

## NauticEd Practical Competency Training Syllabus Skipper Small Keelboat (to 26 ft)

### Instructions for the Training/Assessment Instructor

Train your student on a keelboat on the water using the syllabus on the following pages. Once you are confident that your student has gained understanding in ALL the areas below (vessel appropriate) and completed the online NauticEd Skipper Small Keelboat theory course, assess your student on a keelboat on the water using the SKIPPER – Practical Competency Assessment Rubrics. If they pass the assessment rubrics:

- ASK YOUR STUDENT FOR THEIR SECRET LOGBOOK CODE (not their password) AND THEIR LOGIN EMAIL ADDRESS. Their logbook code is self assigned and is in their “myprofile” section. They must have this filled in before you can gain access.
- Login to NauticEd.org with your instructor login email address and password.
- In the search box, enter the student’s email address and logbook code. Then check the Upgrade This Student’s Practical Competency box
- In the dropdown, check the Skipper Small Keelboat Verified Practical Competency box. Make additional notes about the student’s competency in the appropriate fields. If using the Rubrics Assessment App, upload their Rubric results into their logbook
- Their Sailing Certificate and Sailing Resume will then be instantly updated with your name as the Verified Practical Competency Instructor along with your School.
- Your student will then be given the opportunity to rate their experience with you. Results of this are sent to you, the school principle and NauticEd Admin.

**Note that: Via coded software rules:**

*(1) Instructors are NOT be able to issue a passing grade to a student until the instructor has passed the associated Skipper or Skipper Small Keelboat theory course and test and logged 100 days sailing on the water and are approved by NauticEd*

*(2) a practical competency passing grade WILL NOT be issued to the student by the software until the student has passed the associated Skipper Small Keelboat theory course and test.*

## NauticEd Practical Competency Training Syllabus Skipper Small Keelboat (to 25 ft, 7m)

NauticEd Student(s) \_\_\_\_\_ Date \_\_\_\_\_

Trained by NauticEd Qualified Instructor \_\_\_\_\_

### BOARDING

- Balance of boat during boarding
- Tripping hazard
- Safe step-on and step-off techniques
- Gear stowage

### SAILOR

- Appropriate Clothing and Foul Weather Gear
- Life jacket: Appropriate for activity, sized correctly, serviceable, fitted correctly, meets local regulations (e.g. approved by USCG for USA, MCA for U.K., Transport Canada or Canadian Coast Guard for Canada)
- Footwear and Accessories (gloves, sunglasses, sunscreen, etc...)
- Daysailing provisioning (water, snacks, fuel)
- Can present dangers and legal ramifications of alcohol and drug use

### NAVIGATION

- Navigation area discussion and check
- Can identify local dangers on the local chart
- Can identify day markers for return to marina
- Can understand local tides and currents identify tide and currents source information
- Weather Check

### BELOW DECKS

#### Discussion of and Identify locations of:

- Tool kit
- Flares
- Location of first aid kit
- Spare lines
- Owners Manual
- Emergency numbers
- Flashlight

#### Salon

- Closing Hatches under sail,
- Hatches and locking procedure
- CO2 sensors
- Bilge: Pump/high water alarm/AC bleed

#### Head

- No bleach in head
- Clean and wipe bowl after **every** outing
- Sea Cocks
- "Y" valve
- Only limited amount of paper and previously eaten items to be flushed
- Manual and Electric Head Pump Use
- Pump out

#### Galley

- Stove, igniting and bleeding LP lines for shut off
- Lock all drawers and cabinets before sailing
- Trash bin to be emptied
- Wipe down sink and countertops
- Sink drain sea cocks
- Fresh water system and valves

#### Engine

- 2 stroke v. 4 stroke
- Check oil level, spare oil, filling safety
- Check fuel level, filling safety
- Water pump and impeller
- Gear Shifting

#### Berths

- Hatches

#### Electric Panel

- AC/DC panel explanation
- Entertainment systems
- Speed and depth transducer location
- VHF. Perform simulated Mayday and Pan
- GPS devices, phone GPS
- Battery Locations. Switching procedures.
- Navigation lights and their uses

### ABOVE DECKS

#### Amidships - Discussion of and Identify locations of:

- Water fill port and refill instructions
- Anchor rode
- Shrouds / stays
- Dockline cleats and springlines
- Fender placement and attachment
- Describe appropriate means of pulling the boat closer to a dock including not using life lines or stanchions.

## Sail Control Lines:

- Halyards
- Outhaul lines
- Inhaul lines
- Boom vang
- Topping lift
- Cunningham/downhaul
- Reefing Lines
- Sheets
- Traveler lines
- Genaker/Spinaker equipment
- Halyard, outhaul, traveler lines stowage and appropriate knots

## Aft/cockpit

- Emergency lights,
- PFD's, and proper use
- Throw cushion,
- Life ring,
- Flashlight
- Sound making devices
- Shore power connect/disconnect
- Shore power reset switch
- Deck brush and cleaning supplies
- Engine start procedure including warm up
- Gear lever including neutral warm up button
- Engine shut off procedure
- High temperature alarms
- Manual bilge pump
- Spare tiller
- Life line clips
- Shore power disconnect procedure including turn off switches prior
- Tiller lock
- Wind Instruments
- Dock-line stowage and appropriate knots
- Boarding Ladder

## SAILING AND MANEUVERING

### SLIP DEPARTURE

- See that boat and crew are ready for departure and assigned to proper stations
- As Skipper, communicate departure plan taking into account wind and current directions and speed
- Give proper commands to cast off dock lines in appropriate order
- Demonstrate and discuss knowledge of various wind and current conditions in leaving the dock
- For sailing away from dock, raise sails appropriately and trim sails to safely leave the dock
- Use spring lines appropriately to power away from dock
- Retractable keel and rudder control as applicable when operating in shallow water
- Leave dock completely in control

### BOAT HANDLING UNDER POWER

- Start the engine observing safety procedures and checks
- Maneuver the boat to a full stop with the beam of the boat less than ½ of a boat length away from a mark without over shooting the mark with approaches from downwind and up wind
- Maneuver the boat in 3 full circles around a mark at 1500 rpm and 2500 rpm in forward
- Demonstrate handling of the tiller with two hands when maneuvering the boat in reverse
- Maneuver the boat in 3 full circles around a mark at 1500 rpm and 2500 rpm in reverse
- Maneuver the boat in a figure 8 pattern in forward, around two marks twice at 2000 rpm
- Maneuver the boat in a figure 8 pattern in reverse, around two marks twice at 2000 rpm
- Perform a "Standing Turn" maneuver, turning the boat 360° in a confined area using 1-2 second short bursts on the throttle to 2500 rpm.
- Back the boat in a straight line for 100 feet and stop the boat within ½ a boat length of a mark at the stern.
- Maneuver the boat to a full stop parallel to and 2 feet away from dock. Approach with dock to port and then starboard, without passing a given mark on the dock.
- Stop the engine observing safety procedures

### PARALLEL DOCKING

- Issue proper commands to crew to ready the boat for return including setting out fenders and cleat dock lines to stern and forward cleats
- Use correct approach based on wind and current direction and speeds
- Use slow speed, keeping boat under control
- Stop the boat the correct distance from dock
- Give proper commands for steeping ashore, securing dock lines
- Tie boat securely to dock to prevent excessive movement

### HOISTING, DOUSING, FURLING AND UNFURLING FURLING SAILS

- Hank on headsail / roller furling
- Hoist, set & douse sails correctly with boat in proper orientation to the wind
- Flaking and stowing sails
- Check stopper knots in sheets
- Lines neatly coiled, flaked, or stacked appropriately
- Explain extreme care when using winch on all lines – trace the lines with eyes to observe issues

### PROPER WINCH TECHNIQUES

- Safety – aware of high tension on halyards and sheets
- Proper wrapping techniques
- Removal/stowage of winch handle after use

## BOAT HANDLING UNDER SAIL / POINTS OF SAIL

- As helmsperson – use proper commands, select and maintain a given course
- As crew – give appropriate responses and set sails properly
- Able to point to the wind at various headings
- Sail and stop the boat head to wind within ½ a boat length of a mark abeam
- Demonstrate slowing and accelerating the boat with sails
- Demonstrate proper traveler use
- Demonstrate proper headsail fairlead track positioning: reefed and unreefed

As helmsperson and crew, demonstrate proper sail angles when:

- |   |   |
|---|---|
| <input type="checkbox"/> Close Hauled   | <input type="checkbox"/> Broad Reaching   |
| <input type="checkbox"/> Close Reaching | <input type="checkbox"/> Deep Broad Reach |
| <input type="checkbox"/> Beam Reaching  | <input type="checkbox"/> Running          |

## HEADING UP / BEARING AWAY

- As helmsperson – use proper command (“Heading up”), to sail closer to wind
- As crew – trim sails correctly
- As helmsperson – use proper command (“Bearing away”), sail further from wind
- As crew – ease sheets and trim sails correctly

## TACKING

- As helmsperson – use proper commands: “Ready about; Helm’s over”
- As helmsperson – select then sail a new heading holding a steady course
- As helmsperson – execute maneuver without overshooting new desired heading
- As crew – give proper responses (“Ready”), release sheets at proper time
- As crew – re-trim sheets correctly

## GYBING

- As helmsperson – use proper commands: “Prepare to Gybe [center main]; Gybe-ho”
- As helmsperson – select then sail a new heading with out over shooting new desired heading and maintain a steady course
- As crew – mainsheet control (center main; “Ready”)
- As crew – release sheets with proper timing
- As crew – re-trim sheets correctly
- As crew – cleat lazy jib sheet to ensure head sail does not wrap around head stay prior to gybe

## LUFFING UP, STOPPING, AND GETTING OUT OF IRONS

- As helmsperson, bring boat to a close reach
- As crew – ease the sheets to stop the boat (complete luff)
- As helmsperson and crew – Place the boat in irons (head to wind) and, using proper rudder control and backing of the sails, sail off in a predetermined direction
- As crew – sheet in at proper time

## STEERING / RULES OF THE ROAD

- Steer a compass course for 5 minutes within +/- 10 degrees of course at all times
- Sail a triangular course with one leg into wind requiring multiple tacks.
- Turn the boat through 360 degrees under sail using proper sail trim and commands; as crew and skipper
- Demonstrate knowledge of right of way rules (opposite tack, same tack, sail meeting power, power meeting power and overtaking)
- Proper lookout as skipper and as crew

## HEAVING-TO / REEFING

- Heave-to on starboard and get underway sailing normally again
- Properly reef the mainsail
- Properly reef the headsail
- Shake out reef while under control

## ANCHORING

- As helmsperson and crew – Drop anchor in water more than 10 feet in depth and reverse away using appropriate throttle.
- Friendly deployment of chain so as not to damage boat gelcoat
- As crew - Use proper hand signal communication
- As crew – set appropriate scope
- Raise anchor with boat ready for departure
- Use proper windlass techniques with engine. Do not pull boat to anchor with windlass. Use Engine.
- Proper retrieval techniques so as not to knock anchor against bow.

## LOCAL CONDITIONS

- As Skipper, point out local hazards including overhead wires, known shallows and underwater hazards
- Local sources of weather and tidal information
- Point out and correctly identify day marks
- Discuss local commercial shipping lanes and dangers

## CREW OVERBOARD RECOVERY

- Called COB, Appointed a Spotter, Deployed Flotation (Type IV PFD), organized appropriate throw lines
- Controlled the event and crew with confidence
- Methods with engine on
- Methods with engine off
- Used proper approach - head to wind
- Stopped the boat next to the MOB
- Discussed bringing an exhausted person aboard

## SLIP RETURN

- Towing – able to set up a tow line to tow and to be towed. Secure boom and objects.
- As crew – handle and arrange appropriate dock and spring lines
- As crew – set fenders at appropriate locations using correct knots
- As Skipper give appropriate commands to ready crew and dock lines for safe return
- Retractable keel and rudder control as applicable when operating in shallow water
- As Skipper – return boat to slip safely and under control under engine
- As Skipper – return boat to slip safely and under control under sail
- As crew – use proper cleat hitches when securing dock lines to boat
- Performed holding tank pump out
- Engine check and start
- Stow gear, lines, sails
- Electrical hook-up
- Off loading

## KNOTS

- |  |  |
|--|--|
| <input type="checkbox"/> Stow all lines according to the boat requirements | <input type="checkbox"/> Clove Hitch                   |
| <input type="checkbox"/> Bowline   | <input type="checkbox"/> Round Turn and 2 Half Hitches |
| <input type="checkbox"/> Figure 8 Knot                                     | <input type="checkbox"/> Square (Reef) Knot            |
| <input type="checkbox"/> Cleat Hitch                                       | <input type="checkbox"/> Sheet Bend                    |
| <input type="checkbox"/> Rolling Hitch                                     | <input type="checkbox"/> Tow warp and procedures       |

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## OPTIONAL NIGHT TIME SAILING ENDORSEMENT (Note: only check after a night sailing training experience)

- Able to identify significance and location of local lighted marks
- Able to identify correct return to dock using lighted marks
- Able to identify correct lighting on power boats, sailing vessels and locally operated commercial traffic
- Able to determine direction of movement based on light colors and positions of traffic
- Able to identify sufficient markers to determine positions of local hazards
- Able to correctly identify and describe flashing lighted marks and cross reference onto chart eg FI G (2+1) 6s
- Anchoring in dark – selecting safe spot with swing room
- General confidence and competence in night sailing ability

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