LIGHTNING DATA CENTER Minutes April 9, 2004 St. Anthony Hospital www.Stanthonyldc.org

Quote of the Month:

"We entered the mountains as strangers, but we left as brothers."

Charles S. Houston, MD, Robert H. Bates in K2 - The Savage Mountain, 1954

- 1. Meeting began at 11:30 am and adjourned at 1:10 pm.
- 2. Members present: Arendt, Bergschneider, M Cherington, N Cherington, Foley, Gartling, Gift, Glancy, Hodanish, Keen, Kithil, Langford, McDonough, Middleton, Moore, Mosier, Nibbe, Olsen, Olson, Paton, Resignolo, Russon, Sanders, Schoessow, Stewart, Wells, Yarnell.
- 3. It is with sadness that we report the passing of one of our valued members. Pam Daale, meteorologist with Channel 7 News passed away earlier this week. A Tribute to Pam can be found on the Channel 7 website.
- 4. I brought the following articles from the literature (abstracted in part here):
 - a. Ramsey FK, Howard JR. Diagnosis of lightning strike. JAVMA 1970;156:1472-4.

"Through the years the veterinary profession has been confronted with calls to determine whether or not lightning was the cause of livestock losses. It was hard to realize the paucity of information in standard veterinary literature concerning the effects of lightning on livestock...A 3-year study from 1962 to 1965 on the effects of lightning on livestock was reported. Gross lesions in many cases were minimal. In 75 detailed necropsies of lightning fatalities, singed hair and skin were the most significant lesions caused by lightning."

b. Jacome DE, Risko M. Lightning artifact in the EEG. Clin Electroenceph 1986;17:105-9.

"The artifact caused by lightning was recorded during performance of standard EEGs with silver-silver chloride disc scalp electrodes...The laboratory was located on the third floor of a general community hospital having no particular shielding...Power wall outlets were triphasic with a ground pin...The artifact was characterized as brief, variable duration, abrupt, high amplitude deflections of the pens, synchronous to lightning flashes."

- 5. Lightning on the ski slopes: Sheryl Olson reported that Lightning Warning Signs are now posted in Vail, Colorado. Tom Resignolo reported that lightning struck on the ski slopes in Breckenridge last month. There were no injuries. Sheryl reported that last year, lightning struck a Maine skier who was injured. Rich Kithil said that recreational sites (ski slopes, golf courses, etc.) often post "duty to warn" signs as general statements. Tom told us that a friend of his who works in the Copper Mountain area finds the small, hand-held, lightning detectors to be "worthwhile." Greg Stewart and Phil Yarnell commented that these detectors are useful because they raise the level of lightning awareness. Rich Kithil cautioned against a "false sense of security" in those who utilize lightning detectors.
- 6. Rich Kithil was our guest speaker. Rich, founder and CEO of National Lightning Safety Institute, gave an outstanding presentation. It was titled: "A Review of Lightning Videos for Safety Education: Something for Everyone." I cannot, in these minutes, do justice to Rich's presentation, but here are annotations from my notepad:
- a. Rich showed 3 videotapes: Lightning Safety; Boating Safety: A tape of lightning shown to the music of Tchiakovsky's 1812 Overture and the William Tell Overture. Most educational and enjoyable.
- b. Lightning safety rules that Rich teaches include the following sayings: "When in a high risk situation, move to a low risk location." With regard to thunder and lightning: "If you can hear it, clear it; if you can see it, flee it." "Absolute lightning safety is impossible."
- c. Coaches, players, and others on baseball fields should know that lightning can precede rain.
- d. Information about boating safety provided by Dr. Ewen Thomson of University of Florida (Gainesville). Data on damage to ships (those with lightning protection (LP) versus those with no lightning protection (NP):

In salt water: Damage to LP Boats - 7% Damage to NP Boats - 17%

In fresh water: 40% 75%

- e. Principles of lightning safety on sail boats: grounding, bonding, electrical (surge) protection. Bonding systems is attached to grounding system.
- 7. Vicki Middleton asked if tents near golf tournament were safe during lightning storms. Rich stated that tents were not safe "tents are invisible to lightning." He recommended individuals seek shelter in clubhouses, cars, or buses.
- 8. These minutes do not represent official positions of LDC or its members. They simply reflect the comments of those present.

Next meeting:

Date: Friday, May 14, 2004 at 11:30 AM

Location: Main Auditorium of St. Anthony Central Hospital. Speakers: Gilbert McDonough, Sheryl Olson, Rick Russon.

Topic: The Lichtenberg Figures.

Respectfully submitted.

Michael Cherington, MD