

UFOs and Aliens in Space

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Popular UFO claims include alien bases on the Moon and Mars. It is widely (but falsely) reported that Buzz Aldrin saw a UFO on the Apollo 11 flight and that NASA spacecraft discovered a humanoid face and other artifacts on Mars.

DAVID MORRISON

Much of the public believes that UFOs are alien spacecraft. This represents a conceptual leap from unidentified lights in the sky or radar bogies that were the UFO stories when I was growing up. Today, “believers” are talking about actual alien contact, with alien bases on the Moon and Mars, and their concerns receive reinforcement from radio, TV, and Internet blogs.

On one level UFOs are real, of course; many people occasionally see objects in the sky that are not immediately identifiable as planes, balloons, planets, stars, or unusual atmospheric phenomena. But the questions I receive from the public (submitted to a NASA Web site) suggest a belief system linking UFOs with alien visitations and abductions



spiced up by “conspiracy theories” to hide this information from the public.

If UFOs are alien spacecraft visiting Earth, then it seems reasonable that evidence of alien civilizations might be seen by astronomers or the radio signals from alien spacecraft might be picked up by the sensitive receivers we use to communicate with our own spacecraft. Perhaps astronauts who venture into space would be among the first to make reliable observations of alien spacecraft or artifacts. Perhaps we should look for alien bases on other worlds. Indeed, the Internet carries many stories of such encounters. I will examine some of the evidence cited for alien presence in the solar system.

Astronaut Encounters with Aliens

One allegedly well-documented report stems from an interview in which astronaut Buzz Aldrin describes seeing a UFO during the Apollo 11 mission. In an interview on the Science Channel (now posted at <http://youtube.com/watch?v=XLkV1ybBnHI>), Aldrin stated that he, Neil Armstrong, and Mike Collins saw unidentified objects that appeared to follow their Apollo spacecraft.

To get the story straight, I called Buzz Aldrin, who was happy to explain what happened. He said that his remarks were taken out of context to reverse his meaning. It is true that the Apollo 11 crew spotted an unidentified object moving with the spacecraft as they approached the Moon. After they verified that this mystery object was not Apollo 11’s large rocket upper stage, which was about 6,000 miles away by then, they concluded that they were seeing one of the small panels that had linked the spacecraft to the upper stage (any part of the spacecraft’s rocket upper stage will continue to move alongside the spacecraft, as both are floating in free-fall). These panels were too small to track from Earth and were relatively close to the Apollo spacecraft. Aldrin told me that they chose not to discuss this on the open communications channel since they were concerned that their comments might be misinterpreted. His entire explanation about identifying the panels was cut from the broadcast interview, giving the impression that the Apollo 11 crew had seen a UFO. Aldrin told me that he was angry about the deceptive editing and asked the Science Channel to correct the intentional twisting of his remarks, but they refused. Later, Aldrin explained what happened on CNN’s Larry King Live (www.youtube.com/watch?v=Np45b2Xt-Ww&feature=related) but was nearly cut off by the host before he could finish.

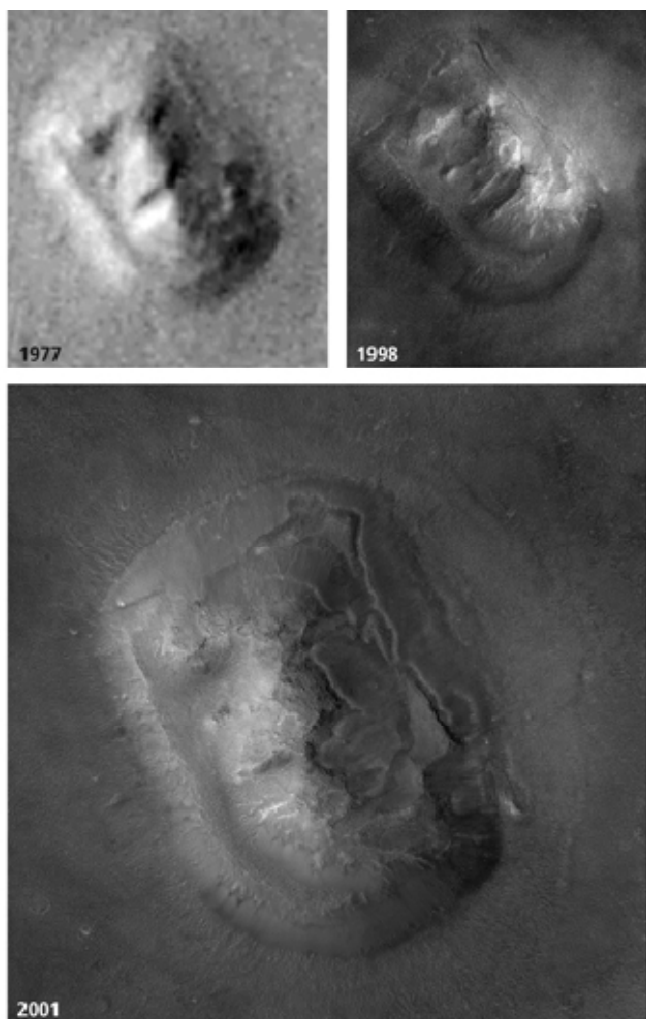
David Morrison is a NASA senior scientist and interim director of the new NASA Lunar Science Institute. A fellow of the Committee for Skeptical Inquiry, Morrison received the Carl Sagan Medal of the American Astronomical Society for his work in communicating science to the public. E-mail: david.morrison@nasa.gov.

With the popularity of YouTube, this same question is addressed to me repeatedly, as in: “Check out this video on YouTube with Buzz Aldrin saying he saw a UFO on Apollo 11. Who is fibbing? NASA or the great American hero, Buzz Aldrin?” My answer was that the fibbing was being done by the producers of the video, who omitted the second half of the interview.



Buzz Aldrin (at top and on the moon) asked the Science Channel to clarify to their viewers that he did not see a UFO, but they refused.

It is instructive to watch this interview to see the ways the story is embellished and ultimately manipulated. Most of the talking is done by the interviewer and not Aldrin, but their comments have been edited to create the illusion of a seamless narrative. Throughout the interview we see a montage of short scenes from Apollo and other missions, including a blurry image through the window taken during a later flight. Only a critical



As improving technology allowed for higher photo resolution, the “face on Mars” looked less like a face and more like the natural landform it is.

viewer will distinguish what Aldrin said from the narrative by the interviewer or realize that the video clips are unrelated. The end product is clever disinformation, strongly suggesting—without explicitly lying—that Aldrin and his crewmates saw an alien spacecraft.

Many Internet claims of encounters between NASA astronauts and alien spacecraft are based on quotes from “secret communications” between flight crews and Houston. It is true that there are such private conversations, concerning crew health for example. But the Internet stories of overheard conversations are never documented and often attributed to leaks from unnamed NASA workers whose jobs (or even lives) would allegedly be at risk if they were identified. Many of these stories involve the Apollo 11 flight, and they include claims that alien spaceships accompanied the NASA craft during its Moon landing and that

a row of alien spacecraft along a crater rim monitored the astronauts’ spacewalk on the lunar surface. (Incidentally, Apollo 11 landed on a flat plain where there were no hills or crater rims to provide such a viewpoint.)

To my knowledge, no NASA astronaut has ever reported seeing a UFO in space, let alone having a confrontation with aliens. However, this is not to say that no astronaut believes that alien visitations to Earth might be happening. Recently there were news reports that Apollo 14 astronaut Edgar Mitchell believes in the reality of some reports of UFOs. He has attended a number of meetings of UFO believers, and he asserts that some of these reports are true, and that the U.S. government and military are aware of these alien visits. However, Mitchell does not claim to have seen aliens himself. His astronaut colleagues tell me that he has always had an interest in the occult, and he even tried to conduct a parapsychology experiment on the way to and from the Moon. It is easy for a journalist to ignore Mitchell’s caveats about most UFO reports being untrue, or about not encountering an alien himself, to give the impression that he and other astronauts have had frequent encounters with beings from other worlds.

One argument presented to me by several correspondents is that aliens must have warned humans to stay away from their bases on the Moon. Otherwise, why was the Apollo program suddenly terminated with three more missions scheduled and almost ready for launch? (The huge Apollo/Saturn-5 rockets that enthral visitors to the NASA space parks at Canaveral, Houston, and Huntsville are not mock-ups; they are real hardware built for Apollo 18, 19, and 20.) The conspiracy story attributes our failure to follow up on the Apollo flights to this same interplanetary quarantine and suggests that NASA’s current program to return astronauts to the Moon will be cancelled for the same reason. I admit being baffled by the sudden termination of the Apollo program at the peak of its success, but I accept the official explanation that it was due to the changing political priorities of the Nixon administration, where many looked upon Apollo as a Kennedy-Johnson program.

Mars: The Viking Era

Mars plays a unique role in public consciousness. Just a century ago, this planet was widely thought to be inhabited by intelligent creatures, largely due to astronomical studies and the popular writing of Percival Lowell. The classic science-fiction novel *War of the Worlds* by H.G. Wells reinforced public curiosity about the possibility of aliens on Mars. But early space missions that showed decisively that Mars was not really very Earth-like—with no canals and an atmosphere only 1 percent the size of ours—damped much of the public’s fascination. Scientific interest has steadily increased, however, and Mars is the planet most visited by spacecraft. The first stage of sci-



entific exploration climaxed in 1976 with two identical Mars landers and orbiters as part of the Viking program. All four Viking spacecraft were fabulously successful, providing a comprehensive survey of the planet together with detailed analysis at two landing sites, including clever experiments to search for evidence of microbial life.

After two decades of post-Viking neglect, NASA initiated a new series of Mars missions with the 1996 Mars Pathfinder, which included a rover about the size of a microwave oven. After two mission failures in 1998, several remarkably successful orbiters and the two famous Mars Exploration Rovers, Spirit and Opportunity, followed. In addition to high-resolution orbiting cameras, there is also a digital, global topographic map based on laser ranging between the orbiter and the surface. As a result, we have more detailed and quantitative data on martian topography than we do for much of the Earth's surface.

Naturally, the tens of thousands of high-resolution photos from orbit and on the ground (all publicly available) have been studied for evidence of life and any potential artifacts of a possible ancient civilization. In this respect, the most famous discovery was made by Viking Orbiter 1 in 1977, in a low-resolution (about 40 meters) photo of the ancient Cydonia region of Mars. In the midst of a heavily eroded plain with irregular low mountains or mesas is the Face on Mars, one of the iconic images of the space program.

The Face on Mars, seen under oblique lighting, seems to be an oval humanoid face with eyes, nose, and a mouth. It is about one kilometer across and surrounded by a sort of halo that reminds some of the cloth headpiece worn by Egyptian pharaohs. It was spotted by Viking scientist Toby Owen and released to the press as a joke to show how even on Mars we (humans) could find features that looked vaguely like ourselves. Unfortunately, Viking project scientist Jerry Soffen made an offhand remark to the press that this "face" showed up only under this particular lighting and not in other photos of the same site. The problem was that Viking had not taken other photos of this spot at equal or higher resolution, and the mission ended before this area could be mapped again. Thus began another conspiracy theory: NASA was suppressing confirming photos of the face. When the next NASA mission to photograph Mars (Mars Observer) failed in 1992 shortly before its arrival at the Red Planet, the story began to circulate that this failure was faked and the spacecraft was really in orbit and sending back secret high-resolution images of the face.

The Face on Mars has been vigorously promoted by one energetic entrepreneur: Richard C. Hoagland. A young freelance journalist and one-time museum guide, Hoagland was a part of the large corps of journalists who encamped at the Jet Propulsion Laboratory (JPL) for the Viking landings. Hoagland not only accepted the artificial origin of the face, he went on

to develop a detailed "theory" that linked this feature with a number of others in Cydonia that he also interpreted as artificial. These included a set of intersecting low ridges that he called the "city" and several mountains of roughly pyramid shape. (Pyramid-shaped peaks with three or four sides are a rather common product of both ice and wind erosion on Earth.)

Hoagland set out to study the geometry of this layout,



Richard C. Hoagland's elaborate interpretations of "monuments" on Mars are amazing flights of imagination.

finding coincidences in the angles between the features that further demonstrated (to him) their artificial origin. He published the results from his "research" in a 350-page book called *The Monuments of Mars* (now in its fifth edition). He also undertook a lecture circuit that climaxed when a naïve public affairs officer at NASA Glenn (then Lewis) Research Center in Cleveland invited him to present a director's seminar and then offered to put a videotape of this talk on the NASA TV channel. Hoagland also began making regular appearances on Art Bell's late-night talk show *Coast to Coast AM*, where he still happily holds forth on the conspiracies of NASA and the U.S. government to keep the truth from the public.

Hoagland's elaborate interpretation of the "monuments" on Mars represents an amazing flight of imagination. Since the features are in a state of ruin, he concludes that the aliens who built them are no longer present and dates the construction of these huge projects to about half a million years ago. Since the face is (in his opinion) clearly human and directed upward (best seen from above), he concludes that it was built as a message for *Homo sapiens*, a species that was just emerging on Earth at the time. The story then bifurcates: either these aliens were also visiting Earth at the time and knew about the future rise of humans (analogous to the opening sequences in the book and film *2001, A Space Odyssey*), or the monuments themselves were built by an earlier race of humans that had moved from

Earth to Mars and left no traces of their tenure on our planet. Yet another option is that *Homo sapiens* had a martian origin, migrating to Earth when their own planet became uninhabitable (a conclusion that flies in the face of all modern genetic analysis of humans and their primate cousins).

Hoagland's analysis of the geometric patterns of the alleged monuments convinced him that the entire layout in Cydonia was a technical message to humans, one that included the key to a limitless source of energy. Apparently he has deciphered the message but is not revealing it just yet, other than to say that this energy could be tapped only at latitude 19.5 degrees (north or south) on the Sun as well as Earth and Mars. More recently, Hoagland linked the monuments on Mars with the crop circles appearing on Earth, which also allegedly held the key to unlimited energy, implying that the creators of the city on Mars were also active today on Earth. The fact that Hoagland was able to peddle this bizarre fairy tale for two decades and make a living selling books and videotapes is a testament to his ability as a salesman, if not to his unscientific acumen.

The two-decade post-Viking hiatus from Mars provided plenty of time for Hoagland to market his fantasy. The 1992 failure of Mars Observer, far from ending this story, was twisted by Hoagland into an additional conspiracy theory. The day the failure was announced, a group of his followers demonstrated outside the JPL gates to protest the blanket of secrecy they claimed had been thrown over this mission whose real purpose was to allegedly study the face. In the late 1990s, one of the two most frequently asked questions in letters and emails received by NASA concerned the Face on Mars (the other topic was asteroid impacts).

New Results from Mars

In 1998, a much-improved camera arrived at Mars on the Mars Global Surveyor orbiter. A vocal segment of the public demanded that NASA give high priority to re-photographing the face. NASA wisely argued that this was not a high-priority target but quietly obtained a high-resolution image of the face as soon as the spacecraft orbit permitted it. On April 5, 1998, when the Mars Global Surveyor flew over Cydonia for the first time, Michael Malin and his Mars Orbiter Camera (MOC) team snapped a picture ten times sharper than the original Viking photos, revealing a natural landform. However, the new lighting was very different from that of the original Viking photo, and some face proponents refused to believe that this was really the same feature. On April 8, 2001, the MOC captured a photo using the camera's maximum resolution, better than two meters, which was twenty times higher than the Viking original. This spacecraft also carried another instrument, a laser ranging device, which gradually built up an extremely detailed quantitative topographic map of Mars that did not depend on lighting angles. With these data, it was possible to reconstruct exactly how the mesa would look from any direction. Many details of this story are recounted in the article

"Unmasking the Face on Mars" at http://science.nasa.gov/headlines/y2001/ast24may_1.htm.

Additional images with even higher resolution were obtained in 2007 by the University of Arizona HiRISE camera on the NASA Mars Reconnaissance Orbiter (http://hirise.lpl.arizona.edu/PSP_003234_2210). With a resolution of 25 cm, these photos showed features as small as a briefcase. Such data eventually convinced almost everyone that the face was simply a mesa surrounded by an apron of eroded debris. NASA's chief Mars scientist, Jim Garvin, even jokingly plotted a hiking trail that ascended the rugged hill. However, as the true nature of this eroded mesa became undeniable, the suggestion was made that the face had been intentionally destroyed by NASA: the clandestine mission of Mars Observer had been to first photograph the feature in detail, then deface it with a well-aimed nuclear missile.

Meanwhile, Richard Hoagland was moving on and generating new claims, some even more bizarre than those associated with the face. The Wikipedia article on Hoagland mentions his assertions that "Rocks on Mars containing biological fossils were purposely destroyed by NASA's rover Opportunity. Numerous objects surrounding the landing sites of the Mars Exploration Rovers are in fact pieces of martian machinery. There are large semitransparent structures constructed of glass on the lunar surface, visible in some Apollo photography. There is a clandestine space program, using antigravity technology reverse-engineered from lunar artifacts and communicated by secret societies. Federal agencies such as FEMA and NASA are linked to Freemasonry."

Hoagland held a press conference at the National Press Club on October 30, 2007, to "review NASA's 50 years of cover-ups and hidden solar system data." His accusations against NASA appeared in more detail in his book with Mike Bara, *Dark Mission: The Secret History of NASA*. He was also by then in his crop circle phase, promoting new sources of energy revealed to him in the crop circles. And he is still a regular guest on Coast to Coast AM, where he has the title of science advisor.

Humans have a natural tendency to see anthropomorphic features in natural shapes such as clouds and mountains. As thousands of new photos of the martian surface were streaming back from the rovers, some of these tendencies were bound to pop up. One of the funniest is an image of a tiny eroded rock only a few centimeters long that looks rather like the famous "little mermaid" statue in Copenhagen Harbor. This too has been hailed as a real photo of a Martian. The continuing torrent of spacecraft images from current missions to Saturn and Mercury as well as Mars will probably generate new advocates for aliens in space. Fortunately, the vast majority of people are happy to accept these images as wonderful products of our space age exploration of the solar system and not as a new episode in the great alien cover-up. □