

The SW River Road Spiky Red UFO

An Oregon MUFON Case Study

by

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Abstract

Keywords: Spiked—Balloon—Red—Moving—3D—Kite

Description	Witnesses Randy Bell and his wife were driving along a country road when a low-level UFO “buzzed” their car. They found a place to stop and Randy took 66 photos of the UFO as it was moving farther away from him.
Witness(es)	Two witnesses: Randy Bell and his wife.
Date and Time	November 3, 2010, at about 5:40 PM to 5:50 PM.
Place	At SW River Road and SW Farmington Road, south of Hillsboro, Oregon.
Weather	Clear, visibility 10 miles; wind: 3.5 mph out of the east; temperature 62.1° F.
Duration	Total time around five minutes; with 66 photos taking one minute and 24 seconds.

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INTRODUCTION

This case is rich in eyewitness testimony because Randy Bell, the primary witness, is a friend of this investigator (Keith Rowell). Thus, I had plenty of access to him to ask many questions and get answers. (Usually, investigators don't have this much access to witnesses.) Additionally, Randy's wife was with him and is a secondary witness to some aspects of the sighting. The case is also rich in photographic evidence since Randy managed to take 66 photos of the UFO as it was traveling away from him.

Randy is the Director of the Portland UFO Network, which is a group whose purpose is skywatching oriented to photographing UFOs. Randy formed PUFON in March of 2010 after a couple of years of on and off photography of UFOs by himself. PUFON had over ten skywatches in 2010 with an average attendance of around five or six people. I have attended nearly every one of PUFON's skywatches and have become a good friend of Randy's. I myself have managed to photograph a few UFOs at Randy's skywatches. See *UFOs From SW Portland UFO Watch* on oregonmufon.com.

I believe Randy has some psychic abilities such as spiritual type healing, which he has told me he sometimes uses in his chiropractic business as one of his many treatment modalities. Randy does meditation and other exercises to enhance his psychic abilities. These abilities, I believe, play a part in Randy's apparent affinity for UFO encounters and photography. He has managed to photograph many other UFOs besides the one documented here. I have seen many of this other UFO photographs and believe that many are of genuine UFOs. His photographs and "cases" are now too numerous to document to the level that this case is.

In June 2007, while he was walking with his wife in their neighborhood, they experienced a small black UFO that came very close to them and then moved away. Randy felt as if the UFO was interacting with a deeper psychological part of him. It made him laugh with a happy feeling, he has said.

I have come to believe that Randy has a psychic/psychological connection with UFOs and that is why he has had such success in photographing UFOs over the past couple of years. He's got lots of other UFO photos and incidents that could be documented but for lack of investigator time.

NOTE

All photos in this report are copyright to their respective sources: Randy Bell and/or Keith Rowell and are not to be reproduced outside of this report except by written permission. All rights are reserved to Randy Bell and/or Keith Rowell, respectively.

SIGHTING DESCRIPTION

On November 3, 2010, a Wednesday, at 5:45 PM, Randy Bell was riding with his wife Galina in their truck moving along north on SW River Road about a quarter mile before the intersection at SW Farmington Road. He and his wife were traveling to their new business in Hillsboro to put the finishing touches on it before hoping to open it up in the coming weeks. They were about a quarter mile from the Cruise In Country Diner at SW River Road and SW Farmington Road when their sighting began. See *Figure 1, Aerial View of Cruise In Country Diner UFO Photography Spot*.

Gets an Intuition

Randy suddenly got an intuition that he should look pretty much straight up and out the driver's side window, which he did. He got an eyeful.

He saw a very low-level—perhaps no more than 50 to 75 feet up—strange-looking aerial object. It was metallic gray, like gun metal, and was perhaps five to ten feet in size. The object was moving in the opposite direction to the south at a pretty reasonable rate.



Source: Google Maps

**Figure 1. Aerial View of Cruise In Country Diner
Photography Spot.**

Randy took 66 UFO photos from the parking lot of the Cruise In Country Diner shown here in aerial view. He was standing near the white car in the back of the lot near the tree beside SW River Road. The view is off toward the SW in the direction that the UFO was traveling.



Source: Google Maps

Figure 2. Full Frame of One of Randy's Photos.

This is a full frame of image 2155. The UFO is the dark spot in the center of the frame above the distant ridge line. The ridge line is about seven miles away, but the UFO is not. It was traveling away from Randy at around 28 mph and at the end of the 66 photos Randy took, it appeared in front of a tree about 1.75 miles away to the south from Randy's position in the parking lot of the Cruise In Country Diner. See EVIDENCE, ANALYSIS and the APPENDICES later.

Pyramidal Spikes on It

Oddest of all were the pyramidal shapes protruding from the surface. The pyramids were very narrow and tall. And the tips of the pyramids were dazzlingly white. The pyramidal shapes varied from much less white at their bases to dazzling at their tips. The rest of the UFO seemed grayish. The object continued on its way in the opposite direction to the south and Randy started looking for a place to stop so that he could try to capture some photographs. He found the parking lot of the Cruise In Country Diner about a quarter mile up the road on the left at the intersection of SW River Road and SW Farmington Road. Randy had his camera equipment with him because he nearly always does since UFO photography has been his special passion since he and his wife saw a very close UFO "buzz" them while they were walking in their neighborhood a couple of years ago. It was as if this awakened him psychologically and even psychically.

Stops to Take Photos

He immediately parked and exited the truck looking for his photo gear. He has a Canon Rebel T1i with a Canon EF-S 55 to 250 mm IS telephoto lens. He spotted the UFO now far off appearing above the distant ridge line to the south. The UFO was quite small now. See *Figure 2, Full Frame of One of Randy's Photos*. It was much smaller than the full moon now—more like the size of Venus in the morning or evening. He aimed and started firing away to take as many photos as he could. He prefers his Canon Rebel in "sports mode." This means that the camera is set to always bias exposure to the highest speed it can under the lighting conditions. He essentially kept his finger depressing the shutter button almost all the time and the camera responded by taking as many photos continuously as fast as it could. He ended up taking 66 photos in a minute and 24 seconds. He was focussing manually as best he could during the

whole time. See *Figure 3, Closeup Above the Ridge Line* and *Figure 4, Closeup Descending to the Trees*.

Sees UFO Stop and Reappear

Randy stopped taking photos because his camera had a full memory card. (He had a four gigabyte card in the camera, but it happened to be nearly full when he started taking photos. Randy takes hundreds of photos in a “UFO hunting” session sometimes and had done this earlier that day and week.)

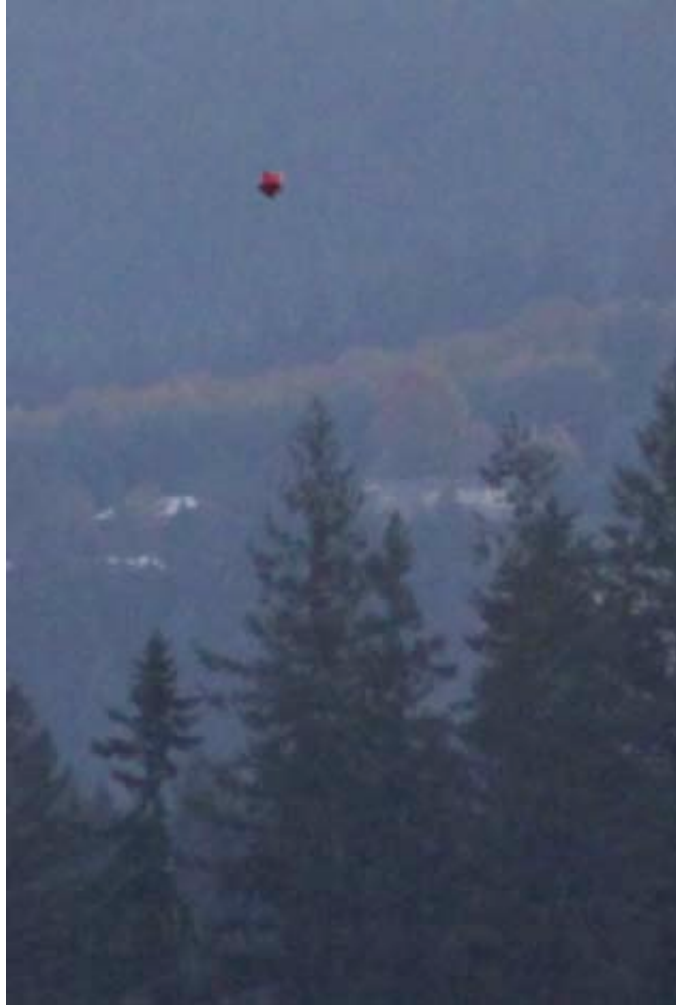
Randy was disappointed, of course, that he ran out of photo memory, but continued looking at the receding UFO in his telephoto lens. He saw the UFO stop in midair for what he thinks was around three to four seconds. The UFO next dropped downward and disappeared behind some distant, low-level trees. He continued to look at where the UFO had disappeared, but then saw the UFO reappear briefly in the same general area, rising up perhaps one hundred feet or so at the most and finally disappearing for good behind some larger trees. He spent another minute or so looking for the UFO to reappear, but it did not.



Source: Randy Bell

Figure 3. Closeup Above the Ridge Line.

The UFO as it appeared in sharpest focus above the distant ridge line. Note the spiky appearance, which Randy saw when the UFO initially traveled very near his truck. A very faint “string” “hangs down” from the UFO. Strangely, this is a feature of many balloon-like or kite-like UFOs. Other characteristics like speed of travel too fast for the prevailing winds or incorrect visual appearance for the prevailing light proves that these balloon-like and kite-like UFOs are not balloons and kites. That is the case here, too. See ANALYSIS later.



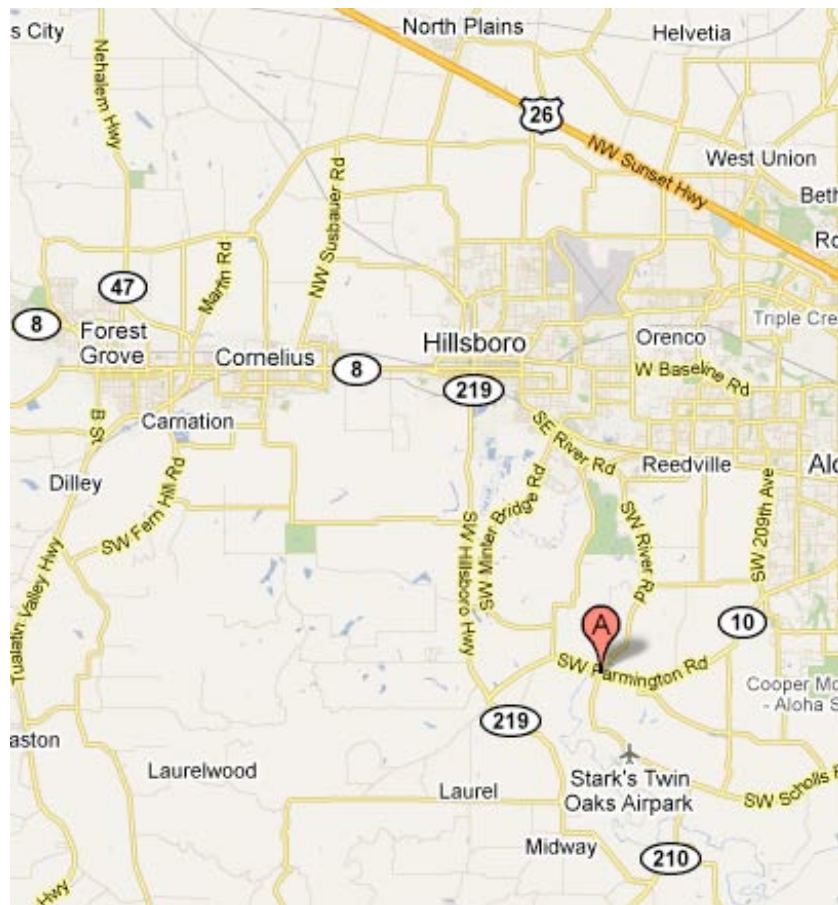
Source: Randy Bell

Figure 4. Closeup Descending to the Trees

This image is taken from a photo near the end of the 66 photo sequence when the UFO was descending toward some distant trees and fields. In the very last photos, the UFO is in front of a distant conifer similar to the ones shown here. See later in this report.

ENVIRONMENT

The environment for this sighting is rural Washington County south of Hillsboro, Oregon. See *Figure 5, South of Hillsboro, Oregon, Environs* and *Figure 6, Terrain South of Hillsboro, Oregon*. The terrain is mixed residential and farms. Numerous roads criss-cross the area with cars moving along at most times during the day. One feature could possibly be involved in the sighting: a small private airpark (Stark's Twin Oaks Airpark) exists south of the Cruise In Country Diner in the direction that Randy photographed the UFO. Except for this, there isn't anything else obvious in the region that might be the cause of the red, spiky UFO.



Source: Google Maps

Figure 5. South of Hillsboro, Oregon, Environs

Randy took his photos in the parking lot of the Cruise In Country Diner looking south toward the Stark's Twin Oaks Airpark. Note that the Portland-Hillsboro Airport is located to the northeast of Hillsboro. Sunset Highway, a major traffic corridor, is about ten miles to the north. Only the nearer airport might have played a role in this UFO sighting.



Source: Google Maps

Figure 6. Terrain South of Hillsboro, Oregon

The sighting location at SW Farmington and SW River Road in the parking lot of the Cruise In Country Diner is surrounded by farm country. Note that Stark's Twin Oaks Airpark is visible in the lower right corner. Randy and I visited this airpark to inquire about pilot activity and possible UFO sightings. See later in EVIDENCE.

Weather

See the details in *Table 1, Weather on Sighting Day*, for the weather on the day of the UFO sighting: November 3, 2010 at 5:45 PM. The weather is not considered a factor in this sighting because of the moving of the UFO in a more or less straight path away (to the south) of Randy, the witness. The winds during the hour of the sighting are in the wrong direction for this UFO to be a balloon or kite. They are also not of a high enough speed to account for the movement of the UFO. For a discussion, see *EVIDENCE, ANALYSIS, and CONCLUSION* later.

Table 1. Weather on Sighting Day

Event Date	Event Time	Temp (F)	Visibility (miles)	Wind Direction	Wind Speed (mph)	Conditions
11/3/10	5:45 PM	62°	10	East	3.5 mph	Clear

EVIDENCE

The evidence in this case consists of the following:

- Randy's and Galina's testimony in a number of face-to-face interviews.
- Randy's sequence of 66 photos taken in 84 seconds with a Canon Rebel T1i with a Canon EF-S 55 to 250 mm IS telephoto lens. (The 250 mm lens on this camera is equivalent to a 400 mm lens in old 35 mm film format cameras. 400 mm is equivalent to about 8 power binoculars.)
- Investigator Keith Rowell's photos taken after the fact at the same location as Randy when he took the UFO photos.
- Maps from Google Maps and Google Earth.
- Weather data from Weather Underground (wunderground.com).

The Witnesses

The truthfulness of Randy and his wife is beyond question for this investigator. I have known Randy for about three years and have developed a good friendship with him in the past year. We have talked at least once a week for the past year or more.

In March 2010, Randy created the Portland UFO Network to promote UFO skywatching and photography, and I have been on at least ten outings with him. Anywhere from four or five to 25 people have shown up at Randy's skywatches. A typical meeting involves a skywatch during which the attendees spend from two to four hours talking with each other while keeping an eye on what is going on in the sky. All meetings have been in daytime hours and mostly atop prominent hilltops in the Portland, Oregon, area. We've had off and on success with photographing mostly small UFOs off in the distant sky. We also had success in photographing some party balloons, a blimp, airplanes, helicopters, birds, insects, contrails, etc.

In PUFON, Randy has been by far the most successful at photographing UFOs. He has also been the person with the best all around equipment and has taken by far the greatest number of photos—many of them “blind”—blind in the sense that he sometimes has seemingly random (psychic?) intuitions that a UFO might be in a certain part of the sky. So, he fires off a number of shots in that direction.

He has also been the person most sincerely interested in getting photographic evidence—and that includes me. (My attitude is mostly, “Hey, Mr. UFO Guy(s), just quit playing games like you have for the last 60 years (and more!) and just show up and let us photograph you out in the open for all to see. I am tired of the games.” Even so, I have managed to see, photograph, and videotape UFOs about ten times since 1996 and at least in one instance on one of Randy's PUFON skywatches.)

Randy's Photo Technique

Randy uses primarily a *Canon Rebel T1i with the CAnon EF-S 55-250 mm IS telephoto lens*. This is a low end DSLR of very good quality. It is capable of 15.1 megapixel photos with good control of digital artifacts through Canon image processing. This allows him to obtain around double the pixels that most UFO photos from witnesses contain because they mostly use point and shoot cameras with no more than 8 megapixels and poorer post processing algorithms.

Modern cameras now all have very sophisticated methods and algorithms to give the photographer a “perfect” image every time, but there are still limits to how successful this is. On most cameras, photographers can choose which kind of exposure mode might work best for them in different photographic situations such as night, sports, and portrait photography.

Uses Sports Mode

Randy has chosen to use the Sports exposure mode on his Canon Rebel T1i to do his UFO photography. In Sports exposure mode, the camera is trying to stop the motion of the subject (running athletes, speeding cars, etc.) so it chooses the highest shutter speed practical under the lighting conditions.

Aperture is allowed to go to as wide as the lens is capable of at the given zoom lens extent. Also, ISO rating is allowed to vary so that you get effectively more exposure at the expense of a more “grainy” photo with less inherent detail. However, the Sports mode also turns on continuous focus. This can be a problem with UFO photography since UFOs are invariably (it seems!) a very small part of the total area of the photographic image. Thus, there is very little for the camera focussing system to “grab onto” to focus correctly on the tiny subject matter. This is probably why more than half of Randy’s UFO photos are out of focus on the UFO in this case.

Balloon and Kite Evidence

A Google search on the Internet for the string of words “spiky red balloon” yielded no hits relevant to the spiky red UFO in evidence in this case. A look through a couple of party balloon sites didn’t show anything particularly relevant to the reported shape and size of this UFO.

A Google search of kites didn’t yield any particularly compelling examples that fit the basic characteristics of this UFO. Though the hanging down “tail” on the UFO and the spiky appearance of the UFO are at least vaguely reminiscent of kites in general, no kite examples fitting the full particulars of this UFO showed up in our search. Additionally, when you add in the apparent speed of the UFO and the fact that the UFO seems to have a tail (string) in some of the photos above the ridge while no tail (string) is evident when it is below the ridge but still pretty defined as an image, the balloon and kite identification candidates fail. See later in *ANALYSIS*.

A Visit to Stark’s Twin Oaks Airpark

On November 8, 2010, Randy Bell and I visited Stark’s Twin Oaks Airpark to inquire about airplane activity and possible UFO sightings the day of his sighting November 3. Stark’s is south of the Cruise In Country Diner about a mile. Stark’s is a small airfield with one runway of 2564 feet. The day we were there a woman in the office helped us by looking at her scheduled activity on the day of Randy’s UFO sighting. There were around four or five airplanes in the air from their facility on November 3 around 5:30 to 6 PM. She was unaware of any balloon or other unusual activity around the airpark. We made it clear that we were UFO investigators and we showed her two photos of Randy’s UFO. She said she’d call us if any unusual stories popped up in conversation with any of the pilots airborne at the time or with any other pilots for that matter. I left my business card with her. As of the date of this report, she has not reported anything.

ANALYSIS

This case offers a great deal of evidence for analysis. We will use the evidence and some analysis and calculations with reasonable assumptions to determine the following:

- UFO color.
- UFO shape.
- UFO distance.
- UFO size.
- UFO speed.

Usually, only color is easily assessed when it comes to UFO evidence even when we are lucky enough to have more than witness testimony. The vast majority of UFO photos do not offer enough evidence to assess with reasonable accuracy UFO distance, size, or speed. In this case, we can determine each of these parameters because the UFO clearly appears in front of something known—the top of a Douglas Fir tree—in the last few photos that Randy took of the UFO.

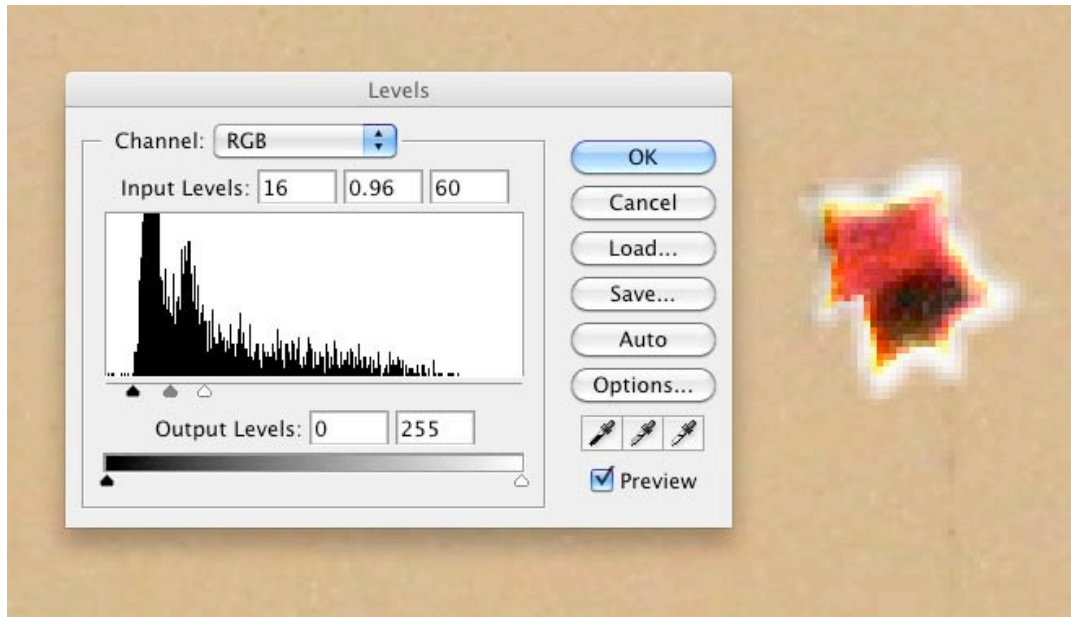
UFO Color

Judging from the photos of the UFO (see *APPENDIX B, UFO Photos*), the color of the UFO falls into two categories (see *Table 2, UFO Shape at Different Times*, for the colors of the UFO):

- Color of the UFO above the ridge line.
- Color of the UFO below the ridge line.

The photos above the ridge line show the UFO as an almost solidly dark brown object in the unmanipulated photos. However, to get an idea of the colors “hidden” in the dark brown tone of the UFO itself, we can use Photoshop and select just the dark UFO itself and then use the levels command as shown in *Figure 7, Dynamic Range Adjustment*. This shows that the underlying color of the dark, above the ridge line UFO is similar to the red color of the below the ridge line UFO. However, the purity of the dominantly red color is greater in the below the ridge line UFO. The color is more toward orange-red in the above the ridge line UFO.

The way cameras calculate exposure for the overall brightness levels in an image is the reason the photos of the UFO above the ridge line are dark and the photos below the ridge line are lighter. Essentially, in a photo if you have a large area of high brightness levels but the subject is of darker inherent brightness levels, then the camera adjusts exposure for the large light area and underexposes the subject. So, the subject is darker than it might appear to your eye.



Source: Randy Bell and Keith Rowell

Figure 7. Dynamic Range Adjustment

This adjustment to the dynamic range of just the UFO image in photo 2170 shows the underlying colors in the dark brown color of the unadjusted image. We can see that the underlying color is indeed orangish red and is similar to the red color that shows up when the UFO descends below the ridge line.

A Color Oddity

There is a bit of an odd UFO color change between photos 2187 and 2188. This change occurs just as the UFO is going from above the ridge line to below the ridge line. See *Figure 8, Odd Color Change*. The color change seems to be inherent to the UFO because there is only about 1/2 stop more exposure in 2188 than 2187. This is not enough to make the dark brown UFO in the ridge top trees turn the much brighter red of the UFO in 2188 when it descends below the ridge line.

Also, the lighting from the sun has apparently not changed from image 2187 to 2188, but if it had, it would make the higher UFO in 2187 more likely to catch the brighter sun rays and show up more like the lower UFO in 2188. So, if the effect were due to a difference in sunlight shining on the UFO, 2187 would be the brighter, more red one. But the opposite is true.

Thus, it seems as if there is an inherent color change when the UFO descends below the ridge line.



Source: Randy Bell and Keith Rowell

Figure 8. Odd Color Change

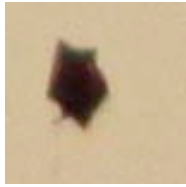


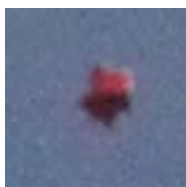
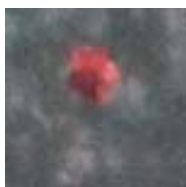
This composite illustration shows two images of the UFO—one taken immediately after the other. The time between them is six seconds. This shows the color change from dark brown to distinctly reddish. (The color changes show up better in Photoshop, but it is still evident in this illustration.) The difference in exposure between the two photos is about 1/2 stop more exposure for 2188 over 2187. This difference shows up as the slightly lighter toned selection box for 2188 as it was layered over the background of 2187. The ridge line trees have been lined up so that we can see that 2188 has gone lower and to the right in absolute terms.

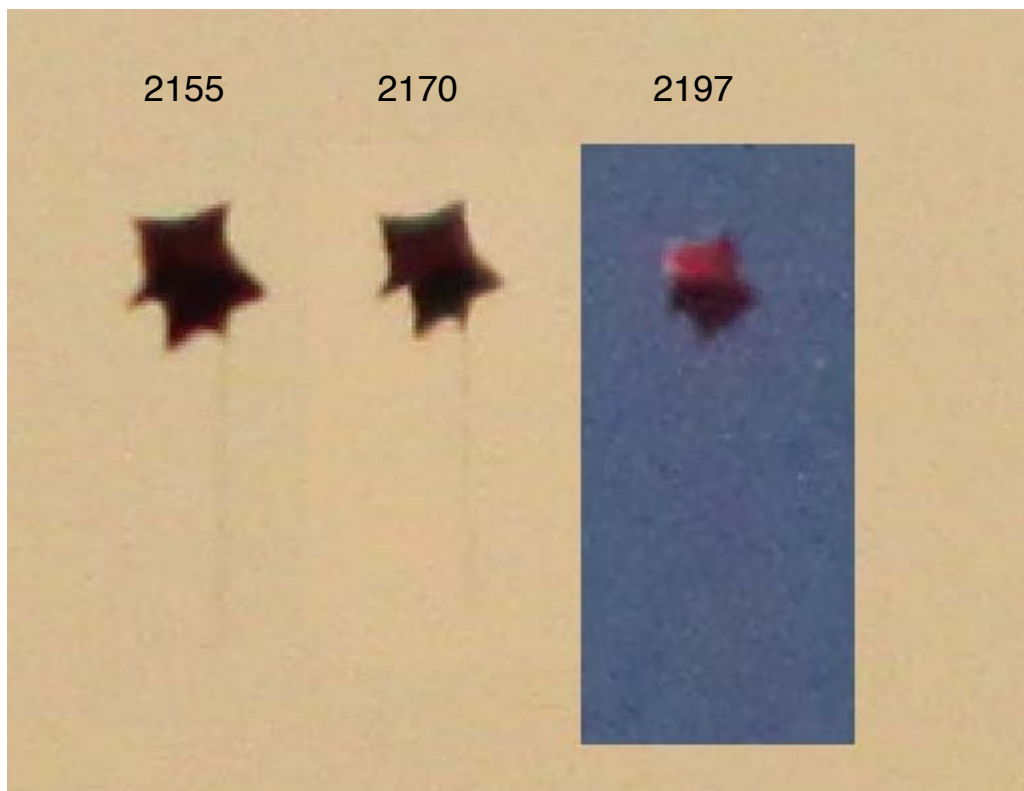
UFO Shape

Table 2, UFO Shape at Different Times, is a selection of some sharply focussed images in the chronological sequence of photos from the complete table in *APPENDIX B, UFO Photos*. We can see by simple inspection that the shape does indeed change as the UFO is moving away to the south from Randy's position.

From image 2155 to 2170, the UFO seems to have turned 180° as if it is flat and is simply showing its other side. See *Figure 9, UFO Shape Comparison*. However, in later images when the UFO has gone down below the ridge line and the camera is giving the entire image more exposure, and thus the UFO too, the UFO appears not to be flat. It appears to have more inherent volume. When Randy saw the UFO up close, maybe 50 to 100 feet away, it certainly seemed more three dimensional with inherent volume than it appears in the earlier images in the entire sequence of 66 images. Is the UFO changing inherent shape as it moves along? It could be interpreted to be, judging from the evidence in the images.

Table 2. UFO Shape at Different Times

Photo Number	Image	Time (hh:mm:ss)	Time Elapsed (sec)	Focal Length (mm)	Comment
2147		17:49:00	0	250	One of the first sharply focussed images of the UFO.
2155		17:49:08	8	250	Comparing 2147 and 2155, is the UFO changing its inherent shape or is it simply rotating on an axis?
2170		17:49:23	23	250	Note the virtually identical shape but changed 180° apparently.
2197		17:50:02	62	250	Now the shape has changed again 180° and the color has changed dramatically.
2202		17:50:14	84	250	The color has maintained its bright red as the UFO gets closer to the ground. The shape is ill defined now. Again, is it changing shape inherently or just rotating?



Source: Randy Bell and Keith Rowell

Figure 9. UFO Shape Comparison

This comparison illustration is constructed of three different images from Randy's 66 photos of the UFO. Each image (2155, 2170, and 2197) is enlarged in Photoshop to 200%. Then the composite comparison illustration above was constructed. Time elapsed from 2155 at time 0 is 15 seconds for 2170 and 54 seconds for 2197. Note that images 2155 and 2197 have been flipped horizontally to match the shape of 2170. Note that 2155 and 2170 are virtually identical in shape but not exactly. 2197 is similar but definitely different.

UFO Distance

We have hit the jackpot here in this UFO case since we have photos of the UFO against the background of a known object—a Douglas Fir tree. See *Figure 10, The UFO in Front of a Douglas Fir*. We were able to use Google Earth to identify the distance to the trees the UFO was in front of.

Using the photo in *Figure 10, The UFO in Front of a Douglas Fir*, we were able to identify in the distance the tree cluster that Randy's UFO was in front of from the spot where Randy took his photos. At the parking lot of the Cruise In Country Diner, we used the iPhone app Theodolite to get a bearing (heading) reading. This app superimposes lots of technical data onto a photo taken by the app. Comparing the photos taken by Randy and the Theodolite app, we can determine a compass bearing (heading) of about 211°, give or take a degree. See *Figure 11, iPhone Theodolite Pro App of Douglas Fir Cluster* and *Figure 12, Red UFO in Among Douglas Firs*.

Using Google Earth, we then located the parking lot of the Cruise In Country Diner where Randy took the photos and, using the ruler tool, marked the parking lot and stretched a line off in the direction of heading 211°. We carefully observed trees, shrubs, streams, fields, etc., that the measurement line crossed till we could tell from shadows cast on the ground that the measurement line crossed some Douglas Fir trees. This happened about 1.76 miles distant from the parking lot. See *Figure 13, Distance from the Sighting Spot to the UFO*.

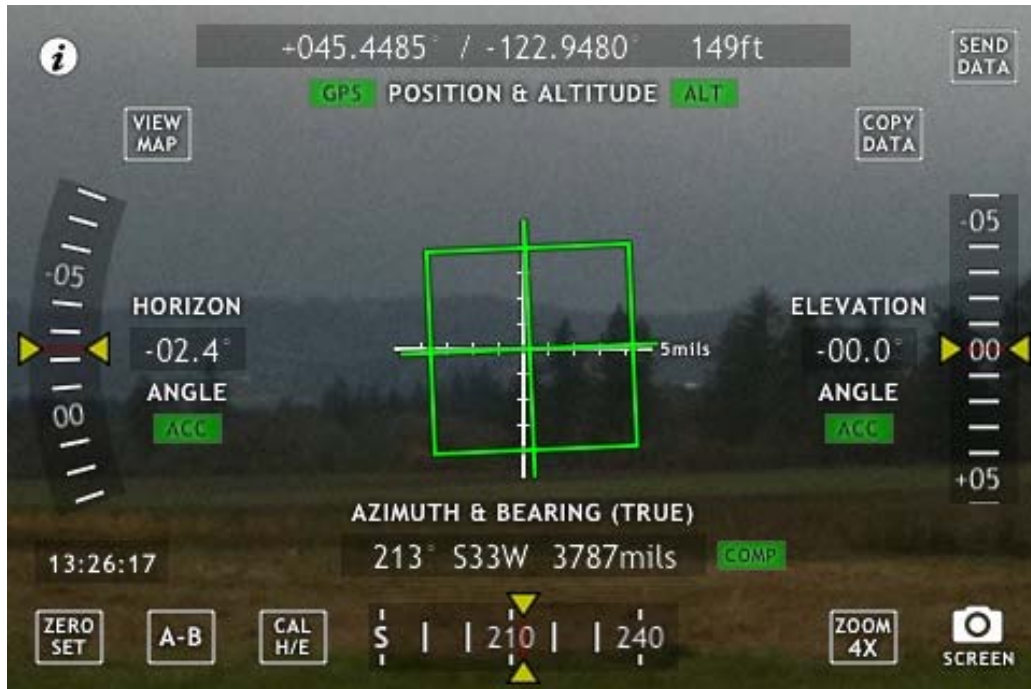
So, the UFO in *Figure 10, The UFO in Front of a Douglas Fir*, is about 1.75 miles from Randy when he took the photo.



Source: Randy Bell

Figure 10. The UFO in Front of a Douglas Fir

The UFO is clearly visible in front of a Douglas Fir tree. Randy managed to photograph this image shortly before he filled up his memory card. The circumstance of a UFO in front of a known object allows us to know the true size of a UFO. This crop from the whole image is taken with the photo at 100% in Photoshop.



Source: Keith Rowell

Figure 11. iPhone Theodolite App of Douglas Fir Cluster

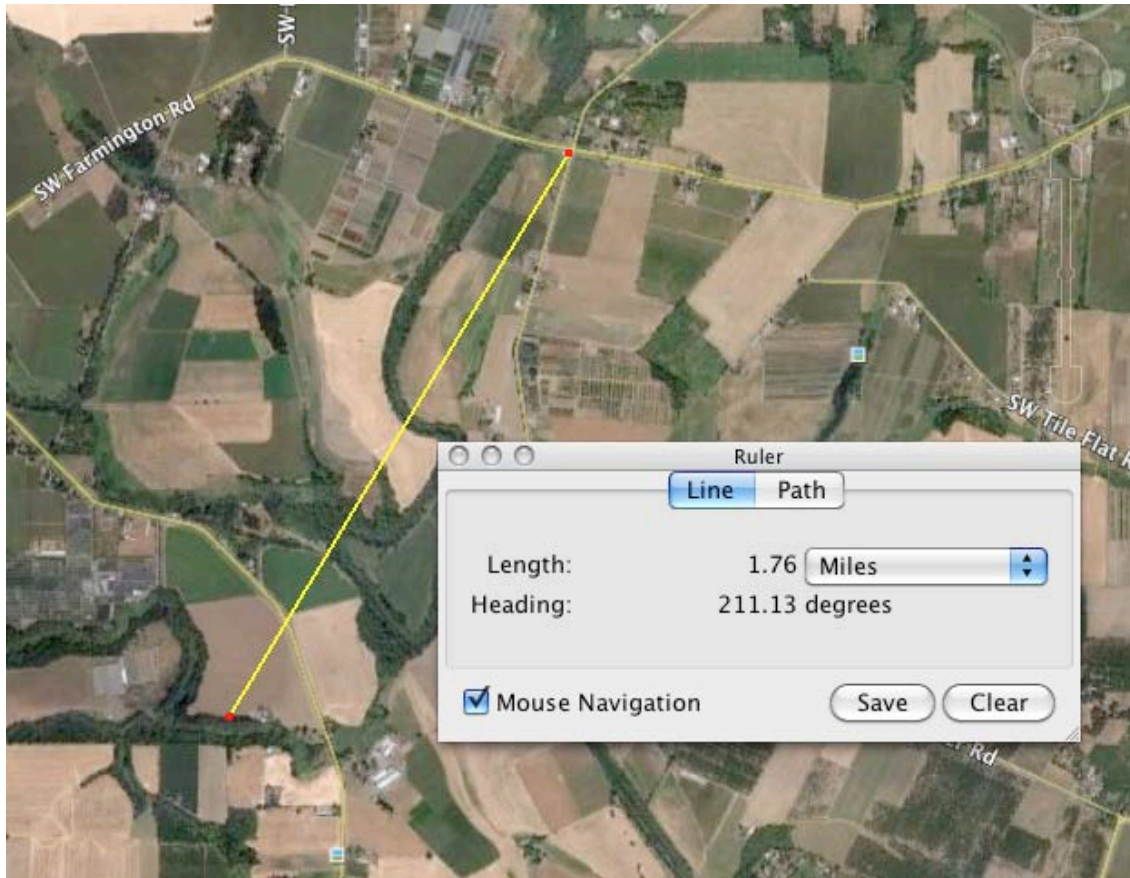
Compare this photo with the photo in Figure 12, Red UFO in Among Cluster of Trees. The UFO would have been in the lower left quadrant of the central green box. Thus, the heading (bearing) to the UFO was about 211° or SSW of Randy's position when he took his photos.



Source: Randy Bell

Figure 12. Red UFO in Among Douglas Firs

This photo shows the red UFO in the center left in front of a distant cluster of Douglas Firs with some houses in the far distance. On the right side is a closer cluster of Douglas Firs. Compare this photo to locate where the UFO would have been in Figure 11, iPhone Theodolite App of Douglas Fir Cluster.



Source: Google Earth

Figure 13. Distance from the Sighting Spot to the UFO.

This image from Google Earth shows the distance to the UFO from where Randy took his photos in the parking lot at the Cruise In Country Diner. Note that the heading is 211, which is in the SSW direction from his spot in the parking lot. The parking lot is at the top end of the yellow direction line and the bottom end is the spot of the UFO at the end of Randy's 66 photos. Note the distance is 1.76 miles.

UFO Size

To determine the UFO size, we can use two methods:

- Compare the UFO width in pixels with the field of view width in pixels. Then figure in the distance and obtain the actual size.
- Estimate the width of the Douglas Fir branches in front of which the UFO appears and assume the UFO is close to the tree.

The Field of View Method

Since we know the distance to the UFO and we know the angle of view of the lens the UFO was taken with, we can calculate the real (absolute) size of the UFO.

- The width in pixels of the UFO in *Figure 10, The UFO in Front of a Douglas Fir*, is 25 pixels.
- The width in pixels of the entire photo of *Figure 10, The UFO in Front of a Douglas Fir*, is 4752 pixels. (*Figure 10* is a crop of the entire photo.)
- According to Canon, the Canon EF-S 55 to 250 mm lens has an angle of view of about 5° at 250 mm, which the photos were taken at.

- Assuming the UFO is within about 25 feet of the Douglas Fir trees it appears in front of, the distance away according to Google Maps from the UFO photography spot to the identified Douglas Fir cluster the UFO was in front of is 1.75 miles approximately. This is 9240 feet.

Doing the ratio and proportion:

$$\frac{25}{4752} = \frac{x}{5} \Rightarrow \frac{25(5)}{4752} = 0.03^\circ$$

So, the angular size of the UFO is about 0.03°. Since we know the distance and angular size, we can use some trigonometry and calculate the maximum size the UFO was when Randy last photographed it.

Thus,

$$\tan(0.03) = \frac{x}{9240} \Rightarrow x = \tan(0.03) \cdot 9240 = 4.8 \text{ ft}$$

The UFO is around five feet across and up and down since the pixel count is virtually the same vertically as it is horizontally.

A Check on the Field of View Method

When Randy first saw the UFO when it buzzed his truck, he estimated that the size of the UFO was about five to ten feet. We can construct a table of values for the probable UFO size and then solve for distance away given each value of size for the UFO. We use the trigonometric equations just above in *The Field of View Method* to calculate these values.

We can see from the values in *Table 3, UFO Distances Given Different UFO Sizes*, that the size of around five feet fits well with what we determined was the most probable distance away (1.76 miles) the UFO was when Randy photographed it in photo 2202, the last photo.

Table 3. UFO Distances Given Different UFO Sizes

If UFO Size Is . . . (ft)	Then UFO Distance Is . . . (ft)(miles)
2	3819 (0.7)
4	7639 (1.4)
6	11,459 (2.2)
5	9549 (1.8)
8	15,278 (2.9)
10	19,098 (3.6)

The Size of Branches Method

This method of determining the size assumes especially that the UFO is very close to the tree that it is in front of—like perhaps ten to fifteen feet. Just by general inspection of the tree and knowing the approximate habit of trees and the approximate sizes of branches on a Douglas Fir, we can estimate a size for the UFO of around five to ten feet or so across. However, the UFO does not seem like it is that close to the tree just judging from the look of the photo, so this method is not very accurate.

Conclusion on Size

We feel that the actual size of this UFO is somewhere around five feet across and vertically. However, we are talking about UFOs here and from the literature about UFOs seen over the last 60 and more years, we do know that UFOs can change shape and size and there is no guarantee that this UFO did not change its size. We do know from the photos alone that the UFO certainly changed its shape somewhat in the minute and a half from when Randy initially saw the UFO to the last time he was aware of it when his memory card filled up and he stopped photographing, and the UFO was too small to be seen easily with the naked eye.

UFO Speed

We can calculate the average speed of the UFO from when Randy first saw the UFO to the time of the last sighting captured by the 66th and last photo that he took. Randy estimates that the time it took him to travel the quarter of a mile from the barn (when he first saw the UFO) to the parking lot was about 20 seconds. See *Figure 14, Distance From the Barn to the UFO*. (This works out exactly from 45 mph going a distance of 0.25 miles, which is the distance of the barn to the parking lot. SW River Road's speed limit is 55 mph and figuring he slowed somewhat to look at the UFO flying overhead and past him, this seems reasonable.)

Randy also estimates that it took him perhaps 30 seconds to locate his camera gear, get it out of the car, locate the UFO, and start taking photos once he was stopped in the parking lot.

The time line established to the second by the EXIF data in the photos from the first to the last photo is 84 seconds.

So, we have:

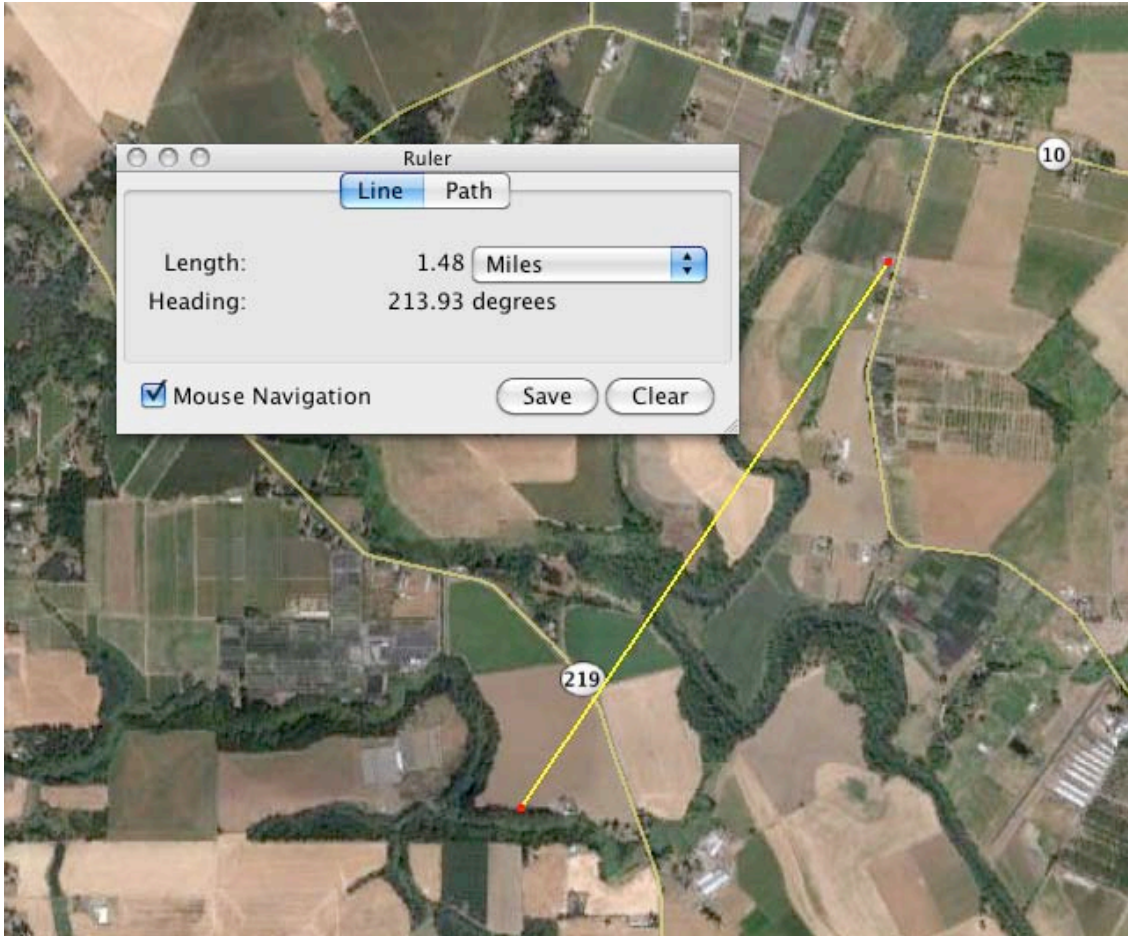
- 20 seconds to finish traveling the road and stop.
- About 90 seconds to get his camera ready, find the UFO, and start taking photos. (We did a reenactment for this time.)
- 84 seconds to the last photo.

This makes a total time that the UFO was traveling away from him toward the south about 134 seconds or a minute and a half.

Using the elapsed time number and the distance from the barn to the trees visible in Randy's last photo, we have an average velocity (speed) of:

$$v = \frac{d}{t} = \frac{1.5 \text{ miles}}{0.054 \text{ hours}} \Rightarrow 28 \text{ mph}$$

So, the UFO was traveling south away from Randy at an average speed of about 28 mph from the time he first saw it to the time he made his last photo of it. *This rules out any purely wind-borne object of any kind because the wind speed from 5 PM to 6 PM was about 16 mph diminishing to 3.5 mph and the maximum wind **gust** on the **day** in question was 28 mph. To be an ordinary object, it must have been powered by some kind of propulsion system.*



Source: Google Earth

Figure 14. Distance from the Barn to the UFO.

This image from Google Earth shows the distance to the UFO from where Randy first saw the UFO driving north along SW River Road near a barn on the left. The barn is at the top end of the yellow direction line and the bottom end is the spot of the UFO at the end of Randy's 66 photos. Note that the distance is 1.48 miles.

CONCLUSION

The UFO observation in this case was made by two people—Randy Bell and his wife. Randy got an especially good look at the UFO close-up and then he and his wife stopped to watch it move away from them into the distance toward a distant ridge line. They both saw the UFO and Randy took 66 photos of the UFO. The details in this case with two eyewitnesses, one very close-up at one point and viewing the UFO through a camera's telephoto lens at another point, in addition to all the photos make identification as a conventional object or effect very unlikely. Because of the richness of detail, the identification candidates are ruled out definitively except for the "secret military aircraft."

Identification Candidates

The candidates for identification for this low-level, extensively maneuvering, oblong UFO with two prominent lights on either end of the oblong shape are the following:

- **Secret U.S. military or foreign power aircraft.** This explanation, of course, can never be completely ruled out by anyone except for the very few within the bowels of our deep black military

and corporate contractor world who would also have access to all the on-going projects. This list of people is exceedingly small (perhaps only 100?!) because of the “need to know” and compartmentation of military secrets. However, verified reports of this kind of object over populated areas in the U.S. are far fewer than “standard” UFOs. It strains credulity that human-designed, “conventional” secret aircraft would be tested at 100 feet or so altitude just outside a large metropolitan area. (We assume that secret military aircraft buffs could adequately “verify” this kind of report, but the documented record of reports of secret military aircraft appearing over populated areas—which are always only at very high altitudes!—is very scant, indeed.) The object photographed in this case is about five in diameter and looks like no military object of terrestrial operation that we know of. Also, Randy reported no sound coming from the object as it traveled around 28 mph. *Thus, this identification candidate is rejected.*

- **Police surveillance UAV.** No city police or county sheriff’s departments in the Portland metro area have any operational police surveillance UAVs, much less any that fit the description of this UFO. *Thus, this identification candidate is rejected.*
- **Aircraft.** No conventional aircraft, military or civilian, looks like this UFO. *Thus, this identification candidate is rejected.*
- **Helicopter.** No helicopter, military or civilian, looks like this UFO. *Thus, this identification candidate is rejected.*
- **Blimp.** No blimp, military or civilian, looks like this UFO. *Thus, this identification candidate is rejected.*
- **Ultralight.** No ultralight looks like this UFO. *Thus, this identification candidate is rejected.*
- **Remote-controlled model aircraft.** No RC model aircraft looks like this UFO. *Thus, this identification candidate is rejected.*
- **Balloon.** This UFO does indeed resemble in some aspects a specialty balloon of some kind, but a search of the Internet did not reveal any balloons matching the full range of the photographic evidence. However, the real problem with this UFO being a balloon is the speed at which the UFO was traveling—both from an estimate by the witness and by calculation from the photographic and witness evidence. The wind speed at the surface (10 meters above) in Hillsboro, Oregon, at the time (5:00 PM to 6:00 PM) was 16 mph diminishing to 3.5 mph with a *maximum gust during the whole day of 28 mph*. The UFO was traveling on a heading of 211° (SSW), yet the prevailing wind was out of the east. An average speed of about 28 mph was calculated for the UFO during the approximately four minutes it was first seen and then photographed. *Thus, this identification candidate is rejected.*
- **Kite.** This UFO does indeed resemble in some aspects a kite. But the real problem with this UFO being a kite is the speed at which the UFO was traveling—both from an estimate by the witness and by calculation from the photographic and witness evidence. The wind speed at the surface (10 meters above) in Hillsboro, Oregon, at the time (5:00 PM to 6:00 PM) was 16 mph diminishing to 3.5 mph with a *maximum gust during the whole day of 28 mph*. The UFO was traveling on a heading of 211° (SSW), yet the prevailing wind was out of the east. An average speed of about 28 mph was calculated for the UFO during the approximately four minutes it was first seen and then photographed. *Thus, this identification candidate is rejected.*

Since the identification candidates fail for the reasons stated, this UFO observation is classified as a true UFO, a MUFON UAV.

Appendix A: EXIF Data of UFO Photos

The following table data is taken directly from the EXIF data accompanying each photo of the 66 that were taken. The card was then full and Randy Bell had no other memory cards with him. The photos were taken with a Canon Rebel T1i with a Canon EF-S 55 to 250 mm IS lens.

Most of the photos were taken at the extreme telephoto end of the lens. Most of the exposures are made with a 500th to a 2000th speed with wide open aperture till the UFO descended below the bright sky of the far distant ridge line. The exposure increases then to about two or three stops more to account for the lower light level. The sun was about five minutes from complete sunset when the UFO photos were taken.

Total time for the sequence is 84 seconds.

Table A-1. EXIF Data

Photo Number	Time	Exposure Time	F Number	Focal Length	ISO
2137	17:48:50	1 / 499	4.5	55	100
2138	17:48:50	1 / 499	4.5	55	100
2139	17:48:50	1 / 499	4.5	55	100
2140	17:48:55	1 / 1999	5.6	232	500
2141	17:48:55	1 / 1999	5.6	232	500
2142	17:48:55	1 / 1999	5.6	232	400
2143	17:48:56	1 / 1999	5.6	232	400
2144	17:48:56	1 / 1600	5.6	232	400
2145	17:48:56	1 / 1999	5.6	232	500
2146	17:48:56	1 / 1999	5.6	232	500
2147	17:49:00	1 / 1999	5.6	250	500
2148	17:49:01	1 / 1999	5.6	250	500
2149	17:49:01	1 / 1600	5.6	250	400
2150	17:49:02	1 / 1999	5.6	250	640
2151	17:49:02	1 / 1999	5.6	250	640
2152	17:49:03	1 / 1600	5.6	250	640
2153	17:49:03	1 / 1600	5.6	250	640
2154	17:49:03	1 / 1600	5.6	250	640
2155	17:49:08	1 / 1999	5.6	250	640



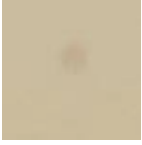


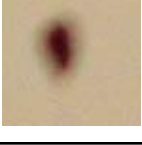


2156	17:49:08	1 / 1999	5.6	250	640
2157	17:49:08	1 / 1600	5.6	250	640
2158	17:49:08	1 / 1600	5.6	250	640
2159	17:49:09	1 / 1600	5.6	250	640
2160	17:49:12	1 / 1600	5.6	250	640
2161	17:49:12	1 / 1600	5.6	250	640
2162	17:49:12	1 / 1600	5.6	250	640
2163	17:49:13	1 / 1600	5.6	250	640
2164	17:49:13	1 / 1600	5.6	250	640
2165	17:49:18	1 / 1999	5.6	250	640
2166	17:49:18	1 / 1999	5.6	250	640
2167	17:49:18	1 / 1999	5.6	250	640
2168	17:49:19	1 / 1600	5.6	250	640
2169	17:49:19	1 / 1999	5.6	250	800
2170	17:49:23	1 / 1600	5.6	250	640
2171	17:49:24	1 / 1600	5.6	250	640
2172	17:49:24	1 / 1999	5.6	250	640
2173	17:49:24	1 / 1600	5.6	250	640
2174	17:49:24	1 / 1600	5.6	250	640
2175	17:49:25	1 / 1999	5.6	250	800
2176	17:49:26	1 / 1600	5.6	250	800
2177	17:49:26	1 / 1600	5.6	250	800
2178	17:49:26	1 / 1600	5.6	250	800
2179	17:49:27	1 / 1600	5.6	250	800
2180	17:49:30	1 / 1600	5.6	250	640
2181	17:49:30	1 / 1600	5.6	250	640
2182	17:49:30	1 / 1600	5.6	250	640
2183	17:49:31	1 / 1999	5.6	250	640
2184	17:49:31	1 / 1999	5.6	250	640






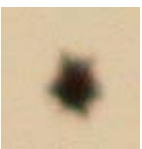

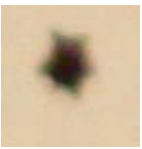


2185	17:49:32	1 / 1600	5.6	250	640
2186	17:49:41	1 / 1999	5.6	250	1000
2187	17:49:41	1 / 1999	5.6	250	1250
2188	17:49:47	1 / 1600	5.6	250	1250
2189	17:49:47	1 / 1999	5.6	250	1600
2190	17:49:47	1 / 1999	5.6	250	1600
2191	17:49:48	1 / 1600	5.6	250	1250
2192	17:49:49	1 / 1600	5.6	250	1250
2193	17:49:49	1 / 1999	5.6	250	1600
2194	17:49:55	1 / 1600	5.6	250	1600
2195	17:49:55	1 / 1600	5.6	250	1600
2196	17:49:55	1 / 1600	5.6	250	1600
2197	17:50:02	1 / 1000	5.6	250	1600
2198	17:50:02	1 / 1000	5.6	250	1600
2199	17:50:02	1 / 1250	5.6	250	1600
2200	17:50:03	1 / 1000	5.6	250	1600
2201	17:50:10	1 / 800	5.6	250	1600
2202	17:50:14	1 / 640	5.6	250	1600











Appendix B: UFO Photos

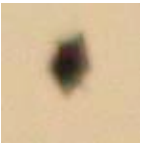
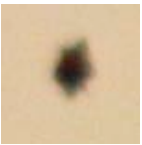








The following table data shows all the 66 photos in sequence. Just the UFO images themselves are cropped from the photos. Comments are made for some of the photos only.



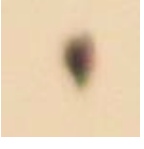

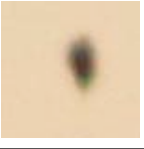


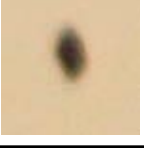


Table B-1. Sequence of UFO Photos

Photo Number	Image	Time	Time Elapsed	Focal Length	Comment
2137		17:48:50	0	55	Out of focus and not zoomed all the way in.
2138		17:48:50	0	55	Out of focus and not zoomed all the way in.
2139		17:48:50	0	55	Out of focus and not zoomed all the way in.
2140		17:48:55	5	232	Out of focus still, but zoomed in more but not all the way.
2141		17:48:55	5	232	Out of focus still, but zoomed in more but not all the way.
2142		17:48:55	5	232	Out of focus still, but zoomed in more but not all the way.
2143		17:48:56	6	232	Out of focus still, but zoomed in more but not all the way.
2144		17:48:56	6	232	Out of focus still, but zoomed in more but not all the way.



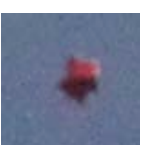


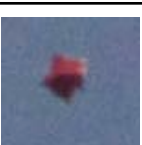


2145		17:48:56	6	232	Better focus and zoomed in more but not all the way.
2146		17:48:56	6	232	Almost completely focussed and zoomed in more but not all the way.
2147		17:49:00	10	250	Completely focussed and zoomed in to maximum extent.
2148		17:49:01	11	250	Completely focussed and zoomed in to maximum extent.
2149		17:49:01	11	250	Completely focussed and zoomed in to maximum extent.
2150		17:49:02	12	250	Lost focus, but zoomed in to maximum extent from here to end.
2151		17:49:02	12	250	Lost focus.
2152		17:49:03	13	250	Lost focus.
2153		17:49:03	13	250	Lost focus.
2154		17:49:03	13	250	Lost focus.

2155		17:49:08	18	250	Back in focus.
2156		17:49:08	18	250	Back in focus.
2157		17:49:08	18	250	Back in focus.
2158		17:49:08	18	250	Back in focus.
2159		17:49:09	19	250	Back in focus.
2160		17:49:12	22	250	Lost focus again.
2161		17:49:12	22	250	Lost focus again.
2162		17:49:12	22	250	Lost focus again.
2163		17:49:13	23	250	Lost focus again.
2164		17:49:13	23	250	Lost focus again.

2165		17:49:18	28	250	Lost focus again.
2166		17:49:18	28	250	Lost focus again.
2167		17:49:18	28	250	Lost focus again.
2168		17:49:19	29	250	Lost focus again.
2169		17:49:19	29	250	Lost focus again.
2170		17:49:23	33	250	Back in focus. Note that shape is virtually 100% 180° turned around from 2159 in 14 seconds.
2171		17:49:24	34	250	Back in focus. Note that shape is virtually 100% 180° turned around from 2159 in 14 seconds.
2172		17:49:24	34	250	Back in focus. Note that shape is virtually 100% 180° turned around from 2159 in 14 seconds.
2173		17:49:24	34	250	Back in focus. Note that shape is virtually 100% 180° turned around from 2159 in 14 seconds.
2174		17:49:24	34	250	Back in focus. Note that shape is virtually 100% 180° turned around from 2159 in 14 seconds.

2175		17:49:25	35	250	Out of focus again.
2176		17:49:26	36	250	Out of focus again.
2177		17:49:26	36	250	Out of focus again.
2178		17:49:26	36	250	Out of focus again.
2179		17:49:27	37	250	Out of focus again.
2180		17:49:30	40	250	Out of focus again.
2181		17:49:30	40	250	Out of focus again.
2182		17:49:30	40	250	Out of focus again.
2183		17:49:31	41	250	Out of focus again.
2184		17:49:31	41	250	Out of focus again.

2185		17:49:32	42	250	Out of focus again.
2186		17:49:41	51	250	Out of focus again, but now descending to level of top trees in distant ridge line.
2187		17:49:41	51	250	Out of focus and still descending. Note color is still dark brown.
2188		17:49:47	57	250	Out of focus and still descending. Note radical color change in 6 seconds. This color change is not due to exposure differences. See <i>UFO Color</i> in <i>ANALYSIS</i> earlier.
2189		17:49:47	57	250	Out of focus.
2190		17:49:47	57	250	Out of focus.
2191		17:49:48	58	250	Out of focus.
2192		17:49:49	59	250	Out of focus.
2193		17:49:49	59	250	Out of focus.
2194		17:49:55	65	250	Out of focus.

2195		17:49:55	65	250	Out of focus.
2196		17:49:55	65	250	Out of focus.
2197		17:50:02	72	250	In sharp focus again. Note bright red color.
2198		17:50:02	72	250	In sharp focus again. Note bright red color.
2199		17:50:02	72	250	In sharp focus again. Note bright red color.
2200		17:50:03	73	250	In sharp focus again. Note bright red color.
2201		17:50:10	80	250	In sharp focus again. Note bright red color. UFO is now in front of trees.
2202		17:50:14	84	250	In sharp focus again. Note bright red color. UFO is now in front of some different trees from 2201. See <i>UFO Distance</i> in <i>ANALYSIS</i> .

