

LIGHTNING DATA CENTER MINUTES

December 11, 2020
ST. ANTHONY HOSPITAL
www.lightningdatacenter.org

HAPPY HOLIDAYS TO ALL!

Have fun. Be merry. Be safe.

1. Members Present: Clark, Langford, Stemple, Yarnell, Terry, Crow and Brewer. Clark moderated. Meeting began at 11:50 AM and ended at 1:05 PM.
2. **VERY IMPORTANT – PLEASE READ!** We will continue to hold meetings via Zoom only. Since last month’s meeting, the number of COVID cases has skyrocketed here in Colorado. As of December 11, 2020, hospital administration said we may be able to resume in-house meetings as early as February 2021, although remains to be seen.
3. 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 \$482.00 in cash, thanks to a \$100 donation from Melvin Patrick. Thank you, Melvin!
4. In last month’s meeting, Dr. Yarnell said the Lightning Strike & Electric Shock Survivors International (LSESSI) group was going to have a Zoom conference in January. As these minutes go to press, their website does not mention an actual conference; instead, there is a link to a short survey to determine peoples’ thoughts on holding a Zoom conference. Steve Clark will reach out to Jim Segnari to find out what is going on.
5. The lightning safety brochure initially started by Barb Stemple has been finalized. There are two versions, an electronic version for Shirley Terry’s RETAC and affiliated members and a print version to be distributed by Barb Stemple to community outlets to hand out to the public. Shirley will send them to the graphic artist in mid-December. The print version should be available in early 2021 and it will also be posted to the LDC website.
6. Last month, Carl Swanson said he could not access the struckbylightning.org website maintained by Mike Utley. Steve wrote to Mike with an eye towards acquiring the website and/or merging it with the LDC website. Mike responded, noting there has been a misunderstanding between him and the website host. Mike is currently working with the host to resolve the issue and expects the website to be back up soon. He is interested in exploring a possible “merger” with the LDC. A portion of next month’s meeting will be spent discussing ideas.

7. We met with Barbara Brewer*, the mother of Jacob, a teenage boy that was struck by lightning while vacationing with his family of four at the Florida Keys. Clouds had started to build, so the family had started to pack and head to shelter, when Jacob was hit by lightning on July 16, 2020 at about 4:30 PM. It was not raining at the time. Barbara had seen lightning off the coast and heard thunder approximately 2 minutes before the strike. She was asked if anyone else appeared to be heading for shelter before the strike. She said her husband, Jeremiah, noted everyone else was out and did not appear to be heading for shelter. Jacob and Jeremiah had been in the water shortly before and their bodies were still wet. Jacob was wearing a t-shirt and a pair of rubber-soled shoes. Jeremiah felt heat from the stroke. A daughter and Jeremiah were each about 10 feet away from Jacob when the lightning hit. Barbara was next to Jacob and both were knocked to the ground. She was dizzy and had ringing in the ears. Her family says she seems to be somewhat harder of hearing. She has not yet seen a doctor due to her extreme concern for her son. Ken Langford suggested she might have a ruptured eardrum.

Here follow my imperfect recollection of Jacob's medical issues in no particular order.

The lightning hit his chest and he went into immediate cardiac arrest. Men who were nearby started CPR immediately for 10 minutes. He was without a heartbeat for about 45 minutes, but he was resuscitated.

There were burns throughout his body. A photo showed a burn mark on his chest between the nipples that was approximately 6 inches in diameter. Another photo showed burns on the top and the side of his right foot. The burn mark on the side of the foot coincided with a hole in the side of a shoe above the rubber sole.

He had a stroke, which later was determined to be in the back part of his brain near the motor function and along the right side of his body. The doctors electrically shocked him.

Fluid built up around his heart and lungs. He was on a ventilator for 10 days. His heart rate was high for 2 months before it was stabilized. Lightning caused his blood vessels to constrict and they are working to get the vessels to a less-constricted state. A blood transfusion was done. His liver and kidneys were bad. Doctors think his body is still in "fight or flight" mode and they are trying to relax the body accordingly.

Blood flow to his feet is not where it should be. Jacob has peripheral nerve damage and is paralyzed from the waist down. At first, he could move his toes but is unable to move them now. He feels sensation on the bottom of his feet and some sensation (hot and cold) on his legs. His legs are floppy. There was no nerve conduction following nerve stimulation. Waiting for nerve regeneration. TMS did not get the legs to move. He can move his hip pretty good. He cannot feel vibration below his knees, but he does feel vibration in his knees. One arm is a little weaker than the other. He barely has any leg muscle. At the start of the vacation, he weighed 135 pounds and now he weighs about 108 pounds. Initially, he was not able to urinate or have a bowel movement, but now he is able to go the bathroom.

His cognition is good and his IQ is high. His attitude is good. He does not feel sorry for himself or let himself get depressed.

Various therapies are being pursued. He is on probiotics and vitamins. The family spent about 2.5 months in Chicago for spinal therapy, where he was stabilized. The family is purchasing a grounding mat to dissipate “the electric charge in the blood” per the advice of a doctor. Users of the device claim success. Therapy is done 5 times per week. TMS, brain remapping down to legs. Chiropractic. He is also doing physical therapy.

Jacob has received cards and letters from others who have been struck and also well-wishers. He has also corresponded with another teenager that was struck while playing soccer.

The family found a doctor in their home state of Texas that is familiar with lightning. They know about LSESSI. This encounter with lightning has been covered by news media. Three of the media stories are listed below in the Lightning Links section.

8. 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 EMS.
9. Questions, comments, error notifications, and critiques of these minutes are welcome. Please forward those to Steve Clark. Please keep your communications professional and respectful. Communications will be forwarded to the appropriate author(s) of the minutes and addressed accordingly.
10. 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.
11. Next meeting: Zoom meeting. Friday, January 8, 2021, from 11:45 AM to 1:00 PM MDT.

Respectfully Submitted,
Steven E. Clark, Consulting Meteorologist
Office: 303-364-3622
Cell: 720-205-5209
E-mail: sclarktoto@gmail.com

* Permission was obtained from the family to use specific names, dates and locations.

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.

Cappucci, M., 2020: Lightning "Superbolts" Can Be 1,000 Times Brighter Than Ordinary Flashes, Study Finds. *The Washington Post*. November 14, 2020.

Link: <https://www.washingtonpost.com/weather/2020/11/14/lightning-superbolts-study/>

Peterson, M. and M. Kirkland, 2020: Revisiting the Detection of Optical Lightning Superbolts. *JGR Atmospheres*. November 12, 2020.

Link to abstract & summary: <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/2020JD033377>

Lightning Strike Case News Stories

ABC7 Staff, 2020: Teen Recovering, Still Facing Surgery After Lightning Strike at Siesta Key. *WWSB-TV*. July 21, 2020. Link: <https://www.mysuncoast.com/2020/07/21/teen-recovering-still-facing-surgery-after-lightning-strike-siesta-key/>

Salomone, J., 2020: Texas Teen Survives Lightning Strike on Siesta Beach During Family Vacation. *WFTS-TV*. July 24, 2020.

Link: <https://www.abcactionnews.com/news/region-sarasota-manatee/sarasota/texas-teen-survives-lightning-strike-on-siesta-beach-during-family-vacation>

Osowski, C., 2020: Texas Teen Survives Lightning Strike, Recovering at Tampa General Hospital.

WFLA-TV. July 20 and 21, 2020. Link: <https://www.wfla.com/news/hillsborough-county/texas-teen-survives-lightning-strike-recovering-at-tampa-general-hospital/>