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"If on Mars life made its appearance some billions of years ago," said Dr. Singer, it probably evolved there in a form capable of existing under conditions which would be absolutely deadly to a terrestrial organism which arrived there without the necessary protection."

Dr. Singer added that if thinking beings have evolved they could well believe that life does not exist on earth. These beings, he continued, might be so different from life on earth that they would be difficult to recognize as intelligent beings.

The Brookings Institution - NASA report mentioned elsewhere in this issue suggests, along with Dr. Singer's remarks, the possibly most difficult barrier to contact with spacemen, either here on earth or in space: The possibility that intelligent beings near enough to reach the earth (or to be reached by our astronauts) may have evolved so that we would have little in common with them physiologically or psychologically. Other scientists believe that intellectual communication would be possible regardless, assuming that some form of symbolic language would be necessary for any intelligent race.

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In a five-page section dealing with the possibility of spacemen visiting the earth, the report states that the consequences of such a discovery are unpredictable but could be profound, and suggests the need for further study of the problem.

"It is possible," the NASA report says, "that if the intelligence of these creatures were sufficiently superior to ours, they would choose to have little if any contact with us. On the face of it, there is no reason to believe that we might learn a great deal from them, especially if their physiology and psychology were substantially different from ours."

## Piri Reis Map Stirs Global Interest

The 16th Century Piri Reis map mentioned in "Flying Saucers: Top Secret" has drawn international interest according to the U.S. Navy Hydrographic Office. As pointed out in the December 1958 UFO INVESTIGATOR, however, "(its) full significance will probably not be known until more archeological evidence is obtained." Some points of the Georgetown University Forum broadcast discussing the map remain controversial.

As confirmed by the Hydrographic Office, the map was compiled in 1513 by Turkish Admiral Piri Reis. According to the H.O. "the map is one of the earliest in existence which shows land areas of the Americas . . . particularly striking is its accuracy as regards distances between the Old and New Worlds; the position of the Azores, Madeira and Canary Islands; general delineation of coastline; and the marking of sites of importance."

As a result of the Georgetown University broadcast the Piri Reis map has been confused with other old maps mentioned in the same broadcast. The Piri Reis map "comprises only a section of what scholars believe was a large map of the world," states the H.O. It shows only part of the Antarctic coastline, South America, the east coast of North America, and parts of Africa and Europe.

The accuracy of the map of the Antarctic coastline, now under ice, has been confirmed to NICAP by Father Daniel Linehan, seismologist of Weston Observatory, who aided the U.S. Navy in the Antarctic.

The accurate mapping of the sub-glacial features of the Antarctic coastline also has been confirmed by Prof. Charles H. Hapgood, anthropologist at Keene Teachers College, N.H., who is completing an independent three-year study of the map.

"The implication is that people were around a very long time ago to map the coasts," says Prof. Hapgood. This Antarctic section of the map appears to be the most significant feature.

It is not known whether there is any connection between the map and possible exploration of extraterrestrials. An aerial survey, one suggestion, has not been proved. However, NICAP will continue to follow current studies of the map since it does imply a widespread and accurate mapping by unknown persons, unrecorded in historical records.

Interested members may obtain a copy of the map along with background material for a nominal price from the Library of Congress, Photo-Duplication Division, Washington 25, D.C. The Georgetown transcript is no longer available.

## "Ultracom" Beam May Explain Lack of UFO Messages

Development of an "ultracom" space signal system by Westinghouse may explain why we do not hear messages between space vehicles, or from UFOs to earth.

"Information carried on the ultraviolet beam is almost impossible to intercept," states Dr. Patrick Conley, manager of Westinghouse Air Arms Division. Ultracom, which already has carried TV signals, has a short wavelength that is absorbed by the atmosphere, preventing direct contact between space vehicles and the earth.

"Manned space vehicles could use ultracom for intercommunication," says Dr. Conley. "And a deep-probe satellite with instruments for collecting scientific data could transmit information by ultracom to a relay satellite circling the earth. It would then be retransmitted to earth by conventional systems."

By ultracom, or a similar system, UFOs may be in constant communication with each other or with "mother ships," remote-control UFOs also may be relaying scientific data about the earth to far-off relay units -- all of this undetected by our receiving stations.

## NICAP Adviser Hits Censorship

In a statement to NICAP, recently appointed Special Adviser Morton Gerla, Jamaica, N.Y., has taken issue with the official UFO investigation. Mr. Gerla is an aviation ordnance specialist, and an organizer and past president of the New York Section, American Rocket Society.

Stating that UFOs exist and are capable of performances beyond our technological ability, Mr. Gerla added: "Our knowledge, and perhaps understanding, of UFOs and the advanced scientific achievement they represent, may be increased by widespread, cooperative observation and reporting of their activities."

"Such observation and, particularly, reporting of same is discouraged by governmental policies of secrecy concerning its data and ridicule of those reporting to it. This shortsighted policy results in delaying the solution of the UFO mystery, leaving both military and civilian populations unprepared for whatever steps may eventually have to be taken, whether peaceful or hostile."

"In the event of action being forced upon our government or people by UFO initiative, public confidence in a government following a policy of secrecy prior to being forced into action would be shattered, perhaps with catastrophic results to morale."

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# Adviser Sponsorship

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Incidentally, the words "Laputa," "flandona," and "gagnole" were analyzed with the Shaver Mantong Alphabet. We regret to say that the results did not throw much light on what Mr. Swift was up to, or what Mr. Shaver was up to, either.

Getting back to the moons of Mars, a recent feature article in the "National Enquirer" claims that U. S. scientists are working on a round-the-clock investigation of Phobos. Many leading scientists believe that this little moon, 5 miles in diameter, is probably a huge space platform, built by living creatures from Mars or some other planet.

According to this article, the United States Government is going to spend over \$55 million in the next year or so, in an attempt to find out if this theory is true. Says Raymond E. Wilson, Chief of Applied Mathematics for the National Aeronautics and Space Administration: "Space probes are now being prepared to determine whether Phobos is actually a huge orbiting space base."

It is also believed that the next Mariner space rocket, scheduled for launching late this Fall or in the early spring of 1964, will be aimed to pass close to Mars and will contain special equipment capable of analyzing the light reflected from Phobos. Scientists say that if this moon reflects light in the way aluminum does, it will prove Phobos to be a space platform rather than a natural moon.

Phobos and its sister moon, Deimos, were discovered by the U.S. astronomer Asaph Hall in 1877, - though they were described with great accuracy in Swift's book over a hundred years earlier. For many years after their official discovery, nobody paid much attention to them because they are so small. There haven't even been any good photographs taken of them, because the Earth's atmosphere interferes with cameras, and thus the reflected light from Mars tends to blank out Phobos.

Finally, in 1959, I.S. Shklovsky, who is considered to be Russia's leading planetary physicist, published the results of observations he had made. He came to the conclusion that Phobos is an artificial satellite, probably made of aluminum. He believes that this moon is hollow inside, something like a tin can from which the contents have been removed. Shklovsky had good reasons for his theory about Phobos - the most important of which is that the tiny moon moves in its orbit over three times faster than Mars! This is impossible for a natural moon, according to accepted astronomical theories. For another thing, Phobos is slowing down as time goes by, and moving closer to Mars. This duplicates the motions of all man-made satellites put into orbit by the United States and Russia.

One of the leading scientists to express agreement with Shklovsky is Dr. H.M. Sinton, an astronomer at Yerkes Observatory, Williams Bay, Wisconsin. In a statement to the U. S. National Academy of Sciences, Yerkes said: "Phobos may be a huge orbiting city filled with men, women, and children. The other moon (Deimos) might be one too." Also in agreement is Dr. Fred Hoyle, a professor of astronomy at Cambridge University, England. He is quoted as saying that this is the only theory he has ever heard that covers the mystery of these two moons.

Disagreement has come from other scientists, including astronomer Clyde W. Tombaugh, associate professor of earth sciences at the Research Center of New Mexico University. Dr. Tombaugh is world-famous as the discoverer of the planet Pluto, and is known in saucer circles for his sensational close-up sighting of a saucer with apparent lighted windows, back in 1949. However, regarding the moons of Mars, he is quoted in the Enquirer as saying: "Putting up such a satellite would severely strain the capabilities of even a world rich in resources. The extreme poverty of mineral resources on Mars would have deprived them of the necessary materials."

As the controversy goes on, and it will probably be another few years before it is settled for once and for all.

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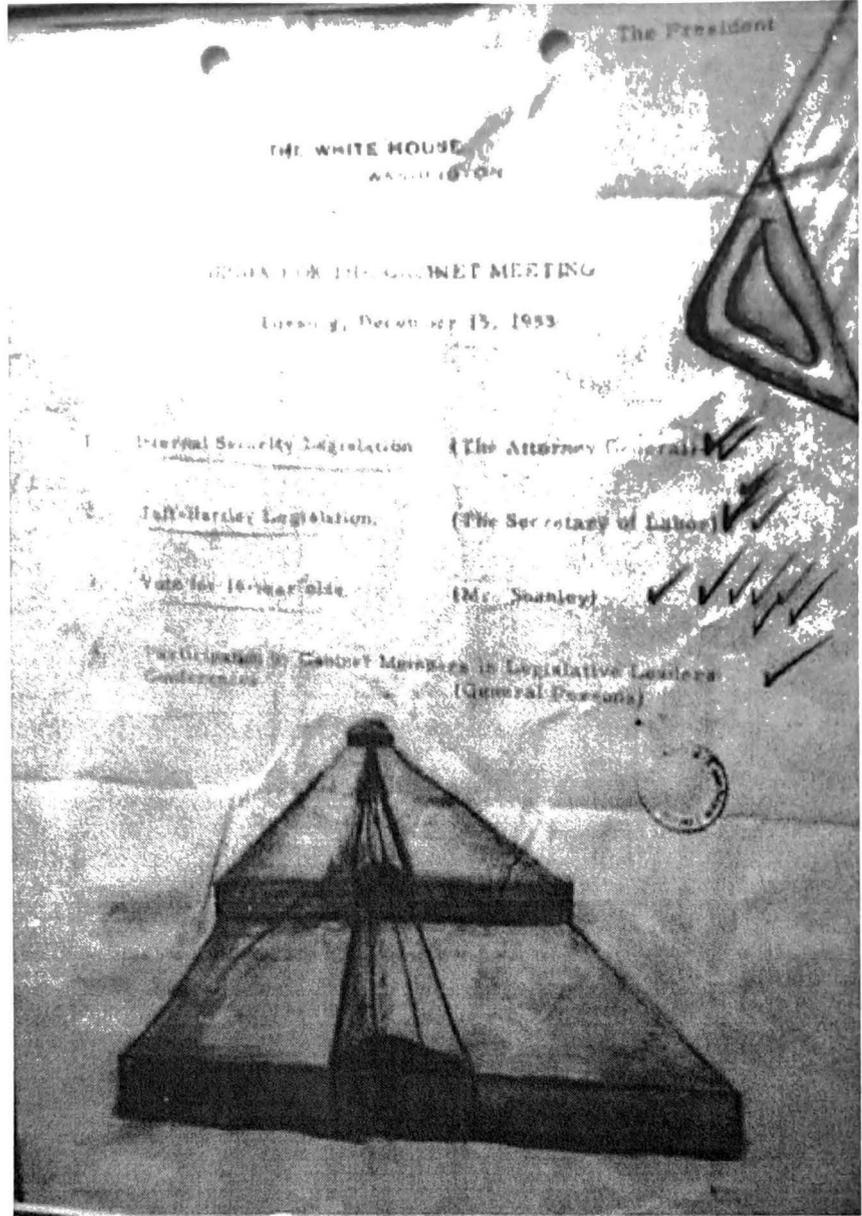
## THERE IS LIFE ON MARS

Based on my analysis of recent images coming from Mars, and intelligence information there is strong evidence that intelligent life once existed on Mars and may continue. As a former Air Force Intelligence officer my analysis is based on my interpretation of the evidence. Scientists often state where there's water there is life? I feel where there is Martian water, heat and geometric structures there is life. University of Arizona scientists announced that photos taken by the Mars Global Surveyor (MGS) show evidence of recent catastrophic floods. A team of researchers studying photographs of Mars has found teardrop features that they say were sculpted by flowing water within the last ten million years ago. Infrared and gamma ray images indicate there are large reservoirs of water, just below the surface of Mars. My photographic analysis indicates that all over the planet there are what appears as ancient structures and anomalies such! as forts, faces, pyramids, walls, and tunnels. These anomalies are not natural geological formations, but in my opinion represent ancient cities or religious centers. We could ignore one or two anomalies, but there are hundreds. We can speculate, that the Martian climate was making catastrophic changes, the atmosphere was rapidly deteriorating possibly due to meteorite bombardment or changes in the sun. These atmospheric changes probably caused the Martians to seek shelter underground and possibly on their Moon Phobos to preserve their civilization. They may have left both a face and pyramids on the surface as a signal to others who would eventually visit Mars. The Germans in World War II due to allied bombing also rapidly moved underground and developed manufacturing and living quarters in a relatively short time. Virtually all ME-262 aircraft were manufactured underground.

While in college I met President Eisenhower and was told that the Mars' Moon Phobos was most likely an artificial satellite launched long ago by an advanced Martian race. Jeff Rense has an article that confirms this speculation. Dr. S. Fred Singer, special advisor to President Eisenhower on Space Developments in his published opinion backed a claim first made by the Soviet astrophysicist I. S. Shklovsky. The Russian scientist's announcement that Phobos was a hollow artificial satellite proved the existence of a Martian civilization, set off heated arguments among astronomers. Shklovsky based his decision on a long study of Phobos' peculiar orbit, which other astronomers also questioned. Shklovsky is also famous for having written a 1966 book with Carl Sagan on SETI. The book states, "We now come to discuss our enigmatic planetary neighbor Mars, which seems to provide the best opportunity, in the immediate future, for the study of extraterrestrial life. In this chapter we will discuss the physical environment of Mars and the possibility that life could have come into being in the ancient Martian past and survived until the present day" "Intelligent Life in the Universe." page 259.

Dr. Singer backed the Shklovsky's calculations and said, Phobos would make an ideal space base, both for Martians and earthlings. In July of 1988, the Soviets launched two unmanned satellite probes named Phobos 1 and 2 headed for a landing on the planet's mysterious moon, Phobos. I watched closely when the first one failed in route, but the second successfully took up orbit around Mars in January 1989. Significantly, its infrared cameras picked up underground heat emissions and numerous other anomalies on Mars. A Phobos picture, released on Canadian TV, presents an infrared scan radiometer image of the Martian surface that showed clearly defined rectangular areas. These are interconnected with a latticework of perfectly straight channels, that resemble city blocks. The heat signature of what may be a set of underground caverns or channels are just too geometrically regular to be formed naturally. According to Dr. John Becklake of the ! London Science Museum, "The city-like pattern is 60 kilometers wide and could be easily be mistaken for an aerial view of Los Angeles." The infrared geometric patterns clearly indicate Martian intelligent life. On March 28, 1989, Phobos 2 then headed for the moon Phobos, when its cameras picked up an Unidentified Flying Object. The Phobos satellite failed as the UFO came closer. The last photos may be seen at [www.filersfiles.com](http://www.filersfiles.com).

President Eisenhower was apparently excited about the possibility of life in space and often made doodling of strange craft on his White House papers. When I visited the President's Museum in Abilene, I took a photo of some of his doodling showing what appears to be a typical Flying Triangle. Eisenhower's Science Advisor Dr. James Killian, gave a briefing on March 14, 1958 -- "claiming Mars is much more exciting than thought and conditions more similar to earth are there. -- Undoubtedly some form of life, although probably not ones which we would recognize." In 1963, Raymond H. Wilson Jr., Chief of Applied Mathematics at NASA, joined Shklovsky and Dr. Singer in their Martian conclusions. He stated that "Phobos might be a colossal base orbiting Mars." New studies this year indicate subsurface reservoirs exist. The heat and water provided by geothermal activity would be good news for biologists who would search for possible life on Mars. The shapes of some of reservoirs indicate they are made by intelligent life forms. I must admit that my analysis of Mars is not strictly scientific, but includes intelligence data gained from retired Soviet Air Force Colonel Marina Popovich, who told us that Phobos, one of the two Martian moons, is an artificial structure. Thanks to Jeff Rense and Space Com, (Space.com)  
[http://www.space.com/scienceastronomy/solarsystem/mars\\_flow\\_020220.html](http://www.space.com/scienceastronomy/solarsystem/mars_flow_020220.html)



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Reynolds  
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On Mars, there exists an excessively slow loss of atmosphere, oxygen and water, against which intelligent beings, if they do exist there, may have protected themselves by scientific control of physical conditions. This might have been done, scientists speculate, by the construction of homes and cities underground where the atmospheric pressure would be greater and thus temperature extremes reduced. The other possibilities exist, of course, that evolution may have developed a being who can withstand the rigors of the Martian climate, or that the race—if it ever did exist—has perished.

Before this, gags and cartoons picturing weird-looking Martians had already become popular, and the AF statement somehow gave them an extra boost. Even now, the idea of possible life on Mars makes many people laugh. But some might be surprised if they knew the sober opinions of certain respected scientists, including planners at NASA.

In 1963, a high NASA official startled members of the Institute of Aerospace Sciences with a statement about the Mars moon Phobos. The official was Raymond H. Wilson, Jr., Chief of Applied Mathematics.

The moon Phobos, Wilson told the scientists, might actually be a colossal space base orbiting Mars. Disclosing that NASA was seriously considering this possibility, Wilson also revealed that the Space Administration had plans for special probes which eventually would bring the answer. Phobos, he said, had long been an enigma because of its peculiar orbit, which appeared to violate natural laws.

In 1959, a Soviet scientist, Dr. I. S. Shklovsky, announced that Phobos was an artificial satellite, basing his conclusion on calculations by the U. S. Naval Observatory. Phobos, he said, was being slowed by electromagnetic drag and tidal friction more than was possible with an actual solid moon. The explanation: Phobos was a hollow sphere, an enormous

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round spaceship built to shelter a colony which had to escape from Mars when the planet started to lose its atmosphere.

Since Phobos is ten miles in diameter, the Russian's analysis shocked many scientists and set off a fierce controversy. But the recorded observations, which later caused the NASA decision, convinced other scientists and space experts, among them Dr. Fred Singer, chief space adviser to President Eisenhower, Prof. James A. Harder of the University of California, and Wells Alan Webb, both respected Mars authorities.

The Space Administration's decision to investigate Phobos was based on its strange orbit, Raymond Wilson told the aerospace scientists. Phobos, he said, goes around Mars faster than the planet turns on its axis, which could not happen naturally. Phobos, he added, is the only satellite in the solar system to rotate faster than its main body. Its period is about one third of Mars' twenty-five-hour rotation.

If Phobos is found to be hollow, astronauts from Earth are expected to board and enter it as soon as this becomes possible. If it was built to shelter a colony from Mars, it would be sealed to prevent leaking of the artificial atmosphere, and it presumably would be a small world, equipped with everything needed for the colonists' survival. Such a gigantic space station would of course have to be built with sections carried from Mars by shuttle craft.

Phobos was first observed by an astronomer in 1877, almost a hundred years ago. According to Dr. Shklovsky, it may have been built long before this, so the chance of finding life aboard would be small. But the colony members could have made shuttle trips to Mars, building permanent shelters in which they could live safely. These could be underground cities, such as the AF suggested in its 1949 quotation of Project Sign scientists. Or they could be large domed bases on the surface of the planet.

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covered, after months of observations by noted astronomers Trumpler, Muller and seven others equally experienced. Before confirming the discovery, the astronomers had carefully rechecked their observations, using different methods to rule out the possibility of an optical illusion.

"It is a good case," said Dr. Opik, "for suggesting that the equatorial bulge of Mars is hollow, a kind of roof built by the Martians who lived, or still live hidden beneath it, perhaps enjoying the benefits of an artificially conditioned climate and atmosphere."

The NASA Mariner photographs of Mars have been taken from too great a distance to show the reported bulge. But if Opik and the nine astronomers are right, then our astronauts may eventually find a hidden world under a tremendous dome over the Martian equator.

Even closer Mariner photographs may not give the full answer. According to Bart J. Slattery, Chief of Public Affairs, George C. Marshall Space Flight Center, we may have to wait for astronauts' landings:

"We'll know for sure, probably, only when we get there."

Several puzzling observations also are awaiting explanation. In 1949, a tremendous explosion was seen on Mars by Dr. Tsuneo Saheki, the famous Japanese authority on the Red Planet. His suggestion, also accepted by other distinguished astronomers: an atomic bomb had exploded, either by accident or as a test by an unexpectedly advance Martian race.

During Mars' close approaches to Earth, every twenty-six months, mysterious clouds and color changes in the planet's surface have been observed by many astronomers.

One of the biggest puzzles concerns the so-called Mars "canals." For years, many reputable astronomers have reported seeing a geometrical pattern of lines, a network which they insist could not be accidental. Some also have reported fairly large areas, labeled "oases," where the lines intersect. It has been suggested that the lines are canals which carry water from the melting polar caps, and that the "oases" are

Martian cities or pumping stations. Other astronomers reject all this as nonsense, explaining the "canals" as surface cracks—in spite of their geometrical network—and the "oases" as spots where meteors have impacted.

In 1954, when Mars once again approached the Earth, an International Mars Committee was established, with the cooperation of the *National Geographic* magazine. The "Mars Patrol" quickly caught the imagination of the public. Press features and networks revived the question of intelligent life on the Red Planet, quoting well-known astronomers.

Dr. Robert S. Richardson, the Mars expert at Palomar Observatory, said that the new photographs should show whether the canals were real. If they were, then they probably would have been built along "great circle" paths—the shortest distance between points on the surface of a sphere.

"If the photographs show that the canals always lie along great circle paths, it would be an indication they are the work of intelligent beings. It is conceivable," Dr. Richardson added, "that some form of life quite different from ours might have developed on Mars."

Harvard's Dr. Fred C. Whipple, chairman of the Department of Astronomy, agreed on the question of Martian life. "Our kind of life is not likely. But there might be a different form of life on Mars—a kind that we know nothing about."

The unexpected publicity caused a problem at AF Headquarters, since they had no control over the Mars Committee—at least, not officially. And in April, the usually conservative *Reader's Digest* added to their troubles with an article called "Is There Life on Mars?"

Instead of different, strange-looking Martians, the *Digest* said they might be intelligent creatures similar to humans. It agreed Mars had lost most of its atmosphere, but it said that as the oxygen content dwindled the inhabitants could have learned to manufacture oxygen and also control the temperature problem (as the AF had stated earlier in suggesting underground cities).

President examines No. 2 in series of Mars photos. Will the Red Planet be the next area for exploration after the Moon?



ing men—not from battle, but from natural disasters.

This closest of all possible approaches between two surviving celestial bodies was recorded by every civilized state of ancient times. Each claimed that Mars destroyed most of the world. "His body fills the heavens with the color of blood," wrote the ancient Peruvians. "Nergal (Mars) causes the Earth to shudder," said the Babylonians. "The heaven he makes dark, he moves the Earth off its hinges," wrote the ancient Indians.

Mars did come terribly close to the Earth in those days—close enough for living men to have seen the "two steeds of Mars"—its mysterious satellites!

Among the modern scientists and planetary physicists who are convinced that Mars is or was inhabited by intelligent beings are Dr. Fred S. Singer and England's Dr. Fred Hoyle, who is the world's leading astrophysicist. In Russia, the Soviet Academy of Sciences has accepted the proof of planetary physicist I. S. Shklovsky that Phobos and Deimos are artificial satellites!

If they are indeed artificial, then their age is almost too shattering for space officials to contemplate. NASA's Chief of Applied Mathematics, Raymond E. Wilson, said as far back as 1963 that "Space probes are now being planned to determine if Phobos is actually a huge orbiting space base." Sixty million dollars have been earmarked for this post-Apollo project alone. It is rapidly developing belief that we will visit Mars immediately after landing on the Moon.

Back in 1959, Dr. Shklovsky, Russia's most brilliant planetary physicist, announced formally to the Soviet Academy of Sciences that Phobos was really a space vehicle, an artificial satellite constructed largely of magnesium or aluminum. "We simply have to assume from the evi-

dence," he announced, "that Phobos is hollow inside—something like a tin can from which the contents have been removed. It is an artificial satellite of Mars."

The respected Russian planetary physicist said his evidence is based upon five peculiar characteristics of Phobos. The evidence supporting his contentions has been investigated by other scientists throughout the world; their conclusions closely follow Shklovsky's:

1. Phobos orbits the Red Planet at three times the speed of Mars' rotation. No other natural satellite does anything like this. A natural satellite cannot move faster than the planet around which it orbits because both the planet and the satellite "were originally made from the same materials, traveling at the same speed."
2. It has been proven by spectroscopic prism analysis of the light coming from Phobos and Deimos that they contain aluminum. Aluminum does not exist anywhere in the universe in a "natural" state. A highly advanced metallurgical science and technology is absolutely necessary to produce aluminum.
3. No other planet in the system is known to have natural satellites as small as those of Mars.
4. Phobos is only 5,000 miles from the surface of Mars (just as Jonathan Swift said); Deimos is also much too close.
5. Phobos, like all orbiting Russian, American and British space vehicles, is slowing down and falling toward Mars.

Dr. H. M. Sinton, an astronomer at Yerkes Observatory in Wisconsin, told the American National Academy of Sciences: "Phobos may be a huge orbiting city filled with men, women and children. The other moon, Deimos, might be one, too."

Astrophysicist and mathematician Dr. Fred Hoyle, who dominates the New Cosmology, agrees with Singer and Sinton: "This is the only theory I have heard that covers the mystery of these two moons," he announced.

Dr. Clyde W. Tombaugh, an associate Professor of Earth Sciences at the Research Center of New Mexico University flatly disagrees with Fred Hoyle. "Putting up such satellites would strain the abilities even of a world rich in natural resources. The extreme poverty of mineral resources on Mars would have deprived the Martians of the necessary materials."

"That," replied Dr. Fred Singer, "is like saying the Egyptians couldn't possibly have built the pyramids!"

The fact is that the two trahants of Mars are *there*; the fact is that they *do* contain aluminum that had to be industrially produced; the fact is that Phobos is too small and moving too fast to be a natural satellite.

Faced with a disarming array of facts, Dr. E. C. Slipher of the Lowell Observatory at Flagstaff, Arizona, came up with this theory: "It would be physically impossible to orbit such a huge satellite," he said.

Dr. Slipher neglected to consider (a) the engineering art of prefabrication, and (b) the fact that NASA's post-Apollo plans call for building huge space stations as jumping-off and refueling ports in orbit around the Earth.

The evidence compels the conclusion that Phobos and Deimos are indeed space stations on Mars. Assuming that they are extremely ancient and highly sophisticated the question arises: *why* were they put into orbit by the Martians?

"Their purpose naturally would be to sweep up the radiation belts around Mars to enable Martians to operate in space without radiation hazards," claims Dr. Fred S. Singer.

He could be right. It happens that Mars has no trapped areas of deadly radiation such as the Van Allen Belt; no astronaut or cosmonaut can invade this belt without lethal effect. Terran scientists have yet to devise any way of shielding future space crews from interplanetary radiation. Even sunspots and solar flares will kill spacemen if they are caught outside a planetary atmosphere when they occur.

**I**t is entirely possible—even probable—that the Martians long ago solved the radiation problem—just as Dr. Singer says they have. The Mars "moons" represent only a fraction of the number of moons or planetary satellites in the solar system.

Until very recently this number was thirty one; it was lately raised to thirty-two, and it looks as though this thirty-second satellite, the tenth moon of Saturn, may be another candidate as a "space city" put into orbit by the Saturnians. Here's the story:

Back in 1904, Dr. William H. Pickering of Harvard was probably the foremost planetary observer of his time. He cautiously observed and photographed an exciting new anomaly connected with Saturn—and couldn't believe the evidence of his own senses!

He had discovered the outermost known moon of Saturn. *It was going in the "wrong" direction!* Few people were

conscious of life on other worlds in those days, so it was unthinkable that this newly discovered body might be an artificial satellite of Saturn. Everything about the Universe—particularly the solar system—seemed wonderfully reliable and orderly. No anomalies existed. Everything—the Earth, all other planets and all the natural satellites—whirled in counterclockwise direction. That supercolossal roaring inferno, the Sun, turns in counterclockwise motion. Even the entire Milky Way Galaxy with its billions of stars whirls in a ponderous counterclockwise motion!

But not Phoebe.

**T**he best time to see the moons of Saturn are when the Earth passes through the plane of Saturn's rings. During such a time, Dr. Pickering was astounded to discover the "tenth moon" of the ringed planet; Phoebe was the ninth. He named this tenth moon *Themis* and placed its mean distance from the parent body as 908,000 miles. A few other astronomers observed it and took photographs, but as unexpectedly as it was discovered, the satellite disappeared from view and remained invisible for 63 years.

Then on October 29 and again on December 17, 1966, Dr. Audoin Dollfus at Meudon Observatory on the outskirts of Paris once more discovered a tenth moon of Saturn! Excitement in astronomical circles ran high. The big telescope of the U.S. Naval Observatory at Flagstaff, Arizona, was turned on Saturn. Dr. Kai Strand announced in Washington late in January, 1967, that the new "moon" is genuinely there, but at an orbit of 51,900 miles from Saturn's surface—just outside Roche's Limit, the region near a large planetary body where the gravity of the planet is so strong that it would break up any object near it. Saturn's rings are *inside* the devastating area of Roche's Limit. All of Saturn's moons orbit *outside* the area discovered by F. Roche of France.

What about this newly discovered "moon"? Is it the same body Dr. Pickering called *Themis* in 1904? If so, we have to account for the shift in its position. The only logical explanation for a body as large as this new moon to shift in orbit is that the satellite is controlled by *unnatural* forces! Yet some astronomers are insisting that the newly discovered satellite and *Themis* are one and the same. (The new satellite since has been named Janus.)

There is little doubt that moons like huge Titan of Saturn, and Ganymede of Jupiter (both of which support heavy atmospheres) are planetlike worlds in their own right. But what about the backward spinning satellites?

Wherever we find anomalies in planetary or satellite movements—things that obviously disregard the known laws of the Universe—we almost have to assume that something or someone has been tampering with the setup. NASA scientists are now restudying the 32 known satellites of the solar system.

When spacemen put up telescopes on the surface of the moon and restudy all the satellites in the system, many more could be discovered.

And there well could be some astounding revelations about some of them. We may have to revise everything we think we know about our local star and its retinue of mysterious worlds.