

Minutes January 12, 1996 Lightning Data Center Provenant SAC

Quote of the Month:

"Nature is not friendly to the lonely hero; it is out to 'get' him, singling him out, it often appears, with mere idle destructiveness, as a lightning-bolt chooses to strike a particular tree. And it is true that these nineteenth-century heroes have no lightning-rods; they are orphans in the storm. The quality of being unprotected--by education, family, good sense, worldly experience--is particularly evident in the heroes and heroines of Manzoni, Emily Bronte, Conrad, Hardy, Zola, that is, in those authors where Nature, all but personified, is a predominant force. The more the characters are isolated in Nature, the bleaker their lot."

Mary McCarthy in *One Touch of Nature* 1969

1. Meeting began at 11:30 am and adjourned at 1:10 pm.
2. Members present: Breed, Carney, Cherington, Clark, Collier, Enloe, Foley, Glancy, Gustafson, Keen, Kithil, Lammertse, Langford, Rossie, Yarnell.
3. Peggy Gustafson introduced Melissa Carney who has recently been appointed as Ortho/Neuro and Lightning Data Center secretary. The LDC has been assigned a dedicated telephone line. Our own phone number is 629-4258. Melissa stated that we can also be reached at the following fax number: 629-2189.

Peggy also brought in an article she found at the supermarket -- a National Inquirer (January 16, 1996) issue describing a lightning survivor who is able to tolerate very low ambient temperatures without having to wear additional clothing. Many of us saw this patient on a videotape that was produced on television. According to Bob Glancy, that program was seen on WGN-TV.

4. I read two letters that Mary Ann Cooper, MD had sent to me via Email and Fax. One dealt with the subject of developing a national central registry for the collection of data on lightning injuries. She suggested that we might set up a World Wide Web page that could be used for the reporting of injuries. Rich Kithil stated that the National Lightning Safety Institute has a page on the WWW which could be used to capture information along with a registry at the University of Illinois. I wondered if the CDC might be an appropriate agency to serve as the reporting center. The CDC already receives data on reportable infectious diseases in the United States. Peggy Gustafson wondered if the National Trauma Institute might work on data collection. Dan Lammertse suggested we contact Richard Hoffman, MD at the Colorado State Health Department. Dan said that the Health Department is involved in collecting data on brain and spinal cord injuries, and may be interested in a pilot project on studying lightning injuries. Dan will contact Dr. Hoffman about attending our next LDC meeting to pursue these ideas.

Her second letter dealt with the matter of a meeting in Chicago in October 1996. The Society for Physical Regulation in Biology and Medicine will hold its 16th annual meeting there. According to Mary Ann the meeting attracts physicians, engineers, physicists and others interested in physical properties governing biological systems. She spoke with Raphael Lee, MD of the University of Chicago. He extended an invitation for a symposium on lightning medicine to be held there. She indicated that they would need 6 to 9 papers for that symposium. I asked our members how many would be interested in participating. We could submit at least 6 papers:

- a. Breed -- Review of thunderstorm charge structure and lightning production. (A meteorology-based paper)
- b. Cherington & Yarnell -- Neurologic Lightning Injuries in the Mountains.
- c. Collier -- Lightning protection testing and analysis.
- d. Foley -- Case Study of Lightning Injury Accident Investigation
- e. Langford -- Questions of viability of an emergency lightning protection safety bag -- a portable Faraday cage.
- f. Kithil -- Lightning safety education; Recent developments of the National Lightning Safety Institute; Risk management of the lightning hazard.

I spoke earlier today with Mary Ann who will be calling me later today to discuss these matters.

I distributed copies of Seminars in Neurology, Lightning and Electrical Injuries, Part 1, to all present. These journals were purchased for the LDC by Provenant Health Partners.

5. Phil Yarnell described the events of a lightning fatality that occurred on Pikes Peak on July 9, 1995. A 35 year old man was struck in the right temporal region at about 5 pm on the mountain (about 13,000 foot elevation). He was wearing a straw hat with a metal medallion just above the site of the head wound. A few minutes prior to the strike he took a picture of his climbing companion. This photograph shows dark, ominous clouds over the peak. There were multiple flashes of lightning for a period of over an hour (lightning showers). The survivor experience transient tingling and jerking of the right side of the face.
6. George Rossie brought a hospital summary sheet of lightning injured patients that were admitted to St. Anthony Hospital from 1988 to 1995.
7. Bonnie Enloe reminded us of the CME program scheduled for January 24, 1996 on the subject of lightning safety and injuries to be given in the new auditorium. Rich Keen, Rich Kithil, and I will make the presentations.
8. Dan Breed distributed a copy of the Newsletter on Atmospheric Electricity which will be placed on our lightning shelf in the medical library on the second floor of the hospital. Dan also announced that the local chapter of the American Meteorological Society will be meeting on February 11 at 3 pm at the IMAX theater to see Storm Chasers. Those interested joining that group should call Randy Collendar at 497-5960.
9. Bob Glancy distributed posters on lightning safety. The poster was designed by Kenneth Howard and Ron Holle.
10. Ken Langford stated that his posters are listed in the Weather Store on the Internet. Ken also discussed the possible downside of the concept of a lightning safety bag. Would it encourage people to take more risks? Give them a false sense of security?
11. Mike Foley reported that he continues to collect information on NFPA and will let us know at a future meeting about the desirability of our participating in that organization. Mike distributed a news article from the December 13, 1995 issue of the Rocky Mountain News that discussed "elves"--emissions of light and very low frequency perturbations from electromagnetic pulse sources described by Walter Lyons.

12. Rick Kithil's report is summarized on his paper, News for NLSI, which is attached.
13. Next meeting: Friday, February 9, 1996 at 11:30 am in the One East Conference Room at St. Anthony Central Hospital. I hope to be able to distribute part 2 of Seminars in Neurology on Lightning and Electrical Injuries if they arrive before then.

Respectfully submitted,


Michael Cherington, MD
Chair, LDC

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News from NLSI, January 1995
The National Lightning Safety Institute

1. NLSI was accorded Non Profit Corporation status by the State of Colorado.
 2. Joining NLSI's Board of Directors are:
 - a. Mary Ann Cooper, MD, Chicago School of Medicine and member, Board of Directors, Lightning Strike and Electric Shock Victims Intl.
 - b. R. James Vavrek, Atmospheric Science Education Specialist, City School System, Hammond IN
 3. NLSI's World Wide Web page is generating 10-15 inquiries daily on average. The Home Page was shown to LDC members. The web page address is:
<http://adgrafix.iserver.com/nlsi/home.htm>
 4. NLSI Board member Jim Vvarek was a co-author of *Lightning Science Education*, published in the Fall 1995 issue of The Earth Scientist.
 5. NLSI has commenced national distribution of *Lightning Safety Tips*, a one page flyer designed to educate and inform the general public about lightning safety. Comments and input were received from about 100 people in creating the document. Copy attached. Please distribute.
 6. NLSI continues its seminar schedule on lightning safety with presentations to:
 - a. North Jeffco Parks & Recreation, Lakewood CO January 10.
 - b. Denver Federal Center Professional Engineers, Denver CO, Jan. 17.
 - c. Alliance for Fire and Emergency Management, Indianapolis IN, Feb. 21.
 - d. American Society of Civil Engineers, Washington DC, March 7.
 - e. Intl. Conference on Atmospheric Electricity, Osaka Japan, June 12.
 7. A Florida lightning protection equipment vendor was found to be making unfounded claims about "...we make lightning strikes impossible..." NLSI contacted the company, explained lightning's behavior, and asked the vendor to cease making insupportable statements. This type commercialism hinders lightning safety, when the equipment user has a false sense of confidence.
 8. NLSI is looking for a corporate partner to help reach 25 million golfers with a lightning safety message. On average, about ten percent of annual lightning accidents occur on golf courses.
 9. NLSI is working with the Orange County Public School system to produce a lightning safety video for school children. It will be available for national distribution when completed.
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