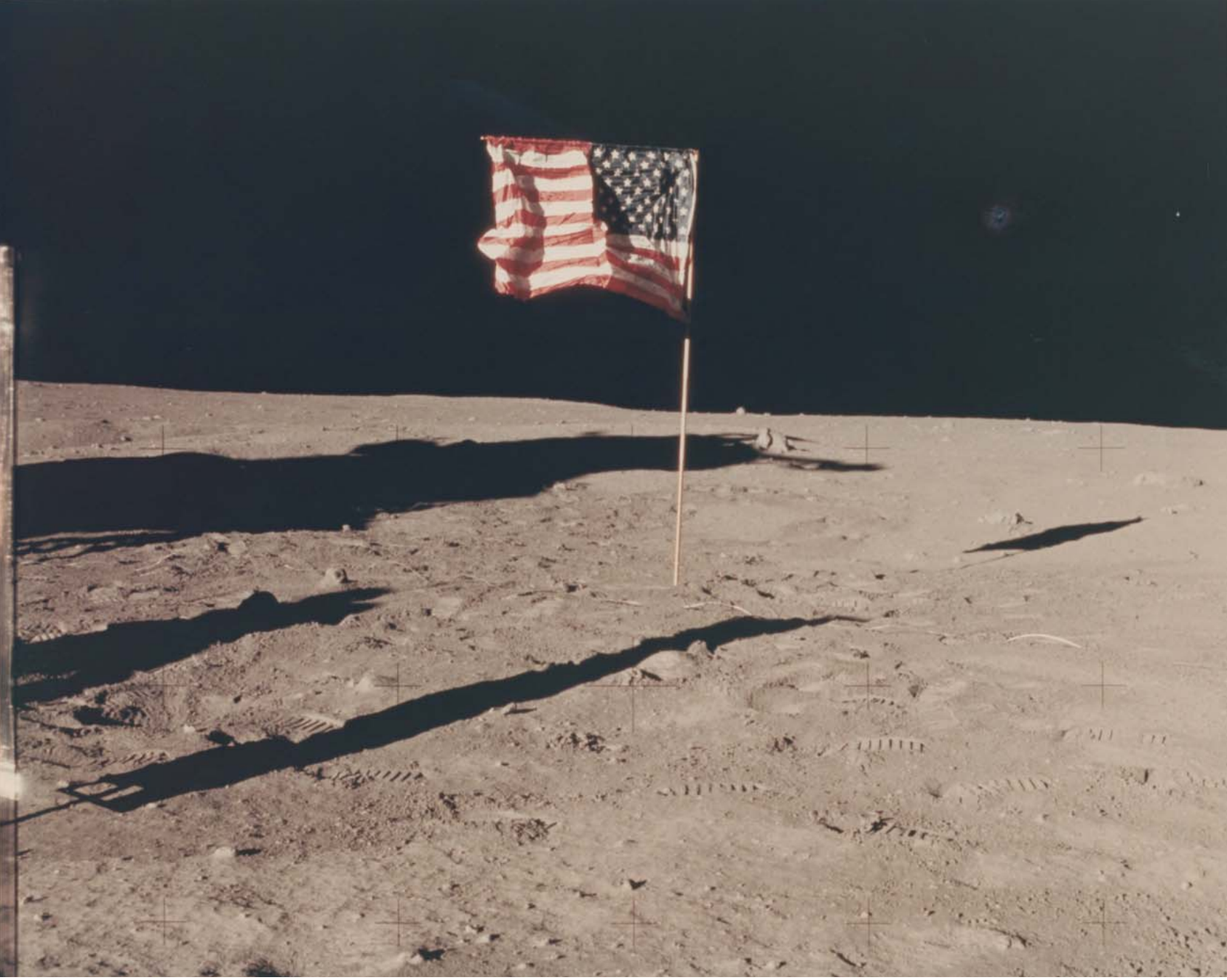
Cover of LIFE and NATIONAL GEOGRAPHIC: Buzz Aldrin's gold-plated visor reflects the photographer and the LM Eagle. 16-24 July 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS11-40-5903]
25,4 x 20,3 cm (10 x 7.9 in), with a reference number stamp dating from 1969 („65834-69") and „A Kodak Paper" watermarks on the verso.

€ 5.000 – 7.000
$ 6.000 – 8.400

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.20 pm (GMT+2)



142

BUZZ ALDRIN (APOLLO 11)

1969

The American flag on the Moon. 16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[AS11-40-5905]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso.

€ 1.500 – 2.500
$ 1.800 – 3.000

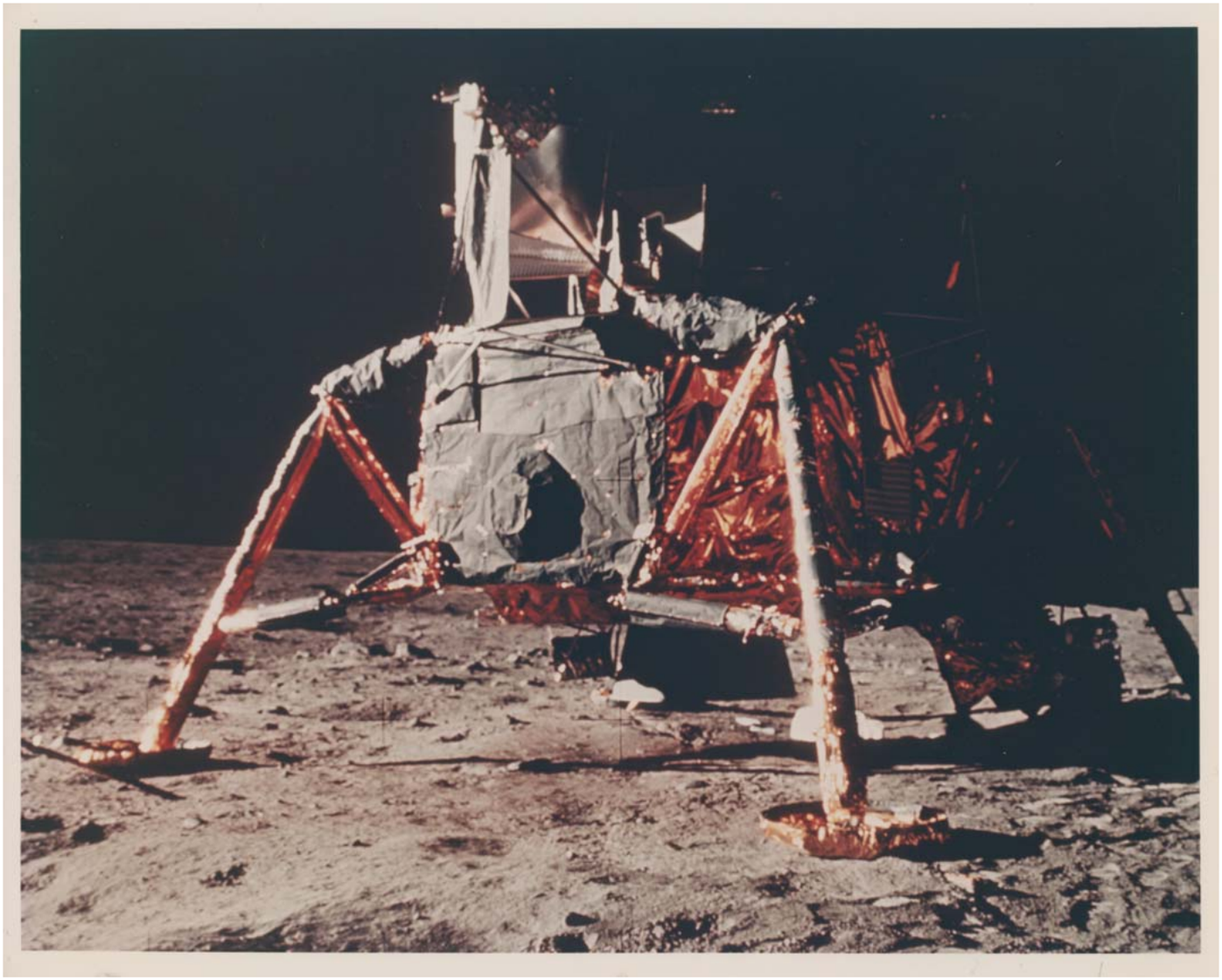
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.21 pm (GMT+2)

This beautiful photograph of the US flag (a frame from the panoramic sequence shot by Buzz Aldrin from the position north of the LM) was surprisingly not in the selection released for publication by NASA's Public Affairs Office immediately after the mission and doesn't appear in newspapers or magazines of the time.

Armstrong's shadow appears between the shadow of the Solar Wind Collector in the foreground and the shadow of the LM in the background.

From the mission transcript during the lunar phone call with President Nixon:
110:17:44 Neil Armstrong: It's a great honor and privilege for us to be here, representing not only the United States, but men of peace of all nations. Men with interest and vision for the future. Men with interest and vision for the future.



143

BUZZ ALDRIN (APOLLO 11)

1969

The LM Eagle on the Moon. 16-24 July 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS11-40-5915]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso (NASA/ North American Rockwell).

€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.22 pm (GMT+2)

This beautiful photograph of the LM Eagle (part of the panoramic sequence shot by Buzz Aldrin from the position north of the LM) was not in the selection released for publication by NASA's Public Affairs Office immediately after the mission and doesn't appear in newspapers or magazines of the time.

“Just too big an angle (to get the Earth), Neil.”

Buzz Aldrin.

144

BUZZ ALDRIN (APOLLO 11)

1969

First human-taken photograph of the Earth from the lunar surface: the Earth over the LM Eagle. 16-24 July 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969 [AS11-405923]
25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper“ watermarks on the verso (NASA/ North American Rockwell).

€ 2.500 – 4.000
$ 3.000 – 4.800

Bidding starts at € 100

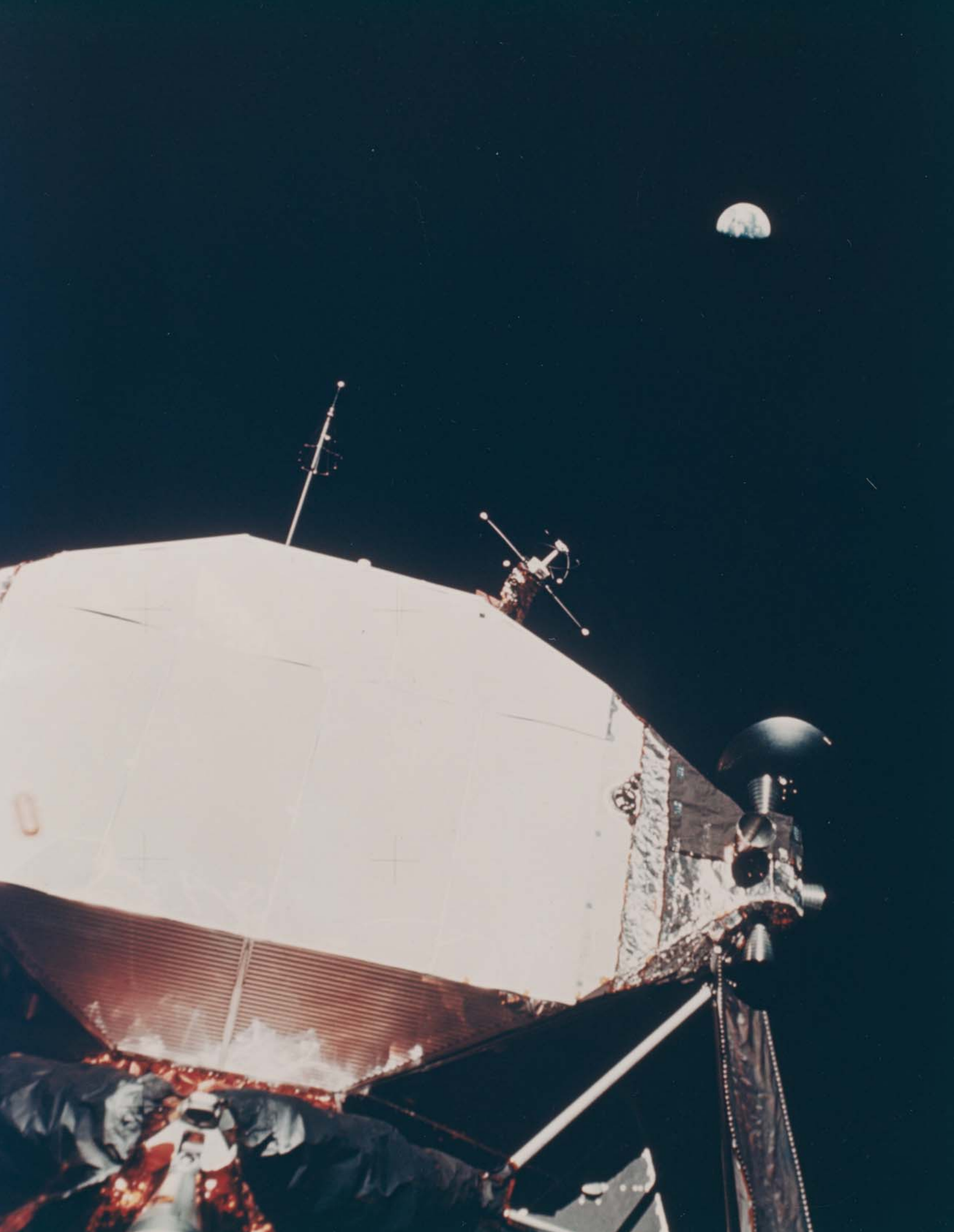
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.23 pm (GMT+2)

“We could also look around and see the Earth, which, though much larger than the Moon the Earth was seeing, seemed small, a beckoning oasis shining far away in the sky.”

Buzz Aldrin (NASA SP-350, p. 216).

In one of the most overwhelming moments on the lunar surface, Buzz Aldrin took the camera off his RCU bracket mounted on the chest and pointed the Hasselblad camera towards the Earth nearly overhead so that he could capture this photograph of their Home Planet hanging in the black lunar sky.

From the mission transcript when the photograph was taken:
110:50:26 Aldrin: Just too big an angle (to get the Earth), Neil.
110:50:34 Armstrong: Yeah. I think you are right.



145

NEIL ARMSTRONG (APOLLO 11)

1969

Buzz Aldrin and the LM Eagle on the Moon.
16-24 July 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS11-40-5931]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper“ watermarks on the verso (NASA/ North American Rockwell).

€ 1.200 – 1.800
$ 1.440 – 2.160

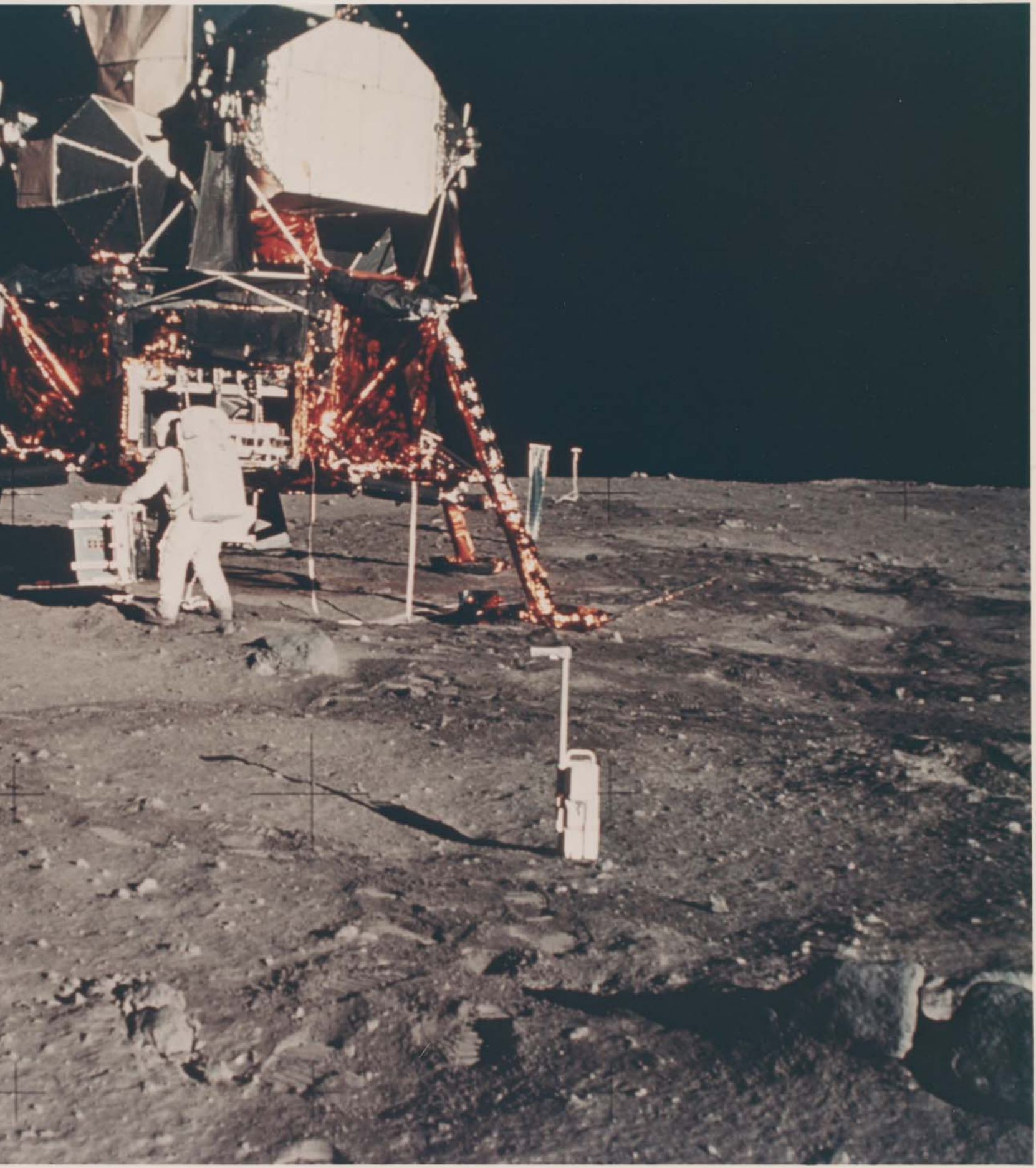
Bidding starts at € 100

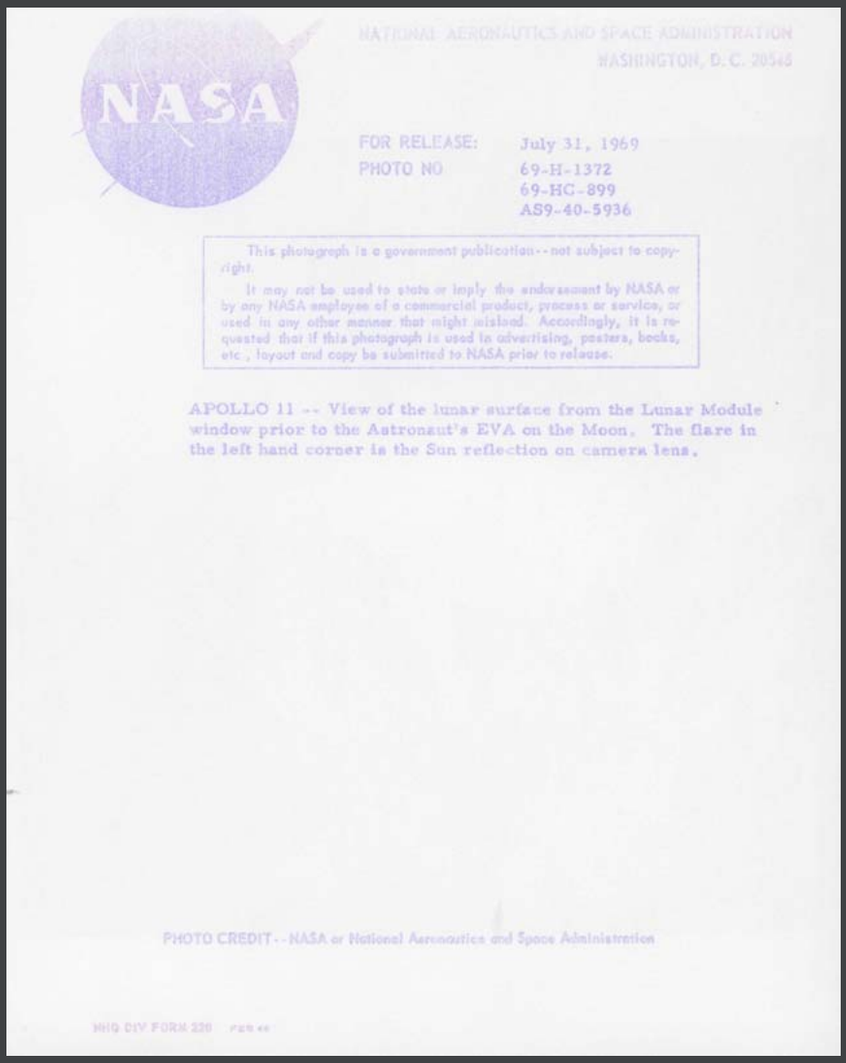
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.24 pm (GMT+2)

“Our LM was sitting there with its black, silver and bright yellow orange thermal coating shining brightly in the otherwise colorless landscape. I had seen Neil in his suit thousands of times before, but on the Moon the unnatural whiteness of it seemed unusually brilliant”

Buzz Aldrin (NASA SP-350, p. 11.5).

Neil Armstrong backed away from the LM to take this magnificent frame from a panoramic sequence shot 20 meters southeast of Eagle. Aldrin was removing scientific equipment from the LM.





146

NEIL ARMSTRONG (APOLLO 11)

1969

Lunar Sun at Tranquility Base. 16-24 Jul 1969.

Vintage Gelatin silver print on fiber-based paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in), with NASA HQ caption numbered „AS11-40-5936" on the verso.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.25 pm (GMT+2)

The NASA caption states in error: "View of the lunar surface from the Lunar Module window prior to the astronaut's EVA on the Moon. The flare in the left hand corner is the Sun reflection on camera lens."

This is a fantastic and extremely rare frame from the panoramic sequence (originally shot on color film) taken by Armstrong 20 meters southeast of Eagle.

The glaring Sun is illuminating the Sea of Tranquillity in the direction of Little West Crater which Armstrong explored at the end of the EVA.

Without an atmosphere to filter the light, the Moon appears as a blinding desert on its surface (and a bright orb from Earth) even if it has a low reflective power.

The Sun shines so brightly on the moondust that the glare makes it impossible to see the stars in the black lunar sky.

From the mission transcript when the photograph was taken:
110:57:05 Armstrong: And the panorama is complete. I'm at about the LM 7:30 position (SE) at about 60 feet.

147

NEIL ARMSTRONG (APOLLO 11)

1969

Neil Armstrong's shadow on the Moon.
16-24 July 1969.

Vintage Gelatin silver print on fiber-based paper, printed 1969. 25,4 x 20,3 cm (10 x 7.9 in), numbered „AS11-40-5941" in bottom margin (NASA/ USGS).

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.26 pm (GMT+2)

"The most dramatic recollections I have now are the sights themselves, those magnificent visual images. They go far beyond any other visual experiences I've had in my life."

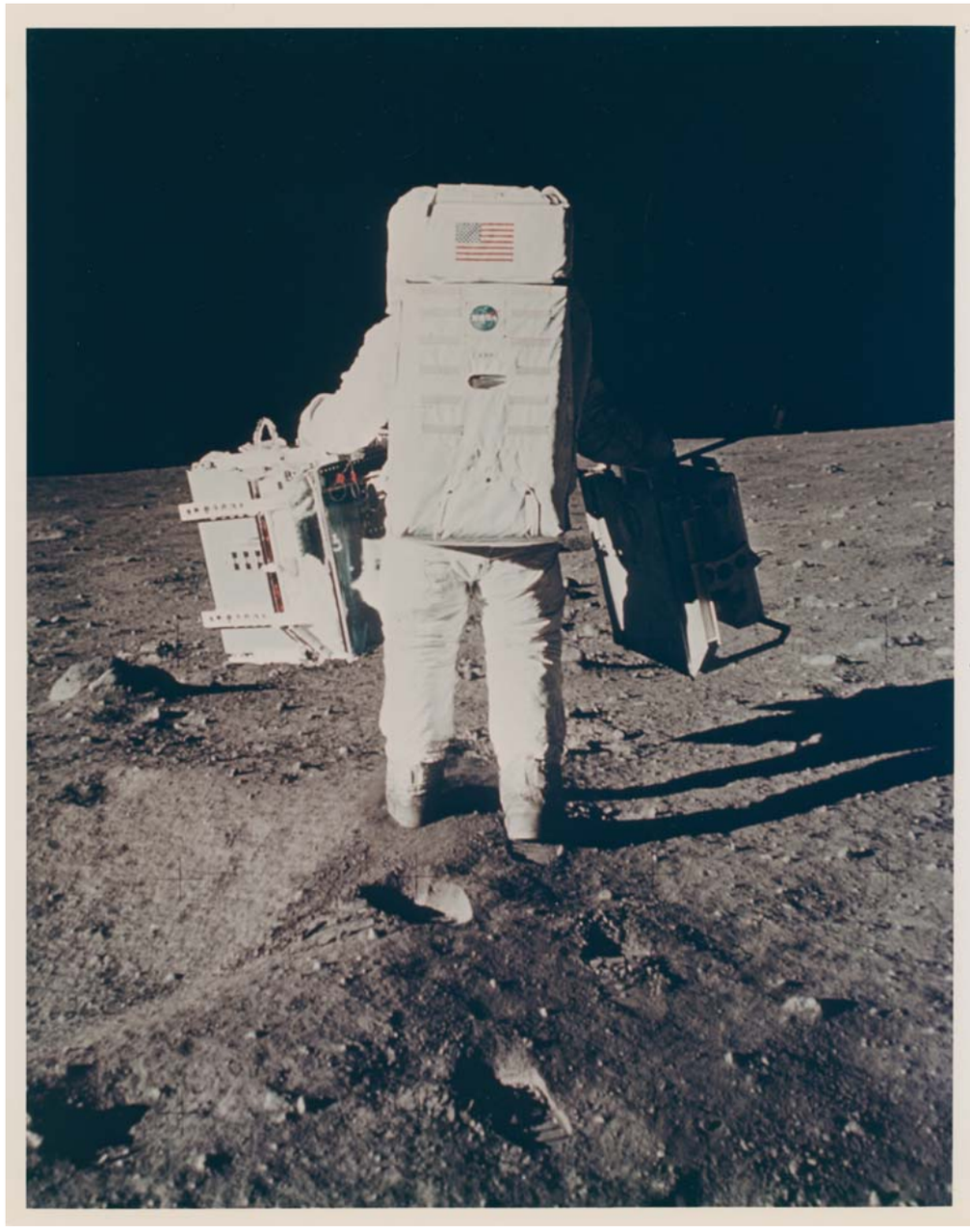
Neil Armstrong (Life Magazine, August 22, 1969, p. 25).

A superb and extremely rare frame from the panoramic sequence (originally shot on color film) taken by Armstrong 20 meters southeast of Eagle.

This "down-Sun photograph shows the bright halo that appeared around the shadow of Armstrong's helmet due to some combination of diffraction around the helmet and/or the coincidence of maximum zero-phase backscatter with that part of Armstrongl's shadow. Note, also, how washed out the scene is along the line of his shadow. This effect is due to the fact that, in this direction, all of the shadows - excepting only those cast by objects in the immediate foreground - are hidden by the objects that cast them. The double crater below Armstrong's LM window is in the middle distance" (ALSJ caption for AS11-40-5930).

“The edge of that crater is really soft.”

Buzz Aldrin.



148

NEIL ARMSTRONG (APOLLO 11)

1969

Buzz Aldrin exploring the Sea of Tranquility. 16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS11-40-5942]
25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper“ watermarks on the verso (NASA/ North American Rockwell).

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

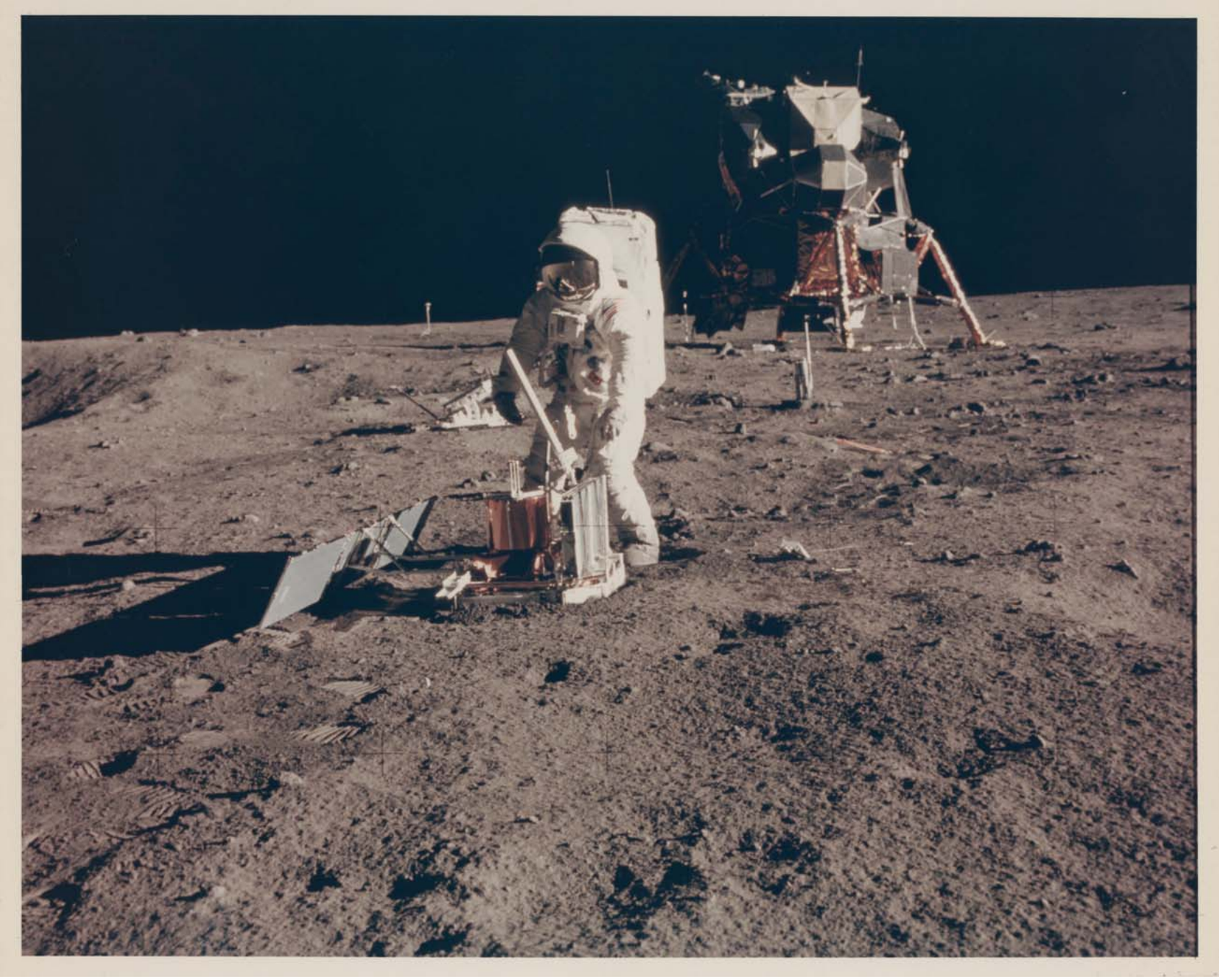
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.27 pm (GMT+2)

Aldrin is transporting scientific equipment to the lunar-science station also called EASEP (Early Apollo Scientific Experiments Package) site.

The scientific experiments had to be deployed far away enough so that they would not be damaged by the ascent stage rocket when the Eagle lifted off.

Aldrin had to maneuver in the one sixth gravity of the lunar surface through an area covered with fragments of broken rock near a small crater to find a level spot while Armstrong photographed the scene.

From the mission transcript when the photograph was taken:
110:57:50 Aldrin: (To Neil) Okay; have you got us a good area picked out?
110:57:53 Armstrong: Well, I think right out on that rise out there is probably as good as any. (Pause)
110:58:06 Aldrin: Right over here?
110:58:08 Armstrong: Let’s probably stay on the high ground there and...(Pause)
110:58:16 Aldrin: Watch it. The edge of that crater is really soft.
110:58:19 Armstrong: Yeah; that’s real soft there, isn’t it?
110:58:24 Aldrin: (To Neil) Get a couple of close-ups on these quite rounded, large boulders.



149

NEIL ARMSTRONG (APOLLO 11)

1969

Buzz Aldrin posing for a photograph in front of Tranquillity Base. 16-24 July 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS11-40-5947]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper“ watermarks on the verso (NASA MSC).

€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.28 pm (GMT+2)

In one of the rare “tourist” moments on the Moon, Armstrong called out to Aldrin to take his portrait.

Aldrin is standing next to the seismometer; the Laser Ranging Retroreflector (LRRR) and the stereo close-up camera are behind him. The TV camera and the LM Eagle are in the background.

From the mission transcript when the photograph was taken:
111:06:20 Armstrong: There you go. Good work; good show. Hey, whoa; stop, stop! Back up.

150

NEIL ARMSTRONG (APOLLO 11)

1969

Buzz Aldrin looking back at Tranquility Base.
16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in), with NASA MSC caption and „A Kodak Paper“ watermarks on the verso, numbered „NASA AS11-40-5948“ in red in top margin.

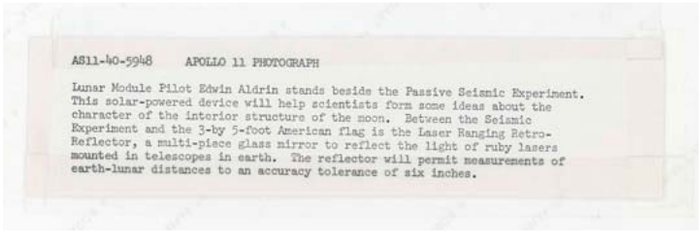
€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

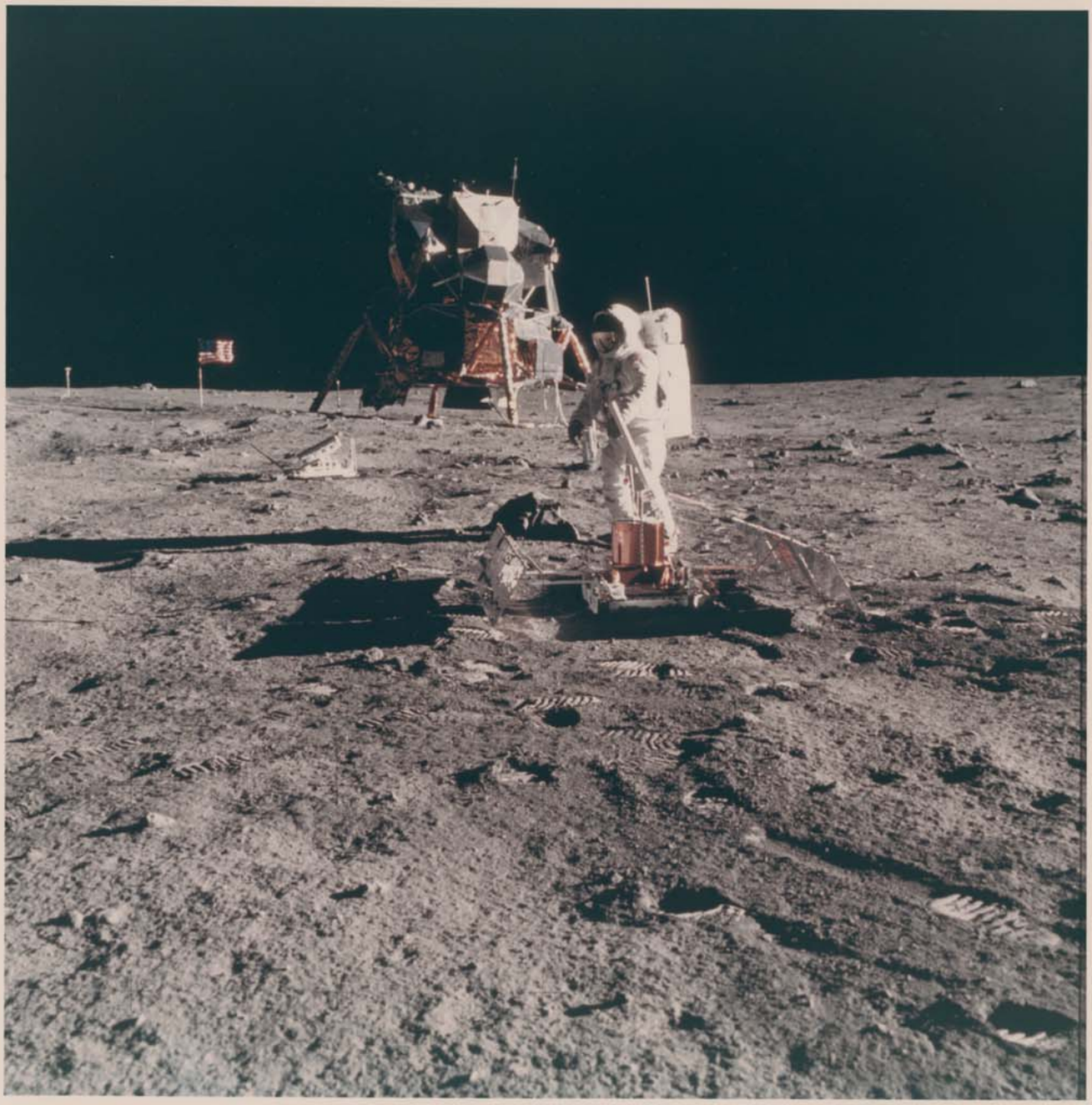
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.29 pm (GMT+2)

“I don’t believe any pair of people had been more removed physically from the rest of the world than we were.”

Buzz Aldrin (Life Magazine, August 22, 1969, p. 26).


AS11-40-5948 APOLLO 11 PHOTOGRAPH

Lunar Module Pilot Edwin Aldrin stands beside the Passive Seismic Experiment. This solar-powered device will help scientists form some ideas about the character of the interior structure of the moon. Between the Seismic Experiment and the 3-by 5-foot American flag is the Laser Ranging Retro-Reflector, a multi-piece glass mirror to reflect the light of ruby lasers mounted in telescopes in earth. The reflector will permit measurements of earth-lunar distances to an accuracy tolerance of six inches.



151

NEIL ARMSTRONG (APOLLO 11)

1969

Portrait of Buzz Aldrin at Tranquillity Base.
16-24 July 1969.

Vintage Chromogenic print on fiber-based Kodak paper, prinzed 1969 [NASA AS11-40-5949]
20,3 x 25,4 cm (7.9 x 10 in), stamped „AS11 5949" (NASA MSC) and with „A Kodak Paper" watermarks on the verso.

€ 1.200 – 1.800
$ 1.440 – 2.160

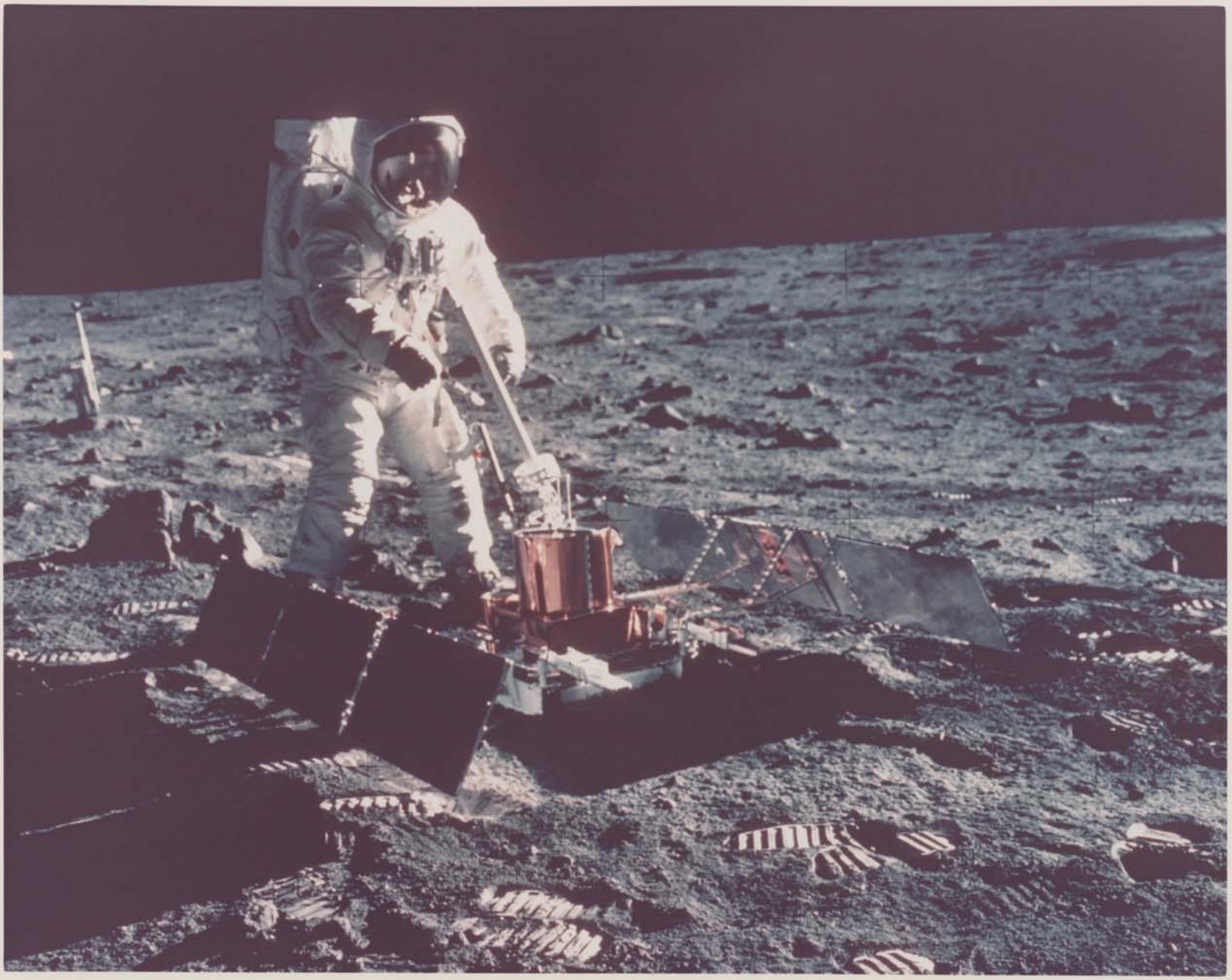
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.30 pm (GMT+2)

"I think in a physiology sense, humans adapt to that lunar gravity quite well. And in that sense it feels natural very quickly, the ability to move and locomote. In the environmental sense, it's less natural. It's very different than here. But I have no doubt that humans would adapt to it as a home in some reasonably short period of time too."

Neil Armstrong (Chaikin, Voices, p. 73).

This scenic photograph shows Aldrin between the seismometer and the Laser Ranging Retroreflector with the LM, the US flag and the TV camera that recorded the EVA in the background.



152

NEIL ARMSTRONG (APOLLO 11)

1969

Close-up of Buzz Aldrin at the lunar-science station. 16-24 July 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS11-40-5951]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso.

€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.31 pm (GMT+2)

Each Apollo mission deployed a lunar science station near the landing site. Apollo 11's was called the EASEP (Early Apollo Surface Experiments Package) site and deployed 15 meters south of the LM Eagle.

Aldrin makes final adjustments on the seismometer.

The reflection of the photographer Neil Armstrong can be seen in his gold-plated visor. Through the visor, Aldrin's face is distinguishable.

The 35mm stereo close-up camera is in the left background.

From the mission transcript when the photograph was taken:
111:06:34 Aldrin: Houston, as I was facing the PSE (Passive Seismic Experiment), the right-hand solar array deployed automatically. The left-hand I had to manually (garbled) restraining bar at the far end. And all parts of the solar array are clear of the ground now.
111:07:02 McCandless: Buzz, this is Houston. I understand that you did successfully deploy both solar arrays. Over.
111:07:10 Aldrin: Roger. That's affirmative. (Pause) And there isn't any way of telling whether that's lined up, without getting in the way; maybe I can get down here.
111:07:40 Aldrin: Well, that appears to be pointing.

153

NEIL ARMSTRONG (APOLLO 11)

1969

Tranquillity Base from Little West Crater,
with Armstrong's shadow in the foreground.
16-24 July 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS11-40-5961]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso (NASA/ North American Rockwell).

€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.32 pm (GMT+2)

Shortly before entering the LM, Armstrong walked back about 65m eastward to survey a crater that he noted during descent.

This traverse to Little West Crater was not scheduled and the rim of this 30-meter diameter crater was the farthest point traversed on Apollo 11.

Armstrong took the photograph (part of a panoramic sequence) from the WSW rim of Little West Crater. The American flag, TV camera and Solar Wind Collector are in the distance next to the LM Eagle. Aldrin is not visible because he is behind Eagle working at the MESA Modularized Equipment Stowage Assembly).

154

NEIL ARMSTRONG (APOLLO 11)

1969

Buzz Aldrin closing out the first EVA on the surface of another world. 16-24 July 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969 [NASA AS11-40-5963]
25,4 x 20,3 cm (10 x 7.9 in,)with „A Kodak Paper“ watermarks on the verso (NASA/ North American Rockwell).

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.33 pm (GMT+2)

“I picked up the hammer, went out in the vicinity of where the Solar Wind Experiment was, and drove the first core tube into the ground. I pushed it in about 3 or 4 inches and then started tapping it with the hammer.”

Buzz Aldrin (1969 Technical Debrief, from the ALSJ mission transcript at 111:15:35 GET).

A very rare photograph of Aldrin (NASA released a variant of this photograph AS11-40-5964 after the mission) before he returned inside the LM Eagle.

One of his last tasks of the EVA was to take core samples of the lunar surface.

He holds the hammer in his hand. The Solar Wind Collector is visible just beyond the core tube stuck into the lunar surface.

“During this first visit to the Moon, the astronauts remained within about 100 meters of the LM, collected about 47 pounds of samples, and deployed four experiments. After spending approximately 2 hours and 31 minutes on the surface, the astronauts ended the EVA at 1:11:13 a.m. EDT on July 21” (http://www.lpi.usra.edu/lunar/missions/apollo/apollo_11/surface_opp/).

155

N. ARMSTRONG & B. ALDRIN (APOLLO 11)

1969

Footprints and marks left by the first men on the Moon, from both windows of the LM before liftoff (2). 16-24 July 1969.

Two vintage Gelatin silver prints on fiber-based paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in), numbered „AS11-39-5799“ and „AS11-39-5815“ (NASA/ USGS) in margin.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.34 pm (GMT+2)

"There are footprints on the moon. Those footprints belong to each and every one of you, to all mankind. They are there because of the blood, sweat, and tears of millions of people. Those footprints are the symbol of true human spirit."

Buzz Aldrin (acceptance speech for the Medal of Freedom, August 13, 1969).

Two extremely rare photographs from the B&W magazine 39/Q taken by Aldrin and Armstrong from both LM windows with the IVA Hasselblad camera equipped with a 80mm lens.

Frames from magazine 39/Q were not released by NASA after the mission.

The black shadow of Eagle is silhouetted against the Moon's surface (first photograph). Impressions in the lunar soil made by the lunar boots of the two astronauts are clearly visible as well as the American flag and the TV camera which recorded the EVA for the viewers on Earth (second photograph). A LM thruster is in the right foreground.

"We'd like to say from all of us down here in Houston and really from all of us in all the countries in the entire world, we think that you've done a magnificent job up there today"

Mission Control

156

BUZZ ALDRIN (APOLLO 11)

1969

Neil Armstrong back in the LM after the historic moonwalk.
16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969.
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso,
numbered „NASA AS11-37-5528" (NASA MSC) in red top margin.

€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

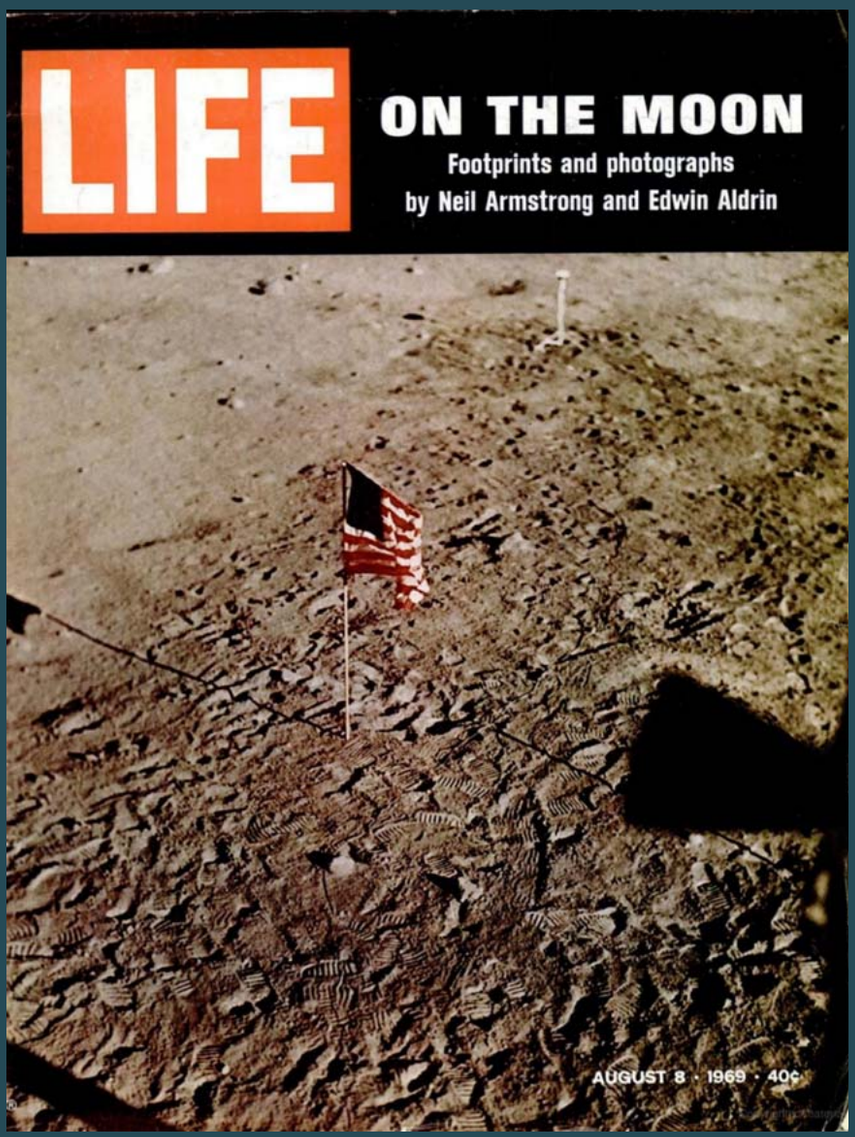
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.35 pm (GMT+2)

Aldrin took very few photographs of Armstrong on the lunar surface but this image of him back in the LM after the moonwalk is the first "helmet-free" photograph of a man on the Moon.

The members of the Apollo 11 crew conducted themselves with a cool-even laconic-professionalism throughout the mission, to the general despair of newspaper headline writers. Once the more difficult and novel aspects of the flight had been successfully completed, however, a change of mood became evident.

The photograph shows a tired and elated Armstrong smiling with satisfaction after regaining the cabin of the LM following his and Aldrin's exploration of the lunar surface.

From the mission transcript before the liftoff from the Moon:
114:22:23 McCandless (Mission Control): We'd like to say from all of us down here in Houston and really from all of us in all the countries in the entire world, we think that you've done a magnificent job up there today. Over.
114:22:46 Armstrong: Thank you very much.
114:22:48 Aldrin: It's been a long day.



157

BUZZ ALDRIN (APOLLO 11)

1969

Cover of LIFE: the American Flag on the Moon. 16-24 July 1969.

Vintage Chromogenic print in fiber-based Kodak paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso, numbered „NASA AS11-37-5545" (NASA MSC) in red in top margin.

€ 1.500 – 2.000
$ 1.800 – 2.400

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.36 pm (GMT+2)

This very famous photograph graced the cover of LIFE magazine (ON THE MOON footprints and photographs by Neil Armstrong and Edwin Aldrin) on August 8, 1969.

Surrounded by footprints left by the first men to walk upon the Moon, the American flag stands on the surface of the Sea of Tranquility.

"In the far background is the deployed B&W lunar surface TV camera which televised the lunar surface extravehicular activity. The shadow on the right of the flag just below the LM thruster comes from the SWC (Solar Wind Collector) pole" (ALSJ caption for AS11-37-5545).

NASA
AS11-37-5545

158

MICHAEL COLLINS (APOLLO 11)

1969

The forbidding backside of the Moon near Crater Daedalus. 16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 20,3 x 25,4 x 800 cm (7.9 x 10 x 314.9 in), with „A Kodak Paper" watermarks on the verso, numbered „NASA AS11-44-6609" (NASA MSC) in red in top margin.

€ 800 – 1.200
$ 960 – 1.440

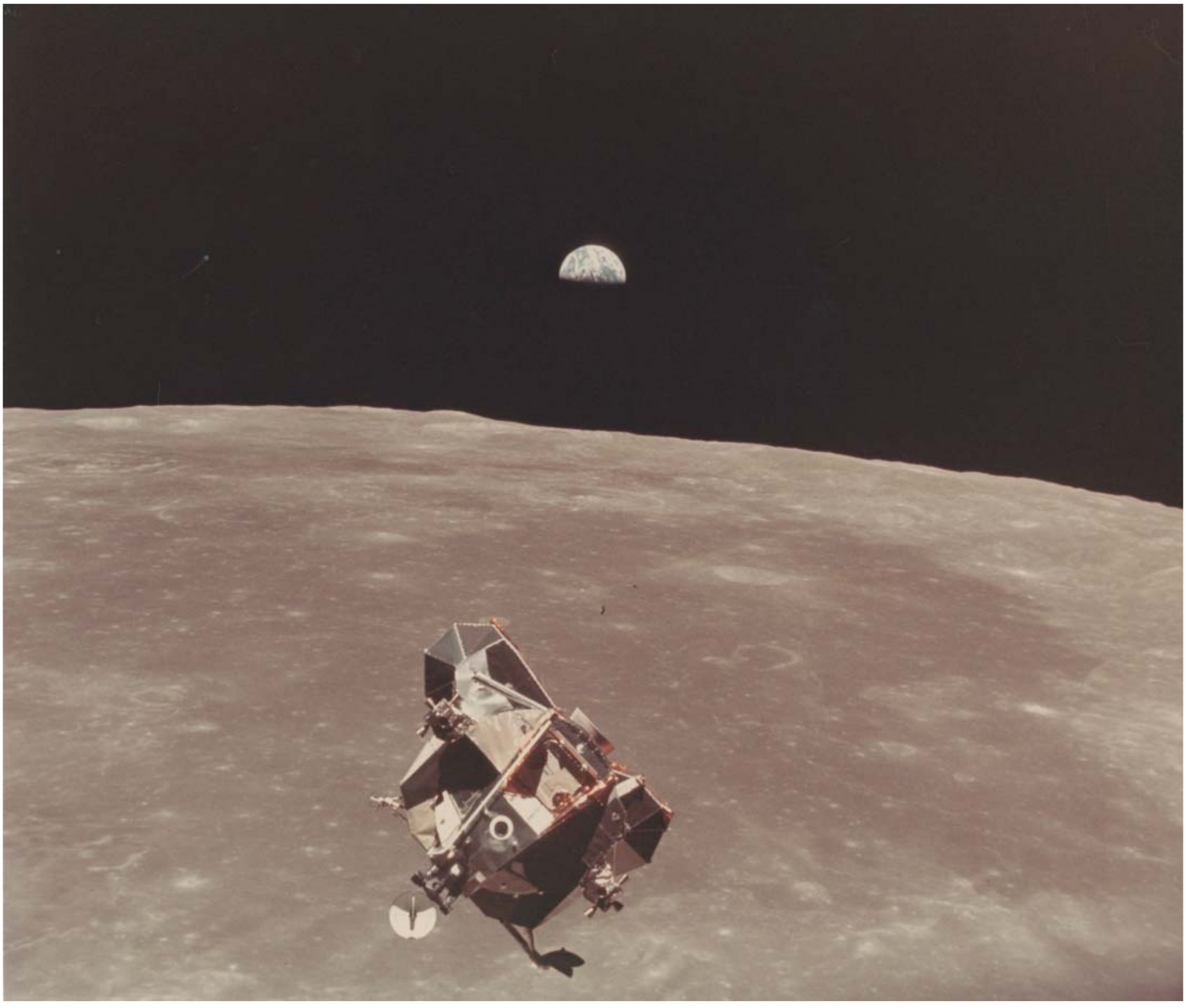
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.37 pm (GMT+2)

"When the Sun is shining on the surface at a very shallow angle, the craters cast long shadows and the Moon's surface seems very inhospitable, forbidding almost. I did not sense any great invitation on the part of the Moon for us to come into its domain. I sensed more almost a hostile place, a scary place."

Michael Collins (from the documentary In The Shadow of the Moon, 2007).

This photograph was taken looking southwest on the center of the Moon's backside during one of the orbital passes between orbits 19 and 26 with the 80mm lens and magazine 44/V. The 93-km Crater Daedalus is in the center. Latitude / Longitude: 4°S / 179° E.



159

MICHAEL COLLINS (APOLLO 11)

1969

LM Eagle and Earthrise. 16-24 Jul 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 19,2 x 22,2 cm (7.5 x 8.7 in), with „A Kodak Paper“ watermarks on the verso [NASA AS11-44-6643]

€ 2.500 – 4.000
$ 3.000 – 4.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.38 pm (GMT+2)

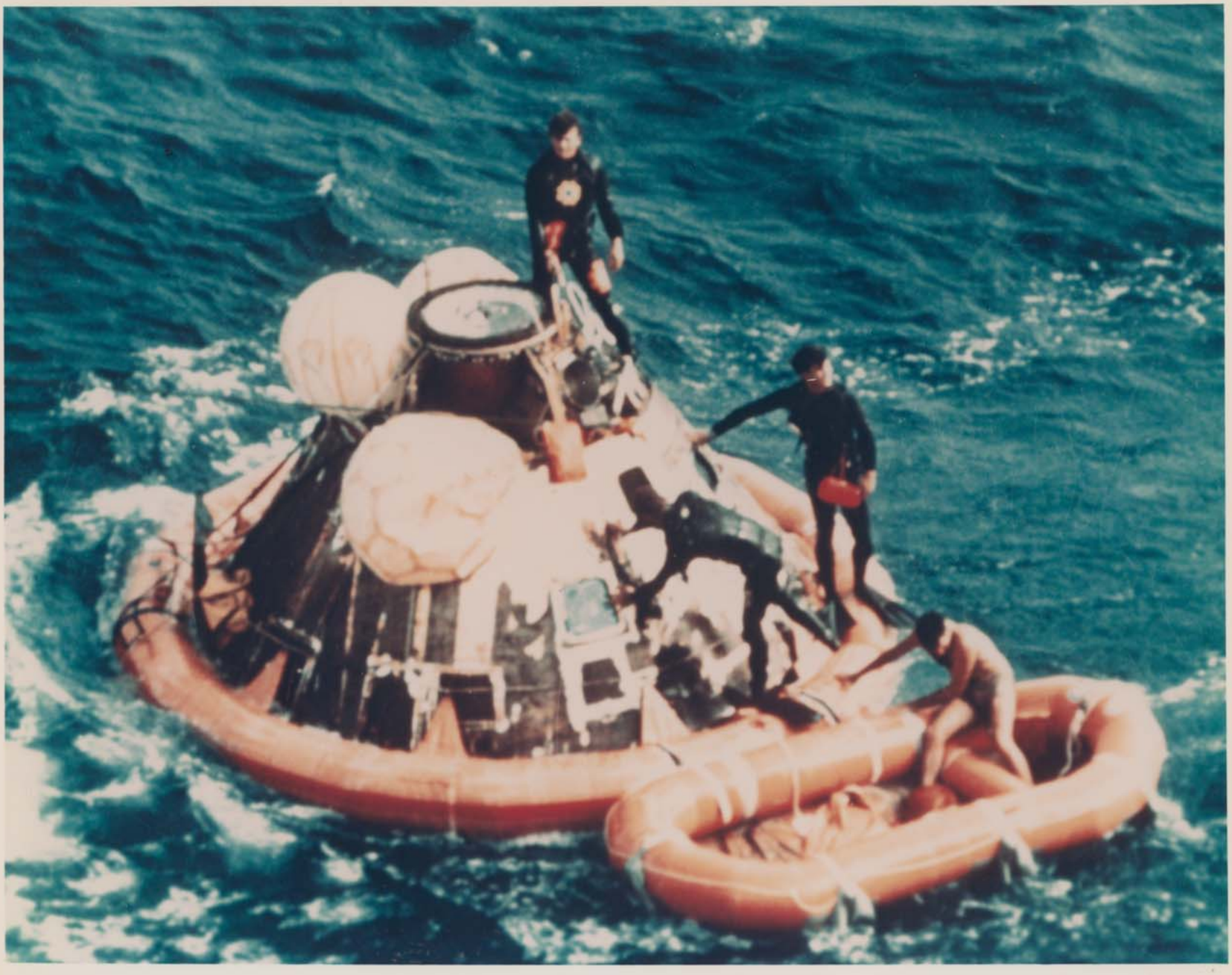
“This venture has been structured for three men, and I consider my third to be as necessary as either of the other two. I don’t mean to deny a feeling of solitude. It is there, reinforced by the fact that radio contact with the Earth abruptly cuts off at the instant I disappear behind the Moon, I am 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”.

Michael Collins (from his 1973 book Carrying the Fire).

After 21 hours on the surface, the LM Eagle rose over Smyth’s Sea to join pilot Michael Collins in the orbiting CM Columbia.

Collins became the only person in history to capture a photograph showing every human being in the universe (including the two astronauts in Eagle) except himself.

From the mission transcript after the docking of Columbia and Eagle:
130:48:47 Duke (Mission Control): How does it feel up there to have some company?
130:48:57 Collins: Damn good, I’ll tell you.
130:49:00 Duke: I’ll bet. I bet, you’d almost be talking to yourself up there after 10 revs or so.
130:49:07 Collins: No, no. It’s a happy home up here. It’d be nice to have some company. Be - As a matter of fact, it’d be nice to have a couple of hundred million Americans up here.



160

NASA (APOLLO 11)

1969

The first Moon explorers back to Earth: recovery and interview with President Nixon (2).
24 Jul 1969.

Two Vintage Chromogenic print on fiber-based Kodak paper, printed 1969.
20,3 x 25,4 cm (7.9 x 10 in)and with „A Kodak Paper" watermarks on the verso (NASA/ North American Rockwell).

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.39 pm (GMT+2)

Armstrong, Aldrin and Collins splashed down 13 miles from the prime recovery ship USS Hornet, 900 miles south east of Hawaii, eight days after they were launched on their historic lunar landing mission (first photograph). Columbia had just travelled 1,534,832 km in 8 days, 3 hours, 18 minutes and 35 seconds.

The Apollo 11 astronauts were pictured as they were smiling through the window of the quarantine facility aboard USS Hornet and speaking with President Nixon following their recovery and completion of their historical lunar landing mission (second photograph).


HORNET + 3

[LARGE FORMAT]

161

N. ARMSTRONG, B. ALDRIN OR M. COLLINS (APOLLO 11)

1969

The Earth. 16-24 Jul 1969.

Large-format presentation Vintage Chromogenic print on fiber-based Kodak paper, printed 1969 [NASA AS11-36-5355]
40,5 x 50,8 cm (15.9 x 20 in), with „A Kodak Paper“ watermarks on the verso.

€ 4.000 – 6.000
$ 4.800 – 7.200

Bidding starts at € 100

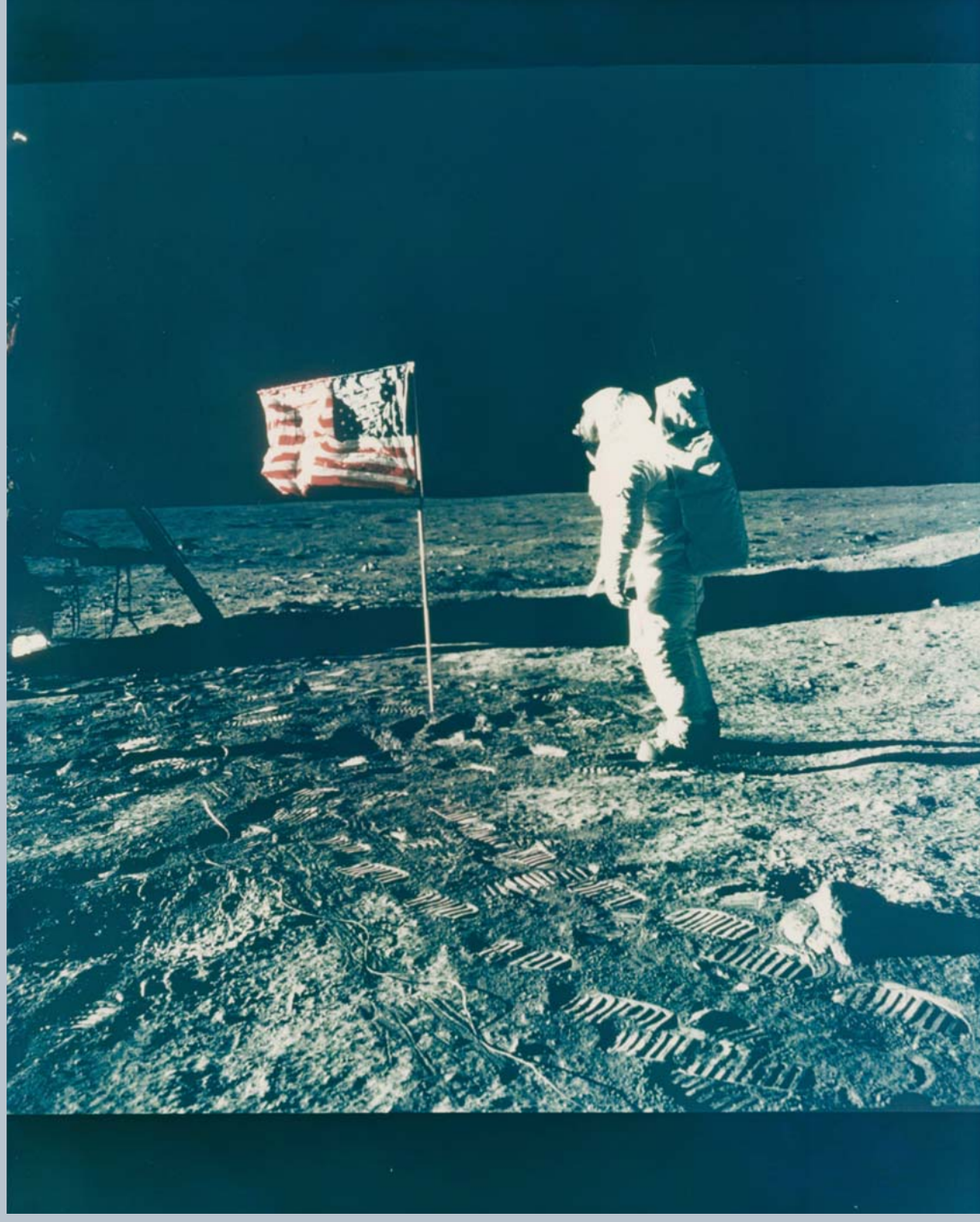
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.40 pm (GMT+2)

“There is but one Earth, tiny and fragile, and one must be 100,000 miles away from it to fully appreciate one’s good fortune in living in it. If I could use only one word to describe the Earth as seen from the Moon, I would ignore both its size and color and search for a more elemental quality, that of fragility. The Earth appears ‘fragile,’ above all else. I don’t know why but it does.”

Michael Collins (from his 1974 book Carrying the Fire).

The famous view of the Earth from 100,000 miles out in space as the Apollo 11 spacecraft was heading to the Moon.

Vintage color prints of this size are exceptionally rare and were expensive to produce. The glorious nostalgia of this fortunate era and the patina of time is reflected in this incredible photograph with reddish colors.



[LARGE FORMAT]

162

NEIL ARMSTRONG (APOLLO 11)

1969

Buzz Aldrin saluting the US flag. 16-24 Jul 1969.

Large-format presentation Vintage Chromogenic print on fiber-based Kodak paper, printed 1969 [NASA AS11-40-5874]
50,8 x 40,5 cm (20 x 15.9 in), with „A Kodak Paper" watermarks on the verso.

€ 5.000 – 7.000
$ 6.000 – 8.400

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.41 pm (GMT+2)

"Being able to salute the flag was one of the more humble yet proud experiences I've ever had. To be able to look at that American flag and know how much so many people had put of themselves and their work into getting it where it was. We sensed, we really did, this almost mystical unification of all the people in the world at that moment."

Buzz Aldrin (LIFE, August 22, 1969, p. 26).

Aldrin is saluting the flag with his right hand clearly visible next to his helmet.

Vintage color prints of this size are exceptionally rare and were expensive to produce. The glorious nostalgia of this golden era and the patina of time is reflected in this incredible photograph.

[LARGE FORMAT]

163

NEIL ARMSTRONG (APOLLO 11)

1969

Portrait of Buzz Aldrin with the photographer and the Lunar Module reflected in his gold-plated visor. 16-24 Jul 1969.

Large-format presentation vintage Chromogenic print on fiber-based Kodal paper, printed 1969 [NASA AS11-40-5903]
50,8 x 40,5 cm (20 x 15.9 in), with „A Kodak Paper" watermarks on the verso.

€ 7.000 – 10.000
$ 8.400 – 12.000

Bidding starts at € 100

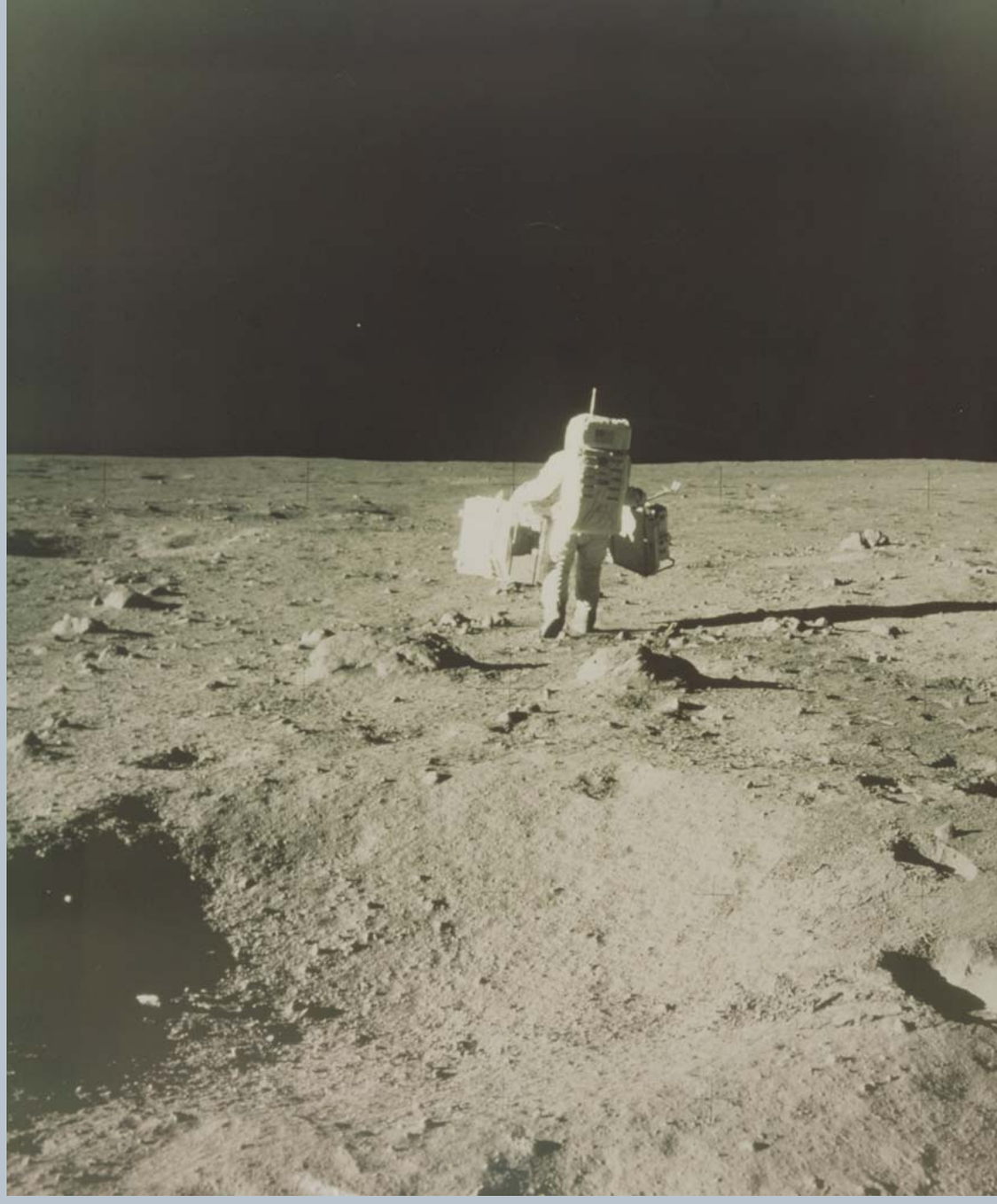
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.42 pm (GMT+2)

"What you remember of the lunar surface is more having looked at the picture over and over again, and looked and studied it. I remember more about what the Moon's about because of the photographs we took that I look back on that give me a better recollection of it than is up there [points to his head]."

Buzz Aldrin (Chaikin, Voices, p.178).

One of the most iconic images in mankind's visual history.

Vintage color prints of this size are exceptionally rare and were expensive to produce. The glorious nostalgia of this golden era and the patina of time is reflected in this incredible photograph with yellowish colors.



164

NEIL ARMSTRONG (APOLLO 11)

1969

Buzz Aldrin exploring the immense Sea of Tranquillity. 16-24 Jul 1969.

Large-format presentation vintage Chromogenic print on fiber-based Kodak paper, printed 1969 [NASA AS11-40-5944] 57,5 x 48 cm (22.6 x 18.8 in), with "A Kodak Paper" watermarks on the verso.

€ 3.000 – 5.000
$ 3.600 – 6.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.43 pm (GMT+2)

Buzz Aldrin described later his view from the surface of another world: "The disappearing of the horizon, it is distinct. There's no haze, no nothing obscuring it, and that makes distant objects appear clear, very clear. And then there's the rock, and then there's nothing. You look out and you see that. Whether you realize it or not, you're looking at the edge of a ball, and you're on it. And that sensation was clear as distinctly different than on Earth. It is curving away. Not that it just grabs you immediately that you're on the knoll of a hill, it's not that; it's more than that, but a little bit of intellect and a little bit of everything says, Gee, this is really obvious that it is a sphere that we're walking on"

(Chaikin, Voices, p. 66).

Aldrin explored an unknown world of an unprecedented clarity, the result of unfiltered sunlight in the vacuum of space.

Vintage color prints of this size are exceptionally rare and were expensive to produce. The glorious nostalgia of this golden era and the patina of time is reflected in this incredible photograph.

[LARGE FORMAT]

[LARGE FORMAT]

165

NEIL ARMSTRONG (APOLLO 11)

1969

Buzz Aldrin looking at Tranquillity Base.
16-24 Jul 1969.

Large-format presentation vintage Chromogenic print on fiber-based Kodak paper, printed 1969 [NASA AS11-40-5948]
50,8 x 40,5 cm (20 x 15,9 in), with "A Kodak Paper" watermarks on the verso.
The glorious nostalgia of this golden era and the patina of time is reflected in this incredible photograph.

€ 3.000 – 5.000
$ 3.600 – 6.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.44 pm (GMT+2)

"I was struck by the contrast between the starkness of the shadows and the desert-like bareness of the rest of the surface."

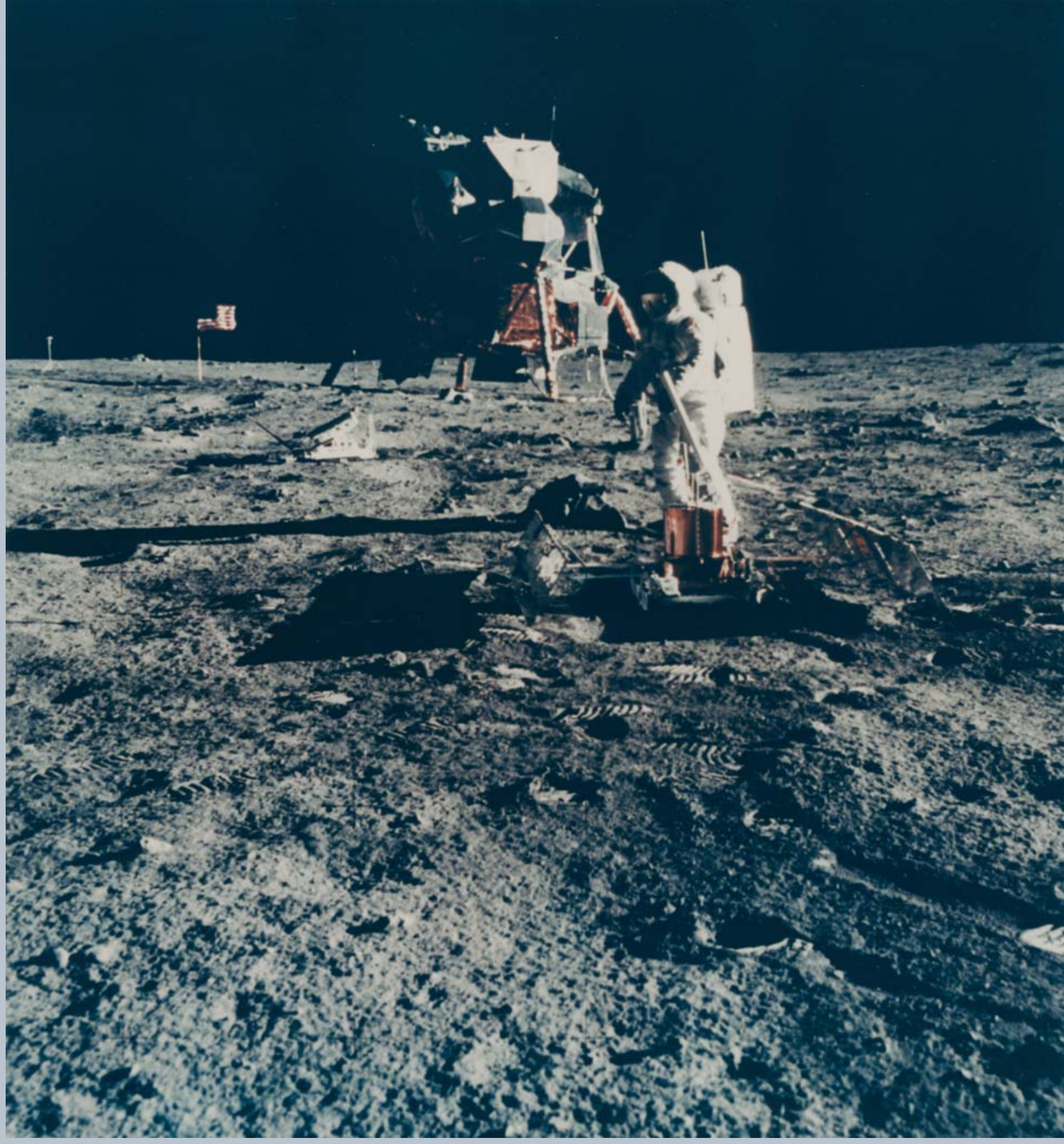
Buzz Aldrin (NASA SP-350, p. 216)

"You can see pictures, and you can appreciate from pictures. But pictures are different from being there."

Neil Armstrong (Chaikin, Voices, p.66).

Vintage color prints of this size are exceptionally rare and were expensive to produce.

The glorious nostalgia of this golden era and the patina of time is reflected in this incredible photograph



166

NEIL ARMSTRONG (APOLLO 11)

1969

Portrait of Buzz Aldrin at Tranquillity Base. 16-24 Jul 1969.

Large format presentation vintage Chromogenic print on fiber-based Kodak paper, printed 1970 [NASA AS11-40-5949] Trimmed to image, 27,6 x 25,5 cm (10.8 x 10 in), with "13 APR 70" stamp and "A Kodak Paper" watermarks on the verso (NASA / McDonnell Douglas).

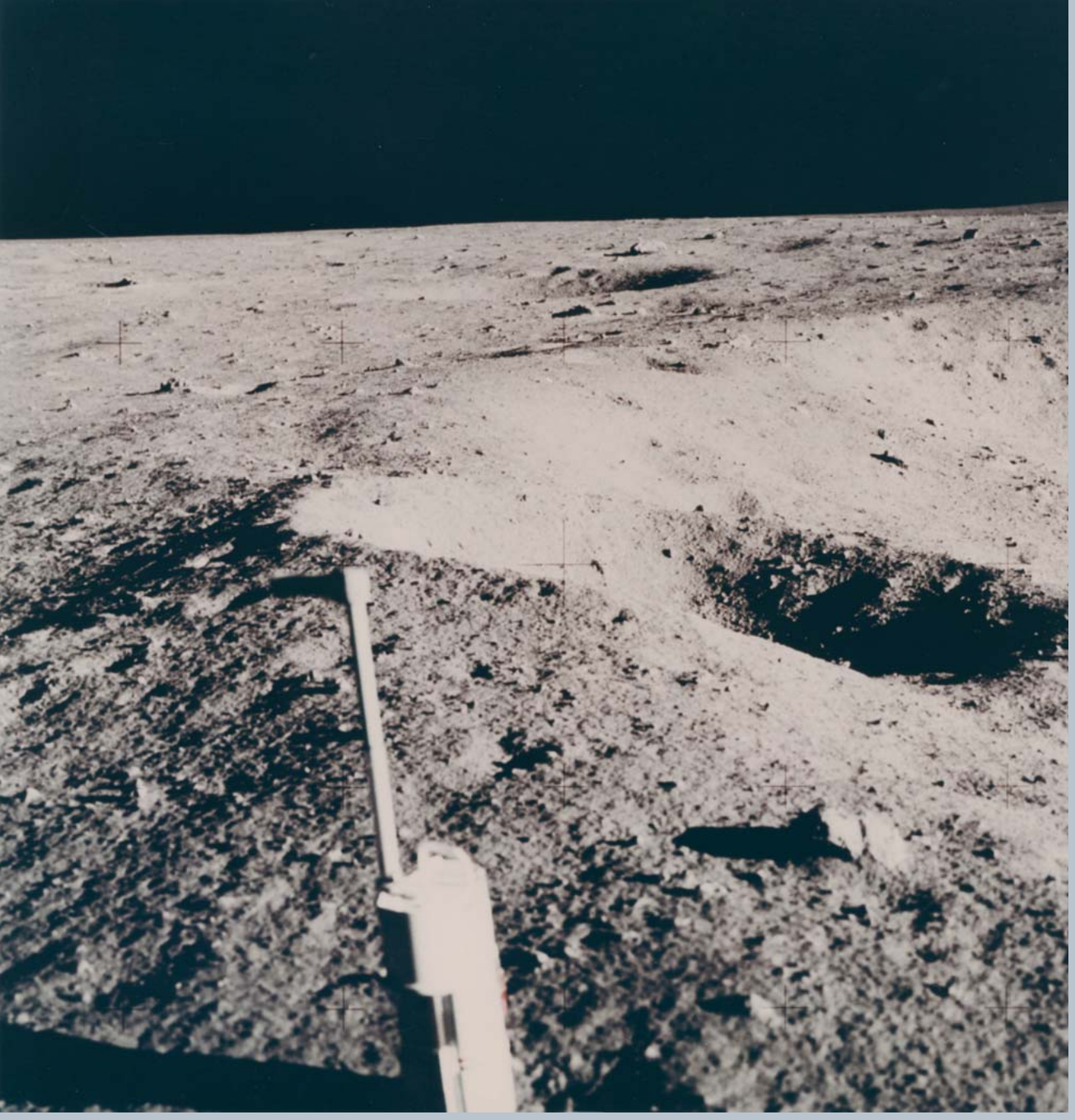
€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.45 pm (GMT+2)

"In my own view, the important achievement of Apollo was a demonstration that humanity is not forever chained to this planet, and our visions go rather further than that, and our opportunities are unlimited."

Neil Armstrong (1999 press conference for the 30th anniversary of the Moon landing).



[LARGE FORMAT]

167

NEIL ARMSTRONG (APOLLO 11)

1969

Little West Crater in the Sea of Tranquillity.
16-24 Jul 1969.

Large format presentation vintage Chromogenic print on fiber-based Kodak paper, printed 1969 [NASA AS11-40-5959]
Trimmed to image 28 x 26,8 cm (11 x 10.5 in), with "A Kodak Paper" watermarks on the verso (NASA / McDonnell Douglas).

€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

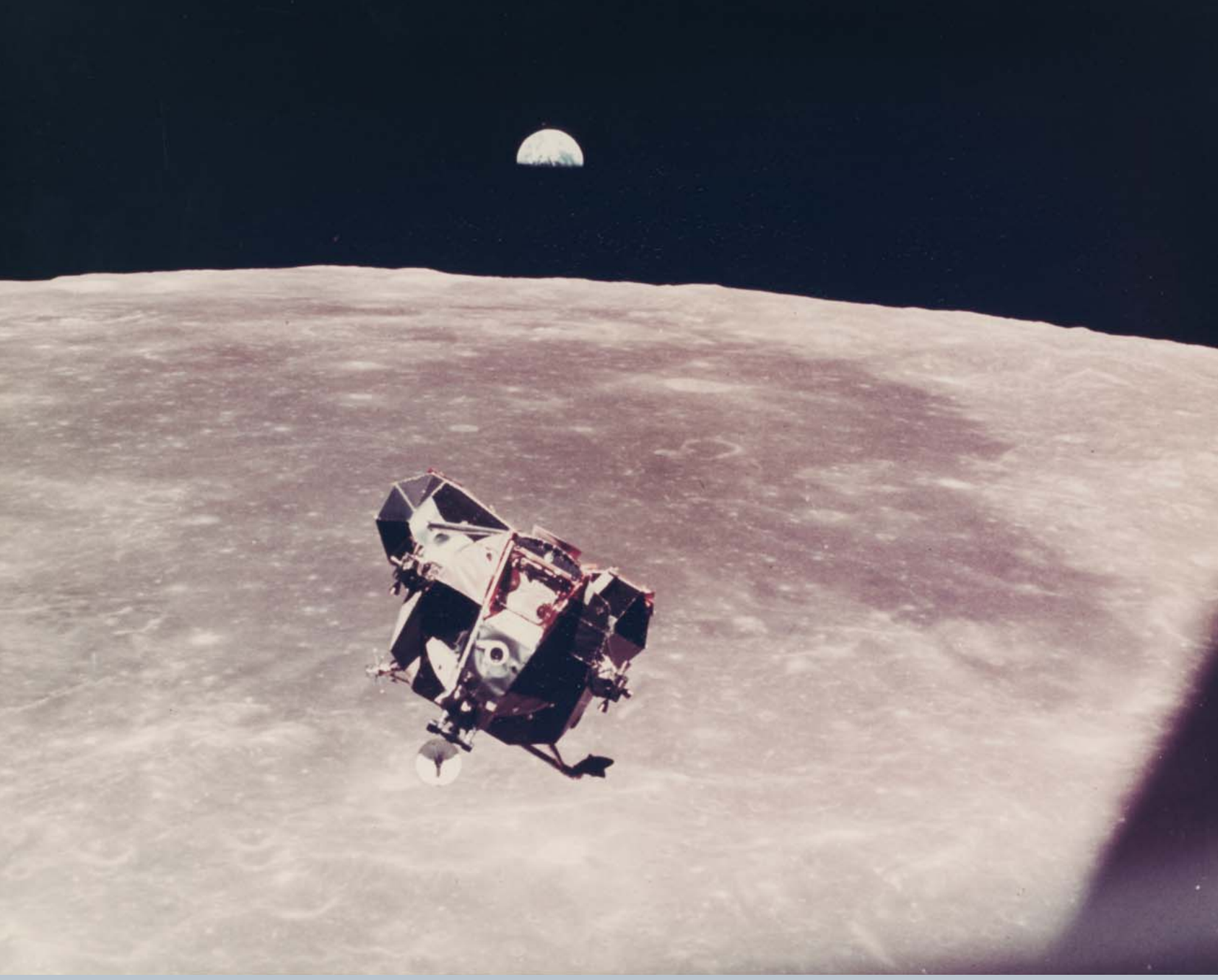
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.46 pm (GMT+2)

"I went the farthest. While Buzz was returning from the EASEP, I went back to a big crater behind us. It was a crater that I'd estimate to be 70 or 80 feet in diameter and 15 or 20 feet deep. I went back to take some pictures of that ; it was between 200 and 300 feet from the LM. I ran there and ran back because I didn't want to spend much time doing that, but it was no trouble to make that kind of a trek – a couple of hundred feet or so. It just took a few minutes to lope back there, take those pictures, and then come back,"

said Neil Armstrong (1969 Technical Debrief, from the ALSJ mission transcript at 111:12:31 GET).

One of the most beautiful examples of moonscapes witnessed during the mission, this is a very rare frame from the panoramic sequence taken by Armstrong during his exploration of Little West Crater, 65 m east of the LM. This was the furthest point traversed in the EVA.

The gold stereo 35mm close-up camera is in the foreground with the WSW rim of the crater just behind it.



168

MICHAEL COLLINS (APOLLO 11)

1969

The photograph of all of humanity: LM Eagle and Earthrise. 16-24 Jul 1969.

Large-format presentation vintage Chromogenic print on fiber-based paper, printed 1969 [NASA AS11-44-6642]
27,1 x 34,1 cm (10.6 x 13.4 in), flush-mounted on original 30 x 37cm NASA card.
A very rare large format of this incredible milestone of photography.

€ 6.000 – 8.000
$ 7.200 – 9.600

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.47 pm (GMT+2)

"Little by little, they grew closer, steady, as if on rails, and I thought 'What a beautiful sight,' one that had to be recorded. As I reached for my Hasselblad, suddenly the Earth popped up over the horizon, directly behind Eagle. I could not have staged it any better, but the alignment was not of my doing, just a happy coincidence. I suspect a lot of good photography is like that, some serendipitous happenstance beyond the control of the photographer. But at any rate, as I clicked away, I realized that for the first time, in one frame, appeared three billion earthlings, two explorers, and one Moon. The photographer, of course, was discreetly out of view."

Michael Collins (Jacobs, p. 65).

On Apollo 11, Michael Collins became the only person in history to capture a photograph showing every human being in the universe (including the two astronauts in Eagle) except himself.

[LARGE FORMAT]

169

NASA (APOLLO 12)

1969

The second Moon landing mission: official crew portrait and rare views of lunar surface EVA simulations (4). Sept-Oct 1969.

Four vintage Chromogenic prints on fiber-based Kodak paper, printed 1969.
Each 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso, the first numbered "NASA S-69-38856" (NASA MSC) in red in top margin, the last three with NASA KSC captions numbered "108-KSC-365C-287", "108-KSC-369C-280" and "108-KSC-69PC-551".
From left to right (first photograph): Pete Conrad, Commander (CDR); Richard Gordon, Command Module Pilot (CMP); and Alan Bean, Lunar Module Pilot (LMP).

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.48 pm (GMT+2)

The lunar surface EVA simulation photographs were taken at the Flight Crew Training Building at the Kennedy Space Center.

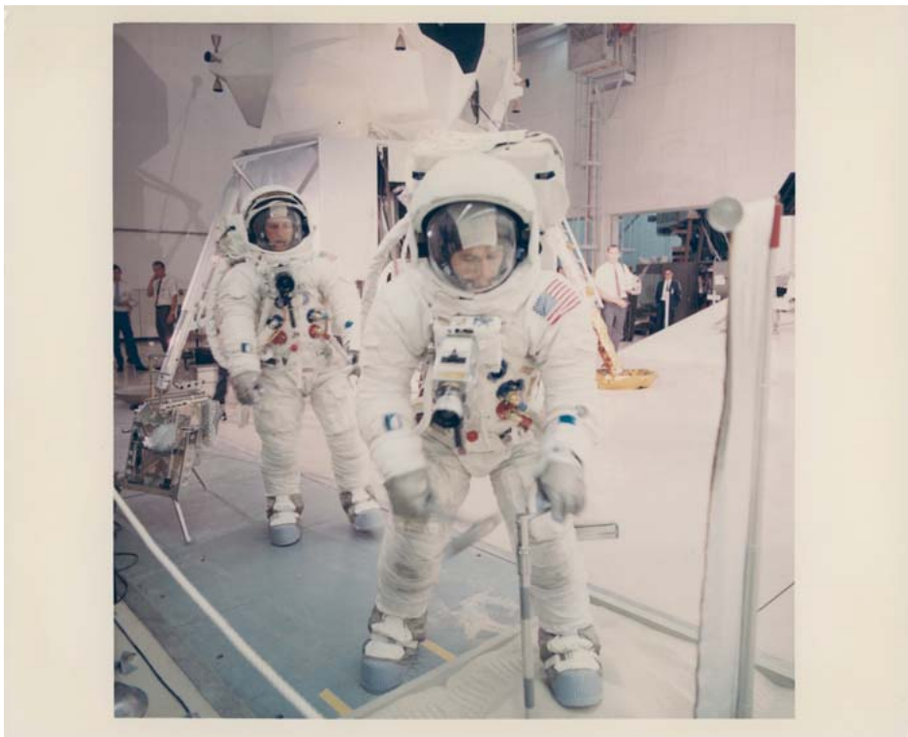
The astronauts (Pete Conrad and Alan Bean) unstow exploration equipment from the Modular Equipment Stowage Assembly (MESA) Bay of the Lunar Module using a Hand Tool Carrier (HTC), collect samples and inspect a model of the robot spacecraft Surveyor III.

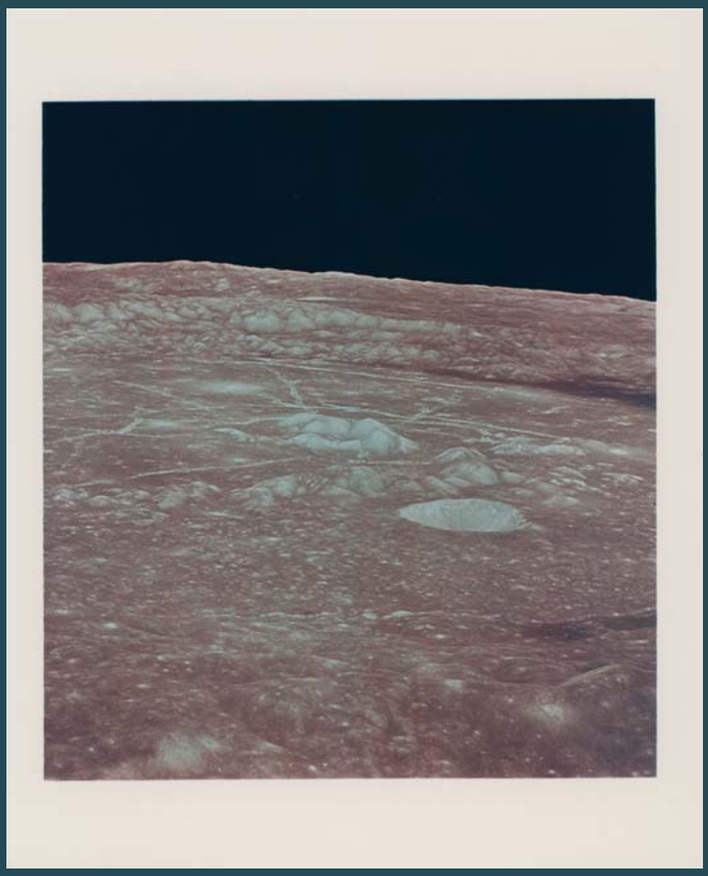
They would spend 7 hours and 37 minutes on the lunar surface, nearly three times as long as the time spent by the crew of Apollo 11.

The robot spacecraft Surveyor III (which landed in the Ocean of Storms in April 1967) was the target of Apollo 12 for a pinpoint landing.

"Our second journey to the Moon opened the new age of extraterrestrial scientific exploration by man. Going beyond Apollo 11, which demonstrated to an eager world that astronauts can set foot on a celestial body and return safely to Earth, Apollo 12 concentrated on a systematic scientific sampling designed to help unlock some secrets of the solar system's origin and early history."

NASA administrator Thomas Paine (NASA SP-235)





170

R. GORDON, P. CONRAD OR A. BEAN (APOLLO 12)

1969

Crater Humboldt and CSM Yankee Clipper after separation in lunar orbit (2). 14-24 Nov 1969.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1969 [NASA AS12- 50-7418 and AS12-47-6877]
Each 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.49 pm (GMT+2)

The impressive and detailed view of Humboldt (first photograph) and its floor was recorded by the crew looking south east during the second revolution of the spacecraft with the 500mm telephoto lens which was used for the first time on Apollo 12.

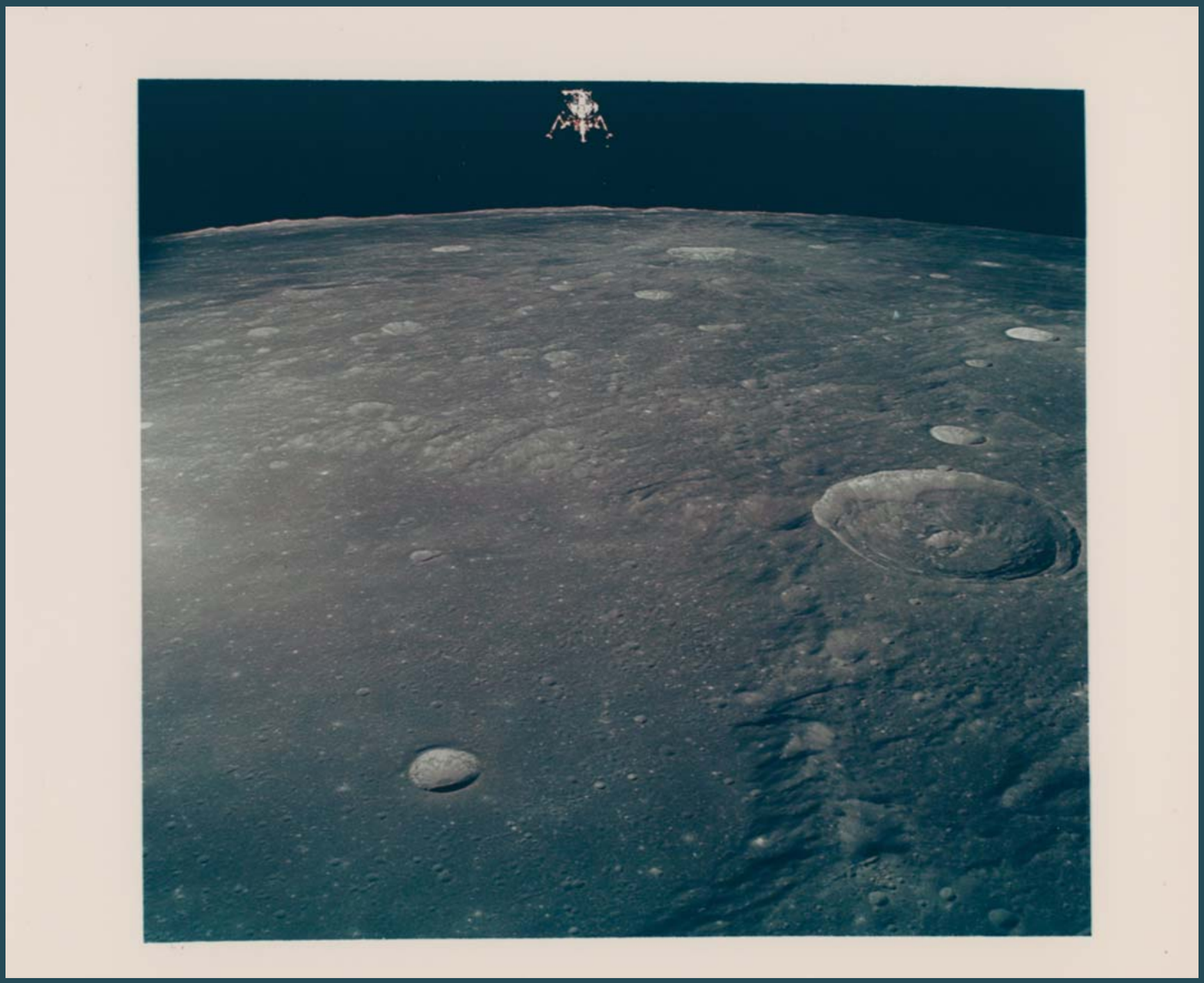
"Looking back to the southeast on the lunar surface, the crew took this dramatic view of the crater Humboldt. The central peaks appear 'snow' white because of the high-Sun elevation angle. The arcuate fractures within Humboldt are evidence of the forces working on the surface of the Moon to change the lunar topography" (NASA SP-235, p.12).

Humboldt is a large lunar impact crater (207km in diameter) located near the eastern limb of the nearside of the Moon. Latitude / longitude: 28° S / 80.5° E.

Highlighted by the Sun, the Command Module with Richard Gordon aboard appears motionless after separation from the Lunar Module Intrepid on orbit 13 (second photograph by Pete Conrad or Alan Bean from the LM).

The propeller-like device is an antenna for communication with Mission Control on Earth. Service Module Reaction Control thrusters can be seen at the left and right sides.

From the mission transcript as the two spacecrafts were station-keeping in lunar orbit: 108:26:48 Conrad: Boy, do you look neat down there against the Moon, Dick.



171

RICHARD GORDON (APOLLO 12)

1969

The LM Intrepid heading for the Ocean of Storms. 14-24 Nov 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS12-51-7507]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.50 pm (GMT+2)

"I made a small burn with the Command Module which allowed for separation from the LM, so we wouldn't collide later on. As I was drifting away," recalled Gordon, "I grabbed the Hasselblad and took some pictures out the window. It was simply a matter of pointing the nose of the spacecraft at the Lunar Module"

(Schick and Van Haaften, p. 80).

This amazing photograph was taken looking west over the Sea of Clouds after separation from the CSM Yankee clipper on orbit 13. The coordinates of the center of the lunar surface shown in picture are 4.5 degrees west longitude and 7 degrees south latitude. The largest crater in the foreground is the 154-km Ptolemaeus; and the second largest is the 39-km Herschel.

"The LM appears to be close to the surface, even though it is some 60 nautical miles high. This was one of Gordon's last views of the LM as he began his one and a half day of solo flight around the Moon" (NASA SP-235).

From the mission transcript as the two spacecrafts were orbiting the Moon:
108:22:25 Conrad: This is one of the better visuals I've seen, Dick.
108:22:29 Gordon: Yes. You are right. I've been taking stills.

"You can see that I was holding the flag up," pointed out Conrad. "Because, if you look at the rest of the pictures [of the mission], it hangs straight down, because the little pin up broke"

(from the ALSJ mission transcript at 116:20:22 GET).

172

ALAN BEAN (APOLLO 12)

1969

Pete Conrad holding the US flag on the Ocean of Storms, EVA 1. 14-24 Nov 1969.

Vintage Chromogenic print on fiber based Kodak paper, printed 1970 [NASA AS12-47-6897]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA G-70-3841" (NASA Goddard) in red in top margin.

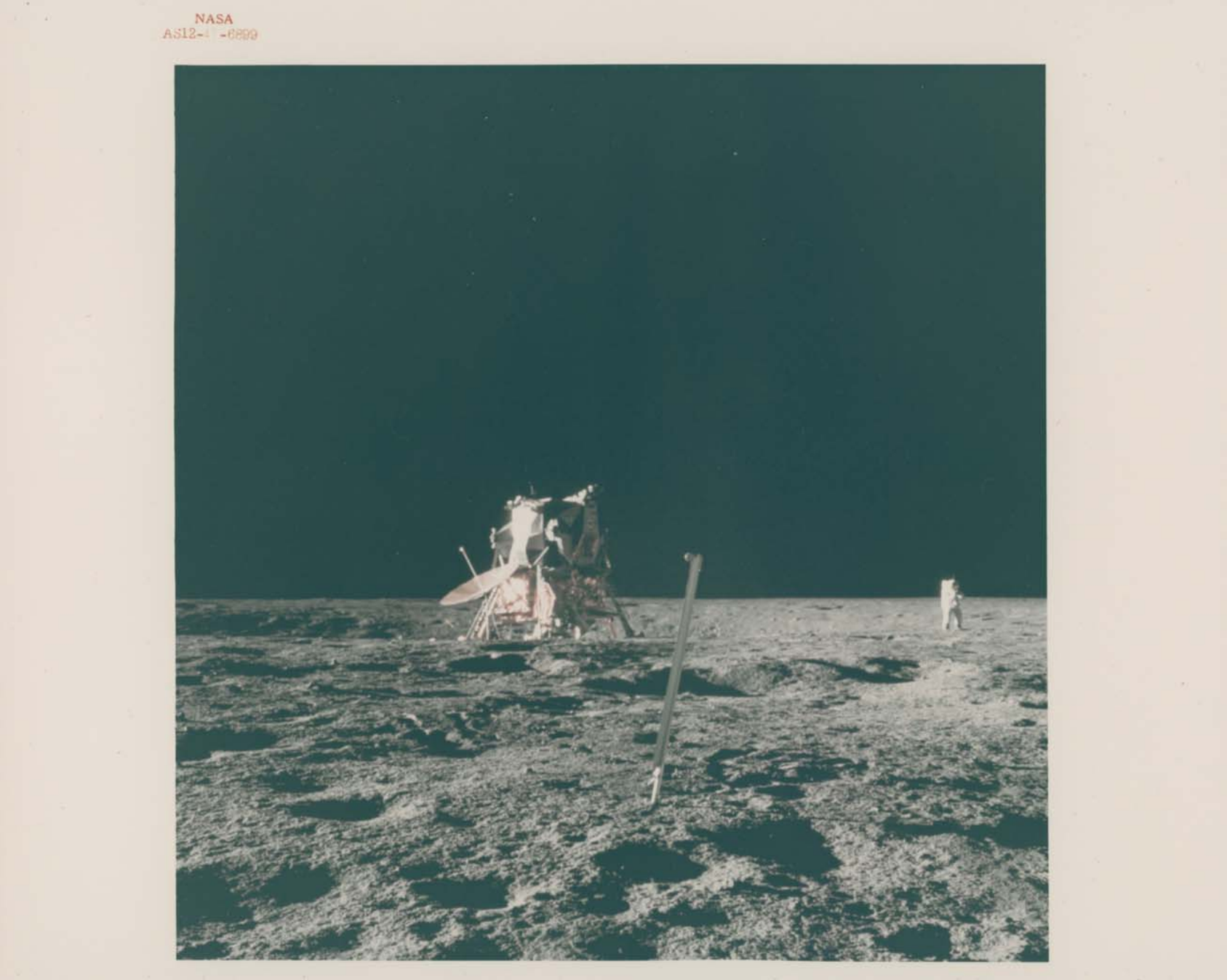
€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.51 pm (GMT+2)

"T he crew erected the American flag after landing and collecting the contingency sample. The long shadow of the LM and the bleak lunar surface serve as a fitting backdrop" (NASA SP-235).

From the mission transcript when the photograph was taken:
116:19:48 Conrad: Okay. We have the flag up. Like I said, hope everybody down there is as proud of it as we are to put it up. (Pause)
116:20:02 Gibson (mission Control): That's affirmative, Pete. And we're proud of what you're doing. (Pause)
116:20:18 Conrad: Al?
116:20:19 Bean: Yes, sir.
116:20:20 Conrad: Can we have a quickie (tourist photo) here?
116:20:22 Bean: Okay. (Pause)
116:20:32 Conrad: (To Al) Back up a little more ...
116:20:33 Bean: Okay.
116:20:34 Conrad: ...to about 15 feet.
116:20:35 Bean: All right. (Pause)
116:20:40 Conrad: Easy. You're getting into the TV cable!
116:20:43 Bean: Nope, I just went right over it, babe. Here you are. Take a look, Pete.
116:20:48 Conrad: I can't see you (because Bean is standing up-Sun). (Pause) Get it?
116:20:57 Bean: Sure did.
116:20:58 Conrad: Okay. (Pause) Another one?
116:21:04 Bean: Yeah.
116:21:05 Conrad: Wait one. (Pause) Okay.
116:21:17 Bean: Got you.



173

A. BEAN AND P. CONRAD (APOLLO 12)

1969

Alan Bean and Pete Conrad photographing each other on the Ocean of Storms (2), EVA 1. 14-24 Nov 1969.

Two vintage Chromogenic prints on fiber-based Kodak paper,
printed 1969 and 1970.
Each 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks
on the verso, numbered "NASA AS12-47-6899" and "NASA S-70-24448"(NASA
MSC) in red in top margin.
Two very rare photographs.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.52 pm (GMT+2)

The first photograph is a wide-angle view of the landing site showing Pete Conrad taking a panoramic view. Alan Bean took this photograph from just beyond the Solar Wind Collector which is visible in the foreground.

Conrad, at right, is taking a series of panoramic pictures (second photograph composing the 12 O'clock LM Panorama) which would include Bean taking this photograph.

Surveyor Crater is behind "Intrepid" at left.

The second photograph by Pete Conrad is the 12 O'clock LM 360° Panorama. This rare panoramic view was assembled from 8 x 10 inch prints by the Mapping Sciences Laboratory at the Manned Spacecraft Center in Houston and then photographed for use by scientists.

Bean can be seen taking photographs.

174

PETE CONRAD (APOLLO 12)

1969

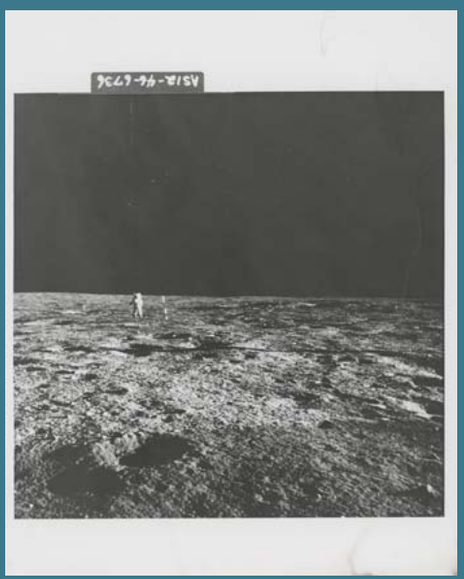
"360° Lunar Panorama": LM 12 o'clock panoramic sequence of Ocean of Storms Base, EVA 1. 14-24 Nov 1969.

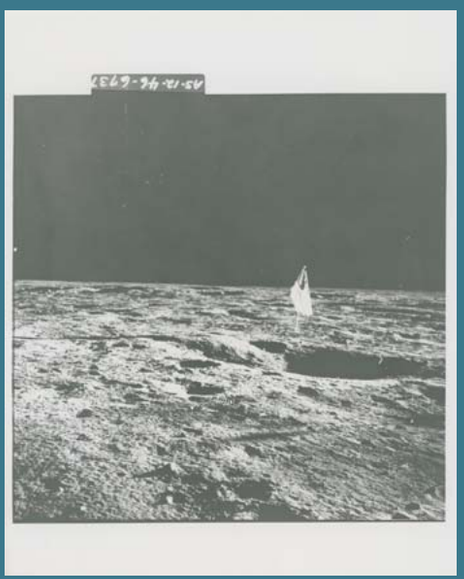
Fifteen vintage Gelatin silver prints on fiber-based paper, printed 1969 [NASA AS12-46-6731 to AS12-46-6745]
Each 25,4 x 20,3 cm (10 x 7.9 in), consecutively numbered in top margin between "AS12-46-6731" and "AS12-46-6745" (NASA / USGS).
Fifteen very rare overlapping photographs constituting an extraordinary panorama of the Apollo 12 landing site.

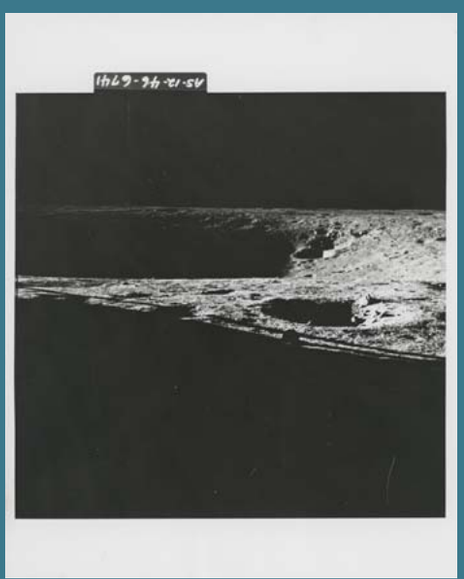
€ 4.000 – 6.000
$ 4.800 – 7.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.53 pm (GMT+2)







In order to provide views of their surroundings in context, the moonwalkers intentionally took series of slightly overlapping pictures, such as these series by Pete Conrad, which could be pasted together into panoramas for later study by geologists and researchers.

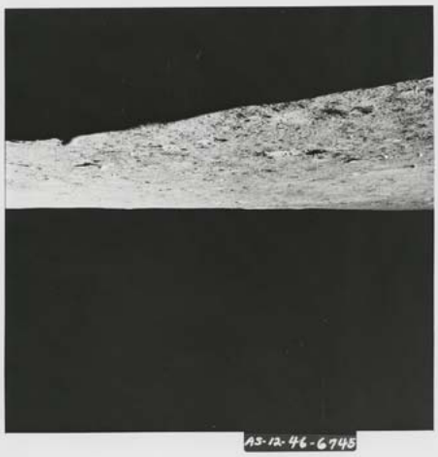
Conrad took this extraordinary rare panoramic sequence (originally shot on color film) early in EVA-1 from a position due west of the LM. It is known as the 12 o'clock panorama because it was taken from the 12 o'clock position relative to the LM's front hatch which was at 12 o'clock.

"This panorama really shows just how precise the landing was, being just a few feet from the edge of the target crater" (Constantine, pp. 32-36).

From the mission transcript when the panoramic photographs were taken:
116:21:58 Conrad: I'm heading out to do the pan photographs right now; and, with any luck at all, we'll get back on the timeline and complete what we need. Al's taking shots of the solar wind. And I'm hopping out here to the number 1 slot. [...]
116:22:29 Conrad: Okay. (Pause) Go. f/11. f/11 it is. (Counting frames and clock positions as he turns while taking the panorama) 1, 2, 3. Now f/8. (Pause) 4, 5, 6, 7 ... (Pause, possibly changing to f/5.6) 6, 7.

"I ran over (to position 1, west of the ladder) and did twelve photographs and ran over here (to position 2, 30 degrees east of north or, roughly, NE) and did twelve and ran over here (to position 3, 30 degrees east of south or, roughly, SE) and did twelve."

Pete Conrad (from the ALSJ mission transcript at 116:22:18 GET).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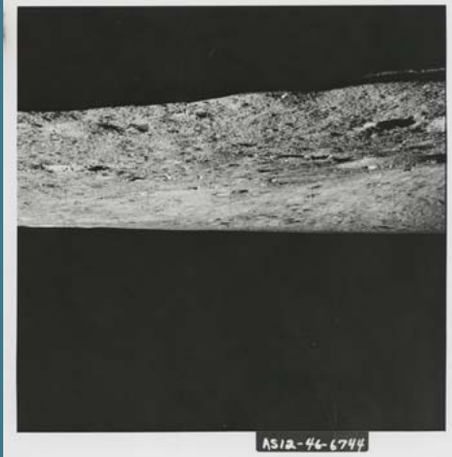
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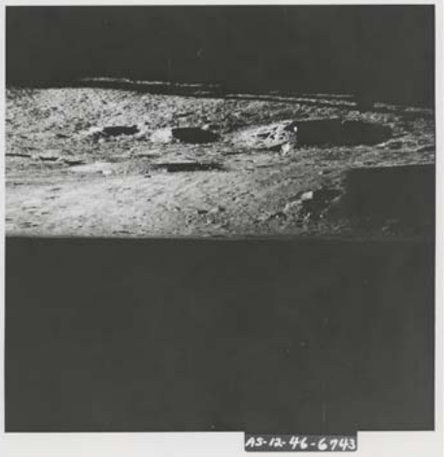
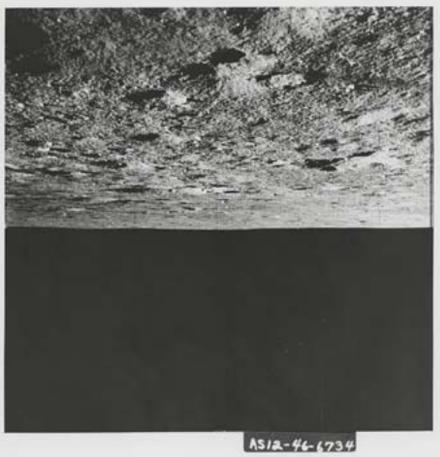

AS12-46-6743

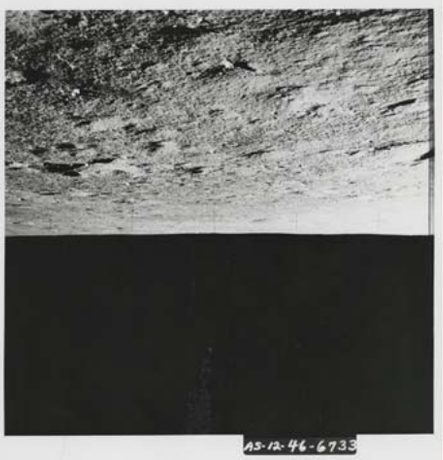

AS12-46-6740


AS12-46-6739


AS12-46-6738


AS12-46-6735


AS12-46-6734


AS12-46-6733

"The Lunar Module seemed much larger sitting on the Moon than I had imagined. All alone, it seemed like a house, with Pete and I working and playing all around it. When I think about it now, it was the only 'house' for 239,000 miles."

Alan Bean (Constantine, p. 37).

175

PETE CONRAD (APOLLO 12)

1969

Alan Bean next to the LM Intrepid on the Ocean of Storms, EVA 1. 14-24 Nov 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969
[NASA AS12-46-6749]
25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso.

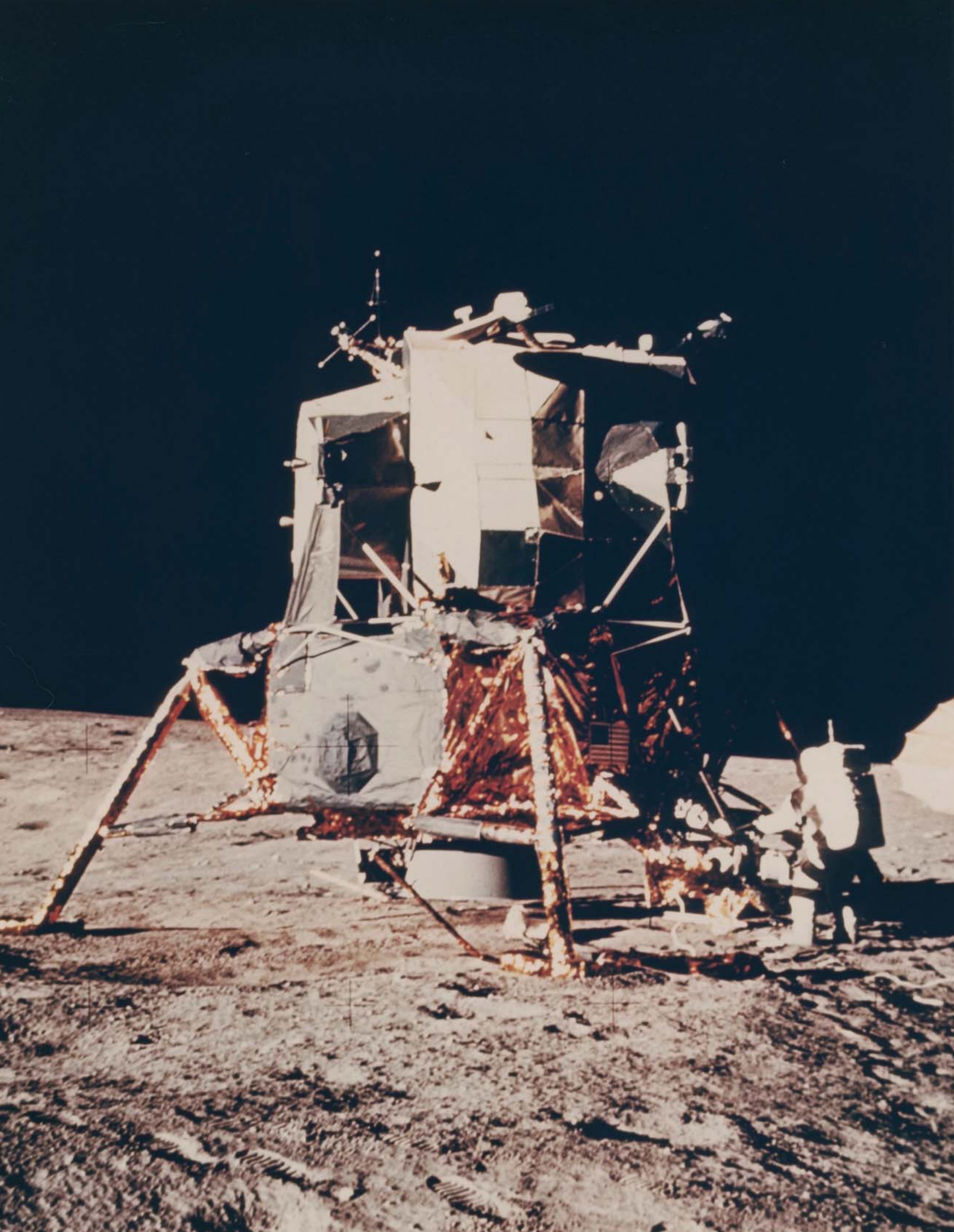
€ 600 – 800
$ 720 – 960

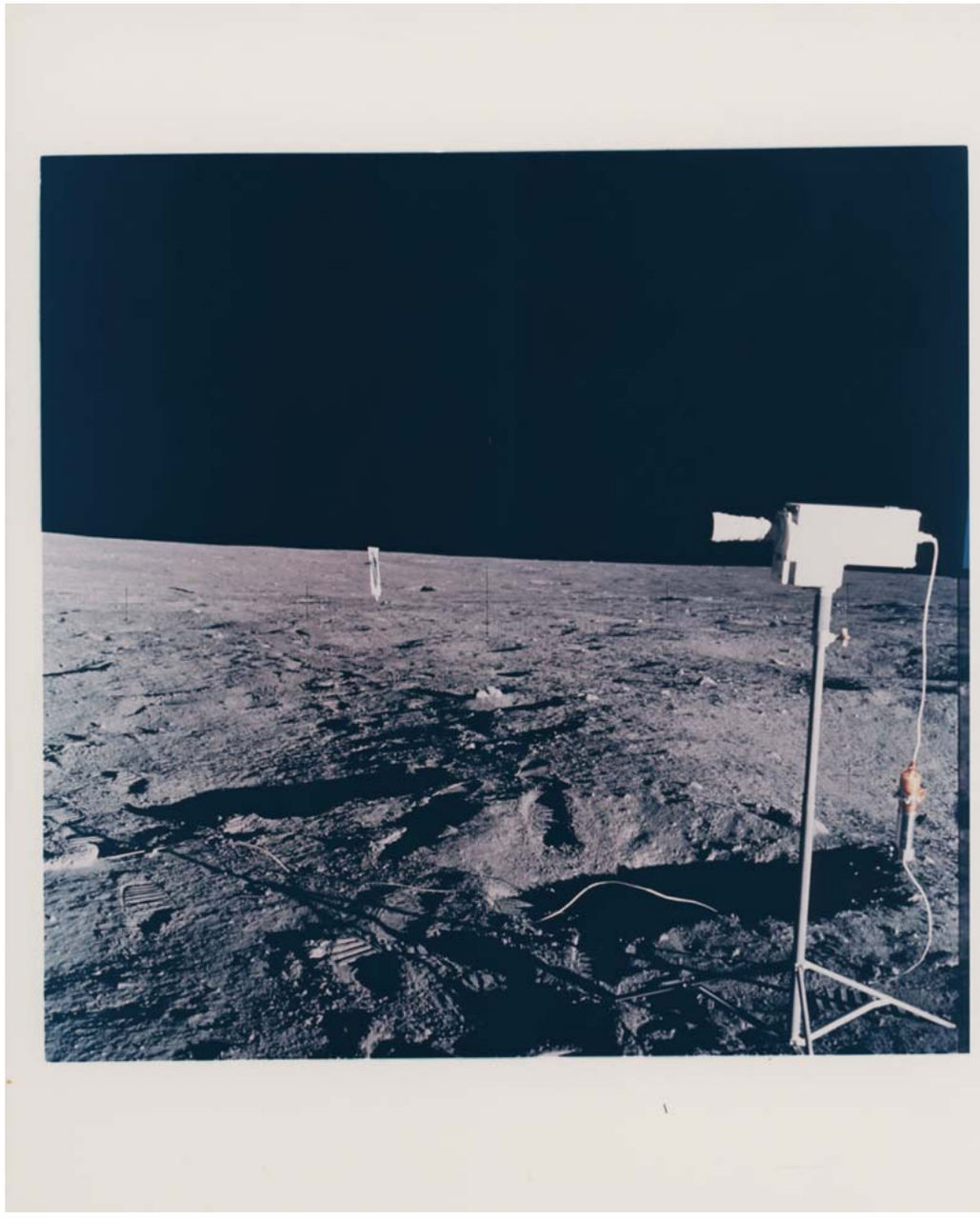
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.54 pm (GMT+2)

Alan Bean is working at the MESA (Modularized Equipment Stowage Assembly). Surveyor Crater is to the left of the LM.

From the mission transcript when the photograph was taken:
116:25:44 Conrad: Okay, Houston, two of the pans are done.
116:25:49 Gibson (Mission Control): Roger, Pete. Copy. Two pans. Al, how was the LM inspection?
116:25:56 Bean: I'm working on it right now.





176

PETE CONRAD (APOLLO 12)

1969

Alan Bean near Intrepid and the TV camera watching the scene (2), EVA 1. 14-24 Nov 1969.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1969 [NASA AS12-46-6750 and AS12-46-6755],.
Each 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.55 pm (GMT+2)

Two very rare frames of the 4 O'clock LM panoramic sequence taken by Conrad showing Bean between the LM and the S-band antenna (first photograph) and the burn-out TV camera with the Solar Wind Experiment site in the background (second photograph).

"The large umbrella type object in the foreground is the S-band antenna, a 3 m diameter portable satellite dish pointing directly at Earth, intended to beam the TV pictures back with a much stronger signal than the LM's own antenna" (Constantine, p.37).

Live television coverage was unfortunately lost early in the mission when Bean accidentally pointed the TV camera at the Sun during transfer from the LM. Thus the Hasselblad photographs taken by the crew are the only visual records of their lunar surface activities.

177

PETE CONRAD (APOLLO 12)

1969

Alan Bean and footprints on the Moon, EVA 1. 14-24 Nov 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS12-46-6780" (NASA MSC) in red in top margin.

€ 800—1.200
$ 960—1.440

Bidding starts at € 100

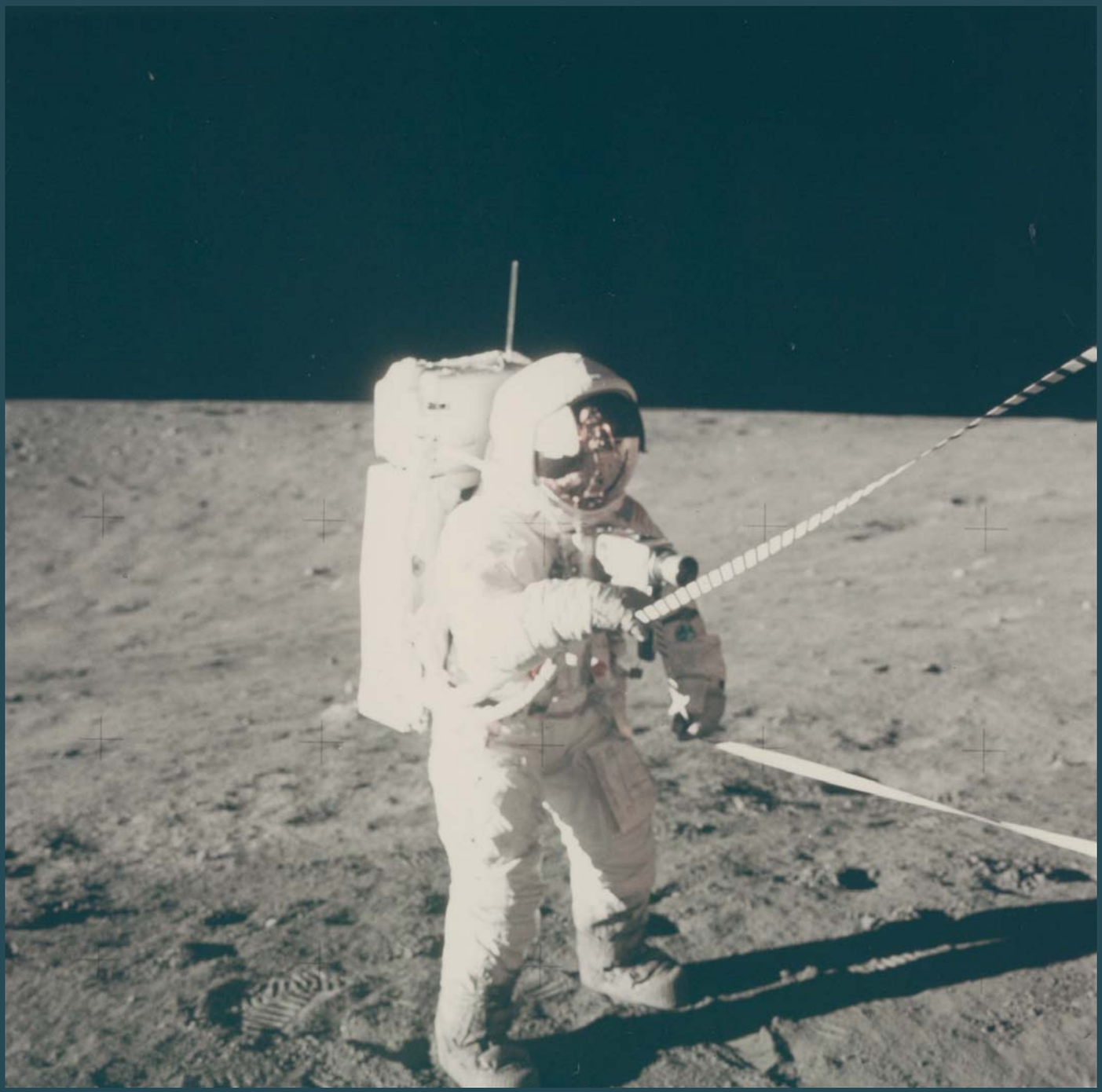
ketterer-internet-auctions.com – Bidding June 20th—July 15th, 2021
Call time: July 15th, 5.56 pm (GMT+2)

"I would have taken a lot more photographs of us just running around. [...] None of the crews really took what I'd call still action photographs of people falling down or throwing objects."

Alan Bean (Schick and Van Haaften, p.100)

A superb frame from the 8 O'clock LM 360° Panoramic Sequence taken by Pete Conrad after he walked a short way 9 m south east of the LM down into Surveyor Crater. Footprints lead to the burn-out TV camera in the background.

Alan Bean is taking photographs of the LM Intrepid (not visible in the picture).



178

ALAN BEAN (APOLLO 12)

1969

Portrait of Pete Conrad with the reflection of the LM in his visor, EVA 1. 14-24 Nov 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 20.3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS12-47-6913" (NASA MSC) in red in top margin.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.57 pm (GMT+2)

»It's a good shot, babe. The LM and everything's reflecting in your visor.«

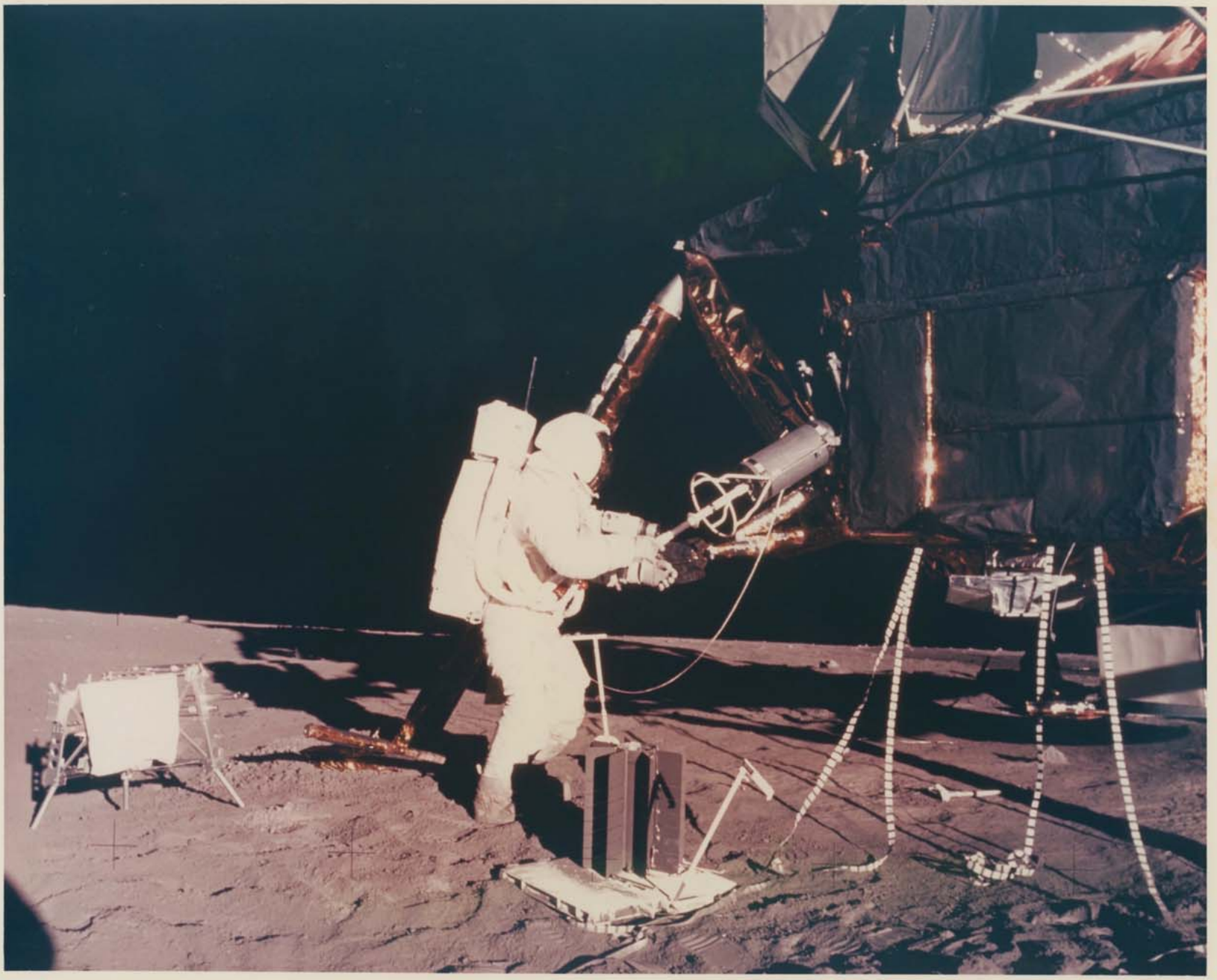
Alan Bean

A superb lunar scene photographed (and directed) by Pete Conrad who called out Bean to take his portrait while he was working at the LM.

Charles Conrad is using a lanyard to pull the first of the scientific experiment packages out of the LM Bay on a rail.

His Hasselblad camera is mounted on his chest.

From the mission transcript when the photograph was taken:
116:33:36 Bean: (Wanting to take a picture) Look at me, Pete. (Pause) It's a good shot, babe. The LM and everything's reflecting in your visor.



179

A. BEAN AND P. CONRAD (APOLLO 12)

1969

Alan Bean and Pete Conrad setting up scientific experiments on the Ocean of Storms (2), EVA 1. 14-24 Nov 1969.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1969
[NASA AS12-46-6789 and AS12-47-67919]
Each 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, the first with NASA KSC numbered "AS12-46-6789" on the verso, the second with NASA HQ caption numbered "69-HC-1325" on the verso.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

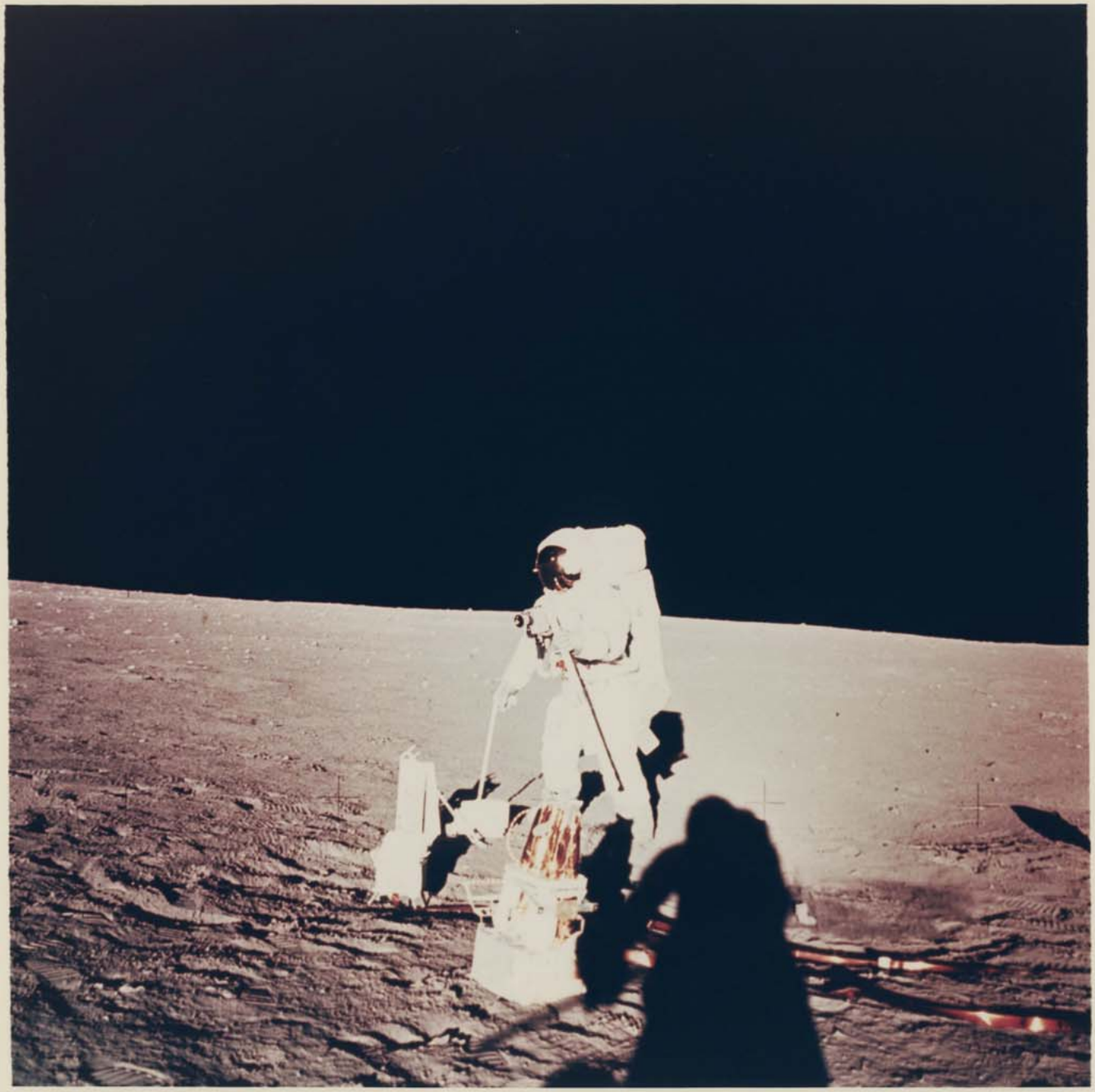
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 5.58 pm (GMT+2)

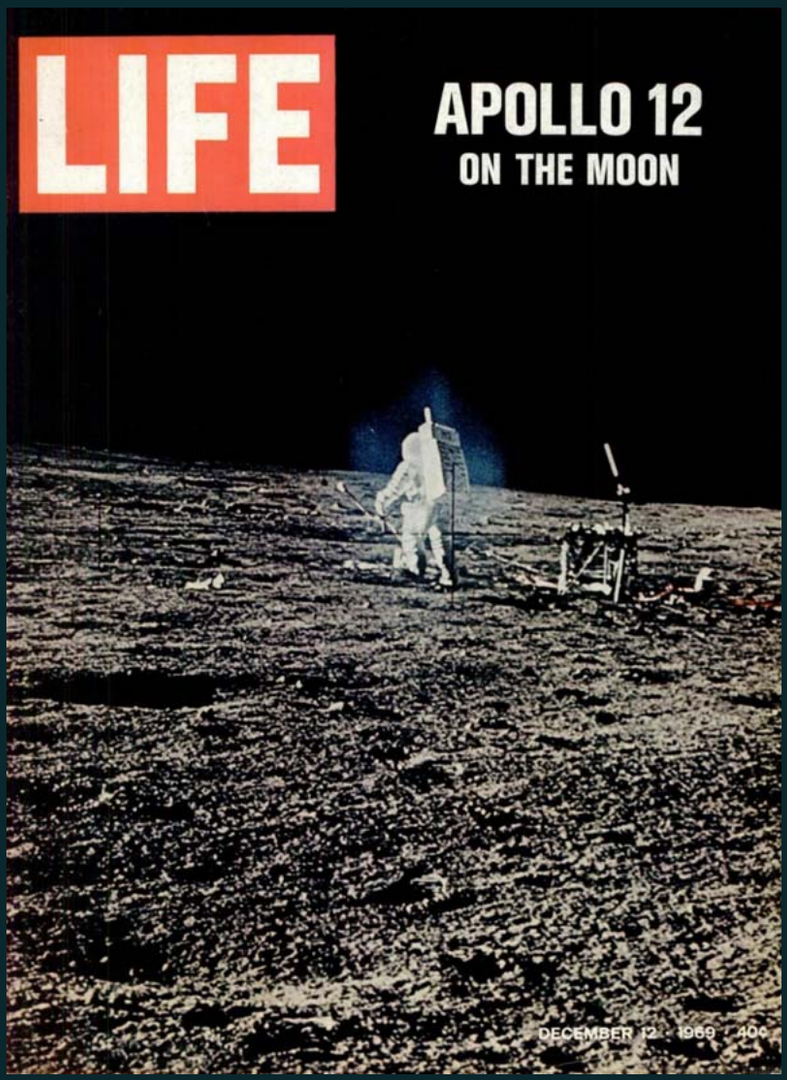
The astronauts had to remove the Apollo Lunar Scientific Equipment Package (ALSEP) from the stowage areas on the descent stage of the LM Intrepid. It was in two sub-packages that were folded up or collapsed for more compact storage.

Alan Bean is trying to remove a radioactive fuel element from its cask at the LM (first photograph by Pete Conrad). The astronauts experienced much trouble to remove the fuel element and had to use a hammer to fix the problem.

Pete Conrad is deploying scientific experiments at the lunar-science station which (or ALSEP site) was located about 500 feet from the LM (second photograph by Alan Bean). Conrad has deployment tools in his hands and the Hasselblad camera clearly visible on his chest. The yet undeployed magnetometer and Bean's shadow are in the foreground.

Pete Conrad and Alan Bean would set up equipment that measured the Moon's seismicity, solar wind flux and magnetic field, and relayed the measurements to Earth. These instruments reflect the first complete nuclear-powered ALSEP station set up by astronauts on the Moon to relay long-term data from the lunar surface.





180

PETE CONRAD (APOLLO 12)

1969

Cover of LIFE: mysterious halo of light around Alan Bean on the Ocean of Storms, EVA 1. 14-24 Nov 1969.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in), with NASA KSC caption numbered AS12-46-6826 and "A Kodak Paper" watermarks on the verso. This photograph graced the cover of LIFE (Apollo 12 on the Moon, December 12, 1969).

€ 800—1.200
$ 960—1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th—July 15th, 2021
Call time: July 15th, 5.59 pm (GMT+2)

"Everybody was trying to figure out what that aura was," explained Pete Conrad. "Neither Al or I remember seeing the other guy putting the stuff out, but the film picked it up. The conclusion was that the halos were water vapor ice crystals coming out of the water boilers on our backpacks"

(Schick and Van Haften, p. 47).

"Alan Bean's extravehicular maneuvering unit is surrounded by halo of light as he deploys instruments of ALSEP on Ocean of Storms near 'Intrepid' landing site" (NASA caption).

Conrad took the photograph near the small mound to show its location relative to the lunar-science station (or ALSEP site). Bean is working near the seismometer.

In fact "the blue glow around Bean was due to a dust smudge on the center of the lens" (ALSJ caption for AS12-46-6826).

46-6826

JOHN F. KENNEDY SPACE CENTER,
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION,
KENNEDY SPACE CENTER, FLORIDA 32899
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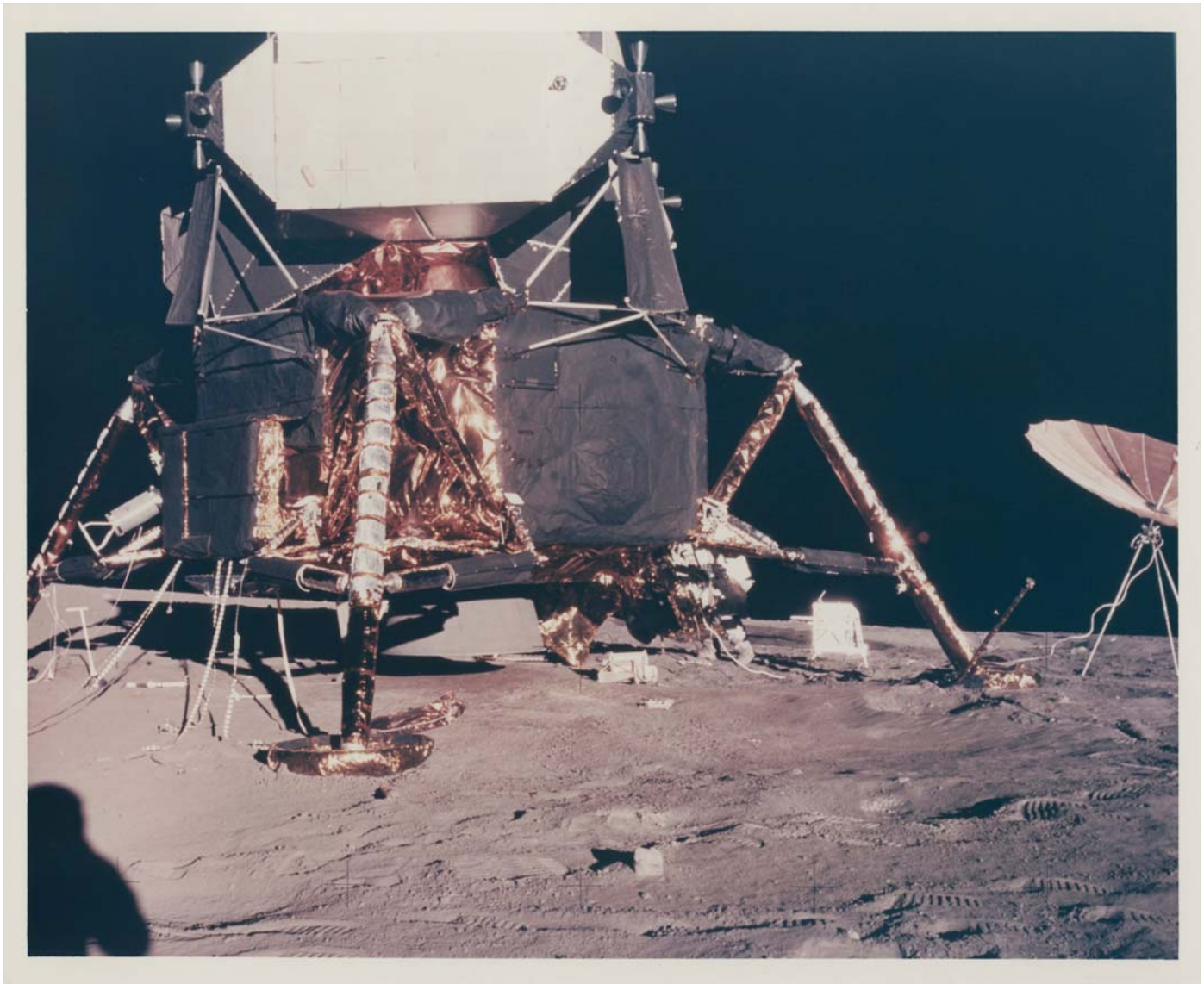
M69-76-MSFC NOVEMBER 19, 1969

CENNEDY SPACE CENTER, FLA.__ Apollo 12 lunar module pilot Alan Bean's extravehicular recovering unit is surrounded by bale of light as he deploys instruments of Apollo Surface Experiments Package (ALSEP) on Ocean Storms near "Intrepid" landing site.



181

ALAN BEAN (APOLLO 12)

1969

Views of Pete Conrad at Ocean of Storms Base (2), EVA 1. 14-24 Nov 1969.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1969.
Each 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, the first with NASA KSC numbered "AS12-47-6961" on the verso, the second numbered "NASA AS12-47-6987" (NASA MSC) in red in top margin.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.00 pm (GMT+2)

"Both of us really enjoyed working on the surface; we took a lot of kidding later about the way we reacted. But it was exciting; there we were, the third and fourth people on the Moon, doing what we were supposed to do, what we had planned to do, and keeping within schedule. Add to that the excitement of just being there, and I think we could be forgiven for reacting with enthusiasm."

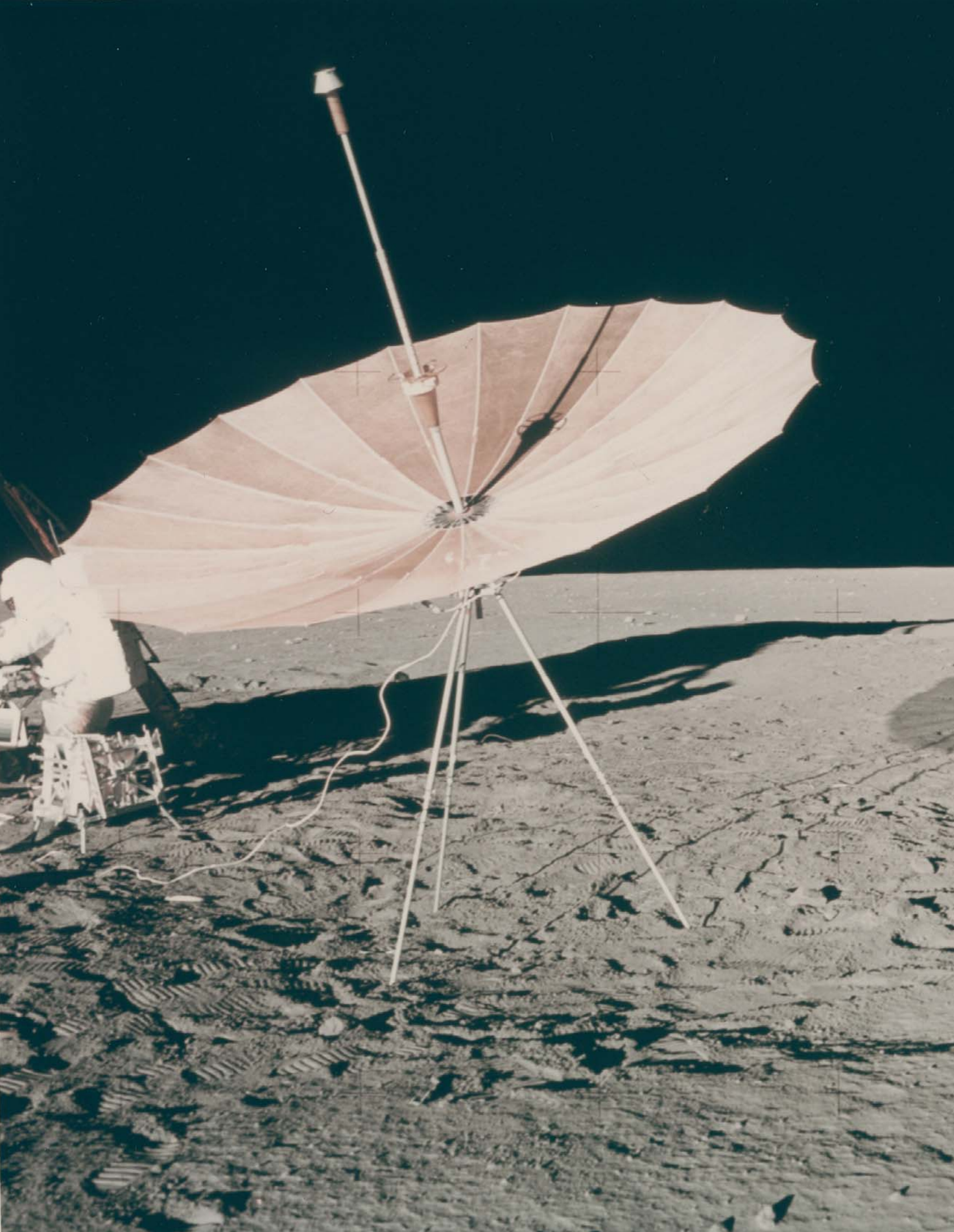
Pete Conrad (NASA SP-350, p. 12.2).

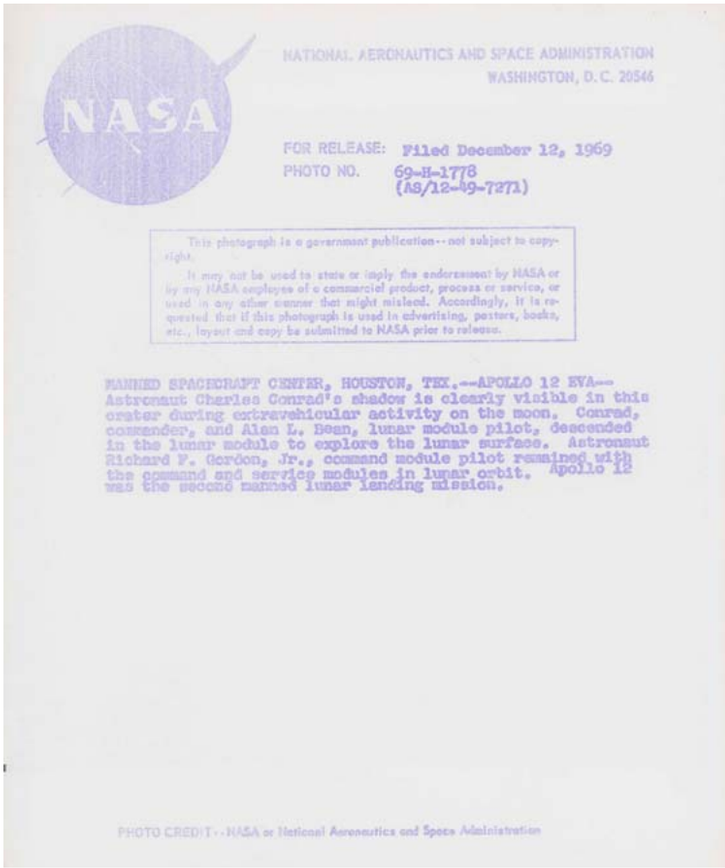
The first photograph is a frame from Alan Bean's panoramic sequence taken at the 6 O'clock position relative to the LM's hatch.

Pete Conrad is working at the MESA (Modularized Equipment Stowage Assembly) behind the LM Intrepid. The S-band antenna is also visible.

The second photograph is a frame of the 4 O'clock LM Pan (so called because it is facing the 4 o'clock side of the LM) taken by Bean at the end of the first EVA. The dish antenna was used for communicating with Earth. The Hand Tool Carrier (HTC) is in the foreground. The shadows of the LM and s-band antenna are in the background.

"Conrad is working at the Modularized Equipment Stowage Assembly (MESA) of the Lunar Module, trying to get the rock box latched on the MESA table" (ALSJ caption for AS12-47-6988).





NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
WASHINGTON, D.C. 20546

FOR RELEASE: Filed December 12, 1969
PHOTO NO. 69-H-1778
(AS/12-49-7271)

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MANNED SPACECRAFT CENTER, HOUSTON, TEX.--APOLLO 12 EVA--
Astronaut Charles Conrad's shadow is clearly visible in this crater during extravehicular activity on the moon. Conrad, commander, and Alan L. Bean, lunar module pilot, descended in the lunar module to explore the lunar surface. Astronaut Richard F. Gordon, Jr., command module pilot remained with the command and service modules in lunar orbit. Apollo 12 was the second manned lunar landing mission.

PHOTO CREDIT: NASA or National Aeronautics and Space Administration

"You don't feel any of the temperature here. Sun's out nice and bright, but it's nice and cool in here (in the suit)."

Alan Bean

182

PETE CONRAD (APOLLO 12)

1969

Astronaut's shadow at Sharp Crater, EVA 2.
14-24 Nov 1969, EVA 2.

Vintage Gelatin silver print on fiber-based paper, printed 1969.
20,3 x 25,4 cm (7.9 x 10 in), NASA HQ caption numbered "NASA AS12-49-7271" on the verso.

€ 700 – 1.000
$ 840 – 1.200

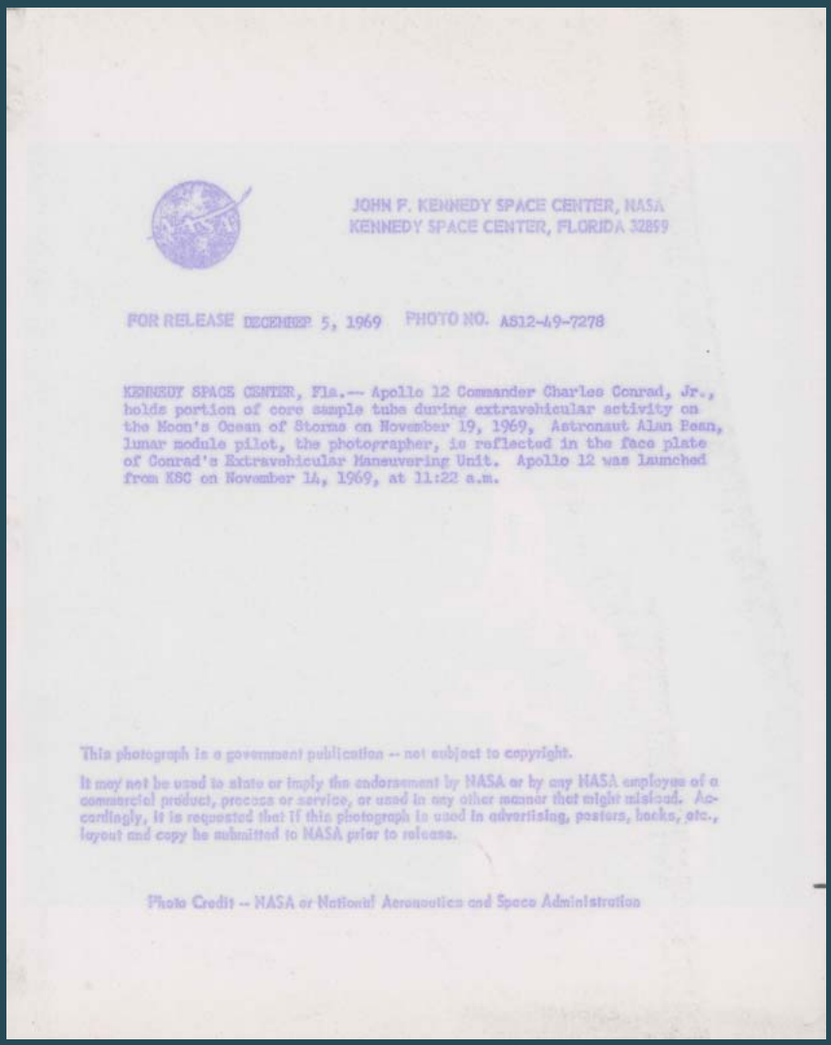
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.01 pm (GMT+2)

This rare and superb photograph of Conrad's shadow is a frame from the second panorama he took at Sharp Crater showing its south rim and wall from the east rim.

"Sharp Crater was about 400 meters southwest of the LM. This crater was at the outermost point of the crew's traverse. From there, they would walk east to a point on the southern rim of Surveyor Crater opposite the LM, and then make their way down to the Surveyor itself before climbing back up to the LM" (from the ALSJ mission summary).

From the mission transcript when the photograph was taken:
132:56:50 Bean: (to Houston) You don't feel any of the temperature here. Sun's out nice and bright, but it's nice and cool in here (in the suit); except when you're carrying something metal, like the Hand Tool Carrier, or the shovel, or something. Then your hand starts to get warm.
132:57:20 Conrad: Could you get out of the...
132:57:21 Bean: Yeah.
132:57:22 Conrad: Could you just slide a little bit?
132:57:23 Bean: Okay. Let me slide right over here. (Pause) That's a new one.
132:57:33 Conrad: Oh, wait a minute. I've got to do it (the panorama) over here. Got it.



JOHN F. KENNEDY SPACE CENTER, NASA
KENNEDY SPACE CENTER, FLORIDA 32899

FOR RELEASE DECEMBER 5, 1969 PHOTO NO. AS12-49-7278

KENNEDY SPACE CENTER, Fla.— Apollo 12 Commander Charles Conrad, Jr., holds portion of core sample tube during extravehicular activity on the Moon's Ocean of Storms on November 19, 1969. Astronaut Alan Bean, lunar module pilot, the photographer, is reflected in the face plate of Conrad's Extravehicular Maneuvering Unit. Apollo 12 was launched from KSC on November 14, 1969, at 11:22 a.m.

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Photo Credit -- NASA or National Aeronautics and Space Administration

183

PETE CONRAD (APOLLO 12)

1969

Portrait of Alan Bean with the reflection of the photographer in his visor, EVA 2. 14-24 Nov 1969.

Vintage Gelatin silver print on fiber-based paper, printed 1969.
25,4 x 20,3 cm (10 x 7.9 in), with NASA KSC caption numbered "AS12-49-7278" on the verso.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.02 pm (GMT+2)

"I've always thought those pictures... we took of each other on the Moon were all we were going to have left after it was over to remember what we did."

Pete Conrad (Schick and Van Haaften, p. 40).

Pete Conrad took this photograph near Sharp Crater. Alan Bean holds a container of lunar soil in his right hand. His Hasselblad camera is mounted on the control unit on his chest.

Conrad is fully reflected in sharp detail in Alan Bean's visor.

This celebrated picture has also been described as the first self-portrait on the Moon (https://apod.nasa.gov/apod/ap060121.html).


MAIN MOM
TALK

184

PETE CONRAD (APOLLO 12)

1969

"Tourist" picture of Alan Bean, EVA 2.
14-24 Nov 1969.

Vintage Gelatin silver print on resin coated paper, printed 1969 [NASA AS12-49-7281]
25,4 x 20,3 cm (10 x 7.9 in), with very faint NASA KSC caption on the verso.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.03 pm (GMT+2)

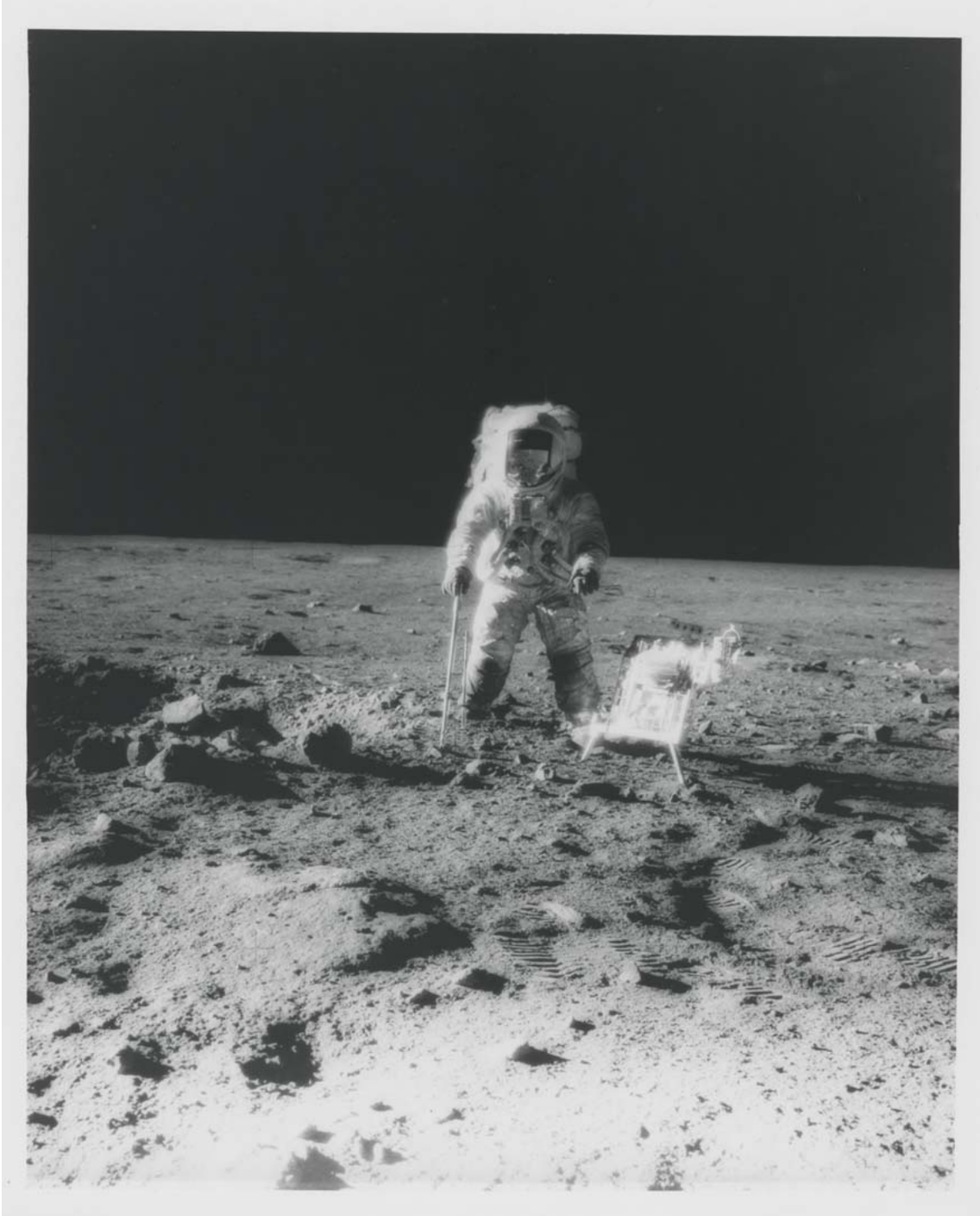
"We didn't take too many tourist photographs; in fact nobody did. [...] We didn't emphasize the human aspect enough, and I tell you it was a mistake."

Alan Bean (Schick and Van Haaften, p. 100).

Conrad took this photograph of Bean as the astronauts were on the way to Halo Crater. The Hand Tool Carrier is to the left of Bean.

This is one of the rare "tourist" pictures of the Apollo program.

From the mission transcript when the photograph was taken:
133:15:25 Conrad: I'll tell you what. Let's see, we're cross-Sun, right? (Preparing to take a tourist picture) Look over here at me and smile.



185

ALAN BEAN (APOLLO 12)

1969

Pete Conrad on the rim of Surveyor Crater, EVA 2. 14-24 Nov 1969.

Vintage Gelatin silver print on resin coated paper, printed 1969. 25,4 x 20,3 cm (10 x 7.9 in), with NASA KSC caption numbered "AS12-49-7318" on the verso.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.04 pm (GMT+2)

Conrad is holding a scoop in his right hand with the gnomon in front of him. The Hand Tool Carrier (HTC) is forward of his left foot.

"As Conrad and Bean were on the subtle rim of Surveyor Crater, they found that, like the ground near the LM, the soil was well compacted. There were only a few small rocks in evidence and on the inner slopes, the soil was just as dark as on the surrounding plain. Based on their observations from the first EVA, the astronauts expected that the footing would remain good as they would descend into the crater to visit Surveyor III in the climax of the Apollo 12 mission" (from the ALSJ mission summary).

From the mission transcript when the photograph was taken:
133:43:20 Conrad: Step across over there (and) photograph that rock right there. Wait until I drop the gnomon in...
133:43:24 Bean: Okay.
133:43:25 Conrad: ...and do it in such a manner as to get this crater that it came out of.
133:43:28 Bean: That's a good idea. Let me see if I can. I'll have to back...Let me get a 15-foot shot.
133:43:32 Conrad: Yeah. That's just what I was just thinking.
133:43:34 Gibson (Mission Control): Pete, could we have your present position?
133:43:37 Bean: (Garbled) 15-foot (focus).
133:43:39 Conrad: (To Gibson) Roger. If you were looking at the Surveyor crater and west was 12 o'clock, we're at the 9 o'clock position on the Surveyor crater.

186

ALAN BEAN (APOLLO 12)

1969

The first photographs of man and robot on the surface of another world (2), EVA 2. 14-24 Nov 1969.

Two vintage Gelatin silver prints on fiber-based paper, printed 1969. Each 25,4 x 20,3 cm (10 x 7.9 in), the first with NASA KSC caption numbered "AS12-48-7093" on the verso, the second with NASA MSC caption on the verso and numbered "NASA AS12- 48-7134" (NASA MSC) in black in top margin.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.05 pm (GMT+2)

The first photograph taken by Alan Bean from the rim of Surveyor Crater shows his shadow together with the Surveyor III spacecraft and represents the first image of the reunion of man and a robot spacecraft on the surface of another world.

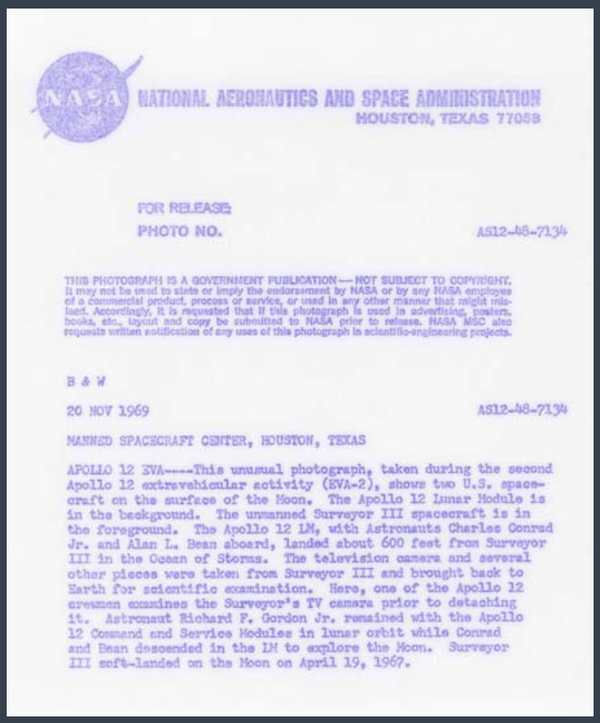
The second photograph is the first showing a human next to a robot spacecraft on the surface of another world. After Conrad's suggestion to take some "tourist" photos of each other standing in front of Surveyor III, Alan Bean captured Pete Conrad "jiggling" the spacecraft to see if it was firmly planted. The LM Intrepid, the S-band antenna and the American flag are in the background.

"Some of the still imagery captured by the 12 Apollo astronauts between 1969 and 1972 while on the low-angled, Sun-lit surface of the Moon, can be likened to 19th and 20th century landscape photography. For example, the 19th century landscape photographer T. H. O'Sullivan's famous otherworldly image of an ambulance covered wagon (containing his portable darkroom) and horses among the sand dunes of Nevada's Carson Desert can be compared to Apollo 12 astronauts Conrad and Bean's documentation of their Ocean of Storms landing site with the Surveyor III spacecraft in view. [...] Both photographs give life to an otherwise lifeless landscape" (Dick, p. 286).

"You don't get a chance like this every day."

Alan Bean

From the mission transcript when the second photograph was taken:
134:15:59 Bean: You don't get a chance like this every day. Shoot up the extras; we've got lots of film.
134:16:03 Conrad: Yep. Here you go.
134:16:06 Bean: Okay. (Pause)
134:16:10 Conrad: Why don't you get yourself in the photo, too?
134:16:14 Bean: Okay. Just a second. (Pause) Back up just a little, Pete. Try for 15 feet. (Pause) Okay. That ought to be good. How's that look to you?
134:16:39 Conrad: Good. Come in just a foot.
134:16:43 Bean: (Chuckling) You got a calibrated eye, huh? (Pause)
134:16:48 Conrad: Trouble with that camera is, if it's not right on the money, it's out of focus.
134:16:52 Bean: Okay.
134:16:54 Conrad: Okay, Houston. I'm jiggling it. The Surveyor is firmly planted here; that's no problem.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
HOUSTON, TEXAS 77058

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B & W

20 NOV 1969 AS12-48-7134

MANNED SPACECRAFT CENTER, HOUSTON, TEXAS

APOLLO 12 EVA-----This unusual photograph, taken during the second Apollo 12 extravehicular activity (EVA-2), shows two U.S. spacecraft on the surface of the Moon. The Apollo 12 Lunar Module is in the background. The unmanned Surveyor III spacecraft is in the foreground. The Apollo 12 LM, with Astronauts Charles Conrad Jr. and Alan L. Bean aboard, landed about 600 feet from Surveyor III in the Ocean of Storms. The television camera and several other pieces were taken from Surveyor III and brought back to Earth for scientific examination. Here, one of the Apollo 12 crewmen examines the Surveyor's TV camera prior to detaching it. Astronaut Richard F. Gordon Jr. remained with the Apollo 12 Command and Service Modules in lunar orbit while Conrad and Bean descended in the LM to explore the Moon. Surveyor III soft-landed on the Moon on April 19, 1967.

"The views of the Earth from lunar distances are spectacular because of the magnificence of the Earth, standing out there in the void against a black background, the velvet of space."

Richard Gordon (Schick and Van Haaften, p.78).

187

RICHARD GORDON (APOLLO 12)

1969

Crescent Earthrise. 14-24 Nov 1969.

Vintage Gelatin silver print on fiber-based paper, printed 1969. 20,3 x 25,4 cm (7.9 x 10 in), with NASA KSC caption numbered „AS12-51-7527" on the verso.

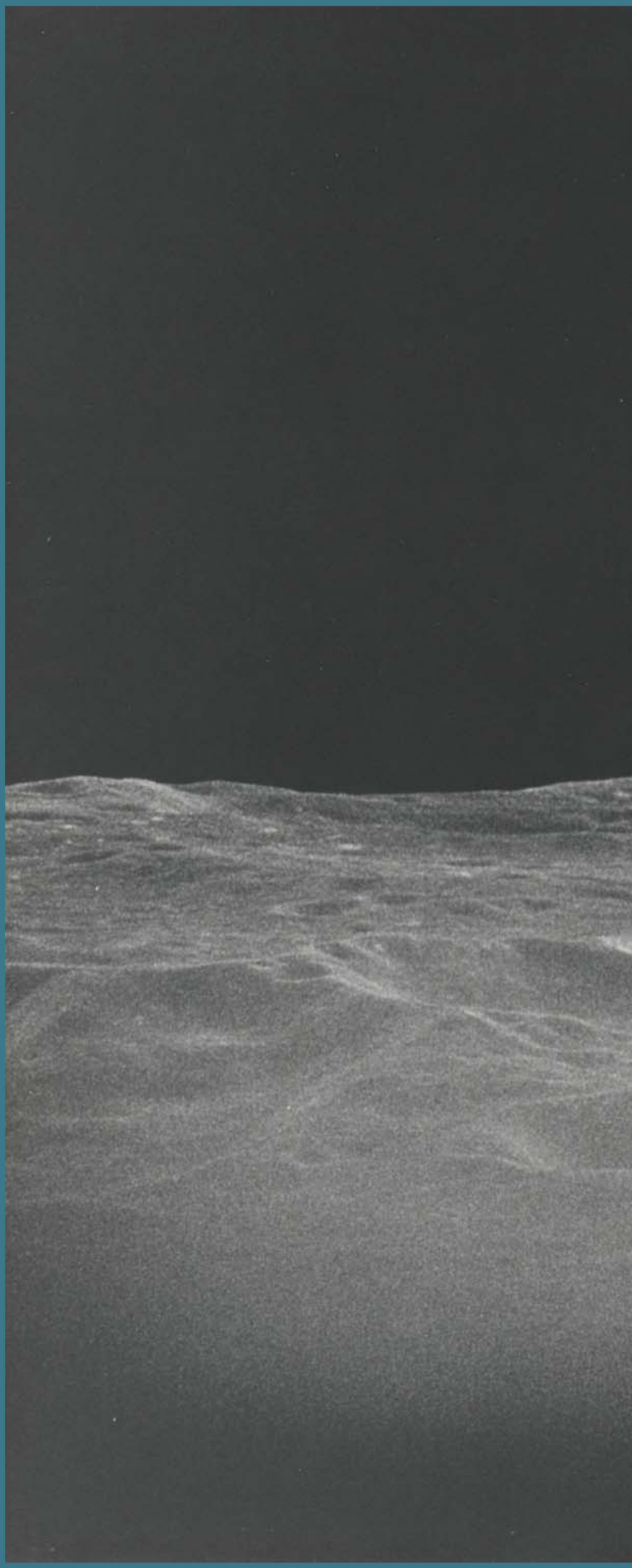
€ 1.500 – 2.500
$ 1.800 – 3.000

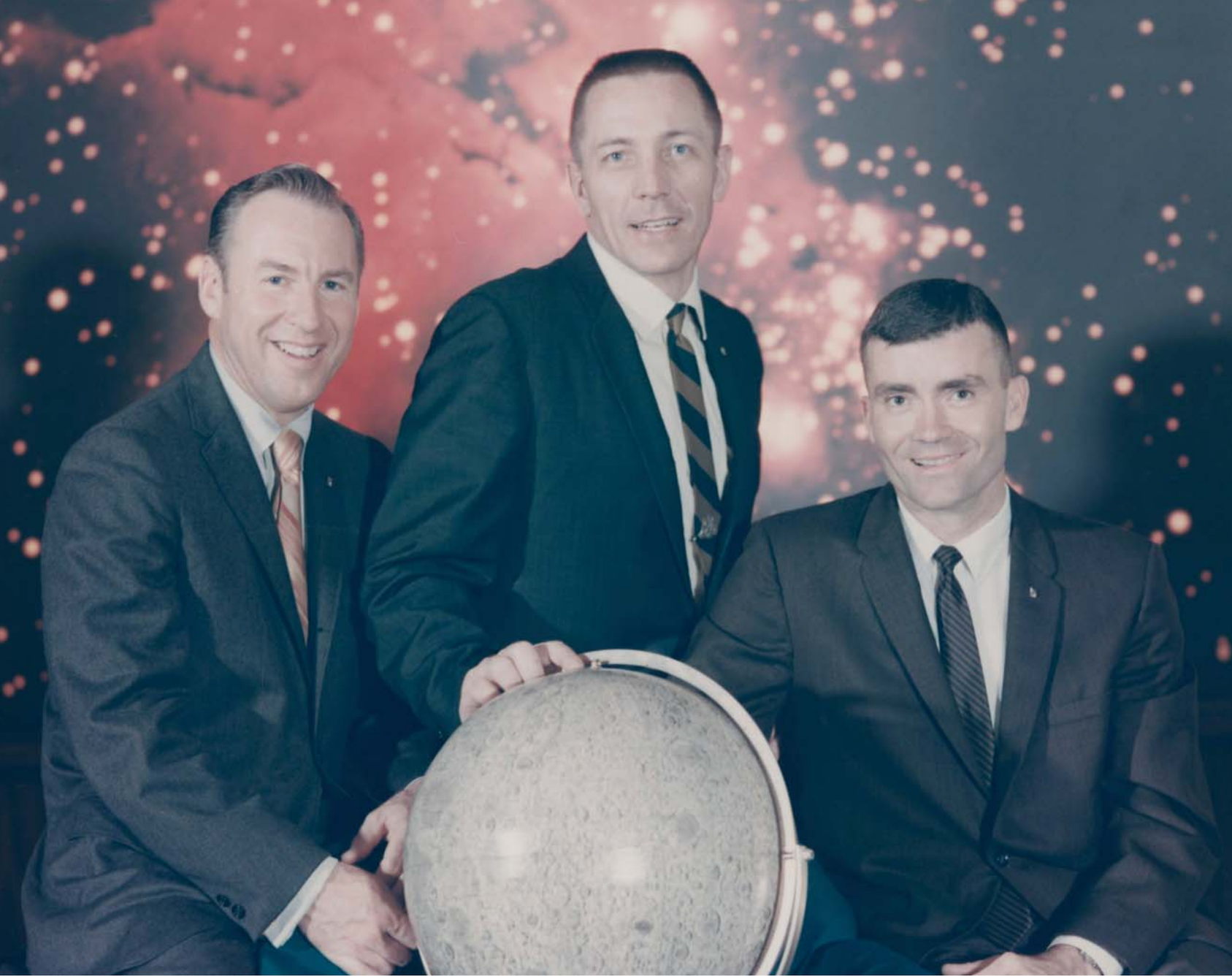
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.06 pm (GMT+2)

This fantastic photograph (originally shot on color film) of a slender crescent of Earth above the lunar horizon was taken by Gordon from lunar orbit from the Command Module Yankee Clipper with the 250mm telephoto lens as Conrad and Bean were inside the LM Intrepid on the lunar surface before the first EVA. The northwestern shore of Crater Pasteur is in the foreground.

The NASA caption states (possibly in error) that "the stark lunar landscape in the foreground is dimly illuminated by Earthshine".





188

NASA (APOLLO 13)

1970

Portrait of the ill-fated Apollo 13 crew. 11 April 1970.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1970. 20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso, numbered „NASA S-70-36485" (NASA MSC) in red in top margin.

€ 600 – 800
$ 720 – 960

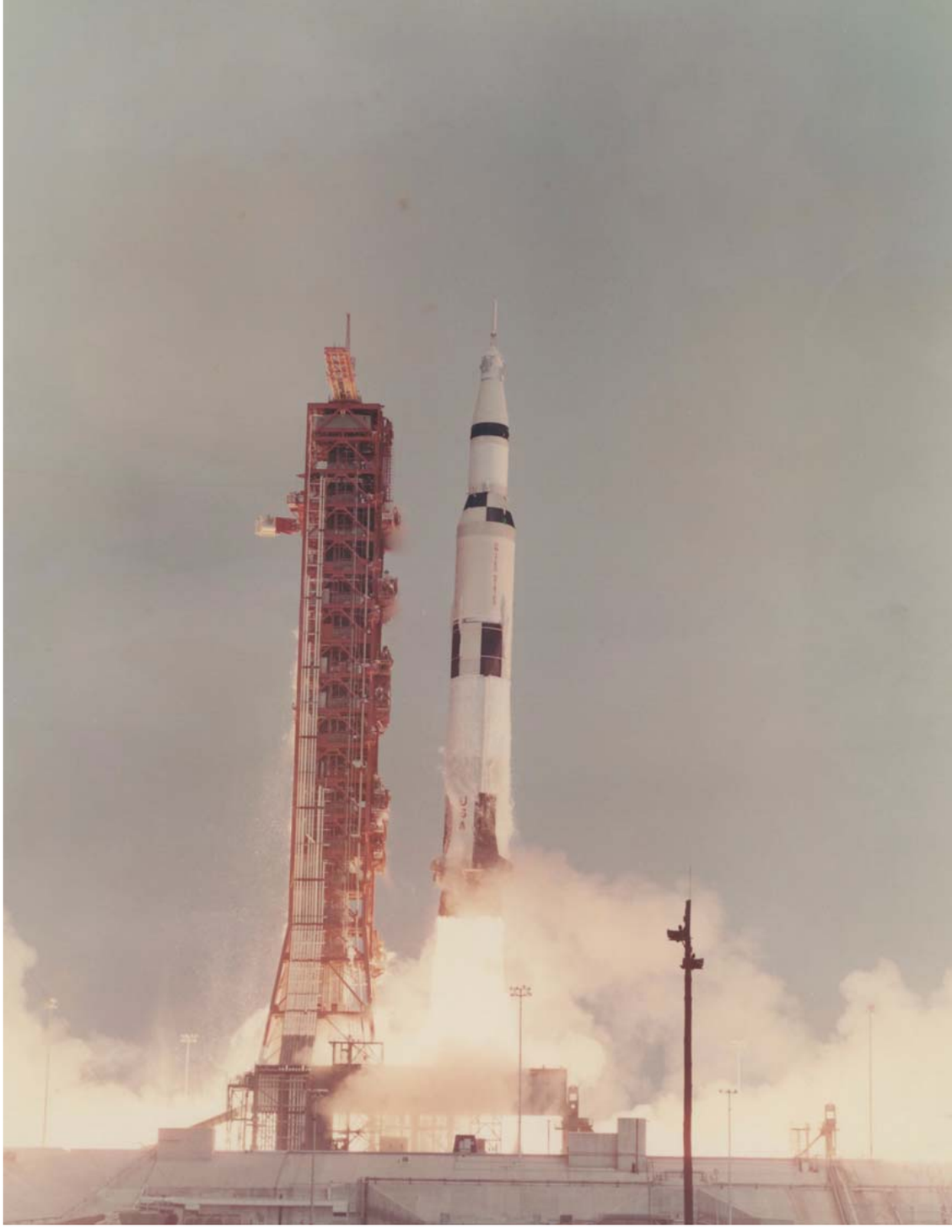
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.07 pm (GMT+2)

Left to right, are James A. Lovell Jr., Commander (CDR); John L. Swigert Jr., Command Module Pilo (CMP); and Fred W. Haise Jr., Lunar Module Pilot (LMP).

They were photographed for an official portrait the day before liftoff as they made a pause durin the busy pre-launch activity. Astronaut Ken Mattingly, until a few days before the mission, was the prime Command Module Pilot for the mission and due to exposure to measles, was replaced by Jack Swigert.

They were about to live the most dramatic mission to the Moon and back.



189

NASA (APOLLO 13)

1970

The ill-fated liftoff to the Moon. 11 April 1970.

Vintage Chromogenic print on fiber based Kodak paper, printed 1970. 25,4 x 20,3 cm (10 x 7.9 in), with NASA KSC caption numbered 107-KSC-70PC-159“ and „A Kodak Paper“ watermasrks on the verso.

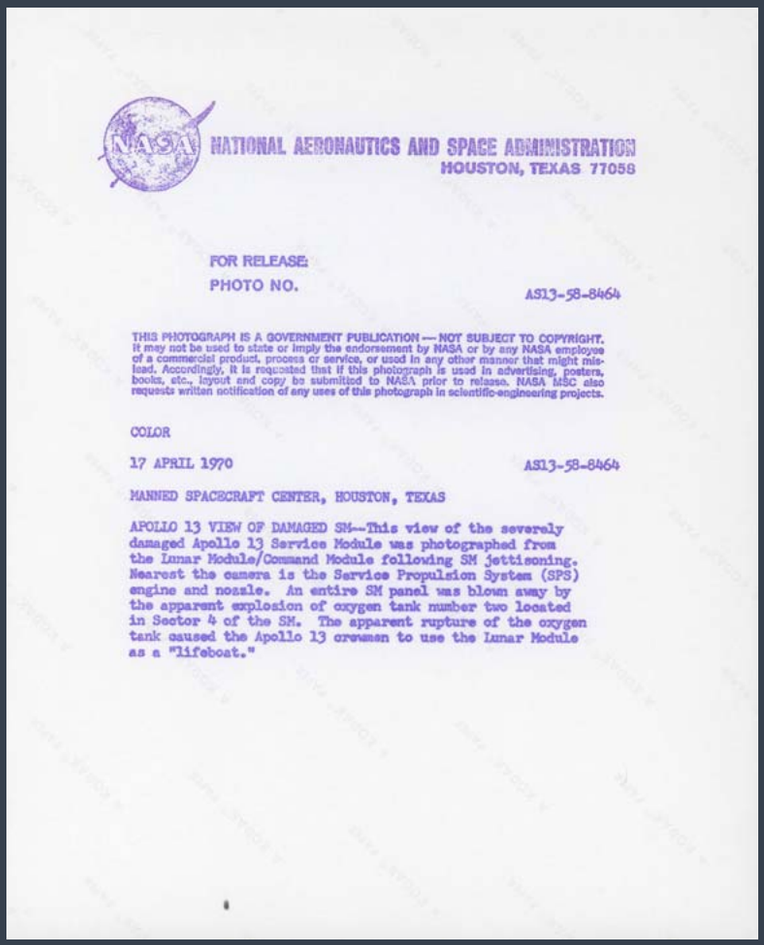
€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.08 pm (GMT+2)

The Apollo 13 (Spacecraft 109/Lunar Module 7/ Saturn 508) space vehicle is launched from Pad A, Launch Complex 39, Kennedy Space Center (KSC), at 2:13 p.m. (EST), April 11, 1970.

“The drama of Apollo 13 began even before the flight was under way. By early April 1970, mission Commander James Lovell and his crew, Command Module Pilot Ken Mattingly and Lunar Module Pilot Fred Haise, had trained for almost a year to explore the Moon’s Fra Mauro highlands. When the crew was exposed to German measles, NASA doctors feared that Mattingly, the only one of the crew not immune to the illness, might become sick during the mission. Despite Lovell’s objections, Mattingly was replaced by his backup, Jack Swigert, just days before launch” (Chaikin, Voices, p. 136).



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COLOR

17 APRIL 1970 AS13-58-8464

MANNED SPACECRAFT CENTER, HOUSTON, TEXAS

APOLLO 13 VIEW OF DAMAGED SM--This view of the severely damaged Apollo 13 Service Module was photographed from the Lunar Module/Command Module following SM jettisoning. Nearest the camera is the Service Propulsion System (SPS) engine and nozzle. An entire SM panel was blown away by the apparent explosion of oxygen tank number two located in Sector 4 of the SM. The apparent rupture of the oxygen tank caused the Apollo 13 crewmen to use the Lunar Module as a "lifeboat."

“I believe we’ve had a problem here.”

055:55:20 Swigert

190

J. SWIGERT, F. HAISE OR J. LOVELL (APOLLO 13)

1970

“Houston, we’ve had a problem”, oxygen tank explosion in the Service Module. April 1970.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1970. 25,4 x 20,3 cm (10 x 7.9 in), with NASA MSC caption and „A Kodak Paper“ watermarks on the verso, numbered „NASA AS13-58-8484“ in red in top margin.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.09 pm (GMT+2)

This photograph was exposed after jettison of the Service Module prior to Earth reentry showing the damage which happened to the Module at about 055:55:20 GET as it was docked to the spacecraft on the way to the Moon. James Lovell and Fred Haise had just entered the LM Aquarius to check it over and sent a TV transmission to Earth when the crew heard a loud explosion. The Service Module had been due to take them back to Earth but this view from the lifeboat LM Aquarius reveals that an entire panel had been blown away by the explosion of an oxygen tank.

Apollo 13 became the most carefully watched mission of the programme. For a tense four days, no one knew if the crew would make it back safely.

From the mission transcript during the explosion:
055:55:19 Swigert: Okay, Houston...
055:55:19 Lovell: ...Houston...
055:55:20 Swigert: I believe we’ve had a problem here. [Pause.]
055:55:28 Lousma (Mission Control): This is Houston. Say again, please.
055:55:35 Lovell: Houston, we’ve had a problem. We’ve had a Main B Bus Undervolt.
055:55:42 Lousma: Roger. Main B Undervolt. [Long pause.]
055:55:58 Lousma: Okay, stand by, 13. We’re looking at it.
055:56:10 Haise: Okay. Right now, Houston, the voltage is - is looking good. And we had a pretty large bang associated with the Caution and Warning there. And as recall, Main B was the one that had had an amp spike on it once before.

191

J. SWIGERT, F. HAISE OR J. LOVELL (APOLLO 13)

1970

Dramatic views of Moon and Earth from the window of the lifeboat LM Aquarius after the explosion (2). 11-17 Apri 1970.

Two Vintage Chromogenic prints on fiber-based Kodak paper, printed 1970.
20,3 x 25,4 cm (7.9 x 10 in) and with „A Kodak Paper" watermarks on the verso, numbered „NASA AS13-62-8893" and „NASA AS12-62-8887" (NASA MSC) in red in top margin.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.10 pm (GMT+2)

Two very rare unreleased photographs from the dramatic journey of Apollo 13.

"With the Service Module damaged beyond use, the only source for power and consumables was the Lunar Module. The resources of the Command Module had to be preserved for the vital reentry operation. And so the LM became the lifeboat for Apollo 13." (http://www.lpi.usra.edu/lunar/missions/apollo/apollo_13).

While surviving in their "lifeboat" LM, the Apollo 13 astronauts took these astonishing and extremely rare photographs of the crescents Earth and Moon, more than 200,000 nautical miles away from their Home Planet, through the 60mm lens of the lunar surface EVA camera not knowing whether they would ever return but knowing for sure that they would not land on the Moon.

The astronauts used two cameras during the rest of the mission after the explosion: one Hasselblad EL equipped with a 250mm telephoto lens and one lunar surface Hasselblad Data Camera equipped with a 60mm lens and the transparent glass reseau plate engraved with grid markings used to calibrate distances on the Moon; which explains the crosses in the images.

“We were as calm as could be. We didn’t panic.
If we did, we’d still be up there.”

James Lovell (from the documentary In The Shadow of the Moon, 2007).

From the mission transcript during the perilous journey toward the Moon:

068:03:33 Lovell: Well, I’m afraid this is going to be the last lunar mission for a long time. [...]

068:21:00 Public Affairs Officer (Mission Control): This is Apollo Control at 68 hours, 21 minutes. Apollo 13’s distance from Earth now is 200,396 nautical miles [371,133 km].

Velocity 2,919 feet per second [890 m/s].

192

J. SWIGERT, F. HAISE OR J. LOVELL (APOLLO 13)

1970

The farthest view of Earth ever witnessed by human beings. 11-17 Apri 1970.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1970. 25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper" watermarks on the verso, numbered „NASA AS13-62-8902" (NASA MSC) in red in top margin.

€ 1.000 – 1.500
$ 1.200 – 1.800

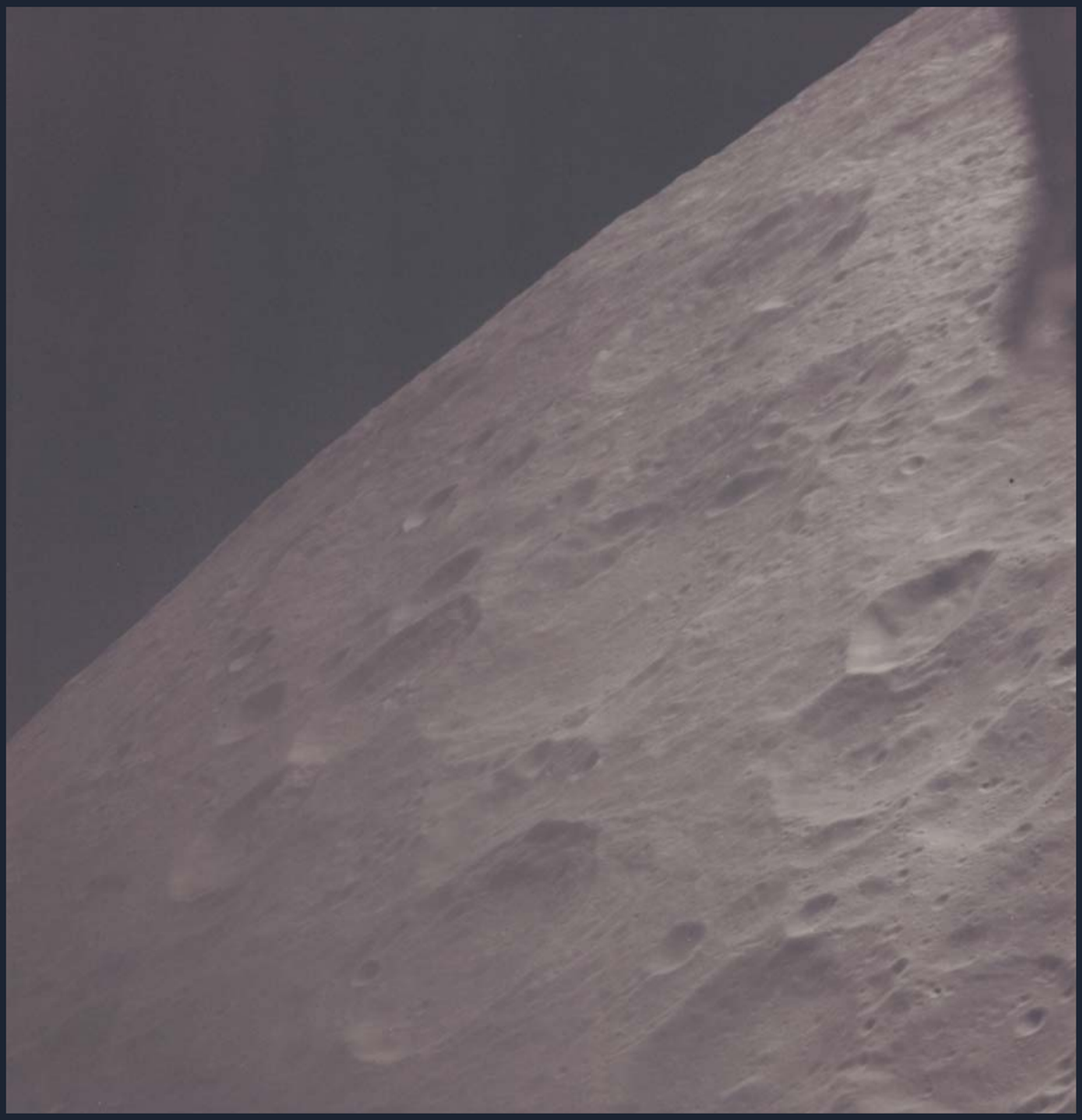
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.11 pm (GMT+2)

An extremely rare unreleased photograph from the miracle journey of Apollo 13.

The crew took this photograph through the 60mm lens just before the spacecraft rounded the backside of the Moon, out of view and communication with Earth. Apollo 13 holds the distinction of the farthest distance in space ever travelled by a manned crew. Following the free-return trajectory, the altitude of Apollo 13 over the lunar farside was approximately 100 km (54 nautical miles) - greater than the orbital altitude on the remaining Apollo lunar missions. It holds the absolute altitude record for a manned spacecraft, reaching a distance of 400,171 km (216,075 nautical miles) from Earth on 7:21 pm EST, April 14, 1970.

From the mission transcript as the spacecraft was approaching the backside of the Moon:
077:06:09 Lovell: Go ahead, Houston.
077:06:11 Brand (Mission Control): Okay, Jim. We have a little over 2 minutes until LOS (Loss of Signal), and everything's looking good here.
077:06:21 Lovell: Roger. Yes. I take it that we don't have to start our activations until we receive AOS (Acquisition Of Signal) from you.
077:06:39 Brand: Roger. That's correct. Comm break.
077:07:00 Public Affairs Officer (Mission Control): Apollo 13 now 421 nautical miles [780 km] above the Moon. Just a little over 1 minute now from time of Loss Of Signal with the spacecraft. This is Apollo Control, Houston; 77 hours, 7 minutes.
077:09:00 Public Affairs Officer (Mission Control): We've had Loss Of Signal with Apollo 13 as it passes above the back side of the Moon. We're at 77 hours, 9 minutes now into the flight of Apollo 13.



193

J. SWIGERT OR F. HAISE (APOLLO 13)

1970

The slingshot pass around the backside of the Moon. 11-17 Apr 1970.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1970. 20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso, numbered „NASA AS12-60-8621" (NASA MSC) in red in top margin.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

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Call time: July 15th, 6.12 pm (GMT+2)

"We really didn't have anything to do in that pass, and we lost communication with the ground for a portion of that, behind the Moon. And our next maneuver coming up was after we passed around the Moon, plus two hours. And we were kind of ahead of the timeline in preparation for that maneuver. So we really didn't have much to do except to look, and shoot pictures,"

remarked Fred Haise (Chaikin, Voices, p. 146).

A very rare unreleased photograph from the incredible journey of Apollo 13.

Following the free-return trajectory, the altitude of Apollo 13 over the lunar farside was approximately 100 km (54 nautical miles) greater than the orbital altitude on the remaining Apollo lunar missions, resulting in particularly striking photographs of the lunar farside.

This very rare photograph was taken through the 250mm telephoto lens looking southwest toward the lunar farside horizon.

194

J. SWIGERT OR F. HAISE (APOLLO 13)

1970

Full Moon from the spacecraft in distress. 11-17 Apr 1970.

Vintage Chromogenic print on fiber based Kodak paper, printed 1970.
25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper“ watermarks on the verso,
numbered „NASA AS12-61-8787“ (NASA MSC) in red in top margin.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.13 pm (GMT+2)

A very rare unreleased photograph from the incredible journey of Apollo 13.

Following their pass over the Moon's backside, the Apollo 13 crewmen had two hours before firing Aquarius's descent engine to correct their flight path so that they could head home. Before that, they took the opportunity to photograph the Moon they left behind.

This outstanding view of the full Moon, in a perspective showing a great portion of the backside seen only by the Apollo astronauts from December 1968 to December 1972, was photographed through the 60mm lens from the spacecraft at the beginning of its journey back to Earth.

From the mission transcript before the critical burn of the Descent Propulsion Engine of the LM needed to correct their flight path for the journey back to Earth:
079:06:31 Brand: Okay, Aquarius. We have some new information regarding what you shoud see out the commander's window at TIG (Time of Ignition). Over.
079:06:44 Lovell: Okay. Go ahead.
079:06:48 Brand: According to calculations - calculations, you should see the Moon. It'll be a full Moon. You should see most of the disk [...]
079:07:38 Lovell: Okay, Houston. I concur. I'm looking at 14 on the LPD and the angle is just about centered. It's south of Crisium, but it's - The line is just slightly to the north of center.

195

J.LOVELL, J.SWIGERT OR F.HAISE (APOLLO 13)

1970

The Moon from a perspective not visible from Earth. 11-17 Apri 1970.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1970. 25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper" watermarks on the verso, numbered „NASA AS13-61-8792" (NASA MSC) in red in top margin.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.14 pm (GMT+2)

"Around the Moon, when we were getting ready for this PC plus 2 burn [firing the LM's descent rocket two hours after the craft's closest approach to the Moon], [...] these guys were interested in looking at the backside of the Moon. I'd seen the backside of the Moon. I'm trying to make sure that that thing is going to light off when we get started,"

said James Lovell (Chaikin, Voices, p.146).

A very rare unreleased photograph from the miracle journey of Apollo 13.

An extraordinary view of the Moon taken from Apollo 13 just after the lunar pass and showing a great expanse of the backside never visible from Earth.

The Apollo 13 crew may have been forced to cancel their landing but a single lunar pass afforded them the opportunity to take some of the finest ever photographs of the Moon.

196

J. SWIGERT OR F. HAISE (APOLLO 13)

1970

The Moon during the perilous homeward journey. 11-17 Apr 1970.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1970. 25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper" watermarks on the verso, numbered „NASA AS13-61-8815" (NASA MSC) in red in top margin. A very rare unreleased photograph from the perilous journey of Apollo 13.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

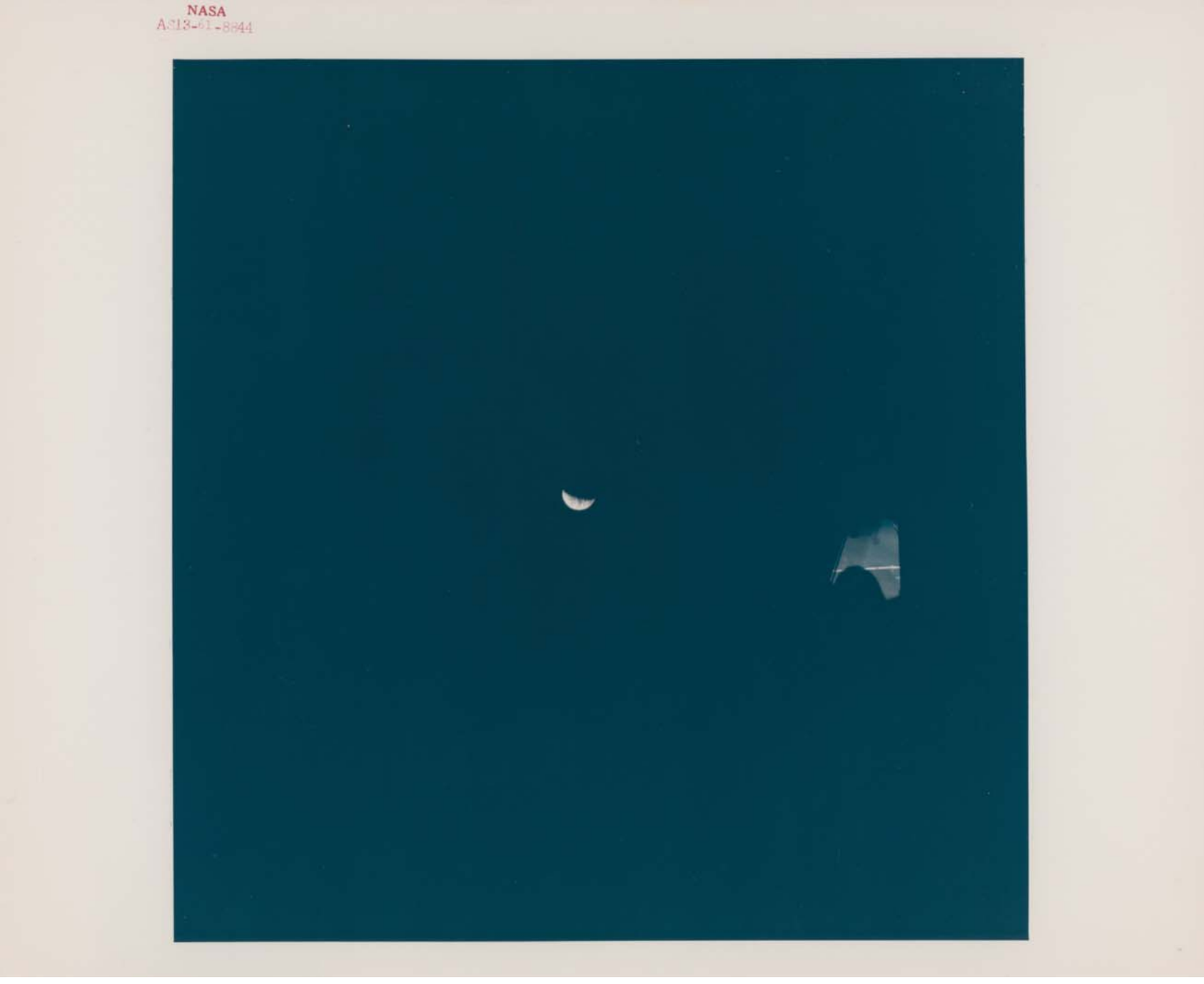
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.15 pm (GMT+2)

"I never felt we were in a hopeless situation... No, we never had that emotion at all. We never were with our backs to the wall, where there were no more ideas, or nothing else to try, or no possible solution. That never came."

Fred Haise (Chaikin, Voices, p. 139).

The spacecraft was about 11,500 nautical miles away from the Moon when the astronauts took this superb photograph of the nearly full Moon showing part of the lunar farside through the 60mm lens. They could see craters Ptolemaus and Alphonsus at the terminator (top right of picture) located on the center of the Moon as seen from Earth.

From the mission transcript when the photograph was taken:
081:42:27 Swigert: Gad, there's Ptolemaeus and Alphonsus.
081:42:30 Haise: Yes, sure enough.
081:42:32 Swigert: See them right over the edge. [Long pause.]
081:43:11 Swigert: Here, let me shoot a few pictures of the old Moon here. [...]
081:45:00 Public Affairs Officer (Mission Control): This is Apollo Control, Houston; at 81 hours, 45 minutes now into the flight. Apollo 13 presently 11,587 nautical miles [21,459 km] away from the Moon and travelling at a velocity of 4,600 feet per second [1,402 m/s].



197

J. SWIGERT OR F. HAISE (APOLLO 13)

1970

Earth and Moon from the lifeboat LM Aquarius during the perilous homeward journey (2).
11-17 Apr 1970.

Two Vintage Chromogenic print on fiber-based Kodak paper, printed 1970.
Each 20,3 x 25,4 cm (7.9 x 10 in)and with „A Kodak Paper“ watermarks on the verso, numbered „NASA AS13-61-8844“ and „NASA AS13-60-8708“ (NASA MSC) in red in top margin.
Two very rare unreleased photographs from the miracle journey of Apollo 13.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.16 pm (GMT+2)

"The finest hour, in my viewpoint, of the space program was getting Apollo 13 back, not the first lunar landing."

Apollo 10 astronaut Thomas Stafford (Chaikin, Voices, p. 150).

These photographs were taken as the spacecraft was still in the lunar sphere of influence.

The photograph of the Moon was taken through the 250mm telephoto lens. Lunar farside features are visible at the left of the picture. The photograph of the Earth (showing the reflection of a LM window) was taken through the 60mm lens.

Swigert and Haise used both the lunar surface Hasselblad Data Camera equipped with a 60 mm lens and the Hasselblad EL equipped with a 250mm telephoto lens to shoot pictures of the Moon and Earth not knowing if they would survive.

198

J.LOVELL, J.SWIGERT OR F.HAISE (APOLLO 13)

1970

Sunlight reflecting over the spacecraft in distress.
11 Apr 1970- 17 Apr 1970.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1970. 25,4 x 20,3 cm (10 x 7.9 in), with „A Kodak Paper" watermarks on the verso, numbered „NASA AS13-62-8973" (NASA MSC) in red in top margin.
A stunning unreleased photograph from the miracle journey of Apollo 13 with reddish tones from possible overexposure.

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.17 pm (GMT+2)

"When we turned off the electrical systems, we lost our source of heat, and the Sun streaming in the window didn't help much. We were as cold as frogs in a frozen pool."

James Lovell (NASA SP-350, p. 262).

This photograph from magazine 62/JJ was taken through the 60mm lens from the window of the lifeboat LM Aquarius plunged into darkness during the homeward journey.

The Sun reflects over elements of the exterior of the powered-down Command Module Odyssey docked to the LM.

The crew were forced to shut down the Command Module to conserve its batteries and save its oxygen for use in reentry.

199

J.LOVELL, J.SWIGERT OR F.HAISE (APOLLO 13)

1970

The Earth rising over the spacecraft in distress. 11-17 Apr 1970.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1970. 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS13-62-8960" (NASA MSC) in red in top margin.
An extremely rare unreleased photograph from the miracle journey of Apollo 13.

€ 800—1.200
$ 960—1.440

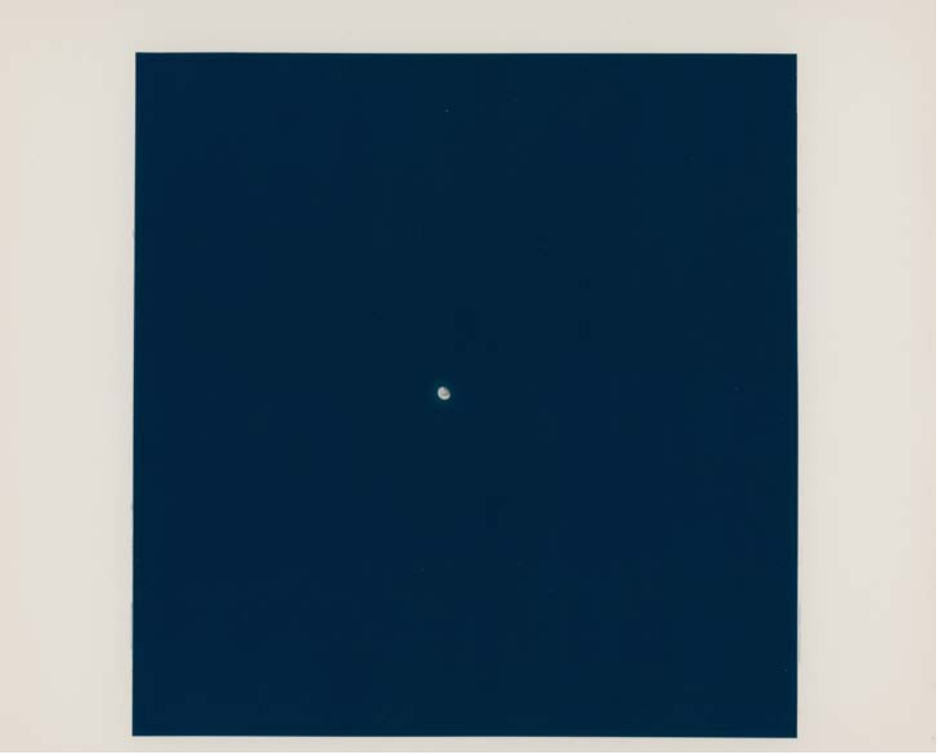
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th—July 15th, 2021
Call time: July 15th, 6.18 pm (GMT+2)

"Our idea was, if all hope was lost, if we went by the Earth, say we missed the Earth, and we were on an orbit about the Sun, if we had exceeded the escape velocity... My idea was to hold off, you know, as long as we had options, as long as we could stand it, send back data... We probably would have been farther out than anybody."

James Lovell (Chaikin, Voices, p. 139).

This view of the Earth from deep space was photographed from the window of the lifeboat LM Aquarius with the 60mm lens. A floodlight is visible on the exterior of the spacecraft. Reflections and moisture condensed on the window (and possibly debris surrounding the spacecraft from the explosion) create a halo around the Earth.



"The Earth is [fifty] times brighter than the Moon, because of the reflection of the Sun's rays on the clouds. But you don't get that on photographs."

James Lovell (Chaikin, Voices, p. 26).

200

J.LOVELL, J.SWIGERT OR F.HAISE (APOLLO 13)

1970

Views of Moon and Earth from deep space (2). 11-17 Apr 1970.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1970.
Each 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks
on the verso, the first with "AS13-62-9016" (NASA MSC) stamp on
the verso, the second numbered "NASA AS13-62-9014" (NASA MSC)
in red in top margin.
Two very rare unreleased photographs from the near-disastrous journey of Apollo 13.
These photographs were taken in successive order with the 60mm lens from the windows of the LM as the spacecraft was in "barbecue" mode about halfway from the Earth.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.19 pm (GMT+2)

201

FRED HAISE (APOLLO 13)

1970

The crescent Earth in the window of the approaching LM Aquarius. 11-17 Apr 1970.

Vintage Gelatin silver print on fiber-based paper, printed 1970.
25,4 x 20,3 cm (10 x 7.9 in), numbered "NASA AS13-59-8498" (NASA MSC) in black in top margin.
An extremely rare unreleased photograph from the incredible journey of Apollo 13.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.20 pm (GMT+2)

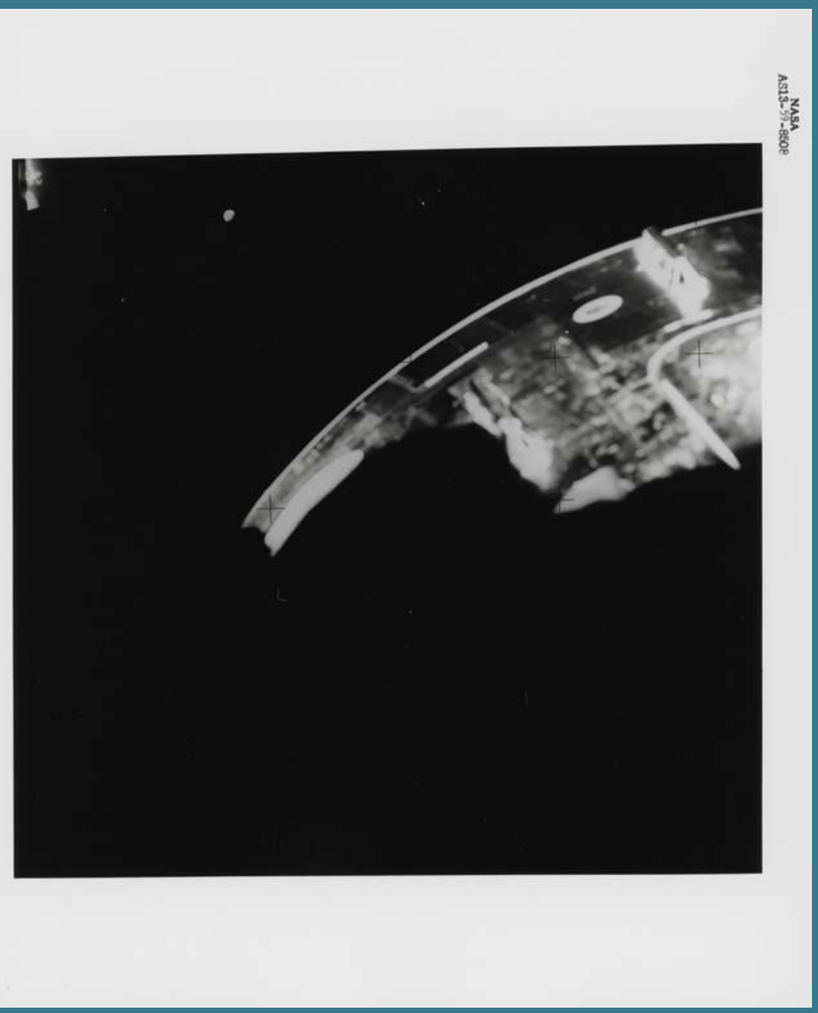
"We do not realize what we have on Earth until we leave it."

James Lovell (upon receiving the Medal of Freedom from President Nixon after his safe return from the Moon).

While surviving in their lifeboat LM on the way back to Earth from the Moon, Haise took this astonishing photograph of the Earth getting bigger in the LM window with the 60mm lens.

The spacecraft was about 48,000 nautical miles and 7 hours from a safe landing.

From the mission transcript when the photograph was taken:
135:46:52 Lovell: I'm looking out the window now, Jack, and that Earth is whistling in like a high-speed freight train.
135:47:13 Lousma (Mission Control): We're clocking you at 48 000 miles and coming in at about 9000.
135:47:21 Lovell: I don't think there's many LMs that have seen it like this. I'm still looking for Fra Mauro and Cone Crater.
135:47:38 Slayton (Mission Control): You're going the wrong way, son.



202

J. SWIGERT OR F. HAISE (APOLLO 13)

1970

Views of the damaged SM and Moon in the dark void of space (4). 11-17 Apr 1970.

Four vintage Gelatin silver prints on fiber-based paper, printed 1970. Each 25,4 x 20,3 cm (10 x 7.9 in), consecutively numbered "NASA AS13-59-8508", "NASA AS13-59-8511", "NASA AS13-59-8532", "NASA AS13-59-8545" (NASA MSC) in black in top margin.
Four very rare unreleased photographs from the near-disastrous journey of Apollo 13.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

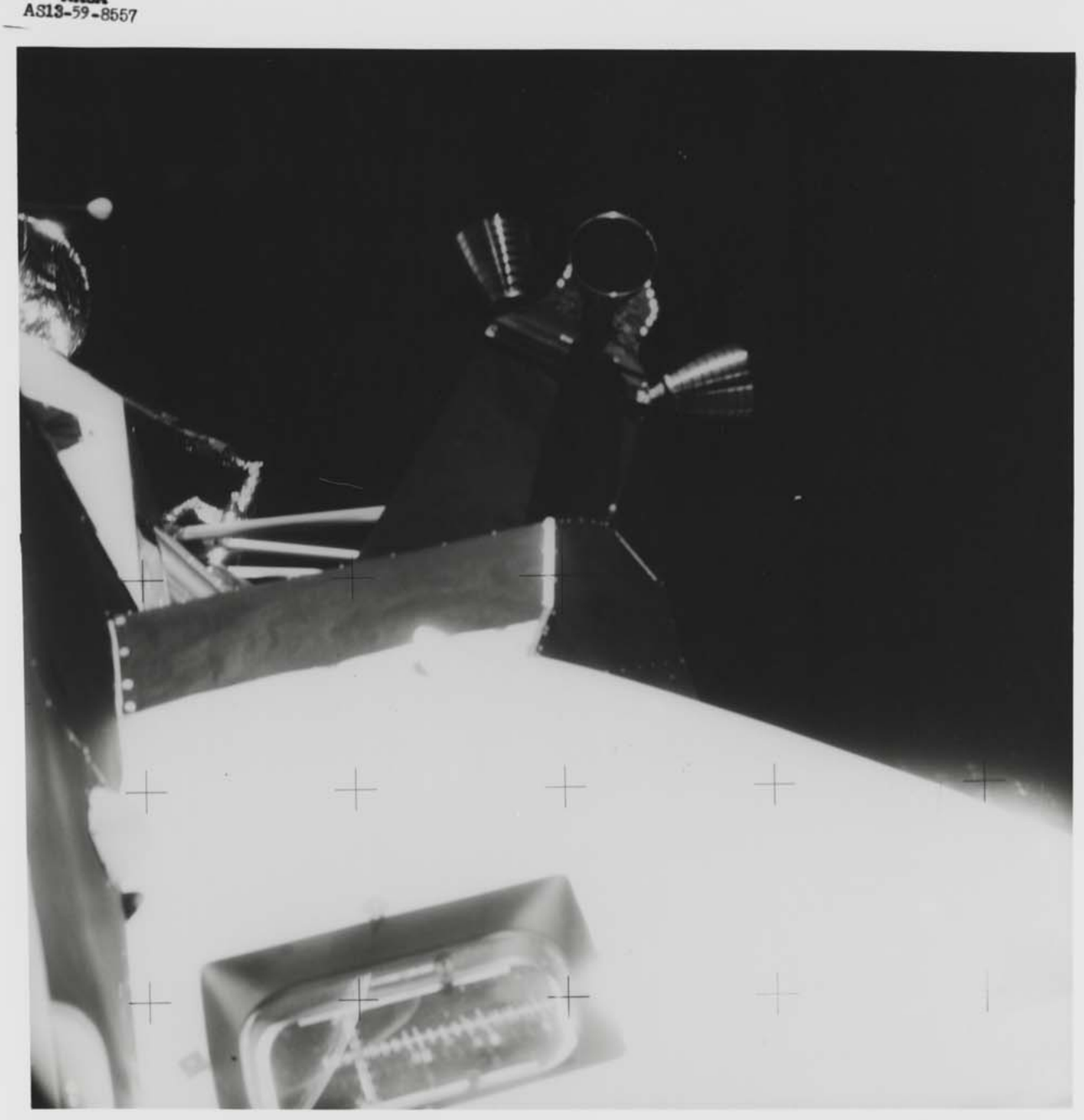
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.21 pm (GMT+2)

The exterior and hatch of the docked Command Module that astronauts use for landing is visible in some of these photographs taken with the 60mm lens from the window of the LM Aquarius after jettison of the damaged Service Module. The now very distant Moon also appears in the background.

From the mission transcript after jettison of the Service Module:
137:58:55 Kerwin (Mission Control): Aquarius, Houston. That's affirmative. You can jettison the service module when you are ready; no big rush, but any time. [...]
138:02:06 Lovell: SM SEP.
138:02:09 Kerwin: Copy that.
138:03:53 Lovell: Do you see it, Jack?
138:04:26 Kerwin: Okay, Aquarius; Houston. I recommend you terminate AVERAGE G. Over.
138:04:33 Lovell: Okay, I've got her, Houston.
138:04:36 Kerwin: Beautiful, beautiful.
138:04:46 Lovell: And there's one whole side of that spacecraft missing.
138:04:50 Kerwin (Mission Control): Is that right?
138:04:57: Lovell: Right by the—Look out there, will you? Right by the high gain antenna, the whole panel is blown out, almost from the base to the engine.
138:05:09: Kerwin: Copy that.
138:05:22 Haise: Yes, it looks like it got to the SPS bell, too, Houston.
138:05:28 Kerwin: Think it zinged the SPS engine bell, huh?
138:05:31 Haise: That's the way it looks; unless that's just a dark brown streak. It's really a mess.
138:05:51 Kerwin: Okay, Jim. We'd like you to get some pictures, but we want you to conserve RCS. Don't make unnecessary maneuvers.

"Four hours before landing, we shed the Service module; Mission Control had insisted on retaining it until then because everyone feared what the cold of space might do to the unsheltered CM heat shield. I'm glad we weren't able to see the SM earlier," said James Lovell. "With one whole panel missing, and wreckage hanging out, it was a sorry mess as it drifted away."

(NASA SP-350, p. 13.5).



203

J. SWIGERT OR F. HAISE (APOLLO 13)

1970

The lifeboat LM Aquarius abandoned in space (2). 11-17 Apr 1970.

Two vintage Gelatin silver prints on fiber-based paper, printed 1970. Each 20,3 x 25,4 cm (7.9 x 10 in), numbered "NASA AS13-59-8557" and "NASA AS13-59-8576" (NASA MSC) in black in top margin. Two very rare unreleased photographs from the miracle journey of Apollo 13.

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.22 pm (GMT+2)

"Survive we did, but it was close. Our mission was a failure but I like to think it was a successful failure."

James Lovell (NASA SP-350, p. 247).

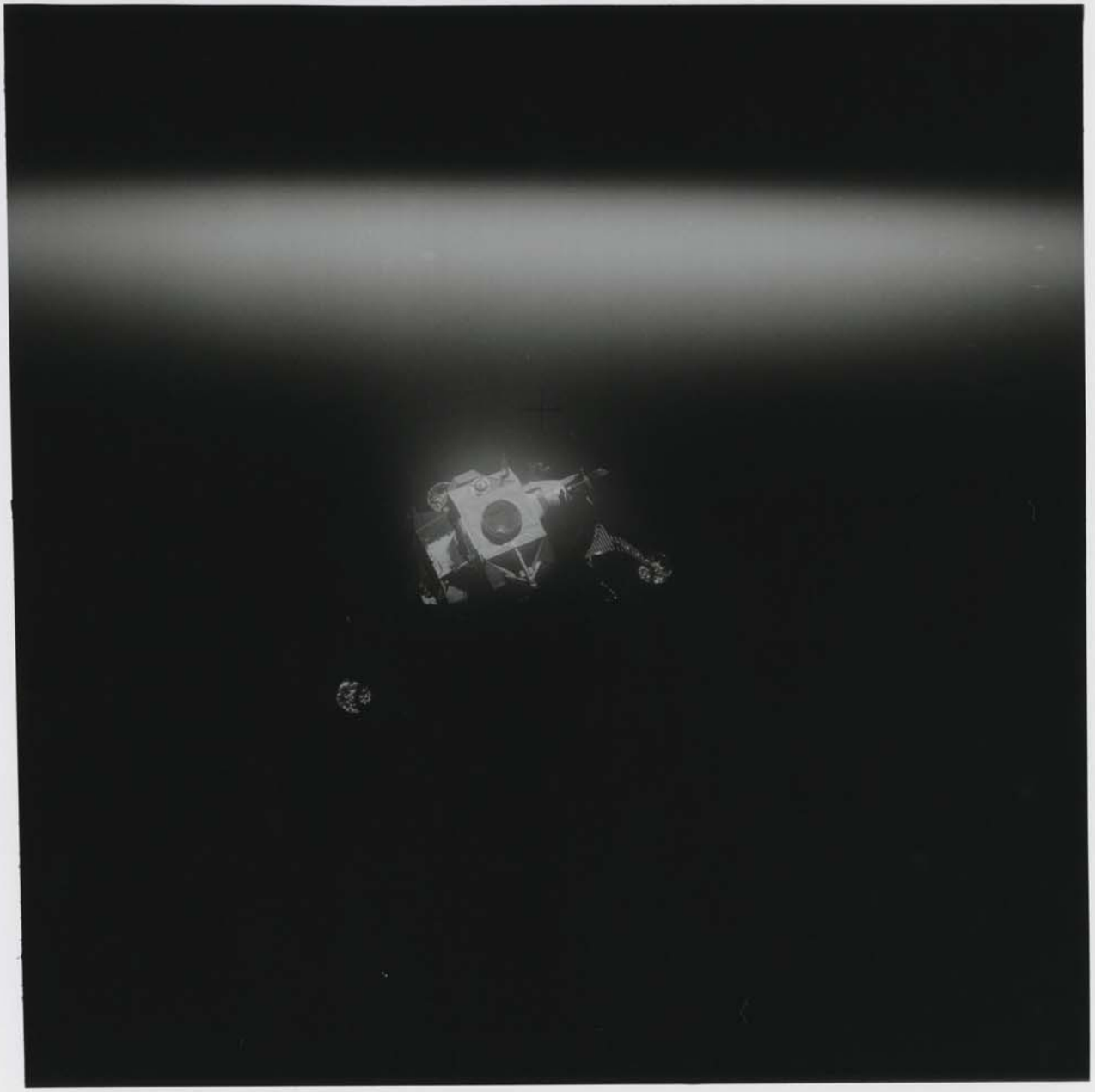
The undocking of the LM Aquarius occured about 11,000 nautical miles over the Earth just over one hour before splashdown. Getting ready for reentry aboard the powered up Command Module Odyssey, the astronauts could see the reflection of the Earth in the docking window of the lifeboat LM which saved their lives (first photograph).

The Lunar Module was abandoned in space and burned on re-entry (second photograph).

From this point, the mission was similar to previous flights, with a safe landing approximately 1 mile from the target point.

From the mission transcript after jettison of the lifeboat LM Aquarius:
141:30:05 Kerwin (Mission Control): Farewell, Aquarius, and we thank you.

NASA
AS13-59-8576



204

NASA (APOLLO 14)

1970

The giant Saturn V Moon rocket. Nov 1970.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1970. 25,4 x 20,3 cm (10 x 7.9 in), with NASA MSC caption and "A Kodak Paper" watermarks on the verso, numbered "NASA S-70-54127" in red in top margin.

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.23 pm (GMT+2)

"The [Saturn V] rocket will free man from his remaining chains, the chains of gravity which still tie him to this planet. It will open to him the gates of heaven."

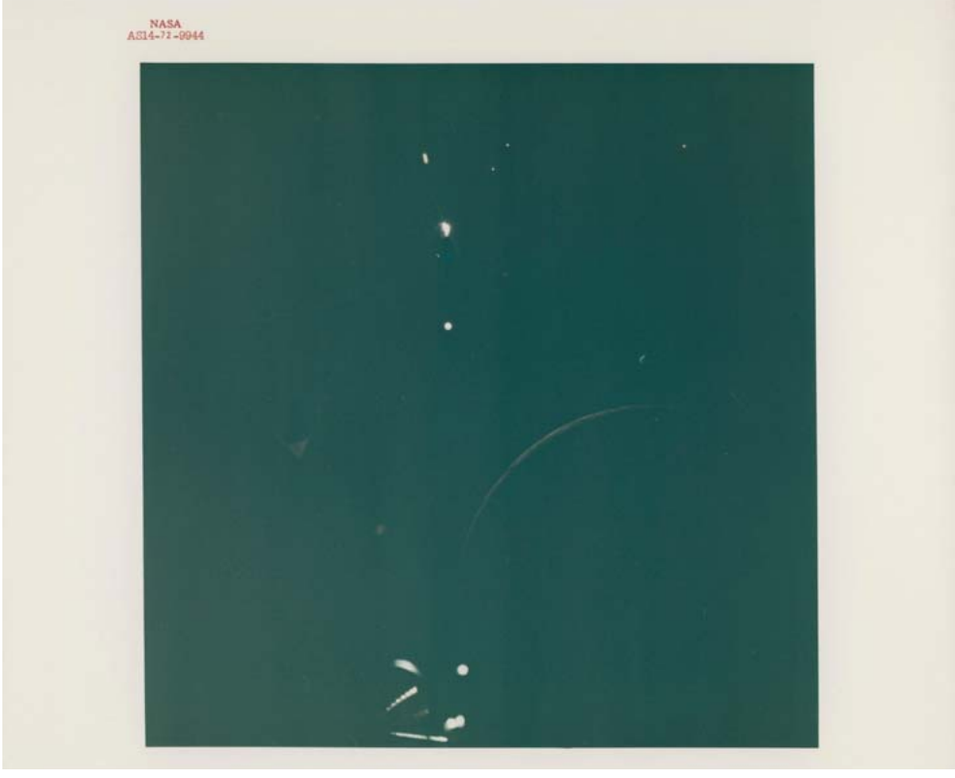
Wernher von Braun

[NASA caption] Apollo 14 ROLL OUT

A high-angle view at Launch Complex 39, Kennedy Space Center (KSC), showing the Apollo 14 (Spacecraft 110/Lunar Module 8/Saturn 509) space vehicle on the way from the Vehicle Assembly Building (VAB) to Pad A. The Saturn V stack and its mobile launch tower sit atop a huge crawler-transporter. The Apollo 14 crewmen will be astronauts Alan B. Shepard Jr., commander; Stuart A. Roosa, command module pilot; and Edgar D. Mitchell, lunar module pilot.

"You have this unreal experience of watching the Moon get bigger in magnitude, shrinking in phase."

Stuart Roosa (Chaikin, Voices, p. 36).



205

ROOSA, MITCHELL OR SHEPARD (APOLLO 14)

1971

Unreal crescent Moon and SIVB stage during translunar coast (2).
31 Jan 1971 - 9 Feb 1971.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1971.
Each 20,3 x 25,4 cm (7.9 x 10 in), with „"A Kodak Paper" watermarks on the verso, numbered "NASA AS14-72-9925" and "NASA AS14-72-9944" (NASA MSC) in red in top margin.
Two very rare unreleased photographs from magazine 72/L.

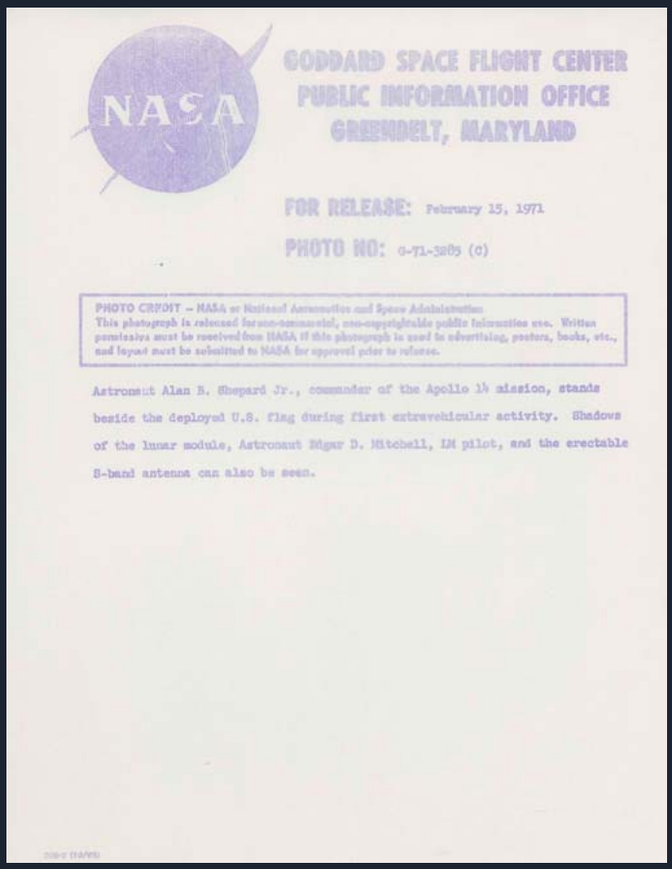
€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.24 pm (GMT+2)

After the successful docking maneuver and extraction of the LM, the SIVB third stage was targeted for a crash landing on the Moon. The compartment in the SIVB formerly occupied by the LM is visible beyond the LM thrusters (first photograph, taken soon after translunar injection).

After crossing the vast translunar gulf, the crew observed the fantastic view of the Moon visible as a thin crescent afloat in the Sun's glare (second photograph, taken soon before lunar orbit insertion). The white dots and glow in the dark sky of space are an effect produced inside the camera by lens flare. The LM thrusters are visible.



GODDARD SPACE FLIGHT CENTER
PUBLIC INFORMATION OFFICE
GREENBELT, MARYLAND

FOR RELEASE: February 15, 1971

PHOTO NO: G-71-3285 (C)

PHOTO CREDIT – NASA or National Aeronautics and Space Administration
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Astronaut Alan B. Shepard Jr., commander of the Apollo 14 mission, stands beside the deployed U.S. flag during first extravehicular activity. Shadows of the lunar module, Astronaut Edgar D. Mitchell, LM pilot, and the erectable S-band antenna can also be seen.

206

EDGAR MITCHEL (APOLLO 14)

1971

Alan Shepard and the US flag at Fra Mauro, EVA 1. 31 Jan 1971- 9 Feb 1971.

Vintage Chromogenic print on fiber-based GAF paper, printed 1971. 20,3 x 25,4 cm (7.9 x 10 in), with „GAF" watermarks on the verso, numbered „NASA G-71-3285" (NASA MSC) in black in bottom margin, with NASA Goddard caption on a seperate sheet.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.25 pm (GMT+2)

Stripes on Commander Shepard's helmet and on his arms and legs help distinguish him from Mitchell, who has no stripes.

Shepard "steadies the flagpole. The partial shadow to the right is cast by the erectable S-band antenna; the shadow of the LM extends along the left" (NASA SP-272, p. 15).

From the mission transcript when the photograph was taken:
114:43:55 Shepard: Okay. (To Mitchell) Take a picture this way (facing the 16-mm camera) and then we'll swing it (the US flag) around so they can see it in the television.
114:44:01 Mitchell: All right.
114:44:02 McCandless (Mission Control): Okay we can see it...
114:44:03 Shepard: Okay, let me turn it around a little (garbled) here. (Long Pause) Okay. (Pause) There we go. (Pause)
114:44:39 Mitchell: I think I'm still too close to you, Al.
114:44:42 Shepard: Look out for the LM leg.
114:44:45 Mitchell: Yeah. (Pause)
114:44:50 Shepard: Okay. And when you're finished (having his picture taken), you can flop it around so they can see it a little better on the TV.

"Exploration is the greatest adventure. And exploration is why we're no longer huddled up in caves. [...] Or why we carved this tremendous nation out of a wilderness. [...] This spirit that took us to the Moon is the same spirit that moved our forefathers west across the country. And as they carried the flag west, why, we carried it onto the Moon."

Stuart Roosa (Chaikin, Voices, p. 184).

207

ALAN SHEPARD (APOLLO 14)

1971

Panoramic sequence of the LM Antares at Fra Mauro, EVA 1. 31 Jan 1971- 9 Feb 1971.

Set of two vintage Chromogenic prints on fiber-based Kodak paper, printed 1971.
Each 20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso, numbered „NASA AS14-66-9255" and „NASA AS14-66-9236" (NASA MSC) in red in top margin, overall size 21 x 47.5 cm.
Two extremely rare unreleased photographs.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.26 pm (GMT+2)

Shepard took this superb panoramic sequence from a spot very close to the LM to the north east (from the 4 o'clock position relative to the LM hatch).

The adjoining photographs provide a "great view of the landing site, with the LM tilted over on a 7° degree slope, and narrowly avoiding a small crater. The disturbed lunar surface directly below the descent engine is clearly visible." (Constantine, p. 48).

The top of the spacecraft is cut off but the first photograph provides an excellent view of the right side and aft section of Antares with "many structural details of the LM visible. Its lightweight construction is apparent with minor buckling of panels covering the aft equipment bay and right side. The extensive use of gold tape to secure the black insulation blankets can be seen" (ALSJ caption for AS14-66-9254).

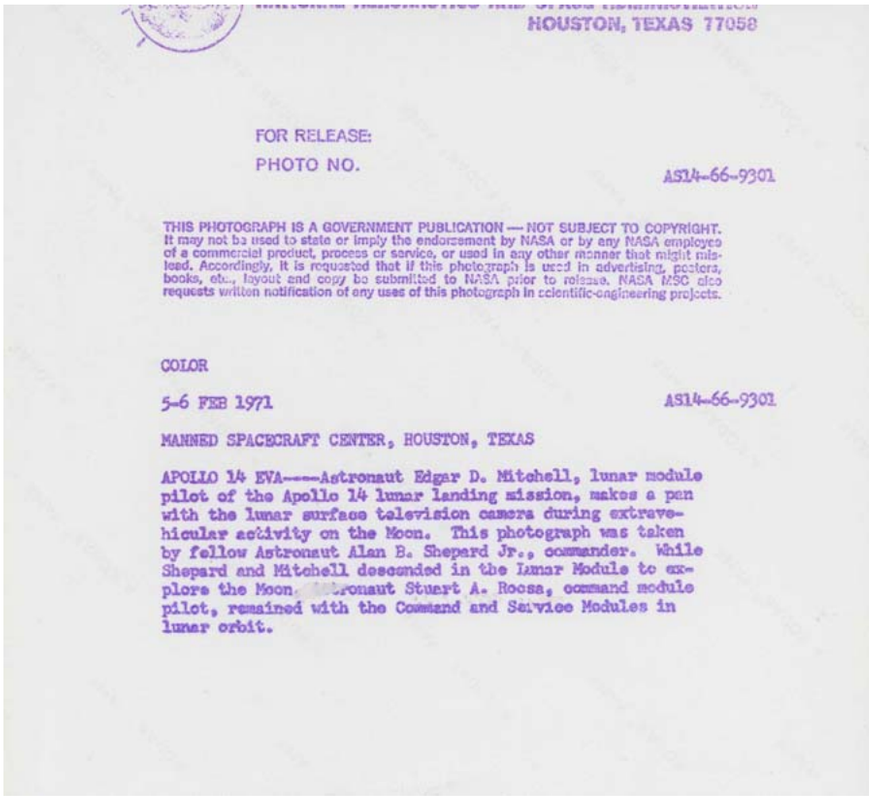
The American flag stands behind the umbrella like S-band antenna which is pointing directly at Earth above, sending back TV pictures (second photograph).

Shepard's shadow and the LM footpad buried in the rim of a small crater from landing are in the foreground.

From the mission when the photographs were taken:
114:46:56 Mitchell: Okay, I'm going to press on out for the TV pan, Houston.
114:47:03 McCandless (Mission Control): Roger.
114:47:08 Shepard: And, while Ed is doing that, Al is going to proceed with photographing the landing gear...
114:47:15 McCandless: Roger.
114:47:17 Shepard: ...and all the features about the LM.
114:47:18 McCandless: Roger. Using (Hasselblad magazine) Indianapolis, Indiana.

"The landing site was rougher, on direct observation, than the photos had been able to show. So I looked for a smoother area, found one, and landed there."

Alan Shepard (NASA SP-350, p. 232).



HOUSTON, TEXAS 77058

FOR RELEASE:

PHOTO NO. AS14-66-9301

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COLOR

5-6 FEB 1971 AS14-66-9301

MANNED SPACECRAFT CENTER, HOUSTON, TEXAS

APOLLO 14 EVA----Astronaut Edgar D. Mitchell, lunar module pilot of the Apollo 14 lunar landing mission, makes a pan with the lunar surface television camera during extravehicular activity on the Moon. This photograph was taken by fellow Astronaut Alan B. Shepard Jr., commander. While Shepard and Mitchell descended in the Lunar Module to explore the Moon [illegible]stronaut Stuart A. Roosa, command module pilot, remained with the Command and Service Modules in lunar orbit.

208

ALAN SHEPARD (APOLLO 14)

1971

Edgar Mitchell operating the TV camera on the Moon, EVA 1. 31 Jan 1971- 9 Feb 1971.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1971. 19,7 x 18 cm (7.7 x 7 in), margins trimmed to original image, with NASA MSC caption and „A Kodak Paper“ watermarks on the veso, numbered „NASA AS14-66-9301“ (NASA MSC) in red in top margin.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.27 pm (GMT+2)

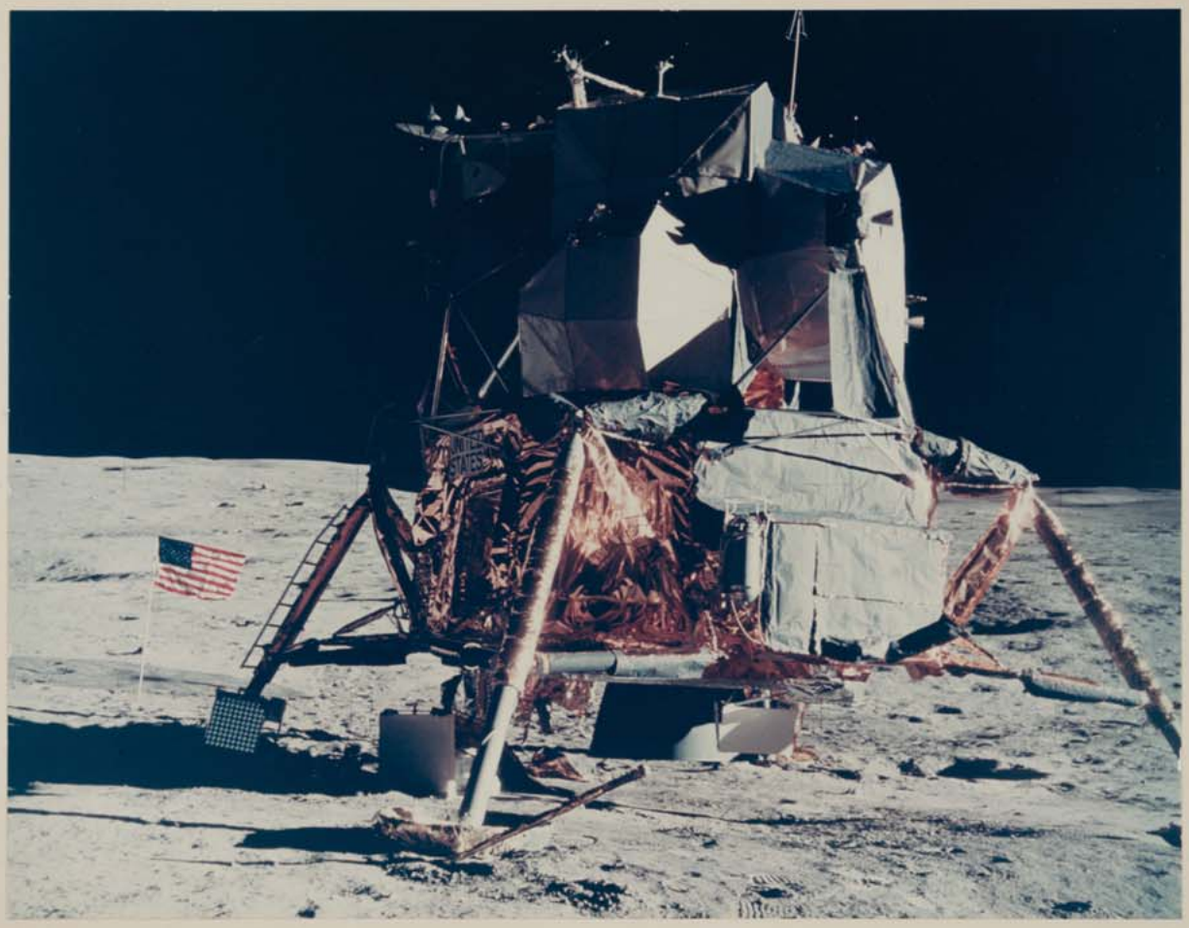
Mitchell is operating the TV camera sending live color pictures of the lunar surface back to Mission Control. Mitchell is “giving Mission Control a guided tour of the area surrounding the landing site” (Constantine, p.49).

After the failure of Apollo 12’s TV camera, the pictures being transmitted were the first full transmission of color TV from the Moon.

The Cone Crater ridge, about 1 km away, forms the background behind Mitchell.

From the mission transcript when the photograph was taken:
114:56:15 Mitchell: Now, I’ll zoom in out here once more (with the TV camera). Let you see at close-hand what’s out there. Another pile of rocks (and) more ridges.
114:56:44 McCandless (Mission Control): You’re pointing at the sky. (Pause)
114:56:51 Mitchell: Okay.
114:56:52 McCandless: That’s better.
114:56:53 Mitchell: You need a gunsight on this thing.
114:56:54 McCandless: You sure do.
114:56:55 Mitchell: That better?
114:56:56 McCandless: Yeah. The horizon is about one quarter of the way up.
114:56:58 Mitchell: Okay. (Pause as Ed lowers his aim)
114:57:04 McCandless: Beautiful. (Long Pause)
114:57:20 Shepard: Okay, Houston. Al is finished with the documentation; (and the frame) counter (is reading) 110 (on the Hasselblad).

NASA
AS14-66-9301



[LARGE FORMAT]

209

ALAN SHEPARD (APOLLO 14)

1971

LM Antares and US flag on the Moon, EVA 1. 31 Jan 1971- 9 Feb 1971.

Large format presentation Chromogenic print on fiber-based paper, printed 1971.
27,4 x 35 cm (10.7 x 13.7 in), flush-mounted on original 40.6 x 50.8 cm (16 x20 in) NASA card [NASA AS14-66-9277].

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

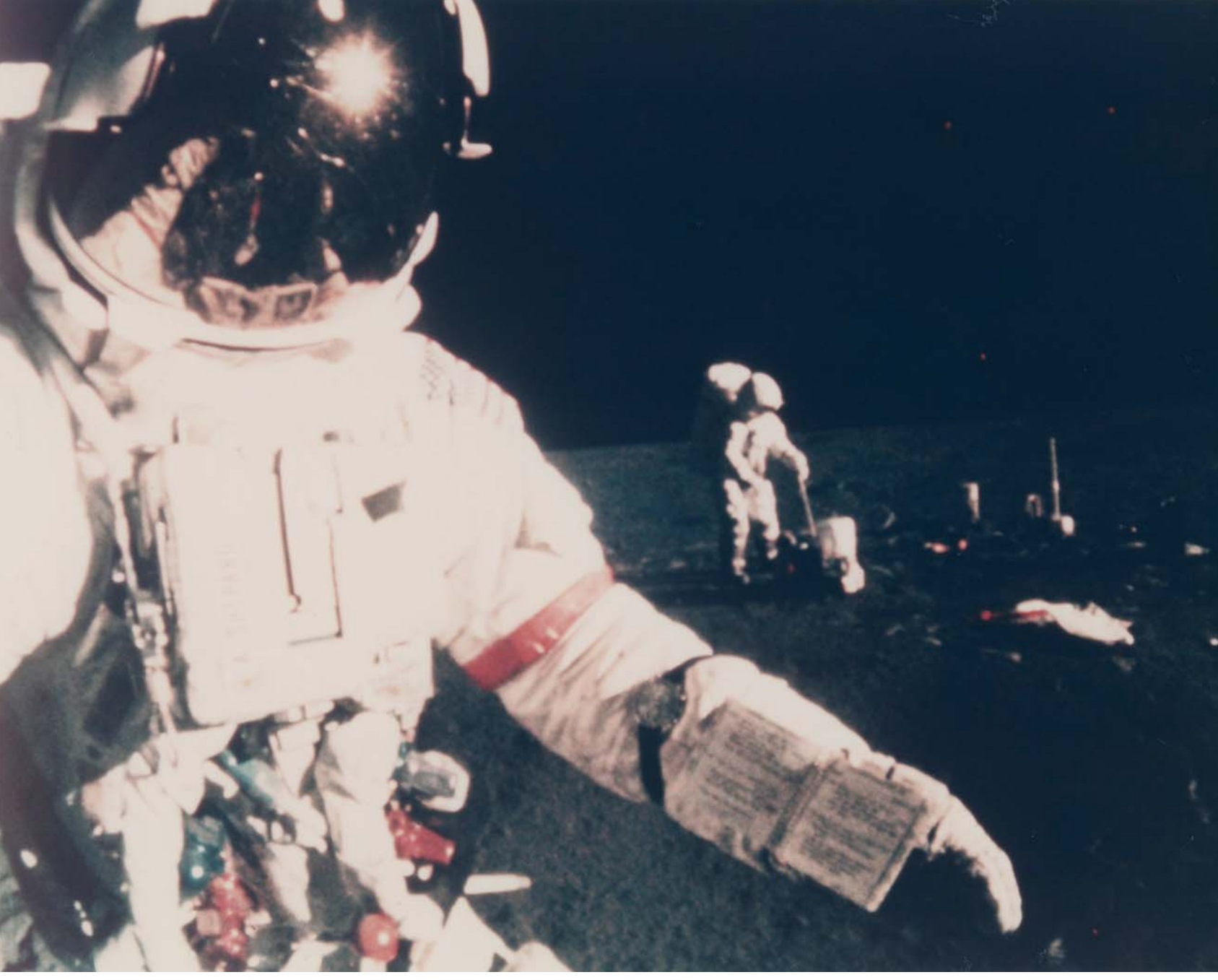
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.28 pm (GMT+2)

"In retrospect, I think it is even more amazing now than it was then. Imagine, going to another planet! With these fragile, primitive, little craft that we used then."

Edgar Mitchell (from the ALSJ mission transcript at 141:53:01 GET).

A superb frame from the panoramic sequence taken by Shepard from the 8 o'clock position relative to the LM hatch (southwest of the LM) while Mitchell (hidden behind the LM) was doing a TV panorama of the lunar surface for Mission Control. "At the foot of the ladder, the square grid-like object is th LRRR (Laser Ranging Retro Reflector) which can be seen sitting on the west footpad, this would later be deployed by Alan Shepard at the lunar-science station" (Constantine, p. 51).

From the mission transcript when the photograph was taken:
114:53:26 Mitchell: I think Al's about to finish up his task over there.
114:53:34 Shepard: Negative. I'm still working at 8 o'clock (taking a panorama).



210

NASA (APOLLO 14)

1970

Close up of Alan Shepard at the lunar science station, EVA 1. 31 Jan 1971- 9 Feb 1971.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1971. 20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper“ watermarks on the verso [NASA S-71-19510].

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

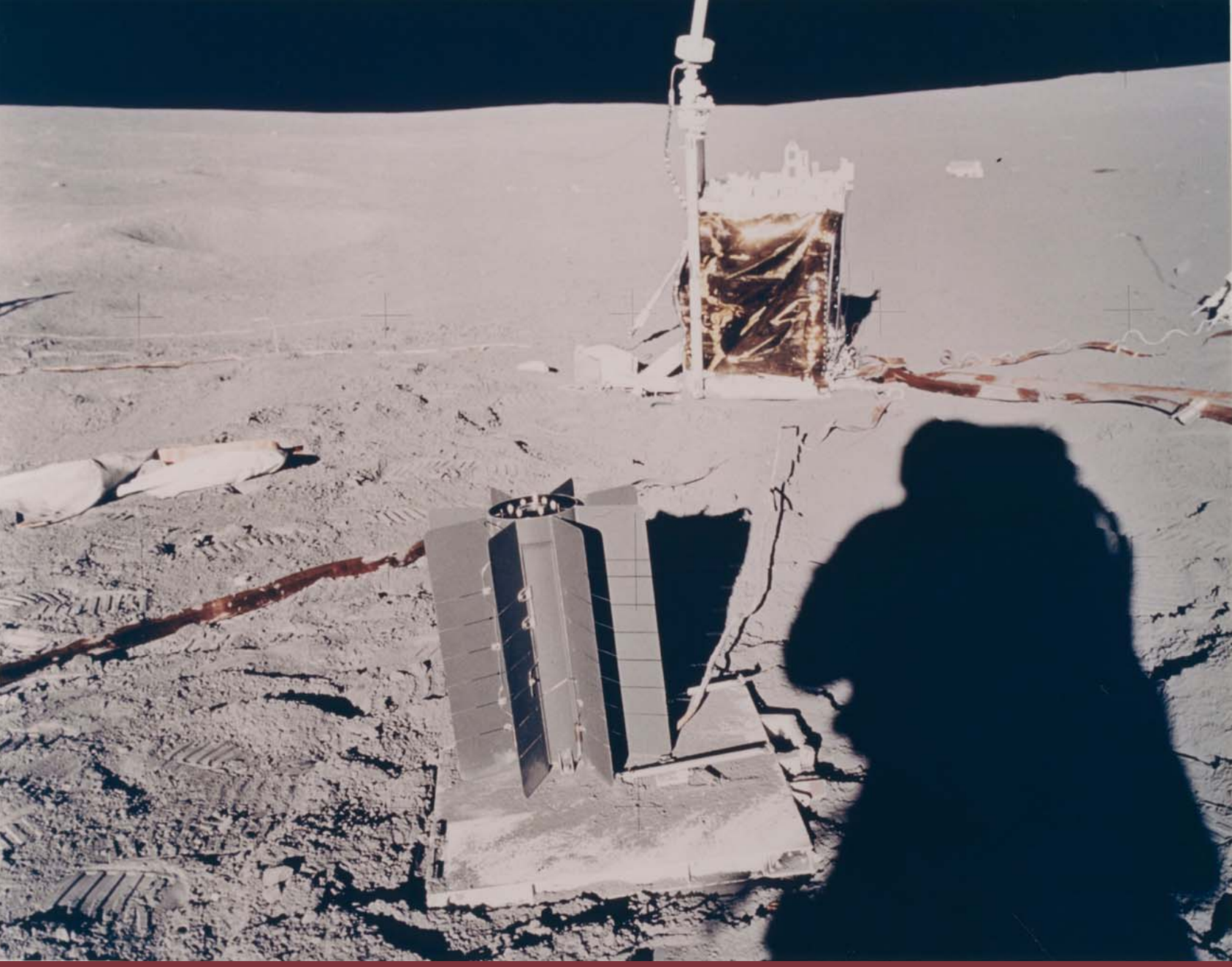
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.29 pm (GMT+2)

“We’re there to do a job. That idea is never out of your head for one instant. Very much aware that it is a professional exploratory mission, and you’re explorers and you’ve got a hell a lot of people and a hell a lot of money tied up behind you, trying to find out what this new planet’s all about. And you’re their eyes and their ears. You’re there to observe and report.”

Ed Mitchell (Chaikin, Voices, p. 77).

This photograph taken by an 16mm camera mounted on the lunar Hand Tool Carrier aboard the Modularized Equipment Transporter (MET) is a close-up of Alan Shepard with his Omega watch and a checklist of the EVA timeline on his left wrist.

Ed Mitchell is setting up a scientific experiment in the background.



211

ALAN SHEPARD (APOLLO 14)

1971

Astronaut's shadow at the lunar science station, EVA 1. 31 Jan 1971- 9 Feb 1971.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1971
[NASA AS14-67-9366]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper" watermarks on the verso.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.30 pm (GMT+2)

The lunar science station or Apollo Lunar Surface Experiments Package (ALSEP) site was deployed about 180 meters west north west of the LM.

The instruments were designed to run autonomously after the astronauts left and to make long term studies of the lunar environment. They were arrayed around a Central Station (in the background) which supplied power generated by a Radioisotope Thermo-electric Generator (RTG, in the foreground) to run the instruments and communications so data collected by the experiments could be relayed to Earth. Thermal control was achieved by passive element (insulation, reflectors, thermal coatings) as well as power dissipation resistors and heaters. Data collected from the instruments were converted into a telemetry format and transmitted to Earth.

212

ALAN SHEPARD (APOLLO 14)

1971

Fra Mauro Base in brilliant Sun glare, EVA 1. 31 Jan 1971- 9 Feb 1971.

Vintage Chromogenic print on fiber-based Kodak paper, printed [AS14-67-9367]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper“ watermarks on the verso.

€ 800—1.200
$ 960—1.440

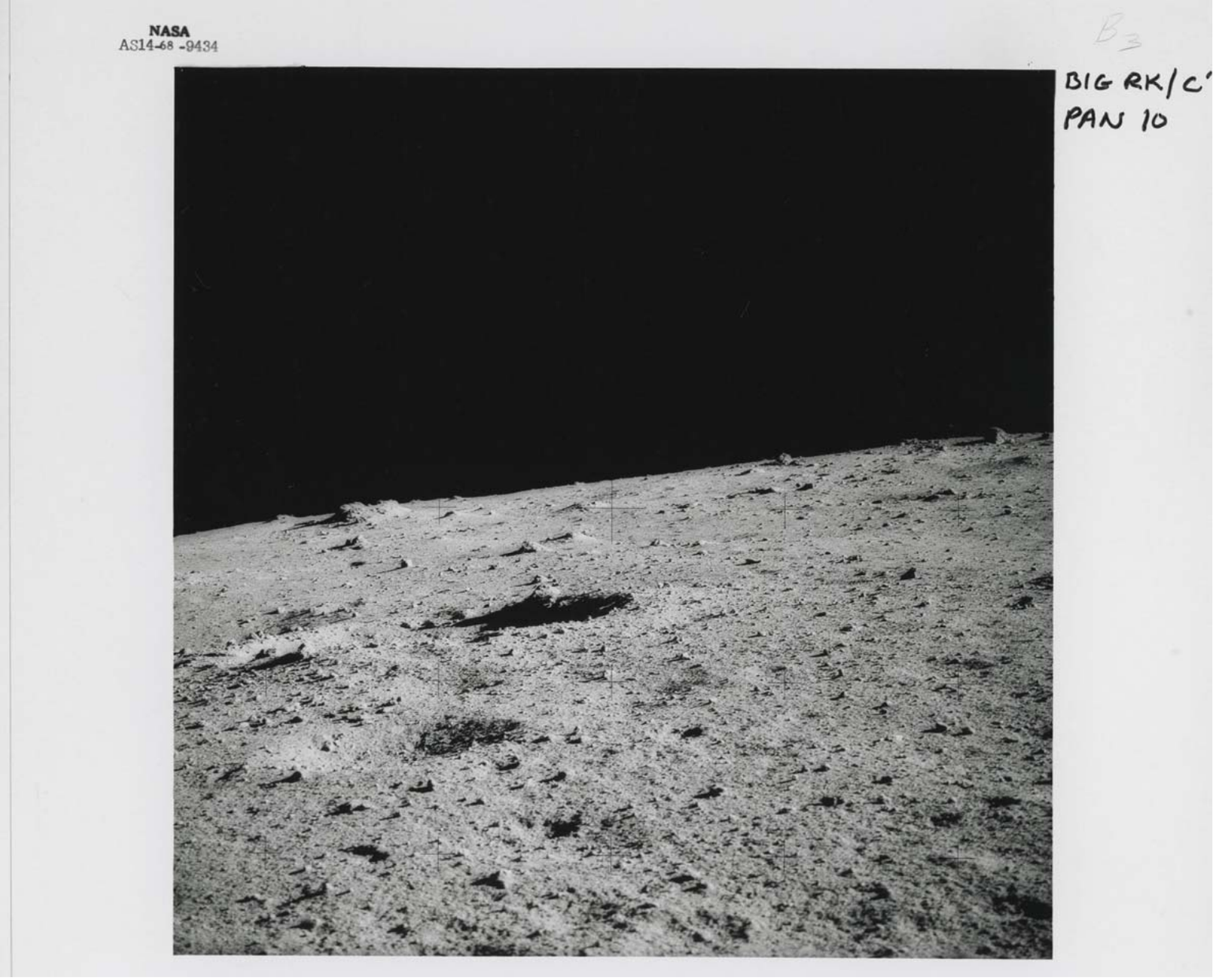
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th—July 15th, 2021
Call time: July 15th, 6.31 pm (GMT+2)

Shepard took this superb photograph from the lunar science station. Tracks of the Modularized Equipment Transporter (MET) gleam in the harsh lunar Sunlight and show the route taken by the two astronauts on their traverse to the lunar science station.

The pattern reminded the Texas-born Mitchell “of driving a tractor through a plowed field.” His companion was less lyrical: “nothing like being up to your armpits in lunar dust,” said Shepard (Mason, p. 186).

From the mission transcript when the photograph was taken:
117:19:27 McCandless (Mission Control): Al, this is Houston. What are you photographing now? Over.
117:19:37 Shepard: Right now, I’m taking the ‘distance’ shot back to the LM from the RTG (Radioisotope Thermoelectric Generator)



213

EDGAR MITCHEL (APOLLO 14)

1971

Moonscapes on the way to Cone Crater at stations B3, C1, G and H (4), EVA 2. 31 Jan 1971- 9 Feb 1971.

Four Vintage Gelatin silver prints on fiber-based paper, printed 1971. Each 20,3 x 25,4 cm (7.9 x 10 in), the first numbered „NASA AS14-68-9434" (NASA MSC) in black in top margin; the second with NASA KSC caption numbered „AS14-68-9453" on the verso; the third numbered „AS14-68-9463" (NASA/ USGS) in left margin; the fourth numbered „NASA AS14-68-9470" in black in top margin.
Four very rare photographs, only AS14-68-9453 was released by NASA after the mission.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.32 pm (GMT+2)

Anonymous undulating terrain with smooth hills over ten feet high hid the landmark craters and made it very difficult for the astronauts to find their way to Cone Crater, the objective of the second EVA.

Mitchell took the first photograph during a brief rest stop on the climb up Cone Ridge at station B3 located more than 1.1 km east north east from the LM. This view looks toward the apparent Cone summit (right). If the crew had moved in that direction after their stop, they would have encountered the south rim of Cone Crater but Shepard decided to continue in a more easterly direction. A considerable number of rocks and boulders are visible on the apparent horizon illuminated by the Sun.

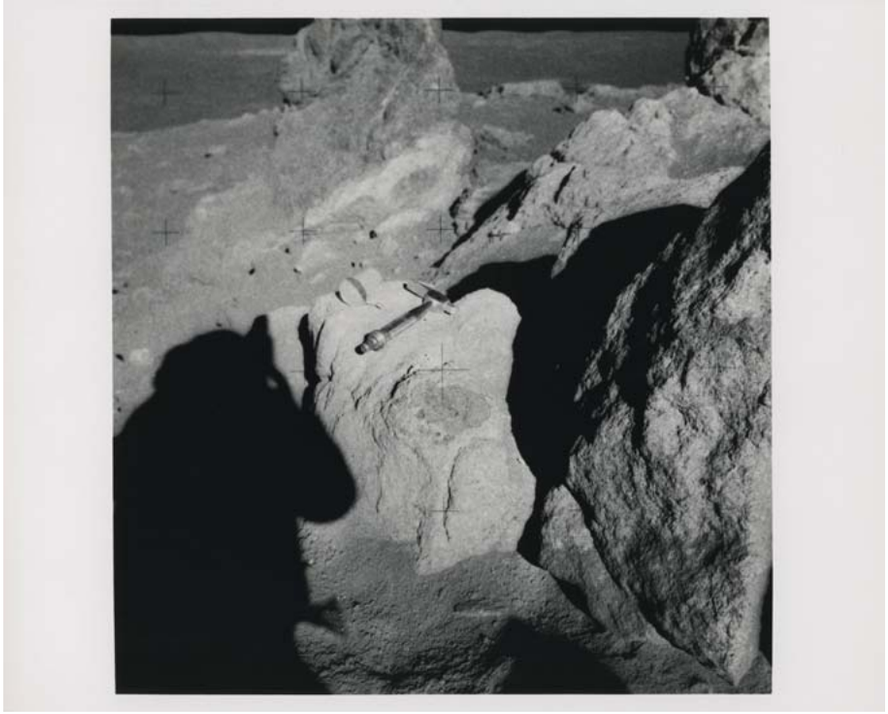
The second photograph was taken at station C1 (about 1.25 kilometers east-northeast of the LM) after the astronauts abandoned their hunt for Cone Crater. It is a beautiful portrait of the southern face of Saddle Rock showing the hammer and one of the sample bags which Mitchell put on the smaller white boulder in the foreground. The white rocks at station C1 were the largest explored by the crew.

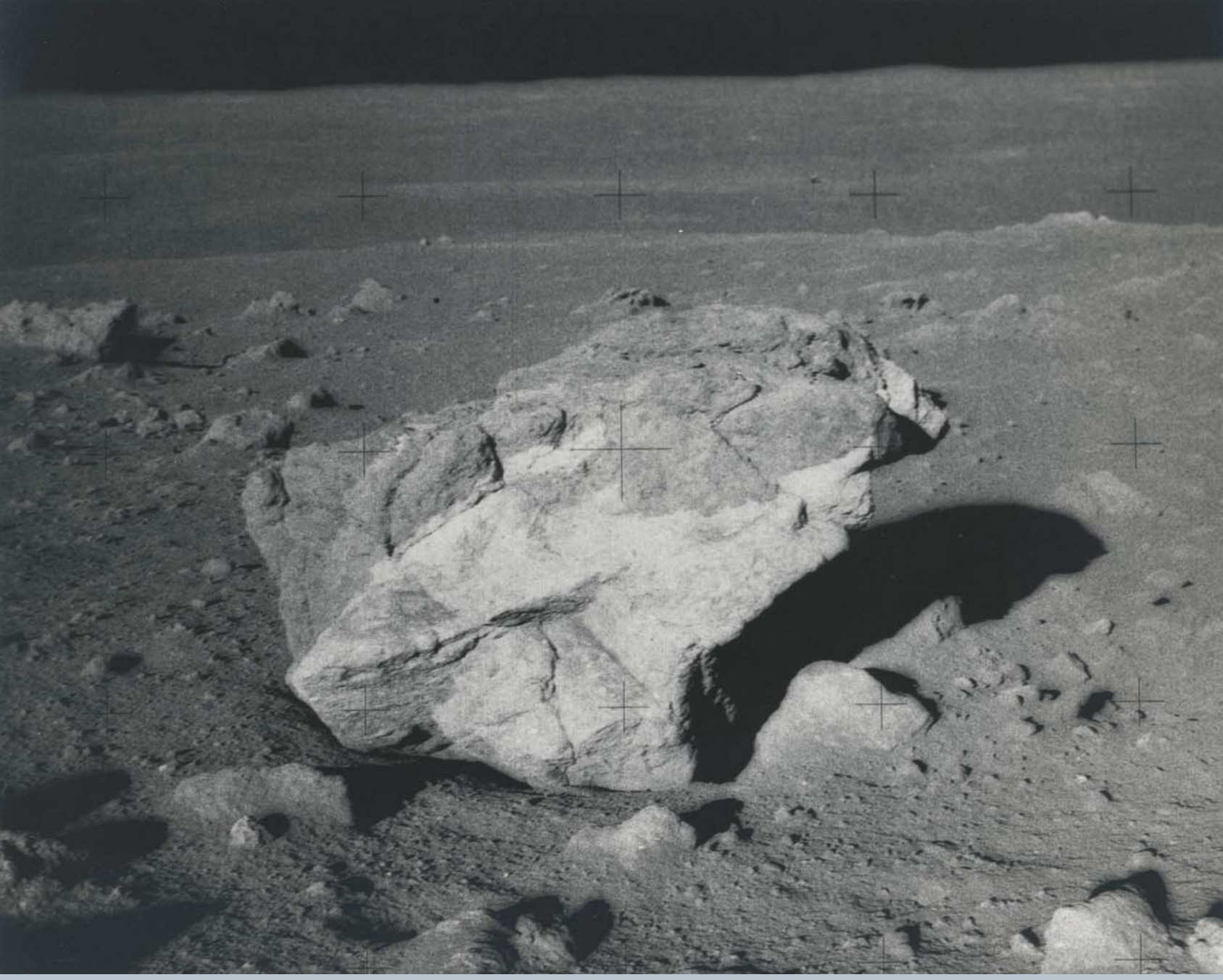
Mitchell took the third photograph at station G located about 230 meters east-southeast of the LM to document the location of a sample (a small rectangular rock to the left of the gnomon) after he collected it.

The fourth photograph shows the field of boulders located at Station H, 70-80 m northwest of the LM. The big boulder referred to as Turtle Rock is at the upper left of this picture. Footprints are visible in detail.

"It was just craters and craters and gray dust. And yet, you know, it's like the Grand Canyon. The Grand Canyon is just rock and a big gash in the ground. But it's still beautiful. It's the same with the lunar surface."

Edgar Mitchell (Chaikin, Voices, p.66).





[LARGE FORMAT]

214

EDGAR MITCHEL (APOLLO 14)

1971

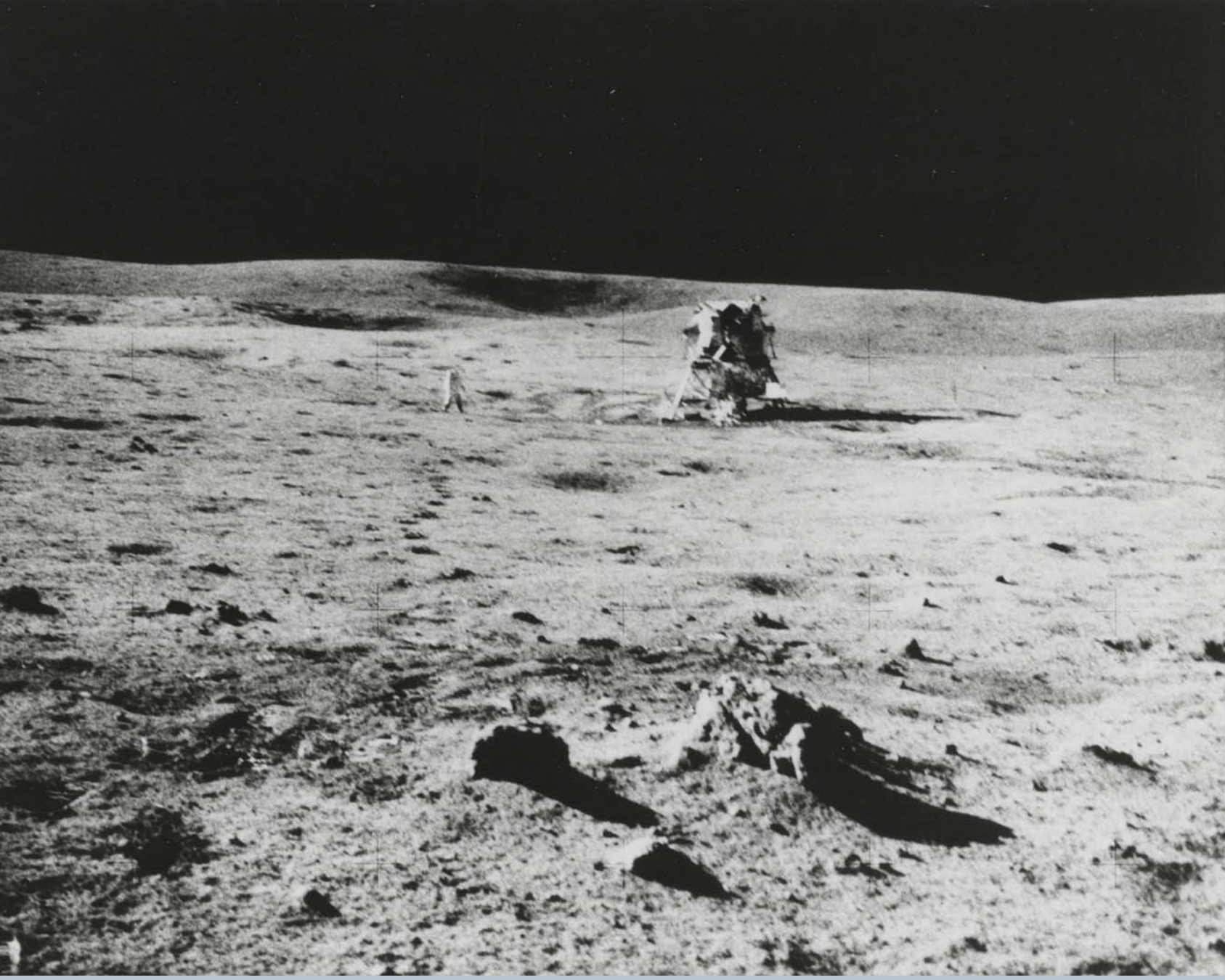
Distant views of Fra Mauro Base: from stations C1 [Large Format] and H during the exploration of Cone Crater (2), EVA 2. 31 Jan 1971- 9 Feb 1971.

Two orginal photographs comprising one large format vintage Gelatin silver print on fiber-based paper, printed 1971 [NASA AS14-68-9448], 23 x 27,2 cm (9 x 10.7 in).
And one vintage gelatin silver print on fiber-based paper, printed 1971 [NASA AS14-68-9487], 20,3 x 25,4 cm (7.9 x 10 in).

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.33 pm (GMT+2)



The first photograph is the furthest taken of the LM during the EVA.

Antares is visible as a tiny speck in the plain on the right over the rock which was referred to as 'Contact Rock', about 1.25 kilometers east-northeast of the LM and about 35 m southeast of the Cone Crater rim. Station C1 was approximately 80 m higher than the LM.

"This photograph is a great indication of how far Shepard and Mitchell had travelled, mostly uphill and without the aid of a lunar rover used on the subsequent J-missions" (Constantine, p. 55).

The second photograph is a superb view of Shepard back to the LM at the end of the second and last excursion on the Moon.

It is a frame from the panoramic sequence taken by Mitchell near Turtle Rock at station H.

"The MET tracks made when the crew started the traverse up to Cone Crater can be seen beyond Shepard and the tracks Mitchell made on his way to Station H from station G1 are in the foreground. Old Nameless Crater is in the background. As per request from Houston, Shepard is aiming the TV camera at the MESA" (ALSJ caption for AS14-68-9486).

"During the whole EVA the crew had trouble judging distance because there were no familiar objects to provide scale, no color differences to break up the lunar scene, and no haze to help differentiate smaller, relatively nearby craters from larger ones in the distance. To their untrained earthly eye, only the LM provided scale" (from the ALSJ mission summary).

“Our destiny, at that time, was to go to the Moon. In fact, probably one of the clearest definitions of an objective or a destiny that mankind has ever experienced has been ‘Man, Moon, 1970’. How could it be any clearer than that?”

David Scott (Chaikin, Voices, p. 183).

215

NASA (APOLLO 15)

1971

The crew with the first Lunar Rover. Mar 1971.

Vintage Chromogenic print on resin coated Kodak paper, printed 1971
[NASA S-71-224407]
20,3 x 25,4 cm (7.9 x 10 in), with „A Kodak Paper“ watermarks on the verso.

€ 600 – 800
$ 720 – 960

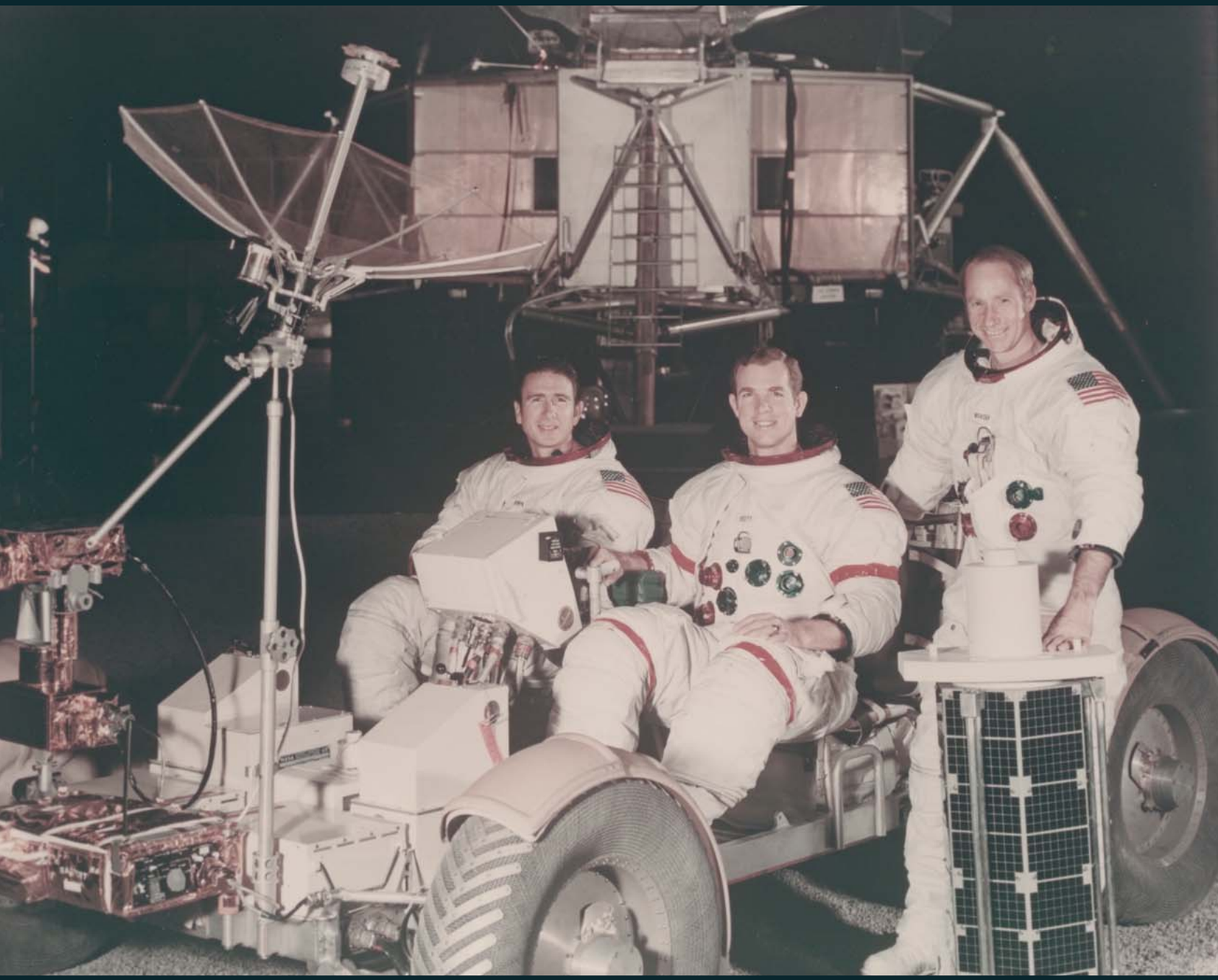
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.34 pm (GMT+2)

David R. Scott, Commander, Alfred M. Worden, Command Module Pilot and James B. Irwin, Lunar Module Pilot, pose in front of a replica of the LM with the Lunar Rover which the astronauts would use for the first time on Apollo 15.

The final three Apollo missions were scientific expeditions, outfitted with extra supplies which allowed a pair of astronauts to spend three days on the Moon. With improved spacesuits that offered greater mobility, they took moonwalks lasting up to seven hours, a full working day of exploration.

Best of all, these teams brought along their own transportation: a battery-powered Lunar Rover that allowed them to travel across the landscape, even onto the sides of mountains.



216

A.WORDEN, D.SCOTT OR J.IRWIN (APOLLO 15)

1971

Translunar photographs: LM docking and SIVB stage jettison (2). 26 Jul 1971- 7 Aug 1971.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1971.
Each 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS15-91-12336" and "NASA AS15-91-12339" (NASA MSC) in red in top margin.
Two very rare unreleased photographs from magazine 91/M.

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.35 pm (GMT+2)

The CSM separated from the SIVB stage approximately 30 minutes after the translunar.

Injection burn and revolved to dock with the LM (still attached to the SIVB stage) whose top hatch, used for docking, is clearly visible (first photograph). The LM rendezvous window and part of the SIVB third stage of the Saturn V rocket are also visible.

After the successful docking maneuver and extraction of the LM, the SIVB third stage was targeted for a crash landing on the Moon (second photograph).

The compartment in the SIVB formerly occupied by the LM is visible beyond the LM thrusters.

From the mission transcript when the second photograph was taken:
004:29:41 Scott: Okay, Houston; 15. We have the SIVB in sight, and it looks like it's probably about - oh 7 or 8 hundred feet away.

"As we got further and further away, the Earth diminished in size. Finally it shrank to the size of a marble, the most beautiful you can imagine. That beautiful, warm, living object looked so fragile, so delicate, that if you touched it with a finger it would crumble and fall apart. Seeing this has to change a man."

James Irwin (Kelley, Plate 38).

217

A.WORDEN, D.SCOTT OR J.IRWIN (APOLLO 15)

1971

The "black marble": UV photograph of planet Earth from deep space. 26 Jul 1971- 7 Aug 1971.

Vintage Gelatin silver print on fiber-based paper, printed 1971. 20,3 x 25,4 cm (7.9 x 10 in), numbered "NASA AS15-99-13429" (NASA MSC) in black in top margin.

€ 800 – 1.200

$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.36 pm (GMT+2)

"You can see the whole Earth at about ten thousand miles. And you start taking pictures. You take one at ten, and one at fifteen, and one at twenty, etc., etc. And of course, they're all the same; it's just that the Earth takes less of the field of view of the camera as you get further away. But you don't think that. You think, Oh, I wanna take another picture now. I wanna take another picture now. It's spectacular. Oh, it's spectacular."

David Scott (Chaikin, Voices, p. 29).

This extremely rare unreleased ultraviolet photograph of our Home Planet, seen as a delicate marble in the black sky of space, was taken 126,083 nautical miles [233,505 km] from Earth with a special 105mm lens and spectroscopic film.

"To take the ultraviolet photographs of the Earth, the spacecraft must be maneuvered so that the UV transmitting window, window 5, is facing the target. Window 5 is to the right of the Command Module as viewed from the couches. The Hasselblad camera, fitted with the special 105-mm UV-transmitting lens and magazine N, is mounted in a bracket in the window" (from the AFJ mission transcript at 010:10:07 GET).

NASA
AS15-85-11366

"There's nothing on the Earth that compares with it. I've never read anything that can adequately describe how well you can see. Whatever that means. It's crisp, and it's clear, and it's distinct, and it's definitive.

David Scott (from the ALSJ mission transcript at 107:10:40 GET).

218

DAVID SCOTT (APOLLO 15)

1971

The only stand up EVA on the Moon: Sunrise over Mount Hadley from the top hatch of the LM, stand up EVA.
26 Jul 1971- 7 Aug 1971.

Vintage Gelatin silver print on fiber-based paper, printed 1971.
20,3 x 25,4 cm (7.9 x 10 in), numbered "NASA AS15-85-11366" (NASA MSC) in red in top margin.
A superb and very rare unreleased photograph.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.37 pm (GMT+2)

Shortly after the LM Falcon landed on the delta called Hadley-Apennine near the north center of the Moon, Scott and Irwin gave the scientists in Houston a thorough description of the surrounding countryside and, rather than restricting themselves to the views out the forward-facing windows, they donned helmets and gloves for what was known as a "Stand-up EVA", the only one performed on the Moon.

They bled all the air out of the cabin, then Scott opened the overhead hatch. Standing on the ascent engine cover with his upper body outside the spacecraft, and bracing himself in the opening he took a series of pictures all the way round the horizon with the Hasselblad 70-mm camera.

"With towering mountains on either side, a broad valley floor, and a rille canyon, the landscape of Hadley-Apennine surrounded Apollo 15 with the most varied terrain that Apollo astronauts would ever explore" (Reynolds, p. 178).

This superb photograph taken up Sun (looking east) shows the illuminated moonscape at Hadley Base; Mount Hadley (left) and the Swann Range are still in the shadow of the morning Sun on the horizon.

219

J. IRWIN AND D. SCOTT (APOLLO 15)

1971

Hadley: the Grand Canyon of the Moon (2), EVA 1. 26 Jul 1971- 7 Aug 1971.

Two vintage Gelatin silver prints on fiber-based paper, printed 1971. Each 20,3 x 25,4 cm (7.9 x 10 in), the first numbered "NASA AS15-85-11451" in black in top margin, the second with NASA KSC caption numbered "AS15-84-11287" on the verso.

€ 800—1.200
$ 960—1.440

Bidding starts at € 100

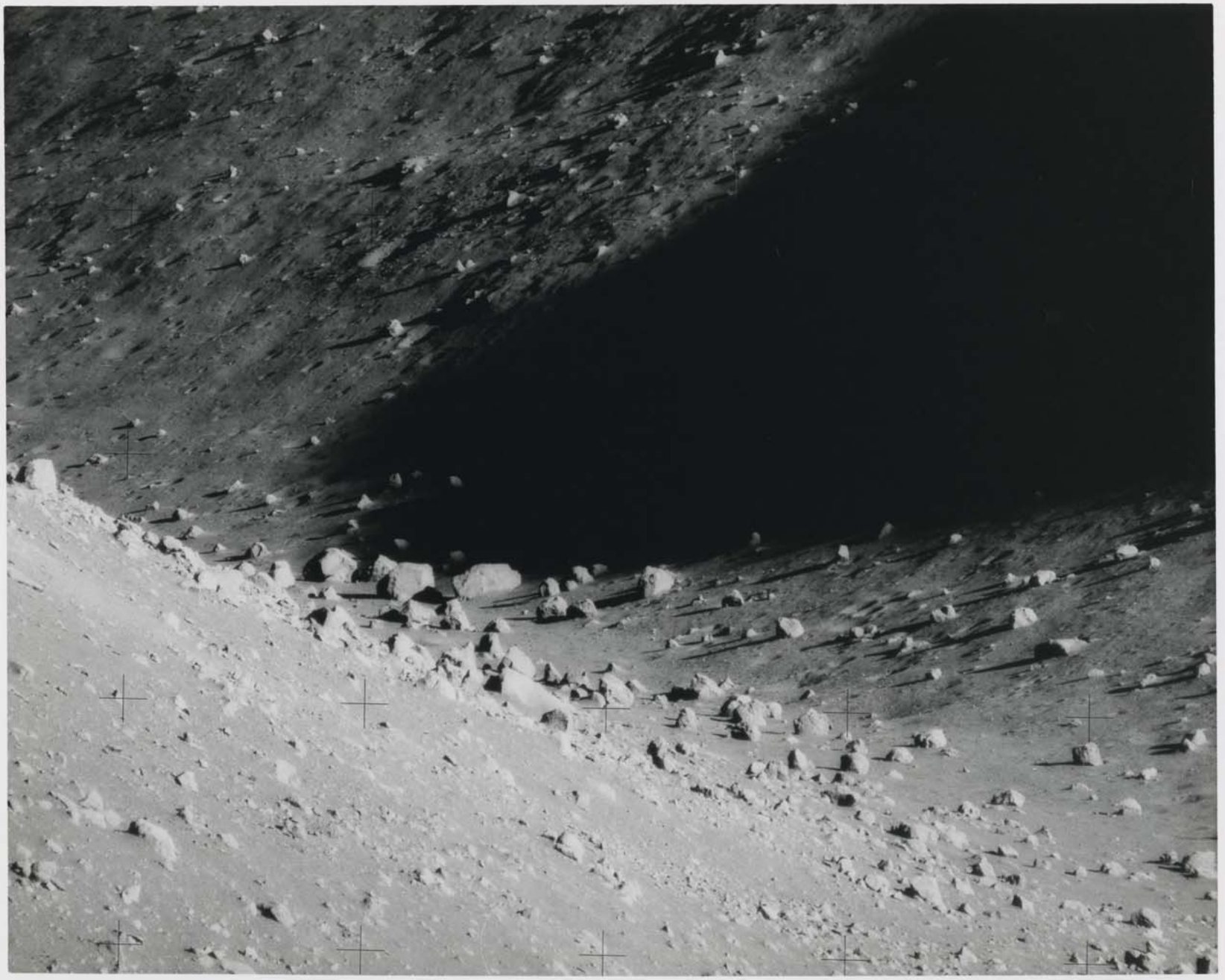
ketterer-internet-auctions.com – Bidding June 20th—July 15th, 2021
Call time: July 15th, 6.38 pm (GMT+2)

The view of Hadley Canyon from St George Crater at station 2 offered one of the most beautiful scenery witnessed and photographed in any Apollo mission.

"The view at station 2 can only be described as spectacular. Because it was still early morning at Hadley, the eastern wall of the rille was in shadow. In contrast, the western wall and, in places, parts of the floor were fully lit. Everywhere in the bottom of the rille, the floor was littered with boulders" (from the ALSJ mission summary).

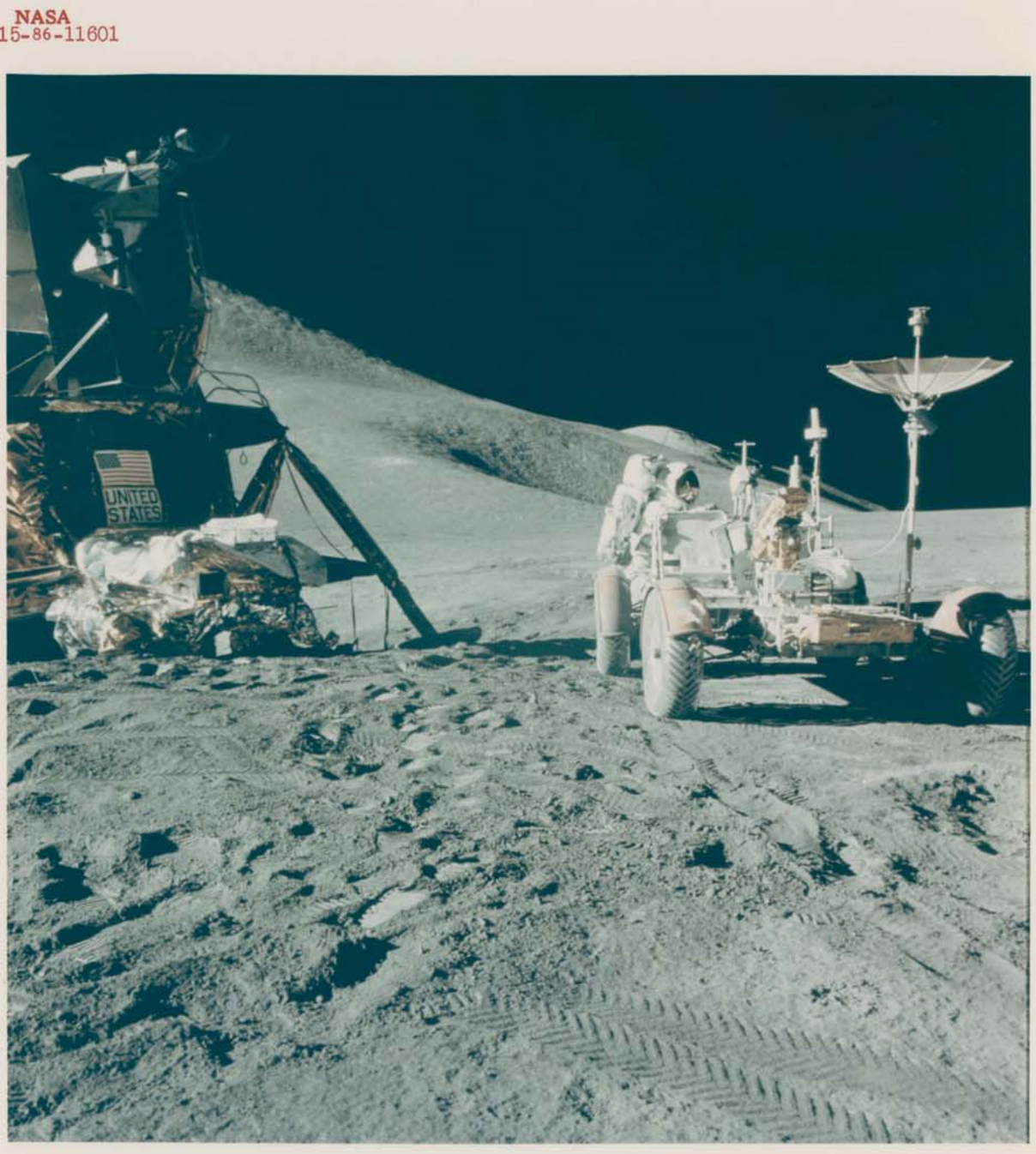
Irwin took the first photograph showing David Scott working at the Lunar Rover in front of Hadley canyon.

Scott took the second photograph with the 500mm telephoto lens used for the first time on Apollo 15, showing the bottom of the canyon. The clarity of the lunar vacuum and the foreshortening of the telephoto lens offer a deceptively small sense of scale since the biggest boulder at the bottom is house-sized.



"Well, the drive...up toward St. George [crater], on the first day... You don't have a big peripheral vision. Stop the rover, and get off, and turn around and look, and the goddamn Grand Canyon, Hadley Rille! I mean, that's an absolute mind-blower. Even though you know it's there, but you can't see it, 'cause you're driving this little rover next to the ground. Hadley Rille's over there, you can't see Hadley Rille. You can't see craters. All of a sudden you get off and you turn around, and there it is! In all its glory. The Grand Canyon of the Moon! That's mind-boggling! I mean, that'll blow you out."

David Scott (Chaikin, Voices, p. 89).



220

DAVID SCOTT (APOLLO 15)

1971

Portrait of James Irwin at Hadley Base, EVA 1. 26 Jul 1971- 7 Aug 1971.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1971 [NASA AS15-86-11601]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered in error "NASA AS15-86-11602" (NASA MSC) in red in top margin.
A great portrait of James Irwin near the LM Falcon and the Lunar Rover in front of St George Crater.

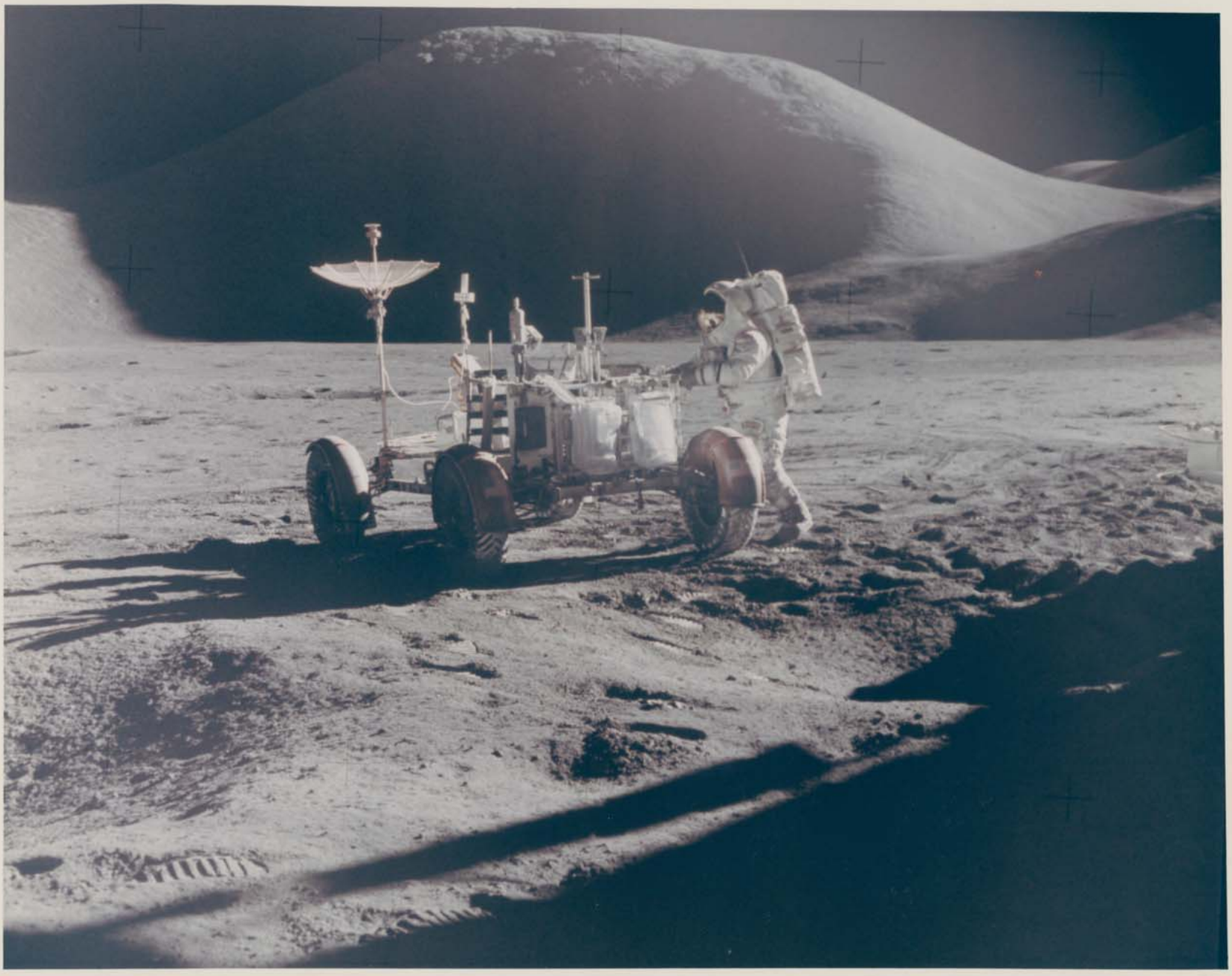
€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.39 pm (GMT+2)

"We were a base... I mean, if we'd had more oxygen and more food and more water in the LM, we could've stayed there. Nothing wore out... The rover's still good. You could go out there and start it up right now. So, we had a lunar base established," noted David Scott.

(Chaikin, Voices, p. 192).



221

DAVID SCOTT (APOLLO 15)

1971

Portrait of James Irwin at the Rover in front of Mount Hadley, EVA 1. 26 Jul 1971- 7 Aug 1971.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1971 [NASA AS15-86-11603]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso (NASA MSC).
The shadow of the LM Falcon is in the foreground of this extraordinary photograph.

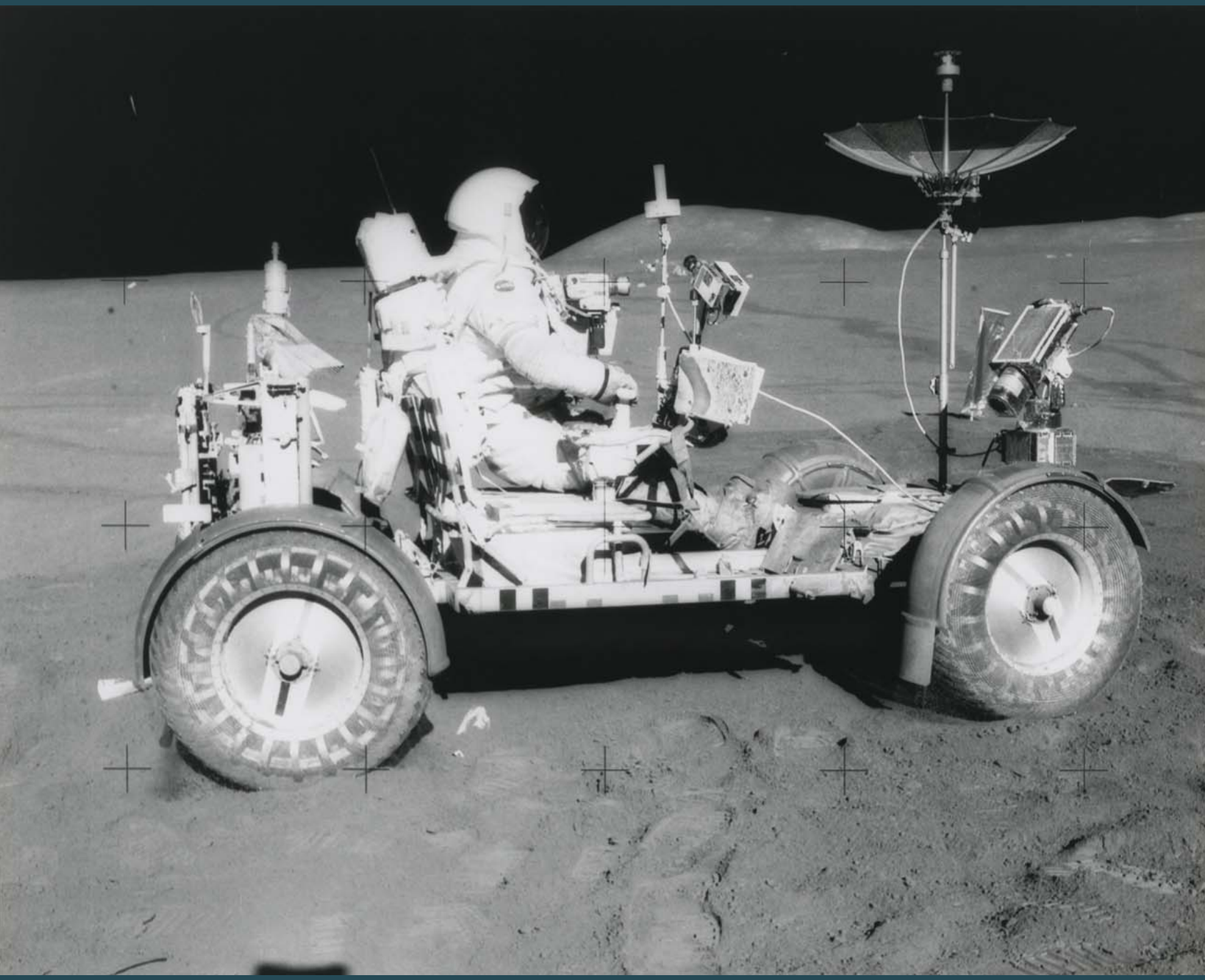
€ 1.000 – 1.500
$ 1.200 – 1.800

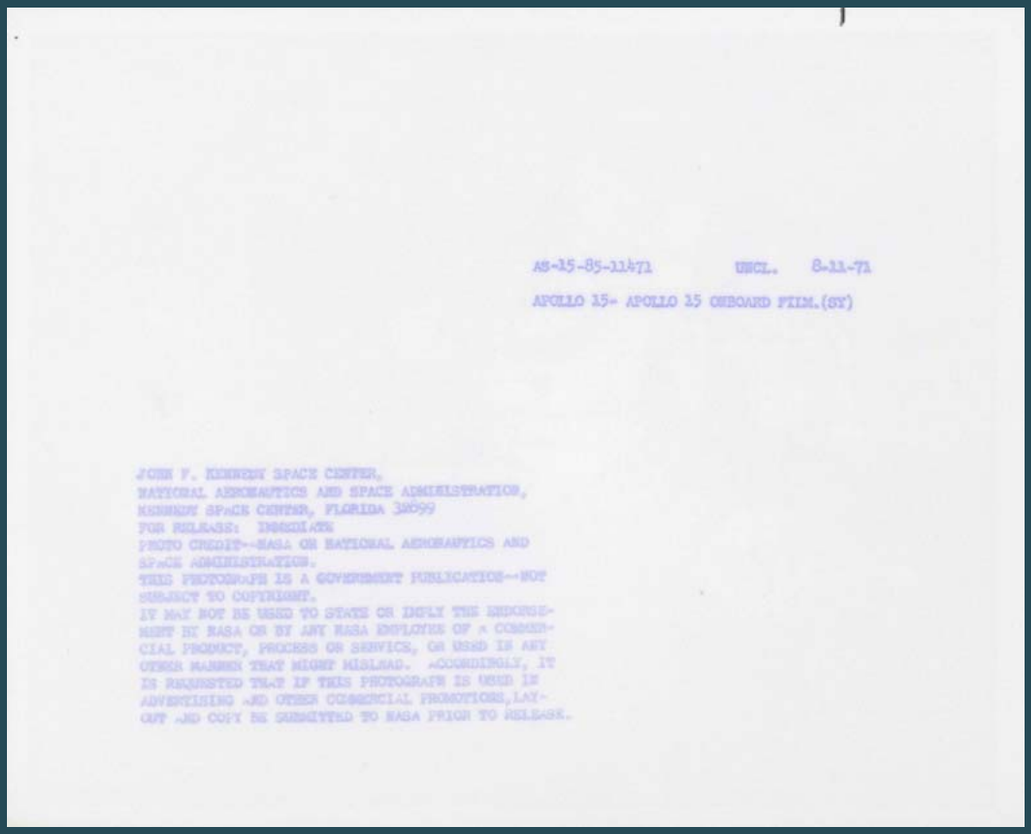
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.40 pm (GMT+2)

"Vistas without parallel in human experience surrounded the crews on the great voyages of exploration. Mount Hadley, rising 2.75 miles above the plain, is Apollo 15's backdrop as Jim Irwin sets up the first lunar rover vehicle on the Moon."

Apollo 17 astronaut Harrison Schmitt (NASA SP-250, p. 265).





222

JAMES IRWIN (APOLLO 15)

1971

David Scott driving the Lunar Rover, EVA 2.
26 Jul 1971- 7 Aug 1971.

Vintage Gelatin silver print on fiber-based paper, printed 1971.
20.3 x 25,4 cm (7.9 x 10 in), with NASA KSC caption numbered "AS15-85-11471" on the verso.

€ 800—1.200
$ 960—1.440

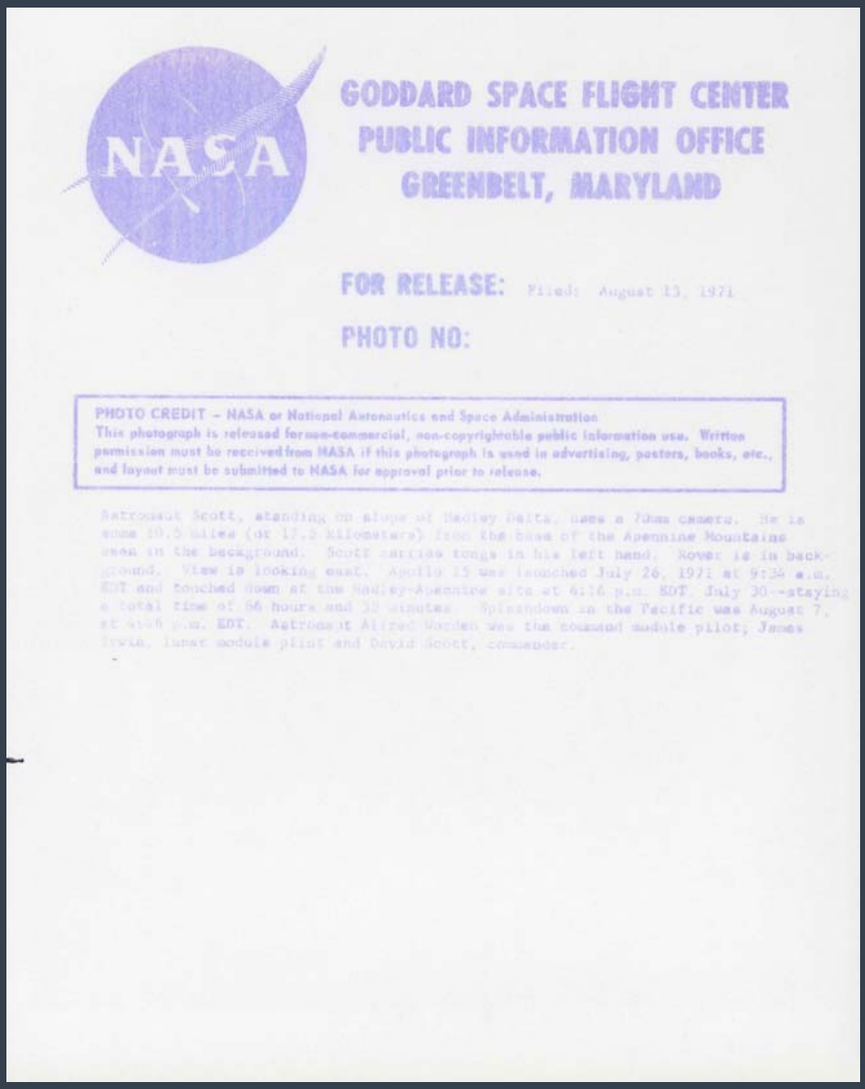
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th—July 15th, 2021
Call time: July 15th, 6.41 pm (GMT+2)

On Apollo 15 the Lunar Rover enabled the first true scientific exploration of the Moon, allowing Scott and Irwin to cover a greater distance and collect a greater variety of geological samples than accomplished on the three previous lunar landings combined.

The photograph was taken near the LM at the beginning of the second EVA as Scoot was testing the electric car before the drive to station 6. The lunar-science station is visible behind the Rover with Hill 305 in the background. The Solar Wind Collector is visible beyond the Rover TV camera. The lunar orbital photographs in front of Scott were used as an aid for navigation as the crew spent almost 38 man-hours on their three expeditions.

"Note that there is dust coming off the wheels as Scott maneuvers. This picture also gives us a good view of Scott's RCU-mounted Hasselblad camera and of the wire Rover wheels." (ALSJ caption for AS15-85-11471).



223

JAMES IRWIN (APOLLO 15)

1971

David Scott and the lunar mountains of Hadley-Apennine, EVA 2. 26 Jul 1971- 7 Aug 1971.

Vintage Gelatin silver print on fiber-based paper, printed 1971 [NASA AS15-85-11514]
20,3 x 25,4 cm (7.9 x 10 in), with NASA Goddard caption on the verso.
A fantastic frame of a panoramic sequence at station 6.

€ 800—1.200
$ 960—1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th—July 15th, 2021
Call time: July 15th, 6.42 pm (GMT+2)

"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."

David Scott (National Geographic, September 1973, "What Is It Like to Walk on the Moon?", p. 329).

David Scott is photographing a geologic find at the Apennine Front's station 6, located about 100m high on the North facing slope of Mount Hadley Delta, about 5 km southeast of the Lunar Module.

The Lunar Rover can be seen parked at a steep angle in the distance behind Scott. The white spots above him are lens flares caused by shooting directly east into the Sun. Footprints made by Irwin and Scott are clearly visible. The Swann Range is extending all the way across in the background, 17 km away. At the right of Scott is the slope rising to the peak of Mount Hadley Delta, 3,500 m above the Marsh of Decay below.

224

DAVID SCOTT (APOLLO 15)

1971

The astronaut's favorite photograph: LM Falcon in the valley of Hadley Apennine, EVA 2. 26 Jul 1971- 7 Aug 1971.

Vintage Gelatin silver print on fiber-based paper, printed 1971.
20,3 x 25,4 cm (7.9 x 10 in), numbered "NASA AS15-84-11324" (NASA MSC) in black in top margin.
This truly extraordinary photograph, David Scott's favorite from the mission, was not released by NASA after the mission.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

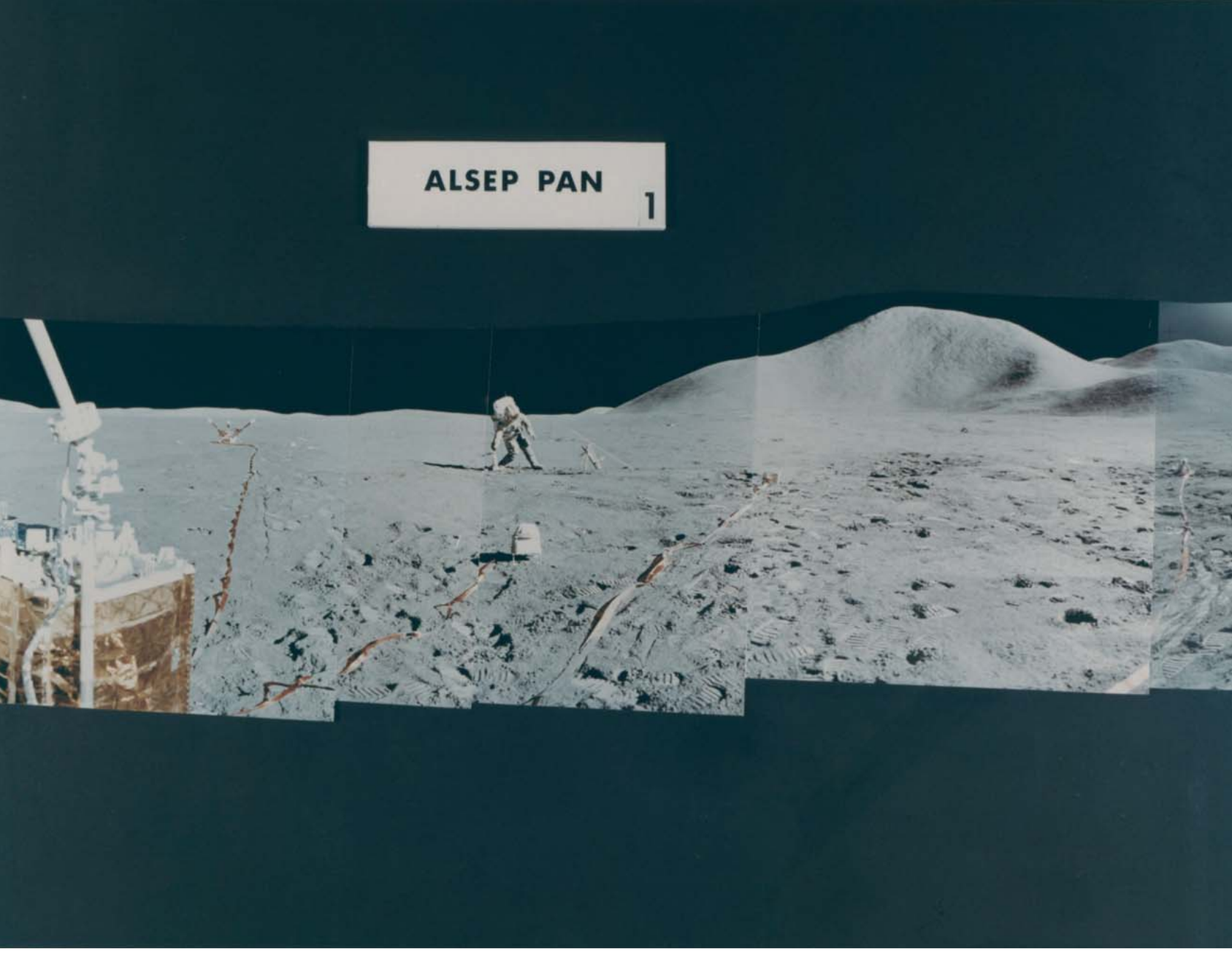
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.43 pm (GMT+2)

"I took a telephoto from there, and it's my favorite picture... And I got the LM in it. And with a 500mm lens you can barely see it. And the impression you get from being up there and look[ing] back is that, Boy, you're a long way from home. Cause that [the LM] is home. And if you look out the whole expanse of the plain, there's nothing there... but that one teeny little thing... An enormous scene, which is very clear, very bright, in which... there is one teeny little thing that's called a Lunar Module, all by itself... And boy, that's impressive... There's a man made thing, and the rest is pure nature. Absolute pure nature," said Scott.

(Chaikin, Voices, p. 92)

Apollo 15 took the astronaut explorers as far from their lander as any previous crew had traveled.

This superb photograph taken with the 500mm telephoto lens shows the LM as seen from Station 6 on the flank of Mount Hadley Delta, about 60 m above the spacecraft and 5 km to the south, with Pluton Crater 8 km away in the background and Dune Crater 2 km away in the foreground.



225

JAMES IRWIN (APOLLO 15)

1971

Panoramic view of David Scott at the lunar-science station, EVA 2. 26 Jul 1971- 7 Aug 1971.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1971. 20,3 x 25,4 cm (7.9 x 10 in), with NASA MSC caption and "A Kodak Paper" watermarks on the verso, numbered "NASA S-71-44695" in red in top margin.

€ 700 – 1.000
$ 840 – 1.200

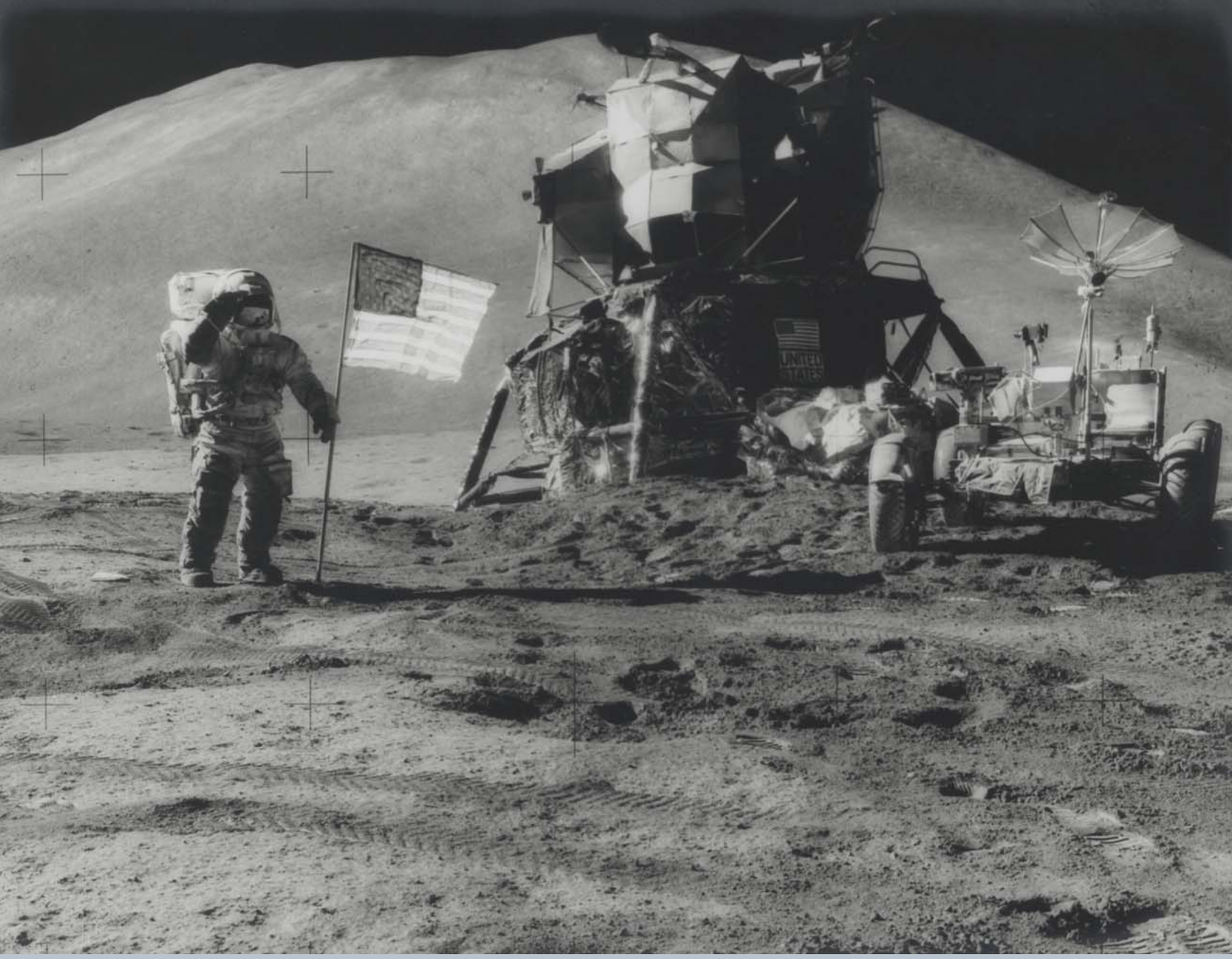
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.44 pm (GMT+2)

A photograph of the first portion of a hand mosaic composing a 360° panoramic view of the lunar-science station (or ALSEP site) assembled from 8 X 10in prints by NASA MSC.

David Scott is leaning to his right and picking up the drill for the Heat-Flow experiment. On the horizon at the extreme left edge of the picture is Hill 305. Mount Hadley is the prominent feature at the right center. Other Apennine mountains are on the far right. Components of the ALSEP are in the foreground.

Early on, astronauts were very cautious in their spacesuits, aware of the lethal dangers of their environment. By later missions the spacesuits had proven their durability, and astronauts thought nothing of leaping, stumbling, or falling.



[LARGE FORMAT]

226

DAVID SCOTT (APOLLO 15)

1971

Portrait of James Irwin with the US flag, the LM and the Rover, EVA 2. 26 Jul 1971- 7 Aug 1971.

Large format vintage Gelatin silver print on fiber-based paper, printed 1971 [NASA AS15-92-12447]
27,8 x 34,7 cm (10.9 x 13.6 in).
A fantastic unreleased large format photograph.

€ 3.000 – 5.000
$ 3.600 – 6.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.45 pm (GMT+2)

This first and extremely rare portrait of Irwin saluting the flag was taken by Scott at the end of EVA 2 with the only working Hasselblad camera loaded with B&W film as the astronauts were out of color film.

Irwin, the US flag, the LM and the Lunar Rover are framed by the majestic Mount Hadley Delta with very sharp details.

The scene was also recorded by Mission Control with the color TV camera of the rover pointing at Irwin.

Irwin and Scott would re-shoot the scene with color film at the beginning of EVA-3.

"Generally B&W film gives better resolution and better defined response to light levels, both features of importance for scientific purposes. On the other hand, B&W can't show the dramatic appearance of color on the otherwise grey Moon" (from the ALSJ mission transcript at 148:52:47 GET).

From the mission transcript when the photograph was taken:
148:55:23 Scott: Gee, I wish we had color (film).
148:55:24 Irwin: Yeah.
148:55:27 Allen (Mission Control): We'll have color tomorrow, Dave...
148:55:28 Scott: That's great just to look at it there.
148:55:29 Allen: ...Saved it especially for you. (Pause)
148:55:33 Scott: (Taking pictures) Okay. (Pause)
Okay. That a boy. (Pause) 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.

227

DAVID SCOTT (APOLLO 15)

1971

James Irwin saluting the US flag at Hadley Base, EVA 3. 26 Jul 1971- 7 Aug 1971.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1971. 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS15-88-11866" (NASA MSC) in red in top margin.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.46 pm (GMT+2)

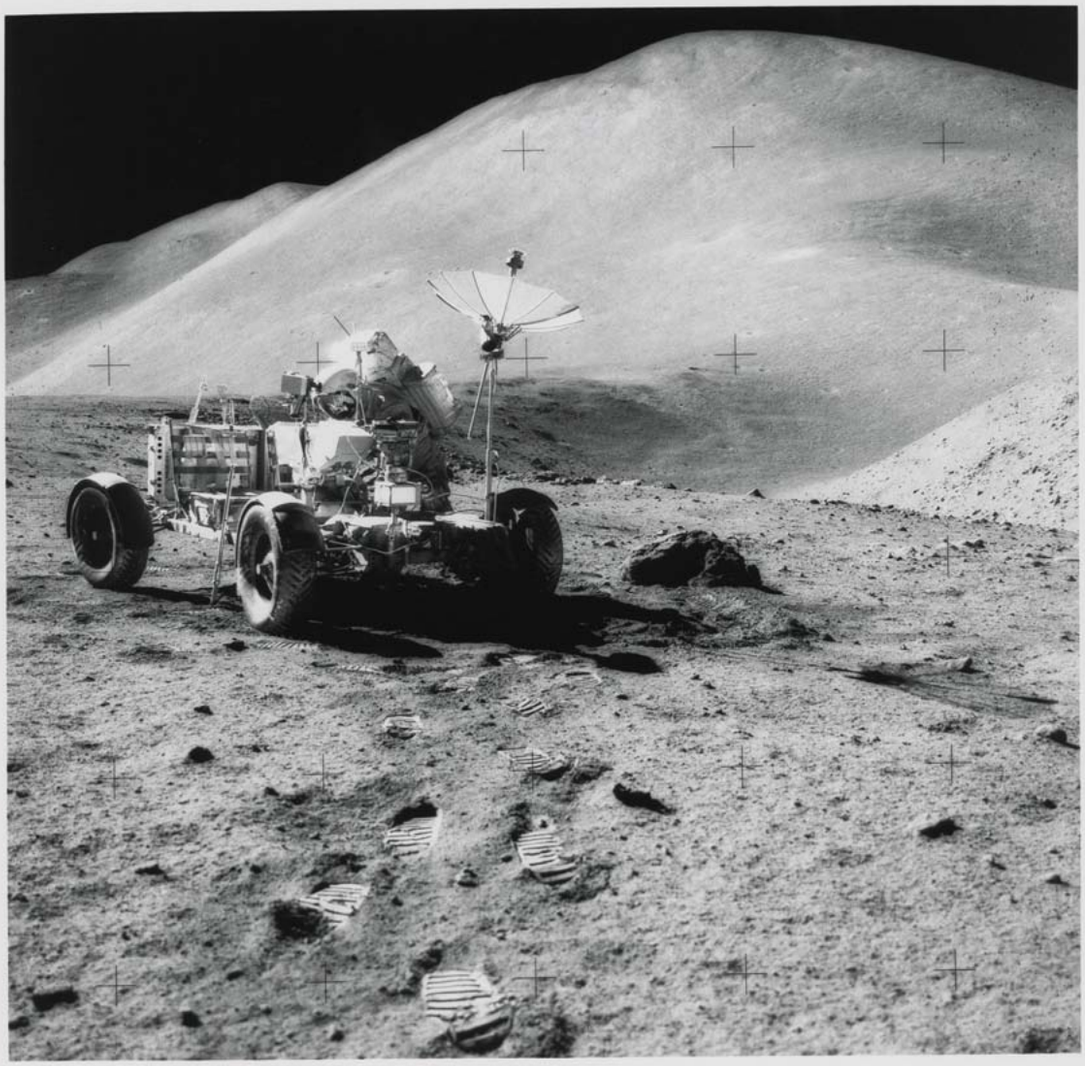
"I felt like I was an alien as I traveled through space. When I got on the Moon, I felt at home. We had mountains on three sides and had the deep canyon to the west, a beautiful spot to camp. I felt in a way Adam and Eve must have felt, as they were standing on the Earth and they realized that they were all alone. I talk about the Moon as a very holy place."

James Irwin (Kelley, plate 46).

Irwin and Scott took a series of "tourist" photographs of each other with the American flag in the splendid lunarscape of Hadley landing site.

Few Apollo photographs have been reproduced more often than this color photo (taken at the beginning of EVA 3) of Irwin, the flag, the Rover, the LM and Mount Hadley Delta.

Hadley Delta rises approximately 4,000 meters (about 13,000 feet) above the plain; the base of the mountain is 5 kilometers (3 statute miles) away.



228

JAMES IRWIN (APOLLO 15)

1971

David Scott, the Rover, Mount Hadley Delta and Hadley Canyon, EVA 3. 26 Jul 1971- 7 Aug 1971.

Vintage Gelatin silver print on fiber-based paper, printed 1971. 25,4 x 20,3 cm (10 x 7.9 in), with NASA KSC caption numbered "NASA AS15-82-11121" on the verso.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.47 pm (GMT+2)

"It had a majestic feeling about it. And one says this after talking about how it's dusty, it's gray, nothing's growing, nothing of any real beauty. But yet, take it all together with the vastness of it, the sense of history, the boulders, and the elevations we had on our flight and certainly some of the other flights, Hadley for example, it really is majestic, in the sense of a desolate mountain desert type of a setting."

Apollo 14 astronaut Alan Shepard. (Chaikin, Voices, p. 66).

A magnificent frame of the panoramic sequence taken at station 9A, located at a spectacular site on the edge of Hadley Canyon, about 1.8km west of the LM.

Scott is collecting the 500mm Hasselblad camera from the Rover to photograph the far side of the Canyon (right) which is about 1 km across.

Behind the rover to the right is Mount Hadley Delta with the huge St George Crater punched into its side. Below Hadley Canyon bends to the south close to Elbow Crater. Silver Spur is visible to the left of Mount Hadley Delta.

"There is a fundamental truth to our nature... Man must explore. And this is exploration at its greatest."

David Scott (first words on the Moon).

229

DAVID SCOTT (APOLLO 15)

1971

Close-ups of James Irwin with a core tube and the Rover (2), EVA 3. 26 Jul 1971- 7 Aug 1971.

Two vintage Gelatin silver prints on fiber-based paper, printed 1971. Each 20,3 x 25,4 cm (7.9 x 10 in), numbered "NASA AS15-82-11161" and "NASA AS15-82-11200" (NASA MSC) in black in top margin.
Two very rare unreleased photographs.

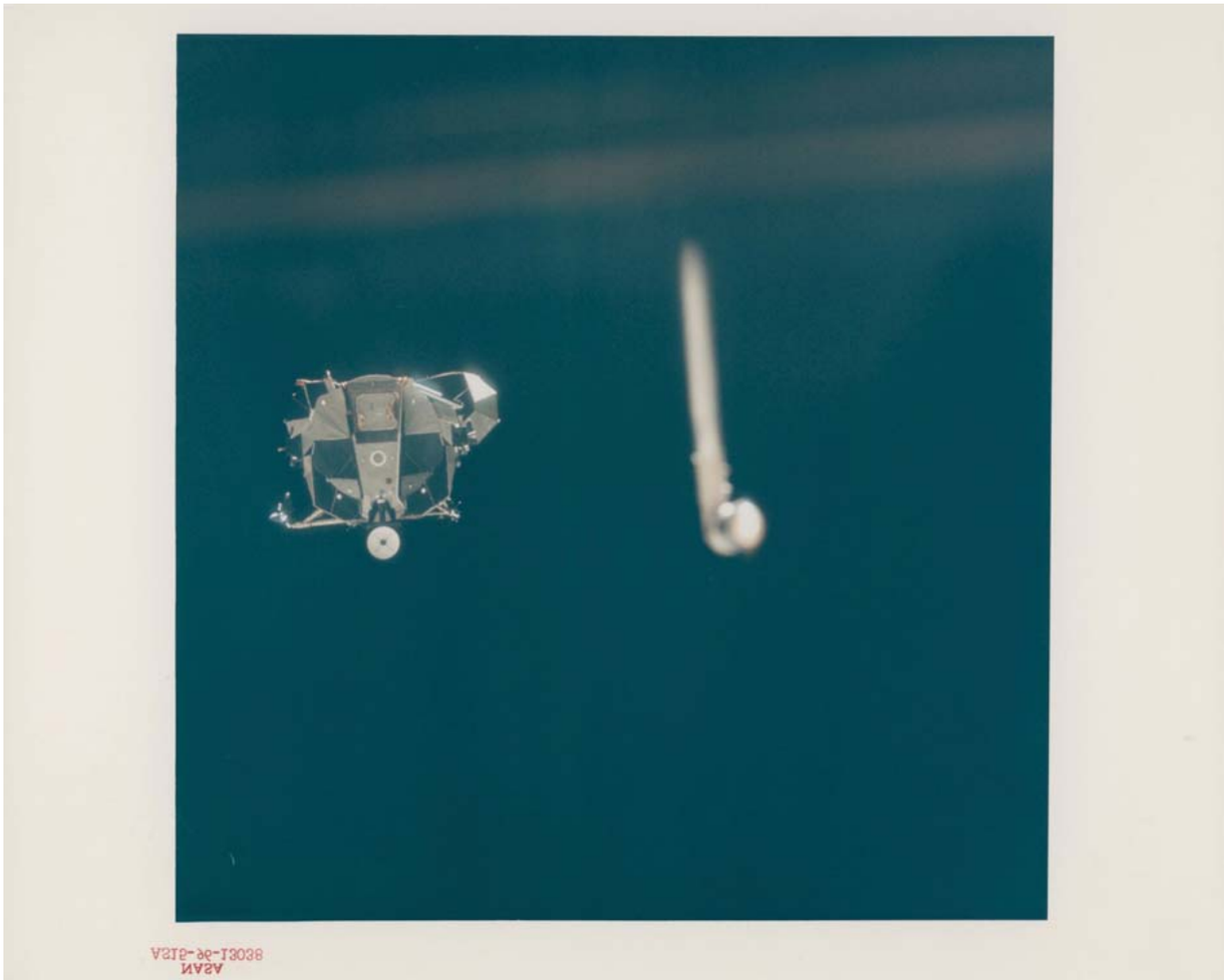
€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.48 pm (GMT+2)

The first photograph shows Irwin at station 9A pushing a core tube by hand before hammering it in the rest of the way. Core samples of the lunar soil were an invaluable method for deciphering its history.

The second photograph shows Irwin (right) next to the dust-covered Lunar Rover back to the LM after its lunar traverses.The Rover worked perfectly, even with considerable buildups of dust on the chassis next to the wheel and on the inside of the hub. Forward of the seats, the face of the console and the switches and switch guards are clearly visible. The center of the images is partly obscured because of a dust smudge on the lens.



230

A. WORDEN AND J. IRWIN (APOLLO 15)

1971

LM Falcon and CSM Endeavour station keeping in lunar orbit (2). 26 Jan 1971- 7 Aug 1971.

Two vintage Chromogenic prints, printed 1971.
Each 20,3 x 25,4 cm (7.9 x 10 in), the first on fiber-based Kodak paper with "A Kodak Paper" watermarks on the verso and numbered "NASA AS15-96-13038" (NASA MSC) in red in top margin; the second [NASA AS15-88-11967] on resin coated Kodak paper with "A Kodak Paper" watermarks on the verso (NASA / North American Rockwell).
Two very rare unreleased photographs (NASA released a variant of AS15-88-11967 after the mission).

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.49 pm (GMT+2)

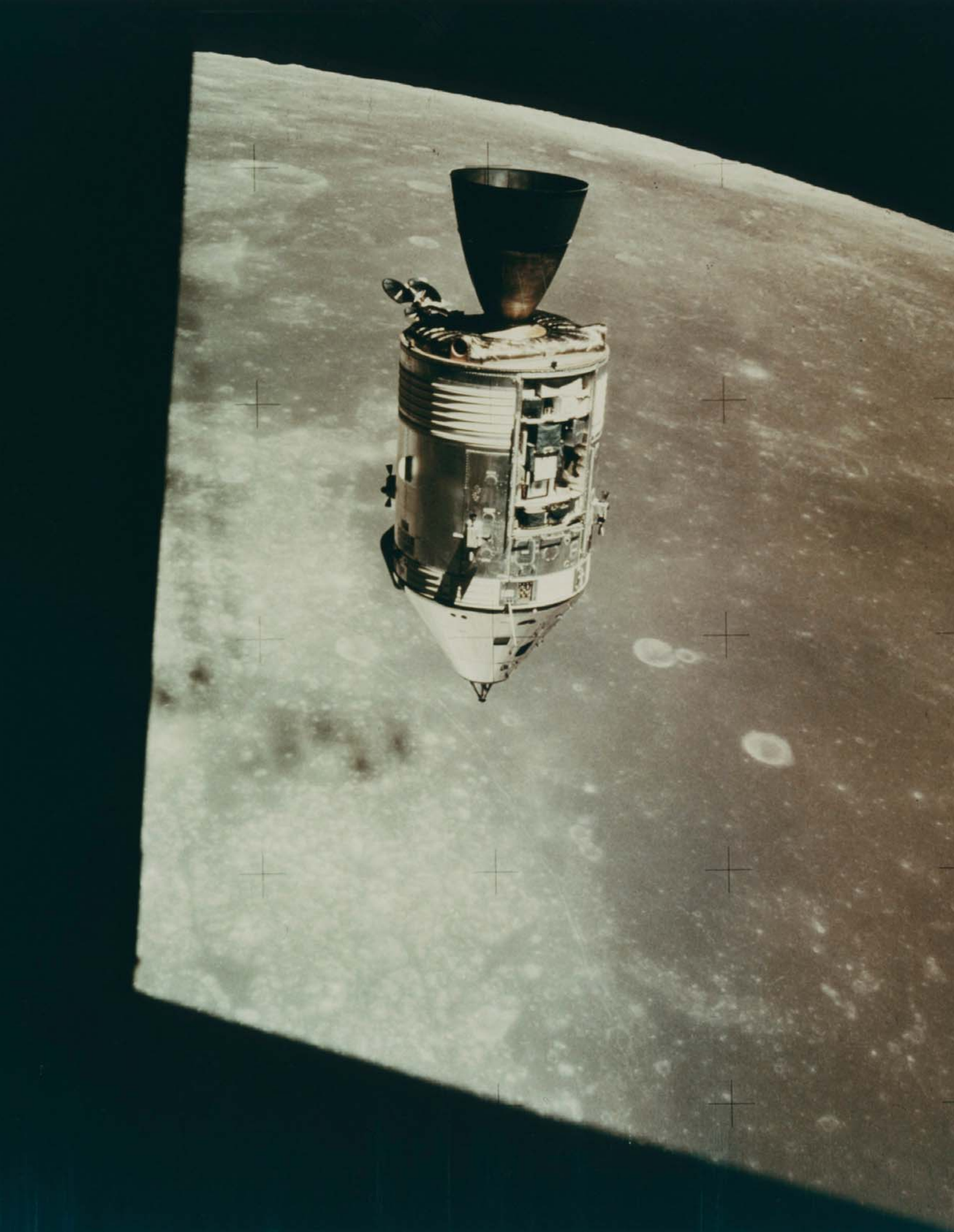
Alfred Worden took the first photograph from the orbiting Command Module Endeavour. The ascent stage of the LM Falcon is returning from the Moon's surface for rendezvous and docking with the CSM Endeavour before the return to Earth. The EVA flood light mounted on the exterior of the CSM is visible in the foreground.

James Irwin took the second photograph with the 60mm lens from the LM Falcon. The CM Endeavour was in its 49th orbit, 115km above the northeastern shore of the Sea of Fertility, with the pair of craters Taruntius N and Taruntius O well visible on the mare (latitude / longitude: 7 N / 48.5 E).

Worden had pitched the command ship nose down toward the Moon so that Scott and Irwin in the LM could inspect the exposed SIM bay (Scientific Instrument Module Bay) used for the first time on Apollo 15, where he would later retrieve the cassettes of the panoramic cameras during the first ever deep space EVA.

"The final stages of rendezvous and docking on all Apollo lunar flights have been the subject of intensive documentation and Apollo 15 is no exception. Both spacecraft are photographing the arrival of the other on still and movie film, and the approaching Falcon is being televised by Worden to Mission Control and the world" (from the AFJ mission transcript at 173:14:11 GET).

From the mission transcript when the photographs were taken:
173:15:44 Scott: Okay, Houston. We're stationkeeping at about 120 feet [37 m] or so.
173:15:50 Mitchell (Mission Control): Roger. Dave, during the Command Module pitch-around, and we'd like for you to take a look at the V-over-H sensor in the SIM (Scientific Instrument Module) bay, if you can. [...]
173:17:05 Scott: Okay, we'll get a picture of it.
173:17:20 Worden: Okay. I'll go ahead and do your pitcharound. [...]
173:19:11 Scott: Hey, it looks good, you're going the right way. [Long pause.]
173:19:37 Mitchell: Dave, while he's pitching, I'll tell you - should be about the middle of the SIM bay by the Mapping Camera. [Long pause.]
173:20:18 Scott: Very nice maneuver, Endeavour.



231

A.WORDEN, D.SCOTT OR J.IRWIN (APOLLO 15)

1971

Telephoto panorama of the Bay of Rainbows in the Sea of Rains. 26 Jul 1971- 7 Aug 1971.

Unique hand mosaic, collage of three vintage Chromogenic prints on fiber-based Kodak paper, printed 1971.
20,8 x 49,4 cm (8.1 x 19.4 in), each with "A Kodak Paper" watermarks on the verso, numbered "NASA AS15-93-12702" to "NASA AS15-93-1705" (NASA MSC) in red in top margin.

€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

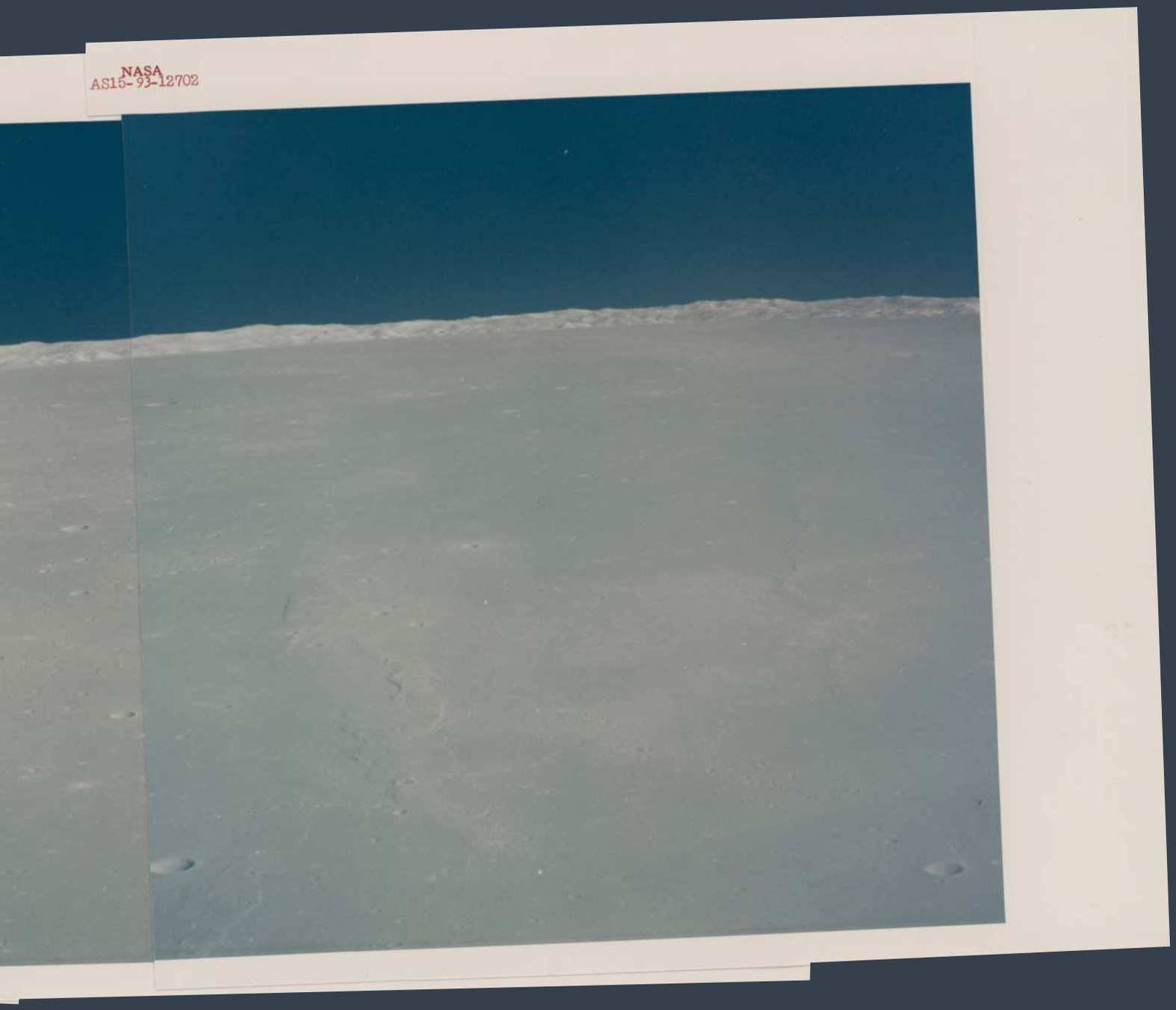
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.50 pm (GMT+2)

Such orbital Hasselblad panoramas were not easy to produce and are extremely rare. In lunar orbit, the astronauts had to take into account the motion and the attitude of the spacecraft relative to the Moon and the varying conditions of lighting depending on the longitude.

Once the crews returned to Earth, the images captured with this technology had to be printed and then hand-assembled into David Hockney-like panoramic collages that provide a spectacular view of the orbital moonscape.

This superb oblique panorama was taken by the crew through the 250mm telephoto lens during one of the last revolutions (orbit 71) before trans Earth injection, looking north across the Sea of Rains with Montes Jura, the mountain range that forms the rim of the Bay of Rainbows, on the horizon. Hercules Promontory (representing the southwestern cusp of the Bay of Rainbows) is in the left background. In the middle distance the largest visible crater is the 7-km Caroline Herschel C. Latitude / longitude: 37 N 29 W.

The Bay of Rainbows was the landing site of the first Chinese Lunar Lander Chang'e 3 in December 2013.



"We probably felt a sense of capturing the spectacular scenes before we departed - our high inclination ground track presented us with a great variety of superb views. And of course, why return with unexposed film?"

David Scott (from the AFJ mission transcript at 216:53:01 GET).

“These photographs are a permanent reminder that we’re a little part of the universe. We’re not the center of anything.”

Alfred Worden (Schick and Van Haaften, p. 109).

232

ALFRED WORDEN (APOLLO 15)

1971

The glorious crescent Earth. 26 Jul 1971- 7 Aug 1971.

Vintage Gelatin silver print on fiber-based paper, printed 1971.
20,3 x 25,4 cm (7.9 x 10 in), numbered “NASA AS15-99-13479” (NASA MSC) in black in top margin.
An extremely rare unreleased photograph from magazine 99/N captured on the way back to Earth.

€ 800–1.200
$ 960–1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th–July 15th, 2021
Call time: July 15th, 6.51 pm (GMT+2)

As the crew headed back home with the Sun in front of the spacecraft, Alfred Worden picked up a Hasselblad camera fitted with a special UV transmitting 105mm lens and captured this amazing view of the very thin crescent Earth increasing in size, illuminated by sunlight from the side and basked in the beam of a lens flare. With the Earth presenting such a thin crescent, the Sun is very near the camera’s field of view. This particular 70mm film magazine (99/N) contained spectroscopic film for ultraviolet photographs.

Apollo 15 was 113,437 nautical miles [210,085 km] from Earth. At the same moment the astronauts could see a full Moon receding behind them.

"We had a problem with the Command Module before landing. Mattingly reported a major engine problem that required us to rendezvous. This photograph was taken as we closed in on Mattingly for a little station keeping until they solved the problem. We were co-altitude at the time and started closing when we had Earthrise. Actually, we were pretty down in the dumps about that time because the mission rules said we were going to abort and not to land. Fortunately, Houston solved the problem."

Charles Duke (Schick and Van Haaften, p. 119).

233

CHARLES DUKE (APOLLO 16)

1972

CSM Casper and Earthrise. 16-27 Apr 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972. 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS16-113-18288" in red in top margin (NASA MSC), with three filing holes in top margin.
A very rare unreleased photograph (NASA released a variant of the photograph, NASA AS16-113-18289, after the mission).

€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.52 pm (GMT+2)

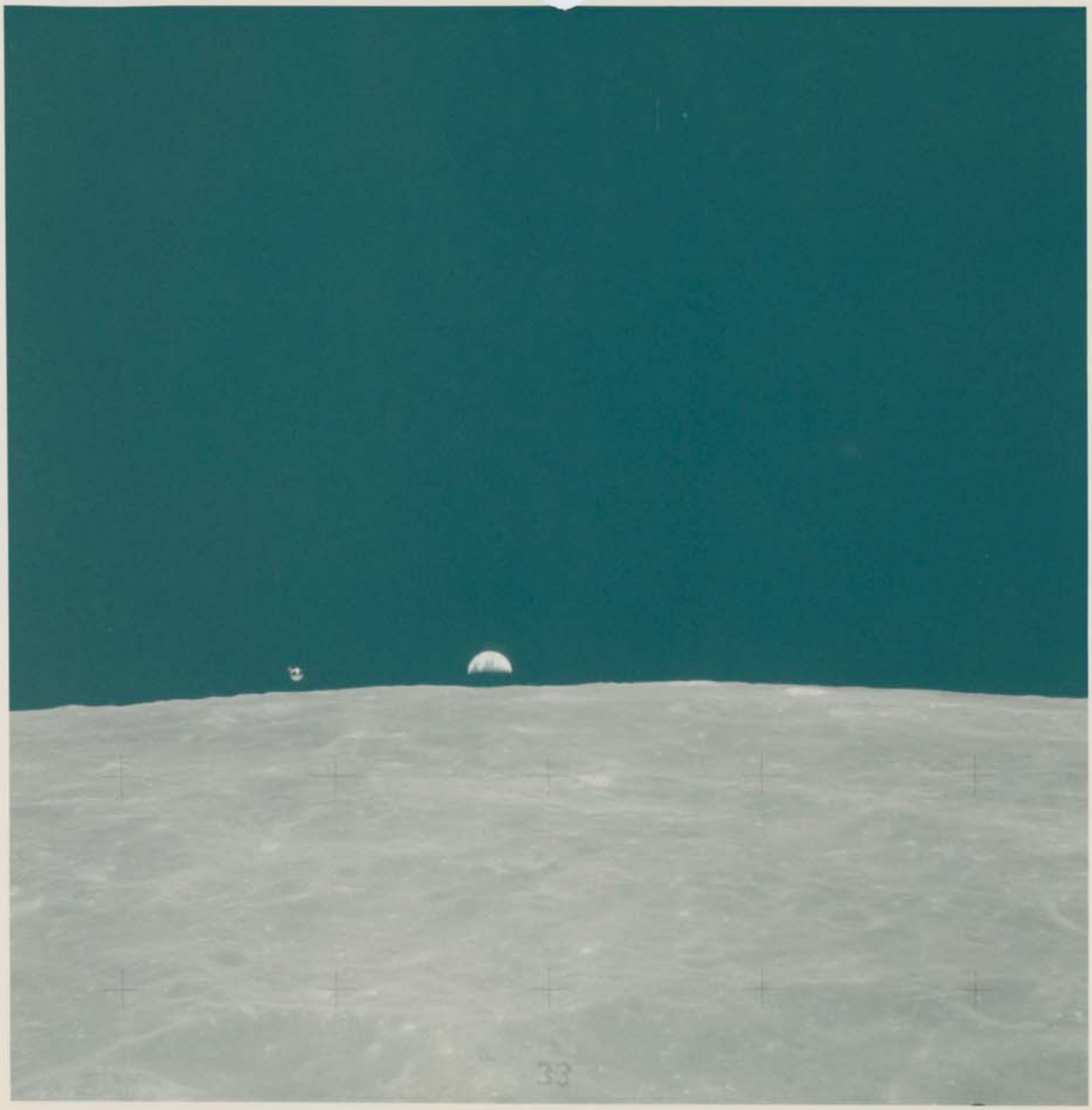
A fantastic photograph showing the reunion of two planets and a manned spacecraft. Apollo 16 was the only mission to feature views of the Command Module with the Earth rising over the lunar horizon in the background.

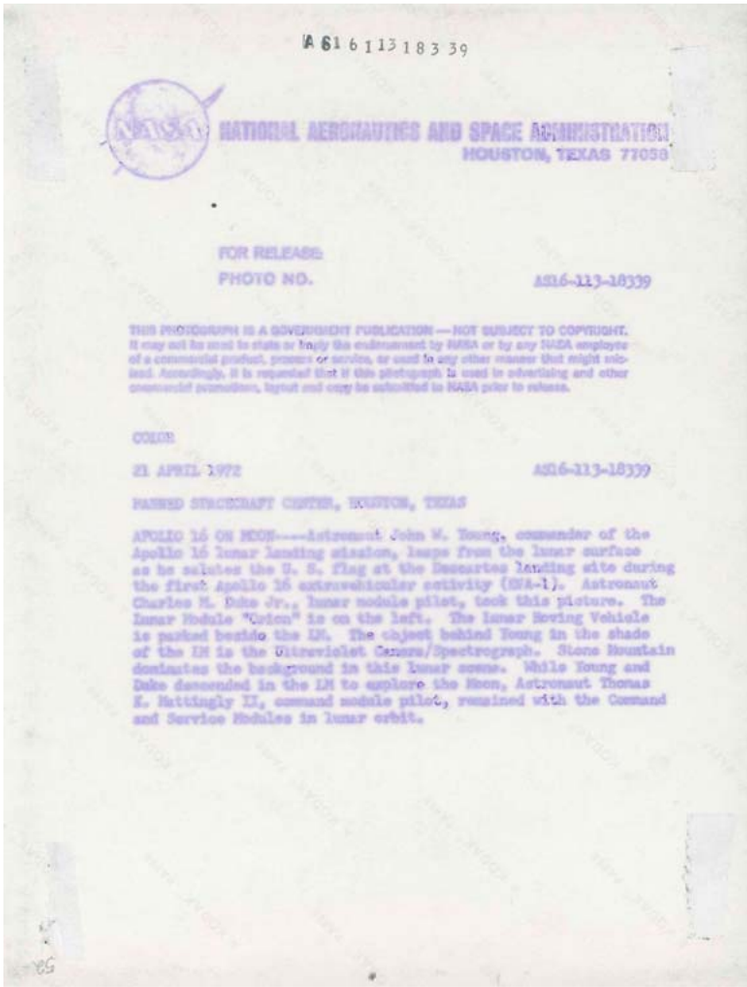
Charles Duke took the photograph from the LM Orion at an altitude of only 57 km above the Moon following the CSM's failure to make the circularization burn which endangered the landing attempt and obliged the two crafts to re-join.

Duke aimed the EVA Hasselblad camera equipped with a 60mm lens looking west toward the CSM about one mile away. Lunar highlands east of Crater Saha are in the background.

From the mission transcript when the photograph was taken:
098:08:45 Young (Orion): See Ken out there?
098:08:46 Duke (Orion): Yeah, I see Ken. [...]
098:09:32 Young (Orion): What should we acquire them (Mission control) on here? Should be - we should he getting them now, Charlie. 98:10.
098:09:39 Duke (Orion): Well, the Earth's - ain't come up yet. [...]
098:10:38 Duke (Orion): There it comes.
098:10:45 Duke (Orion): Okay, Ken, we're getting Earthrise.
098:10:47 Mattingly (Casper): Yeah, I got my high gain set up.
098:11:13 Hartsfield (Mission control): Casper, Houston. How do you read?
098:11:16 Mattingly (Casper): Okay; they're locking up on me. Hello, Houston. This is Casper [garble] now. We did not do [the] Circ(ularization) [burn], and I'd like to talk about the TVC servo loops.
098:11:29 Hartsfield: Understand. No Circ.
098:11:33 Mattingly (Casper): That's affirmative. Presently, about a mile ahead of the LM.

NASA
AS16-1 3-18288





A 61 6 113 18339

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
HOUSTON, TEXAS 77058

FOR RELEASE:
PHOTO NO. AS16-113-18339

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COLOR

21 APRIL 1972 AS16-113-18339

MANNED SPACECRAFT CENTER, HOUSTON, TEXAS

APOLLO 16 ON MOON----Astronaut John W. Young, commander of the Apollo 16 lunar landing mission, leaps from the lunar surface as he salutes the U. S. flag at the Descartes landing site during the first Apollo 16 extravehicular activity (EVA-1). Astronaut Charles M. Duke Jr., lunar module pilot, took this picture. The Lunar Module "Orion" is on the left. The Lunar Roving Vehicle is parked beside the LM. The object behind Young in the shade of the LM is the Ultraviolet Camera/Spectrograph. Stone Mountain dominates the background in this lunar scene. While Young and Duke descended in the LM to explore the Moon, Astronaut Thomas K. Mattingly II, command module pilot, remained with the Command and Service Modules in lunar orbit.

"This shows the advantage of lunar gravity. I weighed, with my suit and backpack, about 360 Earth pounds, but only 60 pounds (30 kg) in the 1/6 gravity of the moon. The 'jumping salute' photo is one of my favorite pictures, as it shows how nice it will be to live and work on the Moon."

John Young (Jacobs, p. 109).

234

CHARLES DUKE (APOLLO 16)

1972

John Young jumping and saluting the US flag, EVA 1. 16-27 Apr 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972. 19,5 x 25,4 cm (7.6 x 10 in), with NASA MSC caption numbered "AS16-113-18339", "AS16-113-18339" stamp and „A Kodak Paper" watermarks on the verso.
One of the iconic photographs of the Apollo program.

€ 1.200 – 1.800
$ 1.440 – 2.160

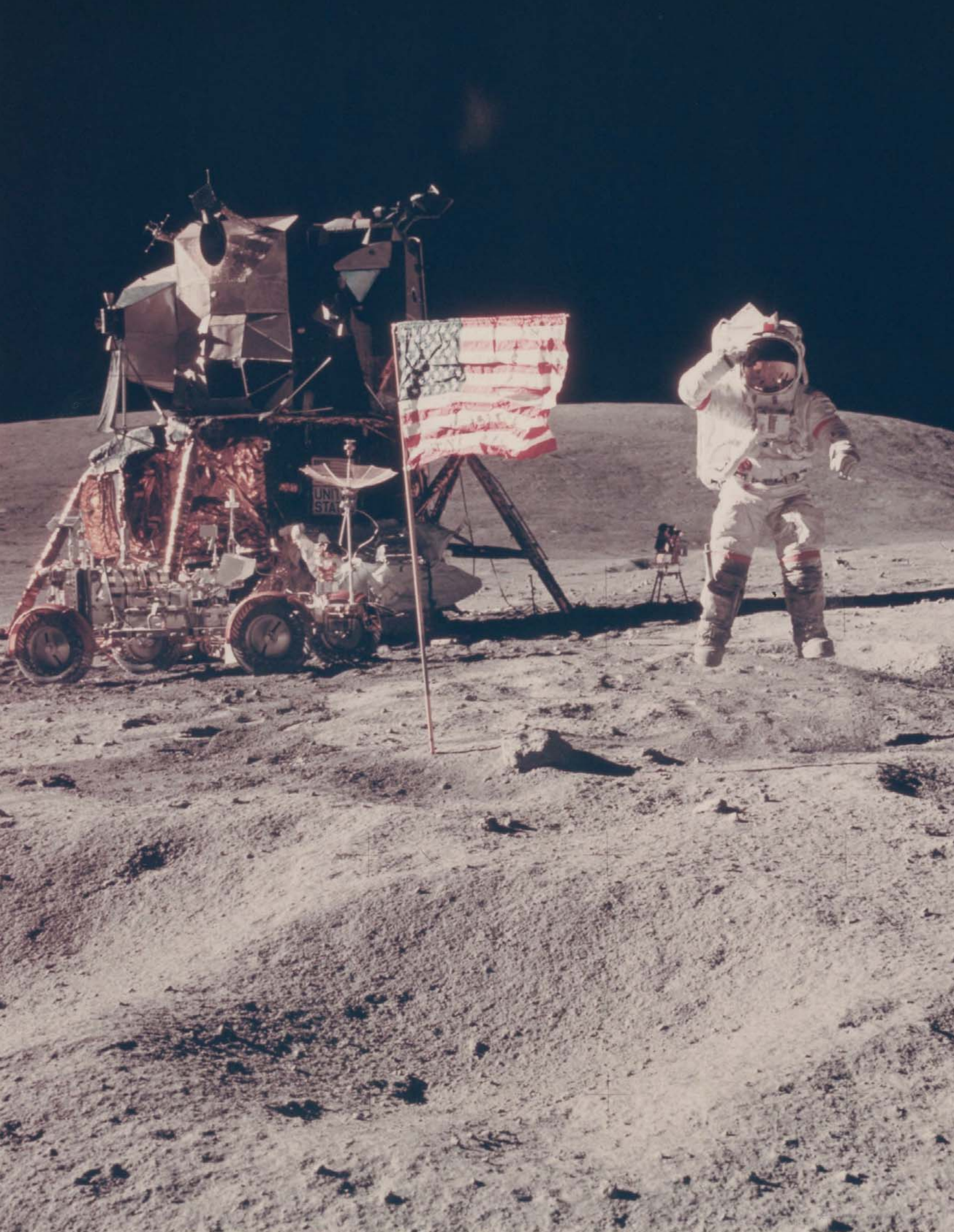
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.53 pm (GMT+2)

"In a burst of exuberance, Young goes aloft for Duke's camera to demonstrate the Moon's meager gravity pull" (Mason, p. 190).

"John Young reached a maximum height of 0.42 m. Although the suit and backpack weigh as much as he does, he only had to bend his knees slightly and then push up with his legs. In the background, we can see the UV astronomy camera, the flag, the LM, the Rover with the TV camera watching Young, and Stone Mountain" (ALSJ caption for AS16-113-18339).

From the mission transcript when the photograph was taken:
120:23:50 Duke: Are you setting it (the flag) up now?
120:23:51 Young: Yeah.
120:23:52 Duke: Okay, wait a minute; I'll run and come get the camera. Can't pass that up.
120:23:56 Young: That's all right. (Grunts) That's got it. (Pause)
120:24:05 Duke: Wait a minute. You're not getting away from there without me getting your picture. [...]
120:24:20 Duke: You are black from the knees down already.
120:24:23 Young: I know, I had to go...I've been on my knees twice to get things. (There's) no way to avoid it. That's why I'm glad the pressure suit bends. [...]
120:25:23 Duke: 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.
120:25:35 Young: Look at this. (Pause)
120:25:40 England (Mission Control): That's a pretty outstanding picture here (on the TV), I tell you.
120:25:42 Duke: Come on; a little bit closer. Okay, here we go. A big one.



"I'd like to see an Air Force salute, Charlie"

John Young

235

JOHN YOUNG (APOLLO 16)

1972

Charles Duke saluting the US flag at Descartes Base, EVA 1. 16-27 Apr 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972. 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS16-113-18342" (NASA MSC) in red in top margin.

€ 1.200 – 1.800
$ 1.440 – 2.160

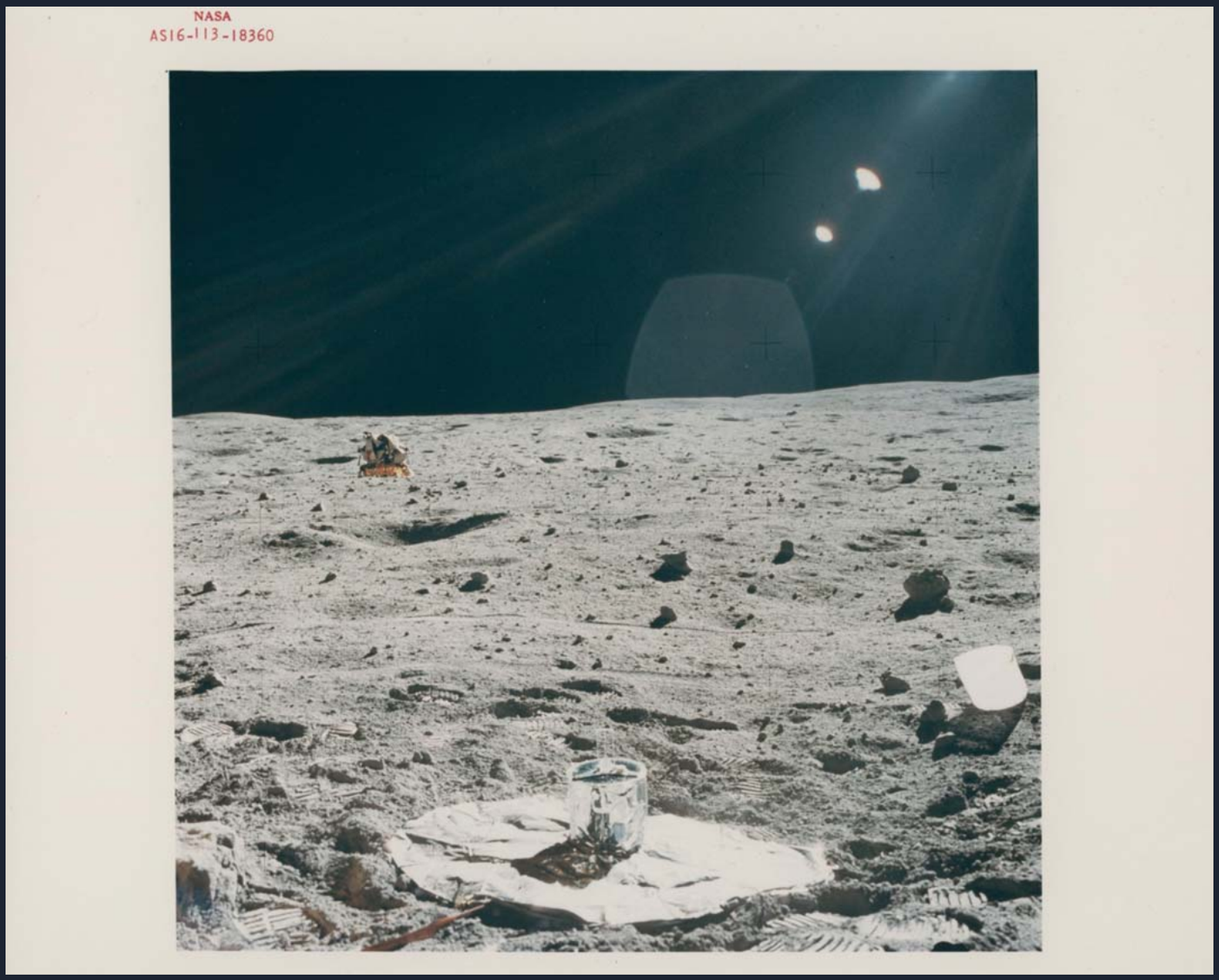
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.54 pm (GMT+2)

Charles Duke took the camera off his RCU (Remote Control Unit) bracket, gave it to Young and they traded places for this picture showing Duke saluting.

"The LMP Charles Duke honors the flag, the Nation, and the American people in this salute to the Stars and Stripes. Stone Mountain, 5 km in the distance and approximately 500 m higher than the landing site, forms the skyline behind the astronaut. The Lunar Rover is parked near the LM. The far- UV camera/spectrograph sits on a tripod partially shaded by the shadow of the LM" (NASA SP-315, p. 4.9).

From the mission transcript when the photograph was taken:
120:26:05 Young: I'd like to see an Air Force salute, Charlie, but I don't think they salute in the Air Force.
120:26:08 Duke: Yes, sir; we do.
120:26:09 Young: (Laughing)
120:26:10 Duke: And fly high and straight and land soft.
120:26:13 Young: Okay, Charlie, say when.
120:26:15 Duke: Here we go.
120:26:16 Young: Do it again.
120:26:17 Duke: One for you. Okay, wait a minute; one more.



236

CHARLES DUKE (APOLLO 16)

1972

LM Orion and US flag from the lunar-science station, EVA 1. 16-27 Apr 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972. 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS16-113-18360" (NASA MSC) in red in top margin.
A very rare unreleased photograph.

€ 800—1.200
$ 960—1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th—July 15th, 2021
Call time: July 15th, 6.55 pm (GMT+2)

"In the near field, you can see the Passive Seismic. And, of course, you're looking more to the east now, back at the Rover (means 'LM'). You can see the little rise we had to walk up. Really, we're almost eye-level with the Ascent Stage."

Charles Duke (from the ALSJ mission transcript at 122:13:49 GET).

A beautiful frame from the panoramic sequence taken by Duke near the Central Station at the lunar-science station. The US flag to the left of the LM is almost hidden by a little rise.

"This photo is a graphic illustration of the undulation of the terrain. Careful examination of the Ascent Stage shows the hatch facing about 45 degrees to the left, indicating that Duke took this picture from SW of the spacecraft. The distance is about 90 m" (ALSJ caption for AS16-113-18360).

237

CHARLES DUKE (APOLLO 16)

1972

The Rover in front of Stone Mountain at the lunar-science station, EVA 1. 16-27 Apr 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972
[NASA AS16-113-18366]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.56 pm (GMT+2)

"It was real soft in that area. And you can see the Rover in the background. And it was parked basically facing south. I think 195 degrees was the heading and the (TV) camera's looking at us taking a picture. To me, the ground looks like what I call 'freshly plowed' and it just looked like it had been rained on. You can see where the unspoiled surface was. And you see, when you step on it, it makes it a brighter albedo. Why that is, I don't know. The surface was fairly unconsolidated in this area."

Charles Duke (from the ALSJ mission transcript at 122:14:34 GET).

A frame from the panoramic sequence taken by Duke near the Central Station at the lunar-science station. The Heat Flow Electronics package is in the foreground. Deep footprints leading to the Lunar Rover are visible on the rim of a small crater. Stone Mountain, approximately 5 km in the distance, forms the skyline behind the Rover.

238

CHARLES DUKE (APOLLO 16)

1972

John Young in brilliant Sun glare at the lunar-science station, EVA 1. 16-27 Apr 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972. 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS16-113-18373" in red in top margin (NASA MSC), with three filing holes in top margin.
A very rare unreleased photograph.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.57 pm (GMT+2)

"We practiced all the photographic sequences that we had. Every time we put out the ALSEP in training, we would go through not only the experiments deployment but we'd go through the photo layout and sequence so we knew what to do and it was second nature," remembered Charles Duke.

(from the ALSJ mission transcript at 122:13:07 GET).

Young is working near the Central Station and the RTG (Radioisotope Thermoelectric Generator). He is using the thumper to provide energy to activate the geophones of the Active Seismic Experiment. The deployed magnetometer is in the foreground.

From the mission transcript when the photograph was taken:
122:20:26 England (Mission Control): And, Charlie, while you're taking the pictures and all, verify the area around the Central Station is policed up.
122:20:37 Duke: Okay, I will. [...]
122:21:05 Young: Okay. Coming up on the last one (thumper firing). [...] Going up here by the Central Station. (Pause) Going to fire it at the white line next to the first geophone. [...]
122:21:36 Duke: Wait a minute, John. (Pause) Okay. Go ahead.
122:21:41 Young: Okay, Houston. Last one. 4, 3, 2, 1, Fire.

239

CHARLES DUKE (APOLLO 16)

1972

Portrait of John Young at Descartes, EVA 1. 16-27 Apr 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972. 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS16-114-18388" (NASA MSC) in red in top margin, with three filing holes in top margin.
A fantastic portrait of John Young at Descartes' lunar science station.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.58 pm (GMT+2)

"Young is bagging a sample from a small crater behind the Rover at the ALSEP site" (ALSJ caption for AS16-114-18387). His backpack's antenna used for communication is visible against the dark sky of space. Young has the Hasselblad camera mounted on his chest as he works with a sample bag, using the camera top as a work surface.

"The components of the ALSEP are in the background. The lunar surface drill is just behind and to the right of astronaut Young. The drill's rack and bore stems are to the left. The three-sensor Lunar Surface Magnetometer is beyond the rack. The dark object in the right background is the Radioisotope Thermoelectric Generator (RTG). Between the RTG and the drill is the Heat Flow Experiment. A part of the Central Station is at the right center edge of the picture" (original NASA caption for AS16-114-18388).

240

JOHN YOUNG (APOLLO 16)

1972

Portrait of Charles Duke at Plum Crater, EVA 1. 16-27 Apr 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972. 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "AS16-114-18423" (NASA MSC) in red in top margin. An amazing frame from the panoramic sequence taken by Young at station 1.

€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

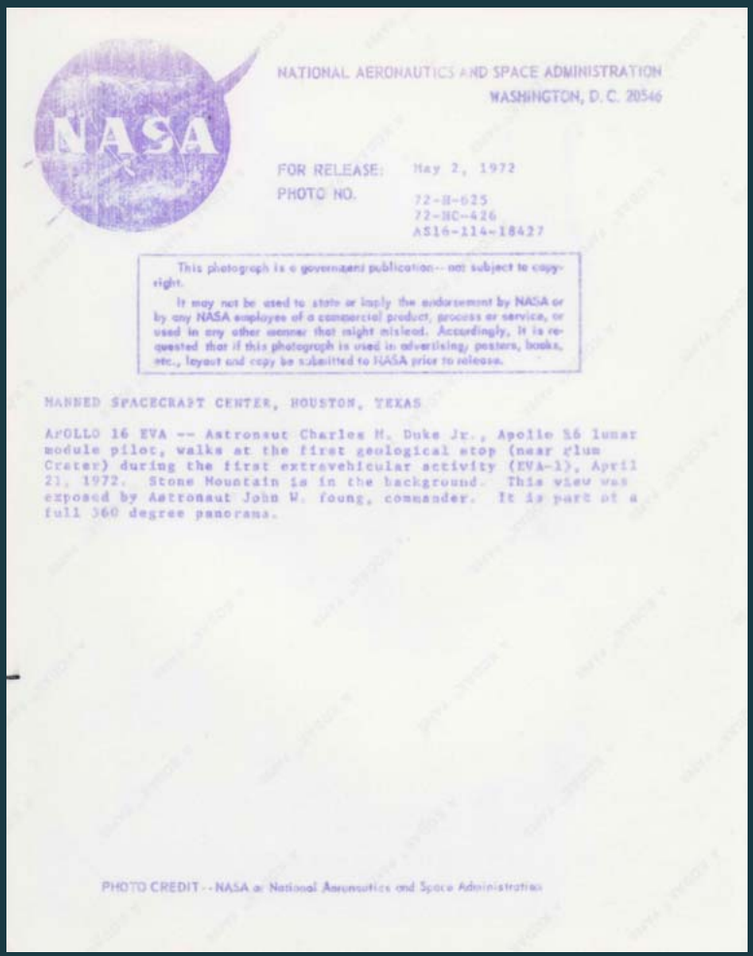
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 6.59 pm (GMT+2)

Duke watches his photographer in the superb scenery of Plum Crater, "raising his right hand to waist height in greeting" (from the ALSJ mission transcript at 124:03:12 GET).

The scoop previously planted by Duke to provide scale in pictures of the lunar surface is visible next to him.

The photograph shows "the beauty and stark bleakness of the lunar surface. With its antenna pointed toward Earth, the Lunar Rover in the background beams a TV picture to vicarious explorers around the world. Duke stands near the rim of Plum Crater. The Hasselblad camera and documented sample bag hangs from the remote control unit on his chest. The Sample Collection Bag (SCB) hangs from the primary life support system on his back. The scoop is stuck into the lunar surface near his left hand. The reflection of the photographer can be seen in his visor" (NASA SP-315, p. 4.11).

From the mission transcript when the photograph was taken:
124:03:01 Duke: John, you are just beautiful. That is the most beautiful sight.
124:03:07 Young: What's that?
124:03:08 Duke: You standing there on the rim of that crater.
124:03:09 England (Mission Control): Doggone. I've never heard John described as beautiful. [...]
124:03:12 Duke: (To England) Well, he's not really... Well, actually, he is on this thing; I'll tell you.
124:03:21 Duke: (As he waves) Hi, there.



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
WASHINGTON, D.C. 20546

FOR RELEASE: May 2, 1972
PHOTO NO. 72-H-625
72-HC-426
AS16-114-18427

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MANNED SPACECRAFT CENTER, HOUSTON, TEXAS

APOLLO 16 EVA -- Astronaut Charles M. Duke Jr., Apollo 16 lunar module pilot, walks at the first geological stop (near Plum Crater) during the first extravehicular activity (EVA-1), April 21, 1972. Stone Mountain is in the background. This view was exposed by Astronaut John W. Young, commander. It is part of a full 360 degree panorama.

PHOTO CREDIT -- NASA or National Aeronautics and Space Administration

241

JOHN YOUNG (APOLLO 16)

1972

Charles Duke exploring Plum Crater, EVA 1.
16-27 Apr 1972.

Vintage Chromogenic print on resin coated Kodak paper, printed 1972. 20,3 x 25,4 cm (7.9 x 10 in), with NASA HQ caption numbered "AS16-114-18427" and "A Kodak Paper" watermarks on the verso.

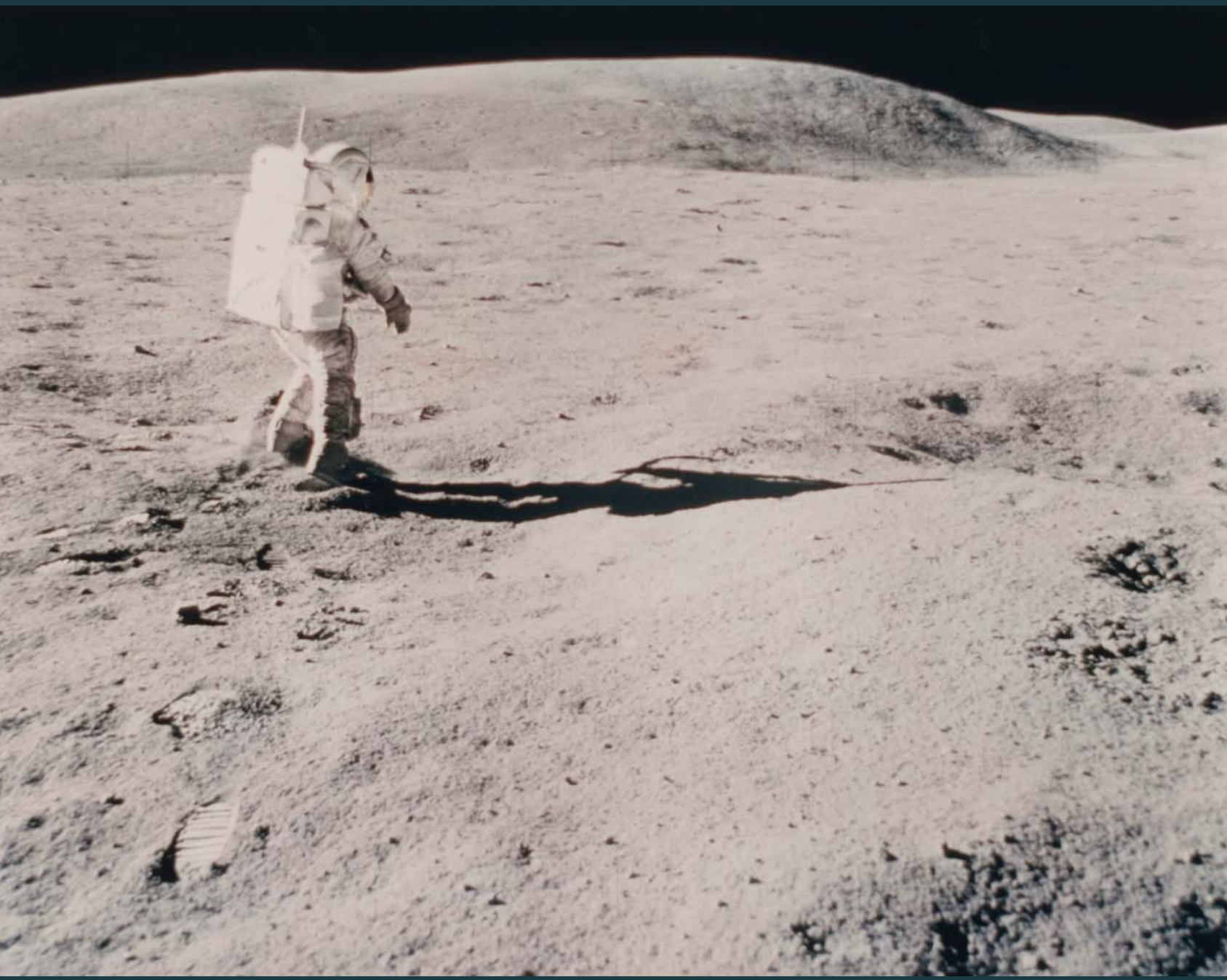
€ 1.000 – 1.500
$ 1.200 – 1.800

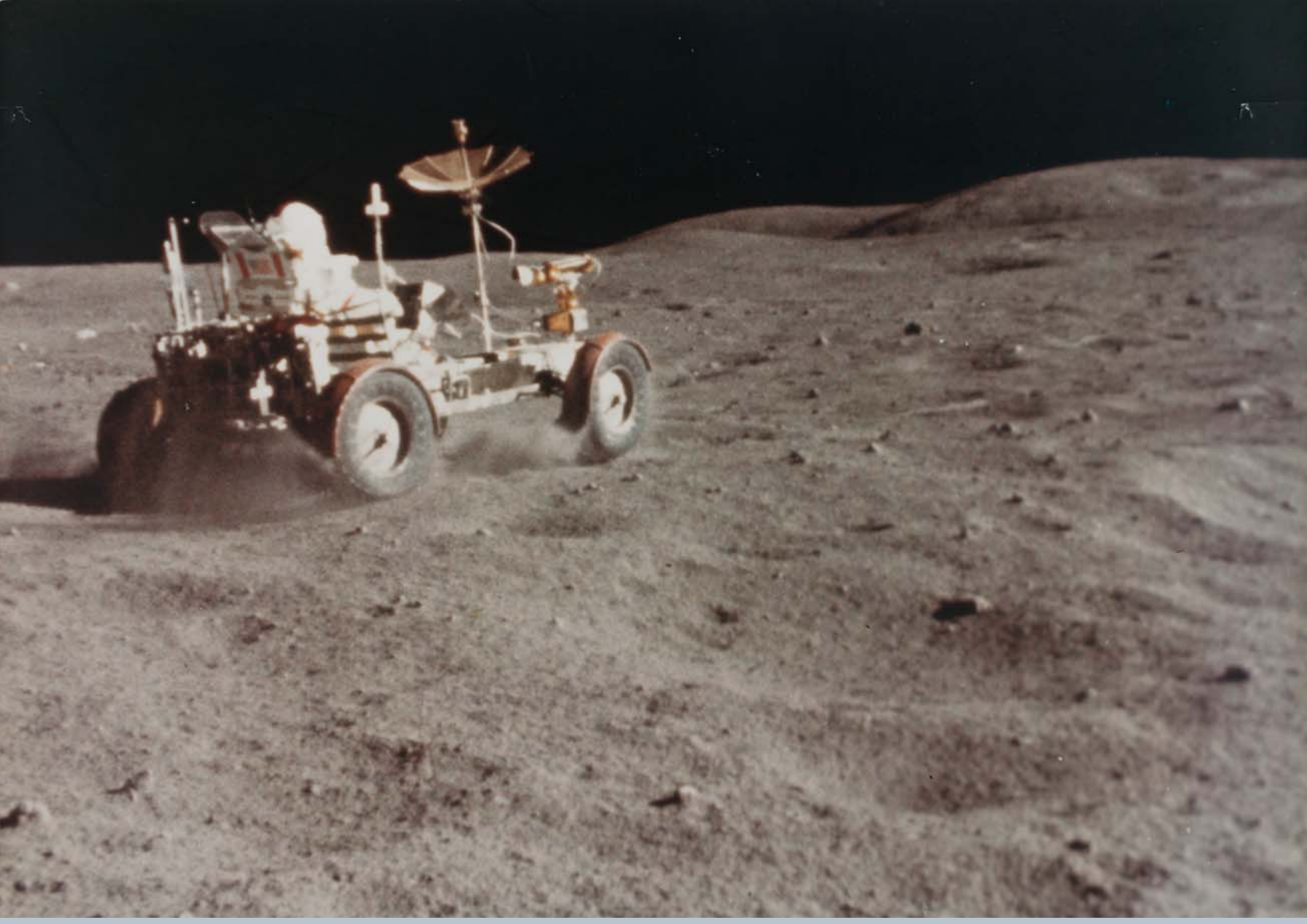
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.00 pm (GMT+2)

A splendid frame of the station 1 panorama taken by Young from the far side of Plum Crater (not visible in the image) from the Rover. Charles Duke is moving to the south to examine some angular rocks looking towards South Ray Crater, with Plum Crater behind him. Stone Mountain, some 500-m high and 5-km in the distance forms the skyline in the background. The small crater to the right is about five meters in diameter. Duke's Sample Collection Bag (SCB) is clearly visible attached to his PLSS (Portable Life Support System).

From the mission transcript when the photograph was taken:
124:03:24 Duke: Hey, John, I'm going to run on 0 and look at some of these angular ones out here.
124:03:28 Young: Okay. (Pause)
124:03:36 Duke: Tony, those lineations are definitely (pause) due to the shadows on this loose regolith. [...]
124:03:51 England (Mission Control): ...We're going to have to hustle you on pretty soon, so you better grab those angular rocks.
124:03:59 Duke: Okay.
124:04:00 Young: That pan takes me through frame 53.





[LARGE FORMAT]

"I didn't get up to any great speed – maybe 10 clicks at the most – but the terrain around there was too rough and too rocky for that kind of foolishness."

John Young (1972 Technical Debrief, from the ALSJ mission transcript at 124:59:32 GET).

242

CHARLES DUKE (APOLLO 16)

1972

Lunar Grand Prix at Descartes Base, EVA 1. 16-27 Apr 1972.

Large format vintage Chromogenic print on fiber-based Kodak paper, printed 1972 [NASA S-72-37002]
26,4 x 34,2 cm (10.3 x 13.4 in), with "A Kodak Paper" watermarks on the verso.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.01 pm (GMT+2)

The Lunar Rover gets a speed workout by astronaut John Young in the "Grand Prix" run at the end of the first EVA at the Descartes landing site.

Young is driving toward the LM, with Smoky Mountain on the horizon on the right side of the picture, and is testing how the vehicle handles in the Moon's one sixth gravity. The dust being thrown up by the wheels is clearly visible.

The view is a frame from motion picture film exposed by a 16mm Maurer camera held by Charles Duke.

From the mission transcript when the photograph was taken:
124:52:30 Duke: Okay, John. We need to stop out here for the Grand Prix. [...]
124:52:39 Young: Here's a flat place, sort of. [...]
124:55:09 Duke: Okay. Well, wait. Why don't you just drive towards the LM. Let me move out here, and you just drive towards the LM, turn around, and then drive towards Stone. [...]
124:55:20 Duke: Let me get the camera. Let me get it set here now. It's 24 (frames per second). [...]
124:56:58 Duke: DAC (16mm camera)'s on; Mark. (Pause) That max acceleration?!
124:57:06 Young: No.
124:57:10 Duke: Man, you are really bouncing! (Pause)
124:57:14 England (Mission Control): Is he on the ground at all...
124:57:16 Young: Okay; that's 10 kilometers (per hour). (Hearing England) Huh?
124:57:20 Duke: (To England) He's got about two wheels on the ground. There's a big rooster tail out of all four wheels. And as he turns, he skids. The back end breaks loose just like on snow. Come on back, John. (Pause) And the DAC is running. Man, I'll tell you, Indy (meaning the Indianapolis 500)'s never seen a driver like this. (Pause) Okay, when he hits the craters and starts bouncing is when he gets his rooster tail. He makes sharp turns. Hey, that was a good stop. Those wheels just locked.

243

JOHN YOUNG (APOLLO 16)

1972

243 Charles Duke, the LM Orion, the US flag, the Rover and the UV astronomy camera, EVA 1. 16-27 Apr 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972. 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS16-114-18439" (NASA MSC) in red in top margin, with three filing holes in top margin.

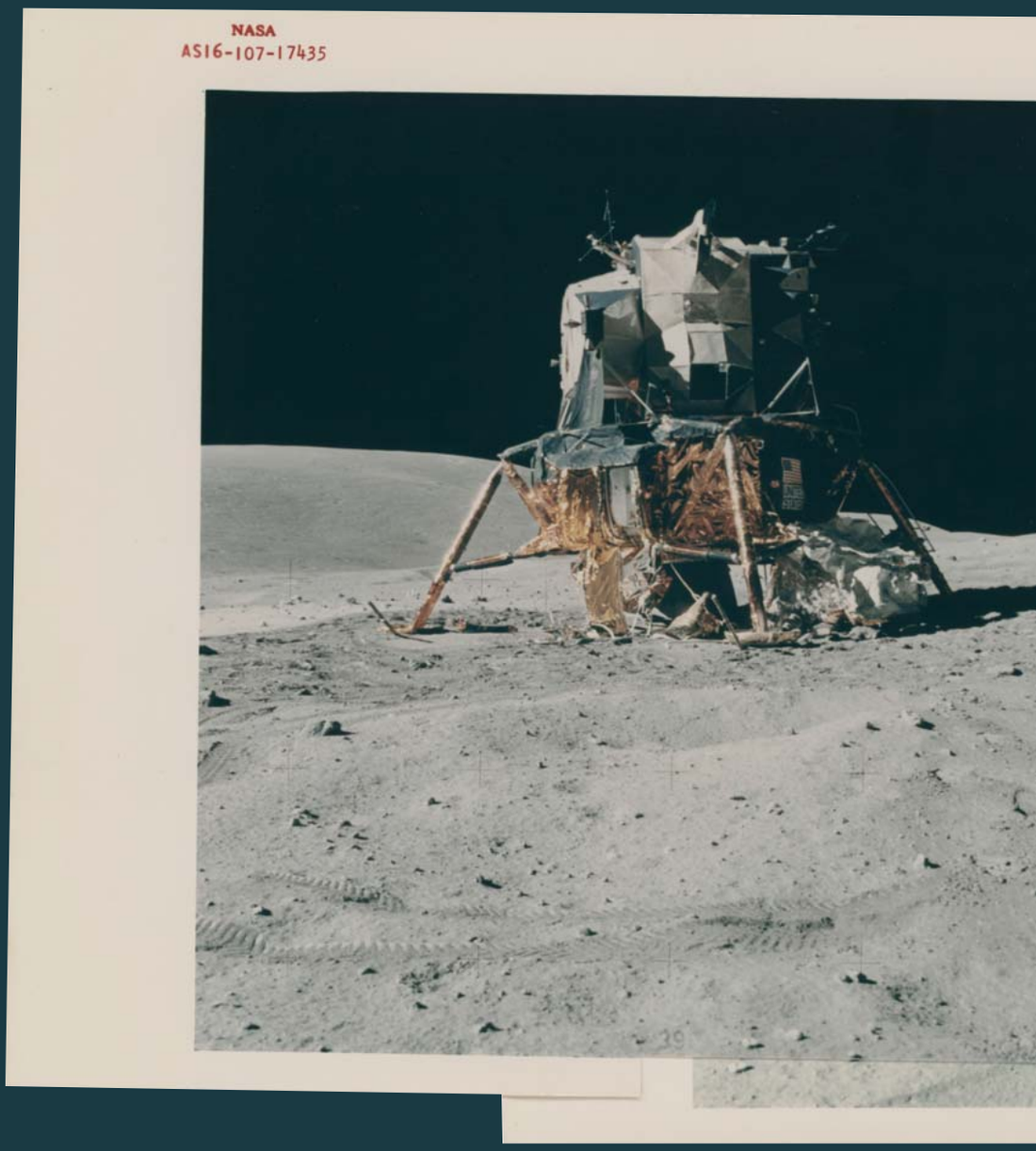
€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.02 pm (GMT+2)

John Young took the photograph during EV close-out at the LM. Charles Duke stands in the shadow of the Lunar Module behind the ultraviolet (UV) camera which is in operation and carries a boulder (nicknamed 'Big Muley'). The UV camera's gold surface is designed to maintain the correct temperature. The astronauts set the prescribed angles of azimuth and elevation (here 14 degrees for photography of the large Magellanic Cloud) and pointed the camera. Over 180 photographs and spectra in far-ultraviolet light were obtained showing clouds of hydrogen and other gases and several thousand stars. The US flag and the Lunar Rover are in the left background.

From the mission transcript when the photograph was taken:
125:24:19 Young: Houston, if I take a down-Sun (photograph), I'll have to stand in front of this contraption. You want me to do that? In front of the (UV) camera at 3 feet (focus)?
125:24:31 England (Mission Control): I guess if you stand a few feet away from it, it shouldn't be too bad. Move 8 or 10 feet away, though.
125:24:40 Young: Okay. I'll take it at 8 feet (focus). (Pause)
125:24:53 Duke: [...] That rock we picked up (next to the Rover at Station 1), the big - the muley - is... Oh, I was going to say, glass crystals; but (I) take that back. Part of it seems to be shocked, and it's a crystalline rock on the inside under all the dust. Whatever it is.



244

CHARLES DUKE (APOLLO 16)

1972

Panorama of Descartes Base with the LM Orion, John Young, the Rover and the US flag, EVA 2. 16-27 Apr 1972.

Unique hand mosaic, collage of three vintage Chromogenic prints on fiber-based Kodak paper, printed 1972.
21,1 x 46 cm (8.3 x 18.1 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS16-107-17435 to AS16-107-17439" (NASA MSC) in red in top margin.
These extremely rare panoramas, taken by the astronauts on the lunar surface, were not easy to produce.

€ 4.000 – 6.000
$ 4.800 – 7.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.03 pm (GMT+2)

On the lunar surface, the astronauts' movements were encumbered by spacesuits and they were unable to align the cameras with a view-finder. Because they were wearing helmets, the cameras were mounted on the chests of the spacesuits. Without the benefit of a view-finder, crews were trained how to point, shoot, turn slightly, point and shoot again until a panorama of overlapping photographs was generated. During the last three missions they even used a telephoto lens to shoot distant features. Once the crews returned to Earth, the images captured with this technology had to be printed and then hand-assembled into David Hockney-like panoramic collages that provide a spectacular boots-on-the-ground view of the lunar landscape.

This panorama was taken facing the 4 o'clock position relative to the LM hatch (20 m from NNE of the LM). Stone mountain, approximately 5km in the distance

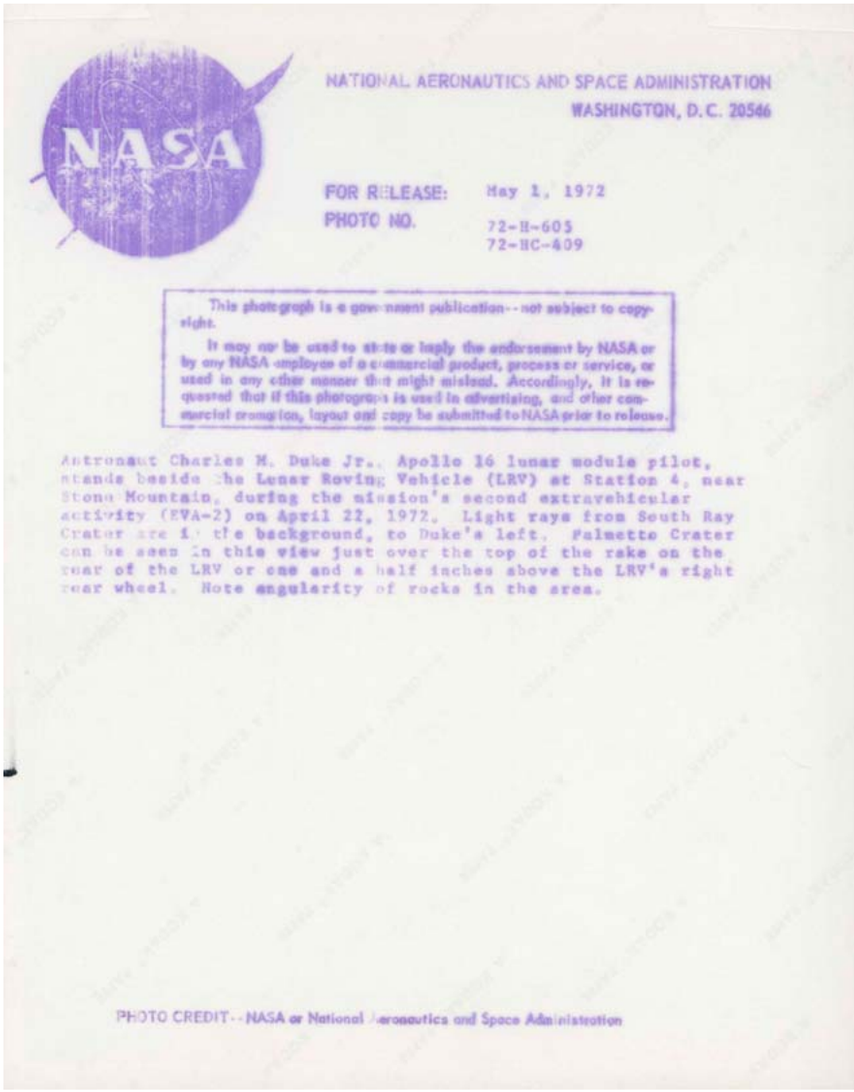
"This and similar views of the LM, Rover and our flag was always special. Other than the grey and white of the Moon, this was the only color. What a contrast to the stark Moon. The landing site that John selected was dead level so this made the deployment of the rover and the ALSEP a simple task."

Charles Duke (Constantine, p. 99).

and 500m high, is in the left background behind the LM. Young is beyond the Rover just south of the LM shadow, collecting samples.

"Below the 'United States' sign on the LM is the Modularized Equipment Stowage Assembly (MESA) pallet, a storage area for experiments and tools. A white insulation blanket protects the area from excessive heating and cooling. To the left is a white area with gold-colored insulation draping to the surface. This is the quad III payload area, a storage area for the far-UV camera/spectrograph, the lunar portable magnetometer, and hand tools. The probes sticking up from the two landing pads are designed to detect LM touchdown on the Moon and then to crush and bend out of the way during the completion of the landing maneuver. The Lunar Rover is parked to the right of the LM. The dark areas on the surface are boot and vehicle tracks" (NASA SP-315, p. 4.15).

From the mission transcript when the panorama was taken:
143:13:18 Duke: Okay. The old pan...
143:13:22 Duke: ...starts at f/11 at 250. Okay. Exactly 60 feet to the left, Tony!
143:13:36 England (Mission Control): Okay. (Pause)
143:13:46 Duke: The best pan. (Pause)
143:13:53 Duke: Boy, it sure looks different looking up-Sun. (Pause) You can still see those lineations in Stone Mountain, Tony. In fact, they're maybe a little bit more pronounced (with the Sun higher than it was during EVA-1).



NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
WASHINGTON, D.C. 20546

FOR RELEASE: May 1, 1972
PHOTO NO. 72-H-605
72-HC-409

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Astronaut Charles M. Duke Jr., Apollo 16 lunar module pilot, stands beside the Lunar Roving Vehicle (LRV) at Station 4, near Stone Mountain, during the mission's second extravehicular activity (EVA-2) on April 22, 1972. Light rays from South Ray Crater are in the background, to Duke's left. Palmetto Crater can be seen in this view just over the top of the rake on the rear of the LRV or one and a half inches above the LRV's right rear wheel. Note angularity of rocks in the area.

PHOTO CREDIT--NASA or National Aeronautics and Space Administration

245

JOHN YOUNG (APOLLO 16)

1972

Charles Duke admiring the spectacular view from Stone Mountain, EVA 2. 16-27 Apr 1972.

Vintage Chromogenic print on resin coated Kodak paper, printed 1972. 25,4 x 20,3 cm (10 x 7.9 in), with NASA HQ caption numbered "72-H-605" and "A Kodak Paper" watermarks on the verso [NASA AS16-107-17446].

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

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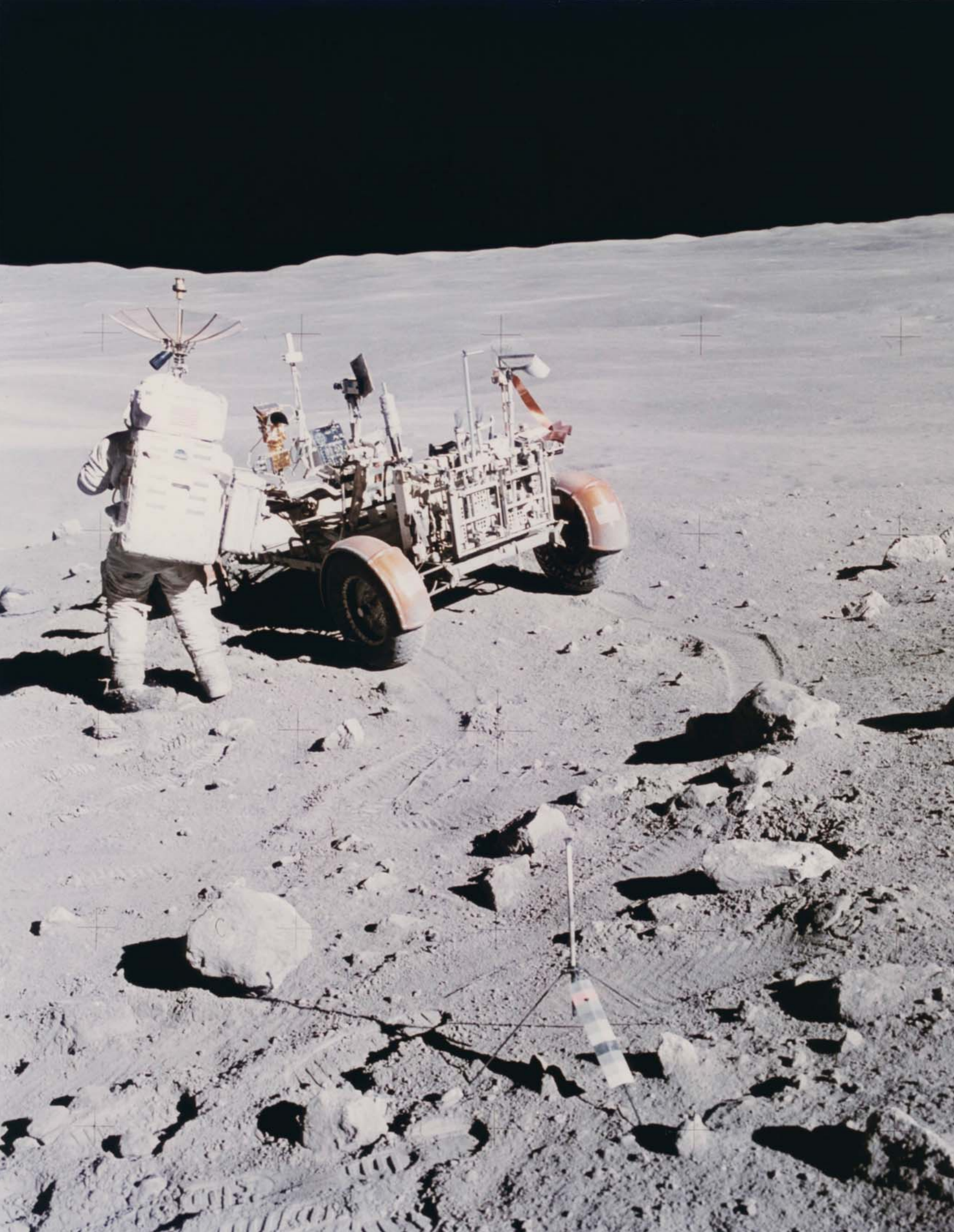
Call time: July 15th, 7.04 pm (GMT+2)

For their second EVA, Young and Duke drove 4 km south to station 4, a cluster of five craters, the Cinco Craters, high on the side of Stone Mountain from where the crew had a spectacular view (the altitude difference between Station 4 and the base of the mountain was about 175 m). Light rays from South Ray crater are in the background, to Duke's left. Palmetto Crater can be seen over the top of the rake on the rear of the Lunar Rover.

From the mission transcript when the photograph was taken:
144:16:27 Duke: Wow! What a place! What a view, isn't it, John?
144:16:30 Young: It's absolutely unreal!
144:16:34 Duke: We've really come up here, Tony. It's just spectacular. Gosh, I have never seen...All I can say is "spectacular", and I know y'all are sick of that word, but my vocabulary is so limited.
144:16:50 England (Mission Control): We're darn near speechless down here...
144:16:51 Duke: Can you guys see (on the TV) how really spectacular the view is?
144:16:59 England: We sure can.



246

CHARLES DUKE (APOLLO 16)

1972

Moonscapes at station 4: John Young near the Rover; Descartes Base in the far distance (2), EVA 2. 16-27 Apr 1972.

Two vintage Gelatin silver prints on fiber-based paper, printed 1972. Each 20,3 x 25,4 cm (7.9 x 10 in), the first with NASA MSC caption on the verso, numbered "NASA AS16-110-17960" and "NASA AS16-110-17980" (NASA MSC) in black in top margin.
The second photograph (AS16-110-17980) was not released by NASA after the mission.

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

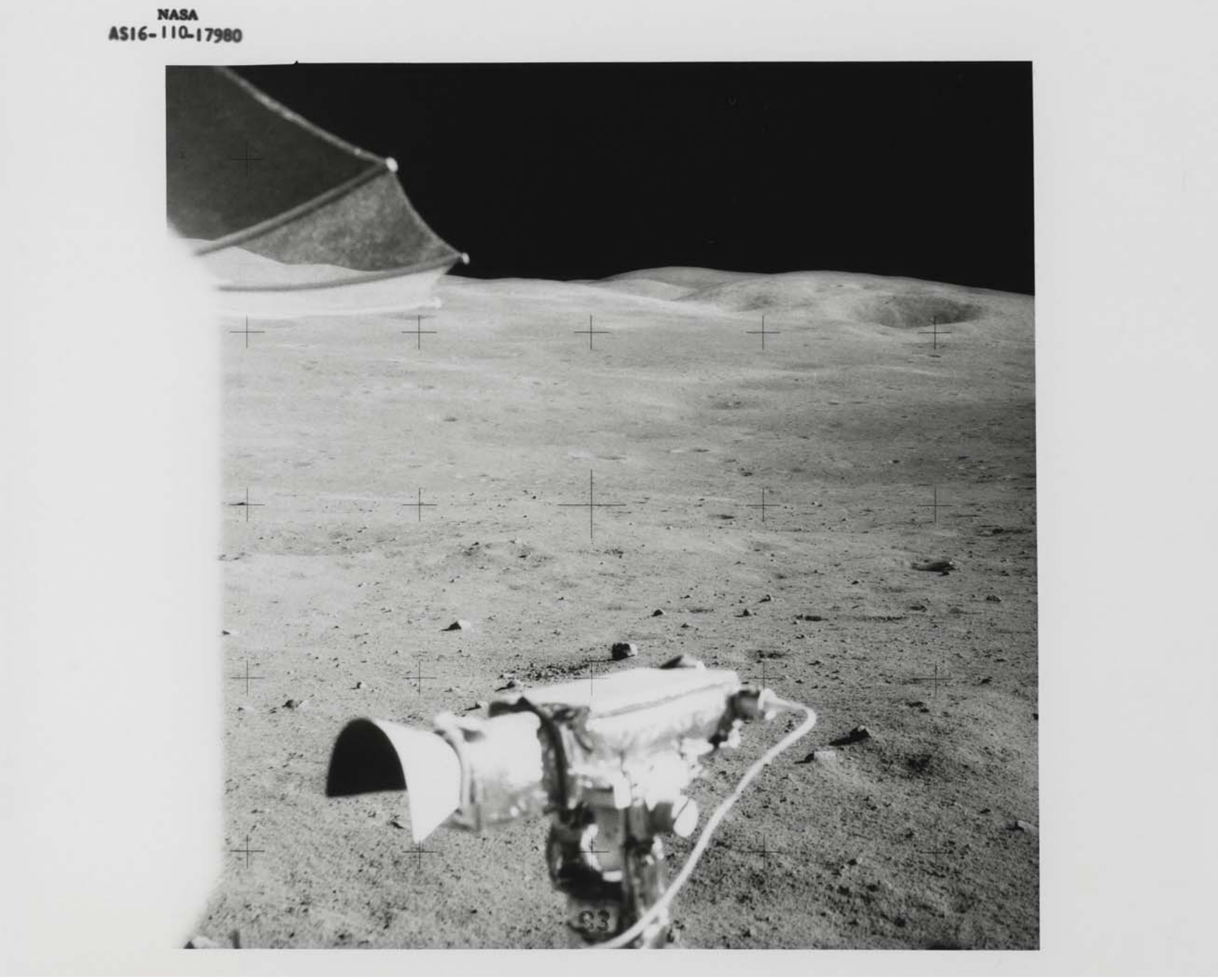
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.05 pm (GMT+2)

Station 4 marked the highest point reached at Stone Mountain and probably the most beautiful stop of the mission. At 152 m (499 feet) above the valley floor, Young and Duke were at the highest elevation above the LM of any Apollo mission.

The first photograph is a frame from a panoramic sequence taken by Duke at station 4. Young replaces tools in the Apollo Lunar Hand Tool (ALHT) carrier at the aft end of the Lunar Rover. This view is looking northeast. Smoky Mountain, with the large Ravine Crater on its flank, is in the left background, about 8 km away.

The second photograph taken at the beginning of the traverse to station 5 shows Descartes base in the far distance.

The LM, about 4 km away, is visible as a small black dot in a slightly lighter area at the top of picture over the third fiducial cross from the right. Smoky Mountain, with the large Ravine Crater on its flank, is in the right background.



"The first place we parked, I tried to get out of the Rover, and I was going to roll down the hill, it was really steep. The rover could actually climb a steeper slope than we could walk on. We were five to seven hundred feet above the valley floor. This was one of the most incredible stops we made."

Charles Duke (Chaikin, Voices, p. 90).

247

C. DUKE & J. YOUNG (APOLLO 16)

1972

John Young driving the Rover back to the LM Orion (2), EVA 2. 16-27 Apr 1972.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1972.
Each 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS16-115-18560" and "NASA AS16-114-18456" (NASA MSC) in red in top margin, with three filing holes in top margin.
The second photograph (AS16-114-18456) was not released by NASA after the mission.
The photographs were taken at the end of EVA 2.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.06 pm (GMT+2)

Duke took the first photograph from the LM Orion whose shadow is in the foreground.

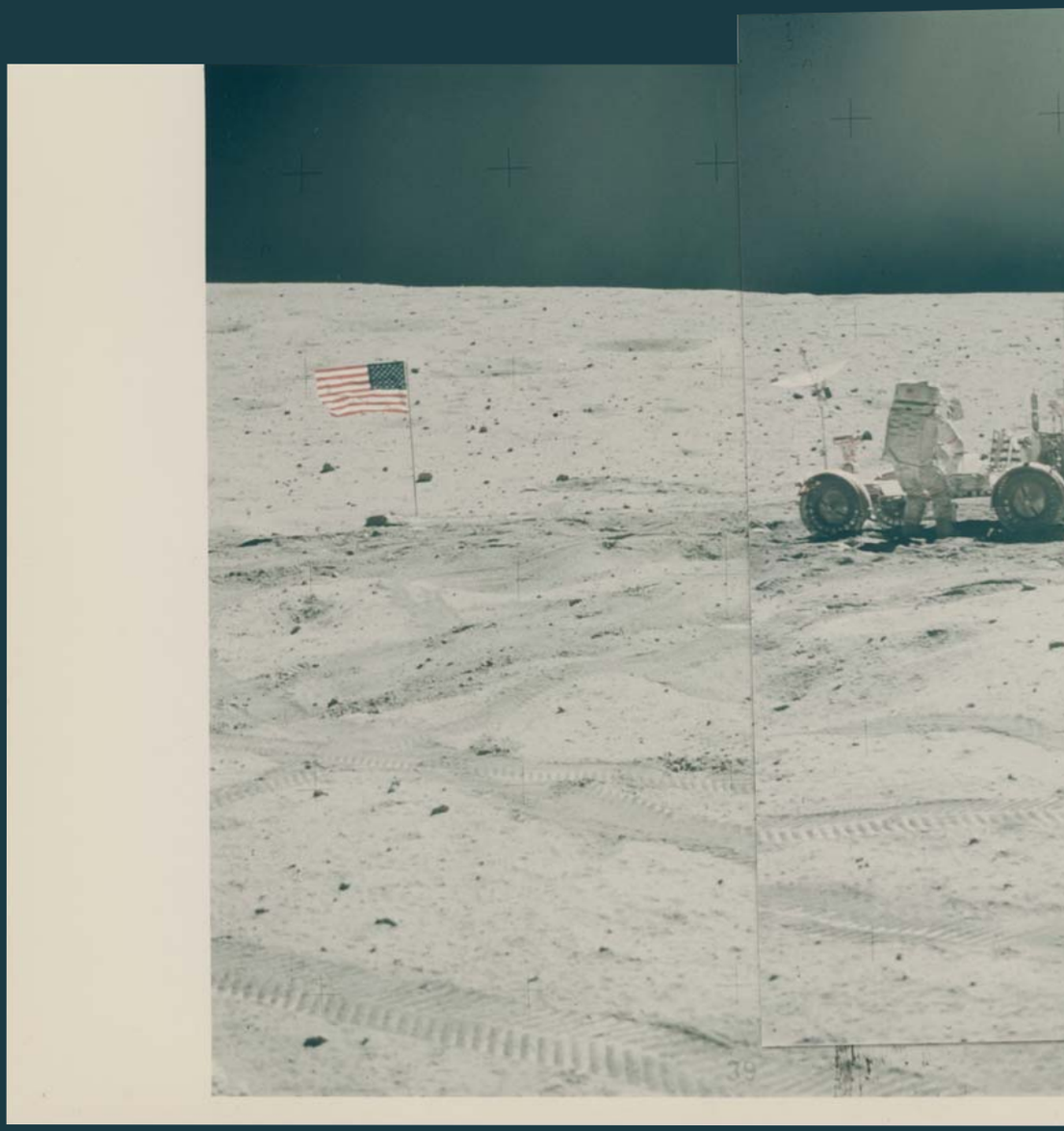
Young is seated in the Rover parked at station 10 near the lunar-science station and about to drive it back to the LM.

Young took the second photograph from station 10 before seating in the Rover and driving back to the LM.

The American Flag is standing to the left of the LM Orion, about 60 m away. Smoky Mountain is in the left background. The photograph shows a smudge pattern to the right of the LM because of lunar dust contacting the right center reseau plate of the camera for all subsequent frames of magazine 114/B and 116/E.

"That blackness you see in those photographs is just black black.
You feel like you can go over there and it's a black velvet screen –
it's just a backdrop for this stage deal we did. So that's the feeling
of space, that you can just reach out and touch it.
And yet there's nothing there."

Charles Duke (Chaikin, Voices, p. 68).



248

CHARLES DUKE (APOLLO 16)

1972

Up-Sun panorama of Descartes Base with John Young, the US flag, the Rover and the LM Orion, EVA 3. 16-27 Apr 1972.

Unique hand mosaic, collage of three vintage Chromogenic prints on fiber-based Kodak paper, printed 1972 [NASA AS16-116-18576 to AS16-116-18580]
19,6 x 44,2 cm (7.7 x 17.4 in), with "A Kodak Paper" watermarks on the verso (NASA MSC).
These extremely rare panoramas, taken by the astronauts on the lunar surface, were not easy to produce.

€ 4.000 – 6.000
$ 4.800 – 7.200

Bidding starts at € 100

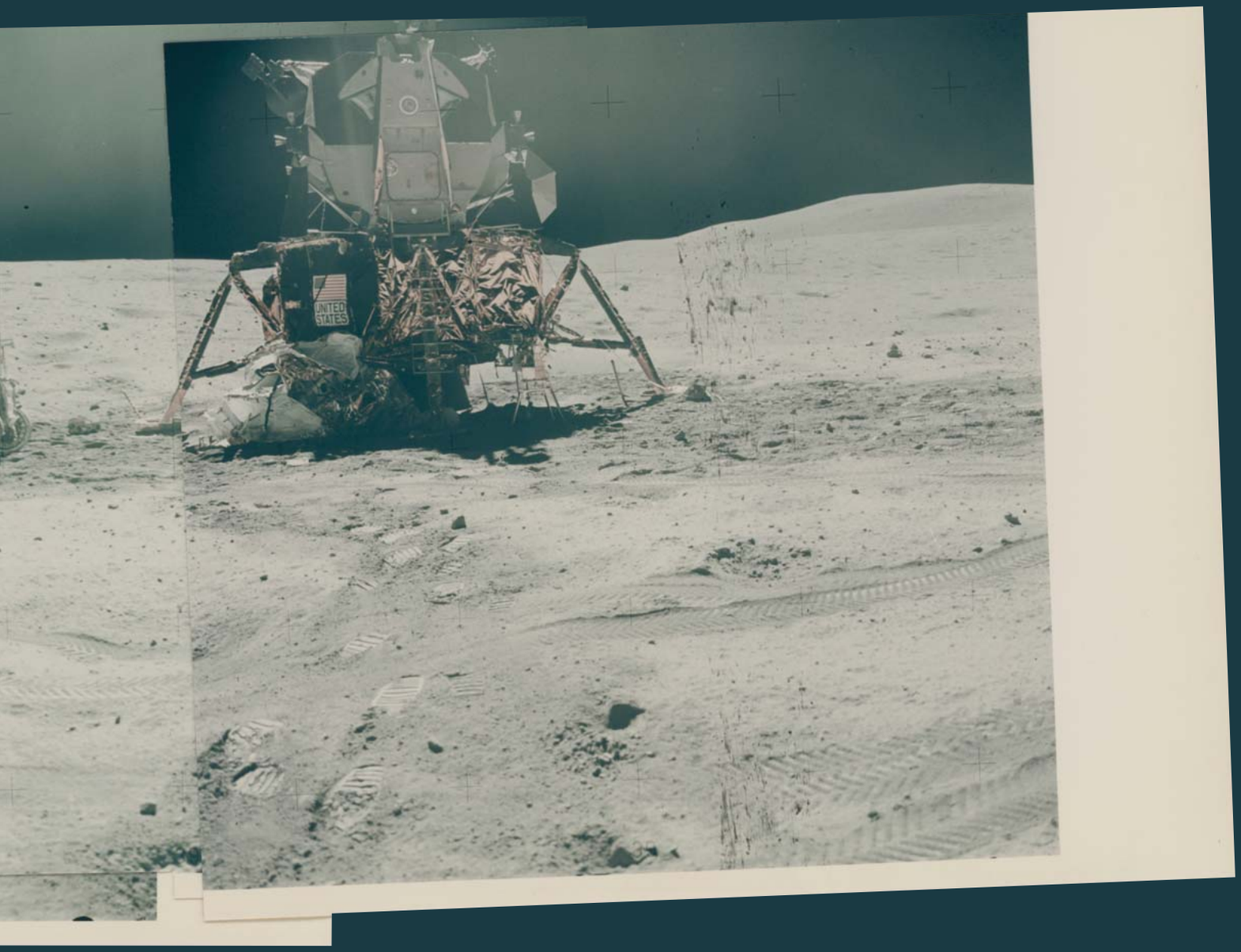
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.07 pm (GMT+2)

On the lunar surface, the astronauts' movements were encumbered by spacesuits and they were unable to align the cameras with a view-finder. Because they were wearing helmets, the cameras were mounted on the chests of the spacesuits. Without the benefit of a view-finder, crews were trained how to point, shoot, turn slightly, point and shoot again until a panorama of overlapping photographs was generated. During the last three missions they even used a telephoto lens to shoot distant features. Once the crews returned to Earth, the images captured with this technology had to be printed and then hand-assembled into David Hockney-like panoramic collages that provide a spectacular boots-on-the-ground view of the lunar landscape.

Duke took this panorama "from a spot west of the ladder strut and, therefore, from a plus-Z position in LM coordinates" (from the ALSJ mission transcript at 165:55:34 GET).

Young is working at the Rover. The forward hatch of the LM, the ladder and the MESA (Modular Equipment Stowage Assembly) to the left of the ladder are clearly visible despite the up-Sun glare; the UV astronomy camera is to the right of the ladder. Rover tracks are in the foreground.

The panorama shows a smudge pattern to the right of the LM because of lunar dust contacting the right center reseau plate of the camera for each frame of the panoramic sequence and all subsequent frames of magazine 116/E.



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

Charles Duke (from the 2007 documentary In the Shadow of the Moon).

From the mission transcript when the panorama was taken:
165:54:58 Duke: (to Young) Okay. Go ahead. I'll take a picture. (Pause) [...]
165:55:34 Duke: Here we are (at) sleepy little Descartes. (Pause)
165:55:46 Duke: Let's see, that's about plus-Z (strut). About (garbled) feet or so. [...]
165:56:13 Young: The big rock bag is on the Hand Tool Carrier (of the rover). And...(Pause)
165:56:30 Duke: Ah, the old U.S. flag. Looks colorful. (Pause)
165:56:42 Young: "Bus A, B, C, and D, close." (Pause) You already got those, huh, Charlie?
165:56:54 Duke: Yeah, I had to turn on the TV for them and it's on external, so...Okay, Tony, pan's complete.

249

JOHN YOUNG (APOLLO 16)

1972

Charles Duke getting the 500-mm camera out from the Rover at North Ray Crater, EVA 3. 16-27 Apr 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972.
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS16-116-18607" (NASA MSC) in red in top margin, with three filing holes in top margin.
A frame from the panoramic sequence taken by Young at station 11 on the southeast rim of North Ray Crater, 4.4 km north of the LM.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.08 pm (GMT+2)

"Young was standing below the Rover and near a dramatic change in slope down into the crater" (ALSJ caption for the station 11 panorama).

Duke is checking the frame count on his LMP Hasselblad camera and getting the telephoto 500-mm Hasselblad camera out from under Young's Rover seat.

From the mission transcript when the photograph was taken:
166:48:48 Duke: Do you want me to start out with the 500(mm Hasselblad camera)?
166:48:50 England (Mission control): Right. Go ahead and start out with your 500.
166:48:52 Duke: [...] Okay, Tony; I have magazine Kilo (with) frame count 1 (on the LMP hasselblad camera), I think, it was.
166:49:06 England: And we've got a picture (on the TV).
166:49:13 Duke: Okay. Those rocks you're looking at now (with the TV camera of the Rover), Tony, are white and they look breccious to me. The big black one (meaning House Rock visited later by the crew) is off behind the TV. And you're going towards the rim on the crater right now (as Fendell pans clockwise).
166:49:34 Young: The unfortunate thing about it, Houston, is that rascally rim...It goes down...It slopes into it about, say, 10 or 15 degrees, which is the kind of slope I'm standing on right now; and then, all of a sudden, in order to see to the bottom, I've got to walk another 100 yards down a 25- to 30- degree slope, and I don't think I'd better. Maybe we can drive around to the other side and see down into it. [...]

250

CHARLES DUKE (APOLLO 16)

1972

Panoramic sequence of John Young and the Rover in front of Descartes Base (2), EVA 3. 16-27 Apr 1972.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1972.
Each 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS16-117-18816" to "NASA AS16-117-1881" (NASA MSC) in red in top margin.
Two very rare photographs.

€ 1.500 – 2.500
$ 1.800 – 3.000

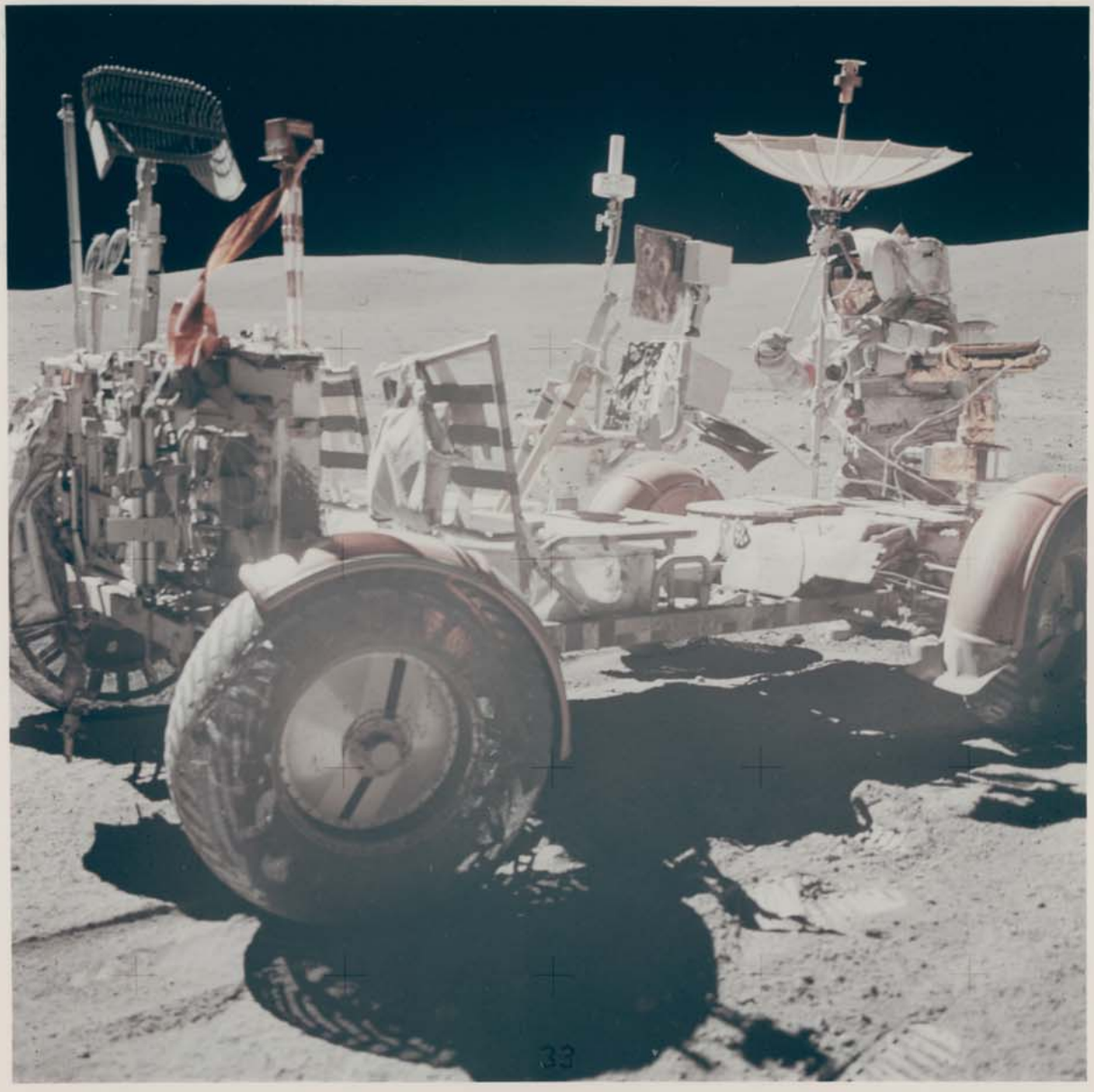
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.09 pm (GMT+2)

Station 10 prime was located about 40 m north of the lunar-science station (out of shot to the right) and about 70 m south south east of the LM. These adjoining photographs show the American flag to the left of the LM (first photograph). John Young is aligning the high-gain antenna of the Lunar Rover toward the Earth with the sighting scope so that Mission Control can survey the station's activities with the TV camera (second photograph). The Rover has only a partial right rear fender because "at one point during EVA-2, Young caught his hammer on the right-rear fender, tearing part of the dust guard completely off, forcing the crew to drive in a rain of dust that was not only a nuisance but also contributed to a noticeable, and somewhat worrisome, heating of the Rover batteries" (from the ALSJ mission summary).

From the mission transcript when the photograph was taken:
169:19:22 Duke: Okay, you moved the (high-gain) antenna, John. (Pause)
169:19:30 England (Mission Control): All right. We lost our picture.
169:19:34 Young: (Garbled)
169:19:42 Duke: Okay. Just a minute. I'm halfway through a pan here. It'll take me 2 seconds. (Pause)
169:19:56 Duke: Okay. Here I come. No, you've got it pointed up too straight. (Pause) Okay. It needs to come left; left; more left; more, more; okay. Now down just a skosh. That's it... Now left.
169:20:23 Young: That's beautiful (meaning the image of Earth in the sighting scope).
169:20:24 Duke: Okay.

NASA
AS16-117-18818



"It was probably the most hostile environment I'd ever been in a flying situation. And yet I felt more at peace and more serene. [...] You didn't feel fearful of the hostile environment. [...] There was a serenity and a peacefulness about the Moon."

Charles Duke (Chaikin, Voices, p. 62).

251

KEN MATTINGLY (APOLLO 16)

1972

Views of the ascent stage of the LM Orion returning from the lunar surface (2). 16-27 Apr 1972.

Two vintage Chromogenic prints on fiber-based Kodak paper, printed 1972.
Each 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS16-122-19529" and "NASA AS16-122-19532" (NASA MSC) in red in top margin, with three filing holes in top margin.
Two very rare unreleased photographs. NASA release variants of these photographs (AS16-122-19530 and AS16-122-19533).

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.10 pm (GMT+2)

After more than three days on the Moon's surface, Young and Duke in the LM Orion were about to join Mattingly in the orbiting CSM Casper to travel back to Earth.

The first photograph is a fantastic view of the LM Orion against the background of the Moon taken looking west with the 80mm lens over the 42-km Crater Nobili (ex Schubert Y, just below the LM). Latitude / longitude: 0.8° N 74 .7° E.

Taken from the CSM Casper looking west with the 80mm lens from an altitude of 110 km, the second photograph shows Orion with a contrasting background of darkness and the Moon's Sea of Fertility over the 11-km Craters Messier and Messier A. Orion is yawing for inspection by Casper before docking. Parts of the LM thermal panels visibly buckled from the stresses of lift-off from the Moon but the damage posed no risk to Young and Duke in their link-up with Casper. Latitude / longitude: 0° N 47.° E.

From the mission transcript as the two spacecrafts were approaching for rendezvous:
177:07:40 Young (Orion): Okay. And you're getting big, Ken.
177:07:45 Duke (Orion): Sure is. Growing like a-
177:07:50 Young (Orion): Okay, we got 2000 feet now, Ken.
177:07:56 Mattingly (Casper): Okay. Man, that looks good.
177:08:02 Young (Orion): What a beautiful machine. [...]
177:09:56 Mattingly (Casper): You look a lot smaller in the daytime. At the same range.
177:10:04 Young (Orion): What a flying machine this is, Ken. Okay, 400 feet; we're going to 4.
177:10:23 Mattingly (Casper): My, you look good. Your forward firing thrusters look like little flashlights when they fire.
177:10:30 Duke (Orion): Ken, you're clean. You don't have a boom out.
177:10:34 Mattingly (Casper): Okay, well, wait until you get back around there and take a look.

"That machine (the LM) just flies so nice. It's just unbelievable! But once you get to ascent stage, it's really light and responsive. Boy, you fire one of those thrusters and it does exactly what you want it to."

John Young (from the mission transcript at 203:12:21 GET after trans Earth injection).

"And I suppose we're seeing as 100 percent full Earth as we'll ever see."

Eugen Cernan

Schmitt stated later, “this now famous picture of the Earth, taken from about 34,000 miles away [18,000 statute miles, actually], shows all of Africa, the continent of human origins and later migrations. [...] In spite of the personal motivations for the descriptions and photographs, when I took this picture, I could not help but be struck by the remarkable fact that humans from that now receding blue, green, red-yellow, and white globe could take such a picture. A new migration to places elsewhere in the solar system had begun. As a geologist, I also reflected on how much our Home Planet had endured over four and a half billion years of time, demonstrating a truly remarkable resilience to apparent diversity”

Jacobs, p. 126

252

H. SCHMITT OR R. EVANS (APOLLO 17)

1972

The “Blue Marble”, first human-taken photograph of the full Earth. 7-19 Dec 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972 [NASA AS17-148-22727]
18 x 24 cm (7 x 9.4 in), with “A Kodak Paper” watermarks on the verso (NASA MSC).

€ 5.000 – 7.000
$ 6.000 – 8.400

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.11 pm (GMT+2)

Only this final Apollo mission saw the Earth fully illuminated.

This iconic photograph taken through the 80mm lens from a distance of about 30,000 km was credited to Schmitt who took most of the photographs of the Earth on the way to the Moon but there is a possibility that Ron Evans took it.

All Apollo flights were heavily scheduled down to the minute. At the time this photo was taken, none of the astronauts was scheduled to do so. Thus this photograph was taken quickly in a stolen moment.

\sl276\slmult1 The photograph was released by NASA on Christmas Eve, four years to the day after the Apollo 8 Earthrise, and the image soon became known as the “Blue Marble,” probably the most widely distributed image in history.

Noteworthy NASA photo editors cropped the black sky of space to make the Earth appear bigger than originally captured on film by the astronauts.

From the mission transcript when the “Blue Marble” was taken:
005:17:37 Schmitt: That view of the Earth for a rev there was something I was looking forward to and I was not disappointed.
005:17:49 Overmyer: That’s great, Jack. [...]
005:19:00 Cernan: Bob, Antarctica is what I would call effectively just a solid white cap down on the - South Pole. There’s definite contact between the continent and the water. But, as Ron said, most of the clouds seem to be, well very artistic, very picturesque - some in clockwise rotating fashion but appear to be very thin where you can, for the most part, kind of see through those clouds to the blue water below. [...]
005:21:07 Schmitt: Could you give us our distance from the Earth ? [...]
005:21:24 Overmyer: 18,100 [nautical miles, 33,520 km], FIDO (Flight Dynamics Officer) says. [...]
005:21:27 Cernan: Okay. And I suppose we’re seeing as 100 percent full Earth as we’ll ever see; certainly as I’ve ever seen. It appears to be - it may be a little bit - a little bit of a terminator way out to the - well, to the east - out beyond Australia and beyond India. But beyond that it’s about 99 percent pure.
005:22:59 Cernan: Bob, it’s these kind of views - these kind of views that stick with you forever. [...]
005:25:56 Cernan: You know - and there’s no strings holding it up either. It’s out there all by itself. [...]
005:49:47 Overmyer (Mission Control): Did you get any pictures of that, Jack?
005:49:50 Schmitt: Oh, yes. We got some pictures earlier. I’m going to get another one here in a minute. I’ll tell you, if there ever was a fragile-appearing piece of blue in space, it’s the Earth right now.

253

HARRISON SCHMITT (APOLLO 17)

1972

The nearly full “Blue Marble”. 7-19 Dec 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972. 25,4 x 20,3 cm (10 x 7.9 in), with “A Kodak Paper” watermarks on the verso, numbered “NASA AS17-148-22735” (NASA MSC) in red in top margin.
An extremely rare and superb unreleased photograph taken with the 80mm lens about an hour later than the “Blue Marble”, from 45,000 km out in space. The Earth is now less than a full disk – night is just beginning to fall across Arabia.

€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.12 pm (GMT+2)

“That lonesome, marbled bit of blue with ancient seas and continental rafts is our planet, our home as men travel the solar system. The challenge for all of us is to guard and protect that home, together, as people of Earth.”

Harrison Schmitt (NASA SP-350, p. 266).

From the mission transcript when the photograph was taken:
006:09:55 Schmitt: Bob, if I’m not waking you up, an observer from another planet certainly - probably could decide that we have such things as clouds and at least large thunderstorms because right at the terminator you get a brightening of the sunlit side and a long, long shadow out to the - out to the east that is reminiscent of what we saw in the early days looking at the Moon at the terminator.
006:10:37 Overmyer (Mission Control): Roger.
006:10:40 Schmitt: However, in the next pass around, I’ll bet you wouldn’t see them.
006:11:21 Schmitt: I’ve never been a big - Well, I didn’t grow up with the idea of drifting continents and sea-floor spreadings, but I tell you, when you look at the way the pieces of the - of the northeastern portion of the African continent seem to fit together, separated by a narrow gulf, you could almost make a believer of anybody.
006:11:22 Overmyer: Roger. It’s beginning to look like the globe that you might buy down at the store, huh?
006:11:57 Schmitt: Oh, I don’t think so, Bob. [Laughter.]
006:11:59 Overmyer: Okay.
006:12:01 Schmitt: I don’t think we’d better put this one up for sale. Somewhere there might be somebody who would like to buy it.

254

HARRISON SCHMITT (APOLLO 17)

1972

Earth from deep space. 7-19 Dec 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972.
25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS17-148-22750" (NASA MSC) in red in top margin.
A very rare unreleased photograph.

€ 1.500 – 2.500
$ 1.800 – 3.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.13 pm (GMT+2)

"With something of the sadness felt as loved ones age, we see the full Earth change to half. [...] The line of night crosses water, land, and cloud, sending its armies of shadows ahead. We see that night, like time itself, masks but does not destroy beauty," reflected Harrison Schmitt.

(NASA SP-350, p. 265)

A fantastic view of the Earth, centered on South America and West Africa, taken through the 250mm telephoto lens as the crew was about 325,000 km from home.

From the mission transcript when the photograph was taken:
059:12:04 Public Affairs Officer (Mission Control): - This is Apollo Control; 59 hours, 12 minutes Ground Elapsed Time. Apollo 17 currently is 56,148 nautical miles [103,986 km] out from the Moon, closing on the Moon at 3,284 feet per second [1,001 m/s]. Distance from Earth is now 175,441 nautical miles [324,917 km]. We'll continue to leave the line up as we proceed into today's activities which includes another activation and check out of the Lunar Module and hopefully today the communications noise will be somewhat less than it was yesterday.

"The valley of Taurus-Littrow is confined by one of the most majestic panoramas within the experience of mankind. The roll of dark hills across the valley floor blends with bright slopes that sweep evenly upward to the rocky tops of the massifs. The Taurus-Littrow Valley does not have the jagged youthful majesty of our Rockies. Rather it has the subdued and ancient majesty of a valley whose origins appear as one with the Sun. Here Gene and I, who have already transferred to Challenger, view our destination from an altitude of ten miles. On a course that takes it a few thousand feet below us, America continues in lunar orbit; it appears insignificant against a ridge of the South Massif."

Harrison Schmitt (NATIONAL GEOGRAPHIC, September 1973, p. 292).

[LARGE FORMAT]

255

EUGENE CERNAN (APOLLO 17)

1972

CSM America flying at low altitude over the Taurus-Littrow landing site. 7-19 Dec 1972.

Large-format presentation vintage Chromogenic print on fiber-based Kodak paper, printed 1972 [NASA AS17-147-22465]
35,5 x 27,7 cm (13.9 x 10.9 in), with "A Kodak Paper" watermarks on the verso (NASA MSC), very minor crease in upper left corner.

€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.14 pm (GMT+2)

Cernan took the photograph from the LM on the orbit before final descent to the lunar surface from an altitude of ten nautical miles. The Command Module with Ron Evans flying solo on board is visible in the distance (center of image). The landing site of the Valley of Taurus-Littrow extends some 20 miles through the ring of massifs surrounding the plains of the Sea of Serenity in the background.

256

HARRISON SCHMITT (APOLLO 17)

1972

Eugene Cernan saluting the US flag at Taurus-Littrow, EVA 1. 7-19 Dec 1972.

Vintage Chromogenic print on resin coated Kodak paper, printed 1972 [NASA AS17-134-20380]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.15 pm (GMT+2)

The LM is behind the flag and the Lunar Rover behind Cernan. "The handle of his geology hammer is sticking out of a shin pocket on his right leg"

(ALSJ caption for AS17-134-20380).

From the mission transcript when the photograph was taken:
118:23:51 Cernan: Houston...
118:23:52 Schmitt: That's beautiful.
118:23:53 Cernan: ... This has got to be one of the most proud moments of my life. I guarantee you. (Pause) (To Schmitt) Why don't you get a close-in one and we'll trade cameras.
118:24:06 Schmitt: Houston, I don't know how many of you are aware of this, but this flag has flown in the MOCR (Mission Operations Control Room at the Johnson Space Center in Houston) since Apollo 11. And we very proudly deploy it on the Moon, to stay for as long as it can, in honor of all those people who have worked so hard to put us here and to put every other crew here and to make the country, United States, and mankind, something different than it was.

"I captured the Earth, the Moon, the man, and the country all in one. I'm proud of this picture," said Eugene Cernan who is reflected in Schmitt's visor.

(Schick and Van Haaften, p. 65)

257

EUGENE CERNAN (APOLLO 17)

1972

Harrison Schmitt and the Earth above the US flag, EVA 1. 7-19 Dec 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972 [AS17-134-20384] 19,2 x 25,3 cm (7.5 x 9.9 in), with "A Kodak Paper" watermarks on the verso (NASA MSC). A great photograph showing a human being on the lunar surface with his Home Planet in the background.

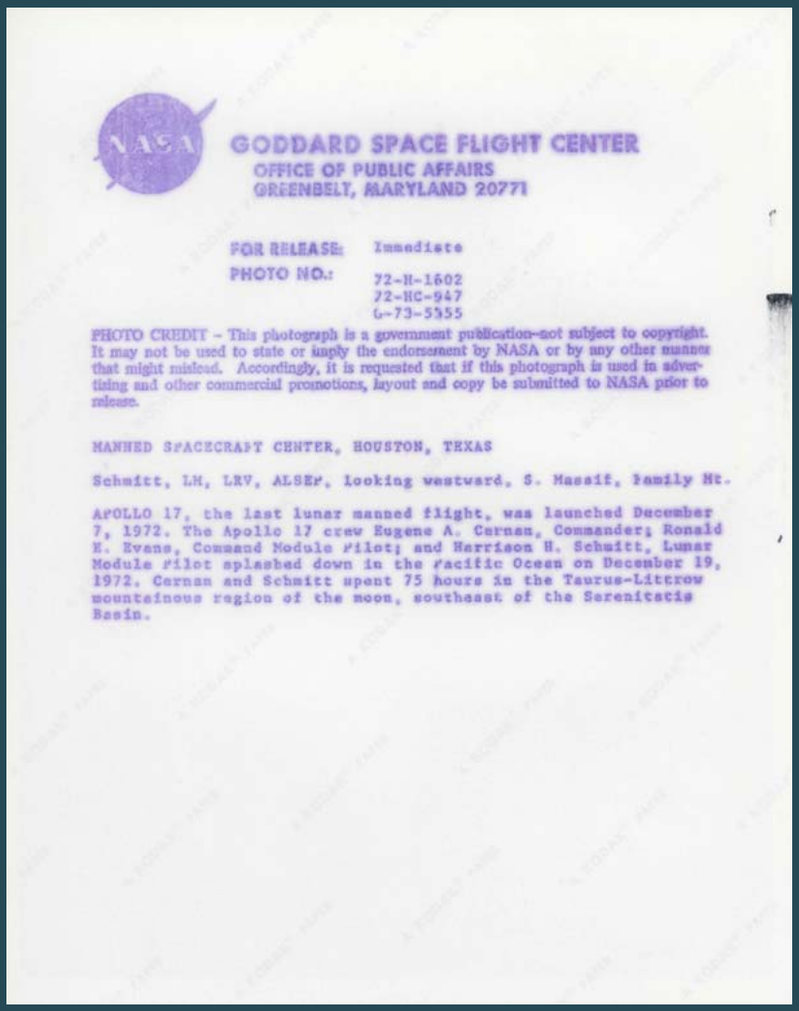
€ 3.000 – 5.000
$ 3.600 – 6.000

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.16 pm (GMT+2)

NASA photography specialist Richard Underwood described the photograph as "one of the great photos ever to come out of the space program" (NASA Johnson Space Center Oral History).

From the mission transcript when the photograph was taken:
118:25:37 Cernan: Well, I want to get something here.
118:25:46 Schmitt: What's that?
118:25:47 Cernan: I want to get the Earth.
118:25:49 Schmitt: Okay. Let me get over here.
118:25:51 Cernan: Get around on that side.
118:25:54 Schmitt: I don't think it's going...You're a little close, maybe, to have them both in focus. That might do it.



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FOR RELEASE: Immediate

PHOTO NO.: 72-H-1602
72-HC-947
G-73-5355

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MANNED SPACECRAFT CENTER, HOUSTON, TEXAS

Schmitt, LM, LRV, ALSEP, looking westward, S. Massif, Family Mt.

APOLLO 17, the last lunar manned flight, was launched December 7, 1972. The Apollo 17 crew Eugene A. Cernan, Commander; Ronald E. Evans, Command Module Pilot; and Harrison H. Schmitt, Lunar Module Pilot splashed down in the Pacific Ocean on December 19, 1972. Cernan and Schmitt spent 75 hours in the Taurus-Littrow mountainous region of the moon, southeast of the Serenitatis Basin.

258

EUGENE CERNAN (APOLLO 17)

1972

Wide-angle view of Taurus-Littrow Base, EVA 1. 7-19 Dec 1972.

Vintage Chromogenic print on resin coated Kodak paper, printed 1973 [NASA AS17-134-20435]
20,3 x 25,4 cm (7.9 x 10 in), with NASA Goddard caption numbered "G-73-5355" and "A Kodak Paper" watermarks on the verso.

€ 800—1.200
$ 960—1.440

Bidding starts at € 100

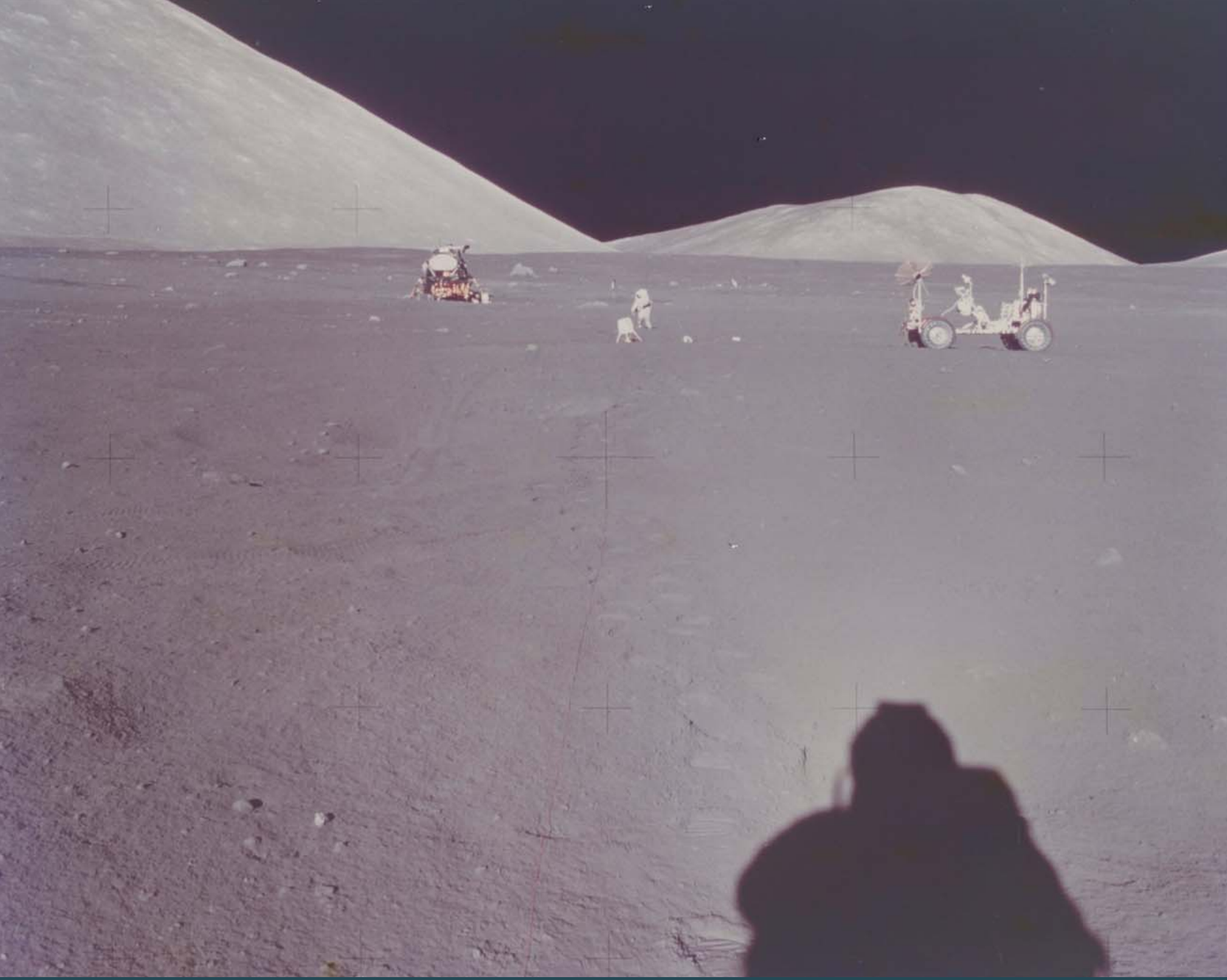
ketterer-internet-auctions.com – Bidding June 20th—July 15th, 2021
Call time: July 15th, 7.17 pm (GMT+2)

With bright mountains rising above the dark lava plains, the Apollo 17 landing site surrounded the astronauts with magnificent views. Cernan took the photograph from the end of the east arm of the SEP (Surface Electrical Properties) transmitter array. Harrison Schmitt is shown working at the end of the west arm with the LM and the rover nearby. Also visible in the background are a large rock named Geophone Rock and the lunar-science station (ALSEP site).

"The problem of distance perception on the Moon is well illustrated in this photograph: the distance to the rover is 35 meters; the distance to astronaut Schmitt is 70 meters. The distance to the LM is 150 meters; to the ALSEP, 350 meters. Family Mountain is 11 kilometers beyond the rover, and South Massif is behind the LM" (NASA SP-330, p. 4.16).

More precisely, West Family Mountain behind the Rover is 20 km from the LM; and Old Family Mountain (out of shot to the right) is 11 km away.

From the mission transcript when the photograph was taken:
123:00:32 Cernan: Okay, let me back up a skosh and take the slack out. And I would say, offhand...Oh, boy. That's about as close to a one-sixth-g orthogonal...at least, not orthogonal yet, but straight-lined. (Pause) That's it Jack, here. Stay there, and I'll take a picture.
123:01:04 Schmitt: I thought you did.
123:01:05 Cernan: No. Okay, I got it now.



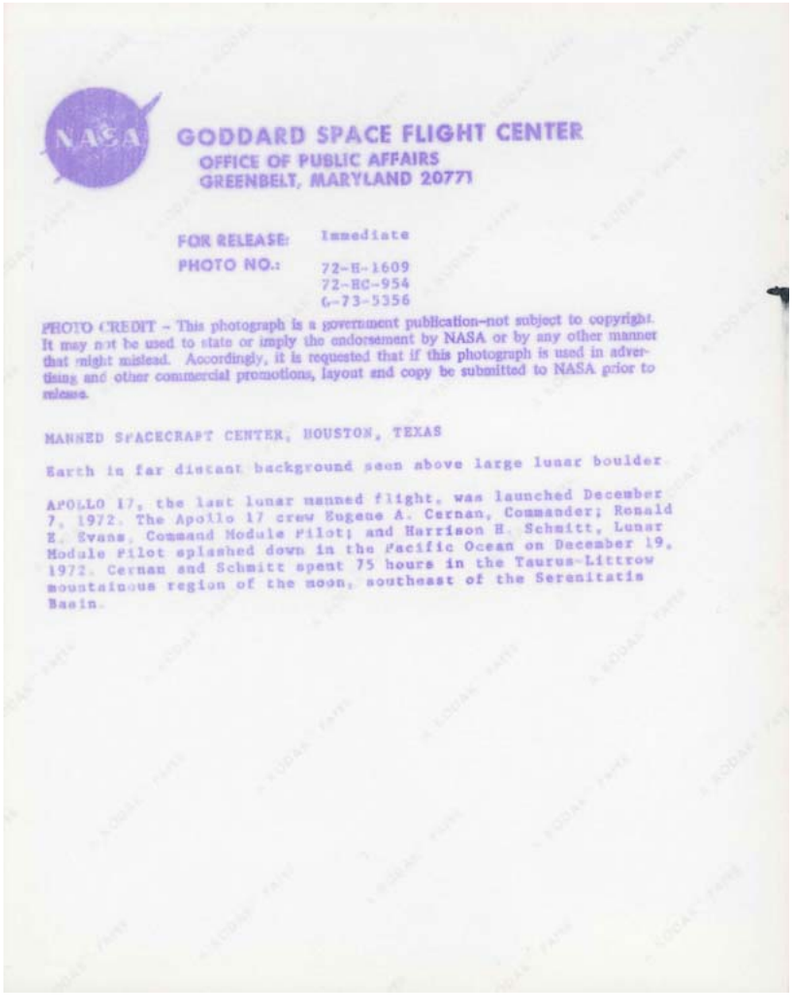


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PHOTO NO.: 72-H-1609
72-HC-954
G-73-5356

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MANNED SPACECRAFT CENTER, HOUSTON, TEXAS

Earth in far distant background seen above large lunar boulder

APOLLO 17, the last lunar manned flight, was launched December 7, 1972. The Apollo 17 crew Eugene A. Cernan, Commander; Ronald E. Evans, Command Module Pilot; and Harrison H. Schmitt, Lunar Module Pilot splashed down in the Pacific Ocean on December 19, 1972. Cernan and Schmitt spent 75 hours in the Taurus-Littrow mountainous region of the moon, southeast of the Serenitatis Basin.

259

EUGENE CERNAN (APOLLO 17)

1972

The majestic Earth above a large lunar boulder, EVA 2. 7-19 Dec 1972.

Vintage Chromogenic print on resin coated Kodak paper, printed 1973 [NASA AS17-137-20910]
20,3 x 25,4 cm (7.9 x 10 in), with NASA Goddard caption numbered "G-73-5356" and "A Kodak Paper" watermarks on the verso.

€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.18 pm (GMT+2)

This magnificent photograph was taken at station 2, located at the foot of the South Massif near the southeast rim of Nansen Crater, 4.8 miles from the LM.

Cernan went downhill a large rock named "boulder 2" and captured the Earth in the lunar sky, which he could see above the rock as he approached it. He had to lean backward to take the shot. The summit of the South Massif forms the background.

"The Earth looked big; and, like the Moon looks down here, it probably wasn't as big as it looked. Yet, because the Earth's beauty was so predominant, there was also a feeling that it was the most precious possession a man could stow in his memory. [...] There you were, standing on the surface of the Moon in full sunlight, looking at the Earth, a quarter million miles away, surrounded by the blackest black. Not darkness, but the blackest black a human being can conceive in his mind. I think the perception that the Earth looks bigger than it really is probably comes from the majesty of its colors and from the fact that you are there on the Moon, looking back at it. It's an overpowering figure of life in the sky."

Eugene Cernan (from the ALSJ mission transcript at 143:20:14 GET).

"The clarity brought on by the lack of atmosphere gives the impression that objects are closer than they really are. This atmospheric clarity made it difficult to estimate distances, so I used the known distance of my shadow and any given sun angle to calibrate my estimates of near field distances and crater diameters."

Harrison Schmitt (Constantine, p. 139).

260

EUGENE CERNAN (APOLLO 17)

1972

Harrison Schmitt and the Rover on the rim of Shorty Crater, EVA 2. 7-19 Dec 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972.
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "AS17-137-21011" (NASA MSC) in red in top margin.

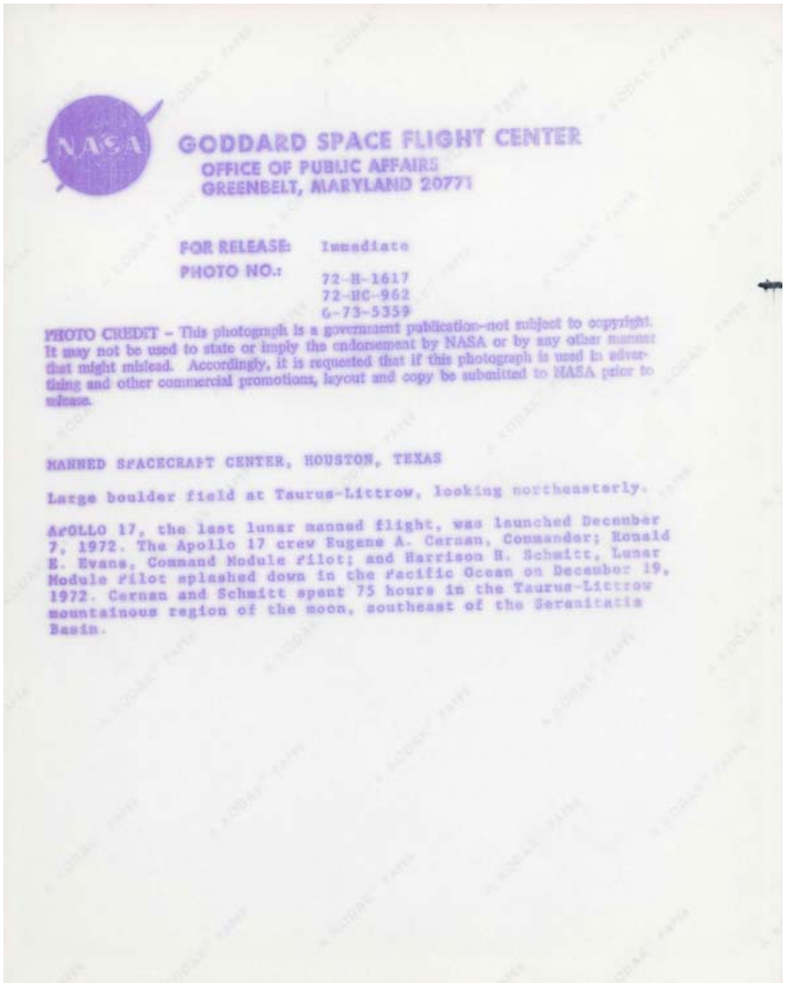
€ 800–1.200
$ 960–1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th–July 15th, 2021
Call time: July 15th, 7.19 pm (GMT+2)

A superb frame from the panoramic sequence taken by Cernan at station 4 near the rim of Shorty Crater.

The western wall of Shorty Crater is at the right of the image; West Family Mountain, rising 1,000 meters above the valley floor, is in the background behind the Lincoln-Lee Scarp, a mare wrinkle ridge crossing the Valley of Taurus-Littrow.



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FOR RELEASE: Immediate
PHOTO NO.: 72-H-1617
72-HC-962
G-73-5359

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MANNED SPACECRAFT CENTER, HOUSTON, TEXAS

Large boulder field at Taurus-Littrow, looking northeasterly.

APOLLO 17, the last lunar manned flight, was launched December 7, 1972. The Apollo 17 crew Eugene A. Cernan, Commander; Ronald E. Evans, Command Module Pilot; and Harrison H. Schmitt, Lunar Module Pilot splashed down in the Pacific Ocean on December 19, 1972. Cernan and Schmitt spent 75 hours in the Taurus-Littrow mountainous region of the moon, southeast of the Serenitatis Basin.

261

EUGENE CERNAN (APOLLO 17)

1972

Camelot Crater, EVA 2. 7-19 Dec 1972.

Vintage Chromogenic print on resin coated Kodak paper, printed 1973 [NASA AS17-145-22159]
20,3 x 25,4 cm (7.9 x 10 in), with NASA Goddard caption numbered "G-73-5359"and "A Kodak Paper" watermarks on the verso.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.20 pm (GMT+2)

A superb example of the magnificent lunar landscapes at Taurus-Littrow. A frame from a panoramic sequence taken by Cernan at station 5 showing a boulder field on the rim of Camelot Crater. The boulders were ejected from underlying lava flows by the impact that formed Camelot some 70 million years ago. Wessex Cleft and the Sculptured Hills are behind the wall of Camelot Crater in the background. The 650-meter-wide Camelot Crater was the largest crater explored by the Apollo 17 crew.

"A geologist's paradise, if I ever saw one..."

Harrison Schmitt (National Geographic, September 1973, p. 301).

262

HARRISON SCHMITT (APOLLO 17)

1972

The Lunar Rover from the LM window, post EVA 2. 7-19 Dec 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972. 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS17-140-21358" (NASA MSC) in red in top margin.
A very rare unreleased photograph, from a panoramic sequence taken from the LM window during the period of rest between EVA 2 and EVA 3; one of the LM thrusters is in the right foreground.

€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

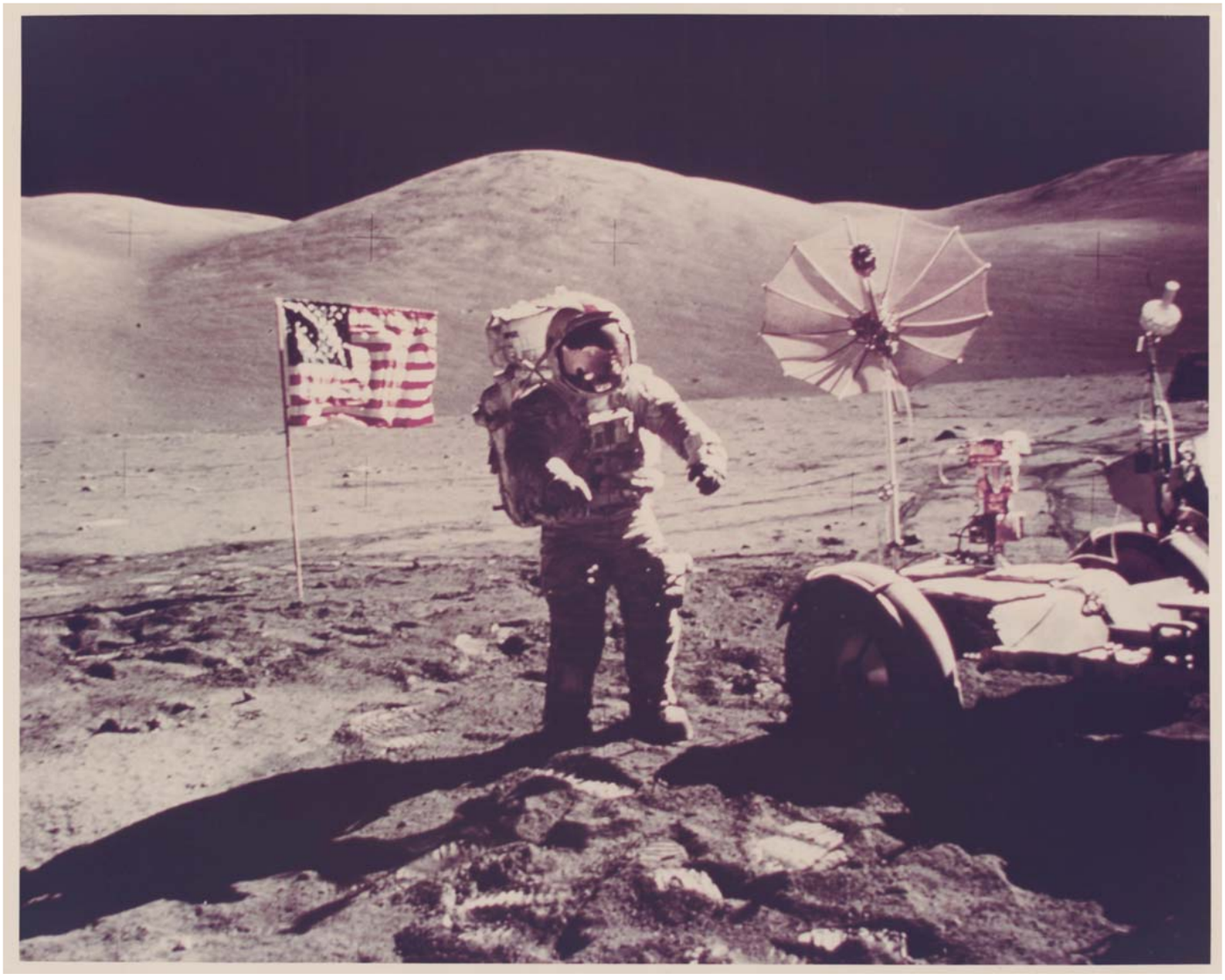
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.21 pm (GMT+2)

"A parked rover awaits our return from sleep before we set out on the third EVA of Apollo 17's surface exploration. We've parked it in an orientation that will minimize heating of its surfaces while we are eating and sleeping in the LM. Our activities around the LM have exposed dark soil beneath the lighter soil caused by our descent-engine exhaust."

Harrison Schmitt (NASA SP-250, p. 287).

"On the surface, when we went to bed at night, we could see the American flag out Schmitt's window and (out Cernan's window) we could see the Earth sitting right on top of the South Massif. Because of where we landed, the Earth was fairly low in the sky and was always part of the scene. Looking at the Earth was something you could do casually, and you would do many times without even realizing it. That was the neat part about it being so low in the sky."

Eugene Cernan (from the ALSJ mission transcript at 113:27:05 GET).



263

HARRISON SCHMITT (APOLLO 17)

1972

Portrait of Eugene Cernan with the reflection of the photographer in his gold-plated visor, EVA 3. 7-19 Dec 1972.

Vintage Chromogenic print on resin coated Kodak paper, printed 1972 [NASA AS17-140-21388]
20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso.
This "tourist" photograph taken near the LM Challenger at the beginning of the last EVA on the lunar surface is one of the most iconic of the Apollo program.

€ 1.200 – 1.800
$ 1.440 – 2.160

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.22 pm (GMT+2)

"As I take man's last step from the surface, back home for some time to come - but we believe not too long into the future - I'd like to just (say) what I believe history will record. That America's challenge of today has forged man's destiny of tomorrow. And, as we leave the Moon at Taurus-Littrow, we leave as we came and, God willing, as we shall return, with peace and hope for all Mankind. Godspeed the crew of Apollo 17."

Eugene Cernan (from the mission transcript at the end of the last lunar surface EVA at 170:41:00 GET).

Cernan's gold-plated visor reflects the photographer, the Rover, and the South Massif.

Cernan is standing between the US flag and the Rover whose high-gain antenna is pointed at Earth.

Wessex Cleft and the Sculptured Hills form the skyline in the background.

"A panorama of lunar history is captured in this view looking south over the Valley of Taurus-Littrow. A huge fragmented boulder had rolled almost a mile down the side of the North Massif to here, Station 6 on our traverse. Our LM and its light area of surface alteration can be seen on the photo about an inch to the right of the top point of the boulder. That's me at the left. Note the marks of my sampling scoop on the debris resting on a slanting surface of the boulder at left."

Harrison Schmitt (NASA SP-350, pp. 284-285).

264

EUGENE CERNAN (APOLLO 17)

1972

Harrison Schmitt next to Tracy's Rock, EVA 3. 7-19 Dec 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972. 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "AS17-140-21496" (NASA MSC" in red in top margin, very slight crease in bottom left margin.

€ 1.000 – 1.500
$ 1.200 – 1.800

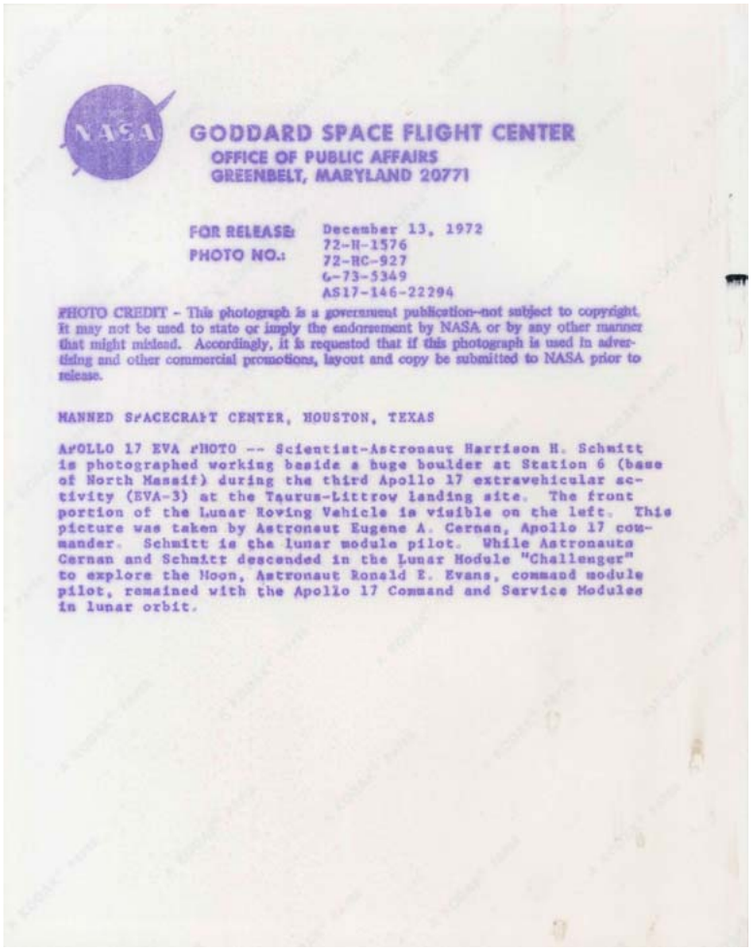
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.23 pm (GMT+2)

A superb frame of the panoramic sequence taken by Cernan upslope from Tracy's Rock at station 6 located on the south slope of the North Massif 50 m above the floor of the Valley of Taurus-Littrow. The large boulder located at this station was named the station 6 boulder or Split Rock or Tracy's Rock, in honor of Eugene Cernan's daughter, who was nine years old at the time of the mission.

Schmitt carries the gnomon after sampling and collecting fragments of Tracy's rock. The East Massif (left) and Bear Mountain (right) form the skyline in the background.

NASA
AS17-140-21496



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FOR RELEASE: December 13, 1972
PHOTO NO.: 72-H-1576
72-HC-927
6-73-5349
AS17-146-22294

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APOLLO 17 EVA PHOTO -- Scientist-Astronaut Harrison H. Schmitt is photographed working beside a huge boulder at Station 6 (base of North Massif) during the third Apollo 17 extravehicular activity (EVA-3) at the Taurus-Littrow landing site. The front portion of the Lunar Roving Vehicle is visible on the left. This picture was taken by Astronaut Eugene A. Cernan, Apollo 17 commander. Schmitt is the lunar module pilot. While Astronauts Cernan and Schmitt descended in the Lunar Module "Challenger" to explore the Moon, Astronaut Ronald E. Evans, command module pilot, remained with the Apollo 17 Command and Service Modules in lunar orbit.

265

EUGENE CERNAN (APOLLO 17)

1972

Harrison Schmitt taking photographs at Tracy's Rock, EVA 3. 7-19 Dec 1972.

Vintage Chromogenic print on resin coated Kodak paper, printed 1973.
20,3 x 25,4 cm (7.9 x 10 in), with NASA Goddard caption numbered "AS17-146-22294" and "A Kodak Paper" watermarks on the verso.

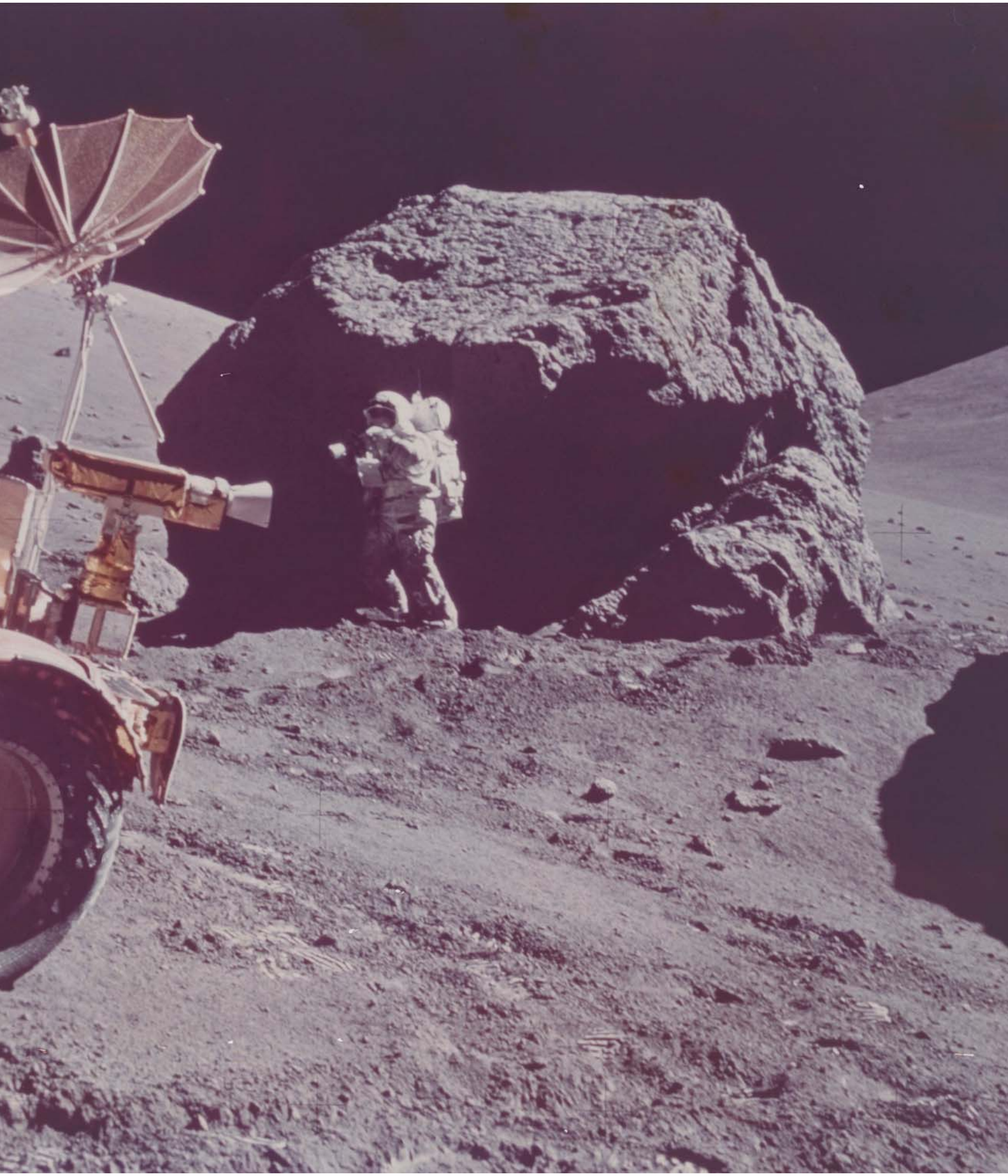
€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.24 pm (GMT+2)

Schmitt holds the Hasselblad camera equipped with the 500mm telephoto lens in his hand. He is leaning on the boulder for stability in order to take photographs of distant features. The Lunar Rover is in the foreground.

From the mission transcript when the photograph was taken:
165:43:48 Schmitt: How am I going to see up there to shoot this thing?
165:43:52 Cernan: Well, why don't you lean against the rock? Go over there and lean against it.



266

EUGENE CERNAN (APOLLO 17)

1972

Human footprints at the last station visited on the lunar surface, EVA 3. 7-19 Dec 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972. 20,3 x 25,4 cm (7.9 x 10 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS17-146-22415" (NASA MSC) in red in top margin.
A very rare unreleased photograph.
This photograph was taken to document the location of the samples Cernan and Schmitt collected at station 9 on the rim of Van Serg Crater, the last station explored on the lunar surface.

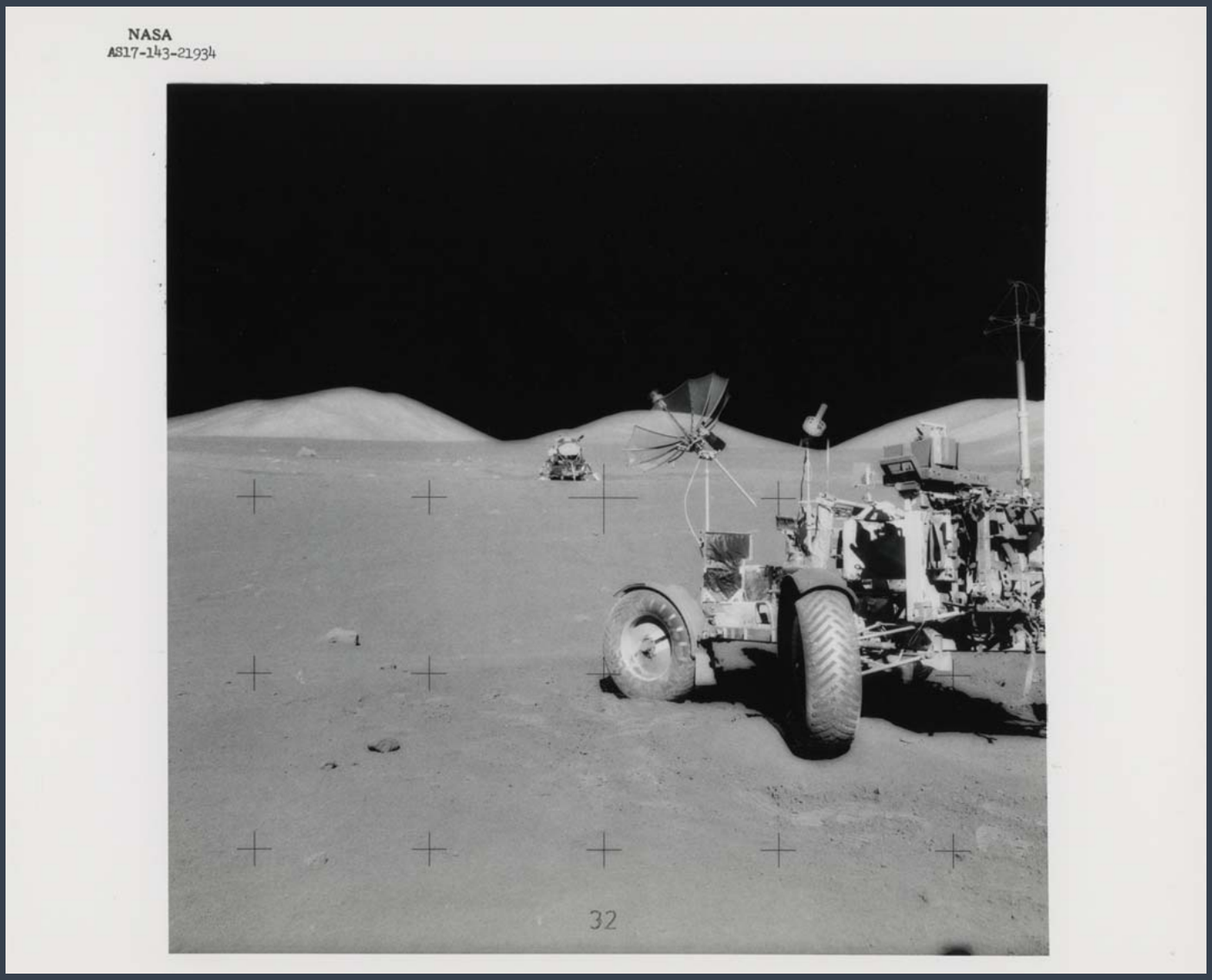
€ 700 – 1.000
$ 840 – 1.200

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.25 pm (GMT+2)

"Another hundred years may pass before we understand the true significance of Apollo. Lunar exploration was not the equivalent of an American pyramid, some idle monument to technology, but more of a Rosetta Stone, a key to unlocking dreams as yet undreamed."

Eugene Cernan.



267

EUGENE CERNAN (APOLLO 17)

1972

The last Lunar Rover watching the last liftoff from the Moon, EVA 3. 7-19 Dec 1972.

Vitnage Gelatin silver print on fiber-based paper, printed 1972.
20,3 x 25,4 cm (7.9 x 10 in), numbered "NASA AS17-143-21934" (NASA MSC) in black in top margin.
A very rare unreleased photograph.

€ 800—1.200
$ 960—1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th—July 15th, 2021
Call time: July 15th, 7.26 pm (GMT+2)

Cernan took this excellent picture of the Lunar Rover at its final VIP parking place about 150 meters east of the LM.

The rover was positioned so that its TV camera could record the LM's liftoff with its high-gain antenna pointed to Earth for transmission.

Harrison Schmitt can be seen through the high-gain antenna (at the lower left) of the Lunar Rover, returning from the lunar science station (ALSEP site) to the LM.

\sl276\slmult1 West and Old Family Mountain forms the background.

The image "gives good definition of the chevron pattern on the wire-mesh tires. One seismic charge remains in the transporter" (ALSJ caption for AS17-143-21934).

From the mission transcript when the photograph was taken:
170:19:48 Cernan: Okay; let me get one parting shot (photo) one of the finest running little machines I've ever had the pleasure to drive.
170:20:12 Parker: Okay. And, Geno, some people down here are concerned about whether you've opened the battery covers or not.
170:20:20 Cernan: Yes, sir; they're open.
170:20:22 Parker: I copy that.
170:20:29 Cernan: Oh, what a nice little machine! Parked on a little downslope, but at the heading you want, and I guess Ed's satisfied with the TV response, huh?
170:20:41 Parker: Roger. We're satisfied with the TV, Gene. We're ready for you to take the EP number 3.
170:20:50 Cernan: Good old Mother Earth is right smack in the center (of the bore site on the high-gain antenna of the Rover).

268

H. SCHMITT AND E. CERNAN (APOLLO 17)

1972

Last human-taken photographs on the Moon (2), post EVA 3. 7-19 Dec 1972.

Two Gelatin silver prints on fiber-based paper, printed 1972.
20,3 x 25,4 cm (7.9 x 10 in), numbered "NASA AS17-143-21953" and "NASA AS17-143-21969" (NASA MSC) in black in top margin.
Two very rare unreleased photographs.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.27 pm (GMT+2)

These views of the valley of Taurus-Littrow were taken from both windows of the LM before the lift-off of the last men on the Moon, the last photographs taken on the surface of another world by human beings.

Schmitt took the first photograph toward West Family Mountain (left) and the left flank of the North Massif (right) which form the skyline in the background. The lunar science station (190 m away) is visible in the left distance. Footprints and rover tracks are visible in the foreground.

Cernan took the second photograph from his Commander window toward the base of the south Massif in the very far distance. Footprints, rover tracks and the abandoned PLLSs (Portable Life support Systems) are visible in the foreground.

NASA
AS17-143-21969

"As we complete our third and final day on the surface of the Moon, Challenger's miniature picture window looks out on a valley transformed, though less than its explorers. [...] This valley of history has seen man complete his first steps into the universe. From this larger home we move to the great future."

Harrison Schmitt (National Geographic, September 1973, p. 305).

269

E.CERNAN, H.SCHMITT OR R.EVANS (APOLLO 17)

1972

The last Full Moon. 7-19 Dec 1972.

Vintage Chromogenic print on resin coated Kodak paper, printed 1972
[NASA AS17-152-23311]
25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on verso.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.28 pm (GMT+2)

On Apollo 17 humans were able to witness for the last time a Full Moon from a perspective not visible from Earth.

This amazing photograph of the near-full lunar disk was taken after transEarth injection with the 80mm lens as Apollo 17 was several thousand miles from the Moon on its way home.

More than a third of the area covered is never visible from the Earth.

Smyth's Sea, the dark circular area just to the top right of the center, straddles the 90° east meridian. The Crater Tsiolkovsky is near the terminator at bottom right.

From the mission transcript as the crew began the journey back to Earth:
240:03:07 Cernan: Gordy, as we're maneuvering, I guess we got one of the most spectacular views of the Moon I've ever seen, from a position like this. It's like - just short of being 100 percent full. We can still see from Tsiolkovsky all the way across the Moon and it's just absolutely magnificent and I'm afraid we're talking here that pictures just won't capture the real three dimensional picture we're looking at.

270

HARRISON SCHMITT (APOLLO 17)

1972

Ronald Evans spacewalking in deep space during the last EVA of the Apollo program. 7-19 Dec 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972. 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS17-152-23364" (NASA MSC) in red in top margin.
A very rare unreleased photograph.

€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.29 pm (GMT+2)

"You're not really a spaceman when you're in the confines of your spaceship," said Evans. "You go outside, and you're hanging on, maneuvering out there from the safety and security of our mother ship. If you ever want to be a spaceman, that's the way to do it!"

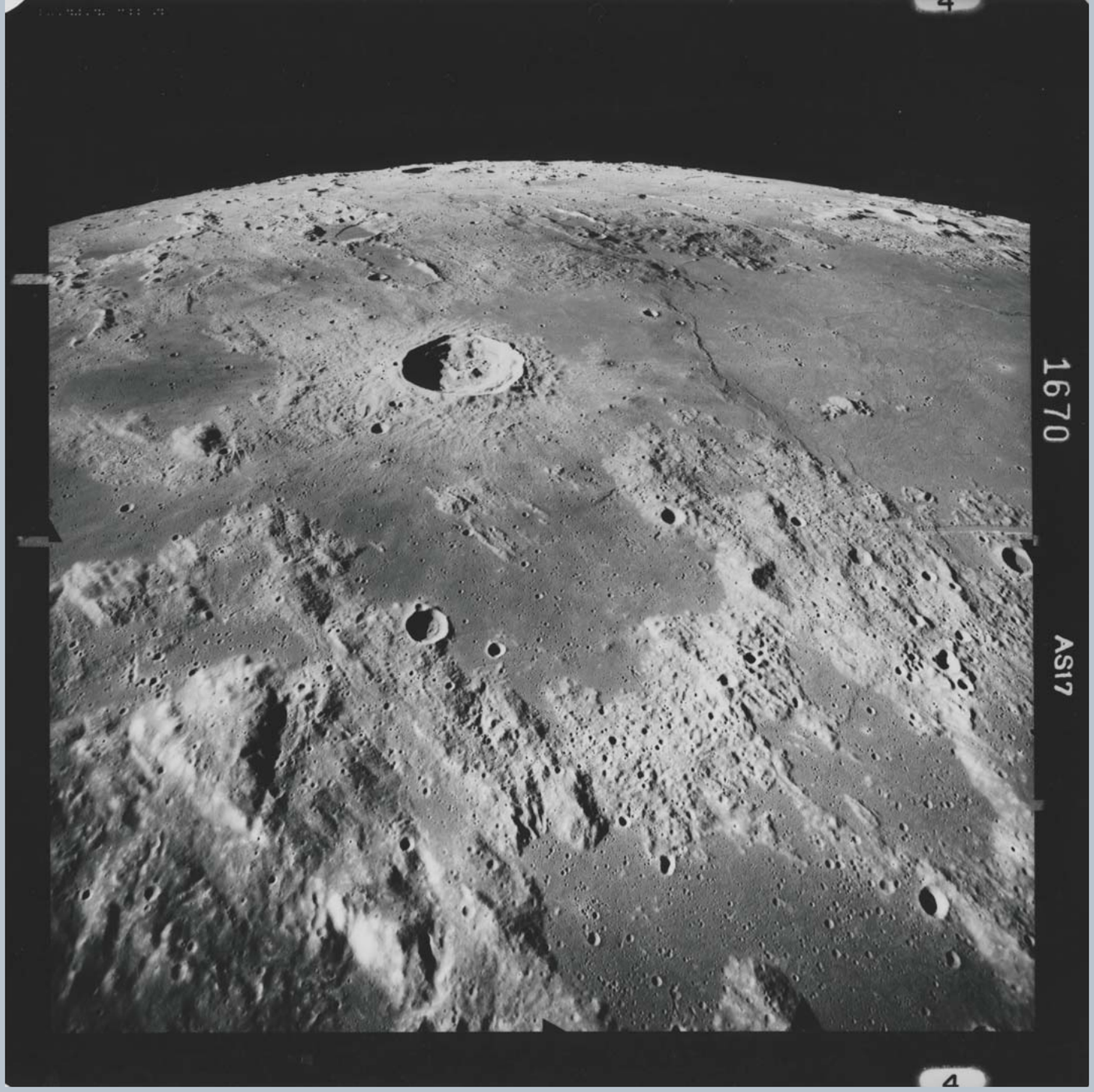
(Chaikin, Voices, p. 122).

Ronald Evans is photographed performing extravehicular activity during the Apollo 17 spacecraft's trans-Earth coast.

Evans is holding a handrail on the Service Module, and his body is extended over the open SIM (Scientific Instrument Module) bay.

The total time for the trans-Earth EVA was one hour, seven minutes, 18 seconds, starting at ground elapsed time of 257:25 (2:28 p.m.) and ending at G.E.T. of 258:42 (3:35 p.m.) on Sunday, Dec. 17, 1972.

Schmitt took the photograph from the open hatch of the Command Module.



271

NASA (APOLLO 17)

1972

Metric camera orbital view over Crater Manilius.
7-19 Dec 1972.

Large format vintage Gelatin silver print on fiber-based paper,
printed 1972.
25,4 x 25,4 cm (10 x 10 in), numbered "AS17 1670" in margin (NASA MSC).
A very rare unreleased large format photograph.

€ 1.000 – 1.500
$ 1.200 – 1.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.30 pm (GMT+2)

This magnificent and very detailed photograph was taken looking south with the 3-inch focal length of the automatic Fairchild metric camera mounted on the SIM bay of the Service Module and operated by Ronald Evans.

The view looks southwest from an altitude of 105 km and a Sun elevation of 14°toward the southwestern border of the Sea of Serenity with the Haemus mountains in the foreground, the 38-km Crater Manilius in the center and the Sea of Vapors in the right background (latitude / longitude: 16.7° N / 8.4° E).

272

HARRISON SCHMITT (APOLLO 17)

1972

Last photograph of man beyond Earth orbit: Ron Evans in deep space. Dec 7-19 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972.
25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS17-152-23389" (NASA MSC) in red in top margin.
A very rare unreleased photograph (NASA released a variant of the photograph, AS17-152-23389). One of the last photographs of Ronald Evans spacewalking in deep space during the last EVA of the Apollo program. The cylindrical object at Evans' left side is the mapping camera cassette.

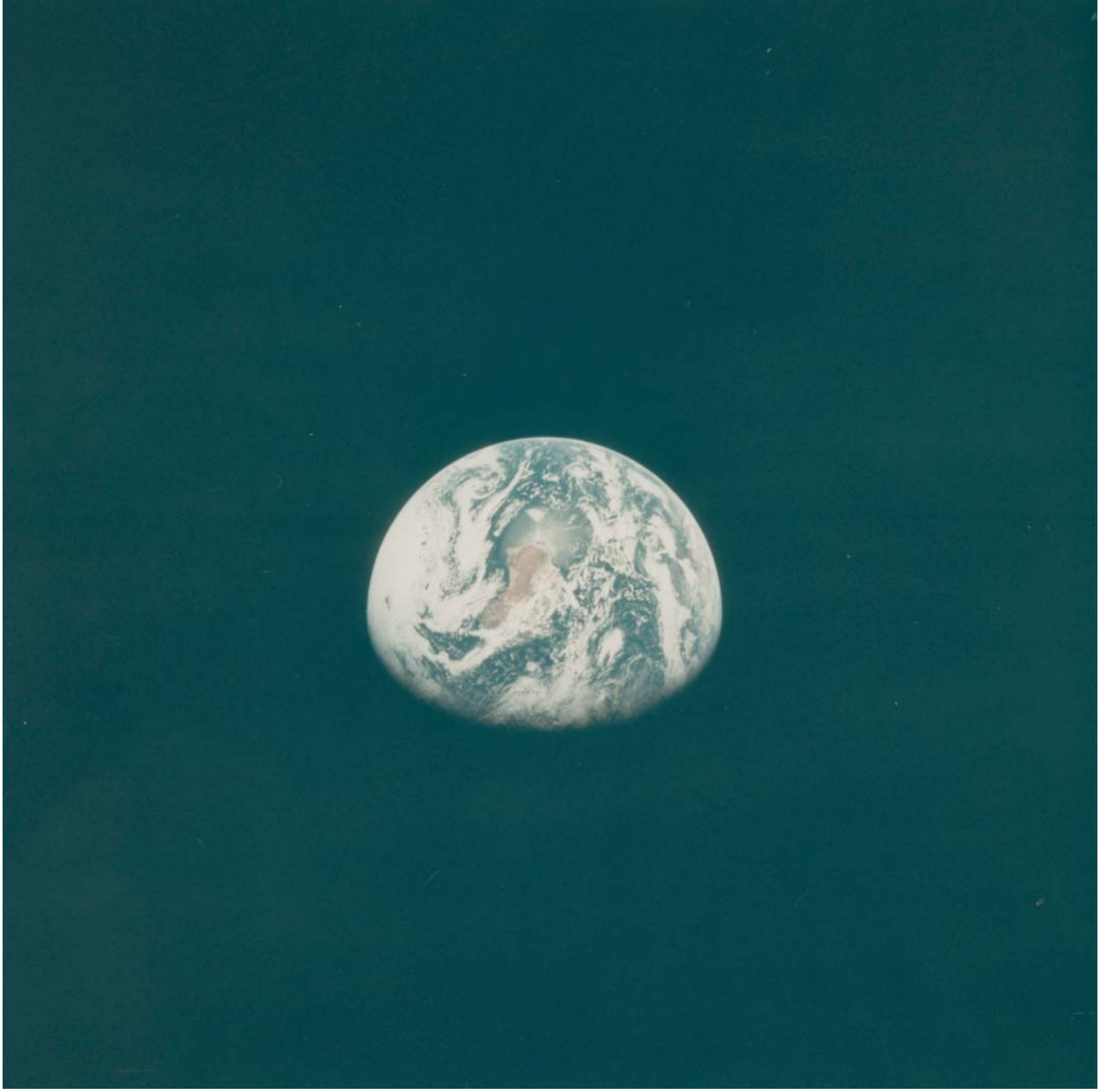
€ 800 – 1.200
$ 960 – 1.440

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.31 pm (GMT+2)

"Adrift between the Earth and the Moon, Ron Evans retrieved the film canister of the mapping cameras on the day after Apollo 17 left lunar orbit. His spacewalk lasted an hour. Evan's oxygen was fed from the spacecraft through the umbilical hose, with an emergency supply on his back. I was in the open hatch to help in retrieval, which was necessary because the Service Module would be jettisoned before we reentered the Earth's atmosphere."

Harrison Schmitt (NASA SP-250, p. 280).



273

NASA (APOLLO 17)

1972

The planet Earth last seen by man. 7-19 Dec 1972.

Vintage Chromogenic print on fiber-based Kodak paper, printed 1972. 25,4 x 20,3 cm (10 x 7.9 in), with "A Kodak Paper" watermarks on the verso, numbered "NASA AS17-148-22742" (NASA MSC) in red in top margin.
A very rare unreleased photograph.

€ 2.000 – 3.000
$ 2.400 – 3.600

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.32 pm (GMT+2)

"For more than six days Earth has been our friend in the lunar skies. That fragile peace of blue with its ancient rafts of life will continue to be man's home as he journeys even further in the solar system."

Harrison Schmitt (National Geographic, September 1973, p. 306).

On Apollo 17 human beings were able to witness for the last time the Earth as a globe, small island of life in the dark void of space.

This amazing photograph was taken one day after launch during translunar coast as the planet Earth was centered over Australia, 100,000 nautical miles away.

274

NASA (APOLLO 17)

1972

The last spacecraft returning from another world. 19 Dec 1972.

Vintage Gelatin silver print on fiber-based paper, printed 1972.
25,4 x 20,3 cm (10 x 7.9 in), with NASA HQ captions numbered
"72-H-1550" on the verso.

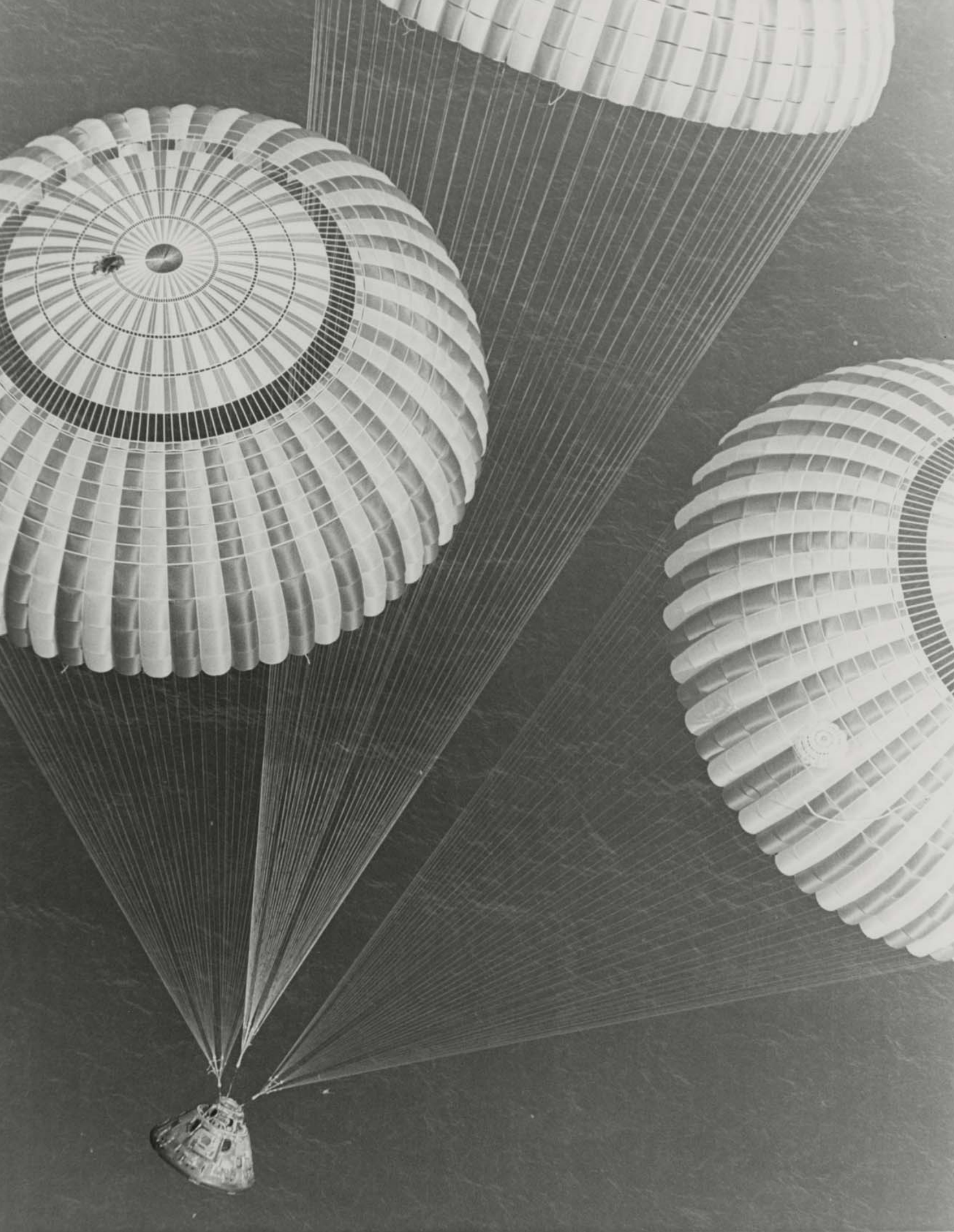
€ 600 – 800
$ 720 – 960

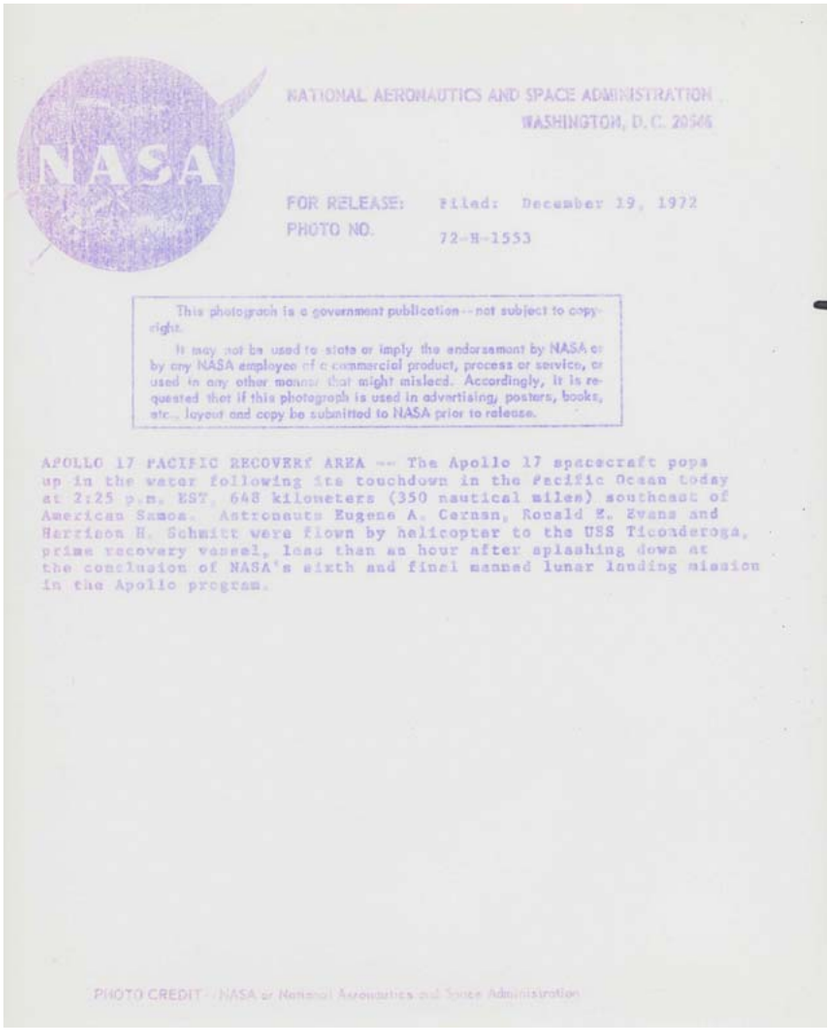
Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.33 pm (GMT+2)

The Command Module America splashdown occurred at 1:24:59 p.m. (CST), Dec. 19, 1972, about 350 nautical miles southeast of Samoa (first picture), successfully ending man's first voyages to another world.

The spacecraft was later hoisted aboard the USS Ticonderoga.





275

NASA (APOLLO 17)

1972

The return of the last men on the Moon (2). 19 Dec 1972.

Two vintage Gelatin silver prints on fiber-based paper, printed 1972. 20,3 x 25,4 cm (7.9 x 10 in), with NASA HQ captions numbered "72-H-1553" and "72-H-1568" on the versos.

€ 600 – 800
$ 720 – 960

Bidding starts at € 100

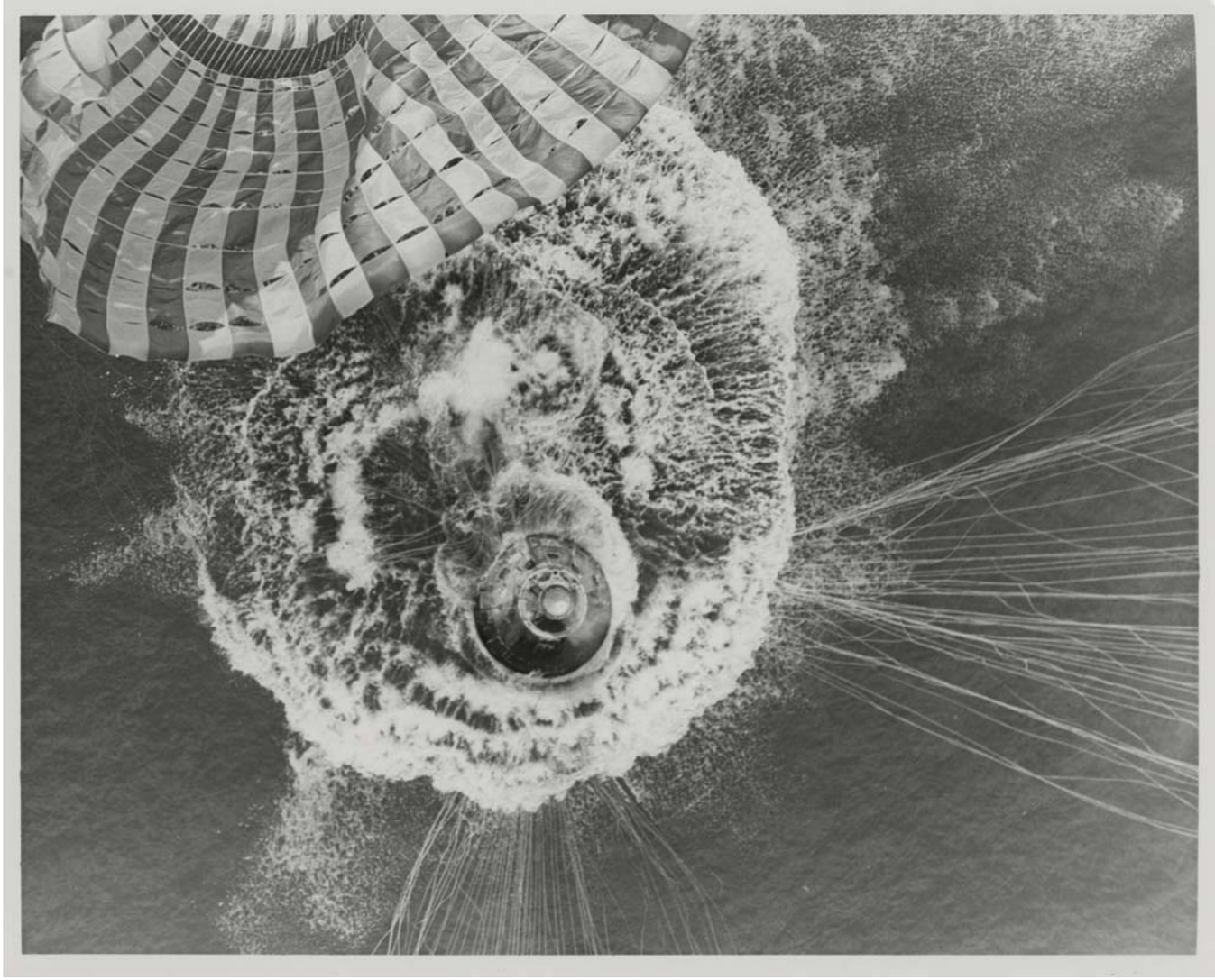
ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.34 pm (GMT+2)

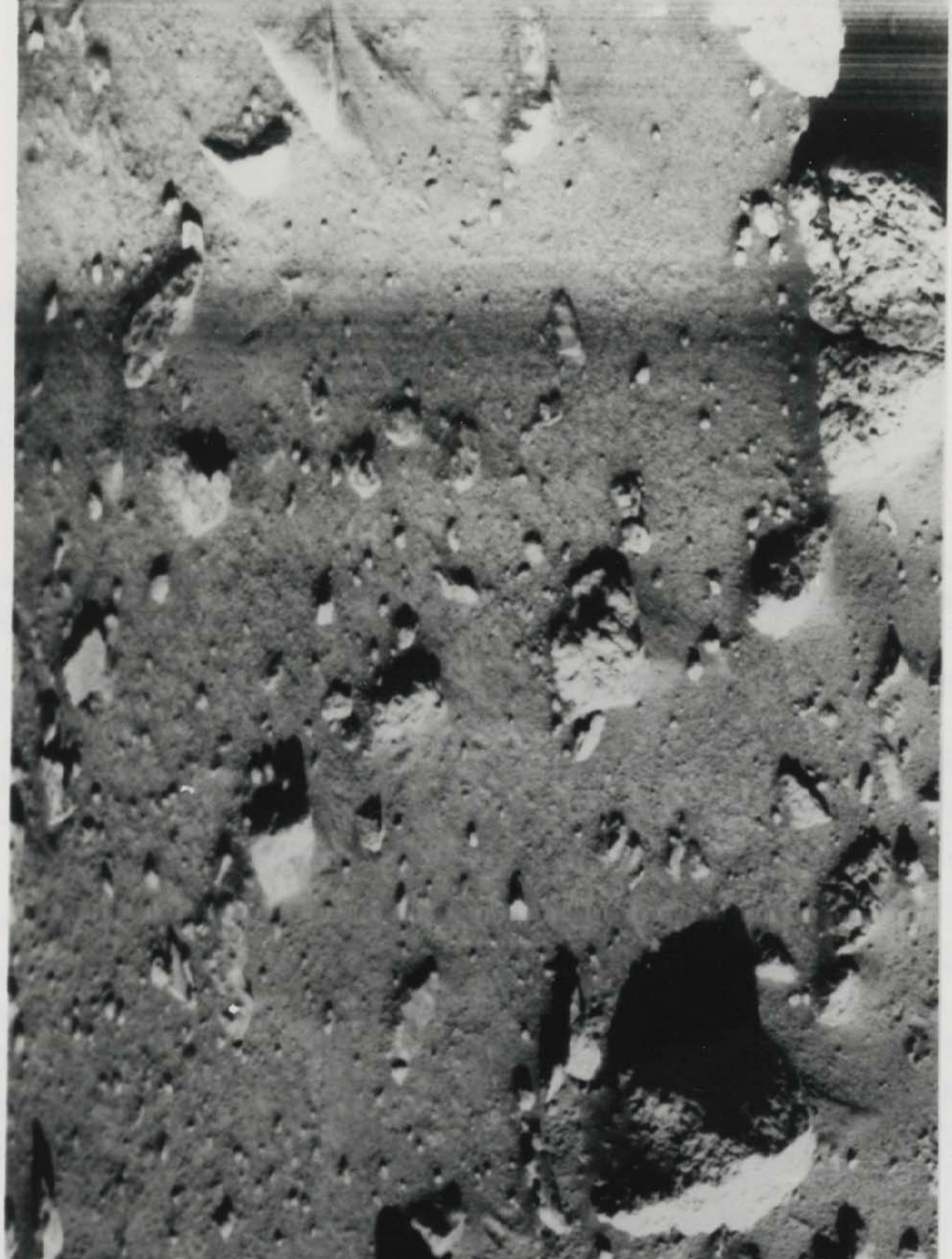
The Apollo 17 Command Module America is floating in the Pacific Ocean following splashdown (first photograph).

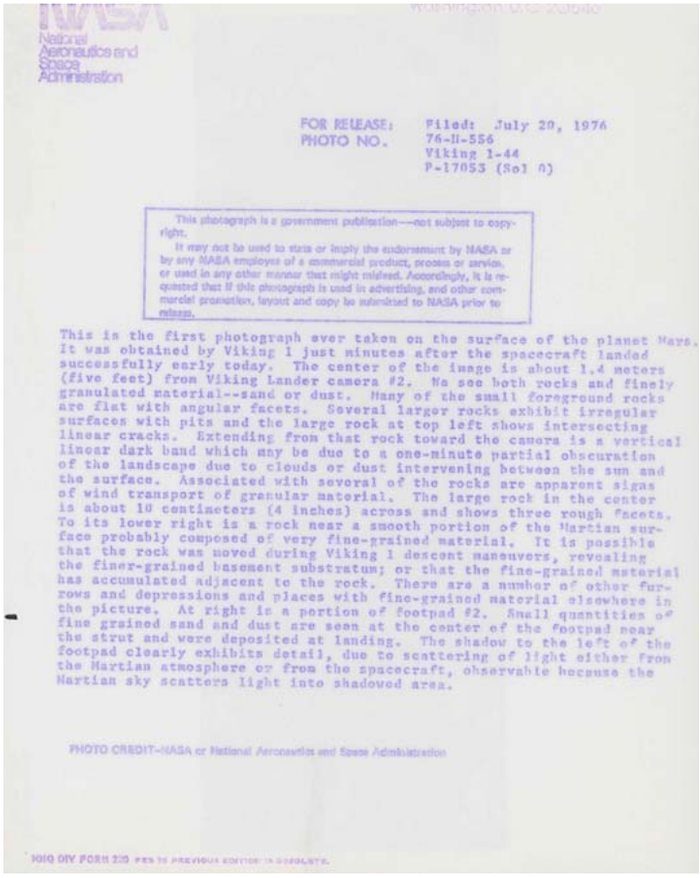
Cernan stands in the open hatch with a United States Navy UDT swimmer on the flotation collar while Schmitt and Evans watch the recovery operations from the life raft (second photograph).

The three-man crew of astronauts Eugene A. Cernan, Ronald E. Evans and Harrison H. Schmitt, were picked up by helicopter and flown to the deck of the recovery ship "USS Ticonderoga" after man's last mission to the Moon and back, closing the voyage initiated by President Kennedy a little more than a decade earlier.

It had been, as NATIONAL GEOGRAPHIC called it, "Man's Greatest Adventure".







National Aeronautics and Space Administration

FOR RELEASE: Filed: July 20, 1976
PHOTO NO. 76-H-556
Viking 1-44
P-17053 (Sol 0)

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It may not be used to state or imply the endorsement by NASA or by any NASA employee of a commercial product, process or service, or used in any other manner that might mislead. Accordingly, it is requested that if this photograph is used in advertising, and other commercial promotion, layout and copy be submitted to NASA prior to release.

This is the first photograph ever taken on the surface of the planet Mars. It was obtained by Viking 1 just minutes after the spacecraft landed successfully early today. The center of the image is about 1.4 meters (five feet) from Viking Lander camera #2. We see both rocks and finely granulated material--sand or dust. Many of the small foreground rocks are flat with angular facets. Several larger rocks exhibit irregular surfaces with pits and the large rock at top left shows intersecting linear cracks. Extending from that rock toward the camera is a vertical linear dark band which may be due to a one-minute partial obscuration of the landscape due to clouds or dust intervening between the sun and the surface. Associated with several of the rocks are apparent signs of wind transport of granular material. The large rock in the center is about 10 centimeters (4 inches) across and shows three rough facets. To its lower right is a rock near a smooth portion of the Martian surface probably composed of very fine-grained material. It is possible that the rock was moved during Viking 1 descent maneuvers, revealing the finer-grained basement substratum; or that the fine-grained material has accumulated adjacent to the rock. There are a number of other furrows and depressions and places with fine-grained material elsewhere in the picture. At right is a portion of footpad #2. Small quantities of fine grained sand and dust are seen at the center of the footpad near the strut and were deposited at landing. The shadow to the left of the footpad clearly exhibits detail, due to scattering of light either from the Martian atmosphere or from the spacecraft, observable because the Martian sky scatters light into shadowed areas.

PHOTO CREDIT--NASA or National Aeronautics and Space Administration

NHQ DIV FORM 235 PER 70 PREVIOUS EDITION IS OBSOLETE.

276

VIKING 1

1976

The first photograph taken on the surface of Mars. 20 July 1976.

Vintage Gelatin silver print on fiber-based paper, printed 1976. 20,3 x 25,4 cm (7.9 x 10 in), with NASA HQ caption numbered "Viking 1-44" on the verso.

€ 2.500 – 4.000
$ 3.000 – 4.800

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.35 pm (GMT+2)

"This is the first photograph ever taken on the surface of the Planet Mars. It was obtained by Viking 1 just minutes after the spacecraft landed successfully earlier today" (NASA caption).

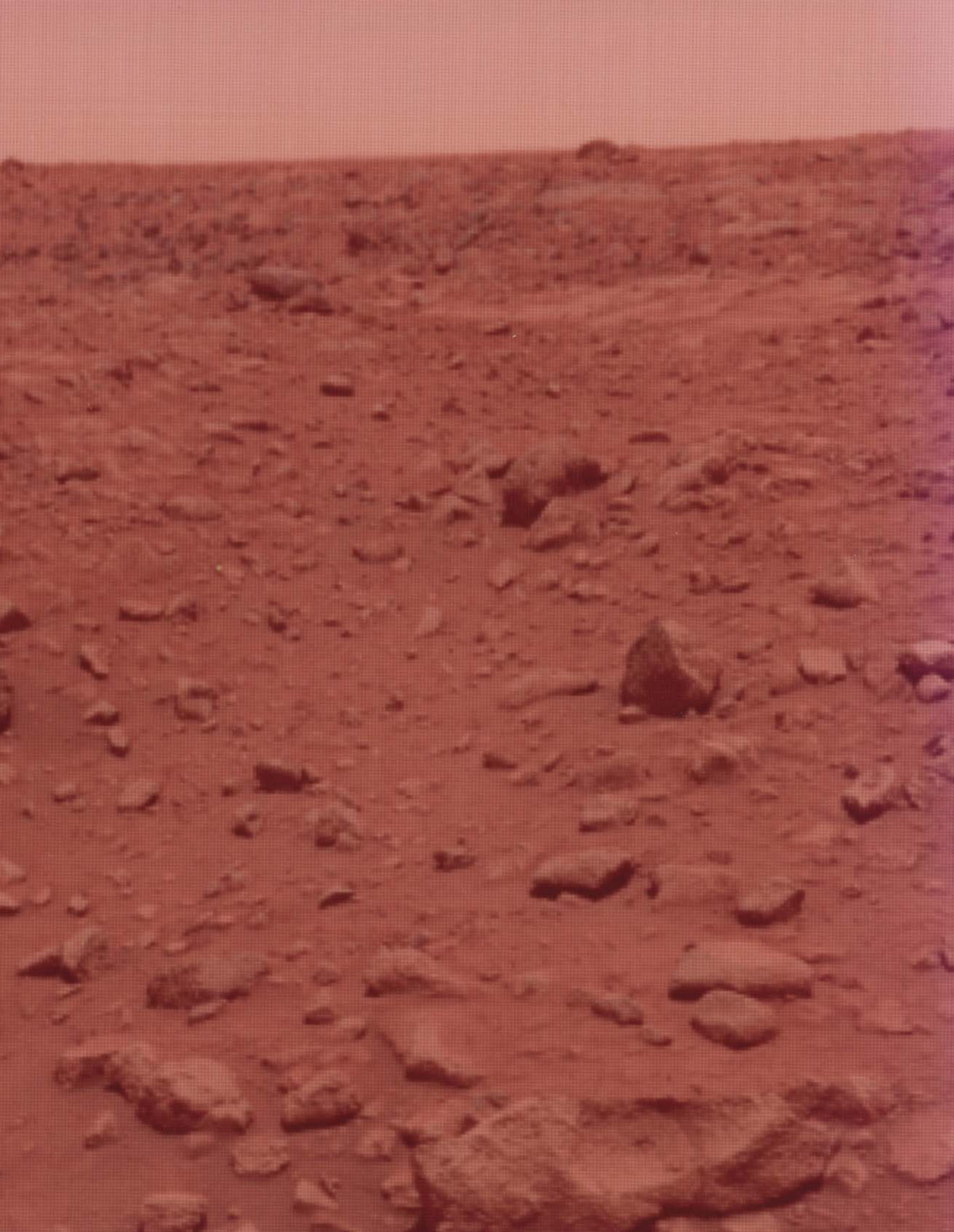
"The center of the image is about 1.4 meters (five feet) from Viking Lander camera #2. We see both rocks and finely granulated material--sand or dust. Many of the small foreground rocks are flat with angular facets. Several larger rocks exhibit irregular surfaces with pits and the large rock at top left shows intersecting linear cracks. Extending from that rock toward the camera is a vertical linear dark band which may be due to a one-minute partial obscuration of the landscape due to clouds or dust intervening between the sun and the surface. Associated with several of the rocks are apparent signs of wind transport of granular material. The large rock in the center is about 10 centimeters (4 inches) across and shows three rough facets. To its lower right is a rock near a smooth portion of the Martian surface probably composed of very fine-grained material. It is possible that the rock was moved during Viking 1 descent maneuvers, revealing the finer-grained basement substratum; or that the fine-grained material has accumulated adjacent to the rock. There are a number of other furrows and depressions and places with fine-grained material elsewhere in the picture. At right is a portion of footpad #2. Small quantities of fine grained sand and dust are seen at the center of the footpad near the strut and were deposited at landing. The shadow to the left of the footpad clearly exhibits detail, due to scattering of light either from the Martian atmosphere or from the spacecraft, observable because the Martian sky scatters light into shadowed areas" (NASA caption).

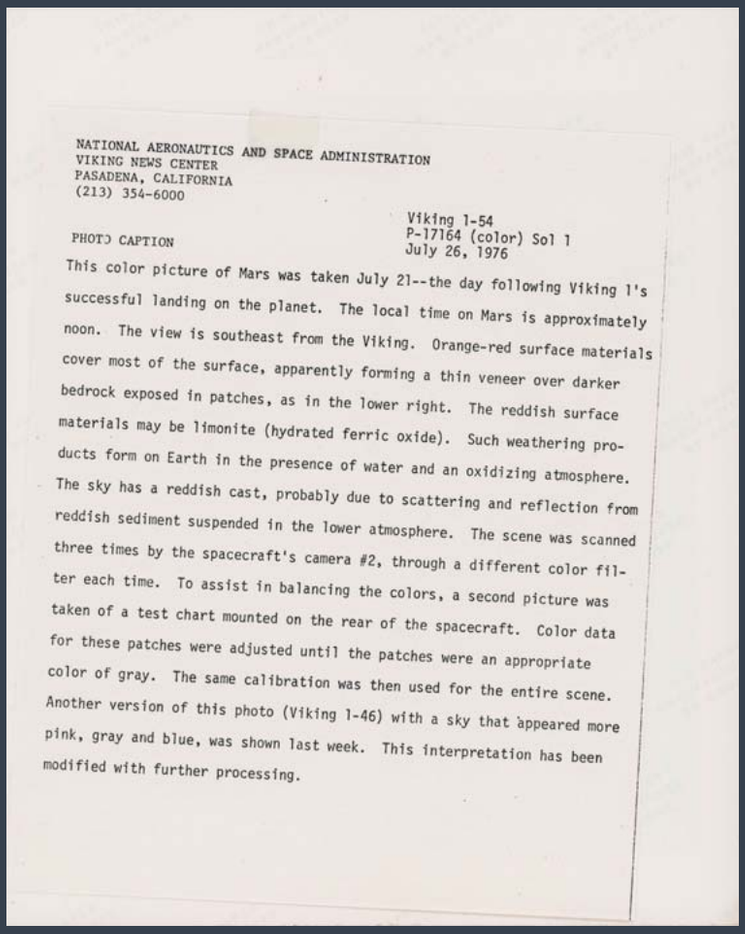
NASA National Aeronautics and Space Administration

Headquarters
Washington, D.C.

"Apollo had a reason. It taught us how to go into space and set up our first outpost. Now we go set it up. Now we go to Mars."

David Scott (Chaikin, Voices, p. 192).





NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
VIKING NEWS CENTER
PASADENA, CALIFORNIA
(213) 354-6000

Viking 1-54
P-17164 (color) Sol 1
July 26, 1976

PHOTO CAPTION

This color picture of Mars was taken July 21--the day following Viking 1's successful landing on the planet. The local time on Mars is approximately noon. The view is southeast from the Viking. Orange-red surface materials cover most of the surface, apparently forming a thin veneer over darker bedrock exposed in patches, as in the lower right. The reddish surface materials may be limonite (hydrated ferric oxide). Such weathering products form on Earth in the presence of water and an oxidizing atmosphere. The sky has a reddish cast, probably due to scattering and reflection from reddish sediment suspended in the lower atmosphere. The scene was scanned three times by the spacecraft's camera #2, through a different color filter each time. To assist in balancing the colors, a second picture was taken of a test chart mounted on the rear of the spacecraft. Color data for these patches were adjusted until the patches were an appropriate color of gray. The same calibration was then used for the entire scene. Another version of this photo (Viking 1-46) with a sky that appeared more pink, gray and blue, was shown last week. This interpretation has been modified with further processing.

277

VIKING 1

1976

The first color photograph taken on the surface of Mars, the Red Planet. 21 Jul 1976.

Vintage Chromogenic print on resin coated Kodak paper, printed 1976. 20,3 x 25,4 cm (7.9 x 10 in), with NASA JPL caption numbered "Viking 1-54" affixed to the verso and "This paper manufactured by Kodak" watermarks on the verso.

€ 5.000 – 7.000
$ 6.000 – 8.400

Bidding starts at € 100

ketterer-internet-auctions.com – Bidding June 20th – July 15th, 2021
Call time: July 15th, 7.36 pm (GMT+2)

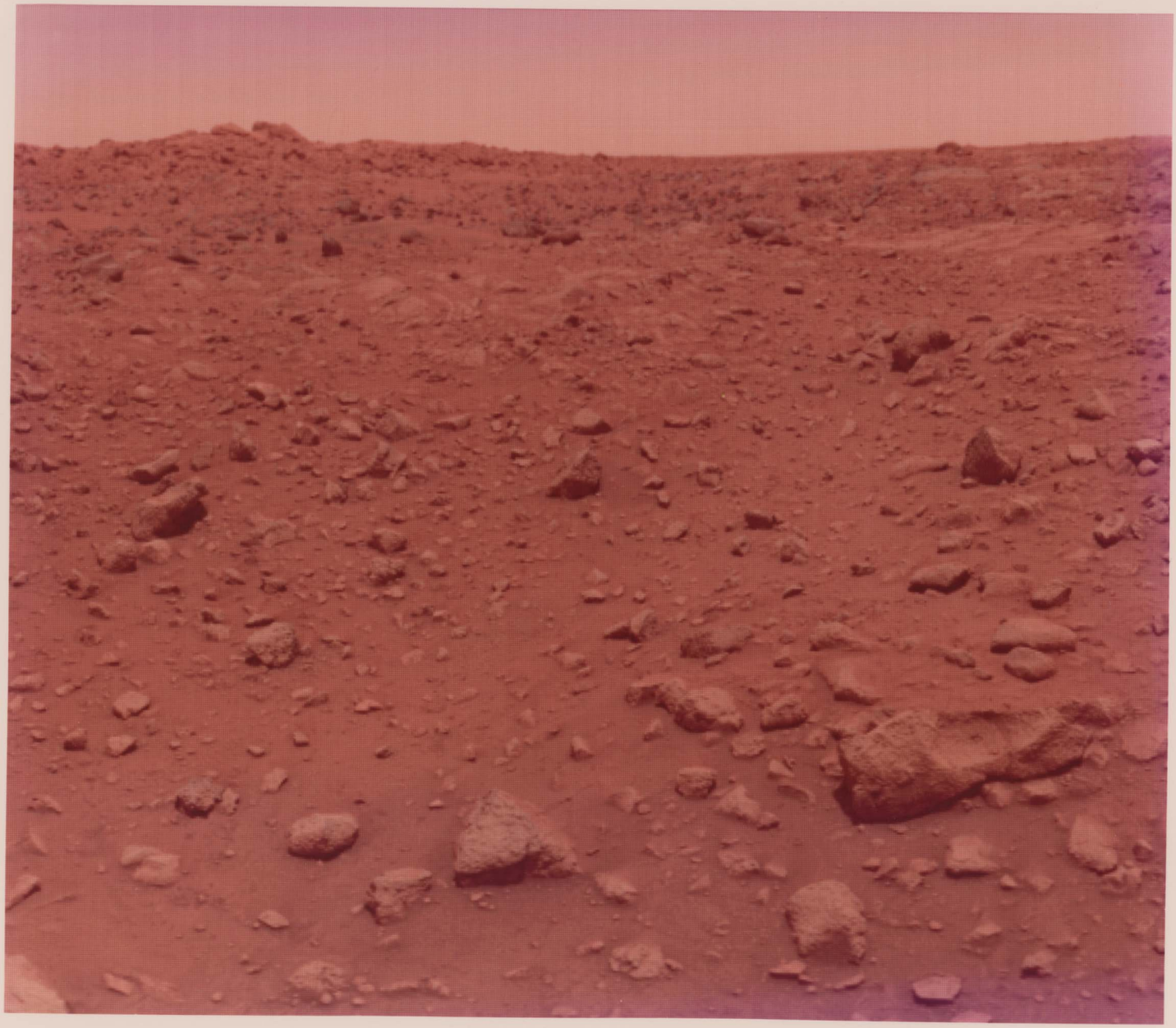
Launched on August 20, 1975, Viking 1 became the first unmanned spacecraft to land successfully on Mars eleven months later on July 20, 1976 and took its first color photograph one day later, showing the famed rocky reddish surface.

[NASA caption]

This color picture of Mars was taken July 21, the day following Viking 1's successful landing on the planet. The local Time on Mars is approximately noon. The view is southeast from the Viking.

Orange-red surface materials cover most of the surface, apparently forming a thin veneer over darker bedrock exposed in patches, as in the lower right. The reddish surface materials may be limonite (hydrated ferric oxide). Such weathering products form on Earth in presence of water and an oxidizing temperature atmosphere.

The sky has a reddish cast, probably due to scattering and reflection from reddish sediment suspended in the lower atmosphere. The scene was scanned three times by the spacecraft's camera 2, through a different color filter each time. To assist in balancing the colors, a second picture was taken of a test chart mounted on the rear of the spacecraft. Color data for the patches were adjusted until the patches were an appropriate color of gray. The same calibration was then used for the entire scene. Another version of this photo (Viking 1-46) with a sky that appeared more pink, gray and blue was shown last week. This interpretation has been modified with further processing.



"For all those useful benefits to mankind that our future space program holds in store for us, we should never lose sight of the importance of man's innate curiosity, his desire to understand better, to dig deeper, to rise higher, to explore. Yes, and his desire to dream. For our civilization is the sum of all dreams that have come true through the labors of our forebears. Let us therefore continue to dream; let us continue to make our dreams come true. For without dreams, without the will to make these dreams come true, the future of mankind would be bleak indeed."

Wernher von Braun (Thomas, p.179)

VINTAGE ORIGINAL NASA PHOTOGRAPHS (1958–1972)

- All photographs are vintage, i.e. printed shortly after they were taken.
- The mention “unreleased photograph” indicates that the photograph was not released by NASA Public Affairs following the mission, meaning it was only used internally and therefore not published in books or newspapers of the time.
- Where noted on the print, the NASA center which issued the photograph has been identified.

  These include Manned Spacecraft Center, Houston (NASA MSC); Kennedy Space Center, Florida (NASA KSC); Goddard Space Flight Center, Maryland (NASA Goddard); Headquarters, Washington, DC (NASA HQ); Jet Propulsion Laboratory, Pasadena (NASA JPL); Marshall Space Flight Center, Huntsville, Alabama (NASA MSFC), Langley Research Center, Hampton, Virginia (NASA Langley), and Lewis Research Center, Ohio (NASA Lewis).

  It also includes partners and contractors which worked for NASA such as McDonnell Douglas (NASA / McDonnell); North American Rockwell (NASA / North American); Grumman Corporation (NASA / Grumman); Radio Corporation of America (NASA / RCA); United States Geological Survey (NASA / USGS).
- Literature citations refer to published versions of the image. When possible, the photographer has been identified.
- Unless otherwise stated, all photographs are glossy prints on standard size paper 20.3 x 25.4cm (8 x 10in). Only the size of the sheets is indicated. Significant defects have been noted. NASA reference numbers within square brackets do not appear on the prints and are provided for reference.
- Most of the photographs are in chronological order mission by mission and from launch to recovery, so the reader can follow the progress of space and lunar explorers.
- Dialogs are extracted from the voice transcripts of the missions indicating indicates the mission time in hours, minutes and seconds from launch (sources: NASA, Apollo Lunar Surface Journal, Apollo Flight Journal).

“The exploration of space will go ahead, whether we join in it or not, and it is one of the great adventures of all time. [...] We set sail on this new sea because there is new knowledge to be gained, and new rights to be won, and they must be won and used for the progress of all people. [...] Well, space is there, and we’re going to climb it, and the Moon and the planets are there, and new hopes for knowledge and peace are there. And, therefore, as we set sail we ask God’s blessing on the most hazardous and dangerous and greatest adventure on which man has ever embarked.”

President John F. Kennedy, Moon speech at Rice University, September 12, 1962

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TERMS OF PUBLIC AUCTION

As of September 2020

General Terms of Business for Making Purchases at www.ketterer-internet-auktion.de/ www.ketterer-internet-auctions.com

1. General

1.1 Exclusively on the basis of the following General Terms of Business ('Terms'), at the same time drawing the consumer's attention to the "Duties to Supply Information for Distance Selling Contracts" and the "Duties to Supply Information for Concluding Contracts in e-Commerce Transactions" including the corresponding "Cancellation Policy", Ketterer Kunst GmbH & Co KG (referred to hereinafter as the 'Seller') handles purchase requests/orders at Internet auctions staged at the Internet portal www.ketterer-internet-auktion.de /www.ketterer-internet-auctions.com.

The 'Ketterer Internet Auctions' website offers art works in general in its own name but for a client's account (commission agreement between the seller and its client).

1.2 These General Terms of Business are binding for any sales transactions by the Seller. The Seller's goods, services and offers are provided exclusively on the basis of these Terms. The Buyer's terms of business and purchase are expressly refuted; they shall only obligate the Seller if the latter has expressly declared that it agrees to them. These Terms shall be deemed accepted at the latest on receipt of the goods out of the first order. These Terms also apply to all future business relations, even if they are not expressly agreed anew.

1.3 These General Terms of Business do not apply to conventional auctions held by the Seller. This expressly also applies to post-auction sales. Auctions and related post-auction sales shall each be exclusively governed by the Terms of Delivery & Auction in force at the time.

1.4 According to the Money Laundering Act (GwG), the seller is obliged to inform the bidder / acquirer or those interested in an acquisition (that is as early as in the initial phase) and, if applicable, a representative and the "beneficial owner" within the meaning of Section 3 GwG for the purpose of executing the order and to record and store the data and information obtained. The aforementioned bidder / purchaser or person interested in acquisition or his representative is obliged to cooperate, in particular to present the necessary identification papers, in particular on the basis of a national passport or passport, identity card or passport or identity card substitute that is recognized or approved with regard to immigration laws. The seller is entitled to make a copy or other reproduction of this on a media carrier (scan, image file, etc.) in compliance with data protection regulations. In the case of legal entities or partnerships, an extract from the commercial or cooperative register or a comparable official register or directory must be requested. The bidder / purchaser or anyone interested in the acquisition assures that the identification papers and information provided by him for this purpose are correct and that he or the person he represents is the "beneficial owner" within the meaning of Section 3 of the GwG.

2. Purchase Contract

2.1 The items offered on the Internet by the Seller constitute an offer for sale, whereby the Seller fixes the start price and the period allowed (bidding period) during which the bid from the highest bidder can be accepted on expiry of the deadline. The bidder accepts the offer by making a bid using the bid function. The bid remains in force until another bidder makes a higher bid during the bidding period, and it only then loses effect. When the bidding period ends, either on expiring or due to the Seller prematurely terminating the offer, a purchase contract for the item is brought about between the Seller and the highest bidder, unless the bidder has the statutory right to withdraw his bid. In any such case (legitimate withdrawal of a bid) the purchase contract is then brought about with the bidder originally making the next highest bid in terms of amount.

2.2 Each bidder may submit a maximum bid at an auction. This is then equivalent to the highest maximum amount which it is willing to pay for the item. Other bidders have no access to this maximum bid. If other interested customers bid for the item, then the bid applying at the time automatically gradually increases, meaning that a bidder who has made a maximum bid remains the highest bidder until its maximum bid is outbid by another bidder.

2.3 The Seller may also mark offers with a 'buy now' option at a fixed sales price. This offer may be accepted by any bidder, but only as long as either no bid has been made for the item, or bids have not yet reached the minimum price fixed by the Seller. In this case, a purchase contract for the item at the quoted fixed price is brought about - irrespective of the length of the bidding period, and without an auction being held or continued - as soon as the bidder/ Buyer effectively exercises this option.

2.4 Sales operations termed an 'Internet auction' are not an auction as defined in Sect. 34 b) of the German Trade Code [GewO] and Sect. 156 of the German Civil Code [BGB]. The 'Internet auction' is not an public available auction as defined in Sect. 312g (2) No. 10 of the German Civil Code [BGB].

2.5 Making bids using automated data processing processes (e.g. sniper programs) is prohibited.

2.6 In the event that - for whatsoever reason - a contract is not actually reached between the Seller and a buyer and that the minimum price is not achieved, the Seller is entitled to make so-called sub- bidders an offer to acquire the item at a fixed price.

2.7 As regards exact procedure for handling purchase contracts, reference is made to the relevant information provided at www.ketterer-internet-auctions.com, and to the Duties to Supply Information for Concluding Contracts in e-Commerce Transactions, which are available at + www.ketterer-internet-auctions.com/terms.php.

2.8 Payments are to be made to the seller by bank transfer in EUR (€). The explanations on the information obligations for contracts in electronic business dealings regulate further details, which can be viewed at www.ketterer-internet-auctions.com/terms.php. Checks and bills of exchange are only accepted on account of performance on the basis of a special agreement with all costs and taxes being charged; the seller is not liable for timely presentation, protest, notification or return of unredeemed checks or bills of exchange. If the seller has agreed to non-cash payment, all costs and fees of the transfer (including bank charges deducted from the seller) shall be borne by the buyer.

3. Hand-Over / Delivery

3.1 After Payment, the item purchased will be sent to the Buyer by insured post unless Item 3.2 below applies. The costs of handover, acceptance and shipping to a location other than the place of delivery are regulated in Section 4.6 (additional transport costs). Shipping may cause additional charges, in particular cash on delivery costs or customs fees, which are levied directly by the transport company and will be collected from the recipient when the goods are handed over. Such fees are not included in the seller's shipping costs and may have to be paid additionally by the buyer, provided they are not included in the costs the seller is legally obligated to bear within the meaning of Section 270a BGB.

3.2 Alternatively there is the option of collection of the purchased item by the Buyer. After appropriate notification and prior arrangement, the Buyer can collect the purchased item from the Seller. The item must be collected immediately, at latest 14 days after termination of the offer and purchase of the item by the Buyer. If the Buyer defaults in this obligation, failing to collect the item and letting a deadline that has been set expire to no avail, or if the Buyer firmly and finally refuses collection, then the Seller may withdraw from the purchase contract and demand compensation, subject to the provison that it is allowed to sell the item again and assert its losses in the same way as in cases of a buyer defaulting in payment (see Item 7 below), without the Buyer being entitled to any extra proceeds from the renewed sale. Moreover, in the event of default the Buyer also owes reasonable compensation for all the recovery costs incurred by its delay. The Buyer opts for collection or dispatch after making its auction purchase; see the Duties to Supply Information for Concluding Contracts in e-Commerce Transactions, which are available at www.ketterer-internet- auctions.com/terms.php.

3.3 The risk of the object of purchase being damaged or lost during consignment shall be borne by the Buyer, insofar as it is planning to use the object of purchase in connection with its commercial business or self-employed operations. Risk shall pass to the Buyer as soon as the consignment is handed over to the carrier or its representative, or has left the Seller's business premises for dispatch. In the case of a consumer within the meaning of Sect. 13 of the German Civil Code [BGB], risk in relation to the item purchased shall not pass to the consumer until it has gained possession of the item purchased unless the Buyer (consumer) instructed the freight forwarder, the carrier or the person or institution consigned with shipping, the selling entrepreneur not having named this person or institution to the Buyer (Sect. 474 (4) of the German Civil Code [BGB]).

4. Purchase price / due date / duties / other costs / final price

4.1 The purchase price is due with the highest bid when the time expires.

4.2 Payments from the buyer to the seller are generally only to be made by transfer to account specified by the seller. The fulfillment of the payment does not come into effect until it is finally credited to the seller's account.

All costs and fees of the transfer (including the bank charges deducted from the seller) are borne by the buyer, as far as legally permissible and not prohibited within the meaning of Section 270a BGB.

4.3 Depending on the consignor's specifications, the sale is subject to differential or regular taxation.

The bidder will be regularly informed about the type of taxation on the bidding site before the bid is submitted. In the case of differential taxation according to Section 25a UStG, the respective highest bid including the applicable sales tax is shown. With standard taxation, the respective highest bid is shown as the "net bid". In addition, the total price including sales tax is indicated.

4.4 Buyer's premium

4.4.1 Works of art subject to differential taxation

With differential taxation, a surcharge is levied per individual object as follows:

- Hammer price up to 500,000 euros: from this 32 % buyer's premium.

- A premium of 27% is charged on the part of the hammer price that exceeds 500,000 euros and added to the premium that incurs on the part of the hammer price up to 500,000 euros.

- The purchase price includes sales tax, currently at 19 %. For original works of art and photographs, a surcharge of 2.4 % including VAT is levied in order to compensate for the resale right that arises in accordance with Section 26 UrhG.

4.4.2 Works of art marked with an "N" in the image were imported into the EU for sale. These are offered subject to differential taxation. In addition to the buyer's premium, the import sales tax paid by the seller, currently 7 % of the invoice amount, is charged. For original works of art and photographs, a surcharge of 2.4 % including VAT is levied to compensate for the resale right that is legally applicable in accordance with Section 26 UrhG.

4.4.3 Works of art subject to regular taxation.

With regular taxation, a surcharge is levied per individual object as follows:

- Hammer price up to 500,000 euros: from this 25 % buyer's premium.

- A buyer's premium of 20 % is charged on the part of the hammer price that exceeds 500,000 euros and added to the premium that incurs on that part of the hammer price up to 500,000 euros.

- The statutory sales tax of currently 19 % is levied on the sum of the hammer price and premium. For original works of art and photographs, a surcharge of 2.0 % plus the statutory sales tax, currently at 19 %, is levied to compensate for the resale right in accordance with § 26 UrhG.

Regular taxation can be applied to businesses entitled input tax reduction on art and antiques.

4.5 Export deliveries to EU countries are exempt from sales tax on presentation of the VAT number. Export deliveries to third countries (outside the EU) are exempt from VAT; if the auctioned items are exported by the buyer, the sales tax will be reimbursed as soon as the seller has the export certificate.

4.6 Additional transport costs vary depending on the place of delivery, weight and size of the object and are to be paid additionally by the buyer. They are specified individually on the object before the bid is submitted and before the bid is accepted.

5. Reservation of Title

5.1 The Seller is under no obligation to hand over the item before all the amounts owed by the Buyer have been paid.

5.2 Title to the object of purchase shall not pass to the Buyer until the invoiced amount owing has been paid in full. In the event that the Buyer has already resold the object of purchase before paying the amount invoiced by the Seller or before paying said amount in full, the Buyer assigns all its receivables created on such resale to the Seller up to the invoiced amount still outstanding. The Seller accepts this assignment.

5.3 If the Buyer is a public corporation, a special trust under public law or an entrepreneur who concluded the purchase contract in the context of its commercial or self-employed operations, then title shall be reserved in relation to all the Seller's claims vis-a-vis the Buyer that have been created during the on-going business relationship and by other items, until such time as the receivables to which the Seller is entitled in connection with the purchase have been paid.

6. Setoff, Right of Retention

6.1 Vis-a-vis the Seller, the Buyer may only offset uncontested claims or claims which have been declared res judicata.

6.2 Right of retention on the part of the Buyer is excluded. The right of retention in the case of Buyers who are not entrepreneurs within the meaning of Sect. 14 of the German Civil Code [BGB] is only excluded insofar as such rights are not based on the same contractual relationship.

7. Default of payment, withdrawal, claims for compensation by the seller

7.1 If the Buyer defaults in making a payment, then the Seller - notwithstanding further claims - may demand default interest at the usual interest rate charged by banks for outstanding current account loans, or at a minimum the statutory rate of default interest pursuant to Sect. 288 and Sect. 247 of the German Civil Code [BGB].

7.2 If in cases of late payment the Seller demands compensation in lieu of performance, and if the item is sold again, then the original Buyer - whose rights created on previously making a successful bid extinguish - shall be liable for any losses thus sustained, such as e.g. storage costs, shortfalls and lost profits. It shall not be entitled to any extra proceeds attained on renewed sale, not will it be allowed to make another offer.

7.3 The seller is entitled to withdraw from the contract if it turns out, after the conclusion of the contract, that he is or was not entitled to execute the contract due to a legal provision or official instruction, or that there is an important reason that makes the execution of the contract, also in consideration of the buyerâ€™s legitimate interests, unreasonable for the seller. Such an important reason exists in particular if there are indications of the existence of elements of an offense according to §§ 1 Paragraph 1 or 2 of the Money Laundering Act (GwG) or in case of missing, incorrect or incomplete disclosure of the identity and economic background within the meaning of the Money Laundering Act (GwG), as well as in case of insufficient participation in the fulfillment of the obligations following from the Money Laundering Act (GwG), regardless of whether by the buyer or the consignor. The seller will endeavor to clarify the matter without undue delay as soon as he becomes aware of the circumstances justifying the withdrawal.

8. Warranty

8.1 The descriptions and illustrations, as well as representations of the objects, were made to the best of knowledge and belief, and do not constitute a guarantee and are not contractually agreed properties within the meaning of 434 BGB, but only serve to inform the buyer, unless a guarantee for the corresponding quality or property is expressly given by the seller in writing. This also applies to expertises. The fact that the item has been examined by the Seller or by a business or expert acting on its instructions does not in itself constitute a quality or characteristic of the object of purchase.

8.2 Vis-a-vis entrepreneurs within the meaning of Sect. 14 of the German Civil Code [BGB], all guarantees are excluded for all manner of defects in the goods sold. However, in case of material defects which destroy or significantly reduce the value or the serviceability of the item and of which the purchaser notifies the auctioneer within 12 months of his bid being accepted, the auctioneer undertakes to assign any claim which it holds against the consignor or - should the purchaser decline this offer of assignment - to itself assert such claims against the consignor. In the event of the auctioneer successfully prosecuting a claim against the consignor, the auctioneer shall remit the resulting amount to the purchaser up to the value of the hammer price, in return for the item's surrender. The purchaser will not be obliged to return this item to the auctioneer if the auctioneer is not itself obliged to return the item within the scope of its claims against the consignor or another beneficiary. The purchaser will only hold these rights (assignment or prosecution of a claim against the consignor and remittance of the proceeds) subject to full payment of the auctioneer's invoice. In order to assert a valid claim for a material defect against the auctioneer, the purchaser will be required to present a report prepared by an acknowledged expert (or by the author of the catalog, or else a declaration from the artist himself or from the artist's foundation) documenting this defect.

8.3 Vis-a-vis consumers within the meaning of Sect. 13 of the German Civil Code [BGB], the guaranty for used goods is limited to one year after commencement of the statutory prescriptive period. In all other respects the statutory regulations shall apply.

9. Liability

All claims for damages of the buyer against the seller, its legal representatives, employees, vicarious agents are excluded - regardless of the legal reason and also in the event of the resignation of the seller in accordance with Section 7.3. This does not apply to damage based on willful or grossly negligent behavior on the part of the seller, their legal representatives or vicarious agents. The exclusion of liability does not apply to the assumption of a guarantee or the negligent breach of essential contractual obligations by the seller, but in the latter case the amount is limited to the damage that is foreseeable and typical for the contract when the contract is concluded. Liability for losses resulting from mortal injury, bodily harm or health damage remains unaffected.

10. Disruptions, System Failure

As technology generally stands, it is as a matter of principle not possible to develop or keep hard- and software entirely free of defects. Similarly, it is not possible to completely exclude faults and problems in Internet communications. Consequently, the Seller cannot assume any liability or guaranty for the permanent and fault-free availability and usage of its Website, insofar as the fault is beyond its control. Due to this circumstance, the Seller therefore also assumes no liability in the event that by reason of any such fault there may be no bids submitted, or only incomplete or late bids which would have led to a contract being reached if the fault had not occurred. Accordingly, the Seller similarly refuses to assume any costs incurred on the bidder due to such fault. If no bids can be made for items due to a system failure, then the remaining time between the occurrence of the fault and the scheduled auction closure shall be recorded and added on after the fault has been eliminated, meaning that the auction closure originally fixed is deferred by the duration of the fault. After the fault has been eliminated, the auction shall be continued with exactly the same bids and stage of procedure as applied at the time when the fault occurred.

11. Final Provisions

11.1 Oral ancillary agreements must be done in writing in order to become effective. The same applies to any waiver of the requirement for written form.

11.2 In business with registered merchants, public corporations and special trusts under public law, it is further agreed that Munich shall be place of performance and place of jurisdiction (including proceedings involving cheques and bills of exchange). Moreover, Munich shall always be venue if the Buyer does not have a general place of jurisdiction in Germany.

11.3 The legal relations between the Seller and the Buyer shall be governed by German law, excluding CISG.

11.4 Should one or more terms of these General Terms of Business be or become ineffective, the effectiveness of the remaining terms shall remain unaffected. Sect. 306 par. 2 of the German Civil Code (BGB) shall apply.

11.5 These General Terms of Business are available in German and in English. The German version shall be decisive at all times, whereby German law shall apply exclusively with regard to the meaning and interpretation of the terms used herein.

DATA PRIVACY POLICY

Valid as of May 2018

Scope:

The following data privacy rules address how your personal data is handled and processed for the services that we offer you when you contact us initially, or where you communicate such data to us when logging in to take advantage of our further services.

The Controllers:

The "controllers" within the meaning of the European General Data Protection Regulation* (GDPR) and other regulations relevant to data privacy are:

Ketterer Kunst GmbH & Co. KG

Joseph-Wild-Str. 18, D-81829 Munich and

Ketterer Kunst GmbH

Holstenwall 5, D-20355 Hamburg,

Each is independently responsible for the respective processing activities pursuant to Art. 6 of theGDPR.

You can reach us by mail at the addresses above,

or by phone: +49 89 55 244 222 or +49 40 37 49 61 11

by fax: +49 89 55 244 166 or +49 40 37 49 61 66

by email: privacy@kettererkunst.com

Definitions under the new European GDPR made transparent for you:

Personal Data

"Personal data" means any information relating to an identified or identifiable natural person ("data subject"). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier, or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural, or social identity of that natural person.

Processing of Your Personal Data

"Processing" means any operation or set of operations performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organization, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure, or destruction.

Consent

"Consent" of the data subject means any freely given, specific, informed, and unambiguous indication of the data subject's wishes by which he or she, by a statement or by a clear affirmative action, signifies agreement to the processing of personal data relating to him or her.

We also need this from you - whereby this is granted by you completely voluntarily - in the event that either we ask you for personal data that is not required for the performance of a contract or to take action prior to contract formation, and/or where the lawfulness criteria set out in Art. 6 (1) sentence 1, letters c) - f) of the GDPR would otherwise not be met.

In the event consent is required, we will request this from you separately. If you do not grant the consent, we absolutely will not process such data.

As a general rule, visiting our websites is possible without actively communicating your personal data (except for your IP address, which is sent automatically). We do not establish a profile at the individual level, we do not engage in any database marketing, and we do not sell any data.

Every time our website is accessed and every time a file is retrieved, we save data regarding that process in a log file. Such data includes:

IP address, date and time of access, description of the type of browser used and the requested access method/function of the requesting computer, type and/or category of file accessed, data volume, report of whether the attempted access was successful.

This data is saved and evaluated to the extent required for processing and for resolving technical issues. This data is not disclosed to third parties. The IP address is saved for a reasonable and permissible period of time for purposes of discovering abuse, defending against cyber-attacks, and for detecting and fixing malfunctions, and is subsequently anonymized (via truncation). To the extent that analytical tools are used, the IP address is likewise disclosed only in the aforementioned anonymized form.

Personal data that you provide to us for purposes of performance of a contract or to take action prior to contract formation and which is required for such purposes and processed by us accordingly includes, for example:

- Your contact details, such as name, address, phone, fax, e-mail, tax ID, etc., as well as financial information such as credit card or bank account details if required for transactions of a financial nature;
- Shipping and invoice details, information on what type of taxation you are requesting (standard taxation or margin taxation) and other information you provide for the purchase, offer, or other services provided by us or for the shipping of an item;
- Transaction data based on your aforementioned activities;
- Other information that we may request from you, for example, in order to perform authentication as required for proper contract fulfillment (examples: copy of your ID, commercial register excerpt, invoice copy, response to additional questions in order to be able to verify your identity or the ownership status of an item offered by you).

At the same time, we have the right in connection with contract fulfillment and for purposes of taking appropriate actions that lead to contract formation to obtain supplemental information from third parties (for example: if you assume obligations to us, we generally have the right to have your creditworthiness verified by a credit reporting agency within the limits allowed by law. Such necessity exists in particular due to the special characteristics of auction sales, since in the event your bid is declared the winning bid, you will be depriving the next highest bidder of the possibility of purchasing the artwork. Therefore your credit standing - regarding which we always maintain the strictest confidentiality - is extremely important.)

For particular functions of our website, we engage further, external service providers to process data. These service providers process personal data exclusively in accordance with our instructions. In particular, this means that such service providers are thus also obligated to follow this Data Privacy Policy. The service providers absolutely may not use the data for their own purposes.

Registration/Logging In/Providing Personal Data When Contacting Us

You can choose to register with us and provide your personal data either directly (over the phone, through the mail, via email, or by fax) or on our website.

You would do this, for example, if you would like to participate in an online auction and/or are interested in certain works of art, artists, styles, eras, etc., or want to offer us (for example) pieces of art for purchase or sale.

Which personal data you will be providing to us is determined based on the respective input screen that we use for the registration or for your inquiries, or the information that we will be requesting from you or that you will be providing voluntarily. The personal data that you enter or provide for this purpose is collected and stored solely for internal use by us and for our own purposes.

We have the right to arrange for this information to be disclosed to one or more external data processors, for example a delivery service, which will likewise use it solely for internal use imputed to the processor's controller.

When you show an interest in certain works of art, artists, styles, eras, etc., be this through your above- mentioned participation at registration, through your interest in selling, consignment for auction, or purchase, in each case accompanied by the voluntary provision of your personal data, this simultaneously allows us to notify you of services offered by our auction house and our company that are closely associated in the art marketplace with our auction house, to provide you with targeted marketing materials, and to send you promotional offers on the basis of your profile by phone, fax, mail, or e-mail. If there is a specific form of notification that you prefer, we will be happy to arrange to meet your needs once you inform us of these. On the basis of your aforementioned interests, including your participation in auctions, we will be continually reviewing in accordance with Article 6 (1) sentence 1 (f) of the GDPR whether we are permitted to advertise to you and, if so, what kind of advertising may be used for this purpose (for example: sending auction catalogs, providing information on special events, future or past auctions, etc.). You have the right to object to this contact with you at any time as stated in Art. 21 of the GDPR (see below: "Your Rights Relating to the Processing of Your Personal Data").

Live Auctions

In so-called live auctions, one or more cameras or other audio and video recording devices are directed toward the auctioneer and the respective works of art being offered at auction. Generally, such data can be received simultaneously via the Internet by anyone using this medium. Ketterer Kunst takes the strongest precautions to ensure that no one in the room who has not been specifically designated by Ketterer Kunst to be on camera with their consent for the auction process is captured on camera. Nevertheless, Ketterer Kunst cannot assume any responsibility for whether individuals in the auction hall themselves actively enter the respective frame, for example by deliberately or unknowingly stepping partially or completely in front of the respective camera, or by moving through the scene. In such situation, through their participation in or attendance at the public auction, the respective individuals involved are agreeing to the processing of their personal data in the form of their personal image for the purposes of the live auction (transmission of the auction via audio and video).

Use of Cookies

Cookies are text files that are placed and saved on a computer system via a web browser. We use cookies as tags that we send to your computer's hard drive by means of your web browser. Once you log in, they make it possible for us to identify your user account during your visit to our webpages in a so-called session. It is necessary to activate cookies for the entire time you are logged in because other functions that serve to identify a session carry the risk that an unknown person could perform actions with your session identifier.

We do not use cookies for any other purpose.

You can use the "Help" function on most web browsers to learn, for example, how you can block cookies or delete cookies that have been received. This allows you to permanently reject the storage of cookies. We would like to point out, however, that the parts of our online services that require you to be logged in will no longer function without cookies.

Your Rights Relating to the Processing of Your Personal Data

Pursuant to the provisions of the GDPR, you have the following rights in particular:

- The right to information on stored personal data concerning yourself, free of charge, the right to receive a copy of this information, and the other rights in this connection as stated in Art. 15 of the GDPR.
- The right to immediate rectification of inaccurate personal data concerning yourself as stated in Art. 16 of the GDPR, and as applicable, to demand the completion of incomplete personal data, including by means of providing a supplementary statement.
- The right to immediate erasure ("right to be forgotten") of personal data concerning yourself provided one of the grounds stated in Art. 17 of the GDPR applies and provided the processing is not necessary.

- The right to restriction of processing if one of the conditions in Art. 18 (1) of the GDPR has been met.
- The right to data portability if the conditions in Art. 20 of the GDPR have been met.
- The right to object, at any time, to the processing of personal data concerning yourself performed based on Art. 6 (1) letter e) or f) of the GDPR as stated in Art. 21 for reasons arising due to your particular situation. This also applies to any profiling based on these provisions.

Where the processing of your personal data is based on consent as set out in Art. 6 (1) a) or Art. 9 (2) a) of the GDPR, you also have the right to withdraw consent as set out in Art. 7 of the GDPR. Before any request for corresponding consent, we will always advise you of your right to withdraw consent.

To exercise the aforementioned rights, you can contact us directly using the contact information stated at the beginning, or contact our data protection officer. Furthermore, Directive 2002/58/EC notwithstanding, you are always free in connection with the use of information society services to exercise your right to object by means of automated processes for which technical specifications are applied.

Right to Complain Under Art. 77 of the GDPR

If you believe that the processing of personal data concerning yourself by Ketterer Kunst GmbH & Co. KG, headquartered in Munich, is in violation of the GDPR, you have the right to lodge a complaint with the relevant office, e.g. in Bavaria with the Data Protection Authority of Bavaria (Bayerisches Landesamt für Datenschutzaufsicht, BayLDA), Promenade 27 (Schloss), D-91522 Ansbach. If you believe that the processing of personal data concerning yourself by Ketterer Kunst GmbH, headquartered in Hamburg, is in violation of the GDPR, the agency to report complaints to is the Hamburg Commissioner for Data Protection and Freedom of Information (Hamburgischer Beauftragte für Datenschutz und Informationsfreiheit, HmbBfDI), Klosterwall 6 (Block C), D-20095 Hamburg.

How Long We Store Data

Multiple storage periods and obligations to archive data have been stipulated in various pieces of legislation; for example, there is a 10-year archiving period (Sec. 147 (2) in conjunction with (1) nos. 1, 4, and 4a of the German Tax Code (Abgabenordnung), Sec. 14b (1) of the German VAT Act (Umsatzsteuergesetz)) for certain kinds of business documents such as invoices. We would like to draw your attention to the fact that in the case of contracts, the archiving period does not start until the end of the contract term. We would also like to advise you that in the case of cultural property we are obligated pursuant to Sec. 45 and Sec. 42 of the German Cultural Property Protection Act (Kulturgutschutzgesetz) to record proof of meeting our due diligence requirements and to retain this for a period of 30 years. This may also include the recording and retention of some or all of your personal data. Once the periods prescribed by law or necessary to pursue or defend against claims (e.g., statutes of limitations) have expired, the corresponding data is routinely deleted. Data not subject to storage periods and obligations is deleted once the storage of such data is no longer required for the performance of activities and satisfaction of duties under the contract. If you do not have a contractual relationship with us but have shared your personal data with us, for example because you would like to obtain information about our services or you are interested in the purchase or sale of a work of art, we take the liberty of assuming that you would like to remain in contact with us, and that we may thus process the personal data provided to us in this context until such time as you object to this on the basis of your aforementioned rights under the GDPR, withdraw your consent, or exercise your right to erasure or data transmission.

*Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)

CONTACT

General inquiries regarding the artwork:

Modern Art
Post-War / Contemporary Art
Tel. 0800-53883737
Fax +49 - (0)89 - 5 52 44 - 166
service@ketterer-internet-auktion.de

General inquiries regarding the invoice:

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- Register for Information on Artists
- Register for Information on our Auctions

THE ART LOSS ■ REGISTER™
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THREE STEPS TO A SUCCESSFUL AUCTION

Selling art through Ketterer Kunst is your safe, discreet and easy way to get the best possible result!

Not only do we have an international client base that we have established over decades, we also register an average annual increase in new clients of around 20 %. Acclaimed museums and renowned collectors from all around the world rely on our expertise.

Use the opportunity and benefit from our vast network and our international standing: The booming art market once more promises excellent returns for the upcoming season. The way to your own successful sale is simple – you can reach your goal in just three steps!

1

Get in touch with us!

You own artworks and want to profit from the current market condition? Get in touch with us!

The classic way: By mail
Please send us a letter or an e-mail to **info@kettererkunst.de** and you will definitely reach the right expert for your concern! Just include a short description and a picture of the work.

The personal way: The talk
You appreciate personal, qualified and friendly advice? Just give us a call at **+49 89 55244-0**! If you wish, we will also call on you or arrange for a meeting at our company.

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You are short of time? Just use our online form (**www.kettererkunst.com/sell**) and get a quick, custom-made offer.

2

Get the best offer!

Every work of art is just as unique as our range of services! Our experts find the best possible presentation for every artwork and know how to fetch a maximum yield. Another plus: Only Ketterer Kunst uses the great potential of so many distribution channels!

You would like to sell an upscale work?
In this case the classic saleroom auction is your top choice, as we can definitely reach the right clientele for your top lot in this setting!

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Whether classic saleroom auction, high traffic internet auctions or direct acquisition: You can rely on our expert's recommendation! Ketterer Kunst guarantees to make the most of your art – custom-made for the perfect result!

3

Get international top prices!

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- We organize collection, transport, insurance and, if necessary, restoration measures.
- We carry out comprehensive research for your work and describe it in line with latest scientific standards – putting your art in the spotlight of a highly professional presentation.
- Our broad internationally targeted mar-keting campaigns take the sale potential of your work to a global level.

This is how we guarantee the best possible price for your work! There's just one thing you will have to do: Look forward to your payment!