

NWS Melbourne Marine Web Letter

July 2009

Thunderstorm Hazards

There were 2 weather-related marine accidents from late May to mid June. Sadly, there were 5 deaths. Both cases involved strong wind gusts from thunderstorms which produced dangerous waves.

The first accident occurred on May 24 near the southwest shore of Lake George. The typical collision of the east and west coast sea breeze boundaries occurred right over the lake. Cells developed southward down the lake and led to a long fetch of strong winds, estimated around 45 mph. Several boats gathered together tried to escape to shore as the winds suddenly increased. Tragically, three deaths occurred on one of the capsized boats.

The second accident occurred on June 13 over the Indian River near Titusville. A cluster of storms over northeast Florida built down the coast along the east coast sea breeze. The storms produced 45-50 mph wind gusts. Several members at a family gathering on a spoil island tried to return to the mainland as the storm approached from the north. However, the gust front arrived about 10 minutes ahead of the heavy rain and caught the returning boats as they left shore. Two people drowned and two people were rescued as one of the boats was turned over.

Both of these cases serve as a reminder that being out on a body of water during the thunderstorm season can be very dangerous. Another point to be made is that often the strong and gusty winds occur well out ahead of the heavy rain and lightning occurring in the storm. Darkening skies are the first warning sign that all mariners should heed, even if the storm is not moving your way. Often the storms kick out gusty outflow winds in a circular ring which emanates from the center of the storm. Also, these outflow boundaries can lead to the development of additional storms nearby.

In the second event, a Special Marine Warning was issued around 45 minutes before the strong winds reached the accident site. A NOAA Weather Radio would have provided the victims plenty of time to reach safe harbor.

When planning a day on the water, check the [Hazardous Weather Outlook](#) and [Area Forecast Discussion](#), not just the [Zone Forecast](#) and [Coastal Waters Forecast](#). The Hazardous Weather Outlook will give the expected timing for storms and the direction of movement. Check out the [graphical version](#) of the Hazardous Weather Outlook too. The Area Forecast Discussion will often provide some insight into what the meteorologist on duty is thinking, things that you won't read in the forecasts.

Listen for weather updates on NOAA Weather Radio. At the first sign of a developing storm,

return to port. If caught in a storm, make sure you are wearing a Coast Guard approved life jacket.

Nearshore Wave Model

National Weather Service forecasters have been looking at model data in their workstations and some of the wave data has already been incorporated into forecasts. The summer season often has rather small waves, so evaluation of any forecast improvements will be difficult this time of the year. We will continue evaluations and further development of the model will occur. During the next cool season, we plan to incorporate dominant wave periods into the first 24-36 hours of the forecast.

Lightning and Sailboats

Occasionally, I am asked about how to protect your boat from lightning. The link below is to a Sea Grant publication from 1992 that will provide plenty of information about this subject.

<http://edis.ifas.ufl.edu/pdf/files/SG/SG07100.pdf>

Hurricane Season

On July 9th NOAA declared an El Nino Advisory. This means that El Nino conditions are being observed and expected to continue. As of this writing, the official NOAA Tropical Cyclone forecast for the Atlantic basin was still calling for a near normal number of storms. However, an El Nino usually acts to suppress the number of tropical cyclones in the Atlantic. The NOAA forecast will be updated in August.

Still, it only takes one Hurricane to make it a bad season for any particular location. In 1992 there were only six named storms. One of them was Category 5 Andrew. In 1965 there were only 5 named storms. One was Betsy which made a double landfall as a major hurricane (in the Upper Keys and Louisiana). So even if you hear that the season will not have a high number of storms, make sure to have a hurricane plan for you and your boat, should one of the hurricanes come to your area.

Talks

I have had the opportunity to give several talks the last few months. If you would like someone to come and talk to a group of boaters about marine forecasting, please send me an [email](#).

The next Web Letter can be expected in October.

Randy Lascody

[email](#)