



CAPCA

Chesapeake Area Professional Captains Association
1009 Bay Ridge Avenue PMB 156
Annapolis, MD 21403
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Continuing Education Course Outline

Title of Course: CAPCA Basic Marine Weather

Date of Course: Saturday & Sunday, April 20 & 21, 2013 8:00am to 5:00pm

Course Location: Annapolis Elks Lodge #622, Edgewater, MD 21037

Course Instructor: Senior Meteorologist Lee S. Chesnea www.marineweatherbylee.com

Day One:

0800 – 0830: Welcome: Opening Statements & Introductions

0830 – 0900: Definitions of the Atmosphere, Weather, & Climate

0900 – 0945: Layers of the Atmosphere – Focusing on Where Most Weather Occurs

0945 – 1015: Role of the Sun and Radiation in Generating Land & Sea Breezes

1015 – 1045: Role of Moisture in the Atmosphere

1045 – 1200: Basic Concepts of Pressure and Wind

1200 – 1300: Lunch – Networking

1300 – 1345: Global Pressure & Wind Belts

1345 – 1430: Scales of Weather Systems

(Global Scale; Jet Streams; Synoptic Scale; Lows & Highs, Meso-Scale;
Squall lines, Micro Scale; Thunderstorms/Micro-Bursts/Waterspouts)

1430 – 1530: Air Masses and their impact on Synoptic Scale Weather

1530 – 1600: Map Discussion

(Marine Weather Analysis and Forecasts Charts. Homework: Read Storm &
Fronts Article.)

1600 – 1630: Review, Group Discussion & Networking

(Breaks will occur throughout the day per Instructor's discretion.)

Day Two:

- 0800 – 0830: Critical Discussion of the Marine Advisory and Warnings System**
(National Weather Service-(NWS), Small Craft Advisories (SCA), Gale, Storm, and Hurricane Force Warnings)
- 0830 – 1200: Synoptic Scale Weather Systems**
(Dominant middle latitude (30N/S-60N/S) migratory “Lows & Highs” and their associated “Synoptic Scale Features” such as Fronts (Cold, Warm, Occluded, & Stationary), and Troughs & Ridges & occasional Squall Lines)
- 1200 – 1300: Lunch – Networking**
- 1300 – 1430: How to Read Surface Weather Maps to Circumvent Heaviest Weather**
- 1430 – 1500: Scales of Weather Systems**
(Global Scale; Jet Streams; Synoptic Scale; Lows & Highs, Meso-Scale; Squall lines, Micro Scale; Thunderstorms/Micro-Bursts/Waterspouts)
- 1430 – 1500: Understanding the Importance of Documentation & Verification of Forecasts**
(Lee will take the class through the cultural process of comparing forecasts (48-96 hours surface pressure forecasts) to the most current surface pressure analysis charts, having the same valid date and time in order to make safety decisions and strategic planning.)
- 1500 – 1530: Live Weather Map Discussion**
(The last part of the afternoon session will be devoted to a live weather map discussion, (focusing surface pressure analyses and forecasts), in order to consolidate the learning of the past two days and to use this discussion as a road map for the attendees to follow up on the own.)
- 1530 – 1600: Review, Group Discussion & Networking**

(Breaks will occur throughout the day per Instructor’s discretion.)