

## ARRIVING FROM MARS BY UFO?

In recent years there have been many reports of unidentified flying objects (UFO's), especially since the first Soviet Sputnik went up on October 4, 1957. From time to time the question has been raised as to whether the UFO's might have come from Mars or Venus, perhaps bearing intelligent beings. Usually the answer to this question has been simply a guess which depended to a considerable extent on what the individual wanted to believe. Most scientists have been inclined to doubt that the UFO's came from Mars or Venus, preferring to credit the sightings to natural phenomena which are not as well known as they should be.

There is a logical approach to this question as to whether or not UFO's have come from Mars or Venus. It is well known that if some one on the earth wants to send a space vehicle to Mars or Venus, there are specific favorable times, times when a body can be launched so that it will travel along a minimum-energy orbit, arriving at the path of Mars (or Venus) just as that planet comes to the same point. For example, favorable times for launching a rocket to travel to Venus have been listed as Oct 27, 1965, June 5, 1967 and January 11, 1969, and for Mars, December 23, 1964, January 26, 1967 and February 28, 1969. (SPACE HANDBOOK, Gov't Printing Office 1959)

Of course, there are similar favorable times for launching a space vehicle from Mars (or Venus) to the earth, and for each of these launching times, there would be a corresponding arrival time at the earth. These favorable arrival times come at intervals of about 584 days for Venus and about 780 days for Mars. Actually, in each case, the interval is a close approximation to the synodic period of the planet; for Venus, the synodic period varies from 579.8 to 587.8 days, and for Mars, from 767 to 803 days.

One could then choose intervals of 20 days, say ten days on either side of a favorable arrival date, and look to see how many UFO's were sighted in each such "favorable arrival interval", here named fai, (Plural fais). If there were no increase in the number of UFO's in these fais, then it would be unlikely that any considerable number of UFO's had been arriving from Mars or Venus.

Some one is certain to raise the question as to whether or not a Martian or a Venutian would elect to travel in a minimum-energy orbit. Here I shall assume that intelligent beings from any part of the universe will choose to travel by means and paths that will minimize the expenditure of energy.

This fai approach to the problem can be carried a step farther. One can make a list of the UFO's observed in the fais, and look at the record of each to see if the UFO was observed traveling in the direction it would have if it came from Mars (or Venus) in a minimum-energy orbit.

Roughly speaking, a space vehicle from Mars should overtake the earth from behind and one from Venus should be overtaken by the earth. Thus one could determine whether the path of approach was associated with the proper radiant point in space; here we use the term in the sense in which it is used in connection with meteors.

Now to look at the evidence! A list of UFO's sighted between September 8, 1956 and December 31, 1963 was examined. Nine fairs of 20 days were found in this interval, 5 for Venus and 4 for Mars. Circular paths were assumed for Venus, Earth and Mars in computing travel times for space vehicles, but no particular difficulty is encountered if one elects to allow for the eccentricities of the various paths. In table I below, the number of UFO's reported in each fair of 20 days is given, and is to be compared with the average number of UFO's per 20-day interval outside the fairs, namely, 1.88.

TABLE I

Fair	Planet	Number UFO's
1956 Sept. 8-28	Venus	1
1956 Dec. 5-25	Mars	1
1958 Apr. 16 - May 6	Venus	1
1959 Feb. 10 - Mar. 2	Mars	2
1959 Nov. 18 - Dec. 8	Venus	0
1961 Mar. 26 - Apr. 15	Mars	1
1961 June 28 - July 18	Venus	1
1963 Jan. 29 - Feb. 18	Venus	2
1963 May 1 - 21	Mars	1
1956 Sept. 28 to 1963 Dec. 31 outside fairs		242 in 2570 days.

Thus the evidence seems to indicate that Martians and Venutians have not been arriving in large numbers if at all. When one goes back to examine the direction from which the UFO's arrived, we find not a single case of the UFO coming in from the proper direction to indicate that it had originated on Mars or Venus.

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Extract from Wernher von Braun's book First Men to the Moon,  
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by Holt, Rinehart and Winston of Canada, Ltd.

"Question: What is your opinion on 'U.F.O.'s'?"

"Answer: There is a rational and rather straight-forward explanation for the great majority of 'sightings of unidentified flying objects,' or 'flying saucers', as they are more familiarly called. During the last ten years, official U.S. investigators have tabulated about six thousand sightings.' They could account for all but two per cent as belonging to any of the following categories:

High-flying balloons of various kinds

High-flying aircraft illuminated by the sun after the sun had set on the ground

Nightly 'Fata Morgana' type reflections in the atmosphere of distant light sources on the ground

Artificial satellites of U.S. or Soviet origin

Meteorites and fireballs

Birds

The Planets Venus or Jupiter

Searchlights illuminating cloud layers

Hoaxes perpetrated by pranksters

Even the most ardent believers in flying objects of extra-terrestrial origin will usually concede that most reported 'sightings' can be traced back to one of these sources. But it is that unaccounted two per cent that makes enthusiasts cling tenaciously to their conviction.

I cannot account for the mysterious two per cent, either. But a lifetime spent with testing of guided missiles has taught me to be extremely careful with eye-witness accounts on rocket firings running into some in-flight trouble. Of three experienced observers questioned after a typical mishap, one swore that he clearly saw a part coming off before the rocket faltered; a second hotly denied this but claimed that the missile oscillated violently before it veered off the course; while the third trained observer saw neither a part coming off, nor an oscillation, nor any veering off the course but insisted that the rocket was flying perfectly steadily until it was abruptly ripped part by an internal explosion.

Such contradictions in the eyewitness accounts of old rocket men are by no means an exception; we are almost invariably confronted with this situation. Yet we are dealing here with experienced observers who not only had seen many firings, but who had the great advantage of being mentally prepared for the imminent test.

For this reason I am highly skeptical about the objective of any 'sighting' report of a fleeting, mysterious object in the sky submitted by an equally surprised and unexperienced observer. And those unaccounted two per cent of U.F.O.'s absolutely fail to raise my blood pressure. To me, ninety-eight per cent is a mighty good batting average. I wish we could account for ninety-eight per cent of what we observe in many other fields of human endeavor! Yet, ever since the Middle Ages it has not been customary for science to call on ghosts or witches — or little green men from Mars — whenever we are confronted with a phenomenon for which we do not yet have a satisfactory answer.

To those who, either through personal observation or through hearsay based on other people's accounts, still insist that objects of extra-terrestrial origin are roaming through our atmosphere, I can only say that I have never seen such an object and cannot believe in their existence until I do."