



ASTRAL

Rescue PFD



Uses and Techniques

Contents

PART 1: Intro. to Rescue PFDs & Accessories	3
PART 2: Operating the Quick Release Harness	6
PART 3: On-Water Rescue Techniques	8

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PART 1

Intro. to Rescue PFDs & Accessories

Why use a rescue PFD?

Rescue PFDs (Personal Flotation Devices) were developed to give whitewater paddlers the option of entering the river to perform last resort contact rescues while being tethered to a shore based belay. It became apparent that the rescuer must have the option of escaping the system if they became endangered or when the rescue was completed, therefore the quick release aspect was developed. In the whitewater environment time is of the essence and a rescue PFD can prove to be a valuable resource to save a life on the river. Rescue PFDs have since become essential equipment for Class V paddlers, guides, and kayak instructors.

Get Trained

Before using your new Astral Rescue PFD on whitewater it is essential to have the proper skills and training required to properly use its features. This knowledge is best obtained by taking a Swiftwater Rescue course, offered by both the American Canoe Association and Rescue 3 International.

American Canoe Association
1340 Central Park Blvd., Suite 210
Fredricksburg, VA 22401
(540) 907-4460
www.americancanoe.org

Rescue 3 International
P.O. Box 1050
Wilton, California 95693
(919) 687-6556
www.rescue3.com

Additional Resources

To continue your education in Swiftwater Rescue techniques.

Books

River Rescue
by Les Bechdel and Slim Ray
1997 Appalachian Mountain Club Books

Swiftwater Rescue Field Guide
by Slim Ray. 2006 CFS Press

Whitewater Rescue Manual
by Charles Walbridge and
Wayne Sundmacher
1995 Ragged Mountain Press

Standard Components of an Astral Rescue PFD (Greenjacket shown)



- A. Optional Tow System Park
- B. Cam Buckle Quick Release Ball
- C. Spectra® Safety Loop
- D. Rope Ready Pocket
- E. Reinforced Shoulder Straps
- F. Cargo Stow Pocket
- G. Integrated 1.5" Quick Release Rescuer's Harness with Stainless Steel O-Ring

Optional Accessories for Astral Rescue PFDs

These optional accessories are specifically designed to integrate with Astral Rescue PFDs, further enhancing your rescue capabilities.

Integrated Throwbag

Tuck this into the special pouch located behind the front pocket. By keeping your throw rope on your PFD you can ensure that your rope is always accessible in an emergency (even if your boat happens to be downstream).

Specs: Available in Spectra® (recommended) or Polypro, 46 feet long and ¼ inch diameter.

Working Load: Polypro: 550 lbs.
Spectra®: 1800 lbs.



Webtoe Tow System

The webtoe is a 6 foot Spectra® tow line with a Paddle Biner on one end and a stainless steel O-Ring on the other. The webtoe is designed to be stowed safely inside the side pocket of the rescue vest, reducing the chance of snagging while remaining easily accessible. The knot is tied approx 6" from the O-Ring acting as a stopper to keep the webtoe securely inside the side pocket.



Cowtail Tow System

A bungee cowtail tow system is an effective tool for paddlers such as guides and instructors who spend a lot of time recovering boats. The front panel of the Greenjacket is equipped with a quick release tow system park which allows quick access to this type of tow system. The cowtail is an easier tow system to access than the webtoe, but it is more prone to snagging in a narrow or congested stream bed.

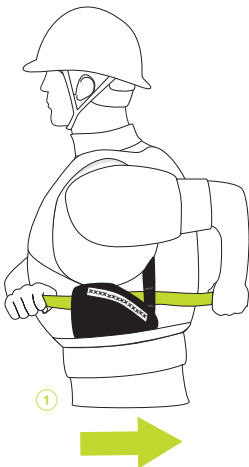


PART 2

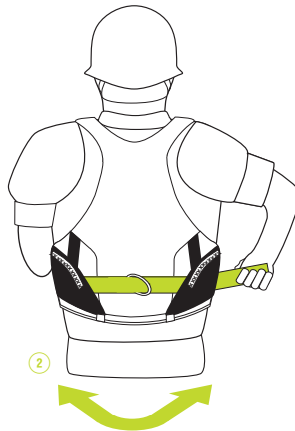
Operating the Quick Release Harness

The Quick Release harness is the central component of any rescue PFD. Here we describe how to use it. Practice these techniques many times on dry land before attempting water based rescue.

I. How to Route the Quick Release Belt: The loose end of the strap should be routed around the PFD as shown below. It's important to practice this technique a few times, **on both dry land and in your boat.**

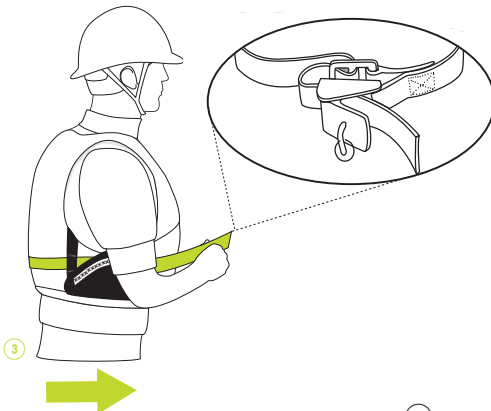


1. Route the loose end of the belt around the side of the vest and behind all fabric on the side pocket



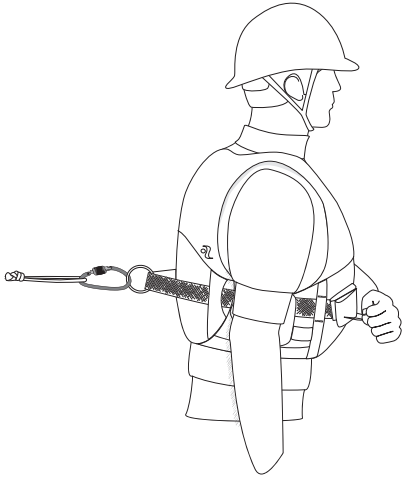
2. Bring the strap around the back, through both belt loops and the O-ring between them.

3. Finally route the strap under the right side pocket and secure at the metal triglide/cam buckle.



Double check that the webbing runs flat throughout the entire system without any twists, and that the webbing runs as described through both belt loops and underneath both side pockets.

II. Releasing the Quick Release Belt



Once force is applied to the quick release belt, simply pull the cam buckle quick release ball to open the buckle and exit the harness system.

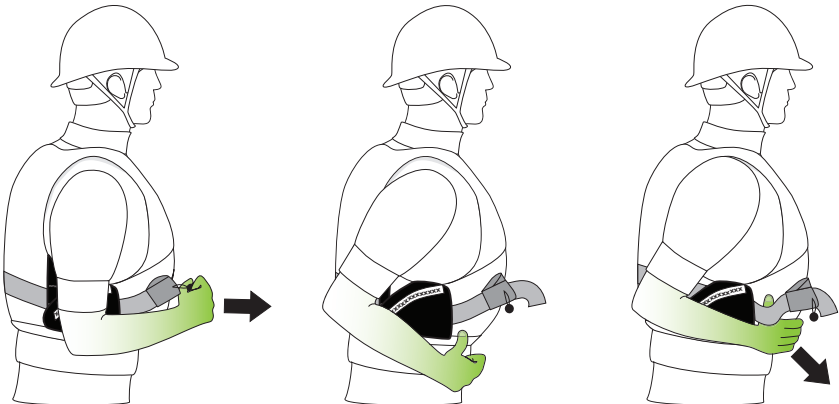
When the buckle is open, the belt will unwrap from the PFD's belt loops and the swimmer will be released from the harness.

→ The belt will remain attached to the PFD while the O-Ring will remain attached to the carabiner and rope.

For your safety, always use a locking carabiner when connecting any line to a rescue PFD to prevent snagging.

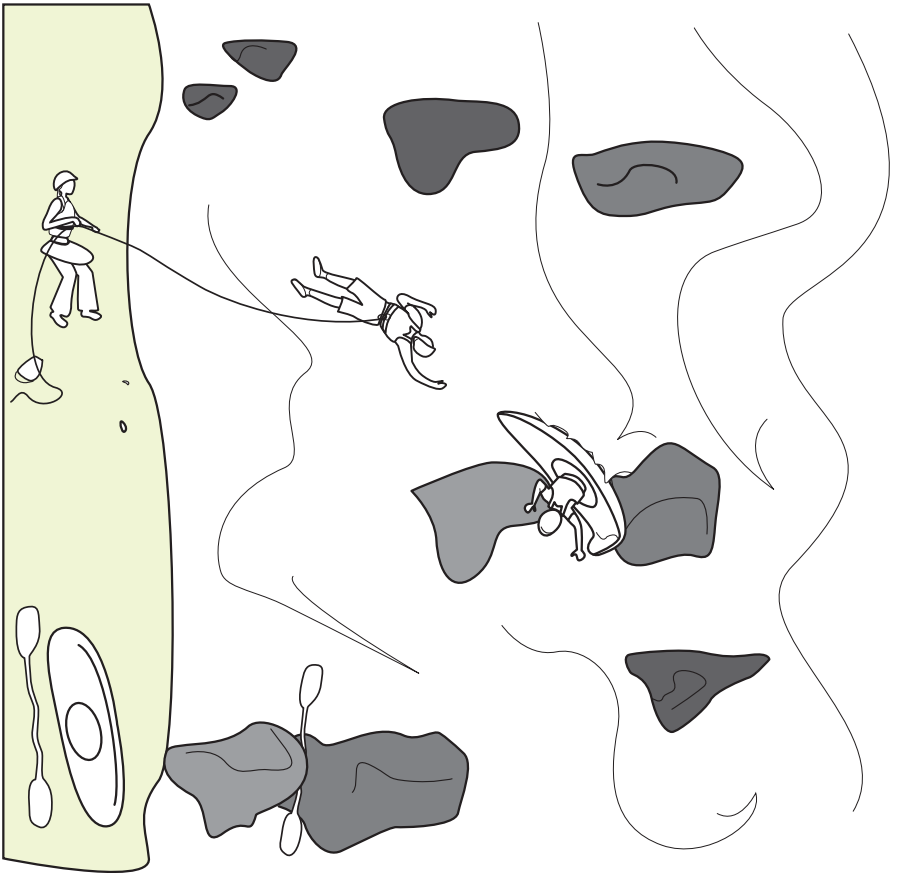
In calm or flatwater you will need to either actively swim to generate the force needed to unwrap the harness strap or manually pull the strap open.

To manually open, slide your thumb underneath the strap then press outward to guide the loose end of the strap out of the metal tri-glide as shown below.



PART 3

On-Water Rescue Techniques

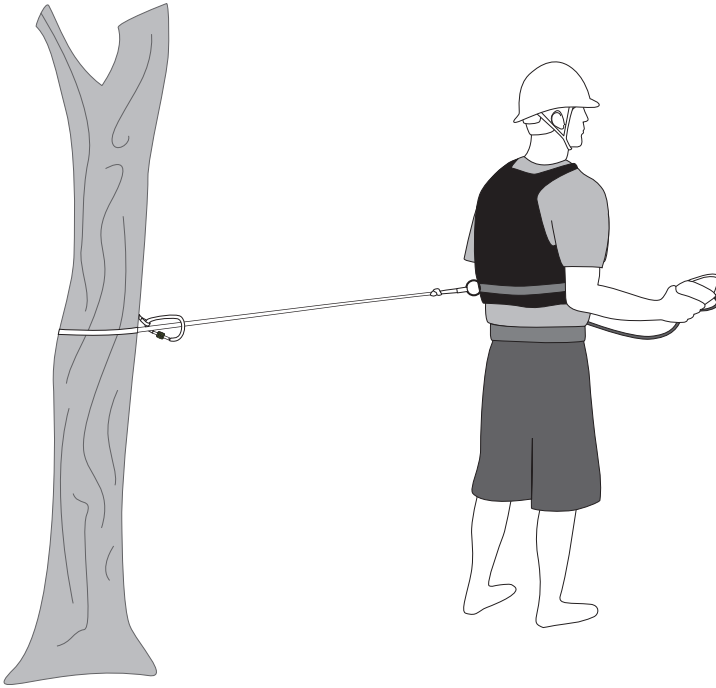


Strong Swimmer Rescue

The Strong Swimmer or “Live Bait” rescue is an advanced yet highly effective method of intercepting a victim from a narrow river or creek. This rescue technique involves a coordinated effort between a tethered swimmer and an on-shore belay.

There are many variations to strong swimmer rescues. The illustration above shows a rescuer swimming downstream to assist an entrapped boater.

Rescue Techniques Using Optional Accessories

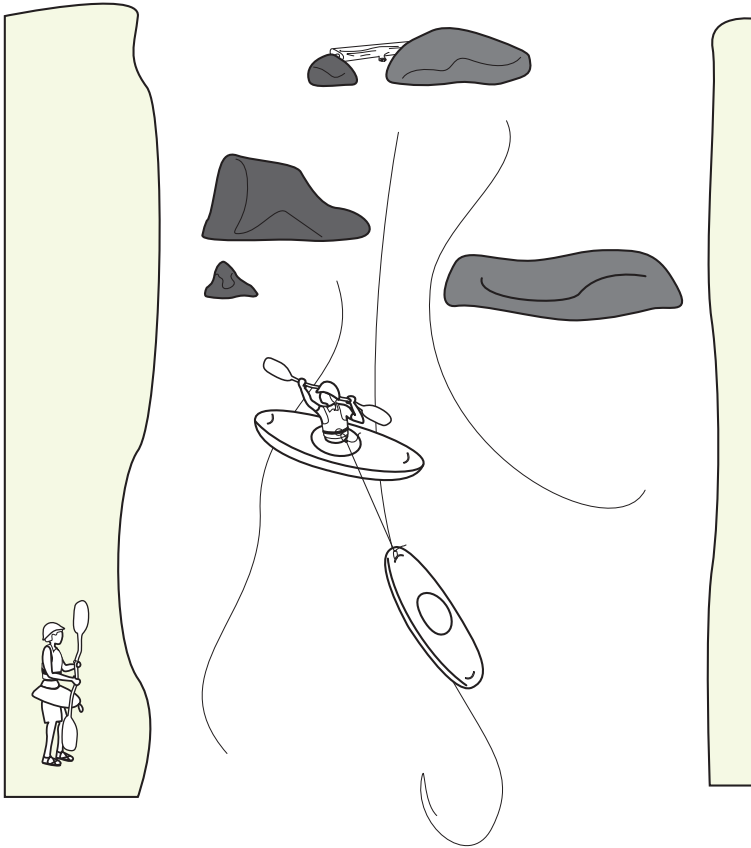


Setting Up a Shore Anchor

The Astral webtoe can be wrapped to create a quick anchor on a nearby tree or rock. Simply remove the stowed webtoe from the side pocket, wrap around the anchor, then clip the carabiner around the line. This creates a secure (and easily escapable) shore based anchor. Being anchored to shore ensures that the rescuer will not get pulled into the water when trying to assist the victim.

Towing a Kayak With the Webtoe

An Astral rescue PFD combined with the Astral webtoe makes towing a swamped kayak much easier and safer than previous techniques. The stainless steel O-Ring is connected to the rescue harness, allowing the paddler towing the boat to escape from the system via the quick release belt if they get into trouble.



Here are some tips for towing a swamped boat with an Astral Rescue PFD.

- Always ensure that swimmers safely reach shore before recovering equipment.
- The use of flotation bags make towing a swamped kayak more manageable.
- Do not connect to a kayak in (or above) a major rapid. For the rescuer's safety it's best to wait for a pool to recover the gear.
- Flip the swamped boat upright before towing.
- Do not connect to a pinned or entrapped boat.

Astral Safety Loop

All Astral Rescue PFDs are equipped with a Spectra® webbing safety loop. This loop is integrated with the PFDs internal webbing frame, making it one of the strongest attachment points on the jacket. It was designed to be used as a non-releasable extraction point for rescue and belay situations where a quick release feature is not necessary. Always use a locking carabiner for non-releasable applications.

Below is an account of the safety loop being used in a vertical extraction.

Upper Cherry Creek, California Kiwi in the Pocket Falls / 2:30 PM

Tommy Hilleke misjudges his line at a 30 foot falls. Hilleke is forced into a cave which he could not escape from in his kayak. Assessing the situation, the team quickly formulated a plan to extricate Hilleke from the cave. Three members set up a Z drag immediately above the cave while a fourth positioned himself to throw a safety rope into the cave. On the third pitch Tommy caught the rope and with one swift motion clipped the rope to himself via the rescue loop on the front of his vest. Hilleke gave the thumbs up, the rope came taught, he pulled his skirt and was whooshed to safety by the crew operating the Z-Drag. Another daring, timeless rescue complete.

Here is what Hilleke had to say about the experience:

"I tried to paddle out of the cave several times, each round I was violently rejected. I caught the rope from Fred, clipped in and was vertically extracted in a matter of moments. I watched as my boat was sucked into the falls and disappeared. There was no other option than to be roped up the cliff. Without having my safety belay loop, the task would have been far more difficult and the results might have been less than desirable."

submitted by Daniel Delavergne

Warranty: We guarantee everything we make to be of the highest quality materials and ethical workmanship available. If you are not happy with it in any way, get in touch with us and we'll make it right.

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