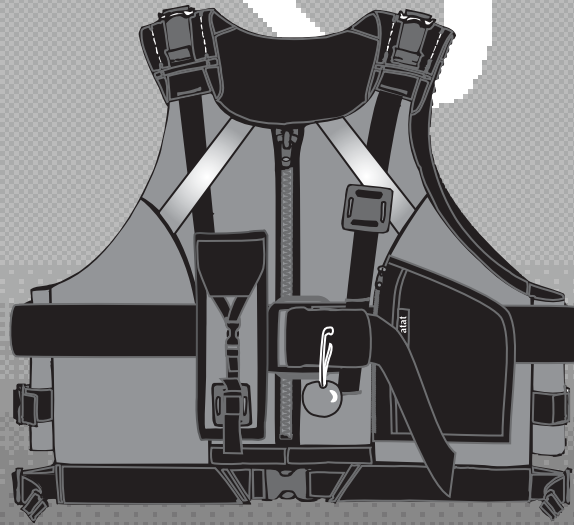


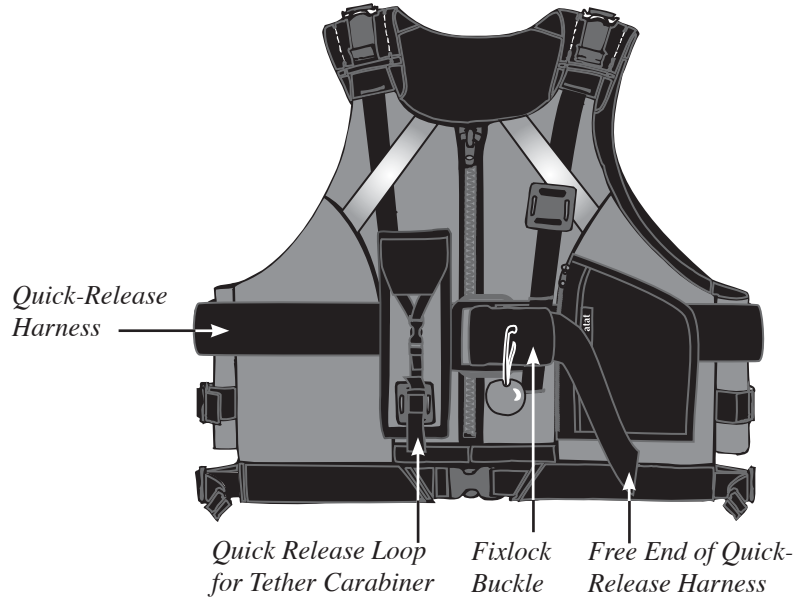
Rescue Techniques with the FIT Series Rescue PFDs



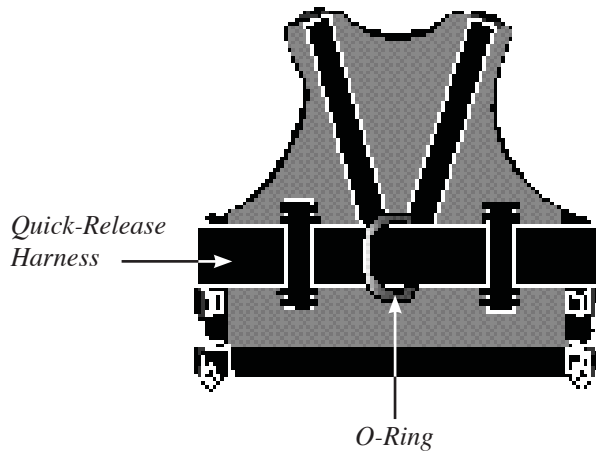
by



The Kokatat FIT Series Rescue PFDs (Ronin Pro, ProFIT Tour & Guide)



Back View



Read this before you proceed!

This pamphlet is not a rescue instruction book, but rather a reference of some available techniques that must be learned and practiced in order to use the ProFIT Series rescue PFDs correctly.

Rescue activities are dangerous, to both the rescuer and the victim. No person should attempt the techniques outlined in this pamphlet without training from a river or bluewater (sea kayak) rescue professional. A river or bluewater rescue course by itself is not enough; it must be followed up by on-water practice in a variety of situations.

Users of the FIT Series Rescue PFDs must be well-versed in techniques of swiftwater or bluewater rescue and familiar with the application of these techniques. In an actual rescue, critical decisions must be made quickly: it's not the time to learn about your equipment. Without both knowledge and practice, river rescue will be even more hazardous to all parties involved.

Kokatat, Incorporated assumes no liability or responsibility for death, injury, property damage or loss of any kind resulting from the correct or incorrect use of the Ronin Pro, ProFIT Tour, and Guide PFDs and/or the techniques described in this pamphlet.

Kokatat would like to acknowledge the European boaters who pioneered the concept of using a harness, and Alexander Khanamirian who has the U.S. patent on a life vest having a safety belt harness system.



What sets the FIT Series Rescue PFDs apart from other PFDs?

The FIT Series Rescue PFDs are Type V special use devices with a quick release chest harness; components are tested by Underwriters Laboratories and approved by the United States Coast Guard.

There are unique advantages to having a PFD with a Quick-Release harness:

- The user is assured that all components are compatible and that the integral harness and PFD meet US Coast Guard requirements for a Rescue PFD.
- The integration of a quick release chest harness (critical to the safety of the rescuer) allows the FIT Series Rescue PFDs to be powerful rescue tools useful in a variety of water emergencies.
- The FIT Series Rescue PFDs are easier to put on than a separate PFD and rescue harness.
- The rescue harness is not packed away or unworn when a potential rescue situation arises.

Since testing and approval by any certification body is no guarantee of safety when performing potentially hazardous activities such as a rescue, **Kokatat strongly urges all FIT Series Rescue PFD users to take a rescue course.**

US Coast Guard Requirements

One of the benefits of using a US Coast Guard (U.S.C.G.) approved Type V Rescue PFD is you are assured that all components and the finished design have been subjected to, and met, the US Coast Guard's performance requirements. Here are some of the tests that are unique to an approved rescue PFD:

- The entire device, including the harness, has met the US Coast Guard's requirements for flotation.
- The O-ring in the center of the back must completely release from the chest harness and vest under a maximum specified load (with the buckle open).
- The O-ring and harness must support a specified load for 10 minutes without damage, impaired serviceability, or webbing slippage of more than 1" at the buckle assembly. At the conclusion of the test, the force required to open the buckle and to release the load must not exceed 25 lbs.
- The chest harness is subjected to a specified load for two minutes and may not slip more than 3" at the buckle assembly during that time.*
- Each shoulder assembly must be capable of withstanding an upward pull for a period of 2 minutes without slipping more than 3".*

All tests are for a new device at the time of construction. Use and age of the device can cause changes in the performance in any of the above tests.

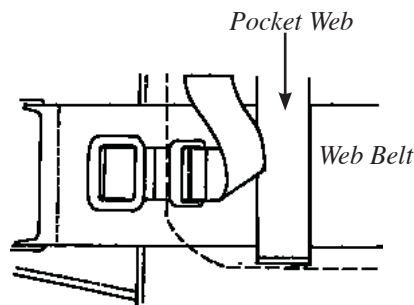
** The device does not have to be serviceable at the conclusion of these two tests.*

FIT Series Rescue PFDs

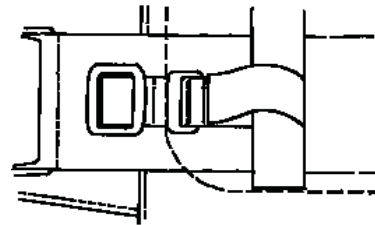
Main Components

- The vest is a U.S.C.G. approved type V special use device
- The chest harness is composed of flat webbing threaded through webbing loops sewn to the body of the PFD. When properly attached to the PFD (see diagram below), the harness is retained when the quick release is activated. Activation of the quick release does not release the PFD from the user.

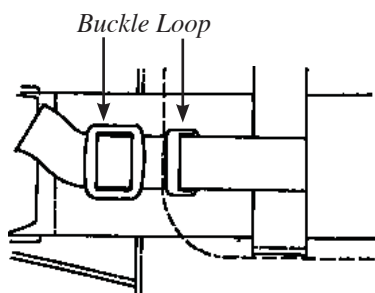
Threading the Chest Harness Under Pocket



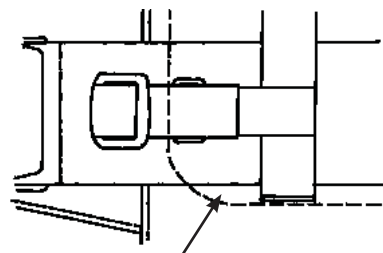
1. Thread web belt under both pocket and pocket web.



2. Thread strap under pocket web.



3. Coming over pocket web, thread strap through loop and buckle.



4. Thread strap back through buckle and tuck strap end under pocket.

- The Fixlock harness is a quick release, augmented by a red ball for rapid location and opening. A heavy duty stainless steel three-bar slider adds friction to the system, enabling the buckle to withstand an 1100 lb. load and still release easily. The belt must be properly threaded through the three bar slider and the buckle as shown.



Belt Threading

- The O-ring is for attaching a rope or tether to the FIT Series Rescue PFDs. Use only locking carabiners to attach a line to the O-ring; a non-locking carabiner gate could snag in the vest body and render the quick release function inoperative. Instead, Kokatat recommends using a locked-locking carabiner. If a locking carabiner is not available, tie a rope directly onto the ring with a bowline or figure eight knot.

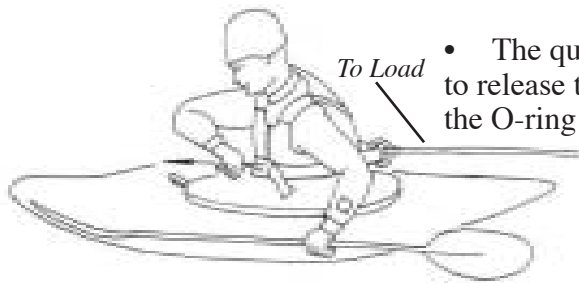
Fitting the FIT Series Rescue PFDs

- Make sure the listed chest size is correct. The white UL label on the inside back of the PFD lists a chest size range, i.e. ADULT LARGE CHEST SIZE 44"-48" (112-122 cm). This label also contains other important information; please take the time to read it. In selecting the proper size, take into consideration any cold water gear you may anticipate wearing
- Loosen all side, waist, and shoulder adjustment straps
- After donning, snap the waist belt and sternum buckles closed, zip the front closure, then tighten all side and shoulder straps snugly.

- Tighten chest harness securely – make sure it is free of twists and threaded correctly! Check that the buckle is fully pressed closed, this will ensure the harness will only release when activated.
- Make sure the free end of the webbing remains free. The end should not be tucked in, twisted or tied off in any way. After tightening over cold water gear (the bulkiest layers you anticipate wearing) there should be between 4" and 6" of the webbing protruding past the buckle. Excess webbing may be cut with a hot cutter, however a clean, flat cut without ridges is essential to the quick release function. Ridges may be flattened immediately after the hot cut with a flat piece of metal.

Using the Chest Harness

Releasing the Harness



- The quickest and easiest way to release the harness, along with the O-ring and anything attached to it, is to open the buckle by means of tugging on the red ball attached to the buckle.

- The buckle can also be opened like a seat belt, by lifting the top plate.
- Pulling the free end of the harness webbing back across the buckle will also open it, but the webbing must be immediately let go to facilitate release.

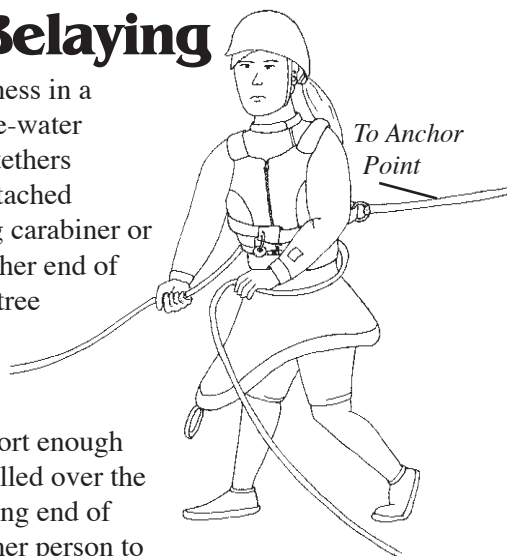
Sometimes the webbing will not pull through the buckle quickly enough, because there is not sufficient pressure on the O-ring (i.e., both the rescuer and a towed boat are floating in the current at the same speed.)

In an event like this, hook the thumbs behind the webbing on both the right and left sides of the buckle, and push straight outwards away from your chest (failure to push straight out could cause the webbing to jam in the three bar slide).

Practice releasing the harness before you need to release the harness in a real life emergency!

Out of Water Belaying

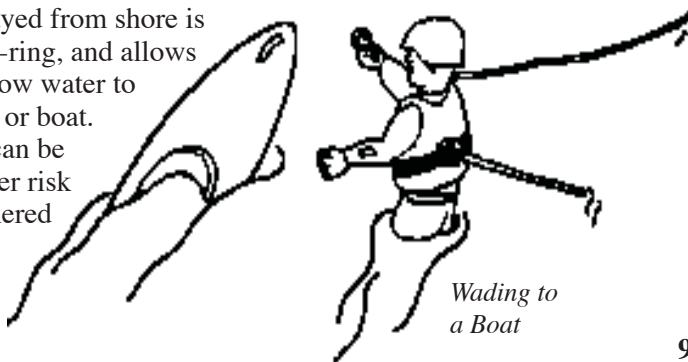
The safest way to use a chest harness in a rescue situation is as an out-of-the-water belay system. A tether (more on tethers later) may be used, or a rope is attached to the O-ring via a locked-locking carabiner or a bowline or figure 8 knot. The other end of the tether or rope is attached to a tree or rock via standard belaying techniques.



Make sure the tether or rope is short enough to keep the rescuer from being pulled over the bank or into the water. The non-ring end of the rope can also be held by another person to belay the rescuer. **The FIT Series are not climbing harnesses!** It is not designed to withstand the types of forces encountered in climbing, and the lack of leg loops could allow a person to fall out of the harness. **The FIT Series are not to be used for vertical rescue work.**

Wading and Swimming Rescues

A tether line belayed from shore is attached to the O-ring, and allows a rescuer in shallow water to wade to a person or boat. The same setup can be used for the higher risk "live bait" or tethered swimmer rescue.



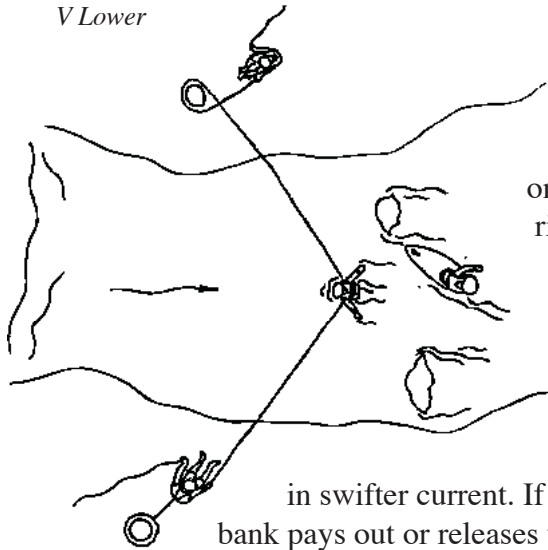
The combination of a PFD and rescue harness allows the tethered rescuer to float, be lowered, or swim out to the victim. Once the rescuer grabs and positions the victim appropriately, the current pendulums them to a downstream point on shore a rope's length away.

Floating Tethered Rescuer



The belay must be properly set up by experienced and knowledgeable rescuers to avoid swinging the rescuer and victim into deeper trouble. This higher risk method is useful for recovering victims who are unconscious, exhausted, injured or otherwise unable to help themselves. If the rescue swimmer has to release, or the belayer has to let go of the line, a hazardous situation can become extremely dangerous! The ramifications of downstream recovery or line entanglement must be well thought out in advance.

V Lower



The tethered swimmer rescue can also be set up with a V-Lower. This uses two lines, one from each side of a river channel to float and maneuver the tethered swimmer down stream to the victim or boat. This technique becomes increasingly difficult, even impossible

in swifter current. If one belayer on the bank pays out or releases their line, the tethered swimmer swings towards the other bank.

The tethered swimmer can also quick release the harness in case of trouble. It is very important that both lines be attached to the PFD at the O-ring, unless you have an accessory tether on your PFD. **In this case, attach the the line or lines to the carabiner of the accessory tether when doing tethered swimmer rescues.**

Tethers

Tethers come in various lengths and configurations. Make sure the one you are using is capable of handling the loads to which you might subject it. They are attached to the harness via the tether's sewn-in O-ring. The free end runs under the right arm and is attached to the front panel quick release with a carabiner. **It is very important to have this quick release feature at both ends of the tether in case of a snag. Do not use a long tether unless you have some means of having it safely retracted when not in use.** Some specialty carabiners can be used which have a larger gate opening for ease of clipping, but make sure they are of appropriate strength.

Victim Assisted Rescue

If a pinned paddler is wearing a chest harness and tether, a rope can be lowered, V-lowered, or a tag line maneuvered to the victim. When the victim feels the rope, s/he can then clip their tether onto it, and be pulled up and away from the obstruction (generally in an upstream direction). This pull should be a highly coordinated team activity. It is difficult to do this correctly without both instruction and practice.

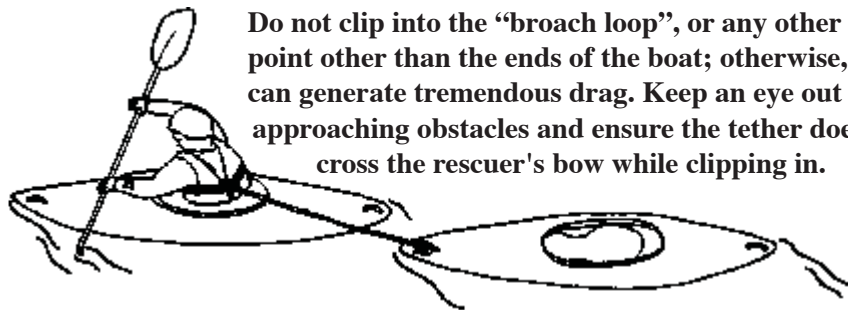
In some cases a pinned paddler may have a throw rope kept within their reach. Another type of victim assisted rescue may be effected by attaching a throw bag rope to the front end of the tether. The bag can then be tossed to another paddler on shore.

Towing

Tethers are useful for towing swimmers, boats and paddles. Again, these are all potentially dangerous activities. The situation is made safer for the rescuer because of the quick release function of the FIT Series Rescue PFDs. Towing a boat or swimmer results in increased drag and weight; it's more tiring and takes longer to reach a safe point. Practicing both towing and releasing beforehand is critically important.

Towing Boats or Paddles

A tether can be clipped into a free floating kayak for towing. Towing a boat should only be attempted on flat or moderate current, depending on one's skill level. On a river, approach the kayak from the side and clip into a grab loop.

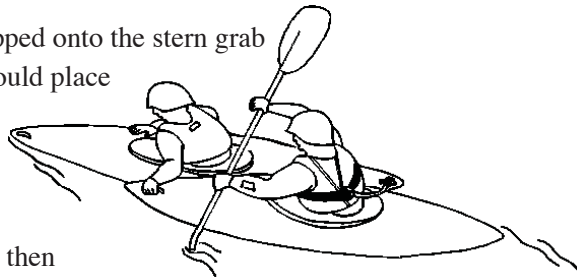


Do not clip into the “broach loop”, or any other point other than the ends of the boat; otherwise, this can generate tremendous drag. Keep an eye out for approaching obstacles and ensure the tether does not cross the rescuer's bow while clipping in.

The tether should be long enough to allow a towed boat to swing past the rescue boat's stern, in order to ferry it to shore. Bluewater tows usually require longer tethers to make towing easier in swells. In either case, if the rescuer's well-being is threatened, the harness can be released. Because of the increased drag and weight, a would-be rescuer can be pulled into rapids, waves, or other dangerous situations. Sometimes, because the rescuer and the towed object are traveling at the same speed, there is not enough pressure on the harness to effect a quick release. If this is the case, hook the thumbs behind the harness webbing on both the right and left sides of the buckle and push straight outwards.

A shorter tether can also be used for towing occupied kayaks in flat or moderate current. The rescuer positions the victims boat on the upstream side of his/her boat, bow forward.

The rescuer's tether is then clipped onto the stern grab loop of the other boat – this would place the stern of the victims boat adjacent to the cockpit area of the rescuer's boat. The victim then grabs the bow loop of the rescuer's boat. The rescuer can then paddle this stable two-boat setup to safety.



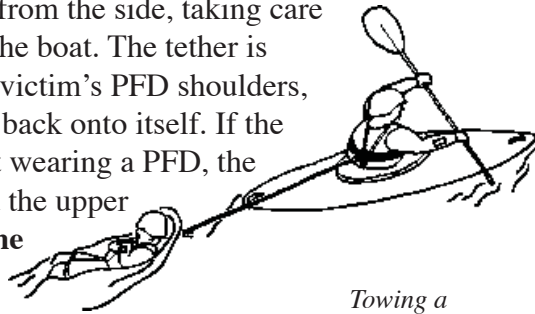
Stable Two-Boat Setup

A tether can also be clipped to a free-floating paddle for towing. Clip onto the end of the paddle shaft on your downstream side. Be aware that paddles can sometimes angle against the current and create surprising resistance.

Towing Swimmers

Towing of a swimmer is a rescue technique for unconscious, exhausted, injured, or any swimmers unable to help themselves.

The swimmer is approached from the side, taking care not to strike the victim with the boat. The tether is threaded through both of the victim's PFD shoulders, behind the head, and clipped back onto itself. If the incapacitated swimmer is not wearing a PFD, the tether may be clipped around the upper chest under the arms. **Extreme caution is warranted when performing lifesaving**



Towing a Swimmer

activities around potentially panicked swimmers.

We would like to reiterate how risky all the preceding scenarios can be for all parties involved. Please contact a certified instructor (a resource list is on page 15), take a rescue course, and practice until the techniques you have learned are second nature. None of the preceding text is designed to scare anyone out of buying or using a rescue vest! Wearing a rescue vest and having knowledge of rescue techniques can save lives, including the lives of the wearers. The more people that wear vests with harness systems, the safer our waterways can be.

Caring for your FIT Series Rescue PFDs

- Treat it as you would any piece of rescue equipment upon which your life may depend.
- Rinse thoroughly after use if worn in a swimming pool or salt water.
- Routinely inspect both the main body and the harness portions of the vest for any tears or abrasions that may affect its performance and your safety.
- It is suggested that you line dry your PFD in a shady area away from the sun's harmful UV rays.
- Do not dry clean.
- Please read the Think Safe pamphlet that must accompany every Ronin Pro, ProFIT Tour and Guide sold. Don't be put off by the somewhat dated graphics and cartoons; there is valuable information on inspection, care, and other pertinent safety issues.

Training Resources

Rescue 3/Rescue Source
PO Box 1050
Wilton, CA 95693
Phone: 800.457.3728
www.rescue3.com

Nantahala Outdoor Center
13077 U. S. 19W
Bryson City, NC 28713
Phone: 800.367.3521
www.noc.com

CCK - California Canoe & Kayak
409 Water St.
Oakland, CA 94607
Phone: 888.452.9257
www.calkayak.com

Ohio Division of Watercraft
2045 Morris Rd.
Columbus, OH 43229
Phone: 614.265.6480
www.ohiodnr.com/watercraft/

Canadian Recreational Canoe Assoc.
PO Box 20069, RPO Taylor-Kidd, Kingston, ON K7P 2T6, Canada
Phone: 888.252.6292
www.paddlingcanada.com

American Canoe Association
7432 Alban Station Blvd
Springfield, VA 22150
Phone: 703.451.0141
www.americancanoe.org

Lifesaving Resources, Inc.,
PO Box 905
Harrisville, NH 03450
Phone: 603.563.8330
www.lifesaving.com

Alder Creek Kayak and Canoe
250 N. E. Tomahawk Island Dr.
Portland, OR 97217
Phone: 503.285.0464
www.aldercreek.com

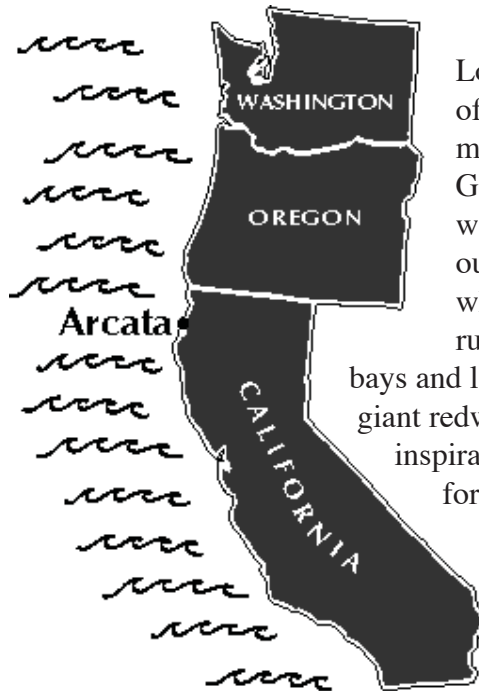
Gregg Goodyear
PO Box 1596
Wilson, WY 83014
Phone: 307.690.0162

Bluewater/Sea Kayaking

Kayak Academy
11801 188th Ave. SE
Issaquah, WA 98027
Phone: 206.527.1825
Fax: 206.525.3392
info@kayakacademy.com
www.kayakacademy.com

Maine Sport Outfitters
PO Box 956, Route One
Rockport, ME 04856
Phone: 800.722.0826
Fax: 207.236.7123
outdoorschool@mainesport.com
www.mainesport.com

Prevent injuries, and take a class at any of these locations. Develop the skills before you need them!



Located in the coastal town of Arcata, California, 300 miles north of the Golden Gate Bridge, some of the best water in North America is just outside our door – breathtaking whitewater rivers, miles of rugged Pacific Ocean coastline, bays and lagoons with a backdrop of giant redwoods. These are both our inspiration and the proving grounds for Kokatat designs.

We test what we sell, we take care of our customers and we speak from experience.

Most of the world is water – what are you waiting for?

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