Crisium Dome

by **Steve Troy**
from LunarAnomalies Website

Part 1

Glass Dome(s) in Mare Crisium?

In July at the *Enterprise Mission Phoenix event*, **Richard Hoagland** asked me and independent Lunar researcher **Steve Troy** to join our efforts.

Steve has been quietly working to confirm Hoagland's artificial Lunar anomalies hypothesis for almost 2 years. Steve's approach is entirely analog, sifting through the reams of data and catalogs provided by a variety of NASA archives. He is finding numerous anomalies and discrepancies in his studies, both with regard to the unnatural "geology" and the also with the photo's themselves. I was asked to provide image enhancement and confirmation of Steve's findings using standard digital techniques.

In the course of examining our first set of photo's, we agreed that we would withhold the results of our mutual studies until such time as we were prepared to jointly release the data with Richard Hoagland. This was to ensure that the data was "done right", and not exposed prematurely. However, one of the frames, AS10-30-4421, has already been examined in some detail by **Lan Fleming** on the VGL website.

Fleming has focused primarily on the craters Pierce and Picard in **Mare Crisium**, and more specifically on a set of "arches" apparently over Picard on this image. While Steve and I have noted the "arches" and plan to work on them later, we are focused on another part of 4421. Assuming others may be examining this frame, we have decided to post our preliminary results so that the other researchers may cross confirm our findings as well. Richard Hoagland concurs with this decision.

The North Shore of Mare Crisium

AS10-30-4421 From 5 X 7 Sectional

This is an unenhanced scan of Steve's original analog photo of **AS10-30-4421**. He first noticed the very bright area in the right center of the image. A quick examination of the 8 X 10 print showed that this area has the highest albedo in the entire photograph.

Steve Troy's comments

I have been studying lunar anomalies on an analog level since 1994, with an astronomical and stratigraphic interest in the moon for several years prior to that.

One of the key frames I have examined is AS10-30-4421. This photograph is a view across the plain of **Mare Crisium** emphasizing the crater Picard and the North shore of the basin. This high-Sun oblique photograph is centered at 55 degrees east longitude, 14 degrees north latitude.

I acquired the negative of AS10-30-4421 last February after looking at the Apollo photographic catalogue SP-232 [(1)]. In the catalog on page 164, 4421 is considerably darker than the rest in the series (4414 through 4420) that covers this region. I ordered it and was surprised that it was of good quality and yielded excellent sectionals. Other researchers including Lan Fleming of VGL, have noted a number of anomalies, especially around the crater Picard. However, in the far right portion of the frame there is an anomalous object several magnitudes brighter than any other feature in this picture.

It is also brighter than any other natural or anomalous formation in the series 4414-4420. With an 8X lupe and a light table one can see - upon examining sectionals of this area - a transparent, Dome-like shape that apparently is along the north Maria edge.

Its transparency is confirmed by tracing the mountains behind the object, which are visible through this immense dome like shape. I obtained other views of this area and am currently looking at the whole Apollo Crisium "Series" with **Mike Bara**.

NSSDC has been most cooperative in responding to this as well as all photo neg requests.

AS10-30-4421 image map. Picard is the crater just to the lower centerof the frame. Cleomedes F and Cleomedes Fa are just to the right of the image edge.

4421 in is an oblique image taken at high sun from an altitude of 60km.

On vertical shots from Lunar Orbiter 4 (191H3 and north Crisium close up, 51-H3) this bright "Dome" can't be seen.[(2)] The Apollo 10 footprint maps show the angle of the photo. Comparative angles overlaid on the Lunar Orbiter photos as well as some Apollo 17 shots of the area show no such anomaly. It is my belief that the dome must be seen at the right sun angle due to its transparency and possible crystalline composition.

On the Lunar Orbiter 4 photos one can see a small bright ray crater that it is situated just inside the right 4421 footprint map photo boundary. The dome seen on 4421 could not be this crater reflection because it is higher than the mountains that tower over this region separating the northern Crisium highlands & the maria.

The mountains "Rise abruptly 3 kilometers above the flat maria area ".[(3)] Scale must therefore be considered when looking at this feature which is estimated to rise 3 to 4 miles vertically and 10-15 miles horizontally from the maria floor area.

The Crisium basin is typical of large impact basins altered by smaller impacts (Pierce and Picard are examples). There has been basaltic volcanism and infilling by impact plains and mantels. Geologic reports as well as several photos of this area are available in the Apollo 17 Preliminary Science Report. It relates "In the past mare history, deposits that seemed to have formed are sheets of fine textured impact ejecta and fields of secondary craters".[(4)] A crystalline dome would not fit the parameters discussed in such a geological report.

In March of 97, I sent prints and sectionals of 4421 to Hoagland, and Mike Bara received them in August of this year.

Footnotes:

1. Apollo 10 Photography and Visual Observations, NASA SP-232, p.164 +maps.

2. Bowker and Hughes, Lunar Orbiter Photographic Atlas, NASA SP-206.
3. G. Heinken D. Vanimen, B. French, Lunar Sourcebook, a Users Guide to the Moon, Cambridge Univ. Press, p.11.
4. Don E. Wilhelms, AS17 Preliminary Science Report – NASA SP-330 Stratigraphic Study of the north Crisium region, pp.29-29 through 29-35.

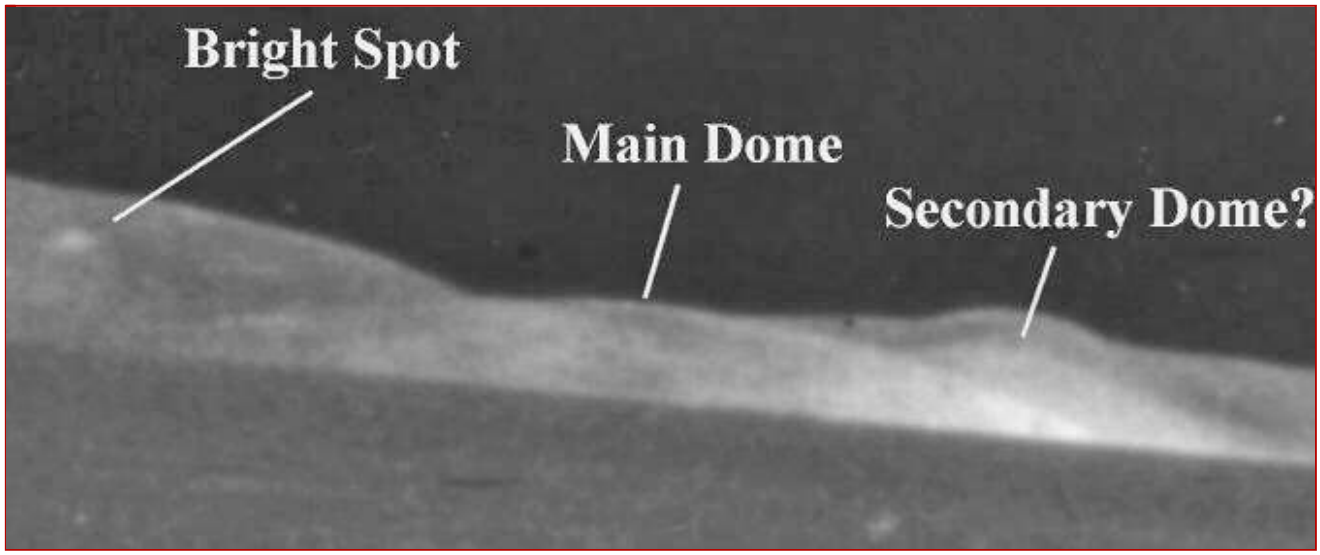
The first thing I noticed about Steve's analog five by seven sectional was the translucency of the dome.

I concur with his conclusion that the mountains can be seen through the dome. I also note that it has 2 distinct "corners" or edges, rather than blending in with the mountains behind.

This is highly unusual, as it seems to stand apart from the mountain chain. In addition, I noted a bright spot on the hillside just above and to the left of the main dome. Immediately to the right of this bright object is a faint cross-like object jutting from the hillside, and an odd spire or antenna seeming to rise from the left slope of the main dome. I also believe there is a second dome just beyond the right edge of the main dome.

It's contour is visible through the body of the main dome. It is more opaque from the perspective of 4421 than is the main dome, and the area where it overlaps the main dome is the area of brightest albedo. This would be explained by the light sources of the two domes adding their brightness as they reflected the sunlight into the camera.

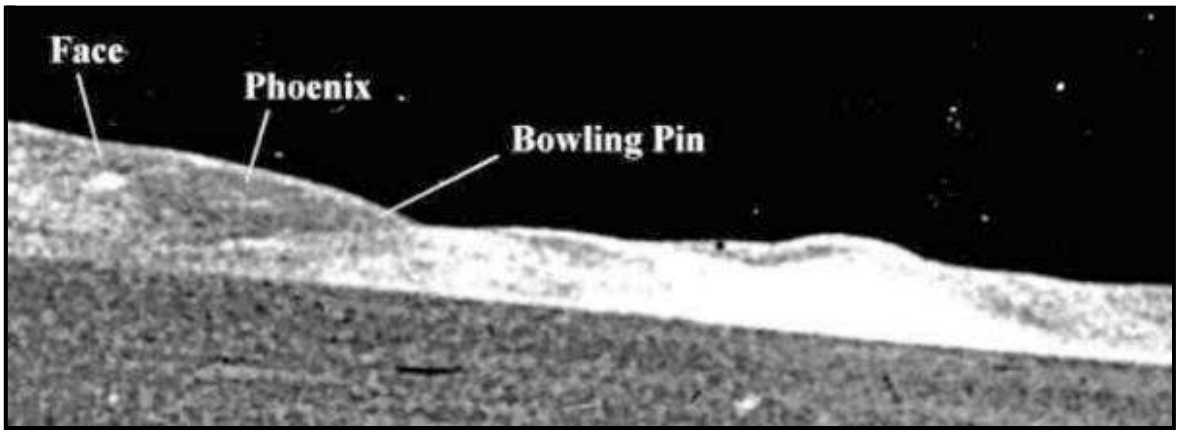
I believe there is a possibility that the image map is in error and that the twin domes are in fact covering the craters Cleomedes F and Cleomedes Fa. If this is correct, then the craters **are in fact not "craters" at all.**



Curiously, the entire image seems to be oddly *blurred*, as if there were some fuzzy "Stuff" between the camera and the north shore of Mare Crisium. Upon viewing these characteristics of 4421 on my light board I immediately began a series of image enhancements.

After scanning the image at both 300 and 600 dpi, I used a variety of image enhancement techniques to bring out additional detail. I used the high-pass and un-sharp mask filters and also applied gamma correction and contrast enhancement.

I was quite frankly stunned by what these revealed.



Under enhancement, the less distinct left edge of the **Main Dome** became more clearly defined, and this helps to determine it's location in front of the mountain chain along the North shore.

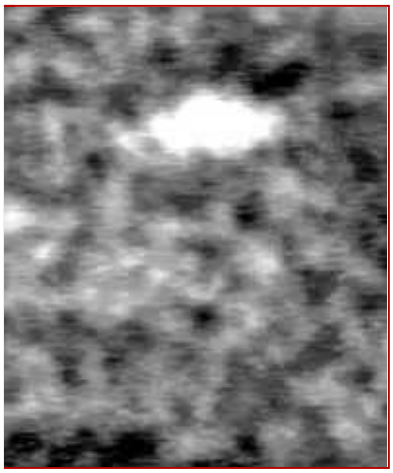
The now familiar translucent material is also seen to be intervening between the camera and the domes, accounting for much of the fuzzy quality and odd mottling apparent on the frame.

Some have asserted that this pattern is an artifact of the JPEG compression process, however, the original data was from TIFF images which do not suffer from this "tile" effect. This intervening material is also consistent with Richard Hoagland's assertion of a box like "dome" over the entire Crisium region (*Martian Horizons* - The Journal of the Mars Mission, Vol2, No.5, Frame AS16-121-19438). The **Dome** also appears to have a cellular structure identical to the "Castle", and the "Tower" seen in the famous Hoagland data.

The anomalous "bright spot" now emerged as the top of a "headdress" remarkably similar to the famous "*Face on Mars*".

The Face

The "**Face**", despite being somewhat distorted by the semi-translucent material intervening between the camera and the object, displays all the necessary characteristics to be included as a potential monument.



It has bilateral symmetry, a defined "Nose" "Mouth" and "Eye-Sockets", and a proximity to other highly anomalous objects. It is also isolated in the sense that there are no other obvious "Faces" along the length of the North Shore visible in this image.

This strongly suggests that it is a genuine feature rather than a collection of random bright and dark spots in the image. The "Face" is also situated on the hillside overlooking the "Dome", in such a way as to look down directly into the center of the main "Dome".

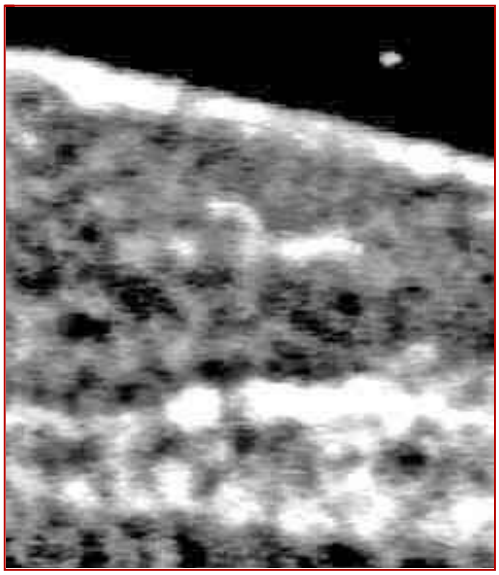
Richard Hoagland has strongly cautioned me about the tendency to see faces everywhere, but it is important to understand that I am not suggesting that this object resembles a face, but rather I am comparing it more precisely to the Face on Mars at **Cydonia**. Given the "headdress" and other features I believe it compares favorably to the Cydonian structure.

On his web site, researcher **Dr. Stanley McDaniel** has proposed a system for classifying possible new faces on Mars, his system uses 5 levels of priority ranking. They are:

- Type I: Facial sculptures equivalent to the Cydonia Face in detail and appearance. High priority for investigation.
- Type II: Possibly Type I faces, but lacking in sufficient information to be sure. Further investigation warranted at second level of priority.
- Type III: Non-type I but containing sufficient detail and context to warrant consideration as possible artificial. Priority depending on degree of detail and context.
- Type IV: Non-type I probably natural features only accidentally resembling some kind of "face." Low priority for investigation.
- Type V: Obvious "jokes." No priority.

Using this system, I propose that this "Crisium Face" is a Type II. We will pursue other images in an attempt to verify details.

The Phoenix



The "Phoenix" is an odd cross shaped appendage rising from the hillside next to the "Face". It is constructed of 2 cylindrical objects interlocking with the vertical cylinder bending over to the left, giving the impression of a bird with wings outstretched in flight.

I have no idea what this object might represent but it stands out dramatically from the drab mountain chain it rests on and bears no resemblance to any explainable Lunar geology. It reflectivity suggests a metallic or crystalline construction.

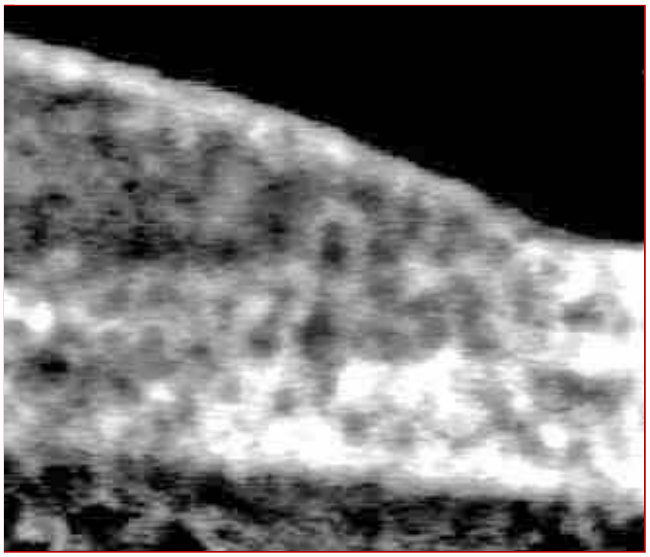
This is reinforced by the fact that such a rounded surface would not reflect this much light if were made of typical "highland" material.

Note that it is nearly as bright as the "Dome" in front of it, which we have already established is made from a translucent glass like material.

The Bowling Pin

The "Bowling Pin" is a dark bulbous object just to the right of the "Phoenix" which actually seems to protrude through the main "glass Dome".

This appears to be an antenna of watch tower of some kind, and it’s middle portion is definitely obscured by the glass like material of the "Dome" itself. Note how the upper tip of the "Bowling Pin" is encased in the same glass like material and blots out the upper rim of the "Dome" behind it.

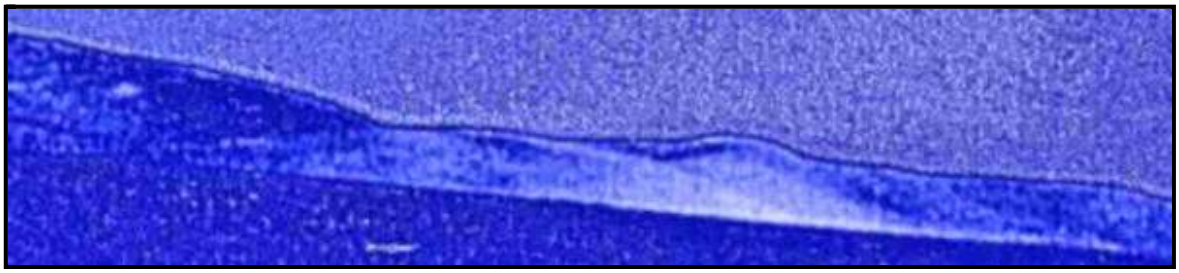


Again, a spike like object such as this has no place in standard Lunar geology, and I am at a complete loss to explain it as anything but artificial.

False Color Enhancement

False color imaging provides another perspective on data such as this. In this case I have separated the 32-bit color channels and adjusted *the Cyan* into the blue range to emphasize shadows and texture.

Again note the geometric "haze" above the horizon and the cellular structure of the 2 overlapping domes.



Conclusions

It is my opinion that the "Dome" or "Domes" are **real objects** on the Lunar surface.

There is no reason to suspect that photographic defects or imaging artifacts account for their presence. The "Face" "Phoenix" and "Bowling Pin" are all genuine *anomalies*, not readily explainable by any natural process.

Their proximity to each other is only further reinforcement of their artificiality. I must therefore conclude that they are all likely constructs.

Part 2

Preface

These are follow up observations to my Crisium Dome discovery and observations posted on this site on 9/13/97. It is suggested readers access or reference "Glass Dome(s) in Mare Crisium?" on this site for initial observations and pictures of the AS10-30-4421 **Crisium Dome**.

AS10-30-4421 has revealed several anomalous features as noted by **Mike Bara** and myself. I ordered this frame from NSSDC in March of 1997 and found, as reported, what I believe to be a crystalline lunar dome located in the North shore area of Mare Crisium.

After thorough analog examination, it was sent to along with sectionals to **Richard Hoagland**, and in '97 to Mike Bara for computer enhancement confirmation on this, and now other data we are working on.

After some discussion we agreed to order The **AS10-30-4414-17 series** taken of this region. It was my decision to concentrate on two areas - the fore-highland terrain areas and, what I believed to be a bright crater area on the North shore area. Mike continued with the North shore search. Before discussion on my areas, some Dome location observations…

I can safely say that it is our shared belief that the Dome seen on AS10-30-4421 **can be seen only at certain sun angles.** In the series AS10-30-4421, the sun angle is high. However, the phase angle - the angle at the point of intersection formed by the vectors from the source (Sun) and the receptor (camera) - changed throughout the sequence.

I believe the phase/Sun angles must be synchronized in order to see the Domes in 4421. Much large-scale crystalline material has been discovered and was photographed by Lunar Orbiter and Apollo technologies. Much of it wasn't captured due to un-synchronized angles.

Consider **Apollo 16:**

> "One of the most intriguing orbital observations was made at approximately 123:07 GET (3:01 C.S.T., Apr.21, 1972). The CMP was watching the starts rise over the approaching sunrise horizon while he was waiting to execute one of the zodiacal light photographic sequences.
>
> While in a totally darkened cockpit, he noticed a bright flash that appeared to the South of the ground track and several degrees below the horizon. This flash was of very short duration and did not remain long enough to permit recording a geographical position." [1]

The **4421 Dome** could be a "flash-unit". It is far brighter than any landform seen on any photo in the 4414-4420 series.

I accessed frame AS11-42-6223 that shows a higher view of the whole north shore area and sent the sectionals to Mike. There is a ray crater that is extremely bright in the general location of the dome that can be mistaken for it. This crater will be discussed.

To play the Devil's advocate here however as I did, if one draws a line from a common landform or crater on the terrain of the West shore seen both on 10-4421 and 11-6223 up passing Picard to the right of the dome area on 4421 and to the bright crater area on 6223, both lines on these photos do seem to meet a point on the North shore near each other. I am not convinced however, that the bright crater and the dome are one and the same.

This "**bright crater**" **area** can be seen clearly on **LO-IV-54-H3**

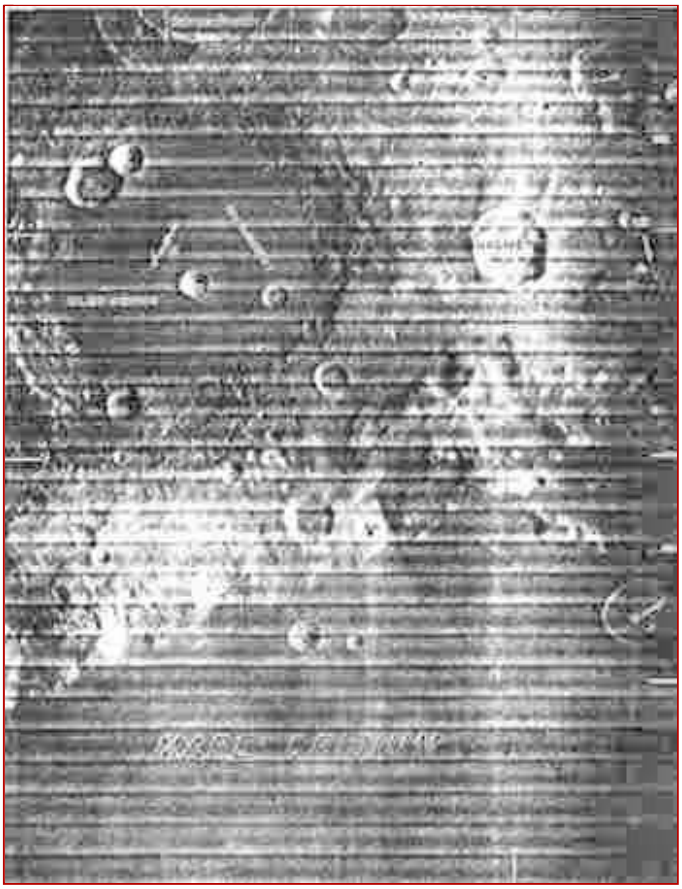


Figure 1.

If one looks at the AS10 footprint maps [2] one can coordinate the angle of **4421** with the 4421 photo.

If the map angle lines are correct (and the may not be, which I'm about to get into) the Dome location according to it's Selenographic location should be to the left of Cleomedes F and Fa, two small Mare craters off the North shore. The bright crater is located here. However, the Dome is obviously seen as a much larger object that is transparent.

The three-mile high mountains on the North shore can be seen through the dome on 4421.

The **11-6223 photo** enlargements and the **LO-IV-54-H photo** show the bright crater has merely splashed near shore. So size is a critical factor here. If the Dome is a "flash-unit", it would also not be visible under all conditions as this "bright crater" seems to be.

This small bright ray-crater is visible on almost any picture of **Crisium** taken from any distance - even trans-Earth Coast photographs.

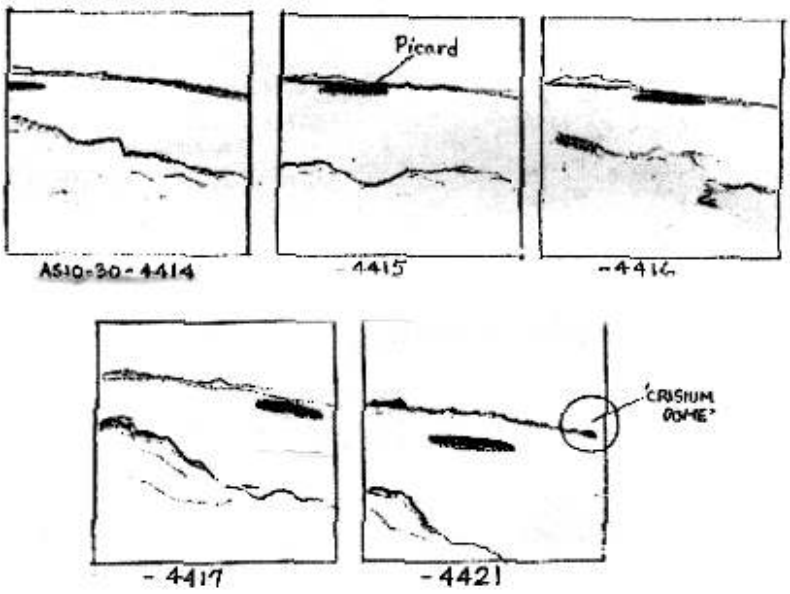


Figure 2.

In looking at the AS10 maps there are discrepancies.

The photo angles for the series AS10-4414-4417 contradict what is shown on the actual photos. Map angles drawn for this series show Picard along the left angle line border which is consistent for only one of the photographs - 4414. Picard changed position as the spacecraft orbited and by the time 4416 was taken, it was in the middle of the frame. If these discrepancies exist it is reasonable to deduce that perhaps the 4421 photomap angle may not be accurate.

I have not found the high albedo along with the transparency on any object in pictures mentioned except the dome on AS10-30-4421.

A combination of factors that include Mike's original enhancements of the Dome, the "bright crater" area, and the AS10 map angles here all kept part of my research focused on this area. I came across a frame in a **NASA** document that has not as yet been identified by number and mission even though I've gone through all the catalogs. Houston does not know yet either. It shows a possible confirming **Dome** shot. It is currently being investigated by this team.

Sectionals were made of the "bright crater" area on frame 11-6223 and sent to Mike. Included were sectionals on the fore highland areas of SW Crisium as well as Lick crater. No enhancements were really needed for what was discovered in the area left of the bright crater area.

There is an astonishing, unmistakable and undeniable **architecture** or **archeology** that I have named "Malibu", for it reminds me of and clearly resembles California homes built into the sides of hills but on a much larger scale.

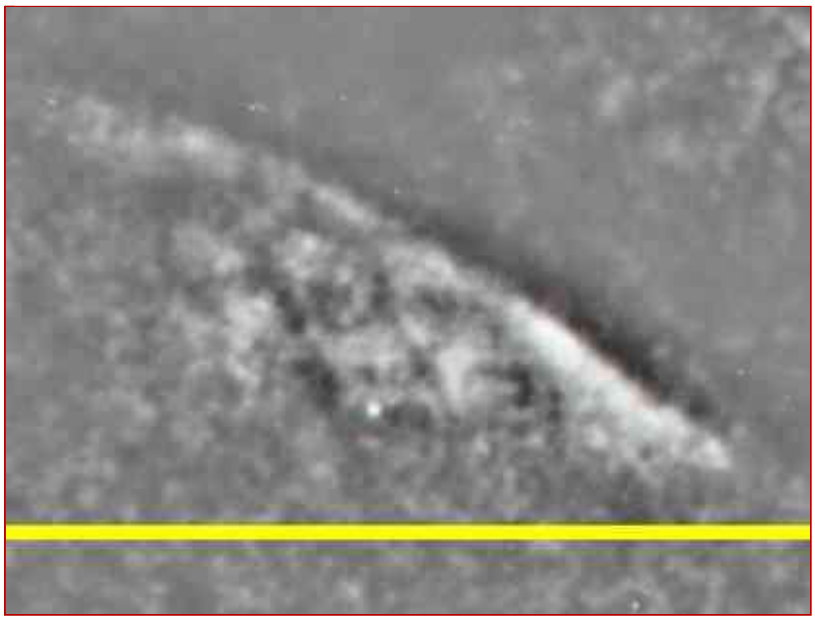


Figure 3. "Malibu". Yellow line indicates intersection of Mare plane and highlands.

There are angular supports conforming to the physical relief of the mountain slope.

Within, are vertical trusses and horizontal beams between them. It is sunlit and like the "bright crater", faces south-southeast overlooking the Mare. After finding this remarkable object, I returned to the AS10-4414-17 series as well as the foreground shore areas of **AS11-6223** to search for similar structures. I discovered many smaller, rectilinear, concentric complexes peppered throughout the inland edges of this Pre-Imbrian basin.

On **11-6223** they are very clear and the orthogonal nature of them can be seen with a magnifying glass on sectionals. They have structural integrity and do not seem to fit within the traditional geology of mere "hummocky-treebarklike" patterns. I consulted geologic maps. [3]

In the traditional stratigraphic model one does see relatively degraded areas with mass wasting that has removed material from and within higher areas that are now depressions. There is a coarse patchy appearance in the steeper slopes along with crater modification. The geometric complexes in these areas just do not seem to fit within this model. (Fig 4).

They cover inland areas in the lower parts of frames 10-4414-17 and 11-6223 & seen more clearly on 6223.

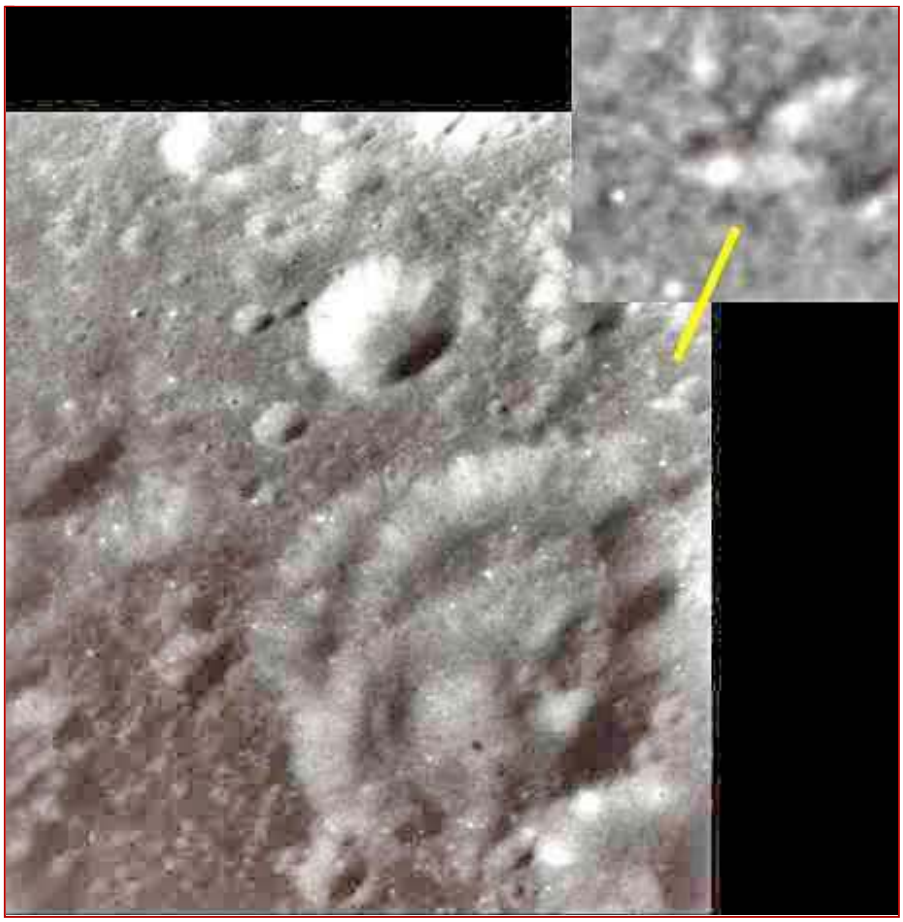


Figure 4. AS11-42-6223.

Two important observations take them out of the traditional model.

One is the fact that all of them, apart from the regular geometry, are located on surfaces out of the path of further deposition and wasting. The other is that the walls and height of these structures appear higher than the natural terrain. For example, many are seen along and near the rims of smaller 3-8 km craters and on plateaus and relatively level areas.

Straight walls, within walls at geometric angles conforming to the terrain do not just appear on levels higher than the highest point of crater rims as these seem to do! And there is no endogenic reason for their existence.

If these were natural one would expect to see such structures on a scale of these things all around the craters where they appear and not such obvious locations and immense complex form as these have. These to me all suggest artificiality and not random manipulations of natural lunar geology. The central area of Lick crater also reveals some similar shapes.

Other frames from different mission of this area are currently being examined. Stay tuned.

Footnotes

1. Young, J.W., Mattingly, T.K., Duke, C..M., Crew observations, sp-315, Apollo 16 Preliminary Science Report, p.5-4.
2. Casella, C.J. Binder, A.B. Geol. Map of Cleomedes Quadrangle, I-707, LAC44, USGS, 1972.
3. Olson. A.B., Williams, D.E. Geol. Map of Undarum Quadrangle, I-837, LAC62, USGS, 1974.
4. Index maps, Apollo 10 Photography and Visual Observations, NASA sp-232, 1971.

5. All images courtesy of NSSDC, Greenbelt, MD.
6. Apollo 10 and Apollo 11 photography 69-059A-01E - Principal investigator Dr. Richard J. Allenby, Jr.

Return to Moon Anomalies