

LIGHTNING DATA CENTER MINUTES
September 14, 2012
ST. ANTHONY HOSPITAL WEST, LAKEWOOD, CO
On the Web at: www.stanthonyhosp.org/ldc

Monthly Quote: “I must say in closing that no one can tell you what it means to be a scientist. There are almost as many different kinds of scientists as there are different kinds of people, but even apart from that, no one can *tell* you. You can only find out what being a scientist means from the intensely satisfying experience of your own efforts.” From: “To Be a Scientist”, Science News Letter, May 16. 1964.

1. The meeting began at 11:55 AM and adjourned at 1:05 PM. Members present: Clark, Wells, Nibbe, Keen and Elder. Clark moderated the meeting.
2. The website is up, but with a rough, unpolished look. Work is ongoing to correct some errors and to improve the visual appearance. Perhaps the main highlight is ALL of the minutes over the history of the LDC are available through the website.
3. Clark presented two articles, one of which addresses electrical shocks to people and animals and the other, which dealt with an apparent lightning-caused explosion aboard a methanol-carrying ship in Malaysia. Links to these articles can be found in the “Lightning in the News” section.

A couple in New York says they are being forced out of their home due to electric shocks, which they attribute to a nearby power substation. They would be shocked when using the sink or the swimming pool. In addition, the family dog chewed the skin from its own legs and had to be euthanized. A so-called “blocker”, intended to isolate the property from the high voltage substation, was installed by the utility. The family is suing the utility for the cost of the property. I showed this to Michael Foley. He stated this is not an unusual situation in rural areas and that the blockers are little more than an economical band-aid. Michael said the best way to fix this is through bonding – that is, making sure the property and the substation have a zero voltage potential between the two.

A ship, unloading methanol in Malaysia was apparently struck by lightning and exploded. Initially, it was reported one person was killed and 4 others were missing, but later reports raised the number of fatalities to five. Users on the Yahoo Lightning Forum have expressed some ideas on how this could have happened, with most of the ideas centered on the idea of bonding, as described above. Generally, they agreed the ship needed to be bonded. One person noted any terminal the ship was connected to would also need to be bonded to show a zero voltage potential across the entire system. Another said when ships are put together, the various metal parts are painted first, then bolted together, which can lead to voltage potentials aboard the ship due to the partial electrical insulation of the paint. Others thought since methanol was being unloaded, methanol vapors would be present which could ignite in the presence of a spark. Still another

thought the strike could have overheated part of the methanol transfer system, causing the methanol to vaporize and explode. Thanks to Mr. Hartano and his colleagues of the Yahoo Lightning Group for their thoughtful comments.

4. Richard Keen told us he was in nearby Allentown, PA at the time of the Pocono Raceway incident reported on last month. Keen said it was obvious a large-scale front was moving through the area, rather than a localized severe weather event. He said multiple severe weather watches and warnings were posted from New York, southward into Pennsylvania, and farther south into Maryland.
5. Karen Wells found an article on Pubmed titled: "Wilderness Medical Society Practice Guidelines for the Prevention and Treatment of Lightning Injuries". She noted the authors are from the Department of Emergency Medicine at the University of Colorado School of Medicine and recommended they be approached about the LDC. Clark will follow up on that.
6. Clark will be giving a presentation about the LDC to the Medical Executive Committee of St. Anthony Hospital on October 3, 2012.
7. Next meeting: Friday, October 12, 2012 at 11:45 AM at St. Anthony Hospital West. Conference Room TBA. Howard Wachtel is tentatively set to present the lightning safety issue at the Boulder pool, as reported in the August 2012 minutes, hopefully with a City of Boulder official present.

Respectfully Submitted,

Steven E. Clark, Consulting Meteorologist

In Case You Missed It...Lightning in the News

This is a monthly listing of news and videos about lightning and allied areas as reported in the media. A headline is listed, followed by a link to the article. Please note that some of the links are perishable, which means you'll need to go to the source for the article. Enjoy!

Electric Shocks Force New York Couple, Millie And Hal Mendelson, To Abandon Their Home (Article and Video). The Huffington Post, Posted 9-11-12

http://www.huffingtonpost.com/2012/09/10/electric-shocks-force-leave-home_n_1872338.html

Chemical Tanker Explodes Off Malaysia, Fire Now Threatens Nearby Methanol Silo [UPDATED] (Article with photos)

<http://gcaptain.com/tanker-explodes-malaysia-fire/>
