



Outrigger Canoeing

Paddling & Steering Guide

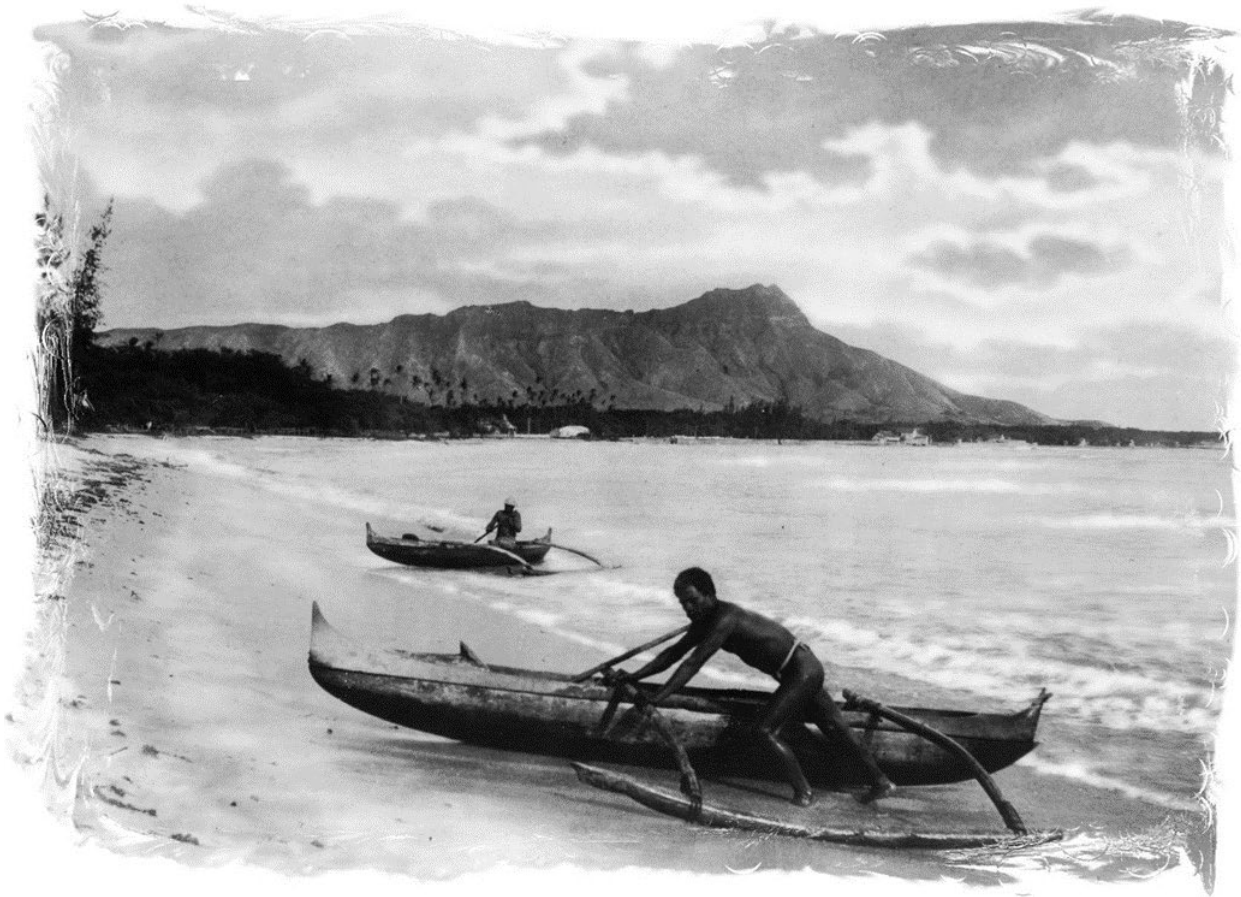


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Note

Throughout this manual where personal pronouns or suffixes specifying gender are used without reference to a specific person, they are meant to refer to persons of either sex.

History

It has been said: “Canoe racing has been around as long as there have been 2 canoes.” Although outrigger canoes were standard craft in the Indian and Pacific Oceans (over half the world’s surface) since time immemorial, the contemporary sport of outrigger canoe racing has its origins in the Hawaiian Islands.

Outrigger canoe racing, along with most other aspects of Polynesian culture, were lost or nearly lost in the rest of Polynesia in the 19th century but fortunately survived in Hawaii. It is the Hawaiian outrigger canoe which is the standard canoe principally used internationally for racing.

For this reason, it is common practice to use original Hawaiian customs, traditions and names for all aspects of the sport: the techniques, the parts of the canoes, the seat assignments, etc.

Many indigenous names exist for canoe, but the more universal names used in outrigger canoe racing include: Wa'a- Hawaii, Va'a- Tahiti, Waka Ama- New Zealand.

The Spirit of Aloha

In the beginning A (pronounced "ahh"), the eternal light giver, created Namaka O Ka Hai (the great power of the sea). But A saw the seas were alone, so he freed the force Pele. Pele created the lands. To keep them above her jealous sister, she constantly renewed them. The people who found these lands named it Hawai'i hailing it as a place of blessed "alo" or "aloha" meaning "in the presence of A." Life in old Hawai'i was a spiritual experience. There was aloha everywhere, in the people, plants, animals, rocks and reefs. Even in the canoes and paddles and the tools used to make them.

But aloha is more than a word, it's a way of life. If there is life, there is mana, goodness, and wisdom. If there is goodness and wisdom in a person, there is a god-quality. One must recognize the "god of life" in another before saying "Aloha." It means mutual regard and affection and extends warmth in caring with no obligation in return. It's the essence of relationships in which each person is important to every other person for collective existence. It's to hear what is not said, to see what cannot be seen and to know the unknowable.

To say "Aloha" to another with indifference is blasphemous, just as saying "Mahalo" ungraciously is profane. Therefore, when one says "Aloha" to another, one must mean it sincerely. If you are angry with someone, you must cleanse away all ill feelings before saying "Aloha." It is said, and given, freely and without condition or expectation and with the realization that it may not be returned but it is given without regrets, nonetheless. It is this concept more than any other that distinguishes Hawaiian culture. It also allows an outrigger club and its members to grow and thrive. A club's leaders, more than any other, should understand, and be possessed of this concept. It is not enough to be in charge, one must lead by example.

There are many traits that express the charm, the warmth, the sincerity, the generosity, and the love of an intangible substance or spirit known to many in Hawai'i nei as "ALOHA."

Aloha is appropriate when it comes to your hoa wa'a (canoe mates) and as your competitors. Every race is an occasion for the celebration of team spirit, meeting the challenge of competition, the test of determination, and the solidarity of club pride. So, what are these traits? See the next page.

Trait	Meaning
Akahai	Kindness. Help others where you can, let others help where possible. Remember to give credit where credit is due and do not take credit at another's expense.
Lokahi	Unity. Unity is to a club, what water is to a farmer. Take away a club's unity, and the club becomes a lifeless desert. By maintaining club unity, you maintain a common goal and individuals are possessed with a common motive.
`Olu`olu	Agreeable. Commend in public, condemn in private. Remember a good judge of character corrects what he hears by what he sees, a bad judge of character corrupts what he sees by what he hears.
Ha`aha`a	Humility. Pride brings destruction, humility brings honor. If you are humble, you consider yourself the servant of others. You do not act or feel superior to others. Remember that a leader who excels in employing others humbles himself before them.
Ahonui	Patience. Never remember small faults, never forget small favors. The development of patience challenges the strongest by the minute to break away and take the easy road. It is something to admire and respect in someone but often overlooked because patience is hidden in all of us.

Before canoeing

Hydration

It is vital to consume fluids during long races or during race days, especially if the climate is hot and humid. You can lose up to 3% of your body fluid in less than two hours on a hot day, which can cause severe trauma to your system. For some of us that means up to 3 liters of water which needs to be replaced even during a race! This is exacerbated by the demands that carbohydrate mobilization has on your water reserves.

Never underestimate the need for water. Hydration should begin for hours or better yet days before a race or long training run, even if it means getting up five times in the middle of the night for relief. Urine that is thick as syrup, means your blood is probably just as thick, that can result in a high heart rate and renal shut down.

Water

Water is a necessity for all life. Without it, life can't exist. Even when water is limited, living organisms suffer. You are no exception. For young athletes like yourself, not enough water means you can't do your best. It can even cause serious health problems.

Our blood circulates like an ocean within us. The water in blood helps carry nutrients and energy to our body cells. It also carries waste products away from our cells for excretion from our body. Water helps regulate our body temperature, too, an important factor for all of us.

As an athlete, you have a special need for water. When you participate in a sport like dragon boating, you burn a lot of food energy (called calories). Some of that unleashed energy powers muscles. But some of that energy is released as heat. Water keeps you from overheating. Sweating and evaporation from the skin cools you down. However, water is lost in the cooling process. That can be dangerous if the water is not replenished.

If you run low on water, your body can overheat, like a car that is low on cooling fluid. Losing just two percent of the body's water can hurt performance. A five percent loss can cause heat exhaustion. A seven percent to ten percent loss can result in heat stroke and death. *Dehydration can kill.*

Thirst is your body's signal that you need to drink water. By the time you feel thirsty, you may have already lost one percent to two percent of your water and that's enough to hurt performance. But just drinking enough to satisfy your thirst may not supply your body's needs. If you drink only enough to satisfy your thirst, your body may take up to 24 hours to fully rehydrate its cells and regain maximum performance.

When you participate in a sporting event or practice session, follow these guidelines:

- Don't wait until you are thirsty before drinking water.
- Drink more than enough to satisfy your thirst.
- Drink more than you think you need before an event or practice to make sure you are fully rehydrated.
- Without enough water to cool itself, the body can overheat to dangerous levels.

The conditioned athlete can store and burn more energy in a shorter time. That means your body releases more heat, requires more cooling, loses more water, and needs more water to replenish its stores. Also, you may have increased your sweating response, which means you lose even more water. As an in-shape athlete, you need more water than other people.

When you feel exhausted and hot during a workout or race, drinking large amounts of water very rapidly may cause discomfort or stomach cramps. But that is not a good reason to restrict water. Drinking moderate amounts at frequent intervals is the best strategy during competition or practice. About one cup (six to eight ounces) of cool water every 15 to 20 minutes during an activity is about right for most athletes. Some athletes can drink a bit more than this at each interval. Cool water (40 to 50 degrees Fahrenheit) is best. Cool water helps absorb body heat. And it empties from the stomach into the intestine at a fast rate, which allows it to be absorbed rapidly into the body.

Some drinks that have caffeine, such as cola and iced tea, are advertised as thirst quenchers. Do not use caffeine-containing beverages as fluid rehydration drinks shortly before, during, and after practice or competition. Caffeine acts as a diuretic. It increases urine output and can promote dehydration.

Your biggest concern is getting enough water, pure, cool water. Even the salt you lose while sweating can be easily replaced by adding salt to foods.

Plain, cool water is the fluid of choice when the actual exercise does not last longer than 60 to 90 minutes. And that includes most situations, even a tough practice session. You don't need an energy source in the fluid you drink to rehydrate. During these normal situations, if you have been eating and training properly, you should have enough energy stored as liver and muscle glycogen to power you through.

There are many different commercial sport drinks available. They contain varying kinds and amounts of carbohydrates and electrolytes. For example:

- *Gatorade* is a glucose electrolyte solution of about six percent carbohydrate concentration.
- *Exceed* is a glucose polymer solution of about seven percent carbohydrate concentration.

If you use a sport drink, pick one that has less than eight percent total solids (carbohydrates, electrolytes). More concentrated solutions can delay fluid absorption. They must be diluted with plain water before you use them as a fluid replacement drink. Also, avoid sport drinks that

contain fructose as the only source of carbohydrates. Fructose may delay gastric emptying of fluid and cause an upset stomach. And the fructose must first be converted to glucose before it can be used for energy. This conversion means you can't use fructose as an energy source as quickly as other carbohydrates.

Fruit juices like orange juice should also be diluted if you're using them as a fluid replacement drink before, during, or after an event or practice session. Fruit juices vary from 10% to 17% carbohydrate concentration. Dilute them with an equal amount of pure water before you use them as fluid replacement. Of course, when you drink juices at other times, such as with a meal or snack, you don't have to dilute them.

Take every opportunity to drink water and other appropriate fluids. Drink fluids every day, even when you are not thirsty. That means drinking at mealtimes and snack time, too! As a competition or practice approaches, follow these guidelines:

- Drink plenty of appropriate fluids 24 hours before an event. Give your body every opportunity to become fully rehydrated.
- If you eat a pregame meal three or more hours before an event, make sure that ample fluids include at least two cups (16 ounces).
- About 15 to 30 minutes before the start of competition or practice, drink a cup or more fluids. This will help ensure that your tissues are fully re-hydrated at the start.
- During the activity, drink six to eight ounces of fluids every 15 to 20 minutes. Drinking moderate amounts frequently is the best way to keep fluid levels up. If you drink too much too quickly, you may develop stomach cramps and other discomfort.
- Drink plenty of fluids after the activity. If you weigh in before and after activities, drink two cups (16 ounces) for every pound lost until you are within a pound of your pre-activity weight.
- Remember to drink fluids before you get thirsty. If you wait until you're thirsty, your body may have already lost enough water to hurt your performance.

Getting it all down means you can perform at your best levels. Your endurance will be long-lasting, and you won't become as tired. You will have that extra edge when you need it most whether it's the last few minutes of the contest or the last 10 meters before the finish line.

Remember to power up with good food every day so you can take full advantage of a well-hydrated body.

Warm Up and Stretching

Warming up, cooling down and stretching have places in a workout routine, primarily to reduce the chance of injury and to facilitate recovery. Ideally, we should try to warm up before training and cool down after the session. When possible, the best warm up and cool down

routines are simply extensions of the training activity. For instance, a running session could start and finish with easy jogging.

Warm-up practices should be done not only to get blood into your muscles but also to prevent tearing, ripping, straining and spraining, not to mention the multitude of other gruesome things that can happen to your body.

Warm-up is very important and while a practice session may incorporate a warm-up component it is vital for people who come late to be sufficiently prepared before they are committed to heavy work.

On the water, 5 minutes of easy paddling followed by 5 minutes of medium effort work will be adequate, though everyone should have worked up a good sweat before turning up the intensity.

Land warm-up exercises are good including everything from push-ups and jumping jacks to a 10–20-minute jog, which should come before stretching exercises! (stretching a muscle which has not warmed up is like pulling on a frozen rubber band). A stretching regime is generally a good habit even in the middle of practice, though exercise should not incorporate bouncing which promotes hyper-extension. All stretches should be held for a count of 30.

Stretching is best done after training to help recovery. If you want to stretch before training, you should warm up first, then stretch. Stretching can be dangerous if done incorrectly, such as when your muscles are cold and tight, or by stretching ballistically rather than dynamically, or by having someone else help you stretch.

Training

Your coaches expect you to follow directions and work hard in practice. Since much of our practice time is devoted to developing and perfecting our individual and crew technique, testing and selecting crews, and doing paddling-specific speed training, you should plan on doing your own out-of-the-boat training.

Your coach will let you know what type and duration of training is expected of you. Generally, you can plan on working out to increase your general fitness level and endurance. To address your paddling fitness, you can train in OC1. To improve general fitness and help prevent injury, cross-training for endurance or with resistance can be effective. Body resistance exercises such as crunches, pull-ups and push-ups are good supplements to paddling workouts.

Bear in mind that to reach your goals as a competitive paddler you need both a high level of general fitness and endurance, and a high degree of paddling-specific strength and endurance. Ultimately, the only thing that will make you a faster and stronger paddler is

paddling. If you have limited workout time, choose to paddle before you pursue another training activity.

Understanding Effort

What do we mean when we call for 50%, 70%, 80% effort and so on? What we are really talking about is a percentage of your heart rate range, defined as the difference between your maximum paddling heart rate and your resting heart rate. In practice, you must correlate these percentages with how your body feels under the stress of paddling.

You can find your max paddling heart rate on OC1. After warming up for a few minutes, paddle as hard as you can for as long as you can, pushing yourself to complete exhaustion. Immediately take your pulse. Do this over a period, perhaps several days, and take the average. Find your resting heart rate by taking your pulse when your body has been at rest for at least 30 minutes. One good method is to take your pulse routinely when you first wake up and before you've gotten out of bed. Over a few days you'll have a good average heart resting rate.

Think of 100% effort as working as hard as you can or going "all out." You're going to be working anaerobically very quickly, and you'll probably burn out in a matter of minutes because you'll be working above your lactate threshold heart rate (LTHR) and close to your peak heart rate (PHR). You'll experience ventilatory distress; you won't be able to take in enough oxygen. This is the kind of effort that you save for race- intensity situations, such as starting a race, pushing to overtake another boat (maybe by doing "power 10's"), coming out of the turn in a regatta race, or doing a finishing sprint.

Think of 80% to 90% as working just below your maximum effort. You'll be working at or just above your LTHR. If you experience the ventilatory threshold (breathing very heavily, gasping for air, muscles starting to burn) back off until your breathing is under control. This is a level you should be able to sustain for 10 to 20 minutes, and which corresponds to race pace.

Working at 70% is below your LTHR and is the level at which you develop aerobic capacity. You should be able to sustain 70% effort for upwards of an hour.

Working at 50% to 60% should be recovery mode, used for both warming and cooling down. This is "paddling easy" and should be sustainable indefinitely or for several hours.

Conduct

Respect and be responsible for our equipment

Canoes

- Everyone will help carry canoes in and out of the water.

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- Lift boats in and out of the water carefully.
- Do not scrape bottoms of boats on the ground.
- Do not intentionally bang other canoes during practice or races.
- No swearing or cursing in canoes at any time.
- No sitting in/on canoes out of the water unless instructed to.
- Do not rest your feet on the canoes.

Paddles

- Treat club paddles as if they were your own.
- Wipe off and rinse and put away paddles after use.

Canoe Protocol

Talking

- #2 or #3 call changes
- #3 or #4 relay ho`okele's (steerer's) calls
- #2, #4 and #5 be ama conscious
- #5 acts as backup ho`okele, helps steer when called on by #6
- #6 (steersman) is the captain of the crew. What ho`okele says, goes.
- Absolutely no swearing or cursing in the canoes at any time.

Coaches

- Treat every paddler with respect.
- Discuss disagreements in private.
- Be positive: if paddlers don't understand you, try a different way
- No yelling or swearing at paddlers.

Paddlers

- Treat each other with respect.
- Take any disagreements directly to the coach. If unable to resolve the problem, take it to the head coach.
- No yelling or swearing at fellow paddlers or coaches.

Practice

- Paddlers try to attend all practices. In case you cannot attend a practice, inform your coach so adjustments can be made. In some cases, missing practice may mean losing your seat in the race for that week.
- If you need to leave early, let your coach and steersman know in advance so that you can be dropped off early, or be given an alternative workout.

- Do not criticize other paddlers, even if it is something obvious. The steersman or coach will advise paddlers.
- No talking in the canoe while practicing, unless necessary.
- Do not talk to other members about another paddler's performance.

Crew Assignments

- You may not always paddle with the same crew. Paddlers are switched around to find combinations that work at peak efficiency.
- Keep an open mind and always try your best in any seat. Be a team player.
- Some paddlers may come to have "regular" seats, but must work hard to
- in them.
- Coaches may let you know your crew assignment as early as Friday before a race. However, depending on attendance, paddlers may be shifted to fill in or work with new combinations.

Any Lōkahi paddler consistently showing unacceptable or unsportsmanlike conduct will be seated out of races, or in extreme cases, will be asked to leave the club. Cursing or swearing will not be tolerated at practices or races, in or out of the canoe.

Paddling Terms

Club Chant

“`ekahi, `elua, `ekolu...i mua Lōkahi!”

“one, two, three...Go forward in Unity”

Terms & Phrases

Term	Meaning
ama	outrigger, balancing float
automatics	(power tens) two or more changes of ten strokes where emphasis is placed on increasing power while maintaining technique
change	one set of repetitions
eggbeaters	fastest stroke possible while maintaining timing; usually uses less than a full blade
hou	sometimes called by crew or steersman in response to “hut”
hoe	paddle (n); to paddle (v)
hold water	place paddles in the water to stop or hold the canoe
ho`omākaukau	ready, get ready
huki	hit, pull hard (for racing)
huli	turn, used colloquially for “capsize”
hut	called by seat two to signal crew to change sides on next stroke
`iako	spar, crossbeam connecting ama and hull (kino)
kahi	to cut longitudinally; to paddle at a 45° angle to the boat, used to help control direction
kau	plant (or place) the blade in the water
luma`i	capsize
paddles set	ready position, leaning forward with paddles across canoe gunwales (mo`o)
power tens	see automatics
ready all	set position, paddles ready to enter water
repetitions	repeated individual strokes making up a change
steersman, steerer	ho`okele: seat six, back of the boat, captain of the canoe
stroker	seat one, sets tempo for crew
timing	paddling in synchrony at every phase of the stroke
une	pry; use the paddle as a lever to control direction

Checklist

Be Ready to Swim

Boats can huli, and even the most experienced crews will sometimes find themselves in the water. Novices, of course, will be more likely to huli.

Also, during practice, coaches frequently call for crew seat changes which allow them to watch different "combinations" of paddlers and judge the performance of individuals in a boat. At those times, it's often easier to just jump out of a boat and swim to your new seat assignment, than to crawl.

What to Bring

- **Paddle.** This assumes that your commitment to sport is such that you have purchased your own "blade."
- **Water.** A small bottle of water or sports drink to carry with them in the boat.
- **Head protection.** Headband, hairband or hat of some sort to keep your hair out of your face and sweat off your face.
- **Dry T-shirt.** Dry towel and a t-shirt or sweatshirt to put on after practice will be more comfortable for you. During early or late season, polypropylene is recommended as cotton is very cold.
- **Sunscreen.** You really do need to protect yourself from the sun -- especially on race day at the beach and any daytime practices. Don't worry about it during weekday evening practices.
- **Neoprene.** You'll see a lot of paddlers wearing neoprene (wetsuit material) shorts. Neoprene is popular with paddlers because it cushions the hard seats of the canoe and minimizes chafing. Biking shorts also work well.
- **Footwear.** All paddlers must help put boats in the water and bring them out. Early season, wetsuit booties and rubber boots are recommended.

Never carry anything in the boat you cannot afford to lose to the ocean. This includes glasses, jewelry, keys, water bottles, and clothing. Never carry anything in the boat you cannot afford to lose to the ocean!

Pre-launch

Pre-Launch Inspection

- Watertight compartment forward, is empty and watertight
- Watertight compartment aft, is empty and watertight
- The hull is sound, no visible cracks or fractures to the fiberglass
- Wae (structure to which the ama is secured) is sound, no cracks evident
- Wae rigging lines are tight and secure - no frays evident
- Seats (all 6) are serviceable and secure
- Iako are sound - no cracks or delamination
- Ama is sound, no visible cracks and it contains no water. Lift the ama - if it is unusually heavy, it contains water. Look at the bottom of the ama - that's where the cracks emerge
- Ama lines (2 sets) are tight and secure - no frays evident.
- 2 bailers in good condition are properly secured (lines are tucked, no knots)
- Ensure that there is at least one spare paddle aboard

Safety and Equipment

The first and foremost rule is safety. If there is any doubt about equipment conditions, water conditions, or paddler skills, do not take any chances, stay ashore.

All paddlers must have a life jacket in the boat! Wear life jacket if it makes you more comfortable! If you are not a strong swimmer, be certain that the person paddling near you and the steersman are aware that you might need assistance if we huli.

Anyone with a medical problem that may arise during practice (including, but not limited to asthma, diabetes, heart complications, or special medication) needs to inform the coaches.

All paddlers must provide emergency contact information to the club officers. This includes name, relationship, and phone number.

Required Equipment

To be legal (in the U.S., U.S. territories, etc.) the US Coast Guard requires:

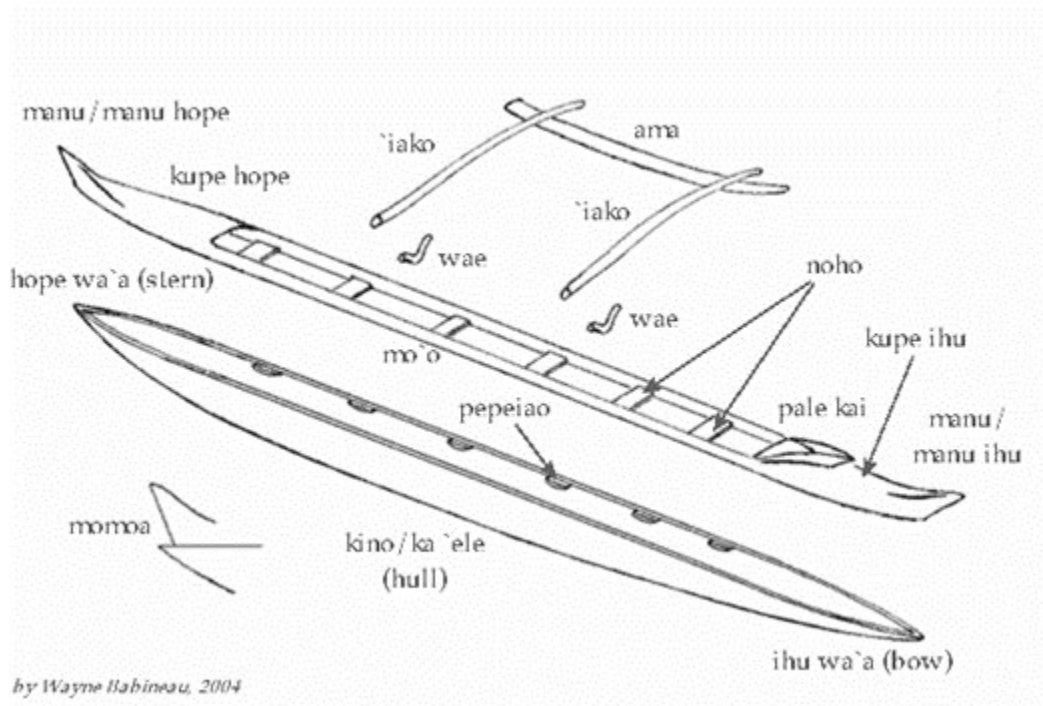
- **Personal Floatation Devices** (one life jacket / vest per person)
- **Emergency Signaling device** (day/night flares)
- **Bailers** (two per canoe)

Recommended Equipment

- **VHF Radio.** A VHF radio needn't be kept with every outrigger, but at least one per practice should be included even if not far from shore! It's not that you couldn't yell at someone ashore, it's so you can speak directly with an emergency service (the Coast Guard) saving critical minutes.
- **Whistle.** When interviewed, the base commander of the U.S. Coast Guard station reminds us of an incident where five people went into the water for many days after their boat sank. Several times rescuers passed within a few yards of them. Each time they were close enough to hear the conversations aboard and yet the rescuers neither saw nor heard them. Given good conditions you must be about five yards away from the rescuers to be reasonably sure of being spotted. Five yards! And you still may not be seen or heard! An emergency/survival whistle or horn can make you hear wind, water, engines or distractions.

The Hawaiian Outrigger Canoe

The outrigger canoe has been central to the development of Hawaiian culture. So important was the canoe that the building of a new canoe was a significant event involving most of the members of a village: priests, craftsmen, laborers, helpers. From choosing the right tree to launching the new canoe, each step in the process had to be done correctly with the proper ritual and respect to preserve the life of the tree in the canoe and create a canoe that would, in turn, sustain the lives of those who used it.



In Hawaiian tradition each canoe is a living entity, with its own spiritual power or mana. We entrust our lives to our canoes, and we treat them with respect.

The open-ocean conditions surrounding our islands led to the development of an outrigger canoe different from those of other Pacific islanders. The Hawaiian outrigger is relatively unadorned, with fore and aft hull covers (kupe) and a splashguard (pale kai) to cope with ocean waves and chop.

Although outriggers now are raced throughout Polynesia, outrigger canoe racing, ancient and modern, seems to have originated in Hawai`i. There are records of ancient Hawaiians racing for fun and for wagers, sometimes including life.

Today's HCRA-approved racing canoes are standardized in length and weight to allow both an observance of tradition and a level playing field. To race in HCRA-sanctioned events, including events sanctioned by our association, Na Ohana O Na Hui Wa`a,

canoes must weigh a minimum of 400 pounds without `iako, ama, or seat covers, and can be no longer than 45 feet. While most associations in the Islands, including ours, allow clubs to race fiberglass canoes, at the annual Hawai`i State Championship regatta all crews must race in koa canoes.

Paddling Positions

Seat number	Responsibilities
Seat 1	stroker: sets and maintains stroke tempo and technique
Seat 2	calls changes, second stroker
Seats 3 & 4	power seats, usually bigger, heavier paddlers
Seat 5	power and backup ho`okele
Seat 6	ho`okele: steers canoe, captain of canoe, may coach crew

Launching

- Plan your trip in advance considering - weather, swell, wind-driven chops, and daylight If you feel uncomfortable, regarding any of the above - don't go out.
- Launch one canoe at a time
- Observe the wave pattern - wait for a small set
- Lift the Ama - move the canoe towards the ocean - `get it wet`.
- Start the launch, as the wave approaches the shore - "ready crew? - IMUA"
- Order all to paddle on the left - smartly, until 200 yards off the beach
- Steerer sits on the left gunwales until crew is seated and paddling on the left
- If you take on water during the launch, head into the sea, order seat 5 to bail
- Proceed with the paddling plan

Paddling Technique

An efficient technique is the key to enjoyable and fast outrigger canoeing. Marathon and outrigger racers who have not only to survive multiple-hour races but to finish strongly, have learned a lot about taking efficient strokes.

In any endurance sport efficiency is the key to getting the best results with the least amount of effort and of all canoeing, outrigger and marathon racing puts the highest premium on efficiency. Observing a canoe race, you'll notice the leaders go by looking relaxed and going fast. Sometimes they don't appear to be working very hard.

Then the rest of the teams follow, each one going slower but appearing to be working much harder than the leaders. What's going on here? Do the leaders have a much faster

canoe? The fact is, they are simply much more efficient in their technique than the teams which they are beating.

Outrigger canoe racing is an endurance sport. The leaders of a cross-country ski race or a runner in a marathon or triathlon appear to be gliding along with minimal effort. Their motions are just enough to get the job done without wasting precious energy. Hence the rules in endurance sports:

Working hard does not ensure that you are going to go fast!

You can take your paddle and attack the water with it, straining every muscle in your body, throwing up big rooster-tails behind you, or you can slice your blade into the water, anchoring it solidly and using your entire torso, pulling it smoothly and evenly with much better results.

Not only is the good technique energy-saving and fast, it is easy to learn because it is so simple. Part of the learning process requires that you have a clear picture in your mind of how a paddler moves the canoe through the water.

The canoe is being pulled forward through the water up to the paddle, which acts as an anchor in-the-water (akin to a mountaineer climbing upward with their ice ax). The canoe is being pulled forward not pushed.

Remember to use your body in the stroke. Most new paddlers are all arms, attempting to generate all the power with the relatively small biceps and triceps muscles of the arms rather than using, in combination, the muscles of the torso and back which are far larger and more capable.

Having a good understanding of the proper technique and applying all your muscle groups will ensure prolonged and powerful paddling. You also need to understand and learn the proper techniques of entering and exiting your paddle blade and how and when to apply power.

A tremendous amount of controversy revolves around the optimum paddling 'style', which is often couched in as much mystery as that of the winged keel. The rudiments of outrigger paddling boat technique, however, are common to most forms of paddling, such as kayaking, marathon canoeing, dragon boating or even rowing for that matter.

Outrigger canoeing is most closely related to C1 canoeing which involves a very similar pattern of movement and is a useful comparison due to the large amount of research data available on this stroke.

The basis of a good paddling technique is the emphasis on 'the forward stroke' i.e. applying power in the water in front of your body. Many good paddlers keep it to basics and will tell you to 'just get the paddle deep and clean and pull like hell with lots of length, as many times as possible'. Though this may sound simple enough, there are a complex series of movements required to execute 'the forward stroke' efficiently and effectively.

Understanding the components of stroke technique is vital to accurate analysis of an individual's paddling style. The four critical phases in the forward stroke are:

- the Catch (anchoring the blade),
- Compression (the power phase),
- the Finish (getting out of the water), and
- the Recovery (getting forward to a ready position).

The characteristics of different 'styles' may be due to variations in one or perhaps in every phase of the stroke, though the principles behind each phase are universal. We must accept that style may also vary from person to person depending on body size and stature which can work to the advantage of the team due to the different physical constraints of each seat position.

Equally important, we must recognize that 'style' changes as the stroke rating increases, and the stroke length is decreased. Many paddlers experience difficulties in attempting to apply the characteristics of a longer, slower technique to a faster rating.

The smooth running of the boat results from paddlers not only going into the water at the same time but moving through each phase of the stroke in perfect unity. The complete stroke must also be seen as a cooperative product of its parts, executed in one unified motion, not as a series of independent movements.

Individual paddlers should create a mental image of each stroke phase both on the water and off, understanding its components intimately and how they affect performance. Analysis of technique can be made easier by isolating the disposition of the paddle in relation to the boat and by tracking key reference points on the body, namely the wrist, the elbow and the shoulder. It is useful for paddlers to know the position of these points relative to their own stroke and in relation to an ideal model.

Stroke Technique

The stroke is broken down into three phases:

1. Catch (Kau). The catch is that portion of the stroke where you get the blade of the paddle into the water.
 - a. Lean slightly forward and using your stomach and back muscles rotate (twist) around your spine dropping your shoulder and extend the paddle forward keeping the shaft of the paddle parallel to the side of the canoe. (This twisting will enable you to use the larger and stronger muscles of your back and torso). Your lower arm should be fully extended with your elbow straight. Your top hand should be at your forehead with the arm fully extended and the elbow slightly bent.
 - b. Once you have extended the paddle (reach), place the blade cleanly in the water without stabbing or splashing. Do not start the power phase of the stroke until the blade is deep in the water (this will cause cavitation, and you will not get full power from your stroke).

If you slice the blade cleanly and bury the whole blade in the water, you will have a solid *anchor* from which you can pull the canoe.

Remember A Clean Silent Entry Is the Beginning of a Good Stroke. Run Silent, Run Deep.

2. Power (Huki). The power phase is that portion of the stroke where you move the canoe forward.

- a. Make sure your body is firmly positioned in the canoe to fully transfer energy from the paddle to the canoe. You do not want any extra movement in your arms that will absorb or deflect energy from moving the canoe forward. (This is accomplished by keeping your arms in the entry position.)
 - b. Push down and across your body with the top hand and untwist with an explosive movement driving down with your top hand and back on your lower hand to about your mid-thigh.
 - c. Once your lower hand has reached your mid-thigh release power and begin the exit.
3. Recovery. The recovery phase is that portion of the stroke where you get the blade out of the water and back to catch for the next stroke.
- a. Once the blade is at your mid-thigh release power and either pull the blade straight out or slice it out to the side. This is done by rotating your top hand down like turning the steering wheel of a car.
 - b. Float the blade forward through an easy return to the start of the next stroke. Remember to feather your blade during times of strong headwinds. You feather the blade by turning it parallel to the water during the recovery, which will reduce drag.

Remember, the recovery should be easier and slower than the power phase. There should be a 2 to 1 ratio between the recovery/catch and power phase. One beat for the power phase and two beats for the recovery and catch.

Helpful Hints:

Try paddling with locked elbows. This will force you to sit up and rotate. Add the minimum bend necessary to your arms for comfort later when you have mastered this.

Try to keep a flat back and keep your chin up, this will afford the maximum oxygen uptake and will help keep your shoulder and neck muscles relaxed.

Don't forget to get the drive from your leading leg. Always keep the leg on your paddling side extended forward to help you brace – this means when you switch the paddle at a Hut, you must also switch which leg is forward.

Keep your face muscles relaxed and remember to breathe! Breathing in synchronization with your paddling helps you maintain an even stroke.

Keep your concentration in the canoe and remember that it is the thoughtful application of power that makes each stroke count.

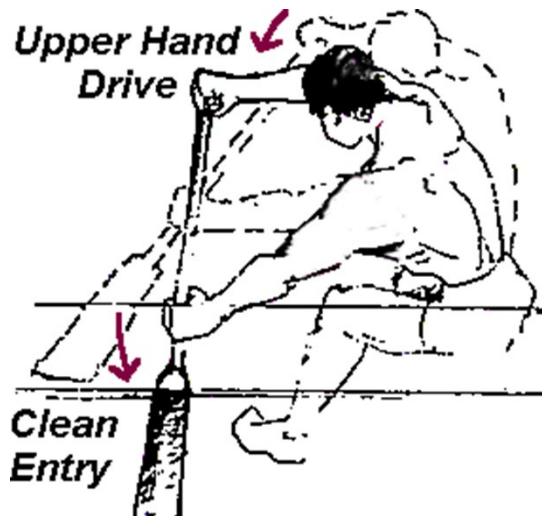
Always concentrate on your stroke technique especially when you get tired. Your stroke is the first thing that will fall apart once you start getting tired.

Remember that the boat slows when the change is made, so make your last two and first two strokes on each side strong.

The Catch

Few sounds on the water generate as much satisfaction as 20 paddles plunging into the water in time and without splash; except maybe that sound a high platform diver makes when they cut the water surface with nothing more than a ruffle of bubbles.

Burying the blade in the water is called the “Catch” and it should be well in front of your body critical to initiate a powerful stroke. This is where most novice paddlers are the weakest, and it is the point at which even veteran paddlers fail when they start losing power due to lack of conditioning. The most common problem is to lose length by catching the water too far back by not reaching far enough forward in the “Recovery” or start smacking the water with a misguided sense of aggression.



A good “Catch” requires a deliberate and powerful drive downward by your top arm, which is made more effective when the wrist and elbow of your upper arm are above the inside shoulder making your forearm parallel to the water surface.

Some teams utilize very high upper hands to emphasize a forceful drive into the water, though good control as the blade enters the water is important to avoid splashes.

Good paddle entry is executed in either a vertical 'spearing' of the water or can be combined with a slightly diagonal 'slice' as the blade curves into the water. The slice is found to be very effective by locking the blade in fast and deep with less

vertical lunge, though requires a greater participation from the bottom hand in combination with the upper arm drive. Your bottom arm must be fully extended forward but not locked at the elbow to help “Anchor” the paddle in the water quickly and cleanly to its full depth and correct location relative to the side of the boat, without any splash or horizontal movement.

A common problem is that 'work' is often applied too late after the “Catch” as a paddler may be well into the first part of the “Stroke” phase before full power is exerted (wasted potential is a paddling sin). A good “Catch” technique must transmit power into the “Stroke” phase within a fraction of a second. This is also important to unify “Catch” in the boat to maximize “Power” with each paddler transmitting power into the “Stroke” at the same time, which is not always apparent. Getting into the water at the same time is one thing; beginning to pull together is another and is vital to a fast boat.

Excess splashes or cavitation in the water (trapped air and disturbed water) is an indication that you are applying power with the momentum of the vertical drive, before the paddle is fully buried (lost energy is another paddling sin). The paddle blade at entry should be moving forward at the same speed as the boat in order to avoid such splashing. Smacking the water too aggressively can result in broken paddles and can lead to tension when your teammate behind you receives an unwanted face full of water. This type of problem is often created by a misapplication of aggression and is usually an indication that a paddler is getting

tired or is unable to keep up with the pace. The “Catch” is not a power phase, it’s how you get into the water. Keep it fast and keep it clean.

Another common mistake is to lunge too far forward with your upper body or to bend excessively at the waist which starts the boat bobbing up and down.

“You want to run a quiet boat. You want a smooth-running boat. Every time the boat wiggles left or right or bobs up and down, you lose a little. This can play havoc with your speed and efficiency - be fast.”

Remember that the length of ‘the forward stroke’ is controlled by a fully extended bottom arm and a rotated torso. You only need to bend far enough forward to bury the blade to its full depth at the “Catch”.

Remember also, a powerful “Catch” comes from a strong upper arm drive into the water at a forward position which is sharp, clean and instantly transmits power into the “Stroke”. Once the stroke rating increases to 90 plus, emphasis on the “Catch” becomes more important in order to deliver power quickly.

The Power

The power phase consists of “Compression” and “Finish” phases.

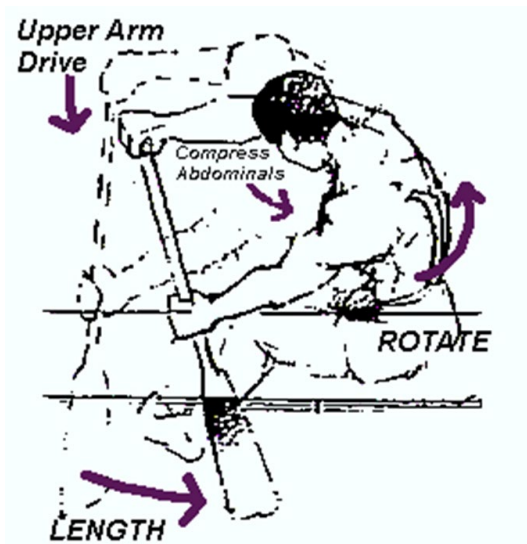
Compression

Many paddlers think that they are pulling water past their bodies to make the boat move forward; but this doesn’t make any sense at all. In fact, the paddle, once it’s in the water, moves very little in relation to a fixed point in space and that the boat is pulled up to this fixed point during the “Compression” phase.

This is the power phase, and it is a full body endeavor which must coordinate arm, leg and torso muscles into a singular and controlled movement, transmitting power into a linear forward direction. Keeping the paddle relatively vertically and anchored in the water with the arms, a paddler must use his/her torso to pull the boat forward. If too much enthusiasm results in pulling the paddle back through the water, then energy is lost and a great turgid froth without much forward motion usually results. Much depends on a good solid “Catch”, and the rest depends on solid control of power expenditure that accelerates the boat forward.

It helps to imagine that you are hurtling your body up and over the “Catch” position by pressing the paddle vertically down. This requires smooth and continuous motion compressing shoulders downward by crunching your abdominal muscles, at the same time rotating the torso at the waist utilizing the large back muscles ie. Lats. and Erectors. The upper arm must continue to be held high and drive down with the shoulders to keep the blade locked into its position in the water as the stroke develops. A minor forward push of the upper arm will transmit additional power into the paddle with your Deltoids and Pectorals, however you must keep the fulcrum point of the paddle high, about six inches below the upper hand 'T' piece.

The bottom arm must be strong to keep the blade on a straight track and transmit the power from the torso into the paddle and will only bend slightly to push the “Finish” of the stroke with your Biceps.



Following this motion, the paddle works as a third-class level, with the upper hand remaining relatively fixed with the vertical drive of the shoulders and rotation of the torso providing force.

Very often, paddlers get into the habit of pushing their upper arm over and downwards at the “Catch”, thereby lowering the paddle fulcrum point to the location of their lower hand. The upper hand during this phase should not drop below your shoulders and your forearm should remain parallel to the water surface.

Another problem is that the paddle blade is often not deep enough to maximize the resistance area, particularly at the front end of the “Compression” phase. The paddler must bend forward to keep the blade buried right up to the shaft.

Very often paddlers will also begin to lift their blades gradually out of the water towards the “Finish”, which can be seen as their bottom hands rise in relation to the gunwale, starting midway through the stroke. Focusing on a good top arm drive and curling the torso over with your Abdominals to keep the paddle in the water will help.

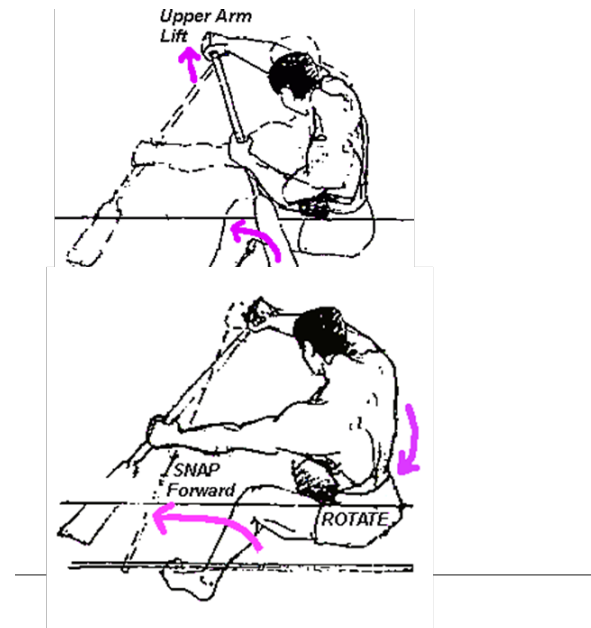
Adding power to the end of the compression phase relies on a deliberate push just before the “Finish”. The paddle must be kept as vertical as possible with forceful upper arm drive downward, as if you were attempting to plant the paddle straight into the ocean bed. This takes tremendous focus to do it well and do it consistently. Efforts must be made to train the deltoids and pectorals to deliver power at this part of the stroke.

"Keep the paddle vertical during the power phase. The paddle should be in line with the keel line of the (boat). Too often, paddlers tend to follow the side of the (boat) with their paddle. Bow people's paddle should enter the water away from the sides of the boat and come in, so the paddle nearly touches the boat at recovery. Stern paddlers do just the opposite, planting the paddle right beside the boat and coming straight back."

The legs play a much more critical role than one would think as they are used to pushing the boat forward and locking the body into your seat. They must anchor the body into the boat to the point that your knees can suffer severe strain. Ideally all paddlers should align their outside legs against the gunwale and outside footrest (or seat in front) so that a continuous line of force is directed into the boat. The inside leg should be tucked under the seat with the knee braced against the inside spine of the boat, which helps lock the body in and assist in an easier rotation. Sitting slightly forward to hang over the front edge of the seat will also help to lock in and provide resistance to the forward motion of the recovery.

Finish

The power stroke is ended when the elbow of the lower arm is aligned with body and the shoulders are parallel to the seat i.e. the neutral position, with the blade still fully in the water. Any power applied after this point, which is certainly possible, results from over-rotating the torso and more often will create a lifting force due to the angle of the paddle that will pull the boat down into the water and/or will ship water into the boat. This is an important point since the body is capable of exerting force beyond the neutral position, however, it is not an energy expenditure which will contribute effectively to the forward motion of the boat.



The paddle should be slipped diagonally up and out of the water leading with the upper hand as quickly and cleanly as possible with minimum resistance or splash (Deltoids). Many teams emphasize lifting the paddle high with the upper hand to keep the paddle as vertical as possible. This is good in flat water conditions and in boats with close seat spacing as it allows a paddler to reach up and around the paddler in front.

A common problem is that the “Finish” is either initiated too early particularly when the stroke rating is high or lacks any clear definition as the paddler begins to lift his blade out of the water halfway through the “Compression” phase. It is imperative that the paddler focuses on keeping the blade deep in the water and applying full power to the stroke right through to

the “Finish” position. Think of the vertical upper arm drive!

It's worthwhile to focus on a 'power punch' at the “Finish” to provide a kick at the end of the stroke like the aggressive “Catch” at the beginning. To achieve this, the outside elbow should be kept close to the body and the paddle blade should be feathered out with a powerful kick from the forearms and biceps. The paddle should be brought out fast and high to avoid drag and to initiate a speedy “Recovery”. This will also help to push water away from the boat as the blade exists.

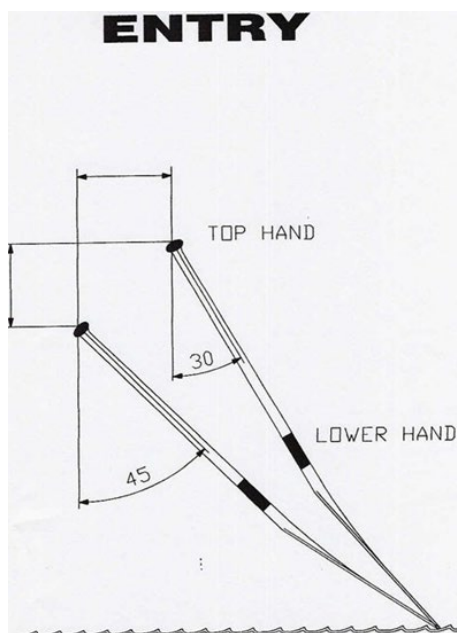
The “Finish” should be executed with the same aggression and precision as the “Catch”, and with the same timing throughout the boat.

The Recovery

The “Recovery” is the key to the forward stroke technique as it sets up the “Catch” well forward of the torso.

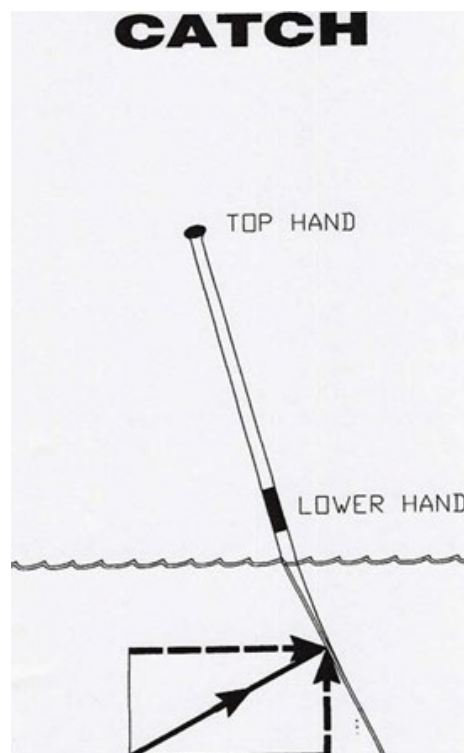
The most efficient “Recovery” is achieved by rotating the torso to push the outside shoulder straight forward while the inside shoulder is pulled to the back i.e. in reverse of the

“Stroke”. The lower arm must punch forward to create a long 'reach' while the upper arm is pulled in the opposite direction and thrown back over the head to open the chest.



This must be a quick and snappy motion since it is effectively 'downtime' - when energy is not spent moving the boat forward, i.e. the less time it takes 'get up front' the more time a paddler can spend pulling the boat. A fast recovery must be trained since it makes great demands on the Abdominal muscles, Deltoids and Traps, different from the efforts needed in the “Compression” phase.

The key to a higher rating is a faster “Recovery” which allows stroke length to be maintained. Precise timing in the boat is controlled by a coordinated “Recovery” where each paddler must execute a sharp and deliberate snap forward with the lower arm pushed from the shoulder. Remember, a clean recovery is executed in a snap forward motion and is not achieved very well if the outside arm is carving great circles in the air. It is a relatively straight linear movement forward aligning with all other paddles in the team with outside elbows and paddle blades kept close to the gunwale.



A slight pause before the “Catch” phase will mark both the end of the full stroke cycle and will help to synchronize the timing of the team; though at a high rating the 'pause' is more of a mental punctuation mark than any noticeable lapse in time.

Though the movement forward should keep 'bright and crisp' the paddle should be held lightly to relax forearm muscles. Very often paddlers exert too much power getting forward. The “Recovery” should be fast but light. Over time it will become effortless movement, but it takes a lot of work to achieve speed and should not be neglected as part of a training regime.

Boat speed in the “Recovery” phase will slow down obviously due to the break in paddling, though the rate of deceleration known as the Check can vary from team to team because of different technique. As paddlers move forward, their center of gravity (CG) can also move forward causing the boat to decelerate more. Strangely enough the boat will accelerate slightly on its own at the end of the “Recovery” phase once the paddler's forward movement ceases. In this respect, you should focus on minimal

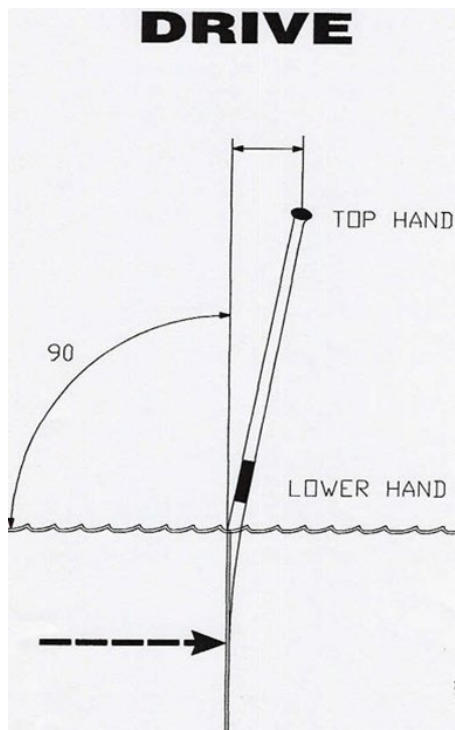
movement of the CG in the “Recovery” and confine that movement to a forward and backward line, not up and down or side to side.

One common problem is that the upper arm is allowed to drop too much resulting in a horizontal “Recovery”. In a tight boat, this will be problematic and will also begin to hamper efforts to increase ratings.

Bending the upper arm also leads to excessive movement which will limit performance at a higher rating and can cause the boat to jump around a lot. Neither the upper or lower arm needs to flex very much in the “Recovery”, or for any phase for that matter.

Variations in Stroke Technique

Stroke technique will vary slightly from person to person due in a large part to differences in physiology and training background, and should be tolerated to a certain degree, particularly at a local race level. While it is important to have everyone paddling the same technique, it is more important to ensure that each paddler is contributing to his or her highest potential.



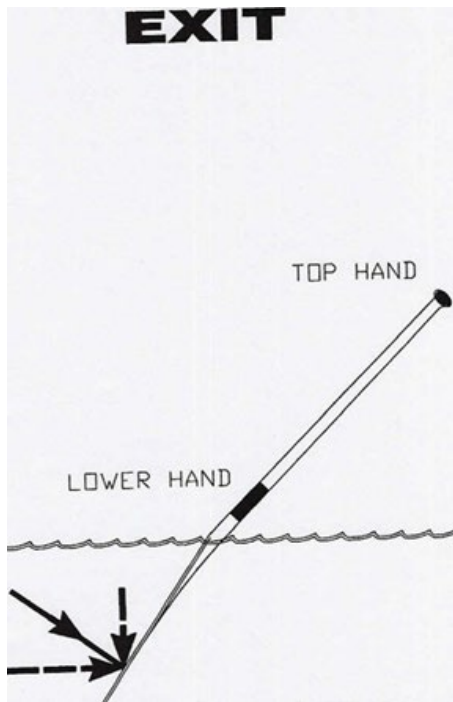
Even the best teams in the world show a variation in individual techniques, yet they all pull a lot of water and win.

The critical issue is that each paddler hits each phase of the stroke with precise timing and that the movement front to back and side to side are consistent throughout the boat to maintain balance and smooth running. Even though paddlers may have slight differences in form, i.e. some rotating more or others with a slightly higher blade on recovery, if everyone is executing each phase correctly and in time, it is doubtful that efforts spent on minor adjustments for the sake of consistency make any significant difference in boat speed. It is more important to focus on the smooth transition of power from one phase of the stroke to the next and that the delivery of power is timed perfectly for each paddler at every point in the stroke.

The basics of technique that establish consistency among team members are recapped as follows:

- the consistent location of the “Catch” and “Finish”
- minimal splash or lifting of water
- uniform speed of “Recovery” and “Stroke” (some people move faster than others)
- uniform depth of paddle in the water
- uniform angle of the paddle as it moves through each phase
- the precise timing at which each phase is initiated
- the alignment of paddles with the direction of travel

- the elimination of excessive movement (bobbing your head up and down or side to side will not improve performance and only waste energy)

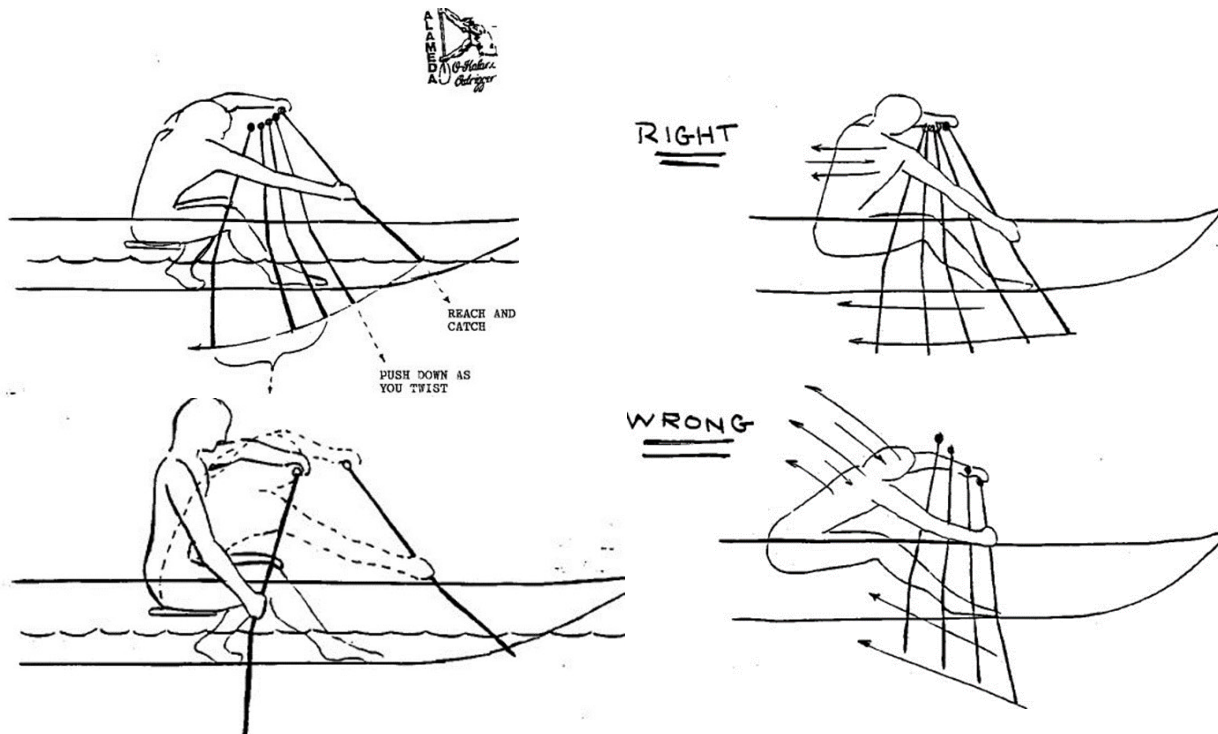


- fluid and unbroken movement through each phase
- uniform breathing pattern

The nature of the boat can also affect the characteristics of stroke technique due to shorter seat spacing, higher gunwales, the weight of the boat or the size of the paddles. It is imperative to 'test' out a race boat by varying stroke length and rating to find the most effective combination to make the craft move the fastest. For example, an eight-man color boat responds much better to a longer stroke with a greater emphasis on a drawn out kicked finish, compared to a quicker dragon boat stroke.

Natural elements such as tide, wind or water conditions will impact on technique. Racing with a tailwind for instance should increase boat speed and allow for an increased stroke rating, whereas rating should decrease, and a greater stroke length should be implemented when heading into the wind.

In choppy water it is important to have paddle blades higher on the recovery and to emphasize greater depth in the water to avoid going in too 'short' when a wave trough is encountered. Choppy water will also slow the boat down, so it is important to be able to adjust the stroke rating in order to suit the abilities of the crew to the particular conditions experienced.



Duties of the Paddler

A paddler should understand the way in which the club is organized and should be able to function within its framework and abide by its rules and regulations. A paddler should take pride in being a club member and must realize that whenever he or she paddles with the club or is even identified as a club member by wearing a club shirt, he or she represents the whole club as well as the sport of canoe racing.

The paddler should respect the authority of the club's officers and must understand that the efforts of all should be directed towards achieving the club's goals.

Every paddler must acknowledge that the head coach and the assistant coaches are delegated by the club to lead and direct the activities of all its paddlers. The paddler should take the advice given by the coaches and strive to perform at the level the coaches expect.

The paddler must also dedicate himself or herself to attain the level of physical fitness that the coaches require and participate wholeheartedly in any conditioning program that is recommended.

At practice, the paddler should be prepared to give his or her best, both mentally and physically, always. Each paddler should come to practice ready to train hard and should arrive at the site early enough to "settle down" and prepare for practice. There should be a willingness and desire to make an initial effort, a second effort, a third effort, and however much effort it takes to become a member of a crew.

The paddler should be punctual and be able to take criticism and praise in a positive way. He or she should be sensitive to the needs of others and be willing to go more than half the distance to allow for the shortcomings of others.

Additionally, the paddler should not instigate or become partial second guessing (gossip) about coaching decisions or techniques that are being taught. There are appropriate times (at crew meetings, for example) when a give-and-take session will be held by the club's coaches. Any influence that disrupts the development of unity or harmony is one that has no place in the attempt to build a successful crew.

When help is needed and asked for by the club's leaders, there should be no hesitancy on the paddler's part to offer his or her services. Giving oneself above and beyond the call of duty has its own rewards. You'll be asked to help again!

Completion of routine chores and attention to details before they become sources of annoyance to the club's staff should be taken care of immediately. The prompt payment of club dues, the completion of club waivers, the presentation of documents such as birth certificates and transfers, eager participation in fund- raising activities, helping with the maintenance of the

canoes and the hauling of equipment are all part and parcel of being a good paddler and club member. A paddler must make it easy for the club to function. That is fair enough, because the club gives the paddler the opportunity to compete in a great sport.

Every paddler must realize that a club's participation in a regatta or long-distance race is a highlight of a series of acts requiring a good deal of work from many people who are not necessarily a visible part of a club's day-to-day activities. From time to time, a paddler should acknowledge the contributions of non-paddling members who are also a part of the club and who enjoy participating in the club's activities as non-paddlers and whose efforts are also needed to help the club run efficiently.

Above all, a paddler must remember that Hawaiian outrigger canoe racing is a team sport, and that the success of a crew is not solely determined by the contributions of any one individual. There is no position in the crew (stroker, steersman, etc.) that is more important than any other.

A good case can be made that being an alternate on a crew is just as important as being a member of the starting six. An alternative, for example, ensures that the crew will race even if one of the starters becomes ill or cannot paddle for any other reason.

An experienced paddler knows and appreciates the fact that canoe racing is a great team sport. When a crew (alternates included) begins to realize that it wants to become a team and proceeds to dedicate its efforts toward that end, the most significant ingredient necessary to build a solid crew has surfaced. Any successful coach knows that helping a group of individual paddlers develop a team feeling is the greatest challenge and duty of both coach and paddlers. After that has been accomplished, assembling the remaining elements necessary to become a consistent winner is a relatively easy task. To become an effective member of a team is the greatest duty a paddler can perform for his or her crew and canoe club.

OC1 Rules & Reminders

Lōkahi Canoe Club was the first club in the state to make solo outrigger canoes (OC1s) available to its members for training. We are still one of only a very few to do so. We have invested in the OC1s because we believe in their benefit to our paddlers, but it is not cheap to buy and maintain the boats. Please use the OC1s, but please also be sure to heed the following rules and reminders. Our future use of boats depends on our careful and considerate use today.

- Handle the boats with care.
- Limit usage to one hour during peak periods, one and a half hours maximum.
- Novice paddlers should not go out into the open ocean alone, nor until they have gained sufficient experience in the open ocean.
- Know your limits are safe.
- Lōkahi paddlers have priority over guests. Guests assume all responsibility for their actions and for any damage that may occur. (Non-club paddlers or guests should not be using the boats regularly.)
- Report damage to the Head Coach or another responsible person. Report damage that occurs while the boat is in your possession, whether your fault or not. You will be charged for any unusual damage. Please be responsible.
- When you put the boat in the water, be aware of the rudder. Place the boat far enough in the water (parallel to shore) so that the rudder will not hit the mud and break when you sit on the boat.
- Drain your boat after you use it, then return it to the space where you found it.
- Get help (if you need it) by taking the boats out & putting them away.
- Lock the padlocks on the shed. Don't leave the shed open to thieves.

About Lōkahi

Origins

Lōkahi Canoe Club was established in 1980 when the men of Kaiko`o Canoe Club's Junior Men's crew decided to blend their talents outside the canoe and form their own club. Lōkahi's founding fathers included Michael Cushnie, Bill Tsuji, Dickie Chow, Randy Fernandez, Marshall Giddens, Jerry Kahler, Willie Luahiwa and John Wong.

The word lōkahi means unity, and described the feeling the club's founders had as members of both a successful crew and also a new canoe club. Randy Fernandez was Lōkahi's first head coach and is credited with suggesting the name for our club. Randy also came up with the idea of using the Hawaiian flag as part of our logo.

Mike Cushnie researched and developed the "Lōkahi stroke" and served as Head Coach for around 12 years, often simultaneously serving as President. Under Mike's guidance Lōkahi quickly became one of the top clubs both in Hui Wa`a and in the state.

Bill Tsuji has coached many different crews, most recently our Women's Novice B crews. Bill was the coach of Lōkahi's first State Champions, the Women's Freshmen in 1982, and he has continued to develop winners over the years.

Marshall Giddens provided the financial resources that the new club needed to start building canoes, buying shirts, and getting the equipment a canoe club must have. Marshall later coached and served as a club trainer, reminding some of us of military drill instructors we have known tough but fair.

Dickie Chow was the steersman for the crew, and he continues to steer both with Lōkahi and with other clubs. Dickie is known to be an expert and low-key steersman with whom it is a pleasure to paddle.

Jerry Kahler and his brother, Dan Kahler, took the lead in building the new club's canoes and paddles, and in helping turn our koa canoe, Ka `lo into a competitive racing canoe. Jerry now lives on the mainland and Dan became a paddler with the club as he continued to build and maintain our canoes. Carrying on the tradition, Dan's sons all paddled with Lōkahi.

Sadly, Willie Luahiwa passed away several years ago. The new club's first canoe was built in Willie's shop, and he was instrumental in getting the club its koa canoe from Kai `Ōpua. Many years later, Willie's son Lester paddled with us.

John Wong was the first President of the new Lōkahi Canoe Club, and he established the administrative procedures and details that are necessary for any organization to succeed.

The spirit of lōkahi that infused Lōkahi Canoe Club's founding members is alive today. We are privileged to share in that spirit. Mahalo nui loa.

Organization

Lōkahi Canoe Club is a member of Na `Ohana O Na Hui Wa`a canoe racing association, one of two associations on O`ahu that are under the general umbrella of HCRA, the Hawaiian Canoe Racing Association. Member clubs of NOONHW, their letter codes and colors are:

Member club	Code	Color
`Ālapa Hoe	E	teal, white
Hawaiian Outrigger	C	yellow, maroon, white
I Mua	K	blue, white
Kai Poha	A	black, yellow/gold
Kalihi Kai	X	brown, gold
Ka Māmalahoe	Z	red, gold
Kamaha`o		
Kamehameha	I	red, yellow
Kāne`ohe	J	blue/navy, white
Kumulokahi Elks	V	purple, white
Lōkahi	H	black, white, yellow
Manu O Ke Kai	F	white, orange, beige
Na Keiki O Ka Mo`i	M	blue, green, white, yellow, black, gold
North Shore	R	green, white
`Ōlelo `O Keola	O	black & yellow
Pukana O Ke Kai	P	red, black, orange, white, gray
Waikiki Beach Boys	B	brown, white, blue
Windward Kai	S	green, yellow
Waikiki Yacht Club	W	white, blue, orange

Lōkahi Canoe Club is organized in accord with its revised Bylaws. The club operates under the general supervision of a Board of Directors, consisting of active club founders and elected members.

Current elected board members are Wayne Babineau, Lee Buhre, Anne Everingham, Chloe Heiniemi, Mark Inouye, Sarah Post, Larry Sakagawa, Haru Tanaka and Esther Wideasih. Founder Marshall Giddens is an active Founding Director.

Active operation of Lōkahi Canoe Club is the responsibility of our Board's Officers: Head Coach, President, Vice-President, Secretary and Treasurer. The Head Coach is responsible for practice, schedules, training program, selection of crews and teams and use of the existing equipment. The Head Coach may discipline a crew or team member for any act considered a violation of the rules.

2025 Officers

Role and responsibility	Officer
Founding Member/Master's Coach	Marshall Giddens
President/Women's Coach	Gina Nicosia
Board Member/Men's Coach	Devon Gordon
Head Coach	Sal Nicosia
Board Member	Esther Widiasih
Board Member	Chloe Heiniemi
Board Member	Heather Murakami
Racing Secretary	Ashley Leinbach
Recording Secretary	Patty Eads
Treasurer	Michael Hoenig

Roster of Head Coaches

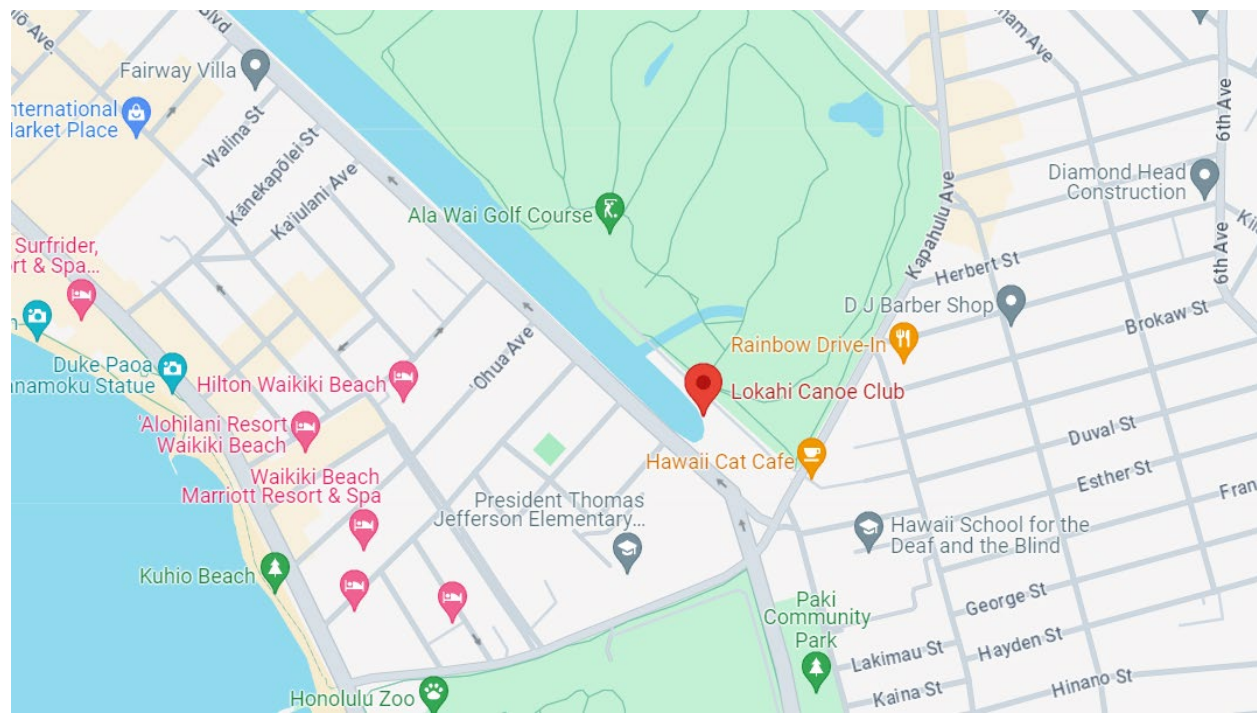
Lōkahi has been well-served by our Head Coaches over the years, beginning with Randy Fernandez, the club's first Head Coach in 1980.

Period	Head Coach
1980 - 1981	Randy Fernandez
1982 - 1993	Mike Cushnie
1994	Butch Ukishima
1995	George Waikoloa, Joy Waikoloa
1996 - 1997	George Waikoloa, Joy Waikoloa, Mike Cushnie
1998 - 1999	Mikala Hetland
2000 - 2001	Wayne Babineau
2002 - 2005	Robert Viernes
2006 - 2008	Mike Cushnie, Darlene Morikawa
2009	Wayne Babineau
2010 - 2012	Carol Jaxon
2103	Lance Poncé
2014	Wayne Babineau
2015 - 2022	Marshall Giddens
2024	Sarah Post
2025	Sal Nicosia

Location

You'll find Lōkahi's white and black canoes at the Diamond Head end of the Ala Wai canal, next to the Waikīkī Library and adjacent to the Ala Wai Golf Course.

The Ala Wai Golf Course Road branches off Kapahulu Avenue. If you are traveling makai on Kapahulu, plan on turning right at the Waikīkī Library (across the street from the Chevron station); coming from Waikīkī, you'll make a left turn. Be careful of the fast-moving, heavy traffic on Kapahulu.



402 Kapahulu Ave, Honolulu, HI 96815, US

There is limited parking at the site, and more parking in the golf course club house parking lot. Please do not park at the golf club driving range or in any of the Waikiki Library spaces.

Lōkahi's Canoes

Many years ago, in the 1960's, a man from the Island of Hawai'i donated a koa canoe to Kai Opuā Canoe Club. The canoe was made from a log from his family's land in the mountains above Keauhou Bay. While it was a beautiful boat it was not competitive racing canoe. One of Lōkahi's founders, Willie Luahiwa, through the auspices of Adam Ahai, bought the canoe from Kai Opuā and then sold it to the newly founded Lōkahi Canoe Club in 1980. Under the talented hands of Tay Perry, the 36-foot canoe was transformed into the 40-foot racing canoe Ka `lo, later rebuilt by Dan Kahler to be 44 feet long. In 1984 Ka `lo was blessed by Reverend Abraham Akaka and was used that year by the men of Lōkahi in the men's Moloka'i to O`ahu race.

Years later, while talking story one day after practice, one of the Lōkahi men, Pete Greenwell, asked the coach how Lōkahi acquired Ka `lo. When he heard the answer Pete was dumbfounded. Pete was the man from the Big Island who had donated that koa canoe to Kai Opuā Canoe Club so many years ago. It seemed as if some cosmic balance had been restored; Pete and his koa canoe were together again.

Harmony, unity, family: that is Lōkahi.

Lōkahi began with only two canoes. Seven of the early canoes, including our koa canoe, were built by Jerry Kahler and his brother Dan Kahler. To help offset the many expenses involved in the maintenance of a canoe club, the club's founding members made and sold about fifteen canoes to raise funds. Some clubs are still using canoes they purchased from Lōkahi. As far as we know, we are the only club to have undertaken a project of this magnitude. Today we have thirteen OC6s and a dozen OC1s.

Our OC6 canoes are of various designs, from the early Malia-class design to our most recent Bradley Striker canoe. As canoe design has developed, racing canoes are approaching the limits of HCRA specifications.

Type	Name	Meaning
koa	Ka `lo	the Hawaiian Hawk
Malia	Lōkahi	unity, harmony
Malia	Kumu	foundation, base
Bradley	Kainalu	surf; ocean waves
Force Five	Kamikawiwo`ole	the courage or boldness of Mike
Mirage	Makani Kūhonua	sudden rush of wind
Mirage	Ho`okela	strive to excel
Mirage	Keauhou	the new current
Mirage	Ka`alekualoia	long-backed ocean wave
Bradley Lightning	Ka`aumoana	seafarer