

Holomua – move forward with success.

We have a strong tradition of working together and supporting all new members to the Club regardless of age, experience and paddling aspirations.

Let us continue to move forward while embracing the 'Spirit of Aloha' at the Calgary Canoe Club and continue to learn, improve and challenge one another in a fun and supportive environment.

Welcome to the Calgary Canoe Club, (CCC). The Club was formed in 1959 with a focus on both recreation and sprint canoe/kayak paddling. Our Outrigger Program has been in existence since 1998 and is a member of CORA (Canadian Outrigger Racing Association). As we look forward to each new year, members of the CCC Outrigger Canoe Club and their `ohana (family) can look forward to a season of aloha, camaraderie, competition and fun.

This manual is designed to provide information about our Club program, the basics related to equipment, training and racing, as well as the culture and traditions of Hawaiian outrigger canoe paddling that are important to us as a canoe club.

We understand it's very lengthy, use the Table of Contents to view sections of interest. We advise new members to browse the entire manual for a stimulating and educational read. Please take some time to review this information. To new paddlers, it will answer many questions that you may have about the sport and our club. For our experienced members, it will remind and reinforce.

Acknowledgements

This handbook was complied through the combined Knowledge of many resources on the Web, Publications, and Individuals of which some are listed here. Big thanks to Lake Havasu for publishing their handbook on the web to lay the framework for our own handbook (see their list of acknowledgments).

Lake Havasu City Outrigger Canoe Club, http://www.lhcocc.com

Some of the key contributors that we also borrowed information from include;

Hawaiian Canoe Club (Maui, Hawai`i)

Kihei Canoe Club (Kihei Maui, Hawai i), Kawika Sands (Hana Hou Series)

Xylo Bladz – QLD. Australia

Steve West – KanuCulture books

To this list we add our members and key contributors;

Lynda Roberts, CCC

John Roberts, CCC Bill Hemstock, resident CCC artist

Kimokeo Kapahulehua (Maui). With projects such as an annual Spring training camp in Maui, Hawaii Voyages and races, and hosting the 2012 World Sprints, the CCC is indebted to Kimokeo for his support, teachings and involvement with our Club over the years, he is truly ohana to the Calgary Canoe Club.

Contents

History	3
CCC Outrigger Program Objectives	3
Organization Structure	3
Membership Information	3
Outrigger Program Overview	4
History of the Outrigger Canoe	4
The Spirit of Aloha	5
Parts of the Hawaiian Canoe	
Outrigger Canoe Rigging	7
The Hawaiian Hoe (Paddle)	
Canoe Customs (Nā hana i kuluma wa'a)	8
Team Customs	9
Calgary's Outrigger Canoe Fleet, (2021)	9
Outrigger Practices	11
Racing Information	12
Safety Considerations	12
What to know before you go out	
First Aid Basics	17
Paddling Commands	14
Seat Responsibilities, amended from KanuCulture	15
Technique	18
Basic Technique pointers	18
Technical basics	18
Paddling Drills	20
Timing:	20
Change ladder	20
Catch drill	20
Connection drill	20
Airwork rotation Drills	20
Right / Wrong approach	21
HULI PROCEDURES	21
Basic Paddle Repairs	23
FAQ's	25
Resources	26

History

The Calgary Canoe Club Outrigger program was established in 1998 when founding member John Roberts purchased a 6 man Outrigger canoe and simply said 'if we bring the canoe, they will come'... or something along those lines. The 2nd outrigger canoe soon followed and the fleet, and program, was initiated.

See 'the fleet' for a full list of the Club's outrigger canoes and equipment.

The program relies on member volunteers to assist in all facets of its program delivery including; coaching novice paddlers, equipment repair, regatta planning, social events, fundraising,

We are located on the Glenmore Reservoir in North Glenmore Park. The reservoir serves as a source of drinking water for the City and has several strict regulations attached to its use. It's a privilege for us to be located here and we shall never take this for granted.

Our season. City bylaws enable us to be on the Reservoir May 1 through October 31, this typically coincides with water conditions (frozen or thawed). There are times when we will be delayed due to a late thaw or even worse, banned from the reservoir during the spring run off as flood mitigation is a key purpose for the reservoir. In this situation, we have typically shifted our paddling practices to Ghost Lake.

CCC Outrigger Program

Objectives

Our objectives are to provide our members with a structured paddling program providing opportunities for competition for all levels of paddlers, sharing the cultural traditions and aloha spirit which embodies the sport of Hawaiian Outrigger Canoe Racing, encouraging the spirit of "Ohana" (family), and to practice respect and care for the Glenmore Reservoir and it's other water users in a responsible, welcoming and positive atmosphere.

Organization Structure

The CCC Board is made up of 9 members; 4 executive - Commodore, Vice Commodore, Secretary, Treasurer. 3 Directors – Building, Youth (Sprint Paddling), and Adult (Outrigger). John Roberts was the Board Representative for the Outrigger Program since its inception, he has finally passed along the reins. Kristine Malmqvist is our current OC director (2021).

Volunteer assistance. We have a talented and keen group of paddlers that always step up when assistance is needed in any area. The program is led by Lynda Roberts, Club Manager and Outrigger Coach. Setting up structured committees to oversee specific areas has not been set in place due to the availability of Club staff assisting with many areas as well as the ease of recruiting volunteers as needed, but certainly an option to do so as needed.

Membership Information

The Club reserves the right to revoke membership privileges of any member that is proven to be disrespectful of fellow members and equipment alike.

The Outrigger leadership team will review each situation, and possible appeal, on an individual basis.

Club Dues

The season begins May 1, or as soon as we are granted permission via the City Recreation department to open. All members must fill in a current membership form and pay dues prior to using equipment and Club facilities.

Membership fees for the Outrigger Program have two components;

- 1. General dues (categories include; youth, single, student or family), and
- 2. Outrigger dues, please see current form for fees.

Refer to the website for most up to date fee schedule.

Outrigger Program Overview

Benefits of the Outrigger membership include access to all Club owned boats (exceptions may be made to preserve high performance boats for racing only), access to coached workouts; Monday to Thursday evenings and Saturday morning (see current season for all listed practices and events). Also included is the participation in all fun Club regattas and away races. Race specifics and sign up numbers will play a role in determining crew selection and participation for away races.

Wednesday newcomer night. From mid May to late September newcomers are welcome to join us to try out outrigger paddling. A \$10 donation is required, and guests may try this out twice before deciding if they would like to join the program. A waiver must be signed at the boat bay office for all non member participants. Feel free to invite friends to try it out. Experienced paddlers and steers are encouraged to join us to support this practice. Seat priority goes to newcomers.

*****(currently on hold during the COVID pandemic)

Out of town visitor's belonging to other Clubs are always welcome to come out and join us. A waiver must be signed and a fee donation will be considered based on the length of their stay. They are welcome to join any group recreation paddle. Permission for small boat use must be approved by Club Manager, regardless of experience.

History and details of the Outrigger Canoe

Hawaiian outrigger canoe paddling comes from a spiritual deeply-rooted love of the ocean, the Hawaiian culture, and the sport. The outrigger canoe has a long history throughout the Pacific as a mode of transportation and migration, as well as being used for fishing and of course for sport. The outrigger is known by various terms throughout the Pacific; *va'a* is the Polynesian term, *wa'a* is the Hawaiian term and *waka ama* is used in New Zealand. Outrigger is grounded in a strong tradition of culture. It is still used for transport by the Polynesian people, used in various ceremonies and paddled in ocean canoe voyages, notably the entire Hawaiian chain (1750 miles) by the paddlers of the Pacific Voyaging Society under the guidance of Kimokeo Kapahulehua in various stages. The introduction of the famous Molokai Hoe channel race in 1952 promoted the resurgence of the outrigger for racing and it soon spread to US mainland in the 1960's.

Sprint racing began to develop in the 1980's with the formation of the International Polynesian Canoe Va'a Federation, today referred to as the International Va'a Federation (IVF). The first World Va'a Sprints were held in Long Beach, California in 1984. They are held every two years and there are currently 26 member organizations represented by countries throughout the Pacific, South America,

Europe, Asia, USA and Canada.

In 2012 the Calgary Canoe Club hosted the *IVF World Sprint Championships*, the first Canadian Club to do so. Calgary hosted 1000 paddlers during the 5 day event which was held on the Glenmore Reservoir, our home course. The event was a great success and our crazy climate didn't disappoint the many new visitors to Calgary with a variety of cold and hot days, and an amazing hail storm. Hawaii, New Zealand and Canada finished top 3 respectively. Unfortunately, due to a very ill timed airline strike the expected 100 paddlers from Tahiti (a powerhouse) was diminished to 6 paddlers.

The men's and women's Molokai's (Molokai Hoe and Na Wahine Molokai respectively), a 42 mile race from Molokai to Ohau, stand as the 'superbowl' of long distance outrigger races. Another notable is the Queen Lili`uokalani, the world's largest Outrigger Canoe Race in honor of her Majesty Queen Lili`uokalani's birthday which is September 2nd. The 18 mile race is typically done by Iron crews but can be done as a change race. Approximately 2500 paddlers participate in the main race. There are a number of great races to participate in throughout the World, and Calgary paddles are certainly getting out there to experience these.

The Spirit of Aloha

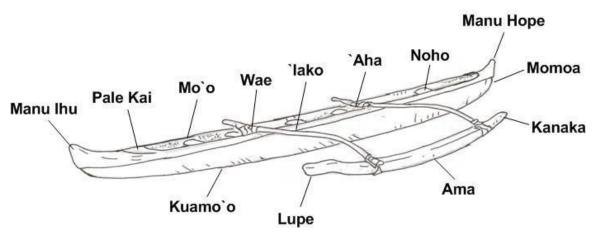
(By: Kawika Sands) The literal meaning of aloha is "the presence of breath" or "the breath of life." It comes from the word "Alo," meaning presence, front and face, and the word "ha," meaning breath. Aloha is a way of living and treating each other with love and respect. Its deep meaning starts by teaching ourselves to love our own beings first and afterwards to spread the love to others. According to the old nā kahuna (priests), being able to live the Spirit of Aloha was a way of reaching self-perfection and realization for our own body and soul. Aloha is sending and receiving a positive energy or mana. Aloha is living in harmony. When you live the Spirit of Aloha, you create positive feelings and thoughts, which are never gone. They exist in space, multiply and spread over to others. Breaking down Aloha goes as follows;

- "Akahai," meaning kindness, to be expressed with tenderness;
- "Lōkahi," meaning unity, to be expressed with harmony;
- "'Olu'olu." meaning agreeable, to be expressed with pleasantness:
- "Ha`aha`a," meaning humility, to be expressed with modesty;
- "Ahonui," meaning patience, to be expressed with perseverance.

These are traits of character that express the charm, warmth and sincerity of Hawai`i's people. It was the working philosophy of Native Hawaiians and was presented as a gift to the people of Hawai`i. "Aloha" is more than a word of greeting or farewell or a salutation. "Aloha" means mutual regard and affection and extends warmth in caring with no obligation in return. "Aloha" is the essence of relationships in which each person is important to every other person for collective existence. "Aloha" means to hear what is not said, to see what cannot be seen and to know the unknowable.

Parts of the Hawaiian Canoe





□ `aha (braided or twisted cord used in lashing the canoe)
□ ama (float/ outrigger)
□ hoe (a paddle; to paddle)
□ 'iako (spars, boom)
□ lupe (bow end of ama)
□ kanaka (stern end of ama)
□ kapua'i (part of 'iako between hull and ama)
□ kua 'iako (portion of the 'iako lashed to the hull)
□ kuamo'o (hull, keel)
□ manu <i>kupe</i> (curved end pieces covering the fore and aft parts of the hull)
□ manu hope (stern end piece), the female – to care, regeneration
□ manu ihu (bow end piece), the male - protects
□ mo'o (gunwale)
□ muku (ends of 'iako that extend beyond the hull), stand on to huli canoe back
□ pale kai (splash board)
□ pa'u (storm covers, spray skirts
□ pikao (hull)
□ wae (spreaders)
□ wa'a (canoe, also va'a, waka)
□ Momoa (Noho `ehiku - where your personal Aumakua sits)

Outrigger Canoe Rigging

Sennit (`Aha), hand twisted from the natural fibers of coconut, was the original cordage used to lash the 'iako to the ama and the main hull. While many lashing styles were used, the primary purpose was to ensure the canoe's safety. If lashings broke, they would not unravel because of the cord's interlacing and cinching. **Today the material best suited for lashing is 100 percent three-strand twisted cotton cord** with a diameter of 6mm or so. The mechanical properties of natural cotton cord are superior for the application of rigging a canoe when compared to man-made synthetics such as nylon, polypropylene, etc. Cotton actually increases marginally in tensile strength when wet. However, cotton is more susceptible to damage by UV rays than most synthetic materials used for lashing.

Rigging is what keeps the main hull, the 'iako, and the ama together. An important part of paddling is to learn the culture. This includes learning traditional lashing techniques of Oceania. All of the CCC's OC-6 canoes should be lashed using these methods. Temporary lashing can be made with modern nylon snap-lashes or with rubber straps for the purpose of short term rigging and daytrip paddles to Ghost Lake as an example. Caution must be taken into account to be done properly with safety considerations in mind so learn the proper method and inspect before use.

There are many styles of rigging a canoe and some depend on the type of `iako and or ama you have. For example, some `iako have a single pin or double pin, and some have no pin at all. Similarly, some ama have pins rather than puka's (holes) and some have no pin or holes. You also use different lashing techniques for different environmental conditions such as large surf or strong currents. In addition, the distance you rig the ama from the center of the canoe is also dictated by the experience of the crew and the conditions you are paddling in, and if you are racing sprints or long distance. Finally, part of mastering the art of rigging is learning how to "float" the canoe. The procedure for adjusting the amount of "roll, pitch, & yaw, how deep or shallow the leading and trailing edge of the ama is tilted, the thickness of any wedge or chock placed under the ama, and above the wae, is called floating the canoe. These are some but not all of considerations one must consider when rigging a canoe. There are other manuals which provide a great deal of information on rigging alone (see KanuCulture).

Rigging style is typically unique to a Club as knowledge is passed along to new riggers, or specific to a particularly ama or iako design. However, this does not mean other methods are wrong. When the legendary Nappy Napoleon was asked how to properly rig a canoe, his answer is simply 'so no fall apart'. Learn as many techniques from others as you can, use experience and success as a guide to determine what works best for your paddlers and water conditions.

As a general guideline we prefer to rig with cotton cord lashing as it allows the paddlers to apply a time-honored Polynesian tradition. It also helps the paddlers appreciate and connect more spiritually with their canoe. Talk story with new riggers, make it a calm and educational experience taking time to do it properly with care and detail.

We expect all paddlers to assist with rigging and we encourage all paddlers to learn how to rig, particularly the steers.

The Hawaiian Hoe (Paddle)

In ancient Hawai`i, the relationship between a canoe paddle and its maker or owner/user was a very personal one. Often times the paddle was given a special name. A good canoe paddle was handed down from one generation to another, prized as a family heirloom. Ancient Hawaiians also believed that everything has mana (spirit or super natural force) this included their paddles. In fact, they believed that some of their ancestors took up residence in the paddle blade. So you should always treat the blade of your paddle as you would treat the head of your grandparents, with respect.

Paddle construction

Historically, paddle dimensions and weight varied according to its intended use and also depended on the kind of wood employed. Wood such as Koa, Mango, Hau and Banyan were popular materials for paddle construction. Today the typically outrigger paddle is a hybrid design with a wooden shaft and carbon fiber blade. For new paddlers, do ask for advice on the length of the paddle as well as the blade size. Having a paddle too large for your size and skill level can invariably lead to injuries and poor technique. There are many good paddle makers to choose from. Make a point of trying a few different paddles (hybrid, all wood, all carbon, regular bent shaft, double bend) and don't forget to get your coaches advice as they have great tips to pass along (hint; the prettiest paddle you see at the race in Hawaii might not be your best bet for paddling in Calgary). (for paddle care tips see the related Appendix)

Canoe Customs (Nā hana i kuluma wa'a)

The following points are a combination of traditional Hawaiian customs along with what we promote in Calgary. As with your paddle, always treat the canoe with much care (malama) and respect ('ihi).

Strong Hawaiian traditions that we acknowledge (and follow when possible);

- Don't step over a canoe on dry land. This is considered kapu in the Hawaiian culture. *Do your best to respect this tradition.* It is similar to choking someone by the neck.
- Recite a pule (non religious prayer) before paddling a canoe regardless of how short the journey to acknowledge gratitude. *Done on occasion, feel free to do this with your set crew.*
- Thank the canoe for a safe journey after you have returned safely to land. Certainly a personal tradition that I would encourage you to do, similar to the above, the purpose of a short pule and post paddle thank you is to assist us in slowing down and to mentally center ourselves.
- Launch and land the canoe with the bow pointing makai (toward the sea). All small boats are stored in the boathouse with bows pointing out, please return small boats to the rack in this matter.
- Don't get into the canoe with sand on your feet. I wish we had sand in Calgary, do respect when the opportunity arises. Clean shoes for us.
- Don't take bananas on to the canoe. From ancient times as bananas would rot the food.

Traditions that we do follow:

- Don't let the canoe run up on rocks or sandy beaches
- Everyone in attendance helps when the canoe is being carried, covered, cleaned or cared for.
- Enter & exit the canoe from the left side (ama side), unless the canoe is tied to a dock
- Never leave a small boat unattended on the dock, for OC6's ensure they are securely attached
 if you must leave the canoe for a brief time
- Assist members with carrying small boats as needed (strength or poor weather conditions)

- Don't stand in the canoe, exceptions for some coaching situations and changing positions out on the water.
- Don't talk excessively while paddling, and never use angry words.
- Do your best to not hit your paddle on the side of the canoe, ask your coach for advice if this is a common occurrence
- Never lean to the right in a canoe, unless JR has you flying the ama
- Never stab your paddle into the ground or sand
- When holding your paddle hold it with the blade up to protect

Team Customs

- Show respect to everyone at all times. If a situation arises, be clear with others that you will finish your paddle and resolve the matter on dryland, whenever possible.
- Keep your word/promises/commitments = integrity
- Don't speak poorly of your team or other paddlers when they are not present
- Encourage each other to do their best, that is all you can ask of each other
- Steersmen have the final say in a canoe, respect their decisions and acknowledge that sometimes we learn through our mistakes.
- · Look after each other in and out of the canoe
- Be on time for practice, show respect, enthusiasm and commitment
- Learn to take initiative

Calgary's Outrigger Canoe Fleet, (2021)

OC6 Outrigger Canoes

Advantages (2) #11 - 1999, #12 - 2000.

- Ka Ohi Lani (Gathering Beauty that which is heavenly)
- Hana Hau Oli (Joyous Labour)

Bradley Lightnings (5)

Legacy canoes from the 2012 World Outrigger Sprint Championships.

- Ka Mana O Haiku; (Spirit of Haiku),
 named in memory of Haiku Bob. 'Ka Mana O Haiku' has returned 'home' to Maui and resides
 in Kihei under the guardianship of Kimokeo Kapahulehua. To be used by CCC members at
 camps and on loan to Uncle. Green deck.
- Mana Kia'i O Mauna; (Guardian Spirit of the Mountains), named after our beautiful Rocky Mountains to the west (komohana). Teal deck.
- Makani Mele Mahakea; (Prairie Wind Song),
 which reflects the beautiful landscape and country to the east (hikina). Green deck.

- Mana Kia'i O Kahiko; (Guardian Spirit of the Elders), named in honor of all the elders
 (kupuna's) past and present which have guided us with their wisdom and passion for living life
 to the fullest both in and out of the canoe. Red deck.
- Hu Mai Ke Aloha no ka Maui; (Love of Maui Rises Forth), named in honor of the bond we share with our Maui ohana. Our 'kuleana' is to share all we learn of canoe culture with our members. White hull and deck.

New in 2017;

- Vortex Unlimited OC6 (Hau Lupo snow wolf), Yellow/black, #747
- Vortex Unlimited OC6 (Elepaio native bird) Black/silver, #777

OC1 & OC2 Outrigger Canoes

OC1's: 7 C-Lions and 1 Hurricane.

- The Club owns 7 C Lion solo outriggers. 6 are the cockpit style (2 white, 2 red, 2 green). These have been great Club OC1's. They are ageing and require regular TLC. The 7th C Lion is carbon/glass sit on top C Lion via John Roberts.
- New 2014. Club lay up sit on top style Hurricane

Teva Nui V1's (6)

- The Club purchased its first V1 from the 2008 World Sprints in Sacramento. This boat was built by the designer, Tiger.
- The additional 5 Teva Nui's are legacy boats from the 2012 World Sprints, Tiger design, built by Pogue Sports. Following some work and upgrades prior to the Sprints these boats have managed to work fairly well.

OC2's (6)

- Viper Duo, Black/Red donated by Pep.
- Vantage, light green
- Tempest (2012), carbon, high performance boat, donated by Pep.
- Tempest Club lay up (2014)
- Tempest Carbon, (2016)

We also have several private OC1's and V1's stored at the Club, these boats are stored on a rack labeled 'private' and are the sole responsibility of owners. We take no responsibility for theft or damage.

OK LET'S GET TO THE PADDLING PART....

Outrigger Practices

Wherever possible we guide new paddlers to start at our Wednesday intro session. This is well attended by our recreational paddlers and volunteer coaches. It is great introduction to the OC6 and the basics of paddling. Once a membership is in place paddlers may attend any other 'Recreation' focused practice session (to start) as well as request a small boat orientation. This orientation is mandatory for all new paddlers. From there the world is your oyster.... feel free to use the equipment (following set out guidelines) at your leisure, attend big boat practices and participate in local and away races. Paddlers will naturally progress from *Recreation* based training (casual, fun) to more *Competitive* training (more volume, more racing, more fun – hopefully).

Your fellow paddlers and coaches will guide you through progression.

What to bring to practice;

A suggested list for new paddlers, you'll get the hang of what you like pretty quick. Do keep in mind the weather can change very quick on our beloved reservoir so come prepared, it never hurts to have that extra layer in your well organized practice tote bag...

- Change of Clothes because yes, sometimes the worst thing that can happen is the canoe
 huli's and you go for a swim, your choice of a wet or dry drive home.
 Note: in cold weather conditions the coach strongly suggests you change into dry clothes if you
 have worked up a sweat. Yes, this keeps you happier and healthier.
- Paddle unless you choose to store in the hale (panabode)
- Water system a great idea for any hot day or planned long workout. Make it a self-confined water system to avoid the annoying bottle rolling around in the hull of the canoe, it may get left behind, very much on purpose by coach or team mates.
- Food each to their own on this one. For a long paddle it doesn't hurt to pack a small scooby snack to ward off the crankiness and fatigue. Bottom line is to show up prepared; fueled and hydrated for a better quality workout.
- Hat, sunglasses and sunscreen as required
- Clothing dress for the weather like you would for a run. Feel free to start with a light jacket
 and remove once you are warmed up. Do be prepared to have anything you take in the canoe
 to get wet, unless you clip in a small drybag to store spare cloths in. Ask experienced paddlers
 what they find works best for clothing. Gloves, toques, and rain gear all come in handy when
 you are committing to be a paddler in Calgary.
- Shorts since you are on your butt, a good pair of shorts is a key consideration; padded or at least with a longer leg to avoid chaffing. Go with technical pants for cooler days, or light legging and shorts overtop, it's not a fashion show. Dress smart.
- Shirts again personal preference on tank, short or long and may change based on weather. Go with a technical fabric that is still lighter when wet and dries quickly.

 Footwear – if we are hitting the beaches in Maui, then barefoot is pretty common. Here in Calgary we'd suggest wearing your footwear at least to the dock and then keeping those slippas, booties or runners on based on weather and comfort factors. If you are wearing your shoes in the canoe do your best to wipe them off so they do not track dirt into the canoe.

Use practices to perfect your fashion attire, food, and water systems.

Racing Information

'Club, Crew, Individual'.

This motto (spotted in the Hawaiian Canoe Club's hale) is taken into consideration when deciding on crew selection.

We encourage all paddlers to sign up for races. Depending on the race, and sign up interest, crew selection may have a focus on the following factors; mass participation, novice, competitive, age categories, fun, safety. Just as experienced, high performance paddlers may get seat priority so too will novice paddlers for certain races. In other situations our focus will be to mix the paddlers for a positive and fun learning experience. Our goal is to meet paddlers expectations as best as we can.

Notes;

- In order to participate in a CORA sanctioned race, each individual must be a member of CORA. Self registration online must be done.
- Become a Member Canadian Outrigger Racing Association
- We will recommend certain races to our novice paddlers as a fun and safe introduction to racing, however that does not preclude them from signing up for more competitive races.
- It goes without saying that if a paddler signs up with the intent to compete then they also intend to commit to their crew and do their best to attend as many practices as possible. The reality of being unable to commit to practicing with your crew may mean you will not be chosen for a crew. Be up front about your availability BEFORE you commit to a crew.
- For competitive crew selection a time trial may be required to earn a seat. Guidelines and additional information will be provided by the coach and leadership group as required.

Please consult the CORA website for more info and resources;

CORA - Canadian Outrigger Racing Association -

It covers all the info related to race rules, age divisions, and other items.

Safety Considerations

A topic we must discuss on an ongoing basis. Learn, be prepared and share experiences so we can all benefit from experience and strive to make outrigger paddling a safe and positive experience each time we go out.

Once again, check out CORA resources. As a coach, a volunteer coach and steers you take on a larger role of responsibility. I encourage you all to read the full Safety document AND to pass on this knowledge to new paddlers.

Specifics related to the Glenmore Reservoir.

We are very fortunate to have the support and guidance of the City Boat Patrol on the reservoir. We will be told to get off the water in dangerous weather conditions (lightning, high winds, etc). Follow their directions at all times.

Also, use your own judgment based on your experience and those paddlers with you. Boat patrol may be tied up, if it looks dangerous get close to the Club and off if needed, don't wait. We ALL have a moral AND LEGAL responsibility to address and manage safety issues.

- The Reservoir is open sunrise to sunset. You may only use Club equipment during our hours.
- All paddlers must wear a DOT approved PFD, an enforced City Bylaw.
- You may land and launch at any of the 3 public docks, do not land at Heritage Park or go beyond the causeway (Glenmore Trail Bridge) boundary.
- As a crew or solo boat user check over your equipment prior to going out.
 - o Do the hull and ama appear sealed tight
 - Do you have 2 bailers in the event of a huli in the OC6/V12's
 - Does rigging look and feel secure
- Is the steers aware of any personal health issues a paddler may have that we should keep an eye on (and hence not having to go too far away from assistance if required)
- Be safety conscious and aware of all dock users, this area is congested
- In the event of a long paddle or race ensure you have atleast one spare paddle
- If you are away from the Clubhouse for a paddle take into account additional safety considerations - additional items; cell phone, bucket, spare clothing, rig rope, duct tape.

Prepare for the worst, expect the best...

A very good example is our participation in the Length of the Lake race. A 100km relay race held on Lake Okanagan in late September. The weather can be unpredictable and poor. Crews need to train for the unexpected events in addition to the obvious elements of technique, timing and fitness.

Set your crew up to succeed should there be a challenging situation that requires action; huli(s), hypothermia, damaged equipment, injured paddlers, etc.

And know when to pack it in for the day for the sake of safety.

Coaches, steers and experienced paddlers need to step up and be leaders in this area of preparation. Never assume.

Details for planning available from the Coach.

What to know before you go out

For your initial paddling sessions our intention is to provide coaches to teach you the basics and look after your safety. Having said that, if at any time, with any amount of experience under your belt, you feel unsafe then do get off the water. Understand that mistakes do happen and our intention is to always learn from them and not repeat. You will be better served if you have a sense of adventure with outrigger paddling, there are elements to being a paddler that are out of our control (weather, another person's actions, etc). Let's work together to control the elements we do have control over.

As a new paddler in an OC6 you should have a basic understanding of;

- the huli drill, what actions occur in the event of the canoe overturning

- what is your seat role in the OC6
- the traffic flow guidelines
- the Glenmore Reservoir bylaws pertaining to paddlers

As an experienced paddler additional knowledge is required as a leader in OC6 and for small boat use, including;

- retrieving and replacing boats on moorings
- dock usage and race course ethics with other users
- rigging OC1, OC2, Vortex V6's
- carrying the boat safely
- basic equipment care so you can address a minor malfunction

(see the appendix for information on some of these topics)

Paddling Commands

When we paddle together in the OC6 our objective is to blend as a crew, all to be paddling in perfect sync with power and exceptional technique....hmmm sounds like a lifelong venture...well it is and that's what makes paddling such a great sport.

As a reminder, your steers are in command of the canoe at all times (unless you have that keener coach interrupting to pass on words of wisdom). Your steers will direct you to get started with 'commands'. Typically, it is a simple command of 'paddles up, take it away'. Being the keeners we are, some of us also use the Hawaiian commands and they are as follows;

<u>Hawaiian</u>	<u>English</u>
Ho'makaukau	Are you ready? (you can answer ae – yes)
Hoe apai	Paddles up
Imua	Move forward
Huki	Go!, forward with race purpose gusto
Lawa <i>(la-va)</i>	Let it run

All paddlers should be ready to react quickly to any command; back paddle, check the boat, all left (if ama needs protecting), seat 1draw left, etc. Know your seat and practice quick reactions, it will come in handy one day.

Two other commons commands with Hawaiian terms used for sprints turns;

- "Uni"

This is the first of two commands used for racing turns around buoys or other obstacles. Seat 1 holds (i.e., pokes) his/her paddle at an angle against the right side of the canoe. This action will move the nose of the canoe to the left. Seat 2 pulls left at the same time. All other seats paddle normally.

"Kahe" (ka – hee)

This is the second of the two commands used in a racing turn. Upon hearing the steersman call Kahe, seat 1 comes across from the right side to the left side and joins seat 2 in pulling left. As soon as the canoe is almost out of the turn, the caller calls a Hut and everyone except seat 1 switches sides. The caller then calls another Hut in 10 strokes or so, so seat 1 can switch sides and get relief.

^{**}If you are new to paddling small boats, you MUST be with an experienced paddler until you learn the basics. You cannot paddle by yourself if you do not know how to self rescue (huli recovery). Paddling with a buddy is always the smart way to go.

Seat Responsibilities, amended from KanuCulture.

Six paddlers in the canoe all working in unison, but each with a role to play. Each paddler from seat number 1-5, paddles alternately on the opposite side from each other.

Stroke and Seat Two

The stroke sits in the very front seat of the canoe. Paddlers one and two, are primarily concerned with ensuring the rhythm and pace of the paddle strokes, which seats three through five follow. They paddle on opposite sides and as such neither has a paddle to follow. The stroke at the front of the canoe must set a more or less consistent pace which varies according to the nature of the race and water conditions, but usually between 65-75 strokes/minute, whilst the paddler behind in number two seat, must follow in perfect time, mirroring the strokes pace so as the power distribution remains equal and synchronized down the length of the canoe.

The stroke's job is crucial in ensuring the consistency of the crew working at an optimum pace and rhythm. When rounding markers, the stroke and number two work together to turn the front of the canoe. *We also refer to seats two and four as keepers of the ama as they sit in front of the iakos. Therefore, we like to see 2,4 get in first and out last and lean left to weigh the ama down both at the dock and on the water when we stop.

Seats Three and Four

Often referred to as Power Seats, the heavier, stronger paddlers will generally take these positions. It is their primary task to provide the brute power required to push the canoe along. Seats two & four generally takes responsibility for ensuring the canoe remains as dry as possible, bailing when need be. Seat three is typically the caller to direct paddlers to switch sides, may be seat 4 as well.

Seat Five

Again, a power seat but also needs to have knowledge of steering to assist the steerer when necessary. They are also referred to as the keeper of the ama. This entails that they must eyeball the ama to make sure it is stable. If it looks at any time to be lifting threatening capsize, they must quickly react to save it. Failing this, numbers three and four need to recognize the predicament and also try to save a capsize. Number five must also take responsibility for bailing if required should there be an excess of water in the canoe as by the time water is collecting towards the aft end of the canoe, there is definitely too much water inboard.

Steerer

The steerer, who is typically the captain of the canoe, calls the shots, motivates the crew and sets the canoe up for the best course and catching the swells (not so many on the reservoir). They plan and navigate a course and have a big responsibility during sprint races, where they must set the canoe up for a good turn around the buoys.

They need to have a good paddling relationship with number 5 in protecting the ama and indeed with all the crew.

Steering a 45ft canoe on the open ocean in rough water is an art form. Those that learn their trade well can be considered masters of a task, which requires intimate understanding of the dynamics of the ocean and the nuances of the canoe and crew.

What are the characteristics of a good stroke?

Being stroke is first and foremost psychologically challenging as they have the position of not being able to follow anyone and must therefore remain at all times self motivated and alert. In many respects their role is mentally more challenging than any other in the canoe, with the exception of the steerer.

They must have a natural sense of timing and rhythm and have eyes in the backs of their head, being able to intuitively feel how the canoe is travelling and respond by increasing and decreasing the stroke rate where necessary. They need to be aerobically very fit as they may not pull as much water as those behind but they will be working hard on an aerobic level. Above all they need to be good natural athletes with a capacity to read the water and have an understanding of what the paddlers behind can tolerate as an effective, efficient stroke rate.

What are the characteristics of a good seat 2 paddler?

Much like the stroke, a good sense of timing and rhythm. It is crucial that number 2 stay in time with the stroke, made all the harder by the fact that they cannot actually follow a blade in front of them, but only the paddlers body movement.

Number 2 needs to talk to the stroke to encourage and keep them on task, unless seat 1 does not prefer feedback on a regular basis. A good paddling relationship at the front of the canoe will ensure the rest of the canoe is firing well. Numbers 1 and 2 are the source and all that happens here, travels back along the canoe.

They should also be in a position to note how the stroke rate is going, in terms of number per minute and therefore can prompt the stroke if needs be if the rate seems to slow or fast.

Why are paddlers 3 and 4 often the heaviest and strongest paddlers?

In order to create a stable canoe, it is preferable to have your heaviest paddlers in the middle of the canoe between the two iako. In this way their weight stabilizes the canoe by ensuring that it sits reasonably deep in this mid section and therefore that the ama on the outer iako maintains contact with the water. *There are exceptions to this if surfing, and downhill motion is needed, or if the balance of weight and power needs to be adjusted.

Ideally three and four need to be concerned with little else, other than following the front two paddlers and applying maximum leverage. Beyond this, the canoe is widest at its mid point and therefore physically large paddlers can fit in these seats and may have trouble fitting into seats 1 or 2.

• Why does number 4 take responsibility for bailing?

When water enters the canoe it will tend to pool first of all in the mid section of the canoe. Number 4 can recognize this and react by bailing.

So when does number 5 bail?

When there is a serious amount of water and the pool has extended to the rear of the canoe.

• What are the characteristics of a good number 5 paddler?

The number five paddler has a varied role and perhaps needs to be a good 'all-around' paddler. They

should ideally be a competent steers and of course strong paddlers. They need to be able to be totally flexible in their paddling ability, so as they can eyeball the ama and protect it and change paddling sides rapidly and frequently if need be. They may also need to paddle for long stretches at a time, much like the steerer, on the left side to protect the ama, so as the steerer can concentrate on steering. Their reactions must at all times be fully intuitive, working in with the steerer when it is needed. It helps to have a solid catch (as water is moving faster at the back of the canoe) and the force (especially on the changes) be straight down so as not to affect the steering of the canoe but to help it move forward and up.

What are the characteristics of a good steerer?

The steerer has without question the greatest degree of responsibility within the canoe, one that is often overlooked by other paddlers. They must steer a good course, read the water and work the canoe so it interacts and travels at its maximum potential at all times. They must motivate the crew, call changes to stroke rates if they feel it necessary and ensure the overall safety of the canoe. Experience counts for a lot in this position. Time on the water in all conditions is crucial and an intuitive understanding of ocean dynamics is crucial to achieving maximum canoe speed. In this respect it is said that surfers often make the best steerers. Curiously, the best steerers happen also to be more and more so, excellent solo outrigger canoeists, specifically V1 (rudderless).

How important are timing and rhythm to a crew's performance?

One of the fundamental secrets to making an outrigger canoe travel well, is precision of the crews timing and rhythm. All paddles entering and exiting the water at the same time, all paddlers pulling in unison and all using the same technique. Applying power at the same phase of the stroke drives the canoe forward and the power surge must be synchronized. Time in the canoe as a crew working on these fundamentals are paramount.

First Aid Basics

This is not intended to be a first aid manual. Having said that, for the purposes of safety we love having people with first aid knowledge around. Club members include a large scope of the community; youth to our beloved kupunas, fit and not so fit, healthy and those with health issues. We expect individuals to use their best judgment as a guide to determine if they are capable of completing a specific practice session or race, and we realize sometimes the unexpected occurs and it's important to be prepared to assist those individuals as best we can.

- Please note we do have COLD WEATHER PADDLING RULES (in effect based on water temperature, below 8C). A reminder of the rules will be emailed out to members when required.
- These include but are not limited to: paddling with a buddy, wearing a full body PFD, staying within 5 meters of shoreline, wearing a leash, bailer in V1 and OC1 with no drain options.

The ability to apply basic first aid for the following ailments is important for any crew, at a minimum learn to recognize the signs and know when and how to get help as soon as possible.

- heat exhaustion, heat stroke
- dehvdration
- hypothermia
- heart stroke and attacks

Technique

A separate manual could be developed on the art of paddling; technique, training, racing, etc. Let's leave that to the experts. (see Steve West's KanuCulture books for excellent resources). And nowadays so much good stuff on Youtube. We've been following along with Johnny Puakea, as have a lot of Clubs in the recent years. I believe new paddlers should learn the basics of technique on the water by listening to coaching tips, watching others – preferably paddlers with good technique, and asking questions. There are many resources on the web related to paddling technique. I encourage you to read, watch youtube and above all get in a boat and paddle.... a lot.

Having said all of the above I will share some basic pointers to get you on track with some terminology as well as be prepared for some drills.

Basic Technique pointers

A good OC6 crew will encompass the following elements; timing, technique, power and **blend** – bringing those elements together. If you are in an OC6, timing trumps the other elements, focus on entering and exiting at the same time.

Let's get the canoe moving forward in a smooth efficient manner.

Coaches have several drills to practice timing and it's worthwhile to add drills to each workout to assist in improving our technique.

Functional principles integral to paddling proficiency; all related to each other;

- 1. Thoracic Mobility rotation. Allows us to generate power from the core if we have a natural longer reach with rotation, if not we often try to compensate and get the extra reach by forcing our shoulder forward and putting stress on smaller muscles leading to injury.
- 2. Scapular Stability shoulders down, squeeze scaps lightly. As paddlers, we are constantly rounding forward so emphasize opening up and back, takes pressure off shoulders again. Will also improve the amount of rotation from torso.
- 3. Glute Strength foundation for stability, provides improved leg drive.
- 4. Core Strength focus on inner core and stabilizers. Provides stability to rotate, improves lat mobility reach. Think of this as your Foundation.
- 5. Disassociation hips are stable while rotating our spine.

Other notes:

- Weakness and limited mobility in any key area leads to compensating in other areas leading to tightness and/or injury.
- Less compensation = greater efficiency = smoother boat
- Reminder: stabilization must always precede force generation
- Therefore, the mantra of; *Alignment, Stability, Mobility & Strength* can be your goal to optimize your paddling efficiency. Alignment refers to posture and more than ever I feel everything starts with this (educate yourself neutral pelvis tilt, core engaged, shoulders back and down, head stacked over spinal column)

Technical basics

• Holding the paddle; the lower hand placement is one fist above the bottom of the shaft.

Body position;

Sitting in the OC6 start with a 5 degree forward lean with a flat back. Maintain the 5 degree lean at the start and finish or the stroke (the lean will extend to approximately 15 degrees at the catch phase).

Hip motion is vital to a long and powerful stroke. Extend the paddling side leg slightly to ensure the hips are able to move forward and back with the stroke (this is optional as some paddlers feel more comfortable keeping both legs extended in front, and anything goes for the steers). Imagine 70% of body weight is placed on the paddling side hip, 30% on the non paddling side. This ensures we are getting our weight out over the blade on the paddling side.

Path of the paddle

The paddle enters the water at a slightly positive angle, fully buried, up front (exactly where is determined by an individual's hip and thoracic mobility and hence ability to reach). The paddle travels through the power zone to your knee while trying to maintain a vertical angle on the blade. Downward pressure is applied to the paddle, think of pressing down the shaft with both lats, once blade reaches the hip, release the pressure and begin the exit phase just past the hip. The blade is pulled out of the water and brought forward for the next stroke. It's important to keep your top hand over the water through the pulling phase and encourage a smooth recovery to set up for the next stroke not allowing the top hand to drop too low into the middle of the boat.

- The stroke phases are typically broken down into; catch, pull, exit and recovery. There are
 many fine details to each of these components that you can spend hours and hours refining.
 Start with the big picture and basics. Focus on good technique, as opposed to speed, to start
 to build good technical habits.
- Note* We have added many new elements and drills to our coaching the last few years, be
 open to new language and experiment with what works for you. Lock, load and launch as well
 as blending with the recovery phase are 2 such items that we have brought to the Club
 recently.

Other notes:

- Switching; we switch sides, left to right vice versa, approximately every 12 strokes. This entails a command from the caller (typically seat 3) to let us know when to switch. A call of 'hut' then 'hoe' at the catch signals the time to switch. As this occurs many times through a practice or race. I am a big proponent of an efficient switch to keep up the boat speed and to assist the steers with forward propulsion (as opposed to a sideways force). No doubt there will be drills from your coach to practice the technique and tips for a good switch.
- Relax your grip during the recovery phase of the stroke. Lift with your top hand to direct the paddle straight back up to catch (as opposed to old school oval loop).
- Breath
- Focus on one element at a time, then blend them all together

Paddling Drills

Coaches have a number of 'go to' drills to assist new paddlers. Here are few to expect;

Timing:

Same side timing drills. Start with seats 1 & 2 on the same side and 3,4 and 5 on the same side. Continue to switch over until all paddlers are on the same side. Use caution as all paddlers are together on the non ama side or this turns into a balance drill. Steersperson stays on ama side, start in calm conditions with more novice paddlers.

Paddling with closed eyes. Get paddlers to feel the rate and timing, it's OK to screw up, keep eyes closed and feel the timing and pressure at the catch.

Change ladder

Review the technical parts of a good change, describe last stroke and first stroke of a change (power, length, etc). Go through a change ladder from 15 strokes down to 2 in each change getting paddlers to focus on a crisp strong change for everyone. Build back up to 15 if wanted.

Catch drill

Focus should be on setting up with a good rotation/core control then driving the paddle into the water and hooking the water before pulling back. Lock, load and launch is a term we started using in 2017.

Start at exit position with the command 'ready', then on the command 'set' bring the paddle forward with top hand driving forward, go right into your catch and 'pause' once fully buried.

Connection drill

Explain the circle of connection to paddlers and then progress through the drill altering technical components as they continue to paddle.

Start paddling with both arms straight. Rotate keeping your chest and the shaft of your paddle parallel, don't worry about dropping your top arm or pulling back past your hip.

After a few changes have them start to exit at their hip, emphasize rotation to reach up front still staying connected. Then progress by having them move the paddle more vertical and putting their top arm in the correct position still feeling that connection.

Give them a mental break for a few changes. Return to paddling with emphasizing the connection between driving down with the top arm and derotating using the hips and back.

With blade buried the pull sequence is initiated from the hips followed by lower back, middle back, upper back and finally shoulder.

Airwork rotation Drills

Have paddlers swing forward and back in the air focusing on rotation.

I also like the drag your hand forward along the gunnel as far as you can. Focus on rotating and not bending forward at the waist.

Paddle the boat 5 strokes backward and then hold your paddle in the water and let the boat drag your paddle as far forward as possible holding your forward rotation. Feel that pull in your lats, paddle backwards further and harder if necessary, to feel that pull. Keep your chest up.

Add a slow forward stroke locking the paddle in and de rotating in the proper sequence.

Add a start with this same method. Paddle 6 strokes back and then with blades buried do the first 5 strokes. Emphasis is on 'gripping' the water and not rushing the stroke.

Right / Wrong approach

Do what is wrong first and then try again with proper technique.

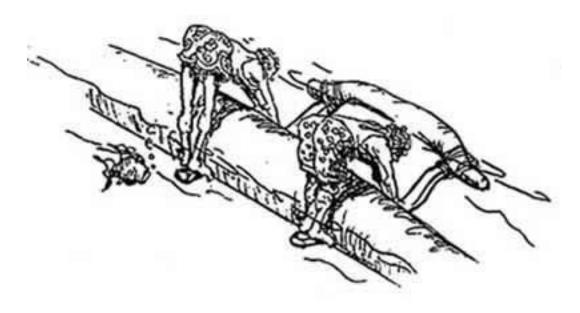
- Arms only
- Reach by bending at the waist and not rotating
- Lunge, fall on your paddle and sit up, feel the bounce
- Pull back with pressure past your hip lifting water
- Drop your elbow through the pull phase
- Keep your weight on the non pulling side
- Etc, pick out any as you note deficiencies in paddlers

HULI PROCEDURES

Always be prepared to swim. Do not carry anything in the boat that you are not willing to lose. **Make no mistake about it, at some point in time you will find yourself in the water!**

- 1. First and foremost, do not panic. Ensure all paddlers are present. If someone is missing everyone feel under the boat. Send one paddler under to start searching. Always try to hold on to your paddle.
- 2. The steersman is in charge.
 - a. S/he will call for a headcount. It is imperative that the steersman account for everyone on the crew.
 - Each paddler calls out their seat number in sequential order beginning with seat 1.
 - c. Depending on conditions you may need to put your PFD on. If you want it on, put it on regardless of conditions! (specific to non reservoir where we MUST have it on).
- 3. The boat may need to be repositioned if there are large swells. Listen for directions. Seat 1 will maneuver the bow into the wind if needed.
- 4. Designate 1-2 persons to collects the paddles (seat 2), and any loose items, if possible. Seat 2 or 5 move towards the ends of the canoe (away from the ama).
- 5. Seats 1 and 6 should be at the ends of the canoe to assist with keeping in line as needed and controlling the flip over speed.
- 6. Two people (seats 3-4) position themselves over the hull standing on the muku's see picture to pull the canoe over by grabbing the iakos and lifting and rolling backwards controlling the speed (make sure no one is in the way of the ama as it comes over). It is difficult to get up on the hull from non ama side by standing on muku's so easier to climb up on hull from ama side of canoe where you typically are following a huli stand on iako and lay across hull then pivot your body around.

If wind conditions make this difficult seat 5 can assist with lifting the ama, stay out of the way of the ama if it comes back down.



- 7. Control the force of the ama slapping down in the water as it is flipped over, a hard landing could crack the ama.
- 8. Once the canoe is righted, one to two paddlers will get in and start bailing. Additional paddlers get back in the boat and start paddling as soon as enough water has been bailed out, this is a good time to switch up the bailing task for a break. Bail ama side and use caution.
- 9. If we huli during a race, safety is the first priority. Next, the purpose is to get the boat going again quickly. Bailing needs to be done with a purpose. People may alternate bailing as arms start to tire. The steersman may have all but one person start paddling as the last few inches are bailed.

When you are paddling with a sprayskirt, calmly unzip and roll out. **Safety:** Do not wear a bulky waist pac as it may get stuck with a tight skirt.

Avoiding a huli;

- adapt with poor water conditions by staying centered in the canoe
- ama side paddlers react as needed with weight shift and paddles to huli line
- non ama paddlers can come over or do a strong low brace pushing down and moving weight to ama side
- steers can stay ama side and ask seat 5 to stay as needed

As the canoe huli's:

- do not lunge away from hull, stay close and protect your head with one hand and hold on to your paddle with the other
- when swimming under the canoe always keep one hand up to feel for hull

^{*}An experienced crew should be able to carry out this drill with little communication. Regardless, always ensure all paddlers are OK, stay calm and work with safety and purpose. Mistakes are often made when trying to rush and too many voices are speaking.

**Can you see why it's important that we keep bailers attached and readily accessible? Loose bailers typically result in them floating in the water somewhere following a huli.

Huli procedures should be discussed with all paddlers and drills should be performed by the discretion of the Coaches and Steersperson.

Always Remember – The CAPTAIN of the canoe is the Steersperson as a default! Less voices giving the commands the clearer instructions will be.

Additional information for very rough conditions.

If water remains over the gunnels after flipping the canoe, re-flip the canoe and refloat it; if the gunnels aren't awash and when sufficient amount of water is out of the canoe, a bailing person can get in the canoe to bail from a seated position.

"Rapid volume removal" is priority one. More bailers can get into the swamped canoe when sufficient water is out of the hull. Keep canoe pointed in the direction that allows for minimum waves and water getting back in the canoe.

Hang onto the ama to keep it from flipping; change out for tired bailers.

If more assistance is needed from the escort vessel, have skipper approach from the downwind or down swell side, so you don't have more complications such as crashes and injuries.

Basic Paddle Repairs

When to Finish the Surface

When you get cuts and deep scratches in the surface of your **paddle** take action to prevent cracks and rot by **refinishing** the surface (wood). You can collect a few minor nicks before taking action, but try not to take longer than a week to seal the wood against water damage.

The materials that you need to maintain the finish of your **paddle** include:

- String, water
- · Polyurethane clear gloss finish (Behr, Miniwax brand)
- · Sandpaper (two grain sizes: 320 and 400, one sheet of each)
- Foam brushes (1-inch wide, extra for extra coats)
- Moist cloth or paper towel
- · Color electrical tape (optional)

Instructions

Begin by sanding the surface. Use 320 sandpaper dipped in water to take out dents and scratches. Then use 400 sandpaper dipped in water to smooth the surface. The lubrication that water provides between the sandpaper and the **paddle** yields a smoother and more even surface. There is no need to sand down to bare wood unless the damage is deep.

Clean the surface. Use a moist towel to remove the sanded residue.

Suspend the paddle. Use string to suspend the **paddle** by the part you will not be **refinishing**. That means that to work on the shaft and blade you will need to suspend the **paddle** by its handle. To work on the handle, you will need to suspend the **paddle** by its blade.

Coat the surface. Use a foam brush dipped in polyurethane to lightly coat the surface of the **paddle**. Use long even strokes, in the direction of the grain. At least once per coating, stroke against the grain to cover missed spots. Finish in the direction of the grain, using light strokes to prevent runs. Be sure to coat the edges and tips. Let each coat dry for about 10 hours. You can safely apply two coats a

day—one in the morning and one at night.

Sand the surface. After the polyurethane coating dries, sand lightly with 400 sandpaper dipped in water to remove any rough surfaces, such as bubbles or thick spots

Clean the paddle. Use a damp cotton rag to wipe off the wood dust.

Coat the surface. See the next section for tips about finishing the surface.

Secrets for a Flawless Finish

Layer the coats. Repeat the sand, clean, coat process until you have four to six coats on the blade and shaft. When the last coat is dry, suspend the **paddle** from its blade, and repeat the sand, clean, coat process until you have four layers on the handle.

Rinse the wipe cloth. Rinse out the wipe cloth between wipe downs to prevent wood residue from being returned to the **paddle** surface.

Cushion the surface. Protect the surface you have already coated when working on the handle by placing a soft cloth or paper towel between the string and **paddle** surface. This will prevent indentions on surface of the dry but not yet cured and hardened polyurethane.

Finish with a dry brush. During the finishing strokes of the last application (both the blade/shaft and the handle), set the brush aside that you used to apply the polyurethane. Use a clean dry brush to finish the last strokes. This will give you a flawless smooth surface.

Cure the finish. Let the **paddle** dry for at least 72 hours after the last coat before using it.

Tape the edges of the blade. If you like, you can tape the edges of the blade with colored electrical tape. This serves to prolong the life of the polyurethane coatings. It is easier to replace tape than coat the blade.

Painting If you'd like to have an image painted on the paddle,

Sand it to or close to bare wood. Finish it with one or two coats, paint on the design, then finish with at least two more coats, preferably more. Your goal is to protect the design during future finishes, but not add weight by adding two many polyurethane coats.

Basic instructions for minor paddle repairs

Shaft worn in areas, dings and little chips

Sand the areas that are worn and grey looking with 100grit sand paper, then coat with a marine varnish or a 2 pack polyurethane. Once this is dry re-sand this area and the whole shaft (to get a better finish) with 150- 180 and recoat, dry again and then a final 320 grit sand and apply a final coat. Remember to not coat anything that has not been touched by sand paper, as it will not stick!

Holes or dings in the blade

The best would be to use some epoxy, fill the hole level, sand the patch down level and lightly sand the whole blade on that side (or both sides of the blade to get a complete even finish on the whole blade) and recoat with a marine varnish or 2 pack polyurethane.

Cracks or splits in the blade

Basically you need to open the crack up make sure it is clean, put some epoxy resin in there and clamp it tightly shut again to it's original shape, you can use electrical tape to hold it to shape and close the gap as much as you can. When dry, sand down the excess resin back to the glass layer (through the varnish),

recoat with a thin fiberglass over the sanded area only, sand level when dry, then apply some coats of marine varnish or polyurethane sanding between coats.

Again, remember to not coat anything with resin or varnish/ polish that has not been touched by sand paper, as it will not stick!

Shorten your paddle

Can the handle be removed with a heat gun, what type of glue is holding it together now? If a heat

gun removal is not probable you will have to drill out.

Cut neatly under the existing handle. Drill out the handle with a 21mm(7/8") drill bit (we use a spade bit with tip shortened so it doesn't go through the other side). Cut the shaft to the length you want, less 12mm (1/2") and shave the end down a distance of 15mm (5/8") with a sharp knife to fit neatly into the hole in the handle,

Glue on with epoxy!

Resources: Xylo Bladz, Lake Havasu Manual.



HONU (the turtle); common Polynesian symbol representing ohana, longevity, safety and mana, also the sign of the navigator. Popular aumakua, ancestral spiritual guide.

FAQ's

- 1) Can I bring a guest paddler out to try OC6 / V12?
 - YES, however we prefer you bring them out on a Wednesday evening for newcomers night (IF IN PLACE). Plan B is to bring them to a Sat am recreation OC6 session. Outside of this please get the OK from your OC6 crew to have them join you, and take full responsibility for giving them a proper introduction. Please talk to Lynda if you have any questions.
- 2) Can the new paddler use small boats?
 - No, we do not want newbies taking out small boats until they have an introduction in big boat. However, we understand there may be special circumstances, please talk to Lynda if you feel you fit this. NO GUESTS are allowed in small boats without permission.
- 3) Can I use a small boat?
 - Yes, if you are a paid up member and have the basics under your belt you may use all Club boats. However, you MUST have an orientation session with either Lynda or an experienced OC paddler. DO paddle with a buddy for the first few times. I'm always happy to happy to hear that you have hulied in a small boat, and managed to handle it no problem. Technically, we are not allowed to swim in the reservoir but we must be prepared to huli so knowing the drill is a must.

- 4) Can I paddle outside of club hours?
 - Yes and No. You may paddle in the morning before the BB is open (Spring, Fall with permission). You must paddle with a partner and stay close to shore when cold weather paddling rules are in effect, this is related to water temperature (early spring and late fall). Talk to Lynda for the process.
 - You may not paddle once we are closed in the evening, yes this applies for Saturday and Sunday evenings when we close before sunset at 5:00pm.
- 5) Can I take equipment off reservoir?
 - We do want to assist members with using Club equipment off reservoir. We will decide if we can allow this on a case by case basis. We will take into consideration; experience, transport safety – such as good racks, length of time you are aware and if the boat is needed for Club activities.
- 6) Can I store my private boat at the club?
 - We would like to accommodate members however we are very limited with space in the bays so please discuss this with Lynda and do not assume we have room.
- 7) Can I sign up for any race the Club is going to, can I go to other races?
 - Yes and yes. Racing is fun and a great way to improve. Understand that crew selection can be tricky based on the number of paddlers that sign up. We always do our best to accommodate everyone that signs up regardless of experience. If you want to race at race we do not plan to attend we'll do our best to lend you a boat and help you out.

Resources

Organizations:

- CORA, <u>CORA Canadian Outrigger Racing Association Share our passion for outrigger canoe</u> racing
- International Va'a Federation (World Sprints) http://www.ivfiv.org.
- KanuCulture.com for books
- http://holoholo.org/hanahou/
- http://www.kiheicanoeclub.com

2021 Calgary Outrigger Program Info Sheet (additional documents available)

Annual Membership and Fees
Training Schedule
Races and Events draft
2021 COVID guidelines, use of app to pre book
Equipment use policy

Rigging

Materials – cotton rope, quick straps, rubber gaskets, dowling for pulling Ama/iako 7x wingspan (Lynda) approx 35ft (HI = 39 ft) enough for 4 passes Wae/ lako 12x wingspan

How to tips;

- wrap around wae then one wrap over tip of iako before the cross pattern helps with the rope from slipping and losing the under tension.
- Copy directions from book, add some pics as examples
- pull up, keep rope dry and clean as you rig

Additional Resources

Docs specific to paddling in the ocean and at our Maui training camps are available. Topics covered include:

- Beach launch and landing
- Downwind runs, paddler test protocol
- Voyaging
- What to bring
- Steering specific

