



*Correspondence
Memorandum*

TO: Terje Stangeland
FROM: Don Jacobs
DATE: September 28 1998
REFERENCE: Nordstrom #799 Gainesville
SUBJECT: Lightning Protection using the Pole System **MEMO#:** 0007

The following is my research on the use of the Lightning Preventor System. My information has all been compiled by talking either with the end user or the designer of the building. I have requested some letters confirming my conversation with some people, but most of this is a recap of my phone conversation with each listed individual.

My question to each one was (1) how long in service, (2) area or size of building being covered, (3) what were the previous problems with lightning strikes, (4) what were their reasons for using this system, (5) did they investigate the included insurance policy, (6) has the now installed pole been seen hit with lightning, and (7) are they still having strikes in the area of the now pole protection.

The following contacts were made by phone in the month of September 1998.

1. Pinellas County Resource & Recovery Power Tampa, Fl
Contact: Russ Wabester Plant Maintenance Supervisor

Main function of plant to recycle trash into electrical power
Plant was having a number of strikes to their high smoke tower and to the surrounding grounds and substation, pole was installed two years ago.
Hits have been witness to the pole a number of times since being installed, but no new strikes to the area under protection. Strikes are still being seen outside of the protected area.
Project was designed by the local city engineer, Ron Larsen

2. Miami Dolphins Training Facility & Pro Player Stadium Davie, Fl
Contact: John Davis Facility Manager

Their facility had the Faraday system installed originally when built and was experience a number strikes which were damaging equipment.
Two and half years ago two of the Lightning Preventor poles were install.



Since that time they have seen the pole being hit with lightning but have experience no lost of equipment.

The pole system was installed based on the protection of their players, because of the umbrella effect it creates. Because of such good results at the Miami facility and per a report from John Davis to the other NFL owners; the pole system has been installed at the Jacksonville Jaguar stadium and the Washington Redskins. I have requested a copy of this report from John since Cochran is the electrical designer of the new Seahawk's stadium.

3. Ringling Museum of Art Sarasota Florida
Contact: Christopher Lyons Maintenance Superintendence

Their building is 200 ft by 350 ft and three stories high. The building houses 50 million dollar of art and has security and air-condition for protect that need to be kept on line. The owners did research on the pole system and it's insurance policy before authorizing its installation. Since the pole was installed lightning strikes have been seen hitting it, but to his knowledge there have been no strikes to the building or the area under the protection. System has been installed over three years.

4. Nick Bollettieri Tennis & Golf Academy Bradenton Florida
Contact: Steve Shulla Manager

Complex is a training facility consisting of 70 acres of soccer, baseball, and tennis fields, plus inside training rooms. They have hundreds of people on the grounds daily and were looking for a way of arial protections. Based on their investigation of the pole system by their parent company (International Management Group) who were quite thorough about the coverage area and the insurance policy. Seven poles were installed three years ago and have been hit several times but Steve is not aware of any strikes to the buildings or grounds under the protected area.

5. Manheim's Imperial Auto Auction Tampa Florida area
Contact: Cecil Henery Owner

Has one building 100 ft by 365 ft, with another section 100 ft by 150 ft. System was installed one and half years ago to protect the two building, parking lot, car storage area, car wash and 150 or more people walking around the auction grounds. Use to have lightning strikes on the grounds of the auction, as of today all known strikes have been out side of the protected area.



6. General Service Building Pinellas County Govt. Tampa Florida
Contact: Jerry Cora Maintenance Supervisor

County government office, use of pole was researched by City engineer and Architect and found to meet all their requirement as to code, coverage insurance coverage and design criteria. Building is a 95000 sq. ft that was remodeled. Old lightning protection system was deleted and one pole installed to protect the building and surrounding grounds. No know lightning strikes have hit the building since it was installed.

7. Orange County Sportmen's Association Orlando Florida
Contact: Kathy Davis Property Manager

Club is a recreational site consisting of picnic areas, boat ramp, lake, main office and boat storage area. Les Crowley (President), retired engineer, did the research on this system and was quite particular about how the protection would work and the creditable of the insurance policy that comes with it. The club has a membership of approximately 1500 and on a busy day can have as many as 150 to 200 people on the grounds at one time.

One pole was installed to cover the main use area over two years ago because of the number of lightning strikes we were getting in the area. No strikes have hit in the protected area since but the pole has been hit several times and strikes are still hitting in the boat storage area, which is not in the coverage area.

8. Ridge Pallets, Inc Bartow Florida
Contact: Tony Volyard Building Maintenance

Site consists of nine to ten buildings for manufacturing pallets. There was no previous lightning protection and because of their 50 ft tower being struck every year plus strikes to the property, they elected to add a lightning protection system. In their research of systems they agreed the preventor pole was the only way to protect people and equipment moving around on the site. One pole was install on top of the 50-ft tower three years ago and since no lightning strikes have hit the protected area, but the pole has been seen being hit a number of times.

9. Florida Cities Water Company-Wttp Fort Meyers, Florida
Contact: Barry Jones Plant Manager

Plant covers a 2000-ft x 200-ft area of ponds and buildings plus another building of 600 ft x 400 ft. One pole was installed two and a half years ago to stops lightning strikes to the area. It work so well that two more poles were installed two years ago and have had the same success. They are still seeing strikes out side of the area but not in the 328-ft protective area.



10. Ruth Eckard Hall & Tampa, Florida
Holmes Beach City Hall
Contact: Pat Fletcher with H Patterson , Fletcher Architect
Associated with offices through the USA

Ruth Eckard Hall is a 20 million Performing Art Center that seats 2200 people. The building had a Faraday system already install on it when original built approximately ten years ago. The owners were having a number of problems with the old system because the lightning strike were burning holes in the roof under the supports for the lightning points and causing leaks in the roof. Also they were finding burn holes around the ground rods.

One pole was install over two years ago to replace all the old terminal points and cable strung all over the roof area. Since that time no strikes have been known to hit the building, except to the pole. Their company did a full research of the included insurance policy and found it to be as publicized.

I also talked with Michael Kallizayalil , a P.E. , in Jacksonville Florida. He is a consultant to Turkinett Engineers who where the designer of the Gainesville new public library that has the Preventor pole on it. The library was built ten years ago and has had no strikes to it. He is also involved with a new five story office building to be built across the street and will also have the poie install for lightning protect.

Another job was just completed in High Springs, just twenty miles NW of Gainesville, on the Aqua Penn Spring Water Co. Was completed one year ago and have had no lightning strikes to the area protected.

(his phone no is (904) 724-1252)

The following are attached for your information as to this system and other research that I have done to date. I had tried making contact with six more companies on my phone list but the hurricane in the area caused lack of communication at this time.

1. All South's summary of the pole.
2. Lightning Preventor information sheets.
3. ETL's testing report.
4. University of Florida's report on boats using the cone protection theory.
5. Library information on Ions.
6. List of some of the installed job in Florida.
7. Introduction to the French Standards for lightning protection.

On October 8th the manufacture of the Lightning Preventor system will give a presentation us here on the job site. Attending will be All Florida, Chuck Mckenzie, Max Schmidt, Perry Construction and my self. I'll try to record it for your information.

Cc Gil Hammond