

ASA 106:ADVANCED COASTAL CRUISING CURRICULUM

Pre-study is vital to the success of your course.

LESSON #1:

- ◆ review of sailboat parts
- ◆ what makes a sailboat go:
- ◆ upwind (review of suction cup and watermelon pit)
- ◆ downwind
- ◆ true and apparent wind
- ◆ power up and power down techniques: sail size and depth
- ◆ three ways to reduce heel: point of sail, draft, sail size
- ◆ causes of lee and weather helm, and correcting methods
- ◆ calculating center of effort (CE)
- ◆ use of the following controls to adjust sail shape(power):
 1. luff tension out haul
 2. jib fairleads leech line
 3. boom vang cunningha
 4. mainsheet and traveller backstay tension
 5. jib sheet tension
- ◆ review of proper mooring techniques

LESSON #2:

- ◆ review of upwind, downwind, heel reduction, power up, power down controls
- ◆ using barometer and/or thermometer to predict weather
- ◆ describe cirrostratus, altocumulus, stratocumulus, cumulonimbus and cumulus clouds and weather associated with each
- ◆ local thermal and prevailing winds
- ◆ sources of weather information
- ◆ sail selection in relation to weather
- ◆ use of heavy weather equipment
- ◆ centering weight to reduce pitch
- ◆ heavy weather upwind technique: feathering, powering through waves, stability
- ◆ heavy weather downwind technique: avoiding the round up
- ◆ heaving to
- ◆ prepare towing bridle, towing another vessel
- ◆ Distress signals listed in Boat Safety Guide
- ◆ remedial action if:

*vessel is dismasted

*vessel runs aground on a lee shore

*shroud or chainplate fails

*steerer fails

*rudder fails

- ◆ skipper's responsibilities in common courtesies and customs
- ◆ procedures for leaving and entering U.S. territorial waters. Coast Guard documentation.

LESSON #3 & #4:

- ◆ handling a vessel and remedial action under the following emergencies while under power:

*engine overheat: raw water filter, through-hull, impeller, FWC water supply

*engine fails in a crowded anchorage

*engine fails in a busy channel

- ◆ fuel tank capacity and range of boat selected, and what factors could affect the range of the boat
- ◆ water tank capacity on your boat and minimum water requirement per person
- ◆ describe appropriate corrective measures for:

*water in boat

*shaft packing gland leak

*rudder packing gland leak

- ◆ oil changes
- ◆ boat construction and quality standards
- ◆ maintenance checks to the following:

*hull--including underwater fittings

*electrolysis

*antifouling

*spars and rigging

*sails

*blisters

◆ describe the recommended methods of grounding for lightning:

*permanent installation

*temporary installation for those not so fitted

- ◆ navigating through a gillnet fishing fleet
- ◆ review of fog navigation procedures
- ◆ uses, capabilities and limitations of a portable yacht radar reflector
- ◆ taking a sounding by two different methods
- ◆ danger of overhead power lines
- ◆ act as helmsman while demonstrating the proper techniques of beating, reaching, running, tacking, jibing, heading up, bearing away and luffing in about 20K's of wind.
- ◆ work to weather using wind shifts, tides and local geography
- ◆ sail compass course with sails trimmed to best advantage
- ◆ correct methods and precautions when towing a dinghy
- ◆ securing the dinghy when at anchor
- ◆ tying to a mooring buoy
- ◆ anchor, weigh anchor, pick up and cast off moorings
- ◆ factors to be considered before allowing anyone to go swimming while the boat is at anchor
- ◆ methods of rafting at anchor, and possible problems when remaining rafted overnight
- ◆ securing with an anchor and a stern line to the shore or dock
- ◆ two methods of using a second anchor to reduce swinging
- ◆ recovering an anchor fouled on the bottom
- ◆ when and how to set an anchor watch
- ◆ carry out man overboard procedures at night
- ◆ stand a navigation watch during a passage of about 20 miles by night and 20 miles by day and demonstrate the Coastal Navigation skills.