Washington Yacht Club WINDSURF INTERMEDIATE & SKIPPER TEST Place all answers on the Answer Sheet

only Score incorrect and still pass = 8 DO *NOT* MARK ON THIS TEST Revised 1/2003

SECTION I: HEAVY WEATHER SAILING Multiple Choice Questions (*there is only one best answer for each question*)

- 1. (2) Hazardous weather is defined in the By-Laws as:
 - a. a steady wind of 25 knots or higher.
 - b. 20 knots of wind with shifting higher gusts.
 - c. 30 knots in the Laser and 15 knots in the I-14.
 - d. A and B above.
 - e. none of the above.

2. (2) Where in approved waters and launches can you not launch from in hazardous **southerly** conditions?

- a. Sail Sand Point
- b. South Point of Magnuson Park

3. (2) When you are planning on taking out WYC equipment, you're required to check it out at http://checkout.washingtonyachtclub.org/:

- a. True
- b. False

4. (2) Assume you have just capsized a windsurf board:

- a. You should attempt to right the board by using the centerboard, or the rail.
- b. Swim ashore and get help.
- c. Lower sails and await rescue.
- 5. (2) When sailing, what does a gust look like?
 - a. A dark-colored spot on the water, with rapid rippling motion
 - b. A light-colored spot
- 6. (2) When non-planing on a run (sailing straight downwind), you should stand:
 - a. farther forward the stronger the wind blows.
 - b. farther back the stronger the wind blows.
 - c. over the universal joint

7. (1) If your boat is forced ashore far from your launch with no rescue barge available, what should you do?

a. Secure the equipment on the beach, out of the water, with board on the sail, and await rescue.b. Secure the equipment on the beach, out of the water, with board upside down (fin pointing up) on the sail, and call the yacht club at the WAC.

8. (3) When windsurfing in heavy winds you should:

a. Know the prevailing wind direction, current wind speed, expected forecast, and safe sailing boundaries

b. Rig an adequately sized sail for the conditions and type of sailing desired (sailing with the board planing vs non-planing)

c. Use this calculator to determine sail and board size for desired type of sailing: https://www.omnicalculator.com/sports/windsurfing

d. never leave a rigged sail on the beach without securing it with a board on top of the sail cloth or some other object preventing it from flipping due to the wind.

e. All of the above

9. (4) If the wind meter says the wind is 10 knots, is this reading a:

- a. Median
- b. Min
- c. Max
- 10. (4) If the wind meter has a reading of 11 knots, lulls of 5 knots, and gusts of 16 knots, and is predominantly a north or easterly, what rating do you need to sail in these conditions?
 - a. Novice
 - b. Intermediate
 - c. Skipper
 - d. Captain
 - e. Chief
 - f. Skipper, Captain, and Chief
- 11. (2) When rigging, windsurf boards should be placed:

a. On grass or astroturf, gently due to the board's delicate construction b. in the water, floating and untied

- 12. (3) What needs to be done before inserting the mast onto the universal joint is:
 - a. attach the uphaul onto the foot of the sail

b. Make sure that the mast, downhaul extension, and (sometimes) adjustable headcap are properly set so that there is roughly an inch (two fingers width) between the downhaul wheels and the bottom corner of the sail

c. ensure that the boom length is properly set, and that the outhaul is cleated and properly cleaned

d. All of the above

13. (3) When de-rigging:

a. The sail should be removed from the board in the water

b. The board should be taken onto land before the sail is, due to the sail not being able to float away like a buoyant board

c. The board and sail should be delicately and securely put on land, away from objects that could crack the board or rip the sail

d. All of the above

South Winds on Lake Washington

1. (2) What is the driver of strong south winds?

a. Storm fronts

B. Near daily thermals caused by temperature changes

2. (2) What times of the year do these conditions most commonly occur (two answers, one point each)?

a. Fall

b. Winter

c. Spring

d. Summer

3. (2) When the "Hazardous Weather" conditions exist, Skippers may sail:

a. in Union Bay if they wear adequate flotation.

- b. In all of Lake Washington
- c. only to the lee of the Evergreen Point Bridge if sailing in Lake Washington, launching from South point of Magnuson park or similarly appropriate launch; Greenlake, Lake Ballinger, the Hook Park in Hood River
 d. all of the above.

4. (2) On which side of the Evergreen Point Bridge should you sail in a strong SOUTH wind?

- a. North
- b. South
- c. East
- d. West

5. (2) In a strong SOUTH wind, what are conditions like at Sail Sand Point?

- a. Wind is gusty and shifts between south and west
- b. Water is flat
- c. Wind is pushing you away from shore
- d. Wind can jump quickly from novice to skipper conditions
- e. All of the above

6. (2) In a strong SOUTH wind, how far should you windsurf from shore?

a. Only as far as you can self-rescue (paddle) back

b. As far as the northerly sailing boundary

7. (2) In a strong SOUTH wind, and you are uncertain whether you can handle the conditions, what should you do?

a. Look at wind meter, look at water, determine the wind direction shifts and whether conditions are hazardous

b. Launch upwind, between the boat ramp closest to the south of the astroturf and the metal pilings

c. Windsurf within the teaching boundaries (easy self-recovery) distance, see if you rigged the right size sail and right board.

d. All of the above

8. (2) In a strong SOUTH wind, where in Magnuson Park is the preferred launch?

a. Sail Sand Point

b. South point of Magnuson Park

9. (2) In a strong SOUTH wind, when launching at Sail Sand Point, where is a Skipper allowed to sail (one best answer)?

a. Within self-rescue distance from shore, keeping in mind it may not be possible to self-rescue directly into the wind

b. Past the point at Magnuson Park

c. Next to OO Denny Park in Kirkland

10. (2) In a strong SOUTH wind, when launching at Sail Sand Point, and self-rescuing/paddling back, which direction is the easiest for travel?

a. Directly into the wind and rough water

b. Crosswind to the wind and rough water

11. (2) In a strong SOUTH wind, when launching at Sail Sand Point, and you end up downwind of the teaching boundaries and you're having trouble sailing upwind back to the beach, and you're self-rescue back to beach is not effective, where should you try sailing to or self-rescue/paddling to?

a. The boardwalk

b. The moored boat and paddle to the boardwalk

c. The land just to the north of the boardwalk and get the gear on land and walk back

d. All of the above

12. (2) In a strong SOUTH wind, when launching at Sail Sand Point, what is your lee shore?

a. Kirkland

b. Bellevue

c. the WAC

13. (2) In a strong south wind, if everything has gone wrong and you're way downwind, what beaches can you aim to land at to have an easier time unloading gear out of the water and calling for a ride back?

a. OO Denny Park

b. Matthew's Beach

c. All of the above

14. (2) Who is responsible for the sailor's safety and equipment recovery/loss/damage in the case of a washed-up situation?

a. The Sailor

b. The WYC

15. (2) Should you rely on Sail Sand Point rescuing you if you're on the water, and are they responsible what-so-ever for your safety?

a. No

b. Yes

16. (2) Can you call the WYC/UW Sailing Club and its members for help with equipment recovery?

a. Yes

b. No

17. (2) Read the southerly wind policies, supervised sailing policies, and southerly rescue policy in Appendix A. Did you read it?

a. Yes

b. No

18. (2) In a Southerly/Westerly wind at SSP, when must you have a skipper rating to go sailing?

a. When the wind is blowing 11 knots consistently or there are some whitecaps seen offshore

b. When the wind is blowing 15 knots consistently

c. when the wind is blowing 20 knots

19. (2) Good practice in the event of a fellow windsurfer struggling to have control of equipment and going downwind:

- a. Follow the supervised sailing rescue policies
- b. Have them attempt self-rescue
- c. Use a rope or SUP
- d. Call for help e. All of the above

North Winds on Lake Washington

- 1. (2) What is the driver of strong north winds?
- a. Near daily thermals caused by temperature changes
- b. Storm winds travelling through Snoqualmie Pass
- 2. (2) What times of the year do these north winds most commonly occur (circle two answers)?
 - a. Fall
 - b. Winter
 - c. Spring
 - d. Summer
- 3. (2) In a strong North wind, where in Magnuson Park is the preferred launch?
 - a. Sail Sand Point
 - b. South point of Magnuson Park
 - c. the WAC at UW
- 4. (2) In a strong North wind, what are the water conditions at Sail Sand Point?
 - a. Swell and rough water
 - b. Flat water
- 5. (2) In a strong North wind, what is the lee shore at Sail Sand Point?
 - a. The sea wall
 - b. NOAA
 - c. all of the above
- 6. (2) Is it okay to step foot on NOAA property through negligence or irresponsible behavior?
 - a. No, this may lead to rating suspension
 - b. Yes, I'm above the law

TRUE-FALSE: *For EACH of the following letters, answer True (T) or False (F)*

- 1. (4) If caught in a squall (strong gust), you should:
 - a. come up to a close reach and luff sails in the higher gusts.
 - b. turn downwind and run before the squall.
 - c. hike out in the harness, as necessary.
 - d. Drop the sail and let the swell take you downwind
- 2. (4) If a component of the sail breaks while sailing, you should:
 - a. Lie the sail over the board and self-rescue back to shore
 - b. Sail back with the sail upside down
 - c. Analyze the situation and attempt to sail the equipment back to shore
- 3. (5) What should you do to control a sailboard if its skeg or daggerboard is lost?
 - a. Carve the windward rail into the water with your foot
 - b. Carve the leeward rail into the water with your foot
- 4. (3) When rigging a sail in heavy weather, one should remember to:
 - a. The luff of the sail should be pointing to windward
 - b. After the sail is rigged, put a board on it to secure it
- 5. (4) All windsurf boards must be:
 - a. in sight of the launch by sunset.
 - b. back to shore by dark.
- 6. (7) Skippers may sail in:
 - a. Lake Washington, north of 520 bridge
 - b. Lake Union
 - c. Lake Chelan
 - d. Shilshole Bay
 - e. Green Lake
 - f. The Hook Park, Hood River, OR (with Chief's permission and safety talk)
 - g. Union Bay
 - h. Lake Wenatchee at University Beach
 - i. All skipper approved waters as laid out in Windsurf Policies Section B. 6. c.
- 7. (2) Infraction of the club By-Laws is grounds for suspension of a Skipper rating and/or membership.
- 8. (5) If you damage a board/sail/windsurf equipment or find one damaged, you should:
 - a. contact a WYC faculty advisor.
 - b. contact the Fleet Captain.
 - c. automatically place tape on the equipment with "Out-of-Service" sharpied on it (tape and sharpie

are in wetsuit storage tent) d. attempt to repair it if the repair is within your capabilities.

Section II: SEAMANSHIP AND CLUB POLICY Multiple Choice Questions (*there is only one best answer for each question*)

- 1. (2) About how long might a moderately dressed person immersed in Lake Washington in the winter be capable of self-assistance?
 - a. 3-20 minutes
 - b. 45 minutes
 - c. 10 hours
 - d. 2 hours
- 2. (2) You see the SSP boatyard gate open and unlocked, who is responsible for locking the gate if no other member is present and the open sailing counter is closed?
 - a. The last Skipper or Novice to leave.
 - b. The last Chief to leave.
 - c. The last Fleet Captain to leave.
 - d. Me.
- 3. (2) You see the WYC windsurf tent entry open and unzipped, who is responsible for zipping up the tent if no other member is present?
 - a. The last Skipper or Novice to leave.
 - b. The last Chief to leave.
 - c. The last Fleet Captain to leave.
 - d. Me.
- 4. (2) What should you do if you are going out and a rated club member will be joining you on the water on other equipment?
 - a. Ignore him.
 - b. If possible, help them get everything rigged correctly and help provide answers to any questions they may have.

- c. Refuse. The responsibility for taking him sailing resides with Chiefs and Instructors.
- 5. (2) What is the rule concerning the use of Coast Guard approved life vests?
 - a. They should be worn in heavy winds, otherwise not needed.
 - b. One per person.
 - c. One per boat.
 - d. Non-swimmers only need to have them in the boat.
- 6. (2) Non-swimmers and persons under 18 years of age who are not UW students are required to:
 - a. wear wetsuits while in club boats.
 - b. wear Coast Guard approved life vests while in club boats.
 - c. have throwable flotation at hand.
 - d. have Coast Guard approved life vests at hand in the boat.
- 7. (2) The general principle of right-of-way is that:
 - a. sailboats always have the right-of-way over power boats.
 - b. the least maneuverable boat has right-of-way.
 - c. the most maneuverable boat has right-of-way.
 - d. the starboard tack boat has right-of-way over the port tack.
- 8. (2) How does the overtaking rule apply to sailboats?
 - a. Sailboats always have the right-of-way.
 - b. Overtaking vessels have right-of-way.
 - c. Overtaking vessels always yield right-of-way.

- d. Overtaking vessels always pass to starboard.
- 9. (2) How is a stand-on vessel expected to act when being approached by a give-way vessel (well before a chance of collision)?
 - a. Maintain speed and course.
 - b. Avoid it.
 - c. Pass it to starboard.
 - d. Stop.
- 10. (2) When sailing in the Montlake ship canal, by the UW and WAC:
 - a. sailboats always have right-of-way.
 - b. vessels with limited maneuverability or that are constrained by draft have right-of-way.
 - c. if it is heavily congested, primarily with small motorized craft, you needn't yield right-of-way.
- 11. (2) How is a stand-on vessel expected to react when it becomes apparent that the give-way vessel is not changing course:
 - a. maintain course and speed.
 - b. swear violently and loudly.
 - c. make a large and obvious correction of course or speed to avoid a collision.
 - d. make small corrections to avoid collision.
 - e. swing back and forth to confuse the other boat.
- 12. (2) Who is responsible for the repair and general maintenance of club sailboats?
 - a. Fleet Captains.
 - b. Chiefs.

- c. Skippers.
- d. Novices and Intermediates.
- e. All members.
- 13. (2) What is the purpose of these teaching and ratings examination sailing boundaries below?
 - a. To keep windsurfers from sailing too far from shore when learning or getting tested
 - b. To prevent windsurfers from washing up at NOAA in Northerlies or in Kirkland on Southerlies
 - c. To keep a class running efficiently
 - d. To keep windsurfers safe
 - e. All of the above





- 14. Below, is this the sailing boundary for northerlies for Novice and Intermediate members for winds within their rating?
 - a. Yes
 - b. No



15. Below, is this the sailing boundary for southerlies for Novice and Intermediate sailors for winds within their rating?

- a. Yes
- b. No



- 16. (2) Below, at the Hook, who is allowed to sail on the **outside unsupervised**; and on the **inside unsupervised**?
 - a. Skipper and above; Novice and above
 - b. Novice and above; Unrated and above



SECTION III: SAIL TRIM AND HULL DYNAMICS Multiple Choice Questions (*there is only one best answer for each question*)

1. (1) Why is a daggerboard necessary on a windsurf board?

- a. To provide leverage for self-righting.
- b. To provide self-righting stability.
- c. To sail on an upwind tack
- d. To permit a sailboat to sail directly into the wind.
- 2. (1) What type of board is this?
 - a. Hybrid/Beginner Board
 - b. Longboard
 - c. Foilboard
 - d. Shortboard



- 3. (2) When putting mast into the sail:
 - a. The mast will be put in from the bottom of the sail
 - b. the headcap should be removed and mast is put in from the top of the sail
- 4. (2) Is this the correct order of operations for rigging a windsurf sail?

Unfurl sail, put in mast, mast extension and apply downhaul tension, (if a skinny mast) use a shim and clamp on boom, apply any remaining downhaul tension needed, apply outhaul

- a. True
- b. False
- 5. (1) If wrinkles perpendicular to the boom are present in the sail, you should:

- a. Apply further downhaul and outhaul
- b. Ignore them and go sailing regardless
- c. Attempt using a shorter boom
- 6. (3) Tensioning the downhaul and outhaul:
 - a. increases sail draft and moves it aft.
 - b. tensions the foot effectively.
 - c. adjusts mast rake.
 - d. decreases sail draft and moves it forward.

7. (3) If the wind is blowing 16 knots, you're 150 pounds and you're taking a beginner board out, what size sail should you take-out for non-planning ('beginner') sailing (https://www.omnicalculator.com/sports/windsurfing)

- $a. 5m^2$
- $b. 4m^2$
- $c.\; 3m^2$
- d. 2.6m²

8. (3) If you are rigging a $3.7m^2$. It has a luff of 364cm, and requires a boom of 155cm. The sail has a FIXED headcap (it isn't adjustable), what mast and mast extension setting do you need to rig this sail?

- a. 370cm mast, and 5cm mast extension
- b. 340cm mast with 24 cm mast extension

9. (3) What needs to be done to correct the rigging of the following sail?

a. Needs less outhaul and possibly more length on the adjustable headcap; more downhaul; shorter boom

b. Battens need tightening

c. Use a longer mast to more finely trim the sail, lengthen headcap, and use a longer boom



10. (3) If you are rigging a $3.7m^2$. It has a luff of 364cm, and requires a boom of 155cm. The sail has an ADJUSTABLE headcap), what mast and mast extension setting do you need to rig this sail? Note: the mast extension goes from 4cm to 28cm, it can't go to 0cm.

- a. 370cm mast, 4cm mast extension, lengthen the headcap by 10cm
- b. 340cm mast with 24 cm mast extension, keep the headcap at the tightest setting
- c. All of the above
- 11. (2) Where do the harness lines go on the boom?

a. Near the mast, and harness lines should be shoulder length apart

b. At the center of effort, just past where the window begins (usually), harness lines should be one fist width apart

c. Near the clew, with harness lines one fistwidth apart

12. (2) When harnessed in, and you feel that your back hand is working very hard compared to your front hand, which direction should you move the harness lines?

- a. Incrementally further back on the boom, towards back hand, until you feel arms working equally
- b. Further forward, towards front hand, until you feel arms working equally
- 13. (2) What should you do when putting a harness on your body?
 - a. Ensure that you have chosen a harness size that fits snug around your waist, or butt

b. Ensure that every aspect of the harness is as snug as possible, to ensure the hook doesn't move up and down or wiggle

c. All of the above

- 14. (2) Sailing 'backwinded' means sailing:
 - a. With the sail windward of the sailor
 - b. With the sail leeward of the sailor
- 15. (2) Putting away the daggerboard:
 - a. moves the center of lateral resistance aft, thereby allowing the board to plane if enough power is transferred from the sail, through the sailor, to the board
 - b. moves the center of lateral resistance forward, thereby decreasing lee helm or increasing weather helm.
 - c. none of the above.
- 16. (2) When going for a sail, you notice a fellow member rigging a boat wrong, you should:
 - a. remember to tell your friends about it at the HUB.
 - b. laugh and walk away.
 - c. see how long it takes before he/she gets it right.
 - d. stop and offer assistance, diplomatically.

17. (2) The class of boards that don't have a daggerboard AND require sinking the windward rail to go upwind are:

- a. Longboards.
- b. Shortboards.
- c. Hybrid boards.
- d. Foil boards.

18. (2) Wetsuits are required for windsurfing when?:

- a. December 1 February 28
- b. November 1 May 1
- c. December 1 March 31
- d. October 1 April 31

SECTION IV: STORAGE

1. (2) Do you acknowledge that the windsurf storage inside the tents is organized as presented in below images and that you will work to maintain this organization and fix things that are out of place?

- a. Yes
- b. No





Non-Beginner Booms

4m-5.9m Sails

Mast Extensions (in bin) Aux Parts (on right)

Under 4m Sails

2. (2) Where do the non-beginner booms go?

a. South sail storage tent, top shelf

b. North sail storage tent, top shelf

3. (2) If you forget what equipment goes where in the sail storage, are the shelves labeled as a guide?

a. Yes, look at the labels

b. No

4. (2) If you see another member putting equipment away in the wrong place, is it your responsibility to help show them where the equipment goes and how it should be stored?

a. Yes

b. No

5. (2) Do you acknowledge that it is each member's responsibility to keep our space clean and organized so that we can have a functioning windsurf club at SSP and to be respectful of SSP's boatyard?

a. Yes

b. No

6. (2) Do you acknowledge that the boards on the racks must be put back in the orientation as described by the labels in-order to maintain a workable storage space?

a. Yes

b. No

7. (2) Do you acknowledge that the wetsuits, lifejackets, and other accessories must be put back on their respective racks, hangars, buckets, irrespective of if they are wet?

a. Yes

b. No

Appendix A

SSP Southerly Wind Policies: (not directly applicable for northerly winds)

Southerly winds at SSP are often characterized by intense gusts and shifts in direction between the south and west. Southerly and westerly winds are offshore winds at SSP, which increase the risk of being blown offshore. To mitigate this risk, if steady winds are above 11 knots, or intermittent or frequent whitecaps are seen offshore towards Kirkland, the following policies must be adhered to:

- 1. Only skippers may windsurf unsupervised.
- 2. In Southerly winds, the 6th street wind meter in Kirkland should be used to determine true wind speed. Dependent on direction, this wind meter tends to be a few mph less than actual. SSP and WYC wind meters are not accurate gauges what-so-ever of southerly winds.
 - a. Another option is this king county buoy (is in meters per second, convert to knots): <u>https://green2.kingcounty.gov/lake-buoy/Meteorology.aspx?Buoy=Washington</u>
 - b. In the case that the wind meters are down, look for whitecaps offshore towards
- 3. Members attempting their skipper test must hold an intermediate rating already.
- 4. Members must stay within self-rescue distance of the SSP launch, keeping in mind that it may be impossible to self-rescue directly against the wind.
- 5. Members must carry a cell phone with them to call for help in the event they can't return to the SSP launch.
- Unsupervised members must communicate their sailing plan and backup sites for washing up in the #windsurfing channel on Discord. Backup sites include: 1) the west side of the SSP pier, 2) Matthews Beach Park, 3) OO Denny Park
- 7. Adequate sail size for skipper test must be found using this calculator: <u>https://www.omnicalculator.com/sports/windsurfing</u>
 - a. No sail over 4m can be used for skipper test.
 - b. It is much more appropriate to use a non-beginner sail in highwinds
- 8. If a sailor washes up far from the launch, they should tear down and secure their gear, and call the WYC or its members, or find another way to bring themselves and the equipment back to the launch.

Supervised Sailing Policies

- 1. Supervised sailing must adhere to the following policies:
 - a. Only a member with a skipper rating may supervise
 - b. The supervising member will conduct a chalk-talk with everyone to communicate the sailing boundaries, launching point, washup options, and self-rescuing in a direction at least 45 away from the wind to allow for progress back to shore. If possible, the supervisor may physically

demonstrate the teaching boundaries by providing a demo of sailing within them.



- c. Only one member will be allowed to sail at a time for testing.
- d. (Only on Southerlies) Windsurfer will be initially tied to a tether, manned by the supervisor on land until they have proven to be able to make consistent upwind progress. A series of tacks and maintaining in the sailing boundaries while making upwind progress would be sufficient. Ensure that the tether doesn't become a hazard for other people or vessels in the water.

Supervised Sailing RESCUE Policy

A. Attempt Self-Rescue:

- If a sailor is having difficulty getting back to shore, direct them (from shore) to drop their sail and self-rescue, paddling the equipment no closer than 45 degrees from the wind (in heavy wind). Maintain calm and clear with language.
- 2. Dictate (from shore) to sailer to rescue themselves to one of the nearest backup sites, point out what that might be to them. For example, the northern fishing docks by the northern boat ramp at SSP.

B. Use the Rope or SUP

- 3. Have any sailor currently being supervised return to the beach, pulling them in with the rope if necessary.
- 4. If sailor isn't able to make self-rescue progress back, and you would be able to sail their equipment back for them, and sailor seems capable of SUPing effectively, pursue the sailor on the rescue sup, provide them with the rescue SUP and have them paddle back no closer than 45 degrees from the wind (in heavy wind), while the rescuer sails their equipment back to the nearest backup site.

- 5. If sailor isn't able to make self-rescue progress back, and you would not be able to sail their equipment back for them due to equipment damage or fear you don't have the skill to sail equipment back, and the SSP open boating office is CLOSED so you cannot ask them for rescue:
 - a. <u>If you believe you can tow the sailor back with the rescue SUP, follow them on the SUP, throw</u> them the line and wrap it around the mast base a couple times and hold onto the end of the line.
 - b. If progress isn't possible with towing, attempt ejecting the sail off of the board and continue self-rescue attempt (or towing).
- C. Call for Help (Last Resort)
 - 6. Request a rescue from SSP, and apologize for the inconvenience.
 - 7. If all rescue measures fail or conditions are too dangerous to attempt a rescue on the SUP, call 911 and request a rescue. Have another sailor keep an eye on the rescue attempt from shore, to help 911 rescuers identify the location of sailors.
- D. Additional Notes
 - 8. Secure the equipment on the beach, out of the water, with board upside down (fin pointing up) on the sail, and call the yacht club at the WAC.