

## Clyde Tombaugh, Mars, and UFOs

MICHAEL D. SWORDS

*Department of Science Studies,  
Western Michigan University,  
Kalamazoo, MI 49008*

**Abstract** — Clyde Tombaugh was perhaps our greatest observational astronomer. It is folk-wisdom in academic circles that astronomers do not see UFOs. Tombaugh saw several. His experience and views, and those of some closely associated technical people, are placed in their contexts and briefly retold here.

### Introduction

"UFOs do not exist. If they did, surely astronomers would see them." This was a belief, and a public argument, placed against UFOs from the early days of sightings in the late 1940s to the present day. It is a belief that seems to have had some force of influence within the scientific community. This in itself is interesting since:



Fig 1. Clyde Tombaugh.

A. Long-ranging, narrow-field observing instruments are among the poorest choices for detectors of any near-ground phenomenon (thus eliminating any simple-minded advantage people might feel that astronomers would have).

B. It is not true. Dr. J. Allen Hynek traveled the country while working for the United States Air Force UFO Project, and interviewed several astronomers who had seen UFOs.

Clyde Tombaugh, discoverer of the planet Pluto and obsessive sky-watcher, was one of them.

### UFOs in the Early Period

1949 was an interesting year for ufology. The United States Air Force Chief of Staff, Gen. Hoyt Vandenberg, had just rejected a study on UFOs from his intelligence center at Wright-Patterson Air Force Base. The study was by a specially assigned group, Project Sign, dedicated to collecting and analyzing UFO reports, and giving some appraisal (an estimate) of the nature and potential threat indicated therein. The Project Sign estimate was that the flying disks are extraterrestrial, and they are technological devices.

Vandenberg could not approve this conclusion; there are no records which fully explain why. It is stated by a later UFO project officer, Capt. Edward Ruppelt, that the top-secret report "lacked proof," with "proof" being interpreted in the strict sense of physical, testable evidence (Ruppelt, 1956). It is also true that there was a strong, entrenched school-of-thought in the Pentagon that the flying disk phenomenon was dangerous, either militarily or *merely* psychologically, and that Air Force policy of whatever sort should not be encouraged towards it (Swords, 1999).

For whatever reasons, the intelligence unit at Wright-Patterson was not only rebuffed by the high command, but its personnel reassigned and dispersed. A contrary *estimate*, affirming that the flying disks were real but probably Soviet (Nazi-inspired), was created by the Pentagon, and the Project Sign estimate was destroyed.

The popular press was smelling something important in all this. National magazines such as *Saturday Evening Post*, *True*, *Argosy*, and soon, *Life* were putting investigative reporters on the UFO trail. The most significant of these writers was retired marine major, Donald Keyhoe. He would become the leading figure in encouraging citizen UFO research of all time. He was also the most unwelcome thorn in the Air Force's side (Keyhoe, 1950; Swords, 1996).

### The Phenomenon in New Mexico

A new and possibly related aerial phenomenon had begun to manifest, particularly over New Mexico. These were the *green fireballs*. They were meteoric appearances of unusually rich green-colored light balls, streaking across the sky and exhibiting, allegedly, un-meteor-like trajectories. Heavyweight

scientists of the United States Air Forces Scientific Advisory Board were called in to try to solve the mystery, or at least make an assessment of it. Joseph Kaplan, UCLA geophysicist and upper-atmosphere expert, led the Advisory Boards concern. Hydrogen bomb inventor, Edward Teller, and world meteor-expert, Lincoln LaPaz, participated. A group of permanently-based Los Alamos scientists became involved and, eventually, so too did Clyde Tombaugh (Mandlekorn, 1949).

The concern and excitement over flying disks and green fireballs was intense in New Mexico. The whole scientific and technical community was aware of the stories, and in many instances had seen objects or fireballs themselves. This is particularly interesting since some of the most experienced people in relevant observing skills were among the witnesses. For example, the U.S. Navy balloon-launching and tracking experts at White Sands Proving Grounds saw UFOs, even in their theodolites, more than once. Cmdr. Robert McLaughlin ultimately broke the story of these sightings, much to the dismay of the Air Force authorities in the Pentagon, who wanted silence on the subject whenever possible (McLaughlin, 1949b, 1950).

Commander McLaughlin described the UFO sighting of Dr. Charles Moore, head of Project Mogul and on the Project Skyhook team at the time. Both Mogul and Skyhook were top-secret balloon projects. McLaughlin writes this in a letter to a friend, Dr. James Van Allen:

Dear Van,

In his [Moore's] words the object was not a cloud, a plane, a bird, a balloon, or a meteor. He is quite positive about this. It was white as if it had been painted, traveled across the sky at a traverse of about five degrees per second... and then took on a sudden burst of speed and disappeared.

A ballistics man attached to the Skyhook group made some calculations on the missile and figured the velocity to be in the order of three to five miles per second, altitude



Fig. 2. Donald Keyhoe, marine major.



Fig. 3. Joseph Kaplan, UCLA geophysicist.



Fig. 4. Edward Teller, inventor of the hydrogen bomb.

between 35 and 40 miles. This would make the object 500 to 1000 feet in diameter from the Mill scale on the theodolite. The object appeared to be somewhat egg-shaped with one edge a faint orange or burnt brown color.

McLaughlin then went on to describe his own sighting:

By coincidence, a few days ago I too managed to see one of these flying saucers along with three other officers during a Wac B firing... This object appeared almost directly overhead at the White Sands Proving Ground, gradually gaining in velocity to the west and disappearing in a blinding burst of speed.

What *was* it that McLaughlin thought he and Doctor Moore's team saw?

My first assumption led me to the conclusion that the object must have a means of accelerating itself. The second assumption naturally is that no one on this planet is sufficiently far advanced to fly such an object (McLaughlin, 1949a).

The second assumption ...naturally.

If the objects seemed not of Earth, then where? McLaughlin says that the best bet seems to be the planet Mars. Why? Where does this idea come from? The commander has been talking about it with Clyde Tombaugh.

### **Tombaugh**

There is no question that Clyde Tombaugh was interested in UFOs. In August of 1949 he would have his most famous sighting (and the only one he talked publicly about).



Fig. 5. Lincoln LaPaz, world meteor expert.



Fig. 6. Robert McLaughlin, Commander.

Dr. James McDonald, a University of Arizona atmospheric physicist, was interested in the Tombaugh sighting and the preposterous comments made about it by the well-known UFO debunker, Harvard astronomer Donald Menzel. Menzel had written off Tombaugh's observation as some sort of optical trick of the atmosphere, and had attempted to bully Tombaugh into doubting and disclaiming his experience. McDonald told Tombaugh that Menzel's speculations were, in this case, ridiculous. The "unusual transparency of the atmosphere," which had drawn Tombaugh and his family out to watch the stars, coupled with no signs of any inversion layers, made Menzel's explanation *physically absurd*.

In fact, no inversion ever known in the history of meteorology could give reflection at the near-normal incidence (*i.e.*, straight up) involved here (McDonald, 1966).

Tombaugh, not being an atmospheric physicist, was very interested to learn this after Menzel's assault. He said that he and his family could hardly believe their eyes, and that

I have never seen anything so strange in my life; it was so flabbergasting I probably would not have thought to use binoculars if I'd had any with me (McDonald 1966).

Never anything so strange... but Tombaugh *had* seen other UFOs as well.

## AN UNUSUAL AERIAL PHENOMENON

by  
Clyde W. Tombaugh

I saw the object about eleven o'clock one night in August, 1949 from the backyard of my home in Las Cruces, New Mexico. I happened to be looking at zenith, admiring the beautiful transparent sky of stars, when suddenly I spied a geometrical group of faint bluish-green rectangles of light similar to the "Lubbock lights". My wife and her mother were sitting in the yard with me and they saw them also. The group moved south-southeasterly, the individual rectangles became fore-shortened, their space of formation smaller, (at first about one degree across) and the intensity duller, fading from view at about 35 degrees above the horizon. Total time of visibility was about three seconds. I was too flabbergasted to count the number of rectangles of light, or to note some other features I wondered about later. There was no sound. I have done thousands of hours of night sky watching, but never saw a sight so strange as this. The rectangles of light were of low luminosity; had there been a full moon in the sky, I am sure they would not have been visible.

Clyde W. Tombaugh  
August 7, 1957

Fig. 7. Clyde Tombaugh's official statement.

Maj. Donald Keyhoe had written a book in 1955, wherein he speculated on a general conspiracy-of-silence within the Air Force about UFOs, and mentioned a rumor that he had heard. Clyde Tombaugh was involved.

The rumor was that the Air Force was searching for small satellites orbiting the Earth. This project was initiated well-prior to Sputnik. To Keyhoe, the rumor was confirmed by a news release saying that White Sands was to make a sky search for small *natural* satellites. Keyhoe talked to science contacts and reasoned that the idea of very small natural moonlets accidentally cruising this close to Earth and maintaining orbital stability was extremely unlikely if not impossible. What then might the Air Force *really* be looking for? *Artificial* satellites? Interplanetary bases for flying disks? Huge motherships? He named Tombaugh as a head of the project (which was essentially true), and suggested that he probably was the one who insisted on releasing a story which was a *close lie* (Keyhoe, 1955). Tombaugh was reading the UFO literature, reading Keyhoe, and he did not like it.

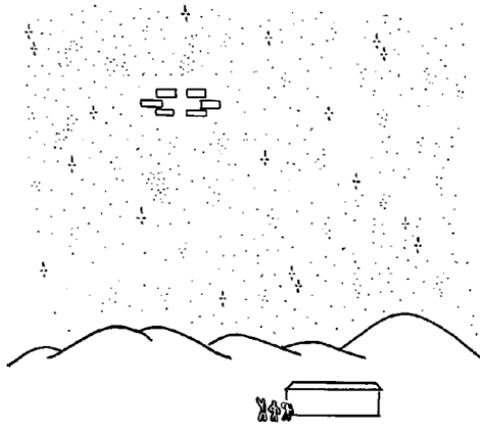


Fig. 8. The author's illustration of the Clyde Tombaugh sighting.

Tombaugh was corresponding with early UFO researcher, Len Stringfield, when the Keyhoe book broke, and cast him in this unfavorable light. Tombaugh wrote that Keyhoe had many facts wrong, especially about his role, and, as Stringfield phrased it: is pretty sore over the affair (Stringfield, 1956b). But Tombaugh included in the correspondence more interesting statements:

I have seen three objects within the past seven years which defied any explanation of known phenomena, such as Venus, atmospheric optics, meteors, or planes. I am a professional, highly skilled observing astronomer. In addition, I have seen three green fireballs which were unusual in behavior from scores of normal green fireballs...

I think that several reputable scientists are being unscientific in refusing to entertain the possibility of extra-terrestrial origin and nature. It is yet too early for any decisions of finality (Stringfield, 1956a).

### Mars

Astronomer Tombaugh saw three UFOs. He believed that it was unscientific for debunkers like Donald Menzel to blindly reject the extraterrestrial hypothesis. Did he have any other inspiration for this viewpoint? Three UFOs and some weird green light balls would seem to be enough, but there was more yet going on in his mind.

Commander McLaughlin, as we have seen, told James Van Allen that he believed that the flying disks were extraterrestrial, and perhaps from Mars. He felt that the evidence of his own senses and the observations of his own scien-



Fig. 9. Dr. Charles Moore, head of Project Mogul.



Fig. 10. Len Stringfield, UFO researcher.

tists at White Sands indicated that the extraterrestrial part of this was likely, but why point toward Mars? He mentioned to Van Allen his conversations with Clyde Tombaugh about the atomic bomb.

By some strange quirk of fate the Planet Mars was quite close to the earth on July 16 when the first atomic bomb was exploded in the New Mexico desert. (Alamogordo/Trinity, New Mexico, July 16, 1945). As a matter of fact, the bomb must have made the whole side of the globe light up like a neon sign according to Clyde Tombaugh.

Ah, a charming romance: the Martians observe that something dangerous was going on here, and begin to send their spacecraft, issuing in the era of flying saucers. Was there anything else to this entertaining daydreaming? In Tombaugh's eyes there was.

Tombaugh's specialty in astronomy had been observation of the Planet Mars for a period of about fifteen years. On August 27, 1941, Mr. Tombaugh saw a flash on the surface of the Planet Mars and ascribed this flash to an atomic explosion of some sort (McLaughlin, 1949a).

This flash on the surface of Mars could not be explained except by a very large energy release: an impact? "A bomb," Tombaugh thought. He had seen three UFOs which could not be explained by mundane hypotheses. Were they the technologies of the creators of the Martian bomb?

Was all this unreasonable on Tombaugh's part? An unexplained *explosion* had been seen on Mars in 1937. The phenomenon was reported again in 1951, 1954, and 1955. In the late forties, speculations began as to whether the unusual orbits and motions of the small moons of Mars might indicate that they were artificial. This led the Russian astronomer, I. S. Shklovskii, to claim that this



Fig. 11. Carl Sagan and I. S. Shklovskii

artificiality was likely to be true (1959), and featured the idea in a book co-authored with Carl Sagan (Shklovskii and Sagan, 1966; Sullivan, 1964). Although the artificial moons concept was later disproved, this did not affect an enthusiasm for Mars mania in the forties and fifties. Carl Sagan remembers reading the Edgar Rice Burroughs *John Carter Mars* novels in that era, and standing out in a field, arms raised to Mars, hoping to be transported there. If UFO abductions had started a little earlier, he might have gotten his wish ...but, alas, no (Swords, 1992).

Tombaugh also did not get one of his wishes. The satellite sky survey failed to find small earth-orbiting moons, natural or otherwise (Tombaugh, 1959). Who can say which he was really hoping to see?

UFOs do not exist. If they did, surely astronomers would see them, would they not Mr. Tombaugh?

### References

- Keyhoe, D. E. (1950). *The Flying Saucers Are Real*. New York: Fawcett.
- Keyhoe, D. E. (1955). *The Flying Saucer Conspiracy*. New York: Fieldcrest.
- Mandlekorn, R. (1949). Report of a trip to Los Alamos, New Mexico. Document from *Freedom of Information Act request*. 4th Army Intelligence. 27 pp.
- McDonald, J. E. (1966). *Letter to Richard Hall*. October 24, 1966. Copies in author's and Center for UFO Studies files.
- McLaughlin, R. (1949a). *Letter to James Van Allen*. May 12, 1949. Copies in author's and Center for UFO Studies files.
- McLaughlin, R. (1949b). Newspaper story with quotes. *Los Angeles Times*, August 30, 1949. Copies in author's and Center for UFO Studies files.
- McLaughlin, R. (1950). How Scientists Tracked A Flying Saucer. *True*, March 1950, pp. 25–27, 96–99.
- Ruppelt, E. (1956). *The Report on Unidentified Flying Objects*. Garden City, New York: Doubleday and Co.

- Shklovskii, I. S. and Sagan, C. (1966). *Intelligent Life in the Universe*. San Francisco: Holden-Day.
- Stringfield, L. (1956a). *Letter to Ted Bloecher*. March 20, 1956. Copies in author's and Center for UFO Studies files.
- Stringfield, L. (1956b). *Letter to Donald Keyhoe*. April 24, 1956. Copies in author's and Center for UFO Studies files.
- Sullivan, W. (1964). *We Are Not Alone*. New York: McGraw Hill.
- Swords, M. (1992). Astronomers, the extraterrestrial hypothesis, and the United States Air Force. *JUFOS* n.s. 4, 79–130.
- Swords, M. (1996). Donald Keyhoe and the Pentagon. *JUFOS* n.s. 6, 149–184.
- Swords, M. (2000). Project SIGN and the Estimate of the Situation. *JUFOS* n.s. 7, to be published.
- Tombaugh, C. (1957). An Unusual Aerial Phenomenon. *Report to National Investigations Committee on Aerial Phenomena*, August 7, 1957.
- Tombaugh, C., Robinson, J. C., Smith, B. A., and Murrell, A. S. (1959). The search for small natural earth satellites. *New Mexico State University Physical Science Laboratory, Final Technical Report*, June 30, 1959, 110.