

LIGHTNING DATA CENTER MINUTES
September 12, 2014
ST. ANTHONY HOSPITAL WEST, LAKEWOOD, CO

Monthly Quote: “Ironically, the only strike before the bolt which injured the children took place four minutes earlier and six miles away – which means if thunder was heard at the sports field, it would have been 30 seconds after that strike – exactly the time frame in which the 30/30 lightning safety rule is based.” From “Lightning Strike Injuring Children was ‘Bolt from the Blue’”. On the web at:

<http://kxan.com/2014/08/26/lightning-strike-injuring-children-was-bolt-from-the-blue/>

1. Meeting began at 11:45 AM and adjourned at 1:05 PM: Members Present: Clark, Langford, Swanson, Elder, and Gift. Clark moderated the meeting.
2. The future of the LDC was discussed. Steve Clark advised he has been meeting with the Medical Staffing Office at St. Anthony Hospital. Personnel there have said they would like to see more patient-focused discussions with an emphasis on something physicians can take away from the meeting. Steve stated he would like to do some basic research, that is, have a lightning survivor be scanned using an advanced form of scanning, with the hope the scan would reveal brain/neural deficiencies that are consistent with patients' complaints. Ken Langford asked if anyone knew what the most detailed kind of scan that has ever been done on a lightning survivor and what the results were. No one present knew.
3. Carl Swanson gave a presentation before the North Metro EMS about tracking the number of those injured that are seen by North Metro EMS and allied EMS agencies. The form, attached herein, was well received by those present.

During his presentation, Carl also learned there is some confusion within the EMS community about lightning safety when a rescue mission is being performed. Specifically, he was told the first responders want to know how to be safe when responding to strikes. Carl also learned of a couple of myths still out there. One, does a person still carry a charge after being struck; and two, if I am struck by lightning, will I be more likely to be hit by lightning again because I've already been hit? Derek Elsom has expressed support for Carl's efforts. A video shown on Denver's 9News gives a brief overview of lightning safety for first responders.

4. Carl told us Dr. Jeff Beckham with Exempla Lutheran EMS & Prehospital Medical Center will give a talk on lightning in November and has requested the LDC's help with the presentation.

5. We discussed Elsom & Webb's 2014 paper titled: "Deaths and Injuries from Lightning in the UK, 1988-2012", which was broadcast to the membership. One item of interest was a mechanism for injury caused by stored potential after the lightning flash has occurred, not unlike the plate of a capacitor. Howard Wachtel seemed to think such a charge could be in place, but only for a fraction of a second after the strike. Steve Clark mentioned several animals in China had died due to a lightning strike. The dead animals were underneath a simple shelter with a corrugated metal roof supported on wooden beams. Ken said that was during the strike and not following the strike, as pointed out in the U.K. paper. Question: Is anyone aware of any cases where someone has been injured or died as a result of contacting an apparently charged surface after a lightning strike? This does not include surfaces that have been electrified due to contact with live electricity.
6. An article and photograph from the Daily Mail showed a photo of a lightning flash apparently within a rainbow and an airplane being struck. Where the aircraft was apparently struck, there is a discontinuity in the lightning channel. Ken Langford questioned the authenticity of the photo. The odds of capturing on camera a lightning flash within the arc of a rainbow and a plane being struck – all in the same shot – are extremely long. Ken thinks it is possible a rainbow could have been superimposed onto an image of an aircraft being struck, or conversely, an airplane could have been superimposed onto a photo of lightning in a rainbow. An expanded view of the discontinuity shows a vague silhouette of what appears to be an aircraft. Other images of lightning striking aircraft show a similar discontinuity. Ken is discussing the photo with other photography experts.
7. Ken also showed a video from YouTube showing a rather close lightning strike. Ken was able to pause the video and capture still images, which showed the beading of the lightning channel and possible ball lightning following the strike.
8. Questions, comments, notification of errors, and critiques of these minutes are welcome. Please forward those to Steve Clark at: sclarktoto@gmail.com. Please keep your communications professional and respectful. Communications will be forwarded to the appropriate author(s) of the minutes and addressed accordingly.
9. LDC Disclaimer: These minutes do not represent official positions of the LDC or its members. They simply reflect the comments made at the meeting. Furthermore, the LDC does not implicitly or explicitly recommend or endorse any product or service. Any service or product presented in these minutes is done so for purposes of discussion and analysis. The merit (or lack thereof) is open for the consideration and review by the entire membership.
10. Next meeting: Friday, October 10, 2014 at 11:45 AM at St. Anthony Hospital West. Conference Room TBA.

Respectfully Submitted,
Steven E. Clark, Consulting Meteorologist

“System in Place to Help with Lightning Safety” (Denver Broncos)

<http://kdvr.com/2014/08/22/system-in-place-at-broncos-stadium-to-keep-everyone-safe-from-lightning/>

“2 Men Struck by Lightning in Denver”

<http://www.9news.com/story/news/local/2014/08/26/2-men-possibly-struck-by-lightning-in-denver/14643807/>

Can you identify the erroneous statement made by the on-scene reporter in the video?

“EMS: Three Children Injured by Lightning Strike”

<http://www.kvue.com/story/news/local/2014/08/26/2-people-possibly-struck-by-lightning-at-hamilton-pool/14649373/>

“Florida Postal Worker Struck, Severely Injured by Lightning”

<http://gantdaily.com/2014/08/17/florida-postal-worker-struck-severely-injured-by-lightning/>

NOTE: This article cites some of NLSI’s work.

“Lightning Damages South Florida Airport Runway, Home” (Video & Photos)

<http://miami.cbslocal.com/2014/06/08/lightning-strike-damages-ft-lauderdale-hollywood-airport-runway/>

“Severe Weather Injures 2, Causes Damage & Throws Wrench in Holiday Weekend Plans”

<http://newyork.cbslocal.com/2014/08/31/severe-weather-washes-out-remainder-of-electric-zoo-music-festival/>

“What First Responders Should Do After Lightning Strikes”

<http://www.9news.com/story/news/local/2014/08/30/first-responders-lightning-strikes/14878509/>

“Over in a Flash! Photographer Captures Incredible Moment Cargo Plane is Struck by Lightning...as it Flies in Front of Rainbow”

http://www.dailymail.co.uk/travel/travel_news/article-2737585/Over-flash-Photographer-captures-incredible-moment-cargo-plane-struck-lightning-flies-RAINBOW.html

“Documenting 25 Years of Deaths and Injuries from Lightning in the UK”; a PDF Slideshow Presentation by Elsom & Webb given at the Royal Meteorological Society’s 2nd Amateur Meteorologist’s Conference on September 9, 2013. The content of the presentation follows pretty closely, the content of their 2014 paper.

<http://www.rmets.org/sites/default/files/presentations/14092013-elsom.pdf>