

ATLANTIC KAYAK TOURS™

Sea Kayak Towing

An Atlantic Kayak Tours instructional information flyer

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We are quite surprised as to how many experienced paddlers don't carry towing equipment or have any knowledge of towing. There are many trip leaders for clubs and outfitters who have never practiced towing. We practice towing on a regular basis in order to keep our skills fine tuned. The most common reason for towing is fatigue on the part of a paddler. The conditions may turn windy and paddler begins to lose energy. Another reason could be a paddler having trouble staying on course in windy conditions. In this instance, towing will help the paddler keep his/her bow pointed in the right direction. Both of these are easy tows because the person being towed is still paddling and the tower is only assisting. The next most common reason for towing is illness (motion sickness or physical injury). Other reasons for towing include: damaged equipment, lost paddle, or capsize at an inopportune time and/or place. Sooner or later you will need to tow or be towed, so this is a skill you need to practice.

Towing is a type of rescue and as with any rescue you need to evaluate the situation and come up with the best plan of action. You must consider the following: Is the person in danger? What are the conditions? What type of towing equipment do you have in the group? How many people do you have to help? What distance do you need to cover? And can the victim keep their kayak upright on their own? Note: The last question is critical! It's another reason for always paddling in a group of three or more. If it's only you and the victim how can this person who is sick or hurt keep the kayak upright without assistance? Who is going to tow? You are in a very bad situation and will need to signal for help. When with a group don't forget about the rest of the group when towing one person.

Towing Equipment

In order to tow you will need to be equipped. The basic equipment is a tow line and a knife. We have been testing many different types of tow systems, and have

not found the perfect system. The four basic systems are tow belt, over the shoulder tow bag, PFD with tow harness, and boat attached tow system (figure 1). Each system has its advantages and disadvantages.

The tow belt is the most popular system. Many companies offer variations of the system. What they have in common is a quick release belt, 30-50 feet of line with a carabiner at one or both ends. The danger of this system is the belt can get turned around so the quick release is out of reach or that the quick release gets buried under your clothing or PFD. For this reason, it is good for both ends of the line to have a carabiner and to have a knife attached to your PFD. The disadvantage of the tow belt is you are towing from a low point and the line has a tendency to get caught on equipment on the stern deck and/or the stern itself. The bag and line opening should be large enough so it is

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Figure 1) Kokatat ProFit Rescue Vest

easy to repack the tow line quickly.

Salamander has the largest line of throw bags and tow systems. For easy conditions the Sea Tow works fine. It is a compact system at a reasonable price. We went to Salamander in 1996 and asked them if they would build a professional tow belt system.

We had a prototype at the time but for the next two years we continued to test it, refine it and have Salamander build another prototype until we got it right. Finally in 1998 it came out (but didn't make it into the catalog). For anyone paddling in open water, rougher conditions or working as a professional guide the Sea Tow Pro is the best waist warn tow system on the market. The unique feature of the Sea Tow Pro is it has two tow lines (of different colors), one short (15'), one long (43'). The reason for two tow lines in one belt is that under many situations you only need to tow a short distance or to recover lost equipment after a wet exit. This tow belt has many other small but good features not included in the Sea Tow including; the highest quality stainless steel carabiners on the market, quick release knob, adjustable d-rings to hold the carabiners near the front of the belt, bungee cord at the neck opening. Salamander tow belts are of very high quality.

When we started towing we used the over the shoulder tow bag. The advantages of our over the shoulder tow bags are it is small (so it fits in a PFD pocket), it's

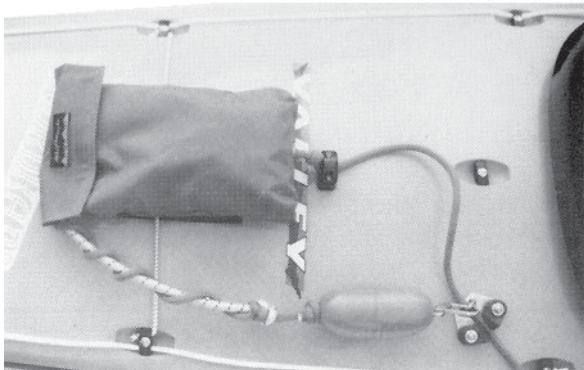


Figure 2) The deck mounted tow system puts no stress on your body, but is hard to repack in rough conditions.

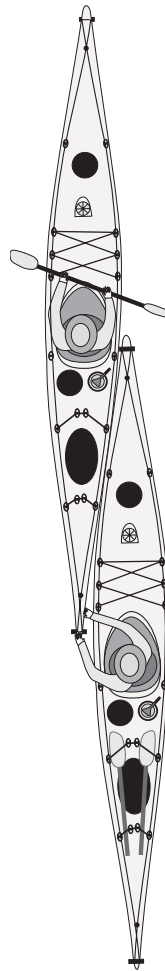


Figure 3) Bow to bow contact tow.

inexpensive, it tows from a high point (so it does not to get caught on equipment, rudder or the stern of you boat), and it's easy to pass to another paddler when you get tired. There is no a quick release on this system. To remove it you must lift it over your head. It is dangerous in rough conditions. Over the shoulder systems should only be used on easy flat conditions. Some of our guides carry a over the shoulder tow bag as a backup to their other tow system. Many times on long tows we will trade off towing and with this system you just pull it over your head and hand it to another person. If this is your only tow

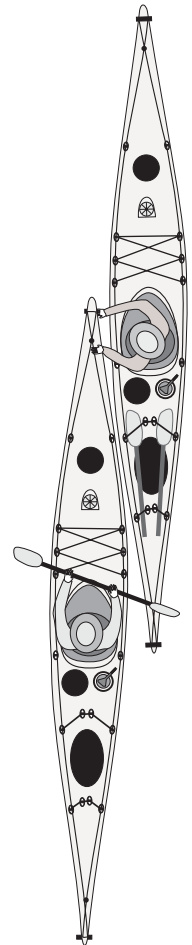


Figure 4) Bow to bow short tow.

system you are now left without a tow line, which is unacceptable. If it is your backup system you are all right. Its other disadvantage is that it puts more stress on the paddler than the other systems, and some people have complained the line cuts into their shoulder or neck. No one sells this system but it is easily made from a mesh bag forty feet of line, with a carabiner at one end. The loop of line should be sized so when it is over the shoulder you can reach the end of the loop.

It is becoming more common to see PFDs with tow harnesses built in. These were first designed primarily for river paddlers, who only need a short tow line. The advantage of the PFD tow line is you

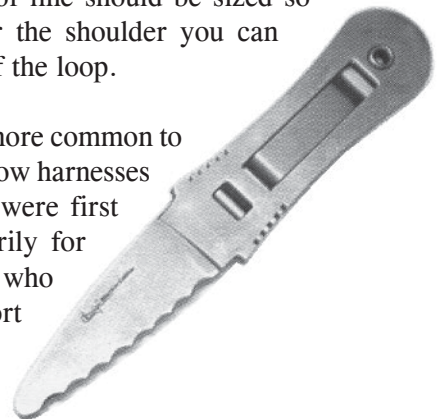


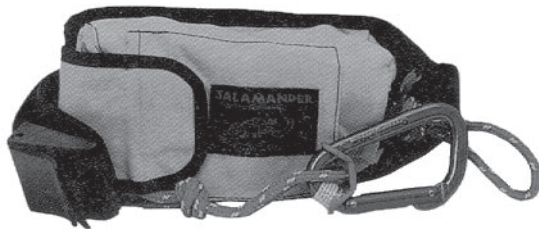
Figure 5) Gerber Clip Lock with a single edge blade.

Salamander Tow Lines

Sea Tow

Designed specifically for sea kayaking, the Sea Tow gets its design inspiration from Salamander's proven waist worn systems. Features include a quick-release cam lock buckle, an anodized carabiner, and a shock absorbing tow tether. An additional secure point allows the option to tow from the waist or a secure deck fitting on the kayak. Neither cumbersome nor bulky, the Sea Tow is easily repacked after use. Since a group can only travel as fast as the slowest paddler, the Sea Tow allows groups to stay together providing a safe excursion every time.

- 30 feet of 1/4" Kernmantle polypropylene line
- Color: Safety Yellow/Black
- \$64.00



Sea Tow Pro

The Sea Tow Pro, designed with input from professional sea kayak instructors, is based on our highly successful waist worn tow systems. The Sea Tow Pro offers sea kayakers another level of safety. We have added a 15 foot tow tether for close in rescue assistance and lengthened the shock absorbing tow tether to 43 feet for extended distance towing. We utilized stainless steel carabiners to resist the salt water elements, and relocated the carabiners to "D" rings mounted to the belt for unobstructed access. The cam lock buckle is fitted with a release knob to help with exiting the system when wearing thick gloves. As sea kayakers test the limits, Salamander continues to provide gear that will assist them in their quests.

- Color Yellow/Black
- \$90.00



always have it and the quick release is in front of you. In addition, many of them tow from a higher point on your back which helps to keep it from getting caught on equipment, rudder or the stern of the boat. Kokatat (figure 1) and Lotus has PFDs with tow systems designed for both river and sea kayaking. Most of these are Coast Guard approved as Type 5, which is for special use. The following is a quote from the Kokatat catalog.

“The ProFIT is a “special use” PFD, intended for people specifically trained by certified instructors in swiftwater rescue. We encourage you to ask your dealer about training in rescue technique before purchasing any rescue equipment”

Remember towing can be dangerous. You need to practice in varying conditions. You must be comfortable with capsizing and release your tow system while underwater. If you tow you need to have a knife available to cut the line in case of entanglement.

Deck mounted tow systems are very popular with British paddlers and are gaining in popularity here. It uses a quick release cam cleat, fairlead, a bag with the tow line and carabiner (figure 2). This system puts the least stress on the paddler and may be the safest because the tow line is not attached to the paddler. Its disadvantages are; it stays with the boat, so if you switch boats you don't have it, it rides low so it easily gets caught, and it is hard to repack on the water. Deck mounted systems have longer lines (55 feet) than other systems. Some manufacturers offer this system factory installed as an option.

If the kayak to be towed has deck lines then attach the tow line to the deck line, otherwise you need to attach it to the carrying toggle. Deck lines are usually stronger and in better conditions than toggle lines.

Tows can be broken down into short or long tows. A short tow is usually only a few hundred feet. It's used to move the person out of danger or back to their lost paddle. It needs to be quick and efficient. Long tows are the most common. The distance can be a few hundred feet to a few miles.

Short Tows

There are two short tow categories. One uses a short tow line which is just long enough so the bow of the boat being towed doesn't hit the stern of the tow boat. The other type of short tow is called contact tows and doesn't use any equipment. These tows are used to get a person out of a bad location quickly. An example would be a capsize in a boat channel. You need to move that kayak a couple of hundred feet quickly. The short tow is the answer.

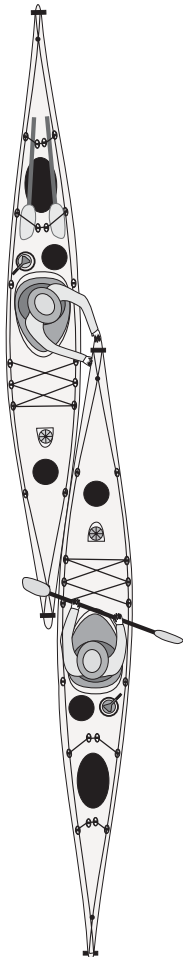


Figure 7)
Bow to stern short tow.

Everyone should practice and know how to do contact tows. Unless the two paddlers have practiced contact tows it will be a hard tow to pull off. The key is to keep the bow of the boat being towed, as close to the tower boat as possible.

Some of our guides are installing a very short tow line on their kayaks. This is used to pick up a lost paddle or boat. This line is only a couple of feet long with a small snap link (mini carabiner type buckle). This line is attached to your boat. How many times have you seen a person capsize and let go of their boat and/or paddle? The short tow line solves the problem of retrieval of lost equipment. It can also be

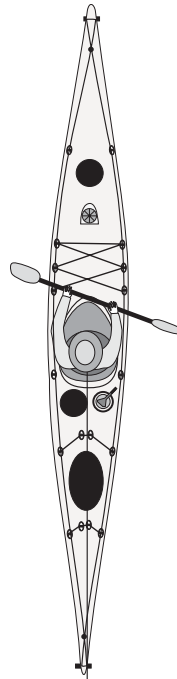


Figure 8)
Standard I tow.

used in a contact tow to help keep the bows together. It runs through the deckline or toggle and clips back onto its own kayak.

The two types of contact tows are bow to bow, which has the bows of both boats in the same direction and bow to stern, which has the bows opposite directions (Figures 3, 4, & 6).

Keep the two boats together. The person being towed should edge their boat over to the other boat to help keep the boats together. The drawings show the two boats upright, but the boat being towed should be edging. This is an easy tow to learn, but it needs to be practiced. If the two boats separate, the movement of the water will pull the boat further apart and you will have to stop and re-setup. We find that different boat combinations work better with the different contact tows. Experiment with different combinations to see what works best.

Long Tows

Long tows are hard work, but a great workout. It is very important that the tow line is the right length. The length will vary from twenty feet in calm conditions, forty feet in moderate conditions and 50 plus feet in very rough conditions. It's easy to shorten a line, but much more difficult to lengthen it. The reason for such a long line is that in rough conditions you don't want the towed boat to surf into you as it comes down a wave. A long line does add a lot of resistance, so in calm conditions you may want to shorten it.

The key to the long tow is paddling efficiency. You need to get into a groove. Many paddlers find they feel they are at their limit, but get over the hump and into a groove and can go farther. Find a pace you can maintain

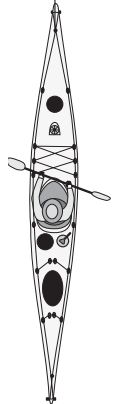
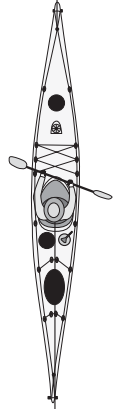
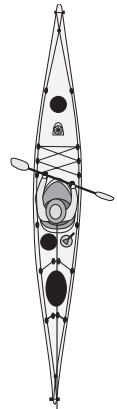


Figure 9)
Double I tow.

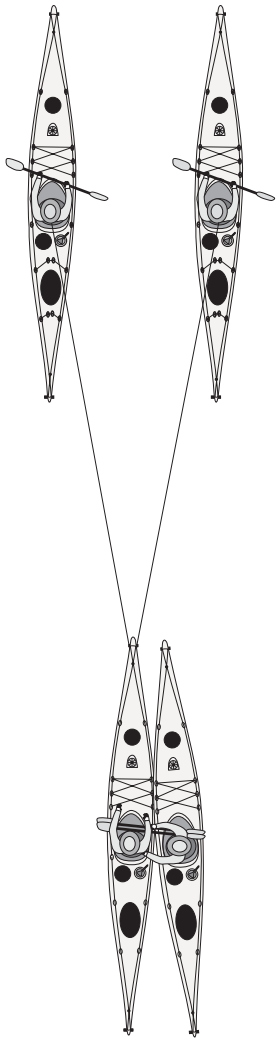


Figure 10) Y tow with a stabilizer.

Using a double "I" tow the stronger paddler should be in the front, if you have the option. A problem with the double I is that the middle boat is committed for the full tow.

Y Tow

The advantage of the Y tow (figure 10-11) is that different paddlers can switch off to take turns. Just clip on and tow for a while then unclip after another person clips on. The key to making the switch over is being ready and acting quick. Open the tow bag and have the carabiners in your hand as you paddle up to the boat. A problem with this tow is it is much harder to go around turns as the outer kayak has a longer distance to paddle. The kayak on the inside of the turn must know to slow down and let the outside paddle keep up.

for many hours. Use your full body. Good trunk rotation and pushing with your feet on the footpegs (as you should always be doing) is even more critical during a long tow.

I Tow

The standard "I" tow (figure 8) is the most used tow. Clip your tow line to the toggle or deck line. It works if the conditions are easy and you only need to go under a couple of miles. The I tow has the least amount of problems.

Double I Tow

If you have to tow for a longer distance or in harder conditions then get into a double I tow (figure 9) or a "Y" tow (figure 10-11). The double I tow usually works better than the "Y" tow. We have seen the bow of the boat being towed pull from side to side with the "Y" tow. When using

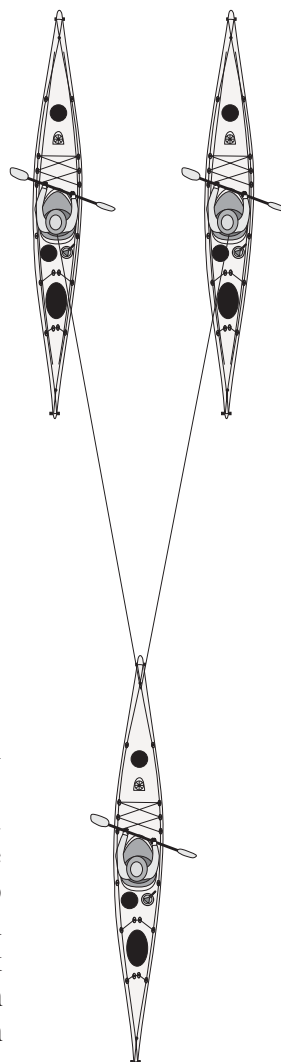


Figure 11) Standard Y tow.

The W Tow

The W tow (Figure 13) is always included in information about towing, but we have never seen it work well. Too many boats and tow lines are involved. All paddlers must paddle at the same speed and in a tight formation. The drawing looks good, but in practice it doesn't work.

Drift Stopping Tow

The drift stopping tow (figure 12) like all tows will get you out of trouble. If a person capsizes and is being pushed into a dangerous area (i.e.. bulkhead, cliff, boat channel etc.) a short tow line is hooked up to the stern of the rescuer's kayak and the tower paddles in place or slowly forwards as the rescuer performs the rescue. The person towing usually can't make much forward progress since they are pulling the rescuer's boat, the capsized boat and the person in the water. If you must move the rescuer out of the dangerous place then a double I might be needed. Over and over this rescue proves it's worth. In easier conditions a short tow line is better.

Stabilizing a Victim

For tows with a stabilizer (figure 10) always clip onto the person needing the tow and not the person stabilizing. It is hard work stabilizing and they will want to switch off once in a while. If you are hooked up to them they must stay with the tow until it is finished. The key to being the stabilizer is to edge your kayak and keep the bows as close together as possible. Stabilizing a victim is harder than it looks.

Tow Landings

Landing a person in rough conditions is difficult at best and could be dangerous to both the

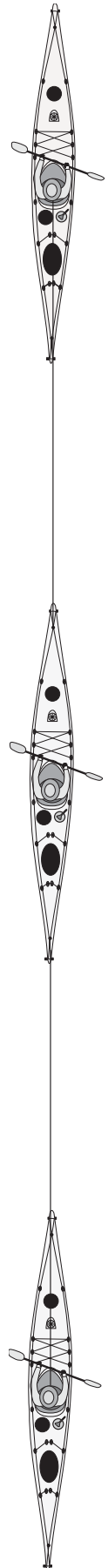


Figure 12

person being rescued and the rescuers. Landing a person in over three foot surf is impractical. It is almost always possible to find a location with smaller surf. If you must land in very large conditions, it might be safer to have the person leave their boat and swim in. If this is impossible, set up a drogue. A drogue is a type of sea anchor which slows the movement of a boat. Since very few paddlers carry a real drogue, the next best solution is to hook up a tow line to the stern of the boat being towed (figure 14). The person in this rear boat would help to slow down the towed boat and also help keep it straight. When the towed boat starts to surf, the rear boat would paddle backwards trying to slow the movement of the towed boat. The rear person needs to be a very skilled paddler. You would not want to capsize while the towed boat is surfing in. The tow line needs to be as long as possible so the anchor boat does not surf a wave at the same time as the boat being towed. A great amount of force is being put on the people and all the equipment. It is sometime better to drop the tow just before entering the surf zone and have the person being towed handle the wave as best possible.

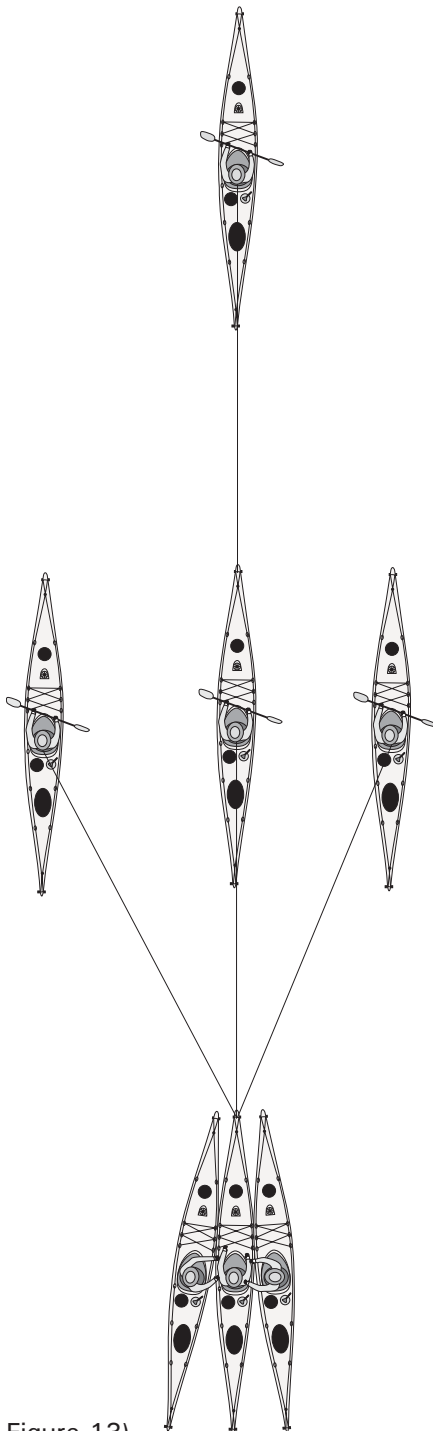


Figure 13) Looks good in a drawing, but doesn't work.

Before landing you would make a plan assigning jobs to different paddlers. One person would go ahead of the group and scout the landing zone for a safe location. This person will land and signal the rest of the group to slow down or paddle hard. As the group lands this person would grab the boat being towed and pull it up onto the beach. If this was a long tow and the group was large enough you might send a few paddlers ahead to land. Once they land, they could go for outside assistance or set up a first aid or bivouac station. If you have VHF radios the person on land can communicate with the people towing.

Final Thoughts

Remember towing is potentially dangerous. You should practice capsizing and releasing tow lines and practice tow in different conditions. The more boats involved in the tow the more things that can go wrong. Again, never put the group in danger to save one person. A good leader should never allow the situation to develop into a dangerous one. If leading a group try to have another person or people do the towing. If you have to tow you can't lead the group. When all else fails and the situation is too difficult or dangerous it is time to use signaling equipment and get outside help. A VHF radio would be the best signaling equipment to have so you can tell the rescuers what the problem is.

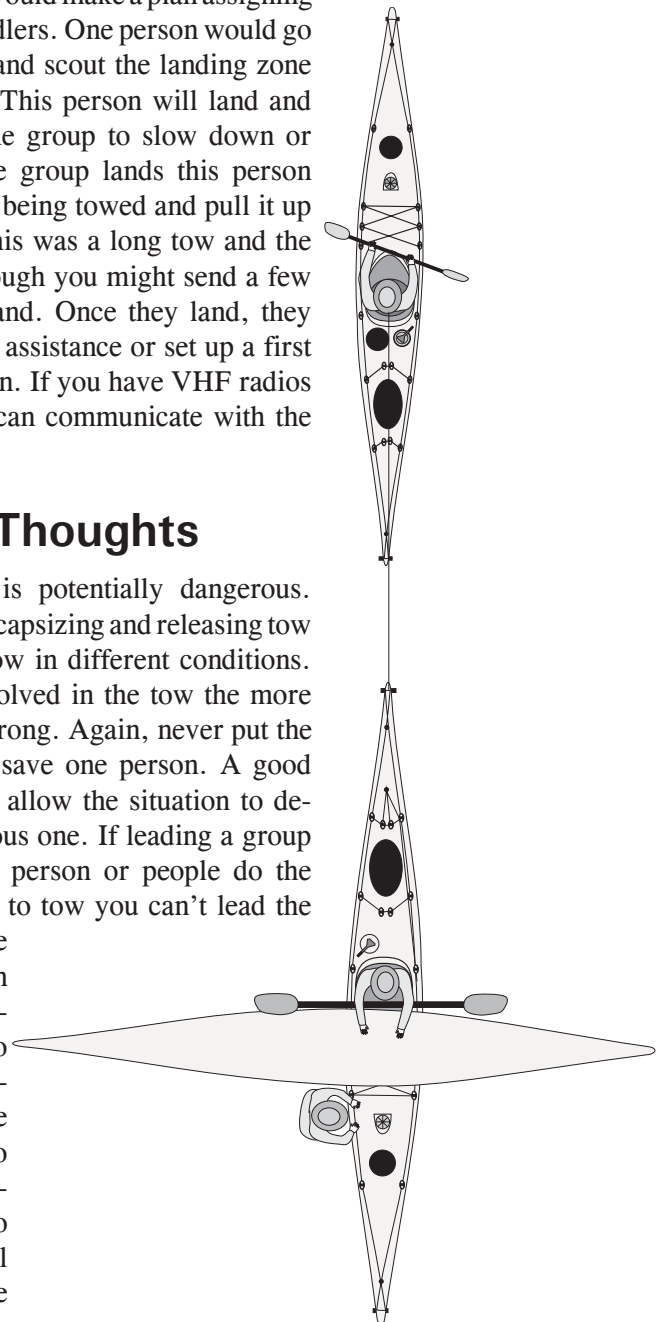


Figure 14) Drift Stopping Tow.