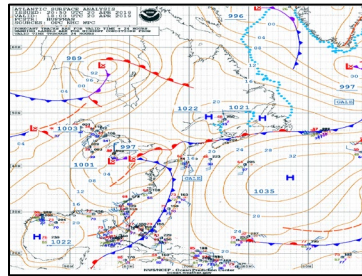
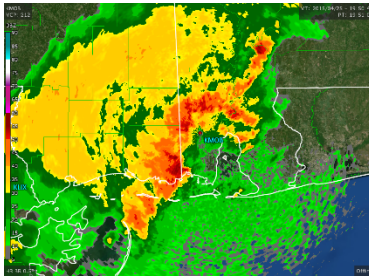


## Marine Weather Forecasting – Master Class Only At Cruisers University



Coastal and off-shore cruising requires many skills. Regardless of where your adventures may take you, no aspect of cruising is more important than understanding marine weather forecasting. During the 2-day Marine Weather Forecasting Master Class, you will gain an understanding of basic weather principles and learn how to use a wide variety of forecasting resources. These skills will improve your cruise planning and reduce the likelihood that you will be exposed to uncomfortable or hazardous weather conditions.

Some of the topics covered at the 2-day seminar:

- Decoding the confusing symbols and meteorological shorthand that appear on forecast graphics, regardless of your cruising grounds.
- Preparing a detailed wave height forecast and recognize the conditions that promote dangerously high waves.
- Understanding why the wind behaves the way it does and how to prepare a detailed wind forecast.
- Predicting the development and movement of low pressure systems and their accompanying frontal boundaries.
- Forecasting the potential for thunderstorms, including when, where, and what type of storms may develop.
- Identifying the ingredients for tropical cyclone formation and how to interpret the products published by the National Hurricane Center.
- Understanding the terminology used by the National Weather Service during hazardous and severe weather events.
- Using Doppler weather radar and satellite imagery to help you avoid severe or hazardous weather.
- Where to find forecast graphics and a strategy for preparing a cruising forecast.
- The pros and cons of several of popular weather forecasting apps.

Most importantly, the seminar will provide you with the skills to be self-reliant. The combination of classroom instruction, case studies, hands-on forecasting exercises, and product demonstrations create an engaging learning experience.

## Marine Weather Forecasting – Master Class Seminar Outline

- A Solid Foundation-A Little Basic Meteorology
- Interpreting Weather Graphics
  - Hands-On Exercise
- Clouds & Precipitation
- Waves & Ocean Currents
  - Hands-On Exercise
- Understanding & Forecasting The Wind
  - Hands-On Exercise
- Radar and Satellite Imagery
  - Product Demonstrations
- Mid Latitude Low Pressure Systems
  - Hands-On Exercise
- Tropical Cyclones
- Thunderstorms
- Forecasting Process & Resources
  - Product Demonstrations

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### Instructor Biography



Mark Thornton has been sailing for more than 25 years and currently owns *Osprey*, a C&C 35. His interest in weather forecasting grew from his experiences cruising and racing on the Great Lakes. Mark is a 2006 graduate of the Penn State University *Certificate of Achievement in Weather Forecasting*, a two-year program that develops skills in general, tropical, and severe weather forecasting.

He is the president of LakeErieWX LLC, a company dedicated to providing marine weather education and forecasting resources for recreational boaters ([www.lakeeriewx.com](http://www.lakeeriewx.com)). Mark publishes a marine weather blog and teaches basic forecasting seminars to recreational boaters during the off-season. He has served as the Race Meteorologist for the Bayview Race to Mackinac since 2014. Mark is also employed as a Teaching Assistant in the *Certificate of Achievement in Weather Forecasting Program* at Penn State University.