

## Basic Marine Weather For Junior Sailors

### Description

Sailing a small boat requires many skills, however no aspect of boating is more important than understanding marine weather forecasting. The weather determines when it is safe to leave port and whether your outing will be safe and enjoyable. During this four-hour seminar, junior sailors will learn basic weather principles and how to use a wide variety of forecasting resources. These skills will reduce the potential that they will encounter uncomfortable or hazardous weather conditions while they are on the water.

- **Understanding Surface Weather Maps:** Weather forecast graphics use a confusing collection of symbols, meteorological shorthand, and color schemes to display current weather conditions and portray future weather patterns. The symbols identifying high and low pressure systems, frontal boundaries, troughs, ridges, and other meteorological features will be explained.
- **Wind Forecasting:** This section looks at the forces that control the wind and introduces a variety of online resources that will improve your ability to predict wind speed and direction.
- **Wave Forecasting:** Wave heights can make all the difference between a pleasant trip and a wet, uncomfortable one. This section explains the dynamics of wave formation and the forces that sustain them. We will review a variety of forecasting resources to help you predict the size of the waves you will encounter.
- **Using Doppler Weather Radar:** Doppler weather radar has a lot to offer the weather-savvy boater. You'll learn how weather radar works (along with a few of its quirks), how to interpret the images, and how it can be used to monitor the development, intensity, and speed of approaching thunderstorms.
- **Understanding & Forecasting Thunderstorms:** Thunderstorms can quickly spoil an outing in many ways—strong winds, large waves, dangerous lightning or visibility-limiting rain. This section will examine the various types of thunderstorms and the ingredients that lead to their formation. Reduce your chances of a hair-raising or wind-swept encounter with a thunderstorm by learning to assess the potential for their development using readily available Internet resources.
- **Noteworthy Websites & Apps:** There are plenty of websites and apps focusing on marine weather forecasting. This section will introduce several of the most popular resources.
- **Weather Jeopardy** – an entertaining and educational way to review the materials presented in the seminar.

### Mark Thornton - Speaker Biography

Mark Thornton began sailing on the Great Lakes in the early 1990s and currently owns *Osprey*, a C&C 35. His interest in marine weather forecasting grew from his experiences cruising and racing on the lakes. Mark is 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.

His company, LakeErieWX LLC, provides marine weather education and forecasting resources to recreational boaters. In addition to serving as the race meteorologist for the Bell's Beer Bayview Race to Mackinac, Mark is a frequent speaker at boat shows and yacht clubs.