

April 9, 1999 Minutes **Lightning Data Center** Centura Health St. Anthony Central

Quote of the Month:

“The next day, the Lindberghs left Brazil for Port-of-Spain, Trinidad, despite a torrential rain. It was one of the few times even Charles conceded to Anne that it was ‘Bad Stuff!’—the sort of weather through which he generally chose not to fly. Months later, he learned that their departure through cloud-covered mountains had given birth to a jungle myth: Just after the *Tingmissartog* {Inuit for big bird} had passed over a band of Waiwai natives, a bolt of lightning had struck the chief’s house, running down one of the hut’s poles”

A. Scott Berg, *Lindbergh*, GP Putnam’ Sons, NY 1998

1. Meeting began at 11:30 am and adjourned at 1:30 pm.
2. Members present: Barron, Breed, Cherington, Clark, Kamin, Keen, Kithil, Lines, Sellon, Simmons, Toler, Yarnell.
3. I brought two articles on lightning injuries from 30 years ago (1969) and 90 years ago (1909):

a.) Coleman TH. Death by lightning. *Penn Med* 1969;72:56-60.

{Dr. Coleman, head of the department of electrocardiology at St. Joseph’s Hospital in Carbondale, reports the tragic death of his son by lightning on the golf course.}

“On July 25, 1967, my twenty-one year old son, Thomas was playing golf at Elkview Country Club, Crystal Lake, Pa...At six pm the foursome teed off. The sun was out and the sky was blue. Tommy was about 200 yards from the clubhouse and was walking with an iron over his shoulder. A sudden bolt of lightning struck the area. The bolt came ‘out of the blue,’ according to Ron Astle, the professional at the club. It struck Tommy and came down the club head to his chest, producing slight burns of the anterior chest wall. He fell to the ground unconscious. He died within two hours at St. Joseph’s Hospital, Carbondale, without regaining consciousness. In the foursome was a physician who was standing about twenty feet from Tommy. Immediate attempts at closed chest cardiac massage and resuscitation by mouth-to-mouth breathing were tried, to no avail.”

b.) Watt DW. Death by lightning. *Brit Med J* March 20, 1909:742-3

“Dr. Watt is qualified to deal with the subject by considerable practical experience, for electrical storms of terrific violence are common in South Africa, and deaths from lightning are frequent. While acknowledging the value of Dr. Spencer’s ‘able’ and ‘exceedingly suggestive’ paper, Dr Watt combats the view advanced therein to the effect that ‘lightning only burns the human body when it meets in its course some metallic object.’ Dr. Watt cites a case which he saw, where a horse and rider were struck dead by lightning, and where, ‘although the man was undoubtedly burnt and singed, there was a total absence of fusing of any metallic object worn on his body, and of any apparent connexion between the metallic objects and the burns.’...It seems to me that the following propositions may be advanced: (1) Lightning stroke may cause no external injury to the body struck... (2) Death may follow with no apparent external injury, as well as often extreme wounding...(10) The body struck may or may not be hurled to a distance, and an appreciable interval may elapse before it falls.”

4. I brought a letter from Steve Marshburn, Sr., President/Founder of LS&ESSI, Inc. He responded to an topic introduced by Gene Lines in our March minutes. "Should companies instruct people working at computers to stop typing during a lightning storm outside?" Steve comments that "This is a very serious problem....The office place...during a storm could well be an unsafe place." Gene Lines, Rich Kithil, and others present agreed with Steve's comments.

I also brought an email letter from Ron Holle. Ron sent a draft of response cards for 911 operators to use when people call in with lightning emergencies. Several members were especially interested in these lightning cards: Steve Clark, Rich Keen, Gene Lines, and Jeff Sellon. Rich said that he had some reservations about the 30 seconds rules. I suggest that these four members contact Ron Holle or vice versa about their thoughts on this subject. Ron's email address is:

holle@nssl.noaa.gov

5. Phil Yarnell brought an advertisement for an anticonvulsant medicine (gabapentin). The medicine has been prescribed for 2 million patients. The ad takes off on the number 2 million and asserts that "you have a 1 in 2 million chance of being struck by lightning."

Phil described two patients that he recently saw in his office. One was struck by lightning and the other received an electrical shock while working on a heater in a customer's basement. Both presented with a similar musculo-skeletal pain syndrome.

6. Rick Kithil brought a weather radio that can be purchased in stores for less than \$30. Weather information is provided by the National Weather Service. When the radio switch is in the alert position it will automatically turn on during weather related emergencies.

Rich announced that he will be giving a two day intensive lightning safety workshop on May 13-14.

Rich also provided us with the following web page address for the past 6 hours lightning map of the USA detected by NLDN:

www.atmo.arizona.edu/gifs/LIGT.GIF

Rich offered to give a 5 minute presentation at the June 4 dinner meeting at the Wellshire Inn. The title of the presentation: Benjamin Franklin in France. The members voted unanimously to allow Rich to do so.

7. Rich Keen reported that the first thunderstorm event of the season as recorded as his Coal Creek Canyon Observatory was on March 27, 1999. Rich stated that this is earlier than in many past years. Phil Yarnell asked Rich if we could expect fewer lightning strikes this year because of the relative drought that we are experiencing. Rich's answer (I am paraphrasing): "It is difficult to make predictions about the future."
8. Cheryl Toler and Barry Kamin lead the discussion about June 4 meeting. As of now here are the arrangements:

- a.) A lunch will be held at 11:00 am in a room next to the lecture hall in the Main Auditorium. This lunch will be open to our guests,

Dr. Gourbiere and the French consult, and to LDC members. We will have an abbreviated LDC round table discussion.

- b.) Dr. Gourbiere will give her lecture in the Main Auditorium at 12 noon in the Main Auditorium. The lecture is open to the medical/nursing staffs and the public.
- c.) A dinner meeting will commence at 6:00 pm at the Wellshire Inn. Each member and his/her guest will be responsible for the cost their own drinks and meals. We are looking forward to a most enjoyable evening. Rich Kithil will provide the entertainment: Benjamin Franklin in France (see paragraph 6 above).

* * * * *

IMPORTANT

If you plan to attend this dinner meeting, please notify Cheryl Toler by email or phone (303 629 4258) **within the next two weeks**. We need to know how many people will be there so that we can reserve enough tables. We understand that the restaurant is hosting other events that weekend, so we need to know this information very soon.

* * * * *

- d.) We are also planning an informal barbecue type dinner for LDC members and their guest at the Cheringtons' residence on the following afternoon: Saturday June 5 at 4:00 pm.

Again, if you plan to attend please let Cheryl know and give her the name and phone number of the person responsible for helping to coordinate the menu.

* * * * *

9. Gene Lines reported that he received a follow-up phone call from a member of John Conway's office (Defense Nuclear Facilities Safety Board). This office collects information on safety issues that are of importance to the Department of Energy. Gene also told us that his company is engaged in new methods pertaining to wind technology for energy use.

Gene reported on a document from the Lightning Protection Institute regarding lightning protection for chimneys that have been added to homes. Reference - NFPA 780 Paragraph 3-11.7 - Chimney and vents. According to Gene, the report suggests that proper grounding with sufficiently large cable should provide protection even if there are bends in the cable to meet the architecture of the structure. There must be proper grounding of the stove as well as the chimney.

Gene introduced a new LDC member, Jeffrey L. Sellon. Jeff is an engineer and President of Electrical Failures & Accidents, Inc. He is also a fire investigation and forensic instructor.

10. Jeff Sellon reported that the National Electrical Safety Agency recommends the use of surge protectors. Several of us discussed the status of surge protectors. Gene stated that the following items should be know about surge protectors:
- a.) UL listing helps the consumer to know if the protector is safe to use.
 - b.) IEEE and ANSI provide standards of performance.
 - c.) A data-line surge protector might be preferable.

d.) A surge protector at the Primary Service Panel of a home might be the best place for a surge protector. It must be installed there by a professional electrician.

11. Warren Simmons reported that rain shelters at the Lowry Golf Course will be "covered" by overhead wires to provide additional lightning protection.
12. Steve Clark said that he is expanding his lightning databases with regard to two areas: Casualties and events (site, property, etc.).
13. These minutes reflect the comments of members present and do not reflect positions of LDC.
14. Next meeting: 11:30 am **Friday May 14, 1999** in the Main Auditorium of St. Anthony Central Hospital.

(Please check your calendar early for our **June** meeting. In June we shall meet on the **first Friday - June 4**. Our guest speaker will be Dr. Elisabeth Gourbiere of France.)

Respectfully submitted,

Michael Cherington, MD
Chair, Scientific Committee, LDC