

Kupa'a Mau Outrigger Canoe Club

Safety Manual

Kupa'a Mau OCC Safety Procedures

KMOCC has implemented mandatory safety procedures which are to be understood and observed by each paddler while paddling a Kupa'a Mau Outrigger Canoe on any body of water. A thorough understanding and observance of the safety procedures outlined in this manual reduce the risks associated with outrigger canoe paddling and increase each participant's enjoyment.

Some Facts about Outrigger Canoes

- Outriggers can and do sink
- Weather conditions can "swamp" an outrigger canoe, making it difficult or nearly impossible to bail out water
- Hypothermia can occur even in water as warm as 80F
- Even if all safety procedures are followed, you can still be injured while participating in this sport

SCORA Release of Liability form

Before anyone is allowed to paddle, they must read, understand, agree to, and sign the SCORA Release of Liability form. Additionally, paddlers will be asked to provide emergency contact information and emergency medical information about themselves.

Recommended equipment for paddlers

- Appropriate paddling clothing for weather (spring or full wet suit, neoprene, layers, etc.)
- Booties (protects your feet, keeps them warm)
- Hat (shields eyes, keeps head warm, can be used as a bailer)
- Sunscreen (should be applied liberally prior to getting into the canoe)

Mandatory Canoe Equipment

1. VHF Marine Radio (handheld, submersible) and/or cell phone in dry bag
2. Marine Signal Kit
3. PFD's for all paddlers on board
4. A minimum of two bailers per canoe, including a 5 gallon bucket

5. Extra paddle
6. Drinking water
7. Extra rigging tubing

Note: It is advisable each canoe carry an operational cellular phone in the dry bag at all times and mandatory on all single canoe outings.

*Always check weather conditions – Do not leave shore under adverse weather conditions such as gale force winds, high seas, small craft advisories, thunderheads or thick fog. Review the latest weather report on channels 1,2 or 3 on the VHF Marine Radio or on the internet at <http://www.nws.noaa.gov/om/marine/home.htm> before leaving shore.

Equipment Check

- A. The steersperson is responsible for checking the following equipment before leaving shore. Do not leave shore if any of the equipment is missing or broken:
 1. All paddlers must have a PFD on board
NO PFD, NO PADDLE, NO EXCEPTIONS!
 2. A minimum of two (2) bailers per canoe with one of the two being a 5-gallon bucket
 3. VHF Marine Radio/cellular phone in dry bag in each canoe
 4. Marine Signal Kit in dry bag in each canoe
 5. Extra paddle in each canoe
 6. Drinking water
 7. Extra Rigging Tubing
 8. Check canoe and ama for cracks and water leaks
 9. Check all rigging
 10. Plug ama
- B. Each paddler is responsible for checking the following equipment before leaving shore:
 1. A PFD is on board for you
 2. You have on reasonable clothing to prevent hypothermia
 3. Your paddle!
 4. It is against club policy to paddle or steer a canoe while under the influence of drugs or alcohol

Raising and Lowering Canoes On to the Dollies:

Avoid back injuries! Bend with your knees and lift the canoe on one end with at least three people!

- Lift the canoe on the count of 3 (“one, two, three, lift”) so you are all raising the canoe at the same time
- Slide dolly between seats 3 and 4 so the canoe is evenly balanced
- Slowly lower the canoe on to the dolly

Moving Canoe from Storage Site to Edge of Water

- One person should be on each end of the canoe and on each iako
- Carefully dolly the canoe to the shoreline on a sandy part of the beach
- With at least three people, bend your knees and lift the canoe on the count of 3 (“one, two, three, lift”) so you are all raising the canoe at the same time
- Remove the dolly from under the canoe
- Slowly lower canoe on to beach
- Never allow anyone to sit in club canoes while it is on land

Evaluating Crew Capabilities

- The Coach(es) are responsible for evaluating the crew’s capabilities. Do not paddle in the open ocean if your crew cannot:
 - Right a capsized canoe
 - Climb into a canoe while in the water
 - Bail out a canoe
 - Swim and/or tread water

Note: Crew members are responsible for notifying the steersperson of ANY physical problems that may affect their ability to paddle.

Launching the Canoe from the Beach

Once all the equipment is on board and checked you are ready to shove off. The Coach on the water and the steersperson is now in charge. Follow his/her directions.

- Wait for the steersperson to give the command to move the canoe from the shore to the water (lift the canoe, never drag it across the sand or rocks)
- Walk the canoe out into the water and wait for the steersperson to give the command to climb aboard and paddle

Out at Sea

Enjoy your workout! However, if you feel dizzy, faint, or have difficulty breathing, STOP PADDLING and notify the steersperson.

- Steersperson – if two (2) or more canoes are paddling at the same time it is advisable they keep each other in visual range (to assist in an emergency situation)
- Steersperson – stay close to shore in off shore gusty wind conditions (avoid being blown out to sea)
- Steersperson – keep an eye out for other watercraft and marine life (avoid collisions)

If and when you huli pau out at sea, don't panic. Know your responsibilities so your actions are automatic.

Seat 1 – Stay at the bow of the canoe and assist the steersman in turning the canoe (if needed).

Seat 2 – Work with Seat 4 to right the canoe. Make sure the ama does not come crashing down on someone's head.

Seat 3 – Gather loose bailers, paddles, PFD's and other gear before they drift away.

Seat 4 – Work with Seat 2 to right the canoe. Make sure the ama does not come crashing down on someone's head.

Seat 5 – Gather loose bailers, paddles, PFD's and other gear before they drift away.

Seat 6 – Stay at the stern of the canoe. Count heads to make sure everyone is accounted for, supervise the huli drill and direct Seat 1 in turning the canoe (if needed).

Once the canoe has been righted, Seat 3 and Seat 5 climb into the canoe and begin bailing (quickly), while the rest of the crew position themselves along the ama side of the canoe at their assigned seat. Do not get into the canoe until directed to do so by the steersperson.

If weather conditions are swamping the canoe and you are unable to bail out water fast enough, try turning the righted canoe into a swell, and have everyone get on the stern of the canoe and force it down under water as far as you can. As the stern "sinks" the bow raises and this is emptied of water. Timed with a swell, release the canoe at the same time at the top of the swell (when the bow is at its highest point). The canoe should dart up and forward and hopefully, spill out more water. Quickly bail out the remaining water.

IMPORTANT: If you are unable to right the canoe or bail out the water, YOU ARE IN A SERIOUS SITUATION, RADIO FOR HELP! (see Emergency Situations below)

Returning to Shore

- Follow the steersperson's instructions when returning to shore.
- Be back on shore before dark. Do not paddle at night or in thick fog.

Moving Canoe from Water back to Storage Site

- With at least three people, bend your knees and lift the canoe on the count of 3 ("one, two, three, lift") so you are all raising the canoe at the same time
- Slide dolly between Seat 3 and Seat 4 so the canoe is evenly balanced
- Slowly, lower canoe on to dolly
- Dolly canoe back to storage site
- Remove dolly and slowly lower canoe onto storage cradles
- Steersperson remove plug from ama

Emergency Situations

Some Facts:

Hypothermia is defined as subnormal body temperature – a lowering of the body core temperature. Unconsciousness can occur when the body core temperature drops from normal (98.6F/37C) to approximately 86F/30C. Safety experts estimate half of all drowning victims actually die from the fatal effects of cold water, or hypothermia and not from water filled lungs. Loss of body heat is one of the greatest hazards to survival when you fall overboard, capsize or jump into water. Cold water robs the body of heat 25-30 times faster than air. When you lose enough body heat to make your temperature subnormal, you become hypothermic.

Sudden immersion in cold water cools your skin and the outer tissues very quickly. Within 10-15 minutes, your core body temperature (brain, spinal cord, heart and lungs) begins to drop. Your arms and legs become numb and completely useless. You may lose consciousness and drown before your core temperature drops low enough to cause death.

Cold water does not have to be icy...it just has to be colder than you are to set hypothermia in motion. A person who is wet, improperly dressed and intoxicated can become hypothermic in 70F weather. The rate of body heat loss depends on water temperature, the protective clothing worn, percentage of body fat and other physical factors, and most importantly the way you conduct yourself in the water.

Predicted Survival Time (Average Adult in 50F/10C Water):

1. Drown Proofing	1 ½ hours*
2. Swimming slowly	2 hours
3. Treading water	2 hours
4. Holding still	2 ¾ hours
5. H.E.L.P. position	4 hours**
6. Huddle	4 hours
7. Wearing a PFD	7 hours

*Drown proofing is a warm water survival technique: to conserve energy you relax in the water and allow your head to submerge between breaths. This technique IS NOT RECOMMENDED IN COLD WATER, since 50% of heat loss is from the head.

**Heat Escape Lessening Position (H.E.L.P.) hold knees to chest to protect trunk of body from heat loss. Wrap arms around legs and clasp hands together.

Body Hot Spots: Certain areas of your body are “hot spots” that lose large amounts of heat faster than other areas. These “hot spots” need special protection against heat loss to avoid hypothermia. The head and neck are the most critical areas. The sides of the chest where there is little fat or muscle, are major areas of heat loss from the warm chest cavity. The groin region also loses large amounts of heat because major blood vessels are near the surface.

Surviving Cold Water

If you suddenly find yourself in the water, don't panic! Calmly follow the procedure below.

If you have a VHF Marine Radio, call for help on channel 16. Call “May Day – May Day – May Day” and your approximate position and how many people are in the water. The radio is waterproof but it won't float, so hang onto it. Unlike a cell phone, the Coast Guard or Harbor Patrol can home in on your radio signal and locate you.

In the event you use your cellular phone, dial “911” and give the operator your location, your name, and how long you have been in the water. They will call Harbor Patrol with this information.

Minimize body heat loss. This is the most important thing you should do. Put on a PFD and do not remove it despite what you may have been told. Instead, button, buckle, zip and tighten collars, cuffs and shoes and hoods. Cover your head if possible. A layer of water trapped inside your clothing will be slightly warmed by your body and help insulate you from the cold water, slowing your rate of body heat loss.

MOST IMPORTANT THING YOU SHOULD DO: PUT ON A PFD, BUTTON, BUCKLE, ZIP, TIGHTEN AND KEEP IT ON TO HELP MINIMIZE BODY HEAT LOSS!

Devote all your efforts to getting out of the water. Act quickly before you lose full use of your hands or limbs. Climb onto a boat, raft or anything floating. Right a capsized canoe and climb in. Most canoes will support you even if full of water. If you cannot right a capsized outrigger, climb onto of the hull. The objective is to get as much of your body out of the water as possible.

DO NOT ATTEMPT TO SWIM unless it is to reach a nearby boat, another person, a floating object on which you can climb onto, or the shore, if it is close.

Unnecessary swimming “pumps” out warmed water between your body and your clothing circulating new cold water to take its place. Unnecessary movement of your arms and legs pumps warm blood to the extremities, where it cools quickly reducing your survival time by as much as 50%.

Whatever you do, STAY WITH YOUR OUTRIGGER! STAY TOGETHER! A group is more likely to be spotted than an individual. To stave off hypothermia HUDDLE until help arrives.

**IMPORTANT: STAY WITH YOUR OUTRIGGER! STAY TOGETHER!
HUDDLE TOGETHER!**

If you cannot get out of the water try one of the following techniques:

1. Heat Escape Lessening Positions (H.E.L.P.) hold knees to chest to protect trunk of body from heat loss. Wrap arms around legs and clasp hands together.
2. Huddle – huddling together with 2 or more people will extend survival time 50% longer than swimming or treading water.
3. Remain as still as possible, however painful. Intense shivering and severe pain are natural body reflexes in cold water which will not kill you, but heat loss will.
4. The urge to urinate should be obeyed, not only will it heat you temporarily, but the decreased volume will give your body less to heat.
5. Eat packets of easily digested foods (store inside the Marine Signal Kit). This will also help stall severe hypothermia. As the body reacts to cold conditions, you begin to shiver. When you STOP shivering you begin the next step of hypothermia. The muscle contractions that make shivering possible are fuelled by your energy reserves. HOWEVER, if you have been paddling your probably used most of this up! Replenishing this reserve may help you postpone the more serious stages of hypothermia.
6. Use disposable warm packs (stored inside the Marine Signal Kit) to stall severe hypothermia. Do not place directly against the skin as they can cause burns. Wrap them and apply to the head, neck, chest and groin areas. Do not apply heat to arms and legs as this forces blood out through the cold extremities and back to the heart, lungs and brain, which will further drop the core temperature. This can cause “after drop” which can be fatal.

Signaling for Help

These instructions are for operating the Marine Signal Kit. Familiarize yourself with the operation of the devices now! There is no time to learn during an emergency!

The Signal Kit includes ALL the following:

1. 12 gauge Corrosion Resistant Safety Launcher
2. 6 to 12 gauge Red Aerial Flares
3. Handheld Red Signal Flares
4. 1 handheld Orange Smoke Signal
5. Distress Flag
6. 1 Safety Whistle
7. Signal Mirror
8. 6 Power Gel Food Packets (KMOCC addition)
9. 6 Disposable Warm Packets (KMOCC addition)
10. 1 Compass

The purpose of distress signaling is simple: First to attract attention, and second, to provide a homing signal to guide the responding party to you. Remember, nothing can happen until someone's attention is attracted. The most effective distress signals for attracting attention are aerial flares because they are moving, spectacular and cover a large sighting area.

Once help is on the way, handheld red signal flares, orange smoke signals and orange distress flags serve as beacons for rescuers to identify your position and keep them on course.

If you are in a Signaling Situation

- Conserve your signals until you are reasonably sure of being detected
- Stay with the boat if it is safe to do so; A boat is easier to spot than a swimmer
- Above all, familiarize yourself with your signals before you leave shore; Time is important in any emergency and should not be spent reading instructions!

A. 12 Gauge Aerial Flares

- Loading the 12 gauge launcher - Break launcher barrel open, insert 12 gauge aerial flare to close launcher
- Launching – for most effective use, fire only after sighting a potential rescue vessel. Hold launcher above eye level, point straight up, cock hammer and squeeze trigger.
- Repeat procedure – the US Coast Guard recommends you fire two aerial flares, one immediately after the other, so rescuers can confirm the sighting and/or direction of the signal. Therefore, you should repeat steps A and B when the first flare has burned out.

- 12 Gauge Flare Specifications
 - Burn time is 6 seconds
 - Altitude is 250 feet
 - Visibility Range is 12 miles maximum

B. Handheld Red Signal Flares and Orange Smoke Signals

- Handling – Grasp bottom of signal flare firmly below the line of the label. Point away from face and body. Aim downwind.
- Expose lighter – Remove black lid on cap, twist cap, remove and save to ignite signal
- Igniting – For most effective use, ignite after sighting potential rescue vessel. Strike igniter button on top of signal with abrasive surface or cap. Hold burning signal down wind and away from your body. **DO NOT WAVE SIGNAL OVERHEAD.**

First Aid for Hypothermia and Cold Water Drowning

Any person pulled from cold water should be treated for hypothermia. Symptoms include intense shivering, loss of coordination, mental confusion, cold and blue skin especially around the lips or fingers, weak pulse, irregular heartbeat and enlarged pupils. Once shivering stops, core body temperature begins to drop critically.

Your goal in treating hypothermia is to prevent further body cooling. Severe cases call for re-warming by trained medical personnel. In all cases, arrange to have the victim transported to a medical facility immediately.

- Gently move the victim to warm shelter
- Check breathing and heartbeat. In cases of hypothermia you should check very closely for as long as two minutes.
- Start CPR if necessary
- Remove victims clothing with a minimum of movement, cut them away if necessary
- Lay victim in a level face up position with a blanket or other insulation beneath them
- Wrap victim in warm blankets, sleeping bag or other warm covering

Note: If there will be a long delay before victim arrives at a medical facility use the following re-warming techniques:

IMPORTANT: LEARN TO DO THIS PROPERLY! IMPROPER WARMING CAN KILL!

- Apply heating pads or hot water bottles (wrapped in a towel to prevent burns) to the head, neck, chest and groin

- Do not apply heat to arms or legs or give them a hot bath. This forces blood out through the cold extremities and back to the heart, lungs and brain, which will further drop the core temperature. This can cause “after drop” which can be fatal.
- Do not massage or rub victim, rough handling may cause cardiac arrest
- Apply warmth by direct body to body contact. Have someone remove his or her own clothes and lay next to the victim, skin to skin. Wrap both in blankets. (NOTE: Don't do this if the victim is truly hypothermic or you may have two victims).
- If person is alert enough you can give them hot drinks with NO caffeine or alcohol. If they are unconscious or in a stupor do not give them anything to drink.

Cold Water Drowning

Some apparent drowning victims may look dead, but may actually still be alive! A phenomenon called the “mammal diving reflex” can be triggered by cold water. This reflex, common to whales, porpoises and seals, shuts off blood circulation to most parts of the body except the heart, lungs and brain and slows the metabolic rate. What little oxygen remains in the blood is circulated where it is needed most. DO NOT ASSUME a person who is “blue” and who has no detectable pulse or breathing is dead. Administer CPR and transport the victim to a medical facility as quickly as possible for specialized re-warming and revival techniques. People have been revived after having been submerged for extended periods of time. DO NOT GIVE UP!!!

Remainder of Page Intentionally Left Blank

DISCLAIMER: The foregoing is not offered as a legal opinion and the medical information contained herein is NOT intended as a substitute for competent first aid and emergency training.

AGREED and ACCEPTED

By signing and dating below, I am stating I have read and understand the “Kupa’a Mau Outrigger Canoe Club” safety manual dated January 2012 and have been given the opportunity to ask any questions I may have.

I further agree to abide by the safety procedures outlined in this manual each time I paddle on any body of water in a Kupa’a Mau Outrigger Canoe.

Name (print): _____

Signature: _____

Date: _____

PARENT'S OR GUARDIAN'S ADDITIONAL INDEMNIFICATION

Must be completed for participants under the age of 18

Child's Name (print): _____

Legal Guardian's Name (print): _____

Legal Guardian's Signature: _____

Date: _____