

LIGHTNING DATA CENTER MINUTES

June 14, 2019

ST. ANTHONY HOSPITAL WEST, LAKEWOOD, CO

www.lightningdatacenter.org

Quote of the Month: “If you’re a human being, you can attempt to do what other human beings have done. We don’t understand talent any more than we understand electricity.” Maya Angelou

1. Members Present: Clark, Langford, Elder, Yarnell, Wachtel and Stemple. Meeting began at 11:50 AM and ended at 1:10 PM. Clark moderated.
2. The LDC is accepting donations, either as cash or check. If you donate via check, please make your check payable to Steve Clark at 755 S. Clinton Street, #2A; Denver, CO 80247. He will cash the check and keep the cash holdings specifically for the LDC. When the LDC incurs expenses, Steve will pay for services rendered through his bank account using the cash from LDC’s cash holdings. A log will be maintained detailing the inflow and outflow of monies. At the present, the LDC has \$154.00 in cash holdings.
3. The LDC was deeply saddened to learn of the passing of Professor Derek Elsom. I was informed of this via e-mail on Monday, June 10. According to Oxford Brookes University, he passed away in March. Professor Elsom joined the Royal Meteorological Society in 1975 and became a Fellow. He served on the Editorial Board of *Weather* from 1993 to 1998. His meteorological interests were air quality, severe weather and lightning. Derek provided guidance and expertise to Carl Swanson’s First Responder Data Collection Project and he was always gracious with his time and comments. His presence will be dearly missed.
4. LDC has submitted a list of 137 lightning strike survivors and their ailments to Dr. Chris Andrews for his review. Hopefully, the dataset will be sufficiently large to allow Dr. Andrews to perform an analysis of the data. Most likely, the number of survivors used in any analysis will be fewer than the 137 submitted. We will let you know what Dr. Andrews has to say after he has had an opportunity to review the data.
5. A motorcyclist was struck and killed by lightning on I-95 in Florida. The motorcyclist was hit on the helmet, lost control of his bike, swerved into the median and was thrown from his bike. The helmet was badly damaged.
6. Carl Swanson said he could not attend the meeting. He did have some items to contribute.

The First Responder Data Collection Project received its first lightning strike report for this season. A group of four people were struck on the Colorado plains. Of the four, one appeared to have burn marks which appeared to be from a direct strike. That individual was hospitalized. The other three reported feeling the tingle, but refused treatment from EMS personnel. Carl is waiting for additional information from the EMS agency.

Carl, along with Dr. Yarnell and Barb Stemple, attended the Lightning Strike and Electric Shock Survivors International conference in Pigeon Forge, Tennessee in May. Carl reports there were approximately 50 attendees on the first day and approximately 25 attendees on the second day. Carl says there is still some misunderstanding between electric shock survivors and lightning strike survivors.

7. Barb Stemple said there were 4 female lightning survivors, including her, at the meeting. The four of them had an opportunity to interact with one another and all found the interaction to be beneficial. She found that most of the survivors (both lightning and electric shock) had been to the conference on previous occasions. Barb also said there was interest from a potential corporate sponsor to possibly hold a meeting here in Denver next year.
8. Phil Yarnell discussed a little bit of what electric shock survivors must do. They are often in chronic pain and have similar neurologic complaints as lightning survivors. They often take multiple medications. If the electric shock is a worker's compensation claim, the patient should document everything, e.g., how they are feeling, what the doctor says and does, what medications are taken and when, etc. Phil said the pressure is on the survivor and it is up to the survivor to take baby steps while trying to recover. Phil also asked if any survivors had undergone any non-traditional treatments and if they did, were any of them successful. There were no responses to Phil's query.
9. Phil and Howard Wachtel discussed a Bemer device, which is billed as an alternative form of therapy. The device is used for chronic pain and fatigue, among other things. It dilates the capillary blood veins and thus increases circulation. Magnetic pulses are emitted at 7.5 Hz, which is very close to one of the peak frequencies of the Schumann Resonances, at 7.83 Hz. Howard said the signal strength emitted is very low in intensity, but the device could still cause some heating. The Schumann resonances were named after Winifred Otto Schumann, who first studied the implications of the earth-ionosphere waveguide system. They occur naturally and are caused largely by lightning. As an aside, Howard noted the Swedish railway runs at 15 Hz, which was thought to possibly be harmful to humans as it is close to the 2nd harmonic of the Schumann Resonances (14.3 Hz).

Barb said a woman at the conference who had been struck twice by lightning, has used the Bemer device and reported beneficial results. Howard asked if there had been any double-blind studies of the effectiveness of the device. None are known.
10. Howard again made a plea for the LDC to consider including electric shock survivors into the name of our group.
11. LDC welcomes your medical questions. Please send them via e-mail to Steve Clark at sclarktoto@gmail.com. Your medical questions will be forwarded to Dr. Phil Yarnell for his review and will usually be taken up for discussion in the next month's meeting. Please be advised any questions posed are for the general consideration by the group and do not constitute a formal medical opinion. If a formal evaluation is requested, arrangements can be made directly with Dr. Yarnell. If you have a medical emergency, please call 911 or your local emergency services provider.

12. 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.
13. 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 product or service 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.
14. **Next meeting: Friday, July 12, 2019, from 11:45 AM to 1:00 PM at the University of Colorado Anschutz Campus in Aurora, Colorado. Dr. Anne Wagner, MD, will present a case history of a lightning burn patient.**

Respectfully Submitted,
Steven E. Clark, Consulting Meteorologist

Lightning Links

This is a monthly listing of periodicals, websites, and videos about lightning and allied areas from a variety of sources. A headline or description is listed, followed by the link. Please note that some of the links are perishable, which means you'll need to go to the source for the information.

CNN Wire, 2019: Motorcyclist Killed by a Bolt of Lightning on I-95 in Florida. *Cable News Network, Inc.* June 10, 2019. Link: <https://wtvr.com/2019/06/10/motorcyclist-killed-by-a-bolt-of-lightning-on-florida-highway/>

On the Passing of Professor Elsom

Royal Meteorological Society, 2019: Passing of Derek Elsom. March 20, 2019.

Link: <https://www.rmets.org/news/passing-derek-elsom>

Brookes Society Event Reports, 2019: Report on AGM and Spring Party - 14th March 2019.

Link: <https://www.brookesalumni.co.uk/the-brookes-society/bs-past-events>

Schumann Resonances in Wikipedia: https://en.wikipedia.org/wiki/Schumann_resonances

Bemer Device: <https://united-states.bemergroup.com/en-US/usage>