

RECAP

Summer 1999

For People Who Monitor the Weather From the Manufacturers of Capricorn™ Reliable Weather Stations

▼ Dakota Ag Service, South Dakota

Capricorn II™ "works really well" for aerial application business

"It's a very valuable reference for our industry," notes Vicky Haven, referring to the Capricorn II weather station located in the office of Dakota Ag Service. Purchased in 1991, the Capricorn has been providing weather information for the aerial application business and the city-owned airport in Britton, South Dakota which is operated by Vicky and her father Terry Haven.



Drift Management

Dakota Ag has a spray plane flown by a contract pilot, as well as doing ground application of agricultural chemicals. "We spray pesticides and herbicides by air. It's very important for us to know which direction the wind is blowing and how hard it's blowing because we have to control drift," Vicky says.

"The information is very important to us. We have to know where the chemical is going to go when we spray it. If we're spraying the chemical on a wheat field, we don't want the chemical to get on the field next to it."

"A lot of times we have to work with the wind to make sure the chemical is going where we want it to. For example, we might need a northwest wind to do a particular field based on what's planted around it. We'll look at the Capricorn and say, 'Yep, we've got the right wind for this.' Then we can go out and do it."

For a new brochure or more information about any Capricorn weather station, please contact us.

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Government Regulations

About regulations, Vicky says, "There are more than I could even discuss. The EPA is on top of aerial applicators as well as anybody that uses agricultural chemicals. They're pretty tough about how and where you load your chemicals, and how you dispose of them, but mainly how you apply the chemicals. If we didn't pay attention to what the wind was doing and our chemicals caused damage to somebody's field, the EPA would be right out here to figure out what's going on."

Accurate, Reliable Source of Weather Information

In an earlier interview, Terry Haven explained why they purchased the Capricorn II: "We needed a good, accurate, reliable source of current weather information."

The Capricorn II weather station is ideal for such an application. It's bright LED display is easy to read and an attraction for visitors to the office, as well as pilots. "A lot of farmers come in to give their work order and whatever commuter traffic there is that happens to stop here," Vicki says. "So we've got that [weather information] service available for them. We're a very small community."

"Our Capricorn works really well. We've got it right up on the counter so people can look and see what the weather is."

▼ Weather Watching: *Nature's Number Two Killer*

I was in a foursome on a golf course in the Wasatch Mountains of Utah. It was a warm, humid afternoon and there were thunderstorms around. Even with my meteorological training, I was still young and foolish.

Earlier, while living in Denver, Colorado, I paid a visit to the driving range. I had wondered why, when thunder rolled across the golf course, most of those practicing picked up their clubs and headed for the club house. Being a native Pacific Northwesterner, thunderstorms were rare, and I kept swinging.

That foolish foursome kept swinging and playing that day in Utah also. While standing on one side of a very large green and waiting for the others to putt, my partner suddenly turned to me and said, "Did you feel that?" "Yes," I said. "I felt it."

What the two of us had felt, which the other two on the far side of the green did not feel, was a thunderstorm leader stroke. The initial phase of a lightning strike.

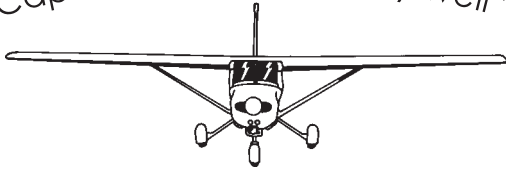


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Capricorn II "works really well"

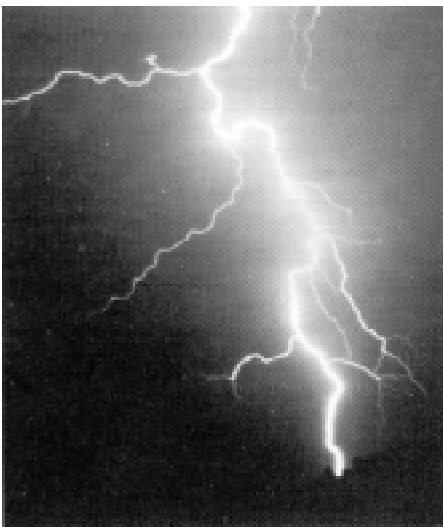


for Dakota Ag Service



by *George Miller,*
Consulting
Meteorologist

Photo courtesy
of the National
Oceanic and
Atmospheric
Administration



▼ Lightning continued....

I was fortunate. An average of 93 people each year in the United States are not so fortunate. They are killed by lightning strikes. Another 300 are injured. Lightning can be called "Nature's Silent Killer." Usually, if you are struck by lightning, you do not hear the rapid expansion of air heated to 50,000°F that produces the thunder.

A Product of Thunderstorms

Lightning is a product of thunderstorms. In the cool Pacific Northwest, these storms are often one rumble of thunder and that is all. In other sections of the country, particularly the mountainous west and the mid and eastern portion of the United States, these storms can be ferocious, their tops reaching into the stratosphere.

The conflicting up and down drafts within these storms create areas of positive and negative charge. When the electrical potential is strong enough, within the cloud, between two clouds, or between the cloud and the ground, lightning is the result. In most cases, the ground is positively charged and the base of the cloud negatively charged.

Leader strokes will start out from both sources. (What I and my partner felt on the golf green.) They will travel along, trying to find the easiest path. When they meet, it is flash, bang, rumble!! This might take a while or not produce a lightning strike at all. (It was 10 to 15 minutes after our experience that we heard thunder.)

Reduce Your Risk

Most lightning deaths occur outdoors while people are boating, golfing, bike riding, playing soccer, fishing, or hiking. Lightning also is responsible for starting many forest fires throughout the western United States and Alaska.

Your chances of getting struck by lightning are about 1 in 600,000. Pretty low, but you can reduce the risk if you hear thunder and see an approaching large, black cloud. Never stand under a single tree. Put the golf clubs away and head for shelter. Reel in the fishing line and hightail it for shore. Hang up the telephone and if you are hiking seek a low spot.

Dispelling Some Myths

There are several myths associated with lightning. Among those is that lightning can not occur without precipitation. A football player in Gresham, Oregon, close to where I live was struck late one summer afternoon while practicing, long after the rain and main cloud had passed.

"Rubber-soled shoes or rubber tires will protect me." These offer little, if any, protection. The steel frame of the automobile will carry the discharge and you may not be seriously injured, but you are not entirely safe.

"Never touch someone who has been struck." Those people need help and assistance. There is no danger here.

Summer is an enjoyable time for outdoor activities. However, when billowing clouds form massive thunderheads with the telltale anvil top, and you begin hearing thunder, it is time to take cover and stay alert. Pack up the golf clubs and head for the club house. Take another day to work on that slice.