

Minutes Dec. 10, 1993 Lightning Data Center St. Anthony Hosp.

Quote of the Month:

"The natural process that accounts for the greatest share of fixed nitrogen is accomplished....by certain types of bacteria....with the aid of an enzyme called nitrogenase. The other important natural process for fixing nitrogen involves the power of a lightning stroke."--Louise B. Young 1990.

1. Meeting began at 11:30 am and adjourned at 12:45 pm.
2. Members present: Breed, Cherington, S. Clark, Collier, Eitel, Langford, Simmons, Yarnell.
3. New member, John C. Eitel was introduced to the group. John recently joined Rich Kithel at American Lightning Protection, Inc.
4. I reported that Susan Knight, who was unable to attend today's meeting, is working on the outpatient lightning victims project. She has contacted the Emergency Department Directors and other members of the major trauma hospitals in the Metropolitan region.

Debbi Clark will be sending out two checks from our Grant Fund this week. One for Susan's first payment; the second for reprints on an article on lightning injuries to be published early in 1994. The article is co-authored by Cherington, Yarnell, et al.

Debbi Clark will contact various civic organizations about our group. We will provide speakers to those organizations interested in hearing about lightning. The following is a list of potential speakers and topics:

1. Breed: Thunderstorm formation and lightning. Weather observations.
2. Cherington: Lightning injuries.
3. S. Clark: Lightning data and statistics.
4. Langford: Lightning safety and photography.
5. Simmons: Lightning and golfers.

5. Ken Langford reported as follows:

1. He recently spoke with Ron Holle. An article by Ron and Raul Lopez on recent advances in cloud-to-ground lightning detection networks will soon be published.
2. Ken stated that he recently learned details about the photograph of two people whose hair was standing on end just prior to a thunderstorm. This photograph, which has been frequently printed, is in the "public domain". It was taken on August 20, 1975 in Sequoia Park, California. Ken has not yet learned if there were any injuries on that day.
3. Ken visited The Bakken Library and Museum of Electricity in Minneapolis, MN. He brought back a brochure from The Bakken.
4. Ken's photographs of lightning were published in the

Sept. 1993 of the Magazine, "5280".

6. Dan Breed reported as follows:

1. He had written to the Newsletter on Atmospheric Electricity regarding the LDS. It was not published in their most recent issue (Nov 1993). He will contact the Editor, Earle R. Williams of MIT, to learn if the information can be published in the next issue. The Newsletter is published two times per year.
2. Dan has been working on the project of building a world network newsletter with other groups with interests in lightning similar to ours. I read to the group and gave to Dan a letter I recently received from Dr. Chris Andrews of Australia. He was very supportive of this project. He suggested we contact several centers including:
Chicago (Dr. Mary Ann Cooper).
Netherlands (Dr. Henk Jan ten Duis).
Australia (Drs. Andrews, Prentice, Mackerras, and Darveniza).
Japan (Dr. Kitigawa).
3. Dan has also been collecting materials, often given to the general public, concerning lightning safety and rules to limit one's risk of injury. He will be looking for both consistencies and inconsistencies, if any, in these materials. For example, what position should one assume if stranded in an open field during a lightning storm?


7. Rich Collier reported on the triggered lightning projects in both Florida and Alabama. He stated that, although most of the emphasis has been on such subjects as munitions, the researchers are now also turning their attention to new areas e.g. "human beings as assets".

8. The following matters were considered during a period of general discussion.

Ken mentioned that Ron Holle believes the term, "thunderbolt", should be avoided in most scientific discussions. Ken also suggested that we revisit topics that we have discussed in the past and collect these discussions in a separate forum or appendix. We did discuss the patient, first seen by Dr. Yarnell, who developed a facial palsy from inside a glass window during a lightning strike. Warren Simmons suggested that the metal window frame may have had focussing properties. The nerve injury was most likely caused by induction rather than side flash. The patient had no skin burns.

9. Next meeting: Friday, January 14, 1994 in Conference Room B at St. Anthony Hospital.
Happy Holidays.

Respectfully submitted,


Michael Cherington, M.D.
Chairman, LDS