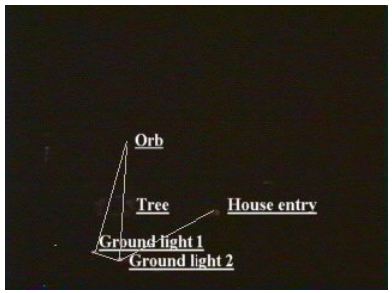
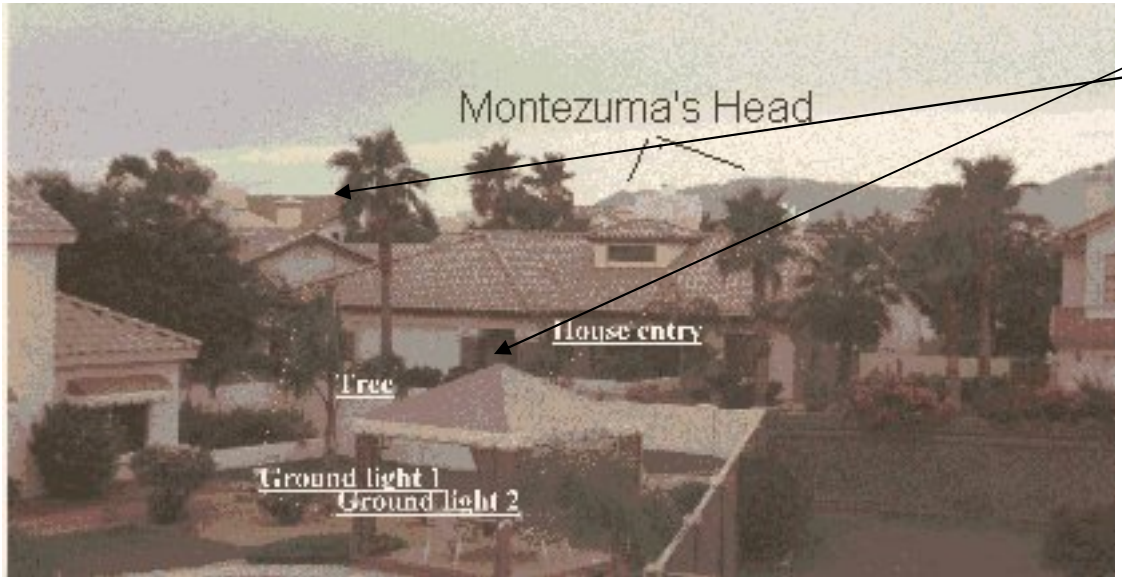
New Triangulation of Phoenix Lights

Incorporating Steven Blonder Sighting

2/29/12

Sighting Location looking from 3747 E. Tanglewood Drive



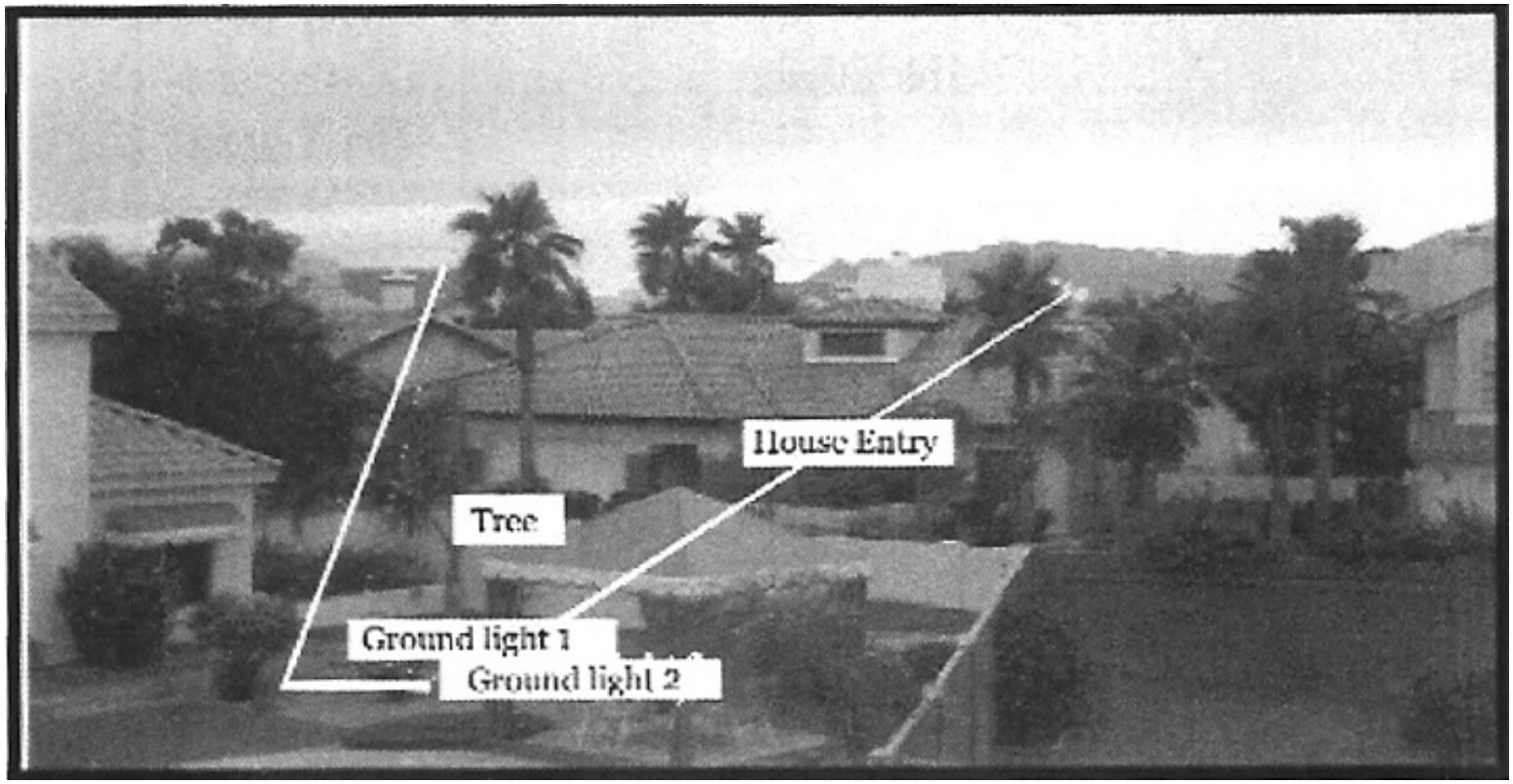


House Entry

Left Light Position

Dr. Maccabee Analyzed Light 0 orb (light approx. 5 minutes prior to Array) and placed it south of Montezuma's Head which is at the extreme Southeast end of the Estrella Range. Graphics at http://brumac.8k.com/new_materials/phoenixlights/ADDENDUM.html

1998 M13 Report infers the location of the array without triangulating them for placement and altitude



"MARCH 13, 1997
I analyzed three M13 videos: Krzyston (K), L and Rairdon(R). (I requested a copy of King's video but never got it.)"

*Source:
http://brumac.8k.com/new_materials/phoenixlights/ADDENDUM.html

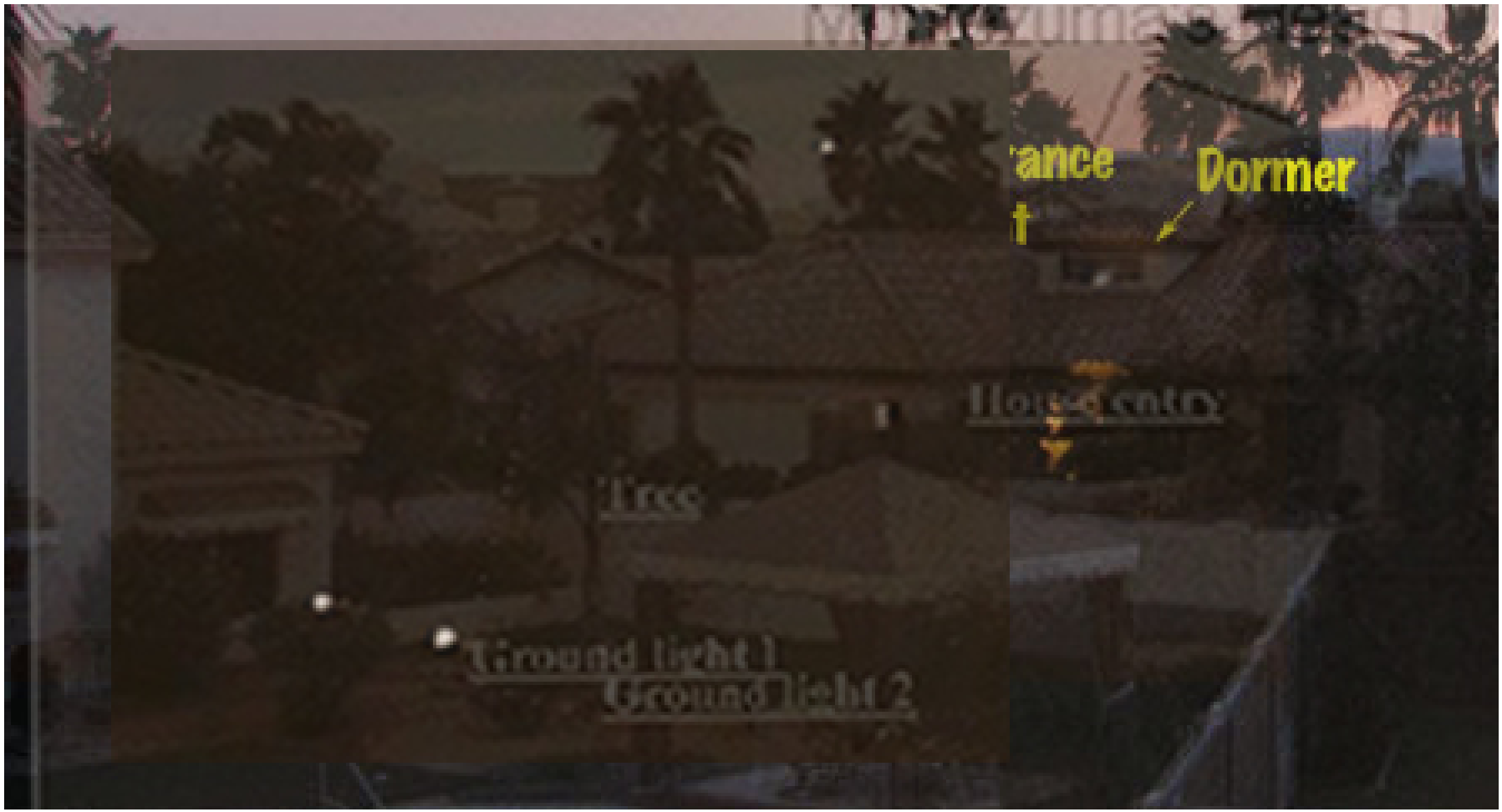
King taped the Lights at SB Home

Composite Left Orb with Ground lights 1:36

http://www.youtube.com/watch?v=V-9I7-rf5G8

1:36 from film using ground light reference from 3/12 film and 1997 House shot

Light at Bottom of Dormer Appears at 2:05 in film



At 2:45 Light at Dormer shifts up and Full Array Appears

Dormer Light Shifts Again at 2:57

3:19 Dormer still Present and Array has not Shifted Position

4:02 Right Orb Begins to Hide behind Chimney (Dormer Light Gone) Slight movement in array in 1:46 total time

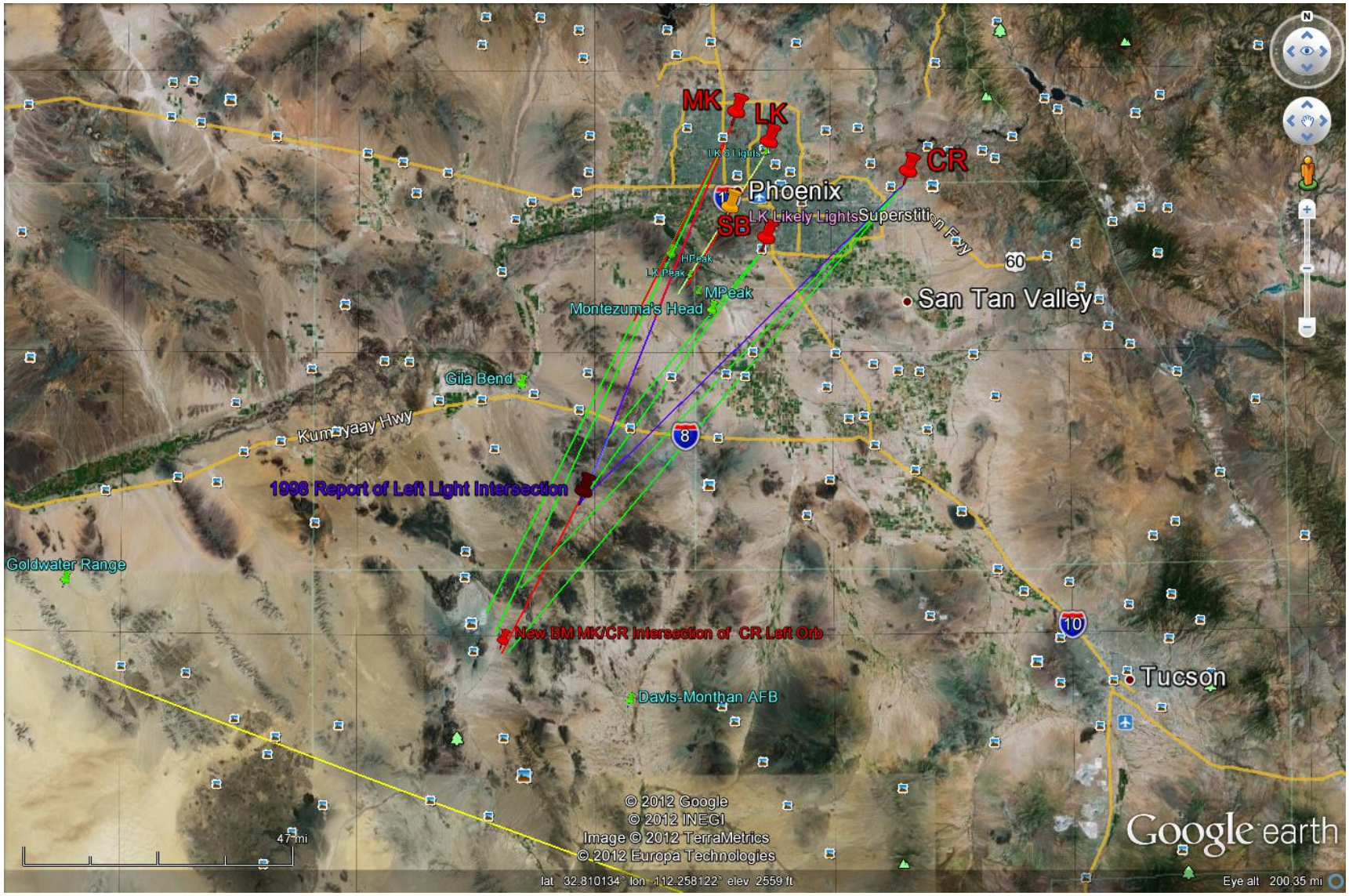
SB Orb Placement On Google Earth

Balcony filming spot 33°17'54.96"N, 112° 0'10.32"W

Right most orb behind chimney 219.66 Azimuth, 53 miles to MK Intersect

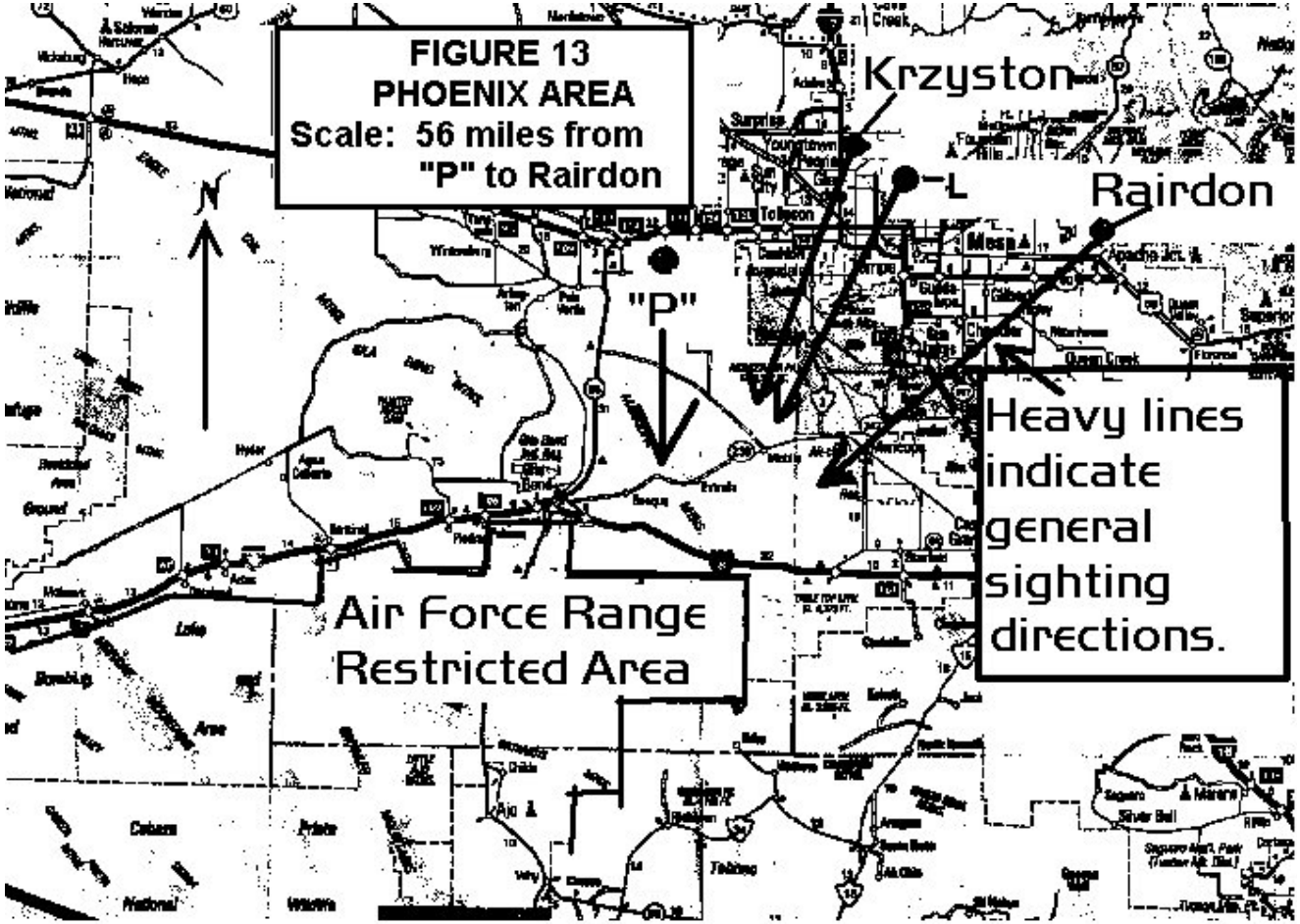
Left most orb by upper window 216.62 Azimuth, 51 miles to MK Intersect

New and Old Triangulations



Dr. Maccabee Changed MK/Intersect 20-30 miles south of 1998 position. LK Intersect was also removed in Jan. 2012

Goldwater Range and Jan.14,1998 Triangulation



Maps shows directions from Jan. 1998 Sighting in Phoenix

Source: http://brumac.8k.com/images/pl_images/REPORTfig13.jpg

Notes from 1998 Study

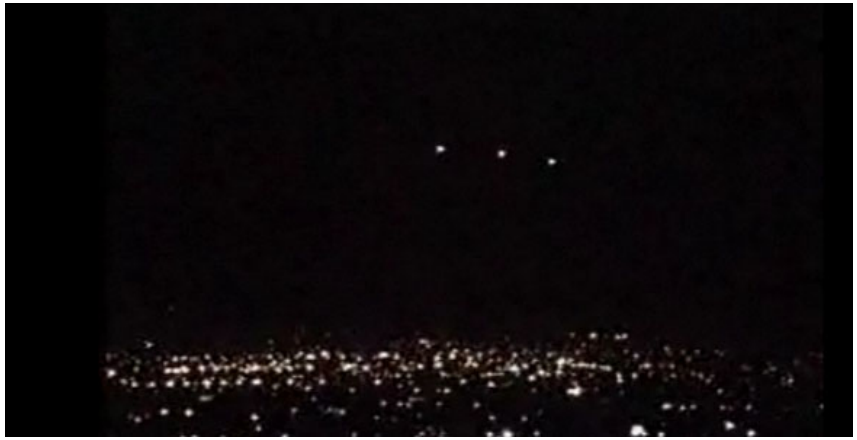
- **DISCUSSION OF THE REPORT BY HAMILTON AND KING**
- TPLA begins with a very brief summary of the results in RPLA and points out the problem with temporal correlation. It then discusses the problems with the Air Force statements. According to TPLA, the Maryland National Guard claimed that the training session with flare drops was held over the North Tac Range, not over the East Tac Range where the triangulation placed them. Initial Air Force statements were that there were no Air Force planes flying after 8:30 PM. However, about 4 months after the sighting the Maryland National Guard stated that it had use of the range between 9:30 and 10 PM. There is no doubt that there was confusion on the part of the "authorities" in this regard.
- In late July, 1997, Captain Eileen Bienz, spokeswoman for the Arizona National Guard said she had learned from National Guard helicopter pilots that they had seen a group of A-10's, the aircraft which drop the LUU-2 flares, heading for Davis-Monthan AFB at about 10 PM on March 13, 1997. She then learned that the Maryland Air National Guard had used the Barry Goldwater range. According to Beinz, the A-10's dropped flares at an altitude of 15,000 ft at 10 PM over the "North Tac Range" which she placed at 30 miles southwest of Phoenix. (I don't know where that would be. I suspect she had the distance wrong, or else the flares were not ejected over the North Tac Range.) Capt. Drew Sullins, spokesman for the Maryland Air National Guard, also in late July 1997, stated that a squad of A-10 jets had been using the Barry Goldwater range for training missions some 60 miles southwest of Phoenix and that the planes had "dumped several flares" at high altitude. Thus the statements by the National Guard officials indicate that there were flares ejected in the general area of the arc of lights.
- During operational exercises flares are dropped at altitudes below 8,000 ft. At these lower altitudes they would be invisible to people in Phoenix because of the Estrella Range (and South Mountain). Probably most of the flares were dropped under normal operating conditions (low altitude) over the North Tac Range far west of Tucson, as stated by the MNG. However, according to a newspaper story about the National Guard training with flares, the aircraft are not allowed land with unused flares but rather must throw them out. Unburned flares falling from high altitude could be dangerous (!!!) but burned flares much less dangerous since they are designed to burn up during the fall (even the aluminum casing is burned). Therefore what I suspect happened is this: two planes on the way back to Tucson (Davis-Monthan AFB) were flying generally eastward at altitudes around 15,000 ft when they ejected unused flares. I suspect that one plane ejected a single flare that became light #1. I suspect a second plane flying to the AFB (right to left from the point of view of witnesses in Phoenix) then ejected 8 unused flares, the maximum number carried by an A-10. I conjecture that plane was making a gradual turn to the right while ejecting the flares, thus making the arc of 8 lights. (I saw something similar to this while in Gulf Breeze in 1992. To the naked eye it appeared as a series of lights, one after another, appearing in a row with each one going out shortly after it appeared. A high power telescope proved there was a large airplane ejecting flares...I could see the airplane, only about 20 miles away, lit by the light of the flares because the flares ignited close to the airplane!)
- H&K point out that the colors of the lights seem to be too orange to be magnesium flares of the LUU-2 type, since magnesium burns at high temperature with a white light. I suggested that light traveling through the atmosphere over 50 miles could be reddened (like the moon or sun) by dust and moisture droplets in the atmosphere. They, however, argue that any reddening wouldn't be sufficient to produce the orange color they and the others saw. This can only be resolved by experiment. (Note: although the magnesium burns white, the consumption of the aluminum cylinder that contains the flare "candle" may add some orange to the light.) The problem of color may be resolved with controlled observations during similar training exercises expected to take place during early 1999.
- Flares burn at uneven rates and therefore fluctuate in brightness. The lights on the video also fluctuate in brightness. The lights in the videos also show flare-like characteristics in the way they appeared and disappeared. The appearances were reasonably fast but the disappearances were more gradual, sometimes taking seconds to complete disappear (burn out).
- H&K point out that I did not discuss any of "orb" sightings from other parts of Arizona (or from other parts of the world). Of course, I did not think it was necessary since I was attempting to learn about the particular lights in the videos. There have been orange orb sightings throughout the world. Many or most of these remain unexplained. It is my impression from having read the literature that most of these are relatively close to the observer, not tens of miles away.
- H&K discuss the their own sighting from a location in Awahtukee. They assumed that they were looking toward Montezuma's peak, which they estimated at 2,500 ft above them and 8 miles away. They calculate that if the lights were above the peak and at a distance of 67 miles from them the minimum altitude of the lights would have to be 2,500 x 67/8 = 21,000 ft, which is much higher than I had calculated. However, their calculation has to be revised for several reasons. Daytime photos showing the mountain ridgeline prove that they were looking over Montezuma's Head (southern end of the Estrella Range, azimuth 221-223 degrees) rather than Montezuma's Peak (azimuth 235 degrees), the distance from them to the Head was about 14 miles, their altitude was about 1,200 ft and that of the Head is about 3,400 ft (according to the geological survey map) so the altitude difference was about 2,200 ft and the actual distance to the array as I located it was about 60 miles. Hence the minimum altitude above sea level was about 1200+2,200 x 60/14 = 10,600 ft. The minimum angular elevation looking over Montezuma's Head was about arctan[2200/(5280 x 14)] = 1.7 degrees.

Source: http://brumac.8k.com/new_materials/phoenixlights/ADDENDUM.html

Various Perspectives

Mike Kryzston (MK) Northwest

Chuck Rairden (CR) East



Dr. Lynne Kitei (LK) North

Steve Blonder (SB) East

MK and SB are 7 seconds apart from 1 on to 6 on (if filming same array)

The Phoenix Lights Computer Analysis

The numbering system of these lights.
Video by
Mike K.

VIDEO BY MIKE K			
Total Running Time of his tape: 3:10:01 Total Running Time "String" in air: 2:41:21			
OBJECT NUMBER	**IN TIME**	**OUT TIME**	**Total Duration on Tape**
1	00:00:00	02:10:17	02:10:17
2	00:28:09	00:50:09	00:21:29
3	00:35:08	01:48:08	01:12:29
4	00:41:08	01:49:17	01:08:08
5	00:44:01	02:50:10	02:06:08
6	00:52:06	02:47:23	01:55:16
7	01:01:28	02:54:23	01:52:24
8	01:08:09	03:10:01	02:01:21
9	01:16:01	02:35:18	01:19:16

The video shot by Chuck R. contains 9 points of light. Chuck didn't record the power-up sequence of the "String". He was able to capture the power down sequence of the lights.

VIDEO LIGHT DURATIONS AND EXTINQUISHING SEQUENCES

The total running times and sequences on the 5 video tapes of March 13th were calculated by Tom King below. Note: Light sequence begins with #1 on far left which was the first to appear and then proceeds to #2 on far right, then numbered right to left in the array:

VIDEO BY TOM KING			
Total Running Time of his tape: 5:26:25 Total Running Time "String" in air: 2:41:21			
OBJECT NUMBER	**IN TIME**	**OUT TIME**	**Total Duration on Tape**
1	00:00:00	03:43:11	03:43:11
6	00:59:26	02:04:07	01:04:10
7	01:08:04	04:49:14	03:41:09
8	01:13:26	05:15:07	04:01:09
9	01:22:07	05:26:25	04:04:17

The video shot by Mike contains 9 points of light. Mike was able to capture the entire sequence of lights in the "string". It enables you to study the timing of lights as they start and turn off without any pauses in the video.

CR begins filming Approx. 3 minutes after SB (if filming same array)

VIDEO LIGHT DURATIONS AND EXTINQUISHING SEQUENCES

The total running times and sequences on the 5 video tapes of March 13th were calculated by Tom King below. Note: Light sequence begins with #1 on far left which was the first to appear and then proceeds to #2 on far right, then numbered right to left in the array:

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OBJECT NUMBER	**IN TIME**	**OUT TIME**	**Total Duration on Tape**
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7	01:08:04	04:49:14	03:41:09
8	01:13:26	05:15:07	04:01:09
9	01:22:07	05:26:25	04:04:17

The video shot by Mike contains 9 points of light. Mike was able to capture the entire sequence of lights in the "string". It enables you to study the timing of lights as they start and turn off without any pauses in the video.

The Phoenix Light Mystery

The numbering system of these lights.

Video by
Chuck R.

VIDEO BY CHUCK R			
Total Running Time of his tape: 2:26:19 Total Running Time "String" in air: 2:26:19			
OBJECT NUMBER	**IN TIME**	**OUT TIME**	**Total Duration on Tape**
1	00:00:00	00:35:06	00:35:06
2	00:00:00	01:19:20	01:19:20
3	00:00:00	01:22:17	01:22:17
4	00:00:00	01:34:00	01:34:00
5	00:00:00	01:30:14	01:30:14
6	00:00:00	01:53:04	01:53:04
7	00:00:00	01:40:12	01:40:12
8	00:00:00	02:06:04	02:06:04
9	00:00:00	02:26:19	02:26:19

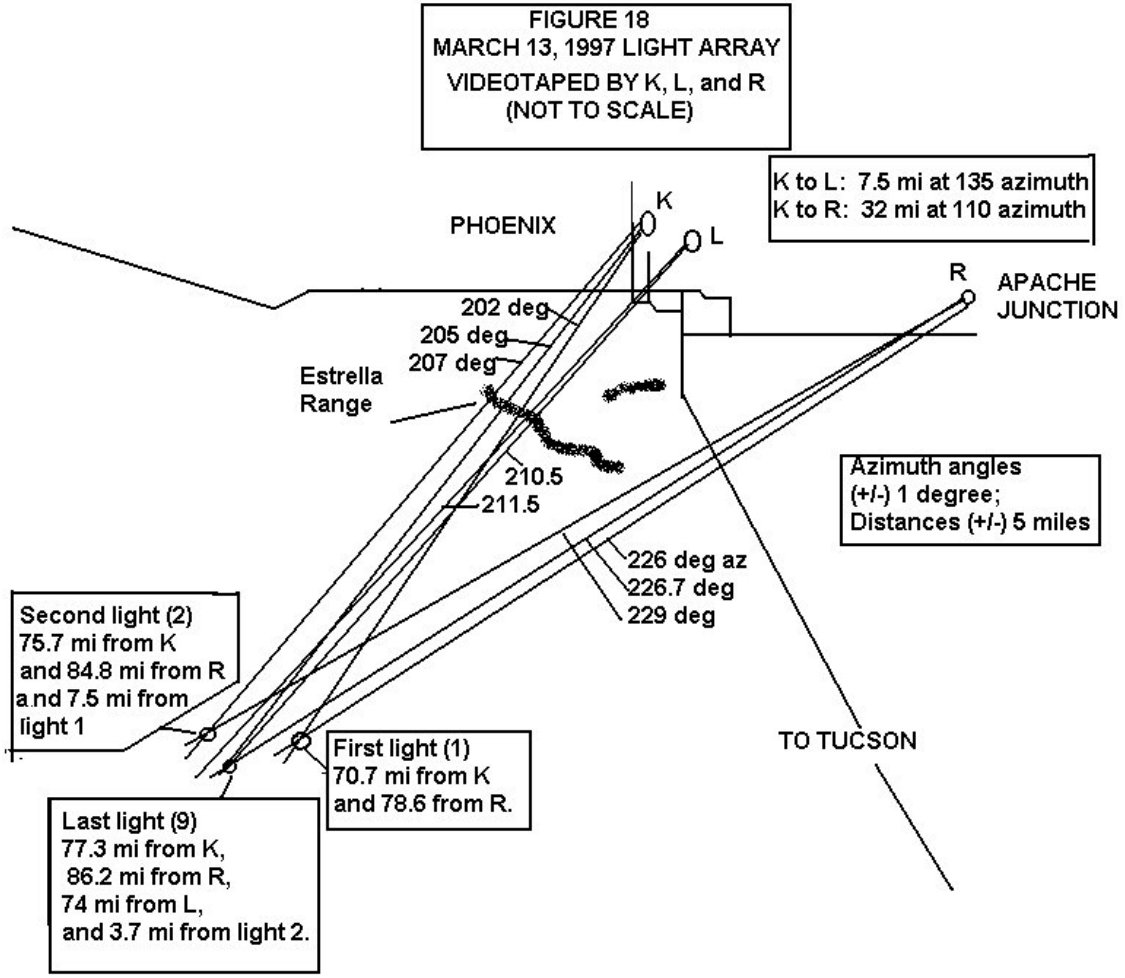
The video shot by Terry M. contains 9 points of light. Terry was able to capture the power-up of the lights also. Although 56 seconds into the event he paused the recording. He continued to later record some of the power down sequence.

All Times

This is a list of the time it took for the lights to appe
tape. The K. and M.

TOTAL DURATION OF LIGHTS CAUGHT ON TAPE				
Total Running Time of his tape: 2:57:22 Total Running Time "String" in air: 2:57:22				
OBJECT NUMBER	**King**	**MIKE K**	**CHUCK R**	**TERRY M**
1	03:43:11	02:10:17	00:35:06	00:56:04
2	not taped	00:21:29	01:19:20	00:56:04
3	not taped	01:12:29	01:22:17	00:56:04
4	not taped	01:08:08	01:34:00	00:56:04
5	not taped	02:06:08	01:30:14	00:44:14
6	01:04:10	01:55:16	01:53:04	02:00:20
7	03:41:09	01:52:24	01:40:12	01:44:00
8	04:01:09	02:01:21	02:06:04	02:03:11
9	04:04:17	01:19:16	02:26:19	02:12:02
Total Duration	**05:26:25**	**03:10:01**	**02:26:19**	**02:57:22**

Original 1998 Triangulation Missing SB



Google Earth Positions

Witness	View Position	Latitude	Longitude	2012 Distance to Right Orb	1998 to Distance to Left Orb	2012 Distance to Left Orb
Mike Kryzston is MK	Actual	33.612850°	-112.090071°	94	76	95
Dr. Lynne Kitei is LK	Actual	33.537441°	-111.992935°	12*	74	12*
Chuck Rairden is CR	Actual	33.461918°	-111.578941°	96	79	104
Steve Blonder is SB	Actual	33.298597°	-112.002845°	53	N/A	51
*LK position is starting position as they moved						

Reference Points	GE Lat	GE Long	
Montezuma's Head	33.133679°	-112.160093°	
Montezuma's Peak	33.184214°	-112.197371°	
Sierra Estrella/Hayes 4512 pk	33.273579°	-112.280745°	
Lone Butte	33.261993°	-112.032367°	
Hole in the Rock	33.456528°	-111.945417°	
SB/MK Intersect of Right Orb	33.164426°	-112.357303°	
MK/CR Intersect of Left Orb (1998)	32.669547°	-112.545940°	
LK Starting Position of 3 Orbs	33.375219°	-112.110344°	
Gila Bend	32.950027°	-112.724701°	
Goldwater AFB	32.453017°	-114.080389°	
Davis-Monthan AFB	32.166389°	-112.404205°	
KTVK Tower on South Mountain	33.333658°	-112.063202°	
2012 MK/CR Left Orb Intersect	32.310260°	-112.779612°	

Distances assume one array/object at one position except for LK