

LIGHTNING DATA CENTER MINUTES
April 10, 2015
ST. ANTHONY HOSPITAL WEST, LAKEWOOD, CO

Monthly Quote: "...the first aviation accident attributed directly to a lightning strike occurred on Sept. 3, 1915, when a German Zeppelin LZ40 (LZ10) was destroyed by a lightning strike while venting hydrogen gas off Neuwerk Island, Germany." Source: Rash, C., 2010: When Lightning Strikes. [AeroSafety World](http://flightsafety.org/aerosafety-world-magazine/june-2010/when-lightning-strikes), June 2010. Link: <http://flightsafety.org/aerosafety-world-magazine/june-2010/when-lightning-strikes>

1. Meeting began at 11:50 AM and adjourned at 1:00 PM: Members Present: Clark, Swanson, Yarnell, Johnson, Wells, and Nibbe. Clark moderated the meeting.
2. There was been spike of e-mail traffic among the members of the Yahoo Lightning Safety Group about setting up some basic lightning protection systems in Africa for the "Lightning Kills: Save A Life in Africa" program. Some of the concerns raised included use of conductors other than copper, as copper tends to be stolen, funding, navigation of the geo-political landscape, travel issues, and lightning safety education. If you are interested in helping with this project, send an e-mail to Dr. Mary Ann Cooper at macooper@uic.edu.
3. Robert Gift e-mailed me an article which I presented at the meeting. An Amtrak signal system was struck by lightning. A photo appears to show pretty extensive damage to the electrical components. One of our members, Bob Johnson, used to drive the light rail trains in Denver. He did not recall there ever being a problem with the trains due to lightning. When asked if there were any safety protocols for lightning, he did not recall any.
4. We also discussed the lightning strike on a Boeing 757 Icelandair flight from Reykjavik to Denver. According to news reports, the aircraft was hit by lightning about 90 seconds following takeoff from Iceland. Passengers reported a bright flash of light and a loud boom. Pilots completed a systems check and determined the plane was flight-worthy and continued on to Denver. Photos of the plane showed a hole in the nose cone of the plane. Carl Swanson thought the pilots should have noticed a "seat of the pants" difference in the quality of the flight, given part of the nose cone was gone. He also thought maybe a fighter should have been scrambled to inspect the plane for damage before it continued onward. It was suggested we look into Icelandair's policy on lightning strikes to aircraft.

5. We also discussed lightning strikes on helicopters. Dr. Yarnell called one of the helicopter pilots with St. Anthony's Flight For Life program, who name is Phil. For purposes of clarity in this paragraph, "Phil" refers to the helicopter pilot and not Dr. Yarnell. Here is some of what Phil to say. Lightning is not the greatest weather threat to helicopters, but turbulence is. All aircraft should stay away from cumulus congestus clouds due to updrafts and downdrafts. Phil also said helicopters, like airplanes, have pointed ends coming off the body to help reduce static buildup. Carl wanted to know if the aerodynamics of a helicopter would be affected if a hole were to be punched into the nose of a helicopter, like the Icelandair plane. Phil said the aerodynamics would be affected and it would be dangerous to continue flying the helicopter.
6. Carl asked about acquiring lightning injury and fatality data from the U.S. Military as part of his lightning statistics collection. Steve Clark suggested he contact the Public Affairs offices at the respective bases.
7. Questions, comments, notification of errors, and critiques of these minutes are welcome. Please forward those to Steve Clark at: sclarktoto@gmail.com. Please keep your communications professional and respectful. Communications will be forwarded to the appropriate author(s) of the minutes and addressed accordingly.
8. LDC Disclaimer: These minutes do not represent official positions of the LDC or its members. They simply reflect the comments made at the meeting. Furthermore, the LDC does not implicitly or explicitly recommend or endorse any product or service. Any service or product presented in these minutes is done so for purposes of discussion and analysis. The merit (or lack thereof) is open for the consideration and review by the entire membership.
9. **Next meeting: Friday, May 8, 2015 from 11:45 AM until 2:00 PM at St. Anthony Hospital West. A special announcement and invitation to the meeting are forthcoming.**

Respectfully Submitted,
Steven E. Clark, President & Consulting Meteorologist

In Case You Missed It...Lightning Links

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

Pattani, A., 2015: Signal Problems at Forest Hills Could Take Months to Fix.

The Boston Globe, April 8, 2015. One the web at:

<http://www.bostonglobe.com/metro/2015/04/08/damaged-amtrak-signal-systems-forest-hills-station-could-take-months-fix/T8N3IIgkquW8v2j4b2omWK/story.html>

McLaughlin, K., 2015: Lightning Strike Leaves Massive Hole in the Nose of Plane...But Pilots Don't Notice and Carry On with Eight-Hour Flight. The Daily Mail, April 9,

2015. Link: <http://www.dailymail.co.uk/news/article-3032076/Icelandair-plane-gets-struck-lightning-leaving-leaves-massive-HOLE-nose-plane-pilots-don-t-notice-carry-eight-hour-flight.html>
