

# The Appaloosa Way UFO

## An Oregon MUFON Case Study

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### Abstract

Keywords: Balloons—Orb Cluster UFOs—Daylight Sighting—Luminescent UFOs—Videotape

<b>UFO Description</b>	A UFO sighting of one clustered UFO consisting of one luminescent blue, one luminescent white, and one luminescent red, more or less spherical orbs are seen “drifting” in daylight blue sky.
<b>Witness</b>	Keith Rowell saw and videotaped the UFO.
<b>Time and Date</b>	About 2:45 to 2:55 PM PDT, September 24, 2006
<b>Place</b>	Front lawn of 2333 Appaloosa Way, West Linn, Oregon
<b>Weather</b>	Sunshine, no clouds.
<b>Duration</b>	Total duration of sighting about 30 seconds.

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## Introduction

This case is actually a sighting by me—the author of this case report. Since beginning my UFO studies in the mid 1970s, I have actually seen in the 1990s some of these things that I've been studying most of my adult life. In ufology, in a sense, what separates the men from the boys, so to speak, is the witnessing of the actual phenomenon that you are studying. Since at this time UFOs are a transient and elusive phenomenon, you cannot study the actual phenomenon entirely at will. You must wait for the phenomenon to happen to you. While this may not be entirely a matter of random good luck, for the most part it seems that way for most people.

I have had other UFO sightings and specifically other UFO sightings involving colored, luminescent globular, “drifting” UFOs. See my “Lake Grove Spherical UFOs” case and my “Millennium Plaza Park UFOs” case. I began seeing these UFOs when I went to the house of a friend, Tony (pseudonym), in 1996 because he called me up and said his UFOs were out in force that day (March 24, 1996) over Lake Grove, Oregon. Tony has since seen and videotaped over a *hundred* hours of colorful, “drifting” (many times apparently against the wind), luminescent, mostly globular, but sometimes variously constructed, UFOs. Someday, Tony will share his wealth of personally witnessed and recorded UFO activity, but chooses not to at this time.

I saw my latest UFO while I was standing in the front yard of my house (in West Linn, Oregon) with my wife who was attending to the dog while he did his duty. I observed the UFO and mentioned the object in the sky, but did not emphasize my sighting because I have a long history with my wife, Jan, of her studiously avoiding the subject (despite this being one of my primary avocations!). I did not ask her to keep an eye on the object while I went back into the house to get first my video gear and then my digital camera. See *Figure 1, Sighting Location at 2333 Appaloosa Way*.



**Figure 1. Sighting Location at 2333 Appaloosa Way**

In addition to this studious avoidance of the UFO subject, Jan is not particularly attuned to her visual environment. She is not a visual person. She is very intelligent, but her skills are verbal and not particularly observational. As a result of all this, even though she was in a perfect place to observe the UFO, she did not end up looking at it and is not, therefore, a witness. (Please note: sometimes people who are “hidden” abductees avoid observing UFOs. However, I do not believe my wife is a “hidden” abductee. She does not have any of the signs or symptoms of abductees. Sometimes people are just not particularly interested in UFOs though this is virtually impossible for us UFO investigators to believe!)

## Sighting Description

I saw this UFO as a matter of happenstance right in my own front yard. Whenever I go out into the front yard, I routinely glance up and quickly scan the sky because of my UFO interest. Then I go about my activities. See *Figure 2, View from Porch of House*.



***Figure 2. View from Porch of House***

I had no inkling or other thought about UFOs preceding this sighting. UFO observation was not particularly on my mind. (Of course, being a MUFON State Assistant Director, a day rarely goes by during which I fail to think about UFOs.)

On September 24, 2006, at around 2:45 PM (plus or minus five minutes), I saw a single, whitish, somewhat indistinct, globular object in the clear blue sky off to the northwest about 45 degrees up from the horizon. I observed this object for around 20 to 30 seconds. During this time, I became aware of a possible internal movement within the object. I also observed the object to be moving slowly to my left — presumably off to the south or southwest. I had the impression the object was moderately close, for example, like a high up, drifting party balloon.

After about 20 to 30 seconds, I decided this might be one of my balloon-like UFOs (see my case report “Lake Grove Spherical UFOs”), and even if it was not, and was some sort of interesting, strange-looking party balloon, I decided I wanted to document this sighting on videotape if I could. (It might serve as material for field investigator training.)

I proceeded back into my open front door and walked quickly around to the adjacent “piano” room were I keep my video and still cameras at the ready. I picked up my Sony digital camcorder and immediately headed back outside through the front door. See *Figure 3, “Piano” Room of 2333 Appaloosa Way.*



**Figure 3. “Piano” Room of 2333 Appaloosa Way**

As luck would have it, the object was still there. I located the object easily in the eyepiece viewfinder and immediately started rolling the tape since I had turned on the camcorder as I was walking out. Also, as luck would have it, the video zoom was already zoomed in to its maximum extent. The tape rolled for six seconds and quit. After realizing this, I muttered some cuss words and started back into the house to search for a good battery to replace the bad one.

After around 30 seconds or so of rummaging, I found no batteries. I then abandoned my battery search and shifted documentation tactics to my Canon Digital Rebel XT. The wide angle zoom lens was on the camera, and thinking this would be of no use to document this relatively small angular size object, I took the time to change to my 70 to 300 Canon zoom lens. This took another 30 seconds or so.

I went back outside to locate the object. This time my luck did not hold. The object was nowhere in sight. I walked up and down the sidewalk on my street. Mostly, I wanted to make sure the object was not simply hidden behind a tree, which it was moving toward when I saw it last. I searched the sky all around for a few more minutes to be sure there was nothing else worth videotaping. Jan had gone back inside with the dog.

## **Chronology of Observation**

The observation information in the following table is taken from a re-enactment of the sighting circumstances. The re-enactment events were timed with a stop watch to get an estimate of the actual durations of the events. On the day of the sighting, I wrote up a couple of paragraphs about the sighting and surrounding events.

When you are trying to reconstruct a series of events, it is always surprising how actions and times can be difficult to determine with reasonable exactitude. The reconstruction of any kind of evidence is always somewhat problematic and that is why accident and crime investigation and scientific investigation is so money, time, and expertise intensive.

Note that the total duration of the entire observational activities and events is about 5 minutes and 20 seconds. And the total observational time concentrating on the UFO is about 40 seconds, some of which,

about six seconds or so, is through the black and white viewfinder of the Sony camcorder. See *Table 1, Approximate Timeline of UFO Event* for more details.

**Table 1. Approximate Timeline of UFO Event**

<b>Time (PM PDT)</b>	<b>Observation</b>
2:44:50 to 2:45:00 (10 sec)	I walk outside my front door down two steps, across the walkway, onto the front lawn.
2:45:00 to 2:45:05 (5 sec)	I glance up straight in front of my house facing northwest and see an interesting object in the clear blue sky.
2:45:05 to 2:45:30 (25 sec)	I observe the object, decide it is unusual, and observe a bit more.
2:45:30 to 2:46:00 (30 sec)	I turn away, hurry back into the house and grab my Sony camcorder and turn it on, while hurrying back outside into the front yard.
2:46:00 to 2:46:10 (10 sec)	I spot the object again, put the camcorder viewfinder to my eye, see the object in the viewfinder, and press the record button. The camcorder quits after 5 seconds with a dead battery.
2:46:10 to 2:47:10 (1 min)	I turn and go back into the house, find the camcorder case, rummage for another battery, fail to find it. I decide to switch to my Canon Digital Rebel XT camera in its case right beside the camcorder case. I take out the camera, see that it has a wide angle zoom, and change it to the Canon 70 to 300 mm zoom lens. I go back outside.
2:47:10 to 2:50:10 (3 min)	I emerge from the front door looking for the object. It isn't visible. I walk into the yard scanning the entire sky. I notice that a tree to the left of the object's initial position may be hiding the object because it was moving to the left. I walk onto the sidewalk and hurry up my sidewalk and the next door neighbor's sidewalk so I can look around the trees across the street in another neighbor's yard. I decide that the object is out of view and walk back down the sidewalk, into my yard, scanning the sky all the while. I go back into my house.

# Environment

This September 24, 2006, UFO sighting took place in the following environment.

## Weather

The weather was clear and sunny with low to calm winds at my house. There were no clouds in the sky on the day of the sighting. A check online with the National Weather Service gave the observation data in *Table 2, NWS Observation Data for the West Linn Area.*

**Table 2. NWS Observation Data for the West Linn Area**

City	Date	Time (pdt)	Surface Wind (mph)	Vis. (mi.)	Weather	Sky Cond.	Air Temp. (°F)
Portland	9/24/06	13:56	E 15	10.00	Fair	CLR	83
Aurora	9/24/06	13:56	NE 12	10.00	Fair	CLR	85
Salem	9/24/06	13:56	N 10	10.00	Fair	CLR	83

The wind direction and speed is of particular interest since the UFO might possibly be a balloon of some sort because that is the closest conventional, terrestrial object the UFO might be. A look on the Internet yielded the following data from the University of Wyoming. See *Table 3, Wind Speed and Direction Over Salem, Oregon.*

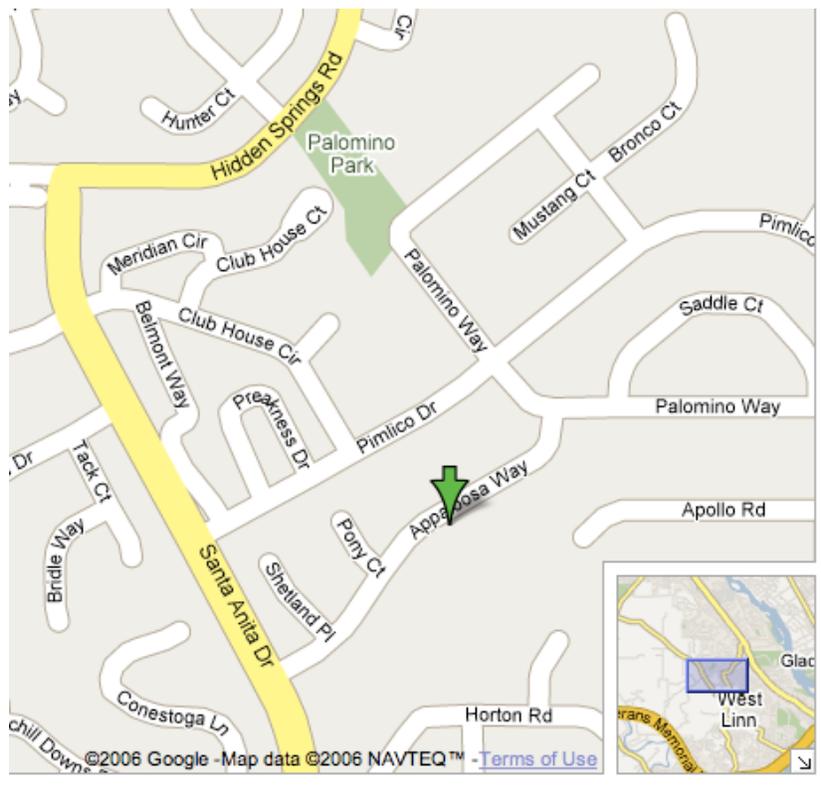
**Table 3. Wind Speed and Direction Over Salem, Oregon**

Height (feet, approx.)	Direction (degrees)	Speed (mph)
200	0 (N)	8
500	0 (N)	8
1000	0 (N)	9
2000	5 (~N)	9
3000	30 (~NNE)	7
4000	90 (E)	7
5000	125 (~SE)	11
7500	125 (~SE)	15
10000	100 (~E)	14
15000	298 (~NW)	2
20000	110 (~ESE)	7

Height (feet, approx.)	Direction (degrees)	Speed (mph)
25000	120 (~ESE)	12
30000	280 (~W)	10
35000	290 (~W)	20

## Neighborhood

My neighborhood is a typical middle class residential neighborhood of single family houses. The street names are all horse-related because the first developer bought the land from the former Hidden Springs Ranch owners. I live on Appaloosa Way. See *Figure 4, Map of Appaloosa Way Neighborhood*. The green arrow shows where I live. Note that the house faces northwest.



**Figure 4. Map of Appaloosa Way Neighborhood**

As *Figure 5, Path of UFO*, shows, there are many trees in the neighborhood. The UFO traveled to the left from the approximate position shown during my initial observation. After I came out of the house the second time (after the camcorder failed after six seconds of videotape), the UFO was gone. Note that the UFO is shown *many times* larger than the actual UFO appeared to the naked eye. Also, the UFO varies quite a bit in shape in the six seconds of videotape as *Table 3, Timeline of Still Frames*, below shows. The most interesting configuration was chosen for the illustration.



**Figure 5. Path of UFO**

## Evidence

The evidence in this case consists of my own testimony and six seconds of Digital 8 videotape captured by a DCR-TRV340 NTSC Sony Digital Handycam.

This case report has been compiled from the following information:

- My five paragraphs of sighting description written the day of the sighting, September 24, 2006.
- A simple timeline re-enactment of the activities surrounding the observational events.
- Six seconds of Digital 8 videotape.
- My own memory of events to fill in gaps in the record.

This is the only evidence for this sighting. This section concentrates on the six seconds of Digital 8 videotape since the other sources of information have been dealt with in the previous sections of this case report.

## The Camcorder Failure

The reason there are only six seconds of videotape, when there could presumably have been a lot more seconds and even minutes, is this: a dead battery.

It is worth a word or two here to discuss this. It is well-known within ufology that sometimes UFO sightings are associated with various kinds of electromagnetic failures of one sort or another. I do *not* believe that the dead battery camcorder failure in this sighting is due to any anomalous, UFO-related failure. It is simply a dead battery failure. I had not used this camcorder for probably a couple of months or more and I left the battery in the camcorder all that time. Sometimes there is a very small current leak in some camcorders, resulting in a dead battery over months time. This is the case here.

## The Videotape Evidence

Since modern camcorder videotape is recorded at 30 frames a second, there are about 180 (30 X 6 seconds) or so frames to examine. What is revealed pretty clearly is an interesting look at a cluster of one red, one blue, and one white, possibly luminescent, stuck-together orbs, tumbling around actively, more or less as a unit, within the six seconds of videotape.

The videotape was handheld, unfortunately, so distinguishing between real translational movement of the UFO and camera shake is well nigh impossible here. (Sony’s anti-camera shake technology “Steady-Shot” was turned ON.) If there had been any stationary attached to the ground objects also in the frame, such as houses, trees, etc., it would be possible to determine actual UFO movements with respect to the ground, but the videotape shows just the UFO against a uniform blue sky.

## Capturing the Still Frames

Two computer systems were used to produce the frames captured here for this case report:

- A Mac laptop using Mac OS X 10.4.8 and iMovieHD.
- A PC using Adobe Premiere.

The movie files and still frames captured by these two different systems produce subtly varying results, but the basic results of both systems support the idea stated above that:

- ***The UFO consisted of a cluster of one red, one blue, and one white, possibly luminescent, stuck-together orbs, tumbling around actively, more or less as a unit.***

The iMovieHD capture and renditions of still frames are used as illustrations in this case report.

## A Timeline of Still Frames

Table 3, *Timeline of Still Frames*, gives you some idea of what is in the six second videotape. It is arranged in time sequence from beginning to end every 10th frame. Some special frames are also included because they are particularly clear or they illustrate some point, such as a change of appearance.

When the six seconds of the videotape are actually viewed, you get a good idea of how the red, white, and blue “orbs” of the cluster move around constantly. This is not really conveyed with the still frames.

All the frames are of the same “magnification” since the camcorder lens was always zoomed in to its maximum zoom extent. Also, the still frames are all at 100% size in Photoshop, which means one pixel on the computer screen corresponds to one pixel in the image. Thus, you can compare the sizes of the UFO object from frame to frame till the very end where I decided to zoom back out to try to show some environment with the UFO object. But, the battery failed and the videotape ends before I could show any environment.

**Table 3. Timeline of Still Frames**

Frame No.	Still Frame	Comment
0:00		Beginning of the videotape. The camcorder is zoomed all the way in to its “Optical 25x” zoom limit. The object is fuzzy because the autofocus is hunting for optimum focus.
0:10		The camcorder autofocus is still hunting for optimum focus.

Frame No.	Still Frame	Comment
0:20		The camcorder is almost focused on optimum focus. Note the faint reddish and faint bluish color in the object. (This may be difficult to see at this point.)
1:00		The camcorder is focused as well as it can be. Some frames are a little sharper than others, but the camcorder is now finished with autofocusing. Note the distinct red orb and bigger white orb.
1:06		This special frame is chosen because it seems a little sharper than other adjacent and nearby frames.
1:10		The red and white orbs are still clearly discernible.
1:20		The red orb seems to shift upward a little.
1:25		This specially chosen frame is selected because it shows the red and white orbs a little sharper than other adjacent frames.
2:00		The red and white orbs are a little less distinct perhaps. The white orb seems a little smaller in relation to the red orb.
2:10		A new orb first shows up. It is blue. Now a red, blue, and white orb seem tightly clustered together.

Frame No.	Still Frame	Comment
2:14		This specially chosen frame is selected because it shows the red, blue, and white orbs a little sharper than other adjacent frames.
2:20		The three orbs are still showing, but appear a little smaller in size.
2:26		The three orbs are still showing, but appear somewhat less distinct.
3:00		The three colors are still visible in the frame, but their orb structure is becoming less distinct and, more importantly perhaps, the basic arrangement in the frame has changed. The blue and red orbs have rotated clockwise about 45°.
3:10		The red and blue orbs have disappeared now and a dark (black?) effect (emanation?) is now seen immediately adjacent to the white orb.
3:14		This specially chosen frame shows the black effect at its greatest size and distinctness.
3:20		The black effect is still visible, but less distinct now.
4:00		The object becomes less distinct and the orbs have pretty well disappeared but hints of red and blue appear around the basic white object. Perhaps the autofocus is operating again, but this is not as apparent as at the start of the videotape.

Frame No.	Still Frame	Comment
4:10		The object becomes even less distinct and the orbs have pretty well disappeared but hints of red and blue appear around the basic white object.
4:20		This frame is pretty indistinct with a hint of the red orb at the bottom of the white orb.
5:00		Two very indistinct "jets" appear at the bottom left of the white orb. This is not considered a real effect of the object because there is just too little information to speculate. "Jets" is just a descriptive term here.
5:04		The elongation of the white orb is almost certainly an effect of camera movement. This is made clear watching the videotape itself.
5:10		More "jets."
5:19		This appearance of two same-sized, whitish orbs is probably a real effect of the actual object. This conclusion is drawn from watching the videotape and cannot be determined from the frames shown here.
5:20		More of the two, fairly distinct, same-sized orbs as the previous frame. A hint of red and blue are seen — blue being in the lower orb.
6:00		The object is now seen to be somewhat smaller. This is due to the camera zoom being operated to pull away from the object to show some of the trees and houses. The camera battery failed at this point and this is the end of the videotape.

## Some Comparison Objects

Table 4, *Still Frames of Comparison Objects*, shows a few comparison objects as the Sony camcorder captures them.

**Table 4. Still Frames of Comparison Objects**

Still Frame	Comment
	<p>This is a commercial jet liner landing at PDX about 10 miles away. The Sony DCR-TRV340 NTSC camcorder is zoomed in to its maximum "Optical 25x" extent. The videotape was taken a few days after the Appaloosa UFO event documented in this case report.</p>
	<p>Single black party balloon on a gray, overcast day with the Sony DCR-TRV340 NTSC camcorder zoomed in to its maximum "Optical 25x" extent. Note small "blip" on bottom where the balloon was filled.</p>

The moon is shown full frame taken with the Sony DCR-TRV340 NTSC camcorder zoomed in to its maximum "Optical 25x" extent in *Figure 6, Moon Full Frame Zoomed In Maximum*. The full moon is about  $0.5^\circ$  angular size. Note that about four full moons fit across the full frame which is about  $1.8^\circ$ . The tip of a conifer is to the right of the moon. Note also vignetting in the upper corners. This is show as darkening of the corners somewhat.



**Figure 6. Moon Full Frame Zoomed in Maximum**

## A Party Balloon Cluster Experiment

On the face of it, my UFO looks most like the following convention object: a cluster of party balloons. And indeed, it could be. To provide some facts about videotaped party balloons, I decided to purchase, release, and videotape a red, white, and blue cluster of party balloons.

On September 30, 2006, I purchased three balloons — one red, one blue, and one white — which the sales person expertly tied together with party ribbon into a loose cluster. Also tied to the cluster was about three feet of ribbon with a lightweight plastic clip on the end for a stabilizing weight. This was a standard materials and construction party balloon cluster. The balloons were helium filled so the cluster would rise in the air if released. See *Figure 7, The Party Balloon Cluster*.



***Figure 7. The Party Balloon Cluster***

My assistant and I drove to the countryside in rural Clackamas county to obtain an area as clear of trees, telephone wires, etc., as we could reasonably attain. The weather, fortunately, was sunny and clear, very similar to the September 24 of the UFO. At around 2:30 PM PDT, we released and videotaped the ascent of the party balloon cluster.

The video lasted 4.5 minutes at the end of which time I lost the balloon cluster due to fatigue in holding the camcorder and the cluster becoming very small in the viewfinder.

*Table 5, Selected Frames From the Party Balloon Videotape*, shows some selected frames. The frames were selected because they were some of the clearest ones on the last 30 seconds of the videotape. Most of the frames showed very blurred and double imaged balloon clusters because of much camera shake at the maximum zoomed-in extent.

**Table 5. Selected Frames From the Party Balloon Videotape**

Frame No.	Still Frame	Comment
129		This frame is chosen to clearly show the object as a cluster of one white, one red, and one blue party balloons tied in a cluster with a hanging ribbon cord.
302		Another view showing a different arrangement of the balloons as they drift along and upward. Note that the hanging ribbon cord is clearly visible.
713		Just the red and blue balloons are visible here.
925		Just the red and barely the others showing here. The hanging ribbon cord is just barely visible here, but shows up in Photoshop.
1126		First frame toward end of videotape when the camcorder lens was zoomed in to maximum extent. Note that the hanging ribbon cord is still sometimes visible.
1516		Note separation of the loosely tied together balloons. The white one is not showing now.
2713		Blue and red balloons barely visible here.
2906		This is the last clear frame before the balloons are lost. Note no white balloon shows, but the blue and red ones are still discernible but just barely. To the naked eye, they are essentially gone except for very keen-sighted people. You take your eye off of them and you won't find them again.

## Observations on the Party Balloon Experiment

Some general observations on the party balloon experiment are the following:

- The party balloon cluster is actually somewhat similar to what I videotaped on September 24.
- The balloons moved actively around within the cluster as they drifted higher.
- The balloons were sidelighted, as it turned out, and not front-lighted as the September 24 UFO would have been if it was a party balloon cluster.
- Camera shake is less evident in the UFO videotape than in the party balloon videotape.
- The party balloons drifted up quickly and were essentially lost to the naked eye in three minutes or so.
- They were essentially lost to the maximum zoomed-in camera lens after about 4.5 minutes.

## A Direct Comparison of the UFO and Party Balloons

Table 6, *UFO and Party Balloons Comparison*, shows the clearest frames from the six second UFO videotape and the 4.5 minute party balloons videotape.

**Table 6. UFO and Party Balloons Comparison**

UFO Still Frame	Party Balloon Frame	Comment
No comparable frame.		The UFO never attained this pixel size.
No comparable frame.		The UFO never attained this pixel size.
		The UFO showed just two orbs. Just as the party balloons show just two of the three possible balloons. Note barely visible hanging ribbon cord.
Same as above.		Just the red balloons and barely the others showing here. The hanging ribbon cord is just barely visible here, but shows up in well Photoshop.
		The UFO shows three orbs — red, white, and blue, just like the party balloons occasionally did. Note hanging ribbon cords here in party balloons. None was ever visible for UFO.

UFO Still Frame	Party Balloon Frame	Comment
No comparable frame.		The UFO video never showed a separation of the orbs.
Same as the red and white orbs above.		Blue and red balloons barely visible here; but hint of hanging ribbon cord.

## Analysis

In this case, not much presents itself for analysis except for the six seconds of videotape we have. It shows a variously shaped colored object in the middle of a field of blue (sky). The object never gets much bigger than 20 or so pixels across and top to bottom, unfortunately, but we'll suggest a few characteristics we can impute to the real object, whatever it was, in this analysis section of the case report.

The balloon experiment described above will allow us to suggest some possible distance and size characteristics of the UFO consistent with some assumptions we'll make about the UFO.

### UFO Distance

My memory of seeing the UFO with the naked eye for around 20 to 30 seconds is that the UFO seemed close. It did not seem more than a couple of thousand feet away and perhaps was even closer than that. It certainly did not seem a mile or more away judging from my experience with airplanes, birds, the occasional balloon, etc. It just seemed close. Because of the uniform blue sky background and because the UFO was not in front of any known object or nearby any known object, an objective distance cannot be calculated or known for certain. However, we can do some comparisons with the party balloon experiment evidence described above.

### The Camcorder Characteristics

The DCR-TRV340 NTSC Sony Digital Handycam says that its zoom in magnification is "Optical 25x." (The Sony has a digital zoom capability, but I always leave this turned off because it adds no new information to the picture. It simply mathematically scales the digital information from the sensor to give you the illusion of getting closer to an object. This effect can be done with more control in Photoshop.)

I took an actual measurement at the maximum zoomed in magnification and found:

- At 26' 7" (319"), the full frame across measurement is 10".

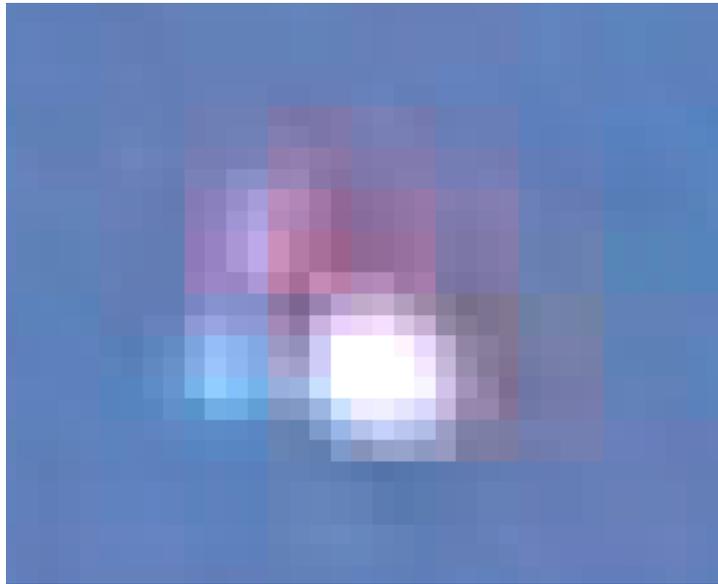
Using these figures, we have the following calculated field of view (FV) of the maximum zoomed in field of the camcorder:

$$\begin{aligned}
 FV &= \arcsin\left(\frac{10''}{319''}\right) \\
 &= 1.8^\circ
 \end{aligned}
 \tag{1}$$

Thus, the field of view is 1.8° at maximum zoomed in extent. Remember that the full moon's diameter is right around half a degree (0.5°). So, about three and a half full moon's fit across the maximum zoomed in extent of the camcorder field of view.

## Angular Size of UFO

Now we can calculate an approximate angular size for the UFO and for the party balloon cluster at maximum zoomed in extent. See *Figure 8, UFO Video Frame 212 Blowup*, for the maximum pixel size of the UFO. Sometimes, it was a little smaller. It varied between 15 and 20 pixels. (The party balloon cluster in the last clear frame of the party balloon experiment video was about 25 pixels across.)



**Figure 8. UFO Video Frame 212 Blowup**

By a simple ratio and proportion, we can calculate the angular size of the UFO.

- Still frame 212 pixels across is 720 pixels.
- Still frame 212 UFO object pixels across is about 20 pixels.
- Still frame 212 angular size across is 1.8°.

Using the values above, we have:

$$\frac{20 \text{ pixels}}{720 \text{ pixels}} (1.8^\circ) = 0.05^\circ \quad (2)$$

Thus, we have an approximate value of a tenth of half a degree. So, my UFO was about ten times *smaller* than the full moon in the sky. This is about like a distant airplane, say a mile away or so.

## Party Balloon Distance Calculation

The party balloon cluster was about two and a half to three feet across. The party balloons themselves were measured right at one foot across. When they were airborne and drifting on the wind, they probably twisted around their loosely tied center to vary between two to five feet across. We'll take three feet for this calculation.

Using equation (2) above, with the measured pixels across value of the last clear frame of the party balloon cluster, which is about 25 pixels across, we have:

$$\frac{25 \text{ pixels}}{720 \text{ pixels}} (1.8^\circ) = 0.063^\circ \quad (3)$$

Thus, we have an approximate value of a little bigger than the UFO. The party balloon cluster at its highest height above the ground was about  $0.063^\circ$  angular size.

Now we can use this angular size and the known absolute size of the party balloon cluster at three feet to calculate an approximate line of sight distance (d) at the point where we finally lost the cluster to practical, handheld videotaping.

We have, by the tangent of a small angle, the following simple equation:

$$\tan(0.063^\circ) = \frac{3 \text{ ft}}{d} \Rightarrow d = \frac{3 \text{ ft}}{\tan(0.063^\circ)} = 2750 \text{ f} \quad (4)$$

This means that the party balloon cluster was a little more than half a mile away when it was nearing the size of the UFO.

## Party Balloon Height

Let's calculate a probable height for the party balloon cluster at the very end of the videotape when the cluster was at its greatest height.

According to my assistant in the experiment, I was videotaping the party balloon cluster at an angle of about  $60^\circ$  above the horizon. Using this angle, we have the following calculation the height,  $h$ :

$$\begin{aligned} h &= \sin(60^\circ)(2750 \text{ ft}) \\ &= 2380 \text{ ft} \end{aligned} \quad (5)$$

## UFO Velocity Calculation

We have enough data to get a reasonable handle on whether the UFO is actually a party balloon cluster, or possibly not. We have already shown that the UFO is pretty close in appearance to a party balloon cluster, although there are some subtle differences.

For the UFO velocity calculation, let's make the assumption that the UFO was in fact a party balloon cluster and see if a calculated speed for the UFO matches the probable wind velocity above West Linn/Lake Oswego where the UFO was sighted.

What do we know?

- We know the wind speed above West Linn from 1000 to 10,000 feet was from 10 to 15 mph on September 24, 2006. See *Table 3, Wind Speed and Direction Over Salem, Oregon*.
- We know the approximate height the party balloon cluster was above the ground at maximum zoomed in distance. The distance was about 2380 ft.
- We know that the UFO was moving to the left, which is in the SW direction because the UFO was sighted in the NW direction.
- We know that the UFO disappeared from view after a maximum of about one minute.
- We know that the angular distance traveled by the UFO from the first point it was sighted to the nearest object to the left that it could have disappeared behind is about  $40^\circ$ .

Using these facts and calculations, we can calculate a probable velocity for the UFO and compare it to the upper air speeds from *Table 3, Wind Speed and Direction Over Salem, Oregon*.

Now, supposing that our UFO is really a party balloon cluster of the size in our party balloon cluster experiment described above, then the UFO is around 2750 feet away. See the *A Party Balloon Cluster Experiment* above. Using the 40° angular distance covered and 2750 feet away, we have:

$$\begin{aligned}d &= \tan(40^\circ)(2750 \text{ ft}) \\ &= 2310 \text{ ft}\end{aligned}\tag{6}$$

So, the UFO moved about 2310 feet to the SW in about one minute. This means the UFO moved at about the following speed ( $d/t$ ):

$$\frac{d}{t} = \frac{2307 \text{ ft}}{60 \text{ sec}} = 38.5 \frac{\text{ft}}{\text{sec}} = 26 \text{ mph}\tag{7}$$

Twenty six mph is a pretty fast constant rate of lateral speed for a party balloon cluster near the ground and, furthermore, when we check with the Salem, Oregon, upper air speeds on the same day, there are no speeds reasonably close to the 26 mph — they vary between about 0 and 15 mph from 200 feet up to 25,000 feet. (Note that upper air speeds do not vary from location to location nearly as much as ground level air speeds. So, we can take the Salem, Oregon, upper air speeds as a reasonable estimate for the wind speeds over West Linn, Oregon, forty miles away.)

There are plenty of assumptions and possible errors of measurement in the calculations above. But I have tried to be honest. Thus, I conclude on the UFO speed calculation that the UFO was *not* a party balloon cluster or any other wind borne conventional object.

## Conclusion

So, what is this UFO? We can use Allan Hendry's *The UFO Handbook* as a basis for evaluating the UFO description. Hendry's excellent study discusses many IFOs and among them only the balloon category stands out as a reasonable candidate for identification. All other IFO categories just don't compare favorably to the description presented here.

Thus, there are essentially five possibilities for what this UFO is:

- Some type of balloon.
- Some type of conventional natural or man-made object of very low probability of occurrence according to Hendry's study in *The UFO Handbook*.
- An unknown natural effect or object.
- A secret, man-made object.
- A genuine UFO — something that should not be in our skies according to modern, mainstream science and scholarship.

These five possibilities are discussed here.

## Balloons

Research on the Internet turns up a wealth of balloon types and styles. Here are some of the main types:

- **Standard weather balloons.** These objects are about the right size and have the right behavioral characteristics (except that they do not rapidly accelerate). The problem here is that weather balloons are launched near airport facilities generally and the closest airport to Lake Grove is PDX at about ten miles away. Besides a weather balloon would ascend out of sight before it got ten miles away from its launch point. (The closest official site of weather balloon launch is actually Salem, Oregon, and not at PDX in Portland. Salem is 40 miles to the south of Lake Grove, Oregon. And besides, no weather balloons are luminescent in the sunny daytime light.)
- **Various research balloons.** These are launched very sporadically from various research facilities around the U.S. They are generally very high altitude balloons and not launched in bunches. No

research balloons are luminescent in sunny, daytime light. There are no research balloon launch facilities in or around metropolitan Portland, Oregon.

- **Various party balloons.** This is actually a reasonable candidate for identification for my sighting. This possibility is seriously considered above and, therefore, the party balloon cluster experiment was undertaken. See above for a discussion of the party balloon cluster experiment.
- **Hot air balloons.** These balloons can be of various shapes and colors, are generally twenty and thirty feet in diameter and as much or more in height and they always have a large gondola underneath with the flame generator below to control buoyancy.
- **Prank balloons.** Prank balloons are generally small (less than five feet in diameter), but can be creative in design. However, a party balloon cluster seems to fit my UFO description better than some more creative prank balloon design.

The basic descriptions of these various types of balloons pretty well eliminates the standard weather balloons, research balloons, and hot air balloons. However, the party balloons are reasonable candidates for identification of my UFO. But see above under *A Party Balloon Cluster Experiment*.

## Low probability Conventional Objects

In this category might be something like a model airship. A search of the Internet turned up some radio controlled airship models and some model “hot air” balloons.

- <http://www.modellballone.com/modellballon/english/welcome.html>
- [http://www.diynetwork.com/diy/rc\\_other/article/0,2033,DIY\\_14223\\_2276183,00.html](http://www.diynetwork.com/diy/rc_other/article/0,2033,DIY_14223_2276183,00.html)

These low probability conventional objects in any case do not have a configuration like an ordinary party balloon cluster.

Thus, this category is rejected as an identification of my sighting.

## Unknown Natural Objects

Ball lightning is a moderately well-known physically real phenomenon, but is not well-understood at this time. Its existence is well established by well documented reports, but the physics of ball lightning is still in its infancy. Even so, we know enough about ball lightning that we can say that this phenomenon has the requisite hint of luminescent quality of my sighting, but it does not have the persisting minutes at a time and fair weather of my sighting. Thus, ball lightning is rejected as a likely explanation of my sighting.

Of course, since this category is “unknown natural object” it could easily be an explanation, but it would not be an identification, which requires a specific object or phenomenon.

Thus, unknown natural object is rejected as a likely explanation of my sighting.

## Secret Man-Made Objects

Since military research and development has been most likely working on remotely piloted vehicles (PRVs) for at least twenty years, my sighting could be explained by this category. However, none of these generally winged craft remotely match my UFO description.

There is also the problem of secret craft being flown and tested over populated areas in the daytime. Overflights by still secret craft over populated areas are conducted generally at extremely high altitudes (above commercial airliner cruising height). My sighting was below 10,000 feet I’m pretty sure.

Thus, secret man-made craft/objects are rejected as a likely explanation of my sighting.

## A Genuine UFO?

Not much is left to explain or certainly identify my UFO sighting. Some type of party or prank balloon that is visible as *vaguely luminescent* in bright, daylight sunshine is the most likely candidate. People who choose to believe this “identification” can if they like. But, for my part, I believe there is only a 5% likelihood that some kid(s) were playing an elaborate prank with an expensive type of luminescent balloons on

the day of my sighting. My calculation of a probable 26 mph speed for my UFO makes the party or prank balloon cluster idea difficult for me to believe since all the winds were 15 mph or below that day.

Thus, my UFO is probably a genuine UFO. The party balloon cluster is eliminated as an identification of the UFO for the following reasons:

- The apparent calculated speed of the UFO (26 mph when the maximum wind speeds were 15 mph or less) is too great for any wind borne object or balloon.
- The UFO disappeared too quickly for a party balloon cluster. When I came out the second time, the UFO was gone, and I made sure of that by walking up the street to look behind the neighbor's tree to the left (or south). I did this pretty quickly. A few more minutes scanning all the sky visible convinced me the object was gone.
- The UFO also moved pretty much only in a horizontal direction. I was not aware of the UFO going both horizontally and vertically, too. It seemed to just have a horizontal component to its path. In the party balloon cluster experiment, the cluster had a definite vertical and somewhat of a horizontal component to its path, though it is true that I was much closer to the party balloon cluster than I was (presumably) to the UFO.
- The UFO seemed visually to show some vagueness of outline as if the UFO orbs in the cluster were luminescent. This "vagueness" of outline for the orbs *does* show somewhat for the UFO and not for the party balloon cluster when the party balloon cluster and UFO are compared in the video-tape evidence. But this is not a striking effect.
- The UFO seemed closer to me visually than the party balloon cluster did in the experiment.

For these reasons, this case report concludes that the Appaloosa Way UFO was a genuine UFO and not some ordinary, human-made or natural object or effect.