Factual Report – Attachment 2

Witness information pertinent to the meteorological investigation

METEOROLOGY

DCA20MA059

Submitted by: Mike Richards NTSB, AS-30

From@gmail.com>Sent: Friday, February 28, 2020 18:59To: Richards Michael@ntsb.gov>Subject: Re: January 26th Calabasas helicopter crash

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Hi Mike,

I know that very small details can make a difference, so I don't mind answering even the smallest question if I can. My apologies if I am getting too detailed in my answers but I figured that too much information is better than possibly leaving something out.

I know you understand the question, but just for reference I attached this quick and dirty map with a line extending from the box through the center of the end of the road. Looking for best aircraft position at time of disappearance relative to <u>extended road</u>, which, of course, depending on where you were standing, may need some compensation due to your vantage. I may be starting to split hairs here, advise if so.

For an exact reference point, I was using the short yellow post on the west side of power box that you noted, to aid my stretching. I went back to that point yesterday and took a few pictures just to clarify, but it appears that your line on the overhead map is pretty accurate as long as it intersects overhead with a low tree on the south side at the trailhead path (see attached picture named 'Tree that aircraft flew over.') Above that tree is the point where the aircraft disappeared from sight. There were clouds covering the top of that tree, so I can't assume in which direction the aircraft went once it disappeared but it did not visibly change direction before entering the cloud.

So in recap, what I am certain of is that the path of the aircraft was heading west along the dirt/grass path that lies between the paved road (Calabasas Rd) and the trees that line that road on the south side. On that path at that short tree where the low clouds were nestled, the aircraft disappeared very quickly from view due to the thickness of the clouds.

Looking at your image007 - the second short yellow post to the right of the box, if facing the box, is where I was standing. The short tree that that I noted above shows in your image directly to the left of your red arrow marking the end of the road. Please see my attached picture to verify the same tree named 'InkedTree that aircraft flew over.' I also attached that same image without marks.

Looking at your image002, it appears that your line does cross the short tree that I noted above and that is in my attached picture named 'InkedTree that aircraft flew over.'

Your image004 is accurate.

I have attached a photo named 'Freeway locator' to show where the freeway is from my vantage point. A green arrow points to a white spot in the picture which is actually a vehicle heading south on the Hwy 101. The short tree is directly to the left of the green arrow.

An additional and possibly irrelevant photo named 'Sign clarification' is attached regarding the sign I previously mentioned as a landmark. I'm only clarifying that the there are two different signs; the sign on the left which is barely visible but marked with a small arrow and next to the short tree (marked with larger arrow) mentioned above is the one I previously referred to, and not the one on the right. You seem on top of providing detailed and thought-out information. This is very helpful.

It was strange for me to see a helicopter shortly before it crashed. We smelled smoke at the stairs, and when we were heading back, my Citizen app alerted us that there was a helicopter crash nearby. My heart dropped at the thought that someone may have lost their life. My grandfather died in a small private plane crash over mountains and they have no idea what happened. I was not born yet but my grandmother and mother always wondered why they lost him. If my little bit of information helps with the investigation, I'm happy to contribute some facts.

All my best, Gina

On Wed, Feb 26, 2020 at 8:34 AM Richards Michael <u>@ntsb.gov</u>> wrote:

Excellent Gina, again good information. Please don't bother yourself with the distance estimation. We can certainly do that ourselves. The question about position of aircraft disappearing relative to extended road is important though...and I anticipate will be the last thing a bother you with.

I know you understand the question, but just for reference I attached this quick and dirty map with a line extending from the box through the center of the end of the road. Looking for best aircraft position at time of disappearance relative to <u>extended road</u>, which, of course, depending on where you were standing, may need some compensation due to your vantage. I may be starting to split hairs here, advise if so.

You seem on top of providing detailed and thought-out information. This is very helpful.

Mike



From:@gmail.com>Sent:Wednesday, February 26, 2020 10:04To:Richards Michael@ntsb.gov>Subject:Re:January 26th Calabasas helicopter crash

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Hi Mike,

Your attached images appear to be correct but I'm not certain of the distances on the second image. I will verify the distances tomorrow when I'm there for my hike.

Below are my answers to your questions.

1. You estimated that the aircraft disappeared into low cloud approximately above the east trailhead/end of road, which I estimate to be roughly 325 feet from the box near your position. Does this seem about the right distance (roughly) the aircraft was from you when it disappeared? That distance sounds correct but I will verify tomorrow. My position standing at the box, as you marked on the attached image is correct. The area to the west of me where you marked that I last saw the aircraft is correct.

2. The top of that closest "taller" tree next to the freeway is about 520 feet away from the box. There are some other taller trees stretching into the background to the left. Do you recall seeing any tops of those trees? May seem ridiculous if the cloud was 10 feet or so above ground, but trees could help with estimation? No. The clouds were too thick that high and at that distance from me to see the tops of the tallest trees. I do want to note that at the position directly above where I was standing, the clouds were higher than the height of those tallest trees that you mentioned.

3. *Important - Based on the images you sent me from a car, looking west straight down the road as about how you would have seen the aircraft disappear, it looks like the aircraft was directly above the road (where you put the dots) when it disappeared. Does that sound right? Was the aircraft directly above the road from your view? Or would it have been more to the right (101 side) or more to the left? Yes. The aircraft was directly above the south side of the road. I want to clarify where it disappeared when I go back tomorrow. I think that it's accurate to say that the position where it disappeared from view was about over the trailhead sign or just to the south of it, however, I feel I can only accurately recall if I'm standing in the same position and looking in that direction. I have a strong kinesthetic memory which would be more accurate than just recall. I don't want to assume since all of those landmarks were partially obscured by the low clouds. I will follow up with you tomorrow.

Sincerely,

Gina

On Tue, Feb 25, 2020 at 11:15 AM Richards Michael

@ntsb.gov> wrote:

Hi again Gina. Again thank you for this detail. This is helpful and important. So I spent some time going through your information, and I put together a single image that I believe captures where the important positions are. Would you please take a look at the Google Earth annotated aerial view below and let me know if the information in that image is correct. If there is error, please help me correct that.

The follow up questions I have are regarding the second image below (and attached) which, if my understanding of your position is correct, shows the view from generally your position looking west down Calabasas Road. The view is slightly distorted (depth) given the google camera, but should suffice I hope. It was easier to annotate this than your camera image.

These may be difficult or impossible to remember or answer but I am giving it a shot...

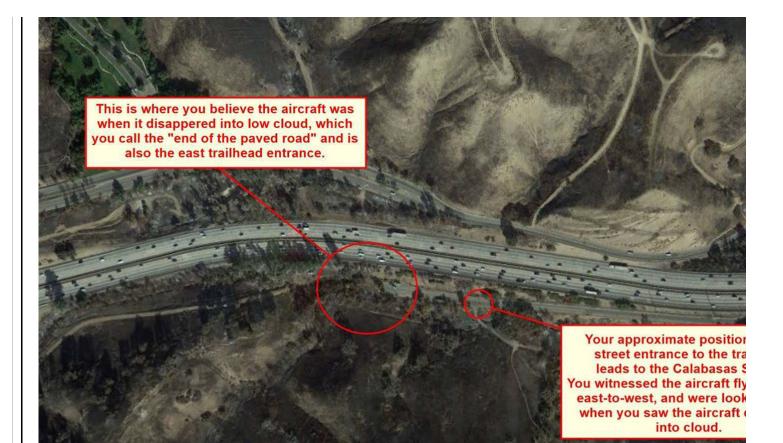
1. You estimated that the aircraft disappeared into low cloud approximately above the east trailhead/end of road, which I estimate to be roughly 325 feet from the box near your position. Does this seem about the right distance (roughly) the aircraft was from you when it disappeared?

2. The top of that closest "taller" tree next to the freeway is about 520 feet away from the box. There are some other taller trees stretching into the background to the left. Do you recall seeing any tops of those trees? May seem ridiculous if the cloud was 10 feet or so above ground, but trees could help with estimation?

3. *Important - Based on the images you sent me from a car, looking west straight down the road as about how you would have seen the aircraft disappear, it looks like the aircraft was directly above the road (where you put the dots) when it disappeared. Does that sound right? Was the aircraft directly above the road from your view? Or would it have been more to the right (101 side) or more to the left?

Again, thanks for your time here,

Mike





From: Richards Michael
Sent: Thursday, February 20, 2020 12:31
To: @gmail.com>
Subject: RE: January 26th Calabasas helicopter crash
Gina, thank you so very much for your response. This is very good and detailed information. Give me a few days to go through you stuff here and make sure I got everything understood (particularly with the spatial information).
There may be some follow-up questions or needed clarifications. If so, I'll let you know.
- Mike
From: @gmail.com> Sent: Wednesday, February 19, 2020 18:29
To: Richards Michael < @ntsb.gov> Subject: Re: January 26th Calabasas helicopter crash
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Hi Mike,
My sincerest apolgies for not getting back to you sooner. I hope that I've provided helpful information. Please feel free to contact me with any more questions, clarification, or unmarked photos.
I have attached twelve images, and my answers are below.

1 - Would you mind emailing me an image of a map of this area with marks for (1) as best as possible the specific location of the "the end of the paved part of that same road" where you saw the aircraft disappear into cloud, and

(2) your position at that time. Sorry I am not too familiar with that area. If this isn't easy for you to do, I am happy to send a map image for you to use. I've attached some pictures and screenshots, including an image of a topographical map of the area from the following website: <u>https://www.hikespeak.com/trails/anza-loop-trail-calabasas/</u>. The website seems to have good information about the area.

2 - You indicate that the clouds were low in some areas and higher in others. Do you recall if the cloud you witnessed the aircraft disappear into was an area of low cloud or relatively high cloud? The cloud that the aircraft entered and disappeared into was a thick wall that extended as low as about ten feet above ground and upward beyond visibility. This low cloud started at about the Juan Bautista de Anza East Trailhead, heading west. This trailhead starts at the end of Calabasas Rd. When I first spotted the aircraft, the clouds were relatively higher than the cloud I watched it disappear into. I couldn't guess the altitude of the higher cloud line but it was lower than a police helicopter would fly when closely circling a person on foot over a residential neighborhood in West Hills, CA. It appeared that the aircraft was flying at a level which had visibility until it entered the cloud wall.

3 – It doesn't sound like you did, but just to make sure... did you witness the aircraft go in or out of cloud either before or after the time you discuss in your email? No. There was zero visibility past the point where I saw it disappear into the low cloud at the trailhead. I first noticed it about fifty to seventy-five yards to the east of where I was standing (marked in attached photo.) I did hear it before that point but only looked up when the sound became so unusually loud as it approached more closely. I specifically watched and listened to see if it appeared to be having engine trouble since it was so low and slow. However with my extremely limited knowledge of aircrafts, I did not hear any hesitations or other noises that would indicate a problem. When I first noticed the aircraft, it was already on a straight trajectory, so I do not know from which direction it came before that point.

Best regards,

Gina

On Fri, Feb 14, 2020 at 9:28 AM Richards Michael

<u>@ntsb.gov</u>> wrote:

Hi Gina,

My name is Mike Richards and I am leading the weather portion of the NTSB's investigation into the helicopter accident in Calabasas on 26 January. My apologies for us not getting back to you on this sooner. As you might understand we have a lot of witness-provided material to work through. But your email caught my attention, and I wanted to follow up with you directly to see if you'd be able to provide us a bit more detail on what you observed.

You indicate that from your position at the street entrance to the Calabasas Stairs you observed the aircraft flying along the south side of the paved road that parallels Hwy 101, and then witnessed the aircraft disappear into cloud at the end of the paved part of that same road.

1 - Would you mind emailing me an image of a map of this area with marks for (1) as best as possible the specific location of the "the end of the paved part of that same road" where you saw the aircraft disappear into cloud, and (2) your position at that time. Sorry I am not too familiar with that area. If this isn't easy for you to do, I am happy to send a map image for you to use.

2 - You indicate that the clouds were low in some areas and higher in others. Do you recall if the cloud you witnessed the aircraft disappear into was an area of low cloud or relatively high cloud?

3 – It doesn't sound like you did, but just to make sure... did you witness the aircraft go in or out of cloud either before or after the time you discuss in your email?

We do really appreciate you reaching out to us with your initial information. I hope you can assist us just a bit more with the above.

Kind regards,

Mike

Mike Richards

Aviation Safety Investigator - Senior Meteorologist

Operational Factors Division

National Transportation Safety Board

@ntsb.gov

+1 202

From: @gmail.com> Sent: Tuesday, January 28, 2020 20:31 To: eyewitnessreport @mtsb.gov> Subject: January 26th Calabasas helicopter crash

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I do not have any pictures but my friend did send one to you just of the weather conditions on the trail. I'm providing my eyewitness account in case the helicopter that I saw directly over me was the same one that crashed.

On Sunday, January 26th, I was at the street entrance to the Calabasas Stairs from 9:32 a.m. to 9:56 am, outside of my car stretching and preparing for a hike. A few to several minutes before my friend arrived at 9:46a (time confirmed by her text to me), I watched a long, white helicopter fly over me, very low and slow along the *south side of the paved road that parallels Hwy 101.

It was flying below or at the cloud line until it reached approximately the end of the paved part of that same road where it disappeared into heavy clouds on the same path. The fog/cloud conditions were not solid from spot to spot in this area. There were heavy low clouds in some parts and there were also areas where the clouds were quite high, but it was overall overcast. I found it peculiar that they flew directly into heavy clouds so close to the hills but disregarded it once they were out of sight. I did not hear an impact. I hope this information is helpful regarding the weather conditions.

Sincerely,

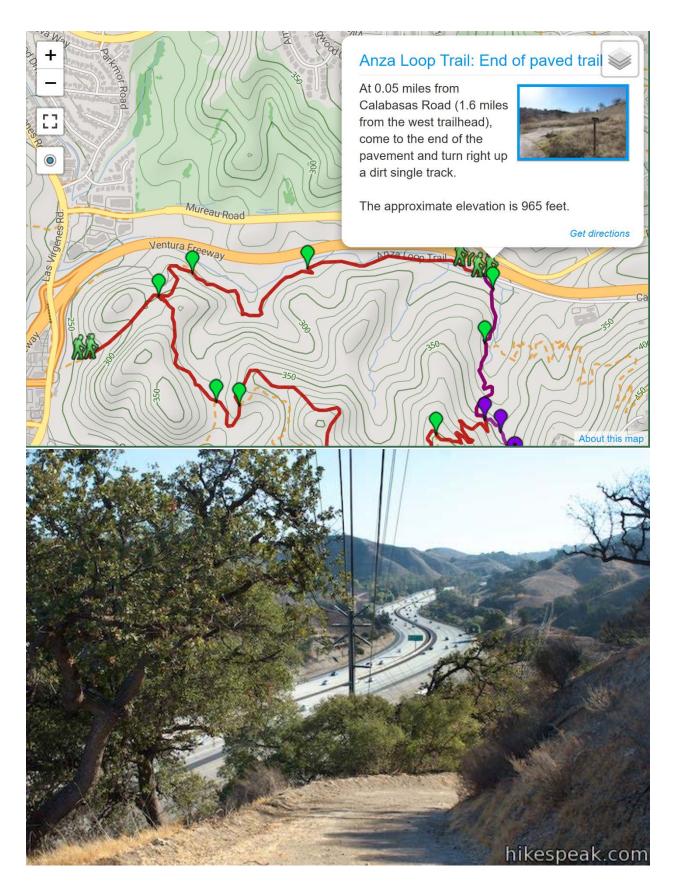
Gina

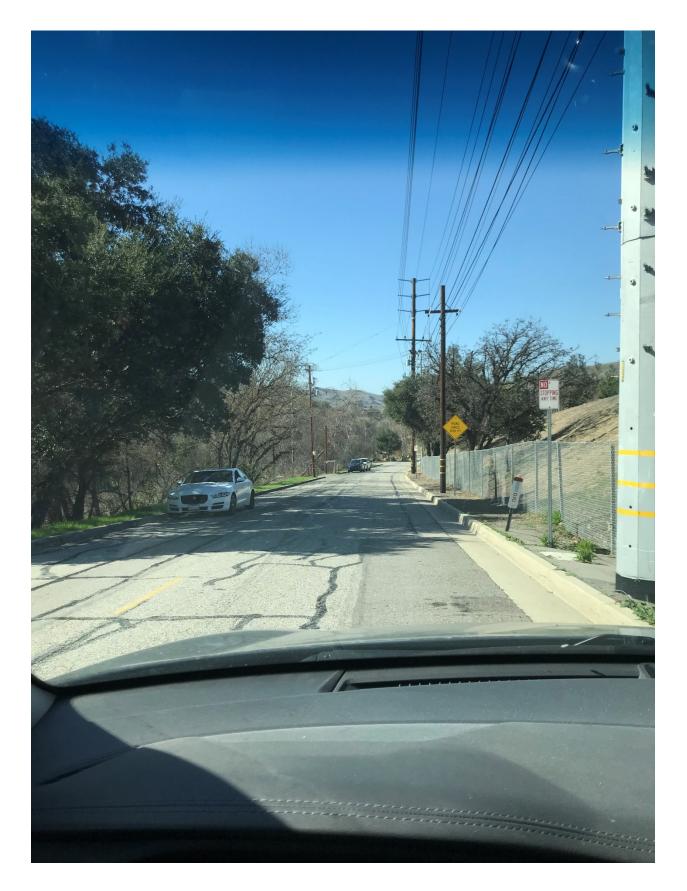
*we call the ocean side of the freeway the south side of the freeway. Not sure of true direction (west maybe).

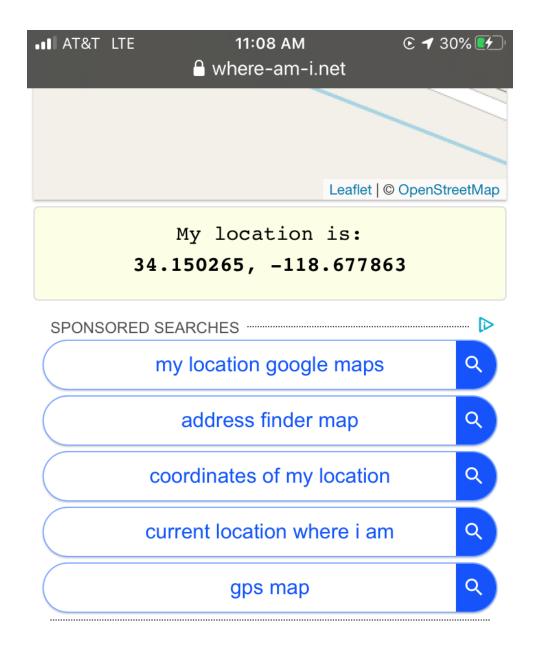
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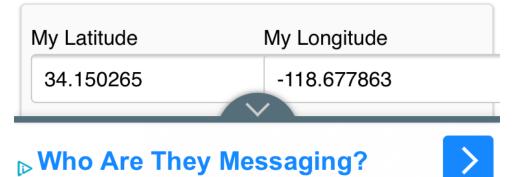




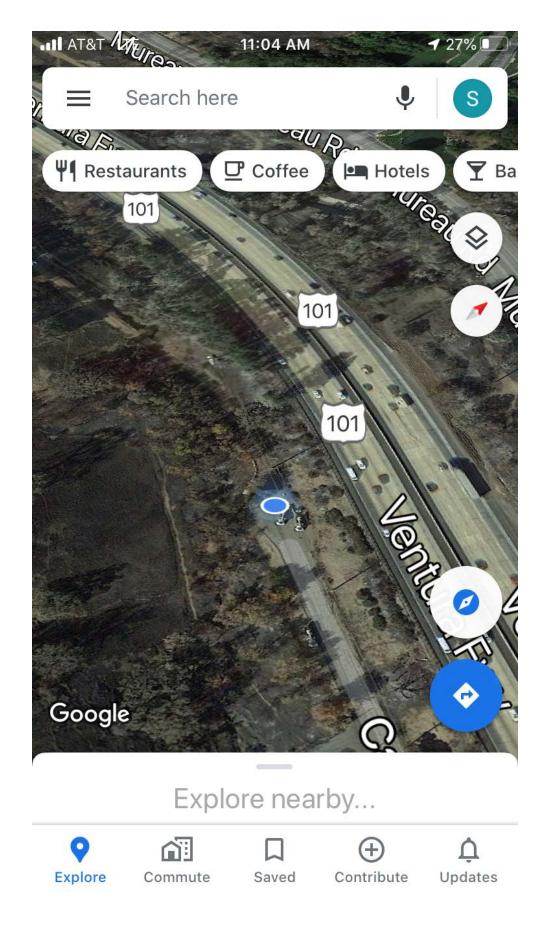


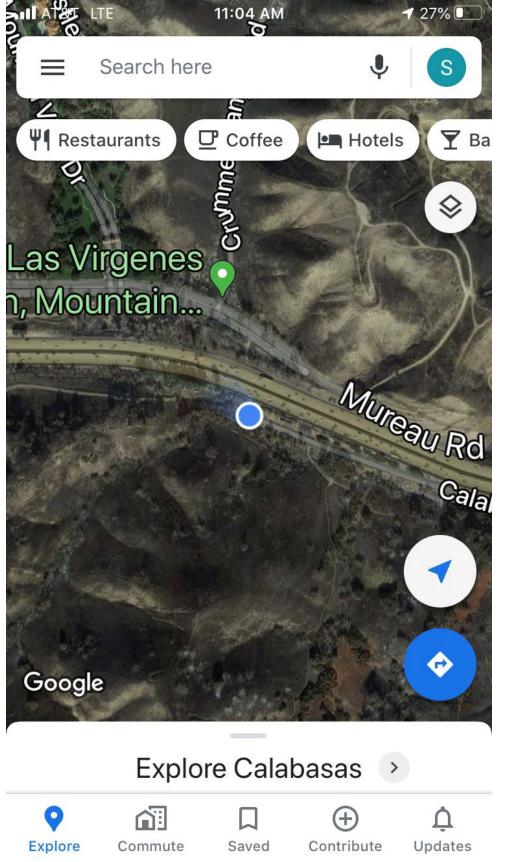
My location

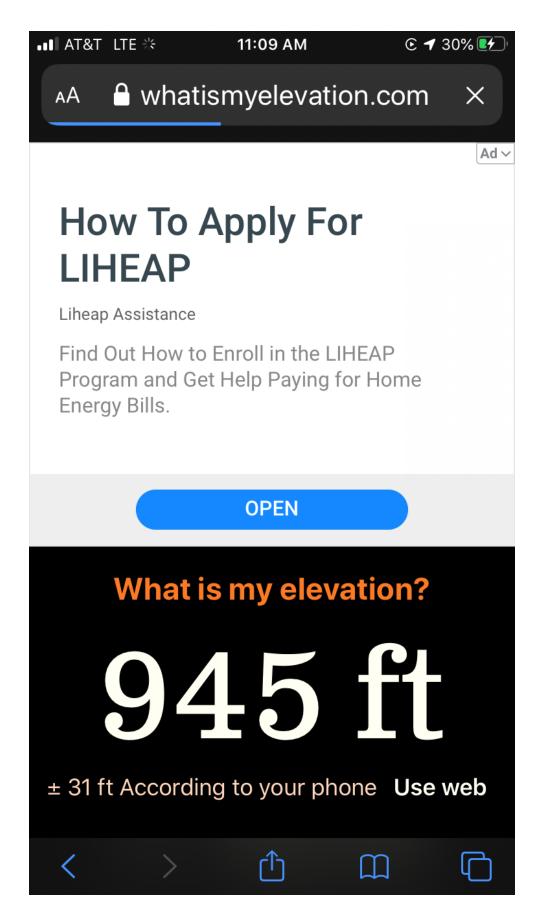
X



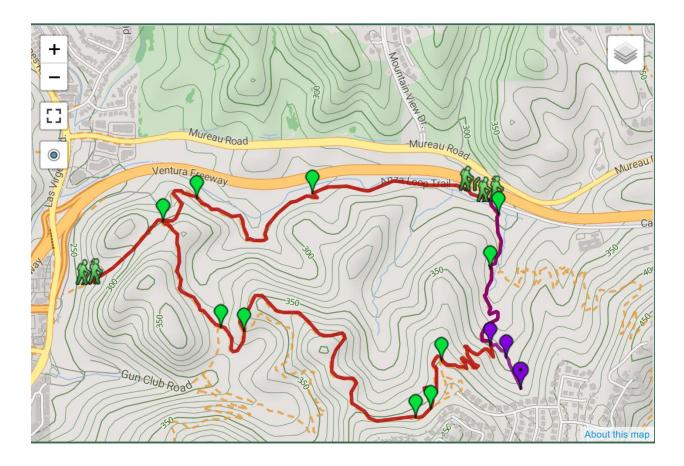


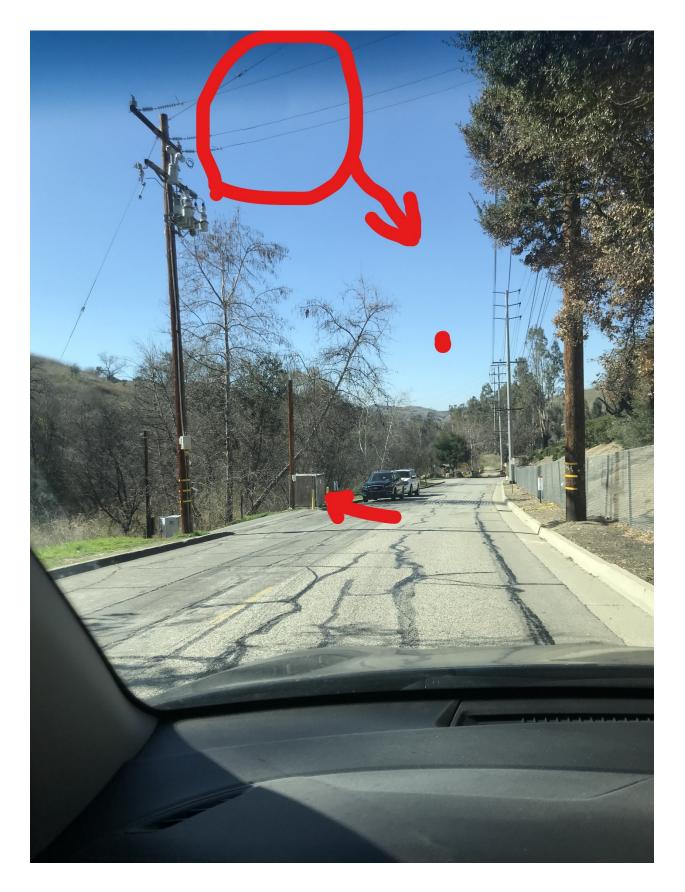


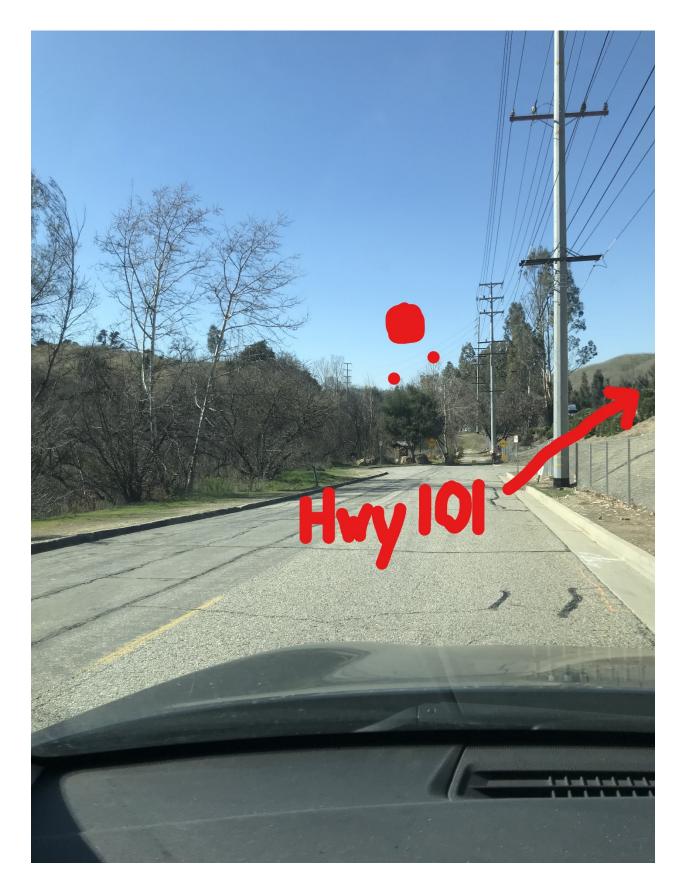


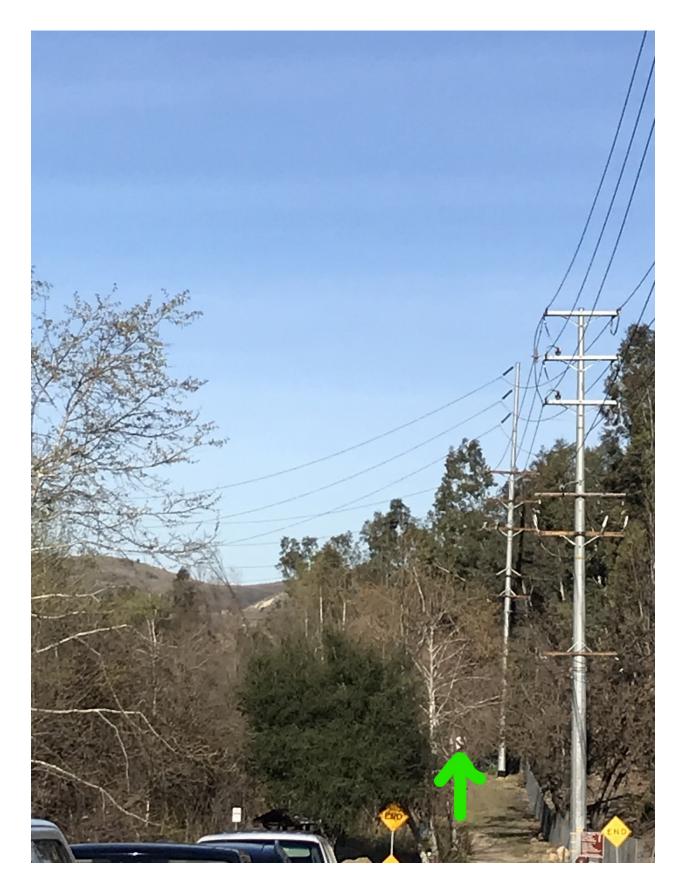


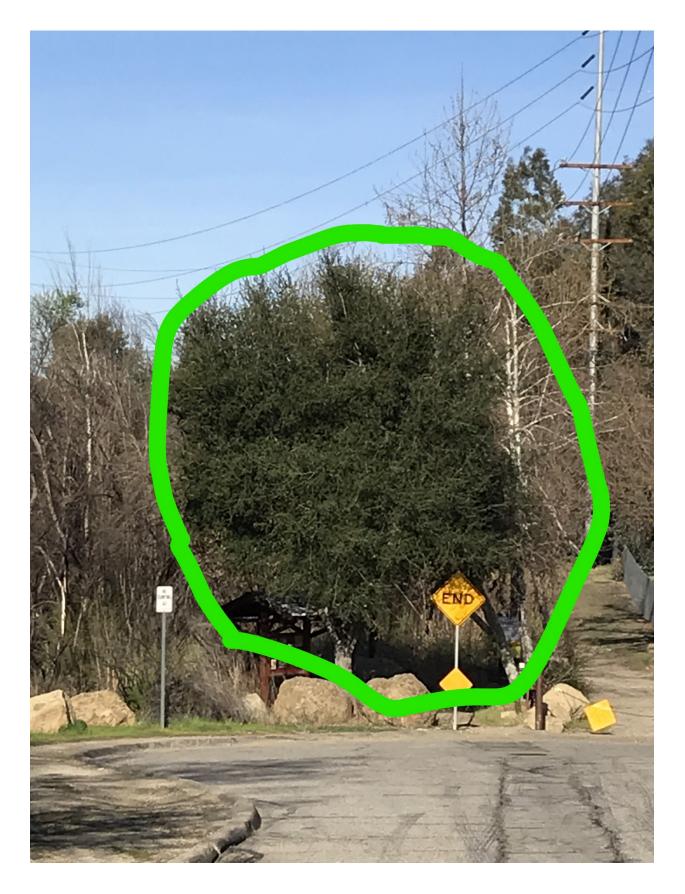
















From:	@lacity.org>
Sent: Friday, January 31, 20	20 18:17
То:	@ntsb.gov>
Subject: Helicopter crash -	Calabasas, CA, Kobe Bryant

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Good afternoon,

I wish to bring to the attention of the investigators of the helicopter crash in Calabasas, CA, a weather phenomenon unique to the area surrounding the site of the crash.

First, I am a 45 year veteran of the Los Angeles City Fire Department, a Captain at the Aircraft Rescue Fire Fighting station at LAX with a total of 17 years of ARFF experience, 7 at LAX. I was a Helitac crew member on board the fire department's helicopters for 10 years and fought fires and performed hoist rescues in the same general area as the crash site. I live approximately 4 miles northwest of the crash site and I drive the 101 freeway regularly at all times of the day and night. I also have a private pilot's license (single engine land, not current) with a couple hundred hours.

The topography of the area near the crash site is predisposed to channel fog up from the coast. The small valley where the crash occurred is at the north end of Malibu Canyon. It is not uncommon at various times of the year for fog that is normally held to the coast by the coastal mountains to funnel up Malibu Canyon and spread out into the small valley and fill it like a bowl. Although the San Fernando Valley to the east and the Conejo Valley to the west can be clear, fog can penetrate through the canyon and fill the small valley in between. The fog stacks up against the hills at the north end of the small valley and up the Calabasas Grade on the 101 freeway to the Mureau Road bridge on the east and to Cheseboro Road on the west. I have on many occasions encountered just such a fog condition in the mornings when I am driving home from work at approximately 7:00 am; I enter fog or very low cloud cover while descending the Calabasas Grade near Mureau Road on the west bound 101 Freeway and start driving out of the fog/cloud cover as I pass Lost Hills Road.

If the conditions are such that the coastal fog has moved inland over the hills (as it did the day of the crash), the fog in the area around and above the intersection of Los Virgenes Road and the 101 would be particularly dense. Under these conditions a pilot who is flying VFR west bound above the 101 would likely enter the dense fog above the small valley rather suddenly at about Mureau Road and since the 101 descends west of that location, a pilot could very quickly lose visual contact with the road.

I hope that this information is helpful and I am available if I can be of any further assistance.

Capt. Los Angeles Fire Department Fire Station 80, LAFD/ARFF/LAX Cell

From:	@gmail.com>
Sent: Monday, January 27, 2020 18:37	
То:	@ntsb.gov>
Subject: Kobe Bryant Helicopter Crash	_

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[CAUTION] This email originated from outside of the organization. Do not click any links or open attachments unless you recognize the sender and know the content is safe.

Hello,

I was directed to your site by a friend. I was a witness to the tragic helicopter crash that occurred yesterday in Calabasas that killed Kobe Bryant and others. My friend and I were at the Erewhon Market in Calabasas, had just finished eating and were finishing our coffee outside the front of the market. We heard the helicopter flying normally, but couldn't really see it because it was extremely foggy and low clouds. I was thinking to myself of why a helicopter would be flying so low in very bad weather conditions. Then, all of a sudden, we heard a large BOOM. We knew at that point that the helicopter had crashed. We could see the wreckage on the hillside, and it was on fire, spreading flames to the nearby grassy area. My friend dialed 911 immediately and I jumped on Google maps app to tell the Police the exact location of the crash. It was a scary situation. Obviously, at that point, we didn't know it was Kobe Bryant. Attached is a photo I took of the hillside area in the distance of the crash site, taken approximately 2 mins after the crash at 9:47 am. The crash site in the picture is in the middle of the picture, behind the trees.

Thank you for taking the time to read my report.



Attachments to email from witness at Erewhon Market





INTERVIEW SUMMARY

Eliott Simpson Senior Aviation Accident Investigator Western Pacific Region

Interview Date: January 30, 2020 Person Contacted: Matthew Baumann, NTSB Accident Number: DCA20MA059

@yahoo.com

Narrative:

During a telephone conversation Mr. Baumann stated the following:

He met **at the parking lot of Bark Park**, on Las Virgenes Road, Calabasas, about 0915 with the intention of cycling up the Millennium Trail. They started on the trail about 0925, and **rode** ahead. They both eventually met at a fork in the trail about 20 minutes later (Figure 1, Photo 2).

The area was surround by mist, and although he could not estimate the visibility, he noticed that tees within about 200 ft appeared hazy. He was facing generally to the north, and began to hear the sound of a helicopter. He has experience working in close proximity to helicopters, and described the sound as appropriate for a helicopter flying while in a powered condition.

Over the course of about 20 seconds the sound continued to get louder, when suddenly a blue and white helicopter emerged from the clouds passing from left to right directly to his left. He judged it to be moving fast, travelling on a forward and descending trajectory. It started to roll to the left such that he caught a glimpse of its belly. He observed it for between 1 and 2 seconds, before it impacted terrain about 50 ft below his position. After impact, debris was ejected around the accident site, followed by an eruption of fire just beyond the impact point where the helicopter came to rest. He was about 200 ft from the impact point, and close enough that he could feel heat from the flames.

He then rode down to the accident site and confirmed there were no survivors (Photo 1).



Figure 1 – Witness Location



Photo 1 – Photo of the Accident Site Facing to the South at 0950:18 (Photo courtesy of Matthew Baumann)



Photo 2 – Witness Location at Time of Impact Facing to the North at 1025:19 (Photo courtesy of Matthew Baumann)

From:	@gmail.com>	
Sent: Monday, January 27, 2020	0 20:49	
To:	@ntsb.gov>	
Subject: Calabasas Weather on 126-2020		

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MOVI5650.avi	
MOVI5651.avi	
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Attached are four dash cam videos from January 26 as we drove on the 101 westbound through Calabasas. The indicated time on the video is off by exactly one hour because we did not change it for daylight savings time.

The four videos span the times from 9:40 to 9:49 am.

We crossed the Parkway Calabasas exit at 10:41:41 (actually 9:41:41).

Please let me know if you need more video.

Thank you,