

# HAWAII DRAGON BOAT ASSOCIATION

## Steersperson Manual

Aloha and Welcome!

We believe that everyone who enjoys the living, playing and working in, near and on the water is family or 'OHANA. All who love the water and its activities are our brothers and sisters at heart; whether they live in Hawaii, Asia, North America, or any of the other continents!

<b>'O</b>	<b>'Oia'i'o</b>	<b>genuine, sincere, truth</b>
<b>H</b>	<b>Ha'aha'a</b>	<b>humility</b>
<b>A</b>	<b>Aloha</b>	<b>friendship, love</b>
<b>N</b>	<b>Na'au pono</b>	<b>right-minded, upright, just</b>
<b>A</b>	<b>Alaka'i</b>	<b>lead, guide, direct</b>

We believe in perpetuating and preserving the art of the Chinese dragon boat paddling and its cultural history. We are supportive of other ocean and water activities, such as Hawaiian canoe paddling, kayaking, rowing, etc. through personal growth and character development rooted in traditional Chinese and Hawaiian cultural values.

We expect all of our participants to respect our decisions of the HDBA, its administrators, race officials and other assistants. Everyone are volunteers and they commit their time and efforts to the dragon boat community.

We believe in having a friendly and fun competition. Respect each other and the paddling community – have fun in the sun paddling. Competition is on the water only.

Learning to steer a dragon boat proficiently comes with practice. An accomplished steersperson will be able to lean on the oar with full weight or lean backwards and be able to pull on the oar with full weight. The steersperson will be able to steer with a "light touch" to have the least amount of water resistance on the blade. The steersperson does not win the race; the steersperson creates the environment for the paddlers to win the race.

References: Sources taken from HDBA rules and regulations and with permission from Southern California Dragon Boat Association and Long Beach Dragon Boat Association via, Dr. Chen and from Electric Dragons Steering Manual; U.S. Coast Guard; State of Hawaii Department of Boating and Recreation (DOBAR); City and County of Honolulu Parks and Recreation; the Mayo Clinic and The Hawaiian Canoe, by Tommy Holmes.

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## Manual Overview

This steersperson guide provides essential information for anyone willing to take on the responsibility of steering a dragon boat in practice and in competition. Reading the manual carefully ensures an understanding of the boating rules and Hawaii Dragon Boat Association (HDBA) safety guidelines.

Rowers face backwards, they use oars, therefore they are rowers. Dragon boaters and canoes uses paddles, therefore they are paddlers. A canoe and a dragon boat is in the same class of boats; they are similar but not the same. Canoes are single seaters, dragon boats are double seaters. We (canoes and dragon boaters) do not row a dragon boat!

## Who Is HDBA/CM?

The Chinatown Merchants (CM) is a non-profit, Internal Revenue tax code 501(c)3 organization, as determined by the U.S. Internal Revenue Service, and recognized by the State of Hawaii. The CM has been promoting cultural awareness for over 30 years and and dragon boating (1996).

The Chinatown Merchants was formed to address the business issues and concerns of the merchants in Honolulu Chinatown. In the 1990's, there were less businesses owned and operated by the first generation Chinese merchants and therefore, the needs of the current owners have changed. Many of the businesses in Chinatown are currently owned and operated by local born Chinese or immigrants of other ethnic backgrounds and nationalities of the Philippines, Cambodia, Lao, Vietnam and Korea. The Chinatown Merchants as a civic organization has evolved to perpetuate the Chinese heritage, specifically the cultural and arts.

The Chinatown Merchants are the presenting organization for the Night In Chinatown Festival and Parade held during the Lunar New Year.

In 1996, the Chinatown Merchants formed the Hawaii Dragon Boat Association, which consists of members of the Chinatown Merchants, civic and community leaders, including but not limited to the Honolulu Chinese Jaycees and Chinese Chamber of Commerce of Hawaii.

The HDBA and nominated senior leaders (those who have participated as a team captain or leader) are voting members of the HDBA steering committee. They are responsible in developing the safety guidelines for the dragon boat teams. These guidelines may be found on the HDBA Dragon boat web site at [www.idealhawaii.com](http://www.idealhawaii.com).

## Overview of Safety Procedures and Responsibilities

### SAFETY FIRST!

#### Who Is in Charge?

You'll hear many people trying to give commands but did you know that the ultimate person to listen to is the steersperson? If you are the steersperson you're in charge of the boat – not the caller, the coach nor the captain, unless they are steering the boat.

While on the water, the steersperson for knowing the “rules on the road” and is responsible:

1. Not only for steering the boat in the right direction but also for the safe operation of the dragon boat and for the safety of everyone onboard.
2. This requires knowledge of boating safety and safe boating practices.
3. This requires knowing those who are crew members on the boat and their skills and abilities.
4. Develop a “local knowledge of your practice area – learn location of all buoys and shallow spots in the area you practice.
5. Stay clear of anchored boats. They will have an anchor line stretching forward off their bow and may have a stern line to shore or to a second anchor. (If they have one anchor line rather than two and it is breezy, their bow will point into the wind.)
6. Around dock or beach areas watch for boats moving in and out and give them ample clearance. Look up to see if any of the masts of sailboats are moving down a dock lane – if so give them ample clearance as they have limited steering capability when moving out of their dock.
7. If you are coming around the corner of a dock or beach with limited visibility stay out from the corner. Have your drummer or one of the stroke paddlers keep a lookout for approaching traffic.
8. You are required to maintain a proper lookout at all times. You are to determine if there is any risk of collision with another boat and take all action necessary to avoid such a collision.
9. You should stay to the right hand side when moving into or out of a practice area such as when moving up or down any channel or leaving the beach or dock. Adopt a counter clockwise route around your designated dragon boat practice area.
10. When you are passing a boat coming towards you, stay to the right hand side. Inside your course early so the other boat knows your intention.
11. When you are overtaking another boat stay well clear of the boat you are overtaking.
12. Any boat approaching you from the right hand side has the right of way – stay clear and yield to the other boat.
13. Always check over your shoulder to see that your course is clear before you turn or change to a new course heading.

14. Give larger boats (just about everyone) the right away. Do not assume that larger boats see you. Stay well clear and respect their course line. Again, take a predictable course heading and maintain a course that keeps you well clear of a collision course with other boats. A collision course is one in which the angle between you and the other boat remains constant and the distance between you is decreasing.

Prior to leaving the beach (or dock):

1. All crew members have signed the waiver form (and it is submitted to HDBA).
2. Each crew member will wear an appropriate sized PFD (U.S. Coast Guard Type I, II or III).
3. You need to be aware of any non-swimmers on your crew and assign a buddy to the non-swimmer in case of capsizes. Typically this would be his/her bench mate.
4. You need to be notified of any of the crew member(s) who has a medical condition of which you should be aware.
5. You must ensure that your team members have learned docking and loading procedures and unloading procedures when the boat is docked or beached at the shore.
6. Your team must recognize the importance of following all instructions quickly.
7. You are the eyes and ears of your crew while on the water; your instructions must be followed for its safety.
8. Each boat will have at least 2 bailers.
9. You may want to carry a whistle and/or air horn for emergencies at practices.
10. You may want to carry a cell phone for emergencies, but do not accept any incoming calls and do not expect the cell phone to work if it is wet or you are in the water!

**A STEERSPERSON ALWAYS NEEDS TO BE OBSERVANT OF SURROUNDINGS!**

Responsibilities – Steersperson Is Responsible for

- The safety of the crew
- The safety of the boat
- The safety of others on or in the water
- Willing to other people in the water or boaters who may be in distress and are in need of assistance
- The image of your team to the public
- The image of dragon boating to the our community in Hawaii and throughout the Dragon Boat community

Assume nothing!

- Do not assume everyone that enters the dragon boat has signed the waiver form
- Do not assume that there are bailers in the boat
- Do not assume each crew member will wear an appropriate size PFD
- Do not assume that every crew member will take proper care of the dragon boat and its equipment
- Do not assume all of your crew members know how to swim and/or able to tread water for at least 5 minutes
- Do not assume your crew members know the buddy system
- Do not assume your crew members know what they are doing
- Do not assume others on the water know what they are doing
- Do not assume others on the shore are watching or looking out for what you or others are doing on the water
- Do not ASSUME anything!

#### Management – Steersperson MUST

- Know how many people are on your boat
- Know who is on the boat; MAKE a list if you need to
- Know who knows how to swim and who doesn't
- Know if anyone has a pre-existing medical condition (pacemaker, severe asthma, etc.)
- Know what are the training plans for the team for that practice day (communicate with the team captain or coach in advance or before entering the boat)
- Know that every crew member will respect HDBA property and help in taking proper care and maintenance of the dragon boat and its equipment

#### Before Leaving Shore

- Make sure that all crew members have signed the waiver form (and it is submitted)
- Make sure the boat has bailers
- Check the condition of steering oar, oar bracket and boat in general; do not use faulty or unsafe equipment
- When standing in back of boat – make sure the area is clear of debris
- Verify that everyone on board is properly wearing an approved U.S. Coast Guard PFD (Type I, II or III)
- Brief the crew on safe behavior and what to do in the event of swamping/capsize|
- Be sure that the boat is loaded properly (max persons not exceeded, weight distributed properly)
- Load boats from back to front: steersperson, paddlers in reverse order (bench 10, bench 9, etc.), and the caller.

- When benches 10 through 5 are loaded, carefully push off the shore before the boat becomes too heavy.
- Do NOT load the seat benches which are not "in" the water.
- Load remaining benches and drummer.
- Do NOT use the paddles or steering oar to push off the dock or the beach.
- The boat should be floating and ready for back-paddling at the steersperson's command.
- Identify non-swimmers, people with significant medical conditions and novice paddlers
- No wave surfing with the dragon boats
- Cancel the session if the weather is inclement
- Take command of the boat – do not back away from the beach until you determine it is safe, then signal the drummer/caller by saying “PADDLES UP” and “TAKE IT AWAY”

### When Returning to the Shore

- Be prompt; other teams may be waiting for your boat
- Do not cut across heavy traffic to return to shore
- Check your boat at least two (2) boat lengths from the beach. This will serve two purposes: to allow space for departing boats to maneuver and help you avoid a collision, and to avoid damage to the hull bottoms caused by running the boat onto the beach
- Do NOT use the paddles or the steering oar to stop the boat against the dock or the beach
- After the drummer and first three benches exit the boat, pull the boat onto the beach before the remaining paddlers exit
- Follow HDBA procedures for cleaning and storing the boat or handing off the boat to another team

### Physical Skills – Steersperson MUST be able to

- Load the boat from the beach or dock
- Balance the boat (placing or moving paddlers to different seats communicate with the team captain that a balance weighted boat is a safe boat)
- Maintain a straight course at full racing speed with a full crew of 18-20 paddlers plus the drummer
- A good steersperson should be able to steer a figure eight course around two buoys at normal speed with a full crew, in both directions, or in the absence of buoys, steer a set course which includes both left and right angled turns
- Execute sideways maneuvers without going forward
- Turn the boat through 360° in both directions without the use of paddlers
- Maintain forward course in a straight line without the use of paddlers

- Propel the boat in reverse for 50m with the use of paddlers
- Execute an emergency stop (from racing speed to full stop)
- Execute safe approaches to a jetty/pontoon/docks in both calm and windy conditions
- Manage the unloading of team members
- Secure the boat and ensure all gear is put away correctly
- Be able to back into a dock or to the shore/beach

## Tips

- Always stand while steering; this gives the steersperson a better view of the area around the boat. Keep your knees slightly bent with one foot forward.
- Do NOT bounce or lunge with the boat.
- If you lower yourself into a crouch position/stance to reduce wind resistance or to raise the oar to decrease drag; be careful and know what you are doing.
- Practice in a safe area until you master the technique and only use it when it is SAFE to use it.
- To balance the boat; instruct all paddlers to sit with their outside hips to the gunwales. Weight affects the boat more in the middle, so swap a heavy paddler for a lighter one if necessary. An unbalanced boat is an unsafe boat.
- In high side wind, move heavier paddlers to the back to help reduce crabbing sideways (eliminate the boat drifting side ways at the back).
- Water shoes are highly recommended, but being barefoot is okay. NO flip-flops or slipper type shoes should be worn or should be allowed to be worn by the steersperson as they are easy to slip and slide while steering the boat.

## HDBA Steering Certification Requirements

### How to Become a Certified Steersperson in Hawaii

- Know the steering commands and dragon boat glossary
- Have at least 6 practice sessions of steering experience
- Have trained with one of the steering staff of the HDBA
- Signed off on having reviewed all written material regarding steering as provided by the HDBA (including this manual), and the HDBA orientation video (found on the [www.ladragonboat.com](http://www.ladragonboat.com) website)
- Taken and passed the written steering test
- Taken and passed the on-the-water portion of the steering test, which includes:
  - backing into a dock and beach/shore (taking no longer than 2 minutes)
  - keeping the boat straight for 30 seconds (calling commands if need be), while having someone on dock hold the tail of the boat or similarly in the water
  - having everyone power paddle away from the dock or from the shoreline (to make sure the steersperson can keep a straight line at full boat power)
  - doing a figure 8 or box formation around a buoy

The following safety violations will result in a HDBA-certified steersperson to lose Accreditation and Hawaii steering privileges:

- Allowing anyone on the boat without properly wearing an approved PFD
- Not properly displaying his/her assigned Certified Steersperson Badge or Apparel, when applicable
- Failing to check your boat when approaching the beach
- Not complying with the State of Hawaii, City and County of Honolulu or other Water Traffic Rules, e.g.
  - cutting the corner buoy in areas not permitted
  - steering on the wrong side of center channel/mid-channel buoys
  - racing in areas not designated for racing
  - inattentiveness or negligence on the water

A steersperson needs to renew his/her certification every year by taking a test administered by a Certifier. Steerspersons may be automatically certified provided that they did not take a season off. A Hawaii certification test may be waived at the discretion of the Certifier for steersperson(s) certified by other organizations.

**THE STEERSPERSON IS RESPONSIBLE FOR THE ENTIRE CREW and FOR FOLLOWING ALL SAFETY NAVIGATION AND RULES!**

## Knowing Your Boat: Champion and Hangzhou Olympic Dragon Boats

Different boat models because of their hull shapes or designs track differently than other boats. Some boats are easier to “lose” than others, but will be easier to “correct,” while other boat hulls track or stay straighter longer but when they do go out of position they are more difficult to correct its course.

Boat Characteristics – These dragon boats are specifically designed for racing. Though they have no skeg or keel, the hull design makes them steer easily and straight. These boats are highly directional with virtually no tendency for sideways slippage. It requires approximately 150’ circle to complete a 180-degree turn in the boats using the steering oar only. Using some additional techniques will reduce the turning arc to as little as one boat length. The one major characteristic of the boats that the steersperson must watch for is the boat’s tendency to continue turning once a turn has been initiated. This can easily be controlled by use of the steering oar to limit the turn while underway.

### 20-paddler boats

- Old design - these boats have a straighter hull design in the center of the boat. They also have a small center keel located just under the first seat.
- New design - these boats have a parabolic hull design which means they have no straight areas in the center of the boats.
- The boats are 42 feet in length, 3-1/2 feet in width, weigh approximately 550 pounds empty and between 3,800 and 4,000 pounds fully loaded.
- They have a pointed bow and stern, concave bottom, and angled, hard chines. A full crew comprises 20 paddlers (10 on each side), a steersperson, and drummer. Paddlers and the drummer sit on benches.
- The steersperson stands on a raised platform at the stern and steers with a 10 foot steering sweep that is 2 inches in diameter, has a 2 foot blade at one end and a T-handle at the other.
- The steering oar is held freely or lashed to a stainless steel U-bolt, which is affixed to the left side of the steering deck. Steering and boat control is accomplished by movement of the steering oar as well as directing commands to the paddlers such as to go forward, stop, hold water, pull to the left/right, reverse, and other variations.

Steering Oar Setup – The boats are designed for the steering oar to simply be supported in place within the opening of the aforementioned U-bolt. A beginning steersperson (or any steersperson negotiating rough water/wind conditions), may want to lash the steering oar in place at the U-bolt. Doing so provides the steersperson with some semblance of standing “fore and aft” support and aids in balancing. The

helmsman must pay very close attention when securing the steering oar to the boat. Lashing of the oar to the U-bolt must be done with secure knots. Secure, but also loose enough to provide sufficient steering oar movement. There will be no opportunity to “re-do” the lashing when underway.

#### 10-paddler boats

- These boats are designed much like the new 20 paddler boats with parabolic sides.
- Both designs have two keels running the length of the boat formed by a concave bottom to the hull.

View looking top down

Front of Boat

(diagram)

Back of boat

(diagram)

Turn Boat LEFT

(diagram)

Turn Boat RIGHT

(diagram)

LEFT Turn

To make a LEFT Turn

- Pull the oar into you or your chest
- Pull the oar handle into the boat

RIGHT Turn

To make a RIGHT Turn

- Push the oar away from you or your chest
- Push the oar handle away from the boat

Learning How to Steer

A trained steersperson is the most important member of any dragon boat crew. The steersperson is not only important to the success of a winning team, but more importantly, the steersperson is 100% responsible for the crew's safety on the water.

A good helmsman will have knowledge of boat commands, read wind and water conditions and be knowledgeable of how the boat reacts in certain conditions. The steersperson has the responsibility to make sure all navigation and safety rules are followed while on the water. A good steersperson will always ask questions prior to entering the boat.

With practice, this person will develop instincts of boat balance and create an environment of confidence within the boat. Written information regarding steering is helpful but nothing replaces hours of steering a boat in various weather and water conditions.

In race situations, it is not good enough that the steersperson is able to keep the boat straight; the steersperson must be able to bring the boat to the line in whatever wind and water conditions and make the maneuvers or commands to hold the boat on the line.

Be sure to conduct steering training and tests in a calm area away from other boat traffic. A certified steersperson must be next to the student and be able to take over the helm if necessary. We use 20-man boats for training steerspersons; the more stable the better.

### Lesson 1 - What to Do in the Event of a Capsize (huli)?

- Know your bench buddy and how many people are on the boat.
- Do not grab, hug, or embrace any person next to you as this might result in drowning the person. Keep an arm's length away from each other and the boat until everyone is calm. Trust in your PFD.
- (Paddlers) Immediately after surfacing, check to see if your partner is present and okay.
- Front pair checks on the drummer, back pair checks on the steersman.
- Count off from the front.
- The next step is to right the boat.
- Remember the commands come from the steersman only (or if incapacitated, the captain of the boat, which could be the drummer).

### In the Absence of a Safety Boat

- Move the weaker swimmers to the nose and tail.
- Pull the steering oar fully aft so the handle is at the steering oar arm (and therefore out of the way).
- Don't worry about rescuing anything floating away, unless it is a bailer. Anything else can be gathered up later.
- If it is windy, use the wind to help you turn the boat.
- As the boat comes over everyone must be careful to keep clear as it rolls.
- Once the boat is the right way up and floating at the surface, get two or three light paddlers into the boat and start bailing water.
- As the boat rises more paddlers can climb in (in pairs as the rest of the crew hold the boat stable).
- The boat should be clear and floating in about 15 minutes.
- The last paddlers in the water may need to be helped in by paddlers already on board.
- If you are unable to turn the boat over, or cannot bail out enough water to get all of the crew in the boat, you may try to swim the boat ashore (although this will be difficult).
  - Line up paddlers next to the boat (as if they were paddling), have them hold on the gunnels, and pull the boat to the nearest and safest shore.
  - If there is not enough room for everyone to remain as one group, divide into two groups.
  - The steersperson should stay with the boat and the captain stays with the remaining swimmers.

- Count off again when you reach shore.
- If you are unable to right the boat and are too far away from shore, try to signal for help. If no one is around, remember to conserve energy and only signal for help when someone is nearby. Use the air horn and/or whistle.

## Lesson 2 – Body Positioning, Going in a Straight Line

### Stance:

To steer well you must learn to establish a stable stance so you can withstand front- - and-back, as well as side-to-side forces caused by the current and wind. This helps you to utilize the whole steering platform to maximize the range of motion you have with the steering oar.

1. Feet should be at least shoulder-width apart or more to give stability; both fore (front) and aft (back) and side to side.
2. Keep one foot forward; typically, keep your other foot as far aft as possible; usually right foot ahead of the left foot.
3. Knees should be slightly bent and flexible, back straight, hips and shoulders square, except when turning the boat.
4. Try to keep the legs relaxed as you get your “boat balance” or “sea legs”.
5. Left foot should be against the left side as much as possible.
6. Left knee or shin can be resting against the left gunwale or left side to provide extra stability.
7. Right foot is the “pressure foot” and will help in determining which ever direction you want the boat to go or turn you want to make is the side you want to move your right foot towards.
  - a. Right turns – your right foot moves to the right side to brace the boat.
  - b. Left turns – your right foot will go the left side to apply pressure on that side of the boat.

### Hands and Arms:

Having a good hand and arm position on the steering oar will maintain proper leverage on the oar required to steer without causing unnecessary force and exertion to the steersperson.

1. Hold the "tee" or “T-handle” with the right hand as a paddle, left hand on shaft near your left hip, around mid-shaft.
2. The U-bolt should be positioned one-third of the way up the steering oar.
3. The blade should be vertical and at least halfway below the waterline.
4. Right hand should be near chest height but will depend on the oar and other factors.

## Stand Up:

To see where you are going, what your paddlers are doing and to have complete control of your boat, it is best to remain standing; do not sit down to steer – you will not have the visibility to see ahead and or around you.

1. Stand-up straight or at least comfortably straight as possible with the hips squared with right foot forward. Many first time steerspersons tend to crouch down because they are worried about losing balance or falling out.
2. If the torso (body) and hips face forward, it will give greater stability side-to-side and is important for pushing or pulling the steering oar.
3. If the torso is squared, the steering oar will be closer to the hip and the steering shaft can rest on the hip. This allows the steersperson to push the steering oar out with your hip (instead of using just the arms) to make a right turn which is a common problem for new steerspersons.

## Balancing the boat:

The steersperson must have the knowledge of how to move paddlers around to improve the balance of the boat. Having the boat off-balance can seriously affect how the boat tracks. Side-to-side and front-to-back weight distribution must be taken into consideration when setting up the boat.

1. With paddlers in "stand by" position, place forward (right) foot slightly left or right as required to balance the weight.
2. Keep left foot aft and against the left side of the boat.
3. Communicate with the team captain/coach to balance the boat (paddler seat position based upon weight).

## Neutral position:

There is an angle of the steering oar blade that has equal water pressure on both planes of the blade while the boat is moving. This is the neutral position. Most steerspersons think that the steering oar needs to be over to left side since the steering column is mounted over to that side. Not true, there is "neutral" position with the steering handle inside the boat and all angles in between.

1. Facing the front, the "T-handle" will be rotated to about 1 o'clock to 2 o'clock for neutral.
2. The T-handle is NOT straight up or down or 12 o'clock position for neutral because the steering column is mounted at the stern on the left side of the boat.
3. By turning the T-handle slightly back and forth while the boat is running straight, you will feel the pressure on the steering oar on both sides evenly. This is neutral.

Know how to use the sweep:

1. The steering oar or sweep is always located at the left side of a dragon boat and usually behind the tenth paddling row (row 10).
2. This type of maneuver is done when the boat is stationary or moving very slowly.
  - a. With the boat is NOT moving forward or without any person paddling, instruct the student to sweep (pull) the oar handle towards the boat to spin left, (push) away from the boat to turn right.
  - b. Be able to spin boat 360 degrees counter-clockwise, then clock-wise while visually checking the bow and stern/oar as well as looking out for traffic and other obstacles and dangers.
    - i. For counter-clockwise spin – the steering oar starts close to the stern or tail of the boat and sweeps out or away from the boat.
    - ii. For a clock-wise spin – the steering oar starts away from the boat and pulls water towards the boat. For this maneuver, the steering oar needs to be pushed down through the “ring” attached to the boat otherwise the handle of the oar will hit the last paddler on the left.
    - iii. The deeper the steering oar is in the water, the more resistance on the blade.
  - c. Use the oar to stop the turning of the boat.
  - d. Do not shift weight and unbalance the boat.
3. Next have the student start the boat moving forward.
  - a. Have the student maintain a straight course while 10-12 of the paddlers move the boat forward at normal speed.
  - b. Make sure the student uses the push/pull method and keeps the oar blade properly submerged while maintaining the correct footing and hand position.
  - c. Have the student make small corrections to maintain a straight course.
  - d. Have the student use a landmark and the bow to maintain their orientation along a straight line.
  - e. Once the steersperson gets a feel for keeping the boat straight, the rest of the crew can join in.

### Lesson 3 – Turning

When the student can maintain a straight line course and safely stop the boat, have the student execute a left turn at moderate to slow speed. The student will need to learn to determine the neutral position of the oar blade with the handle in various positions. When turning under power it is important to make wide turns, this prevents the boat from rocking. Make sure student stops the turn and avoids oversteering (or overturning) the boat. After executing a couple of left turns, execute right turns. The student should develop a “feel” for the boat’s heading and the input and feedback of the steering oar to maintain a desired course.

Technical explanation: The steering oar is mounted on the left side of the boat and the boat glides through the water. The plane of the blade facing the steersperson is the “inside of the blade” and the portion facing away from the steersperson is the “outside of the blade”. Any water pressure on the “inside of the blade” will cause the tail of the boat to shift left and therefore the boat will go right. This is done by either pushing the handle out and/or turning the top of the “t-handle” towards the steersperson. Vice-versa for the other direction.

#### Steering methods:

1. Push and Pull
  - a. Left turn - From neutral position, pull the “t-handle” towards the steerer. Move right foot to the left side to get better leverage.
  - b. Right turn – From neutral position, push the “t-handle” out. Move right foot to the right side as much as possible to push to that side.
  - c. This method is often used for hard turns and emergency maneuvers.
2. Handle rotation
  - a. Left turn – From neutral position, rotate away (counter-clockwise) from the steersperson the top part of the “t-handle”.
  - b. Right turn – From neutral position, rotate towards (clockwise) the steersperson the top part of the “t-handle”.
  - c. Thumb gauge – whichever the right thumb points is the direction the boat will often turn to
    - i. Left turn – with the right hand on the “t-handle” and the thumb at the top; if the thumb rotates counter-clockwise, boat will turn left.
    - ii. Right turn – with the right hand on the “t-handle” and the thumb at the top; if the thumb rotates clock-wise, boat will turn right.
  - d. This method is often used for fine adjustments and minimizes steering oar resistance. Use often in races
3. Combination of Push/Pull and Handle Rotation
  - a. Most common method used during race situations to make turns and corrections.
  - b. Footwork and placement of hand on “t-handle” is the same.

#### Key points to remember:

1. For a counter-clockwise spin, the steering oar blade starts close to the tail of the boat and sweeps out away from the boat.
2. For a clockwise spin, the steering oar blade starts away from the boat and should pull water towards the boat. For this maneuver, the steering oar needs to be pushed down through the U-bolt; otherwise the handle of the oar will hit the last paddler on the left.
3. The deeper the steering oar is in the water, the more resistance on the blade.
4. As you change from a right turn to left turn, the steering oar shaft will bounce around the steering column / u-bolt / rope. This is normal.
5. The pressure on the blade will change from one plane to the other plane (or right side to left side or vice-versa) and it is very easy for you (the steers) to

- get knocked off the boat if you are not ready for that pressure shift or if you have “over-steered”.
6. The position of the right foot will give you stability for the pressure changes from one side of the steering blade to the other.
  7. The right foot is placed to whichever side you are trying to move the boat.
  8. The deeper the steering oar is in the water, the less control you will have to maneuver the steering oar. It may feel like it is “stuck” or “jammed.”
  9. Recommend the steering oar to be half to fully submerged but not any more deeper. The angle of the steering oar will be about 45 degrees or less. Tilt the handle downwards and there will be less blade in the water.

To make sharp turns have your paddlers stop paddling. This is when you have to work –

1. For a left turn, the steering oar blade starts close to the tail of the boat and sweeps out away from the boat with the handle of the steering oar coming towards you.
2. For a right turn, the steering oar blade starts away from the boat and pulls water towards the boat the handle of the steering oar pulls away from you.

You can also have your paddlers help by having them chum or draw water, or by making one side paddle forward while the other paddles backwards. Remember this may make your team more tired but it will help you develop to be a better steersperson as well.

#### Lesson 4 – Steering Backwards

When approaching the dock or beach, it is safest to fully check the momentum of the boat a short distance from a dock or the beach then call for the minimum strokes to reach the dock or beach; either forward or reverse.

1. If the boat is moving forward, to stop the boat; call CHECK THE BOAT or HOLD THE BOAT.
2. Check for clearance and point the stern in the direction desired.
3. Call for back paddling; call PREPARE TO REVERSE, followed by REVERSE.
4. Keep the speed low and make small corrections to prevent the oar from locking in its bracket.
5. Keep the oar blade partially submerged in the water and have a secure grip on the oar and stable footing.
6. When backing up – go slow to
7. Be aware of the oar blade hitting the bottom of the shore or dock.
8. Stop the boat if student loses control.
9. Stop the boat before it collides with the dock or other object.

## Lesson 5 – Fine Tuning

1. Learn to point the bow into the wind or water current to maintain the boat's position.
  - a. Use flags, trees, sails/flags of boats and the water surface to help determine wind direction.
  - b. Allow for drift when positioning a boat for a race.
  - c. Point the bow or stern perpendicular to wakes and waves to minimize impact and disturbing the boat.
2. Make left and right turns at regular speed including sharp and gradual turns. Learn to move forward to allow the sweep or steering oar to pass behind the student to make sharp left turns.
3. Remember that wind and boat wake can cause a steersperson to feel uneasy.
4. The best way to handle oncoming boat wake is to turn the front of the boat into the wake, so that the front end hits the wake first and the boat moves up and down instead of side to side.
5. Facing sideways to a series of waves is a situation the helmsman must avoid.
6. The closer to 90 degrees (head-on) that the boat meets these waves the better.

### To Perfect Your Technique, Practice

- Figure Eight
- Draw Left
- Draw Right
- Back Paddle
- Paddles on the Water
- Rotate Left
- Rotate Right

### Executing Commands and Commanding the Boat:

#### SAFETY IS YOUR FIRST PRIORITY.

- Do not coach, count strokes or perform any other tasks while steering.
- Scan the area in all directions to look for other water traffic or obstacles.
- Be aware of regular traffic patterns:
  - Rowers like to be close to the shore to have a reference since they face backwards. Note: Rowers face backwards, they use oars, therefore they are rowers. Dragon boaters uses paddles, therefore they are paddlers. You do not row a dragon boat!
  - Swimmers are hardest to see and are usually close to shore.

- Sailboats have right of way and it's harder to predict their motion so give them lots of room.
- Kayakers typically are unfamiliar with their surroundings and the water safety rules. Best to give them plenty of room, slow down and give them verbal (but friendly) warnings of your intentions.
- Motor boats will leave a wake. Be careful of the wake. Remain a safe distance from the motorized boats.
- Give verbal warnings and hand signals to other boats when needed.
- When approaching boats head on and it's difficult to determine which direction they will go, point the bow in the direction you want to go to signal your intentions.
- Project your voice with authority to the front of the boat. Physically point your mouth towards the front of the boat. If you give a command while your head is turned away from the front of the boat most paddlers won't hear you.
- Use the commands and wording consistently.
- Don't wait too long to give a command; paddlers may not be ready and may delay executing the command.
- If time permits, give a short explanation of your intention to the boat: "Let's move away from the dock..." "We're drifting towards shore..." followed by your command.
- The helmsman must be aware of the factors of wind, waves and current, and know how to react to them. Wind will require close attention to steering to maintain course. Waves and boat wakes must be anticipated and taken "on angle" (no less than 45 degrees).
- Do NOT allow the boat to wallow in the troughs between waves can cause it to take on water or capsize. Facing sideways to a series of oncoming waves is a situation the steersperson must avoid. This is important. All IDBF boats have very low freeboard. They can swamp easily. The worst rough-water situation for a steersperson is dealing with large, following swells or "surprise" wakes from passing boats. The closer to 90 degrees that these type waves meet the stern or bow, the better. If taken on a wide angle, the boat will tend to slough-off the wave crests and slip sideways into the troughs. Being sideways in a wave trough is a place you don't want to be. The steersperson must also be constantly vigilant of oncoming as well as following wakes and waves and plan in advance for taking appropriate steering actions. Other factors to watch for include current, rip tides, and dead or live water conditions...all require appropriate steering responses to maintain course and the safety of the boat.

Remember to smile, wave and be friendly to all other people on the water. It is better to establish goodwill than to make up for a poor reputation.

## **Steering in Races**

## Steersperson's Job During Races

- Read the rules and regulations for the festival ([www.hawaiidragonboat.com](http://www.hawaiidragonboat.com)). Know what your specific responsibilities are in steering your boat to the boat staging area, start line, at the start, during the race, at the finish, and on and off the dock.
- Know the course and water conditions before going out to race.
- Observe a start or two, listening to the starters instructions, observing the start area, wind and current conditions prior to your race
- Know where the crew marshalling area is and ensure that your team is there in plenty of time
- Know your boat number which will also be the lane you are racing in.
- When lining up to go down to your boat, be in front of the line so you can load first, along with your drummer.
- In the festival your dragon boat will likely have a dragonhead and tail at the front and back. Allow extra clearance for these when moving in and out of the beach or dock and stay clear of other boats.
- Get the paddlers together and positioned at the starting line in quick, orderly fashion.
- Pay strict attention to the starting officials and make sure the crew is doing so as well.
- Get to the starting line quickly, but stopping the boat as the racing teams go by (to reduce wake for nearby competing lanes).
- Maneuver the boat as requested by officials prior to the start.
- Repeat the ATTENTION and READY calls by the starting official if necessary.
- Once the race has started, steer the boat in the straightest possible course to the finish line. Use a stationary object past the finish line, not the buoys, as an aiming point.
- While in the race your attention is outside the boat, pick the line to steer and hold it steady. Do not get involved in looking at your crew – this distracts you from your job of keeping the boat straight and true down the race course.
- There will be a safety water patrol boat following the dragon boats down the course. Obey all instructions directed at your boat; they will call your boat by boat number. i.e. “Boat Two, Move Left” – If this is called to your boat, make a gradual course correction to your left and then straighten.
- Be sure to make any course corrections gradually – over steering can cause problems and collisions. This is why your full attention is required outside the boat and on the course you are steering – so minor changes can be made as you move down the course.
- When one boat is in a position to overtake another boat during a race, it is the

duty of the boat overtaking to keep clear of the boat being overtaken at all times; similarly, the boat being overtaken must not alter course to make difficulties for the overtaking boat or boats.

- If there is a risk of collision because you or another boat is off course or for any other reason then call “Hold the Boat” (crews are responsible for taking all action necessary to avoid colliding and minimizing impact with other boats and crews). This is a fun sport, not a life and death duel – always keep the safety of your crew and that of other boats uppermost in your mind.
- If the referee boat calls you to “Hold the Boat” do so at once – do not delay to question why – they can see more of the race course than you can.
- Should a race be stopped in progress, the Referees will display a red flag along with REPEATED blasts from horns, whistles or other noisemakers and give verbal instructions through a loud hailer.
- On the course remember to stay cool if you’re alongside another boat. Steer a steady course in your lane. It can seem crowded and noisy on the race course – don’t let the noise and proximity of other boats distract you for a moment from your task to steer a straight and safe course.
- Try to minimize use of the steering oar during races as it creates drag and can reduce overall boat speed, but only do this if you have mastered the skill during regular practice times. A race is not a good time to try something new!

### Tips for Steering at our Tournament

1. When racing, think in terms of tweaking the steering with minor adjustments as opposed to a more heavy-handed approach. A very beneficial technique during races is to steer only by twisting the steering oar one-quarter turn to either side. At speed, this will have the same effect as pushing the oar to either side, with far less induced drag.
2. Keeping Straight – When underway and at speed, pick a point to steer toward that is more ahead of the boat. Line up the front of the boat with the selected point and do not let the bow veer off that point by more than 6 inches to either side.
3. Turning – Remember to turn two to three boat lengths after the start line; this allows for wide turns and prevents your team from needing to back up to the start line. Or if you need to back into dock or at the beach (like at the Hawaii Dragon Boat Festival), try not to turn too far ahead of the beach, as you will wear out your crew making them back paddle.
4. Quickly have the crew members load into the boat.
5. Quickly bring your boat to the start line.
6. Be sure you are familiar with all the rules and regulations so that you will be well prepared for the festival you are attending.

7. Have a safe and enjoyable time on the water. Beaching/Docking –In order to dock the boat properly, first have the full attention of all of your paddlers.
  - If docking, then make sure the boat comes parallel to the dock. To do this aim the front of the boat at the docks and then paddle steer the boat into the dock, making sure that the head and/or tail of the dragon boat hits the dock first. You can have your paddlers help by moving the boat back and forward.
  - If beaching, then make sure the boats heads perpendicular to the beach or shore. Do NOT allow the boat to hit the beach or sand. Stop prior to the shore and have the front seats exit the boat and hold the boat steady and straight in the water and allow the seats exit; front to back. Hold the boat for the next team to enter or until the boat is transferred to the next team that is entering the boat; rear seats first.
8. Steerspersons will be responsible to line-up their boat on the right side of the starting buoy.
9. Remain in your designated lane.
10. If you need to gain the attention of the course officials, ie. paddler overboard, emergency distress, etc. then have your paddlers raise or lift their paddles upwards vertically, up in the air.
11. If a race is stopped in progress, follow the instructions of the referees. A re-race may be called. This will require you to paddle back to the boat staging area and wait in the boat staging area while the next race is run, and then your heat will be re-raced.
12. If your steering oar or transom (steering brace) breaks, immediately call “Hold the Boat” and bring your boat to a stop. If you are in a race await assistance and direction from the referee’s boat.
13. If a crew member’s paddle breaks, you must continue to race and be prepared to adjust course. You should have a spare paddle aboard and the crew should pass the paddle to the person who needs it. You should maintain your focus outside the boat – do not be distracted by what is happening in the boat in an instance such as this – your job is the straight course line.
14. Only the flag catcher may catch the flag.
15. If you miss the flag, you may stop, turn and/or reverse the boat in order for the flag catcher to grab the flag.
16. Instruct the flag catcher to drop the flag into the water after having lifted the flag catcher has secured the flag and lifted it up high in the air.
17. Direct all teams to assist in holding the boat or serve as boat tenders for their team and the next team that is loading.

## Hawaii Water Traffic Rules

- Two-way traffic patterns are established by the U.S. Coast Guard.
- All traffic moves to the right hand side of the waterway, just like street driving. An exception to this rule is if the scullers (rowers) or canoes or other boats

- are racing dragon boats are to hug the swim buoys on the left and stay away from the racing boats.
- Dragon boats should always keep to the right of the buoy line (i.e. keep the buoy line on your left). Don't go the wrong way unless necessary to avoid collision.
  - Develop a "local knowledge of your practice area – learn location of all buoys and shallow spots in the area you practice.
  - Stay clear of anchored boats. They will have an anchor line stretching forward off their bow and may have a stern line to shore or to a second anchor. (If they have one anchor line rather than two and it is breezy, their bow will point into the wind.)
  - Around dock or beach areas watch for boats moving in and out and give them ample clearance. Look up to see if any of the masts of sailboats are moving down a dock lane – if so give them ample clearance as they have limited steering capability when moving out of their dock.
  - If you are coming around the corner of a dock or beach with limited visibility stay out from the corner. Have your drummer or one of the stroke paddlers keep a lookout for approaching traffic.
  - Do not assume that larger boats see you. Give larger boats the right-of-way (just about every boat). Stay well clear and respect their course line. Again, take a predictable course heading and maintain a course that keeps you well clear of a collision course with other boats. A collision course is one in which the angle between you and the other boat remains constant and the distance between you is decreasing.
  - Channel marker buoys define the traffic lanes and include:
    - Green can buoys that mark the left side of the channel when boats/ships are returning to port.
    - Red-striped spherical buoys that mark the center of the channel
    - Red nun buoys that mark the right side of the channel when boat/ships are returning to port. "Red, Right, Returning" is a saying to help remember which side of the channel the red buoys should be when boats/ships are returning from seaward to a port of harbor.
  - Inner or shoreline waters are off limits to dragon boats. This is for use by the recreational swimmers.
  - We do not have the right to stop at private docks, unless it is an emergency. If you do need to stop at a dock, please be considerate and polite to the authorized dock users.
  - Five short whistle blasts alert other boats to a dangerous situation.
  - When approaching at right angles and at risk of a collision, give-way or yield to the boat ahead and to the right of you. You must direct your course to the right and pass behind the other boat. If necessary you should slow, stop or back paddle. Never turn your boat to the left during a crossing situation. Doing so may result in a serious collision.
  - When overtaking another vessel, give right-of-way and keep clear. When a dragon boat is approaching a slower boat (e.g. kayaks, shells) and wishes to pass, first make sure there is safe open water to pass, slow the dragon boat

down or stop (give right-of-way), alert the people in the other boat of your intentions and then safely take the widest clearance possible to pass (keep clear). Many of these people are vacationers and are not adept at maneuvering their boats. Remember that we have a responsibility to our Hawaii community to help keep its waters safe.

- Least maneuverable craft has the right-of-way. When in doubt, give-way!
- Dragon boats give way to yachts, sailboats, and large powered vessels.
- Boats propelled by paddles usually have the right-of-way over motor boats, because they are harder to maneuver – but don't challenge them!
- Do not to race in front of boat harbor entrance and near other boats. Be careful if you race in the channel or canal. Please understand that an individual team's lack of respect in following these rules is not only irresponsible, but will reflect poorly on the entire Hawaii dragon boat community. When in doubt; don't race!

Additional rules of the road (waterways) for dragon boaters in our ocean waters

- ALWAYS go COUNTER-CLOCKWISE (i.e. keep the harbor walls on your right). NEVER GO CLOCKWISE; someone else may be just around the corner expecting the way to be clear.
- Dragon boats may not leave the safe waterways nor enter the open ocean past the breakwater without prior approval from the beach monitor.
- Beware of boats with their engines running - they are likely to depart.
- Beware of wakes - and the ricochet of wakes.
- When crossing the path of another vessel the boat on the right is the stand on vessel (Which means they have the right of way). The other vessel is vessel is the give way vessel.
- Try to orient the boat to take waves at right angles, i.e. on the nose (or stern). Continue paddling your current speed as you cut through the waves and do not stop or slow down the boat, as long as you have a clear path ahead. If you do not have a clear path, stop and brace the boat.
- Small craft warnings are displayed by the flying of a red triangle flag near the harbor master office or call U.S. Coast Guard office for any weather advisory. Dragon boats should use extreme caution when this condition arises.

Weather Indicator Pennants

Weather Pennants or Flags appear either individually or as doubles. When displayed as a pair, they indicate a more severe warning.

Dragon boats should use extreme caution when these weather condition arises.

- 1 triangular pennant: The small craft warning indicates a forecast of high winds up to 33 knots (38 mph).

- 2 triangular pennants: Winds predicted between 34 and 47 knots (39 to 54 mph).
- 1 square pennant with a smaller square inside of the pennant: Formerly known as a "whole gale" warning, this signifies winds of 48 knots or more, or 48 to 63 knots (55 to 73 mph) in the case of a tropical cyclone.
- 2 square pennants with a smaller square inside of each pennant: A tropical hurricane with winds exceeding 64 knots (74+ mph).

The Harbor Master has asked dragon boats NOT TO LOITER:

1. In the area IN FRONT OF any BOAT LAUNCH RAMPS
2. Under any bridges
3. In the middle of any waterways
4. In the entrances of the harbor

Also, please "pull over" if you need to speak to your team or converse with other boats.

## Infractions and Penalties

Infractions in order of severity:

1. Personal injury – to own paddlers, beach goers, boaters, etc.
2. Damage to Public property – city bridges, public docks, etc.
3. Damage to Private property – private docks, boats, paddle boards, etc.
4. Damage to HDBA property – dragon boats, steering or paddling equipment
5. Steering safety infraction – wrong side of the channel, racing in prohibited areas, incorrectly / not wearing PFDs (either self or paddlers)
6. Steering non-safety infraction – incorrectly / not wearing steering approved HDBA apparel and/or disregard of quiet zones

Penalties in order of severity:

1. Temporary suspension of team practice
2. Permanent ban of steering privileges
3. De-certification of steersperson
4. Temporary suspension of steering privileges
5. Public. warning
6. Private. warning

The HDBA knows that accidents will happen, but direct intent and negligence will not be tolerated! We want everyone to have fun while being responsible and safe.

If you are involved in an accident of any kind, report as soon as possible to

the beach monitor and HDBA administration at [hawaiichinatown@yahoo.com](mailto:hawaiichinatown@yahoo.com) and/or call the designated telephone numbers issued to all team captains.

Call 911, if an accident involving non-HDBA property or personnel occurs where immediate emergency assistance is required. Thereafter, notify the beach monitor and HDBA administration.

#### What to Do in the Event of a Capsize (huli)?

- Know your bench buddy and how many people are on the boat.
- Do not grab, hug, or embrace any person next to you as this might result in drowning the person. Keep an arm's length away from each other and the boat until everyone is calm. Trust in your PFD.
- (Paddlers) Immediately after surfacing, check to see if your partner is present and okay.
- Front pair checks on the drummer, back pair checks on the steersman.
- Count off from the front.
- The next step is to right the boat.
- Remember the commands come from the steersman only (or if incapacitated, the captain of the boat, which could be the drummer).

#### In the Absence of a Safety Boat

- Move the weaker swimmers to the nose and tail.
- Pull the steering oar fully aft so the handle is at the steering oar arm (and therefore out of the way).
- Don't worry about rescuing anything floating away, unless it is a bailer. Anything else can be gathered up later.
- If it is windy, use the wind to help you turn the boat.
- As the boat comes over everyone must be careful to keep clear as it rolls.
- Once the boat is the right way up and floating at the surface, get two or three light paddlers into the boat and start bailing water.
- As the boat rises more paddlers can climb in (in pairs as the rest of the crew hold the boat stable).
- The boat should be clear and floating in about 15 minutes.
- The last paddlers in the water may need to be helped in by paddlers already on board.
- If you are unable to turn the boat over, or cannot bail out enough water to get all of the crew in the boat, you may try to swim the boat ashore (although this will be difficult).
  - Line up paddlers next to the boat (as if they were paddling), have them hold on the gunnels, and pull the boat to the nearest and safest shore.
  - If there is not enough room for everyone to remain as one group, divide into two groups.
  - The steersperson should stay with the boat and the captain stays with the remaining swimmers.

- Count off again when you reach shore.
- If you are unable to right the boat and are too far away from shore, try to signal for help.
- If no one is around, remember to conserve energy and only signal for help when someone is nearby.
- Use the air horn and/or whistle, if necessary.

IN A RACE, A SAFETY BOAT IS USUALLY AVAILABLE BUT FOLLOW THE STANDARD CAPSIZE PROCEDURE UNLESS ADVISED OTHERWISE.

If you are running a capsizing drill during practice, notify the HDBA beach monitor and Coast Guard first, if applicable!

The State of Hawaii Department of Boating and Recreation recommends that boaters always:

- Check the weather before heading out.
- Wear only U.S. Coast Guard approved PFD or life jackets while under way.
- Abstain from alcohol consumption while boating.

What Is a PFD?

U.S. Coast Guard PFD Policy

The U.S. Coast Guard estimates that PFD's (Personal Flotation Devices) could have saved the lives of over 80% of boating fatality victims. We are not required to wear PFD for dragon boating, however we want to be responsible ocean users and therefore, all crew members are required to wear an approved U.S. Coast Guard PFD (Type I, II or III).

As a boat operator, you're in command of the safety of your passengers. But accidents can, and do happen with terrifying speed on the water. The HDBA requires everyone on the dragon boat to be properly wearing an approved U.S. Coast Guard PFD (Type I, II or III).

Things to Know

- Not all PFDs are made equal!
- Each crew member should wear an appropriate size PFD.
- Adult-sized PFDs will not work for children. Special PFDs are available. To work correctly, a PFDs must be worn, fit snugly, and not allow the child's chin or ears to slip through.
- All states have regulations regarding PFD wear by children.
- Certain PFDs are designed to keep your head above water and help you remain in a position which permits proper breathing.

- To meet U.S. Coast Guard requirements, a boat must have a U.S. Coast Guard-approved Type I, II, III, or V PFD for each person aboard.
- PFDs should be tested for wear and buoyancy at least once each year. Waterlogged, faded, or leaky jackets should be discarded.
- A PFD — especially a snug-fitting flotation coat or deck-suit style — can help you survive in cold water. Even in Hawaii, our water is cold! Do not underestimate our Hawaiian water's temperature.

## Cold Water Immersion Shock

"Cold water immersion shock" occurs when a person falls into very cold water. What occurs is a gasp reflex response or the involuntary inhaling of the lungs. If your head is in the water you could take water into your lungs and drown.

Water temperature generally lags behind the air temperature by about a month's time. In other words, if the air temperature in spring starts to get warm, the water will take a good month to warm up. The same happens in the fall - as the air temperature starts to get cool, the water will start getting cooler.

## Hypothermia and Treatment

### Hypothermia

#### Definition – Mayo Clinic

Hypothermia occurs when more heat escapes from your body than your body can produce. Prolonged exposure to cold air or cold water temperatures are common causes. Signs and symptoms of hypothermia may include gradual loss of mental and physical abilities. Severe hypothermia can lead to death.

#### Conditions Leading to Hypothermia

- Cold temperatures
- Improper clothing and equipment
- Wetness
- Fatigue, exhaustion
- Dehydration
- Poor food intake
- No knowledge of hypothermia
- Alcohol intake - causes vasodilation leading to increased heat loss

## Signs and Symptoms of Hypothermia

Watch for the "-Umbles" - stumbles, mumbles, fumbles, and grumbles which show changes in motor coordination and levels of consciousness

## Treating Hypothermia

The basic principles of rewarming a hypothermic victim are to conserve the heat they have and replace the body fuel they are burning up to generate that heat. If a person is shivering, they have the ability to rewarm themselves at a rate of 2 degrees C per hour.

### Reduce Heat Loss

- Additional layers of clothing
- Dry clothing
- Increased physical activity
- Shelter

### Add Fuel & Fluids

- It is essential to keep a hypothermic person adequately hydrated and fueled.
- Give them hot liquids to drink, and some sugars for energy.
- Avoid giving liquids with alcohol or caffeine.

### Add Heat

- Fire or other external heat source
- Body to body contact. Get into a sleeping bag in dry clothing with a person who is not experiencing hypothermia in lightweight dry clothing

## Steersperson Contract

By signing below I certify that I have fully read and understand the HDBA Dragon Boat Steersperson Manual. I understand that the steersperson takes ultimate responsibility for the safety of everyone on the boat and I intend to follow all the rules as outlined in the HDBA Dragon Boat Steersperson Manual.

Printed Name: \_\_\_\_\_

Team Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Contact information:

Tel: \_\_\_\_\_

Bus: \_\_\_\_\_

Cell/Handphone: \_\_\_\_\_

Email: \_\_\_\_\_