



Lightning Data Center  
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Lightning Data Center  
Minutes  
October 8, 2010  
[www.stanthonyllc.org](http://www.stanthonyllc.org)

Quote Of The Month:

“The wheel is turning and you can't slow down,  
You can't let go and you can't hold on  
You can't go back and you can't stand still  
If the thunder don't get you then the lightning will.”

Lyrics from the song “The Wheel” by Hunter/Garcia/Kreutzmann

The meeting was held in Auditorium A at St. Anthony Central Hospital, Denver, Colorado.

1. Meeting began at 11:45am and adjourned at 1:00pm.
2. Members present: Mary Claus, Rich Collier, Alan Elder, Robert Gift, Ken Langford, Howard Wachtel, Karen Wells, and Phil Yarnell. Langford moderated the meeting.
3. As members trickled in, Ken Langford projected a YouTube video submitted to us by member Steve Hodanish via email. This video is of a thunderstorm that produces an anomalous luminous event which may be ball lightning. The duration of the event is extremely brief – two seconds at most – and shows a downward moving point of light which traces a shallow arc and appears to pass between some distant trees and the camera before dissipating. Rich observed that the downward motion was faster than a raindrop. The event immediately follows a larger in-cloud lightning discharge. The clip may be viewed at the 59 second mark of this video: <http://www.youtube.com/watch?v=qevVKCIAdwM>
4. Another Steve Hodanish email tabled the paraphrased question “what are the known photos of persons with their hair standing on end as the result of atmospheric electrical potential?” Ken Langford was able to show three such images, two of which were the famous images captured at Moro Rock in Sequoia National Park on August 20, 1975. The incident there led to multiple injuries and one fatality, and was the subject of two different lawsuits. A third photo was obtained as a result of Steve’s email, when Ken contacted Lightning Forensics consultant Don Latham of Huson, Montana, who provided the image in question without a definitive source reference. Don specializes in forest fire issues and helped devise the lightning safety sign at Moro Rock following the 1975 incident.

During this discussion, we learned the term “Piloerection,” or erection of the hair of the skin, although this physiological reaction may differ from the sort of externally induced effect observed in a strong electrical field. The question was posed: what is the range of field strength within which hair would stand but lightning would not occur? Rich suggested that a field strength measuring between 300 and 600 volts per meter is used to warn for lightning flash potential.

5. The 10/5/10 lightning strike incident of the two teenagers standing outside of Snow Canyon High School in St. George, Utah was discussed. The students had been dismissed from school, and were still on school grounds when clouds moved in. They took shelter under a tree and were injured by a flash to the tree. They were moved back into the school, where CPR was administered. They remain hospitalized in Las Vegas, Nevada as of this meeting. Ken related his recent observations of public behavior in the presence of thunderstorms, and asked Phil about his recent experience of directing his travel group to take cover. Phil suggested that most people are embarrassed to speak up and take a position on lightning safety. Press releases on the Utah incident can be found at: <http://www.washk12.org/index.php/press-release-lightning-strike-schs>
6. Robert Gift related an incident in his youth where he believes he saw a sprite, which is an upward propagating discharge from the top of a thunderstorm.
7. A news clipping forwarded by Steve Clark entitled “Repetitive Head Blows Raise Worry” was presented. This led to a lively discussion relating back to Phil’s 1972 paper on football concussion entitled “The Ding.” Phil’s attempts to obtain footage of football hits from professional football sources were unsuccessful. Boxing is another area where such repetitive concussions occur. Phil referred to a paper entitled “Neuropsychological Consequences of Boxing and Recommendations to Improve Safety.” The discussion was returned to lightning with the question: Could such repetitive concussions, or similar effects thereto, be induced by the mechanical or electrical effects of lightning or electric shock injury? Howard suggested that whatever damage is being caused by small concussions, it is undetectable on MRI, and might also occur in electric shocks. Studies he has seen suggest an 18 fold increased incidence of early onset dementia in concussion patients. Karen suggested that studies she has seen are inconclusive in this matter. Some of these issues will be discussed at the December meeting when Howard Wachtel is our guest speaker.
8. As a sideline to the prior discussion, Karen Wells presented the article “Lightning Injury May Cause Abrupt Cerebral Salt Wasting Syndrome.”
9. As the meeting would down, Mary Claus described an incident when she was 7 years old in 1942. Lightning struck a grounded rod at her family farm in Iowa and blew out a bank of glass batteries in their basement. The batteries were normally kept charged by wind power, and provided the household with direct current before there was AC power in her area.

10. These minutes do not represent official positions of LDC or its members. They simply reflect the comments made at the meeting.

11. Next meeting: Friday, November 12, 2010 at 11:30 AM in Auditorium A at St. Anthony Central Hospital. Subject: Roundtable.

Respectfully Submitted,

Kenneth Langford, Mr. Random Enterprises, Inc.

### In Case You Missed It...Lightning in the News

This is a monthly listing of news and videos about lightning and allied areas as reported in the media. A headline is listed, followed by a link to the article. Please note that some of the links are perishable, which means you'll need to go to the source for the article. Enjoy!

Lightning & Aircraft:

<http://www.flyertalk.com/forum/american-aadvantage/1122676-aa-737-struck-lightning-sep-2-2010-ord-rno.html>

The previous one leads to this one, which I think everyone should read. It is about the FAA loosening fuel-tank safety rules to benefit Boeing's 787.

[http://seattletimes.nwsourc.com/html/boeingaerospace/2008719843\\_lightning08.html](http://seattletimes.nwsourc.com/html/boeingaerospace/2008719843_lightning08.html)

<http://www.youtube.com/watch?v=49MhvoBW20s>

This is a YouTube video that offers a kind of puzzle. Where did the lightning strike, and why did it appear as it did?

<http://www.signonsandiego.com/photos/galleries/2010/sep/30/user-submitted-weather-photos/>

This is related to rare San Diego lightning flashes; photos and a news story.

<http://abclocal.go.com/kabc/gallery?section=news&id=7697553&photo=32>

This is a lightning shot from Los Angeles from the same storm system as was affecting San Diego on 9/29/10. There are a few lightning shots here.

[http://www.nps.gov/fire/public/pub\\_firenews\\_detail.cfm?postid=4207](http://www.nps.gov/fire/public/pub_firenews_detail.cfm?postid=4207)

Here is an interesting report on a lightning sparked forest fire in Oregon.