Richard C. Hoagland and Dr. Edgar Mitchell Debate

Art Bell Show Wednesday, May 15, 1996 1 AM to 4 AM PDT

Transcribed by G. Varano, Part 3 of 6

AB: Gentlemen, it's all yours once again. Well, let's see. Where were we?

EM: Richard was trying to make his case, here, that what we're observing, he theorizes, is a structure of some sort. And the best case I hear being made right now is that there may be a physical anomaly of some sort that's observable in the photographs that we don't experience with our bodies or with our spacecraft. Let me continue to make that case just a moment and set the picture here. Remember that with the lunar module, before we descended to the lunar surface, we came down into an orbit that's about 10 miles above the lunar surface, which is a little over 50,000 feet. So we were whizzing around the lunar surface at around 57,000 feet, let's call it 60,000 feet, above the lunar surface in the equatorial belt for quite a few orbits, and both spacecraft were there for a while, but generally the command module was up in a higher orbit and only deposited the lunar module in the ten mile orbit before making its descent. Now, if the theory that Hoagland and others are putting forth is correct, these structures on the moon, we had to penetrate them numerous times over and over again before descending to the lunar surface and as we came back from the lunar surface, we had to penetrate this structure, whatever it is, also. This is turning to me to be very, very, difficult to believe and to understand because there's just no evidence that we contacted any physical structure in this way. The fact that there may be some physical phenomenon going on that is observable in the photograph that's causing these photographs to appear as they are, and perhaps even some diffusion effects, or some reflective effects, on light, that would not be too surprising, that we might be discovering the physical effects of some sort that we didn't understand before. To believe that physical effect might be cause by a physical structure, like a wall or a glass type wall or glass girders, beams, anything like that, that stretches credibility to beyond what I'm willing to accept at all, without some more evidence. Now, Richard does need to look to at every single photographs, or representatives of all the photographs, if different locations, different directions, black/white, black and white, color, from every film, every magazine, to see if these effects are indeed there. If they're there, there is a physical effects going on. It may still be just in the emulsion. It may be in the anomalies in the various camera systems. All of that can be isolated. That's what good science is all about. But, I think we're stretching the point enormously to suggest that there are physical structures on the moon, suspended above the moon, covering the moon like a geodesic dome, since that's the model we're using, that are not observed through the physical interaction of our spacecraft, our bodies, and so forth, but are observable due to photographic anomalies.

RH: All right. May I say something. There are a couple of assumptions in your description, Ed, that were not in my description. One is the altitude. We don't know for sure what the altitude of this proposed dome structure is. The ?perisythian? altitude, or the perilune of the command/lunar module combination when they brought you down to that orbit was about 50,000 feet. You're right. So that's 10 miles, roughly. So, let's presume that the tops parts of this are lower than that. That's consistent with Fiertek's analysis and some other geometry. So you need not have encountered this on that low orbit prior to the actual descent or on any other mission. When you say, "no physical effect," there are a wide variety of other observations from the Apollo missions, which are now consistent with this model, the most intriguing of which being the seismic data. Beginning on Apollo 11 and really getting stride on Apollo 12, the ALSEP seismometers, the lunar science packages that were left behind on the moon, powered by these radio-isotope thermal electric generators that lasted for years until NASA arbitrarily turned them all off back in 1978. They sent miles and miles and miles of data, and I had long discussion prior to the missions as science advisor

to Cronkite at CBS with Gary Latham, who was the PI out of Columbia, regarding the seismic data he expected from these seismometers at the various landing sites across the surface of the moon. And the major anomaly that was detected immediately on 11 and discounted because it was so bizarre, and then encountered again on the Apollo 12 mission with that seismometer, and continued through the rest of the missions which carried seismometers, which you left, was this remarkable ringing effect, where the moon when it was struck by either meteorites or spent rocket stages, the S4B from the launch was used as a kind of impactor on many missions. The impact would generate ringing like a bell for hours and hours in the lunar seismic data, and I have, literally, stacks of papers from the lunar science conferences.

EM: Ok. But go ahead and tie that in to why that's consistent with a structure though.

RH: Because if we're looking at a glass trestle-like material, we're looking at glass structure, which is a very low Q, it resonates and transmits sound very efficiently, then that would be consistent with what we're seeing in the seismic data. The other thing that's interesting is the ...

EM: Wait, wait, wait. You're pushing it too far, Richard. Let's let our audience know that most any solid structure is going to ring to a certain extent, that what is means is that the sound is not being attenuated, or the wave is not being attenuated, that it's continuing to reverberate through the structure itself. So any structure, it doesn't have to be consistent with your dome above a surface theory. Any structure...

RH: Oh, no. Wait. It is consistent. It doesn't have to be explained by it...

EM: ... within the moon itself.

RH: ... but it is consistent with it. And the thing that makes the lunar data so anomalous...

EM: Yeah, but wait a minute. Wait a minute. You're misleading here. Let's keep our data separate. The ringing is consistent with many, many other properties of the moon also, not just a structure above the surface.

RH: Well, it's consistent with proposed models, but the models were created to explain the data. It's like ...

EM: That's fine, but let's not push our data too far, which is what I accuse you of doing here.

RH: On the earth, when you have seismic impacts...I had lots of discussion with Latham on this...you have a very short time before the earth's crust attenuates the wave and the ringing goes away.

EM: Yep.

RH: The major anomaly on the moon is the moon is struck by some kind of impacting object, meteor, rocket stage, whatever. The lunar module ascent stages were used to probe this when they were de-orbited from Houston as you guys were coming home. And what was instantly apparent is that the moon seismically is radically different from the earth and rings regardless of what hits it for hours and hours and hours.

EM: Ok. And the moon also has no liquid on it to speak of.

RH: That's the model.

EM: It has a very tiny core. It's virtually a solid substance.

RH: Yep. And the conventional explanation was that you have this regalith, this mass of debris going down hundreds of meters, if not maybe a kilometer, which without water in a vacuum did not provide the attenuation that you get on earth, and so the seismic, the sound waves, the ringing would persist.

EM: OK.

RH: I can show you other geology papers, including one from up here at Columbia from a colleague of Latham's, who basically said in his paper, and I've got the paper, that one other explanation is a high-quality ceramic. Now that's one whisker away from saying glass. And unfortunately, he's no longer with us. He died back in the 60's.

EM: No, wait, Richard. That is not even germane. The point is any sort of more dense substance on the moon is more likely to cause a ringing. You are talking about structures above the moon which, yes, it may be consistent. But that isn't the issue. That's misleading.

RH: Well there are other details. In the seismic data there were patterns observed, to this ringing. The seismometers had an x, y and z axis sensor. It could detect motion up and down, left and right, and back and forth. In terms of looking at the alignment of the sensors from mission to mission to mission, what Latham and his colleagues, in a series of papers, noted was there appeared to be an alignment to the ringing consistent with a geometry, and that geometry is reflected and is consistent with what we're seeing in the photographs, particularly the orbital photographs that we've looked at and we presented in Washington at the press conference. Now this is all preliminary. I'm not saying that this is concluded. What I'm saying that we should be...

EM: You're really misleading when you are pushing it in this direction. Consistency is one thing, but claiming that something above the surface is what is affecting this is really pushing your data.

RH: Yes, it could be. I said it's consistent with.

EM: Ok. Let's go to something else because...

RH: Let me raise a third point. Back in the 1960's, beginning in '66 when the lunar orbiters were put into orbit, Muhler and who what the other guy at JPL, the other, the MASCON guy? Do you remember him?

EM: I don't remember the name, no.

RH: Ok. There were two scientists who were looking at the tracking data from the unmanned lunar orbiters, before Apollo. And they noted that there were these funny residuals in the Doppler tracking data, meaning the spacecraft was speeding up and slowing down.

EM: Yeah, wobbling.

RH: Yeah, wobbling, and in a funny fashion. And the consensus was that there were mass concentrations (MASCONS) under the maria that were affecting the gravity field and thereby affecting the motion of spacecraft

orbiting close to the moon. What's really interesting, Ed, is that if we replace the MASCON model with a shattered lunar dome model over the maria, we get the same effect. And what's really striking, and I'm going to bring in another mission, Apollo 10, and I'm going to send you the video, which we showed to a group of engineers in Houston just a few days ago, and blew their minds. We have a piece of film shot by Apollo 10 of earth rise over Mare Smythe, which on ...

EM: That's a very famous photograph.

RH: ... the far edge of the moon. This is actually 16mm ?DAK? motion picture film showing earth rise tangentially seen from the lunar module as if was doing that precursor test for Apollo 11, looking at the earth over Mare Smythe, and as it rises, the earth is so incredibly distorted that the only conclusion is there's some optical medium extending above Mare Smythe like the remains of a shattered dome. And I will send you this and I want you to go through it frame by frame by frame, because what happens with the ?DAK? cameras is they would turn them off. You would turn them off in the windows, and the film would run down through inertia for several more frames. In effect, increasing the exposure length. At the end of the rundown, when the film was going through the gate very slowly and and effect of exposure is ten times longer than for the normal framing rate, you can actually physically see the remains of the dome structure on these frames. And this has been shown now to a number of engineers on Apollo, a number of people in Houston, people like Johnston and others, and universally, everyone is dumbfounded by what is visible on this motion picture film, and we're now looking for more motion picture film shot on other missions of similar earth rise anomalies.

EM: Richard, I hear what you're saying. I will agree that there may be anomalies that we need to look at, but you're pushing it when you're really talking about dome structures on the moon. There must be other explanations of it. I'm sure there are other explanations of the phenomena that you're looking at because there are just too many things that ? . You're stuck on this theory, and it's just not going to hold water.

RH: Well. All right...

EM: There are anomalies. I'm sure that you can find anomalies.

RH: Well, now wait. Anomaly is a nice catch-all phrase. If we're not looking at physical structure, and we're not looking at optical effects in the film, and we've got four years of...

EM: I think that's what you're looking at is optical ...

RH: Well, but wait, Ed. We've had four years of a lot of people, a lot of photographic experts, that have looked at this film. We've had eight scientists standing with us on the dais at the National Press Club in Washington, people who don't want to look silly and get egg on their face, who did not commit to go in public and talk about this without a lot of soul-searching, a lot of looking at this data. You mean, we're all mistaking this. You're the only one who can be right about this, and we all...

EM: No, no, no. I'm not saying that at all. I'm not saying that at all. But I am saying that you're pushing your data much, much too hard, that there's got to be other explanations.

RH: Now wait a minute, why does there have to be?

EM: How did these structures get here? What are we talking about? Let's talk about origin.

RH: Well, that's speculation.

EM: (Laughs) What in the world are you doing that not...

RH: There's a radical difference between looking at effects on film and optical effects consistent with known physics and trying to explain what we're seeing in the images, and speculating who did it and where they came from. That is real speculation. I have no idea.

EM: But, wait a minute. What type of ... I think structure here is our problem. I don't have any problem at all with a molecular effect, but when you're talking an unnatural structure, then you're talking something that is not occurring by natural physics.

RH: OK. Let me give you some more data.

EM: So then you need to address, if it's an unnatural structure, how did it get there? And that is not speculation, that is a part of your theory.

RH: Ok. If it's an unnatural structure and we can agree, and you and I are obviously not going to agree tonight that it's unnatural, but let's assume at some point we get to where we agree. If we agree that it's unnatural, then, of course, the next question is: Who built it?

EM: That's right.

RH: All right. How'd it get there? Well, ...

EM: Aren't you claiming it's unnatural?

RH: Based on what we looked at, four years of data from manned and unmanned missions, I would be hard pressed to explain this as anything now but an unnatural set of structures. Yes.

EM: Ok. Then you jumped right into it. Don't gloss it over. If you're having to claim it's unnatural, that opens up an entirely different ball game of explanation. I would say it has to be natural, as a... Use ? Occam's Razor? You must approach with a more simple explanation, if possible, and if that doesn't work, go to your unnatural. But let's look at natural...

RH: Wait a minute. Why is unnatural vs. natural a simpler explanation? In your own book, Ed, and I'm sitting here, by the way, fascinated by your book and I heartily recommend it, The Way of The Explorer, with Dwight Williams. Let's mention your other author, ok?

EM: Yeah, sure.

RH: You make the case for the phenomena of ESP and telepathy and a whole series of avante garde experiences that to most people are unnatural.

AB: Richard, you're headed off into a good direction, but I don't want you to unwind it with a break, so gentlemen, relax, get a cup of coffee, whatever. We'll be right back to you.

| Back to Mitchell Page | Prev Segment | Next Segment |