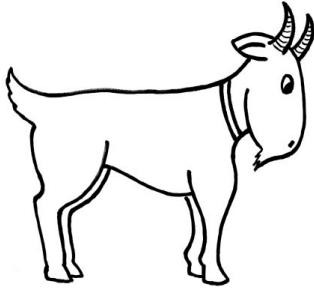


Boat Rescue



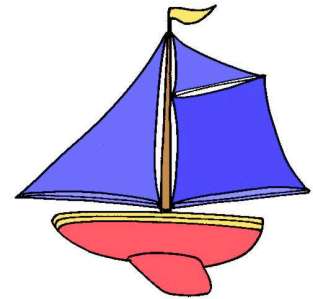
In a small Spanish village, on the fourth Sunday of each year, in honor of the town's patron saint, villagers truss up a goat, carry it up the 50 foot bell tower of the church, and toss it out. The goat is caught in an outstretched tarpaulin and released unharmed.

Despite recent opposition, this ancient tradition persists. The first occurrence, hundreds of years ago, may have been the first Goat Rescue. But I digress . . .

Boat Rescue is a water safety program of the Lifesaving Society. The Lifesaving Society (LSS) has offered aquatic lifesaving training in Canada for over 100 years. The society motto is "Whomsoever you see in distress, recognize in him a fellow man". An older slogan is "Reach, Throw, Row, Go, Tow".

Some LSS awards may be familiar. Here are a few:

- Bronze Medallion
 - Bronze Cross
 - National Lifeguard
 - Lifesaving Instructor



Lifesavers are "lay rescuers" trained to recognize emergencies and react with the least danger to themselves and others. Lifesavers are not trained to perform higher-risk rescues, as lifeguards are. Lifesavers progress through the awards above to obtain lifeguard training. For this course, please adopt the perspective of a lifesaver.

Boat Rescue applies lifesaving principles to the boating environment. A current Boat Rescue award (within three years) serves as a swimming prerequisite for Canadian Yachting Association sailing coaches. The CYA also recognizes Bronze Medallion or any higher LSS award (current within two years), including the awards above.

Boat Rescue is an eight hour training program with specific skills that must be demonstrated and specific content that must be learned, but also with flexibility for adaptation. This document, with related materials, is a self-study module covering the required content and adapted to the sailing environment.

Please review the material and do the questions to check your understanding.

[Quiz](#)

Administration

For LSS records I will need your name, address, postal code and date of birth. Please [email](#) this information or bring it to the classroom session. After you complete the self-study module, we will meet for a knowledge review, for sailing drills, and for swimming drills. You will need a PFD, clothes to sail in, and clothes to swim in. You may want a wet suit, goggles, water wings, etc. If you have any questions, please [ask](#).

First Aid Review

Please review your First Aid and CPR. First Aid is not a focus of this course, but certainly could be required in the followup to a rescue. A person rescued from the water might well suffer from:

- shock
- hypothermia
- unconsciousness
- near-drowning
- water inhalation
- head, neck, spine injuries
- bone, muscle, joint injuries
- cuts, scrapes, burns, bruises
- stings and bites
- heat emergencies
- exposure to polluted water
- dehydration
- starvation
- sunburn

Please review the following slides, from the Sea Cadets Small Craft Rescue Award materials, for additional information.

First Aid Review

- [Prevention of Hypothermia](#)
- [Progressive stages of Hypothermia](#)
- [First Aid for Hypothermia](#)

- [Shock](#)
- [First Aid for Shock](#)
- [Heat-related illnesses](#)

- [First Aid for heat-related illnesses](#)
- [First Aid for bone and joint injuries](#)
- [First Aid for wounds](#)

Check, Call, Care

Check, Call, Care is a sequence covered in Canadian Red Cross First Aid courses.

Check is the first step - check the scene, check the person if safe to do so. Things to look for:

- Is the scene safe to approach? Can it be made safe?
- What happened? How many people are involved?
- Who is nearby who could help?
- Could the situation deteriorate?
- Does the situation require more advanced help than we can provide?

Call - if we cannot provide the required help, we can at least call EMS/9-1-1 and get help on the way. It is usually preferable to send someone else to call. You should also ask the caller to return to inform you. Others can be sent to find required equipment - stretchers, flotation, AED.

Care - At this point, if we can do so safely, we provide assistance according to our training.

Rescue Cycle

Recognizing an emergency may be our most important job and the best way to help. The rescue cycle is recognize - assess - act - followup - evaluate. Situations may deteriorate, and the cycle is restarted or repeated.

Rescuer Safety

We are not helping in any emergency if we put ourselves or others at risk. Our first step and our highest priority is to ensure our own safety. If this requires special equipment or outside assistance, we must wait for that.

If a rescue is possible, our duty is to carry it out with the lowest possible risk to the rescuer. For example, often we can help by giving the person directions, for example in righting a capsized boat. Although it might seem quicker to swim out and help, this puts the rescuer at higher risk. If we can talk a person to safety, that is what we do.

Rescue Ladder

The Lifesaving Society developed the Rescue Ladder as a reminder of the relative risk of different types of rescues. Previously, the society's slogan, "Reach, Throw, Row, Go, Tow" served the same purpose.

The Rescue Ladder steps are "Talk, Throw, Reach, Wade, Row, Swim, Tow, Carry".

Many rescues involve more than one step. For example, we can wade and reach but we should always be talking.

Talk

A talk rescue is an attempt to direct the person to help himself. Talking to the person can reassure him, can reorient him to the nearest point of safety, and can help him improve the situation by giving him appropriate directions.

Throw

In a throw rescue, the rescuer throws an aid to the person, ideally something that can be used to pull the person to safety. This is what our buoyant heaving lines are for. We can also throw disconnected things - PFDs, the picnic cooler, or anything that floats. The rescuer must be braced against the person's pull. Ideally the end of the heaving line will be tied to something solid. The rescuer should still be talking.

Reach

In a reach rescue, the rescuer offers an aid to the person, for example reaching a PFD or a paddle that the person can hang on to. The rescuer must be firmly anchored to a place of safety (boat, pier or beach) and able to withstand the person's pull. Usually the rescuer should have weight down low with a wide base of support. The rescuer should still be talking.

Wade

In a wade rescue, the rescuer is in the water but with a sure footing. The rescuer should continue talking.

Row

In a row rescue, the rescuer approaches the scene in a boat. Because this is our natural environment, it may be the method we employ most commonly. The Rescue Ladder tells us that a reaching rescue from a pier would be safer for the rescuer than the same rescue from a boat.

From the boat, we can still employ the reach, throw and talk rescue techniques. We should certainly be talking.

Swim

In a swim rescue, we enter the water without the sure footing of a wade rescue. This is a relatively high risk rescue, something we should seldom employ. We should never consider a swim rescue without flotation for ourselves, flotation for the person, and a reaching or throwing aid. We should approach head up, with our eyes on the person, and we should still be talking. We should “reverse and ready” at a distance where contact is unlikely.

Reverse and ready means that we stop swimming forward and assume a position in which we are ready to fend the person off with our feet, if that should become necessary.

From the reverse and ready position we can talk to the person and reassess our rescue options.

A swim rescue does not imply contact with the rescued person.

Tow

In a tow rescue, the rescuer is swimming and there is indirect contact with the rescued person through a throwing or reaching aid.

Carry

In a carry rescue, the rescuer is swimming and contacts the rescued person directly in an assistive or controlled tow (e. g. hands holding person’s arm, or hands holding person’s head). This poses the highest risk to the rescuer. While it is the last resort, it might be necessary, for example with an unconscious person or someone who cannot follow directions or grasp an aid.

[Quiz](#)

Rescuer’s Checklist

We should always review:

- What are the dangers to the rescuer? Can the rescue be performed safely?
- Is a talk rescue possible? Always try this first, and keep talking.
- What is the most effective flotation aid on hand? Aside from a PFD for the rescuer and a PFD for the person, can we use the buoyant heaving line as a throwing assist or a paddle as a reaching assist? Is there specialized equipment on board? (Life rings, life slings, lifts)? Is there other equipment that would help? (Pool noodles, picnic coolers, swim fins, swim ladders)?
- If a rescuer is entering the water, what is the most effective entry? Normally the best entry would be very slow, careful, and feet-first, keeping the person in sight. Do not enter without a PFD and the aids discussed above. Consider abilities, training, depth, clarity, current, temperature, distance, hazards, and available resources. Slip in unless

you can wade or you really know the water. Higher risk alternatives - roll in, wade in, stride jump, head-up dive.

- Keep the person in sight while approaching, and keep talking
- What is the most effective and least risk rescue? (Talk, tow or carry)?
- What is the nearest point of safety? After getting there quickly, what is the best way to secure the person?
- What is the best way to remove the person from the water?

Self Help

Practical skills demonstrated for this award include those meant to help ourselves:

- HELP position
- Huddle position
- Donning a PFD in the water
- Treading water using modified whip kick, scissor kick or eggbeater
- Removing clothes in the water when appropriate (only if they impair self rescue ability)

HELP and Huddle positions

These are designed to prevent heat loss, mainly by protecting the major heat-loss areas (head, neck, under arms, groin). Please see the [slides](#), from the Sea Cadets Small Craft Rescue Award, for illustrations of the HELP and Huddle positions. (See also the [Safe Boating Guide](#)).

HELP is an acronym for Heat Escape “Lessening” Position. In a huddle position, small children should be in the middle.

The following slides are courtesy of Sea Cadets:

Self Rescue

- [Throwing a heaving line](#)
- [Lifejacket vs. PFD](#)
- [Immersion hypothermia - HELP position](#)
- [HELP and heat loss](#)
- [Huddle position](#)

[Quiz](#)

Helping others

For this award, among other things we will be demonstrating the ability to help:

- an unconscious person in the water
- a non-breathing person in the water
- a person overboard.

Approaching a capsized

Your first priority, as always, is maintaining your own safety. After that, the safety of people is always more important than the safety of equipment. Your best approach, and particularly until everyone involved has been spotted, is slow and controlled, and probably from downwind. Related to everyone's safety, especially when a sailboat capsizes, is keeping the propellor away from people, halyards, sails and shrouds.

Having approached from downwind, you may prefer to be to windward of the sailboat once everyone is safe and sound. For one thing, trailing lines will likely be to leeward. Also, it is useful to be able to spin the bow to windward.

Crew Overboard Recovery

In a powerboat, the Anderson turn is useful in bringing the boat back to the same point. The Williamson turn brings the boat onto the reciprocal of its original course, in case the crew has been lost some distance away. See the illustrations in the article below. Note which way to turn the helm in order to keep the propellor away from the person.

In a sailboat, the key thing is to maneuver the boat to approach the person on a close reach (so the boat speed can be controlled), allowing the boat to stop with the person on the windward side. The formula for returning on a close reach is "beam reach, tack, broad reach, close reach". This can be called a triangle or a figure eight. In this Wikipedia article it is called a "Quick Turn". Note that the broad reach is incorrectly called a beam reach.

http://en.wikipedia.org/wiki/Man_overboard_rescue_turn

We should always remember to:

- alert the crew
- appoint a spotter (who points at the person in the water)
- (spotter also communicates with the person if possible)
- use the MOB button on the GPS if available (this sets a waypoint)
- throw flotation (this is for two purposes - to assist the swimmer and also to help us find our way back. Bags of Cheetos will not provide buoyancy but do a good job of marking the spot).
- throw out a MOB pole if available (usually has a strobe light)
- deploy distress signals if appropriate

We can promote safety by:

- wearing flotation
- using safety harness and tether if appropriate
- carrying personal signaling devices such as whistles and strobe lights
- setting an "I'm overboard" (dead man) timer when alone on deck - this means setting a timer as frequently as desired, but for no more than 15 minutes. If the timer rings, crew

mates can assume that you are no more than 15 minutes away on the course followed.

[Quiz](#)

[Bonus Quiz](#)

Recovery of a person overboard

Having returned to the person, we should secure the person to the boat as quickly as possible. Then we need to get the person back on board, safely and preferably without aggravating any injuries. (Safety for the rescuers involves lifting with the legs, not with the back).

A lift will be safer (both for the rescuers and for the person lifted) if assistance is available. If another person is not available, consider improvising a swim ladder, or using winches and blocks to help.

People rescued need very gentle treatment, especially those injured and those suffering from hypothermia.

A condition called circum-rescue collapse can occur if the person is lifted by the arms above the head, particularly with a loop under the arms. The person may have been removed from the danger but may collapse later due to circulation problems. Circum-rescue collapse can also occur simply due to hypothermia.

While it may not prevent circum-rescue collapse, it is better to lift a person in a prone position if possible.

<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=286328>

The following slides are courtesy of Sea Cadets:

Crew Overboard Rescue

- [One-person lift](#)
- [Two-person lift for vessels with low freeboard](#)
- [Parbuckling/horizontal lift 1](#)
- [Parbuckling/horizontal lift 2](#)

Distressed Swimmers

Distinctions can be made between distressed and near-drowning swimmers. Consider the swimmer's characteristics in selecting the best rescue technique.

A distressed swimmer (may be tired, cramped, cold or injured) will likely still be making propulsive movements, for example using the legs to swim. The swimming may not be effective and so the body position may be more vertical than horizontal, and there may be little to no progress. A drowning swimmer will likely not be using the legs for swimming at all and the body position will be near vertical.

A distressed swimmer may turn to face a point of safety (a beach, a boat). He may call or wave for help. He may be holding or guarding an injury. A drowning swimmer's effort all goes into staying afloat and breathing. He may not move much at all.

A distressed swimmer may look distressed, but a drowning swimmer will likely have a look of panic.

A distressed swimmer may be responsive to constructive communication (talk rescue). A drowning swimmer may ignore directions and may even endanger rescuers, grabbing the rescuer to try to keep afloat.

A drowning swimmer may be unconscious. If submerged, the swimmer may not be visible.

Buoyancy of Boats

Different craft have different buoyancy characteristics.

Sailing dinghies are commonly self-bailing, meaning that the cockpit floats above the water level when the boat is capsized (this allows the water to run out). In boats with open transoms, capsizing may not be required. In addition, dinghies may have masthead flotation to discourage turtling. The top section of a Laser mast is filled with foam for this reason.

The primary flotation in a sailing dinghy is usually sealed air tanks in the gunwales and in the bow and sometimes the stern. The tank plugs may be opened to release any water that gets in. They should be plugged when underway. The tanks are in separate sections so they back each other up.

In addition, dinghies should have backup flotation (foam, air bags) sufficient to keep the boat afloat when capsized or full of water. Sometimes this is visible, as in an Optimist with an air bag strapped in, but more often it is inside the air tanks.

Multihull dinghies are much the same, with air inside the hulls and backup flotation. Masthead flotation is particularly important with multihulls because of their stability upside-down.

Sailboards are filled with foam.

In the keelboat world, multihulls (catamarans and trimarans) may have inherent flotation, but monohulls usually have none. If they fill with water, they sink. (A sealed monohull may recover from a capsize - however, sealing it includes all through-hull fittings as well as hatches).

Canoes should have backup flotation at both ends. We want them to float at the surface, with the ends above the water level, when swamped, even with passengers.

Kayak flotation should also allow the ends to float above the water, with the paddlers in the kayak, when swamped. Kayak flotation often consists of air bags.

In a small powerboat, extra flotation can be at the bow and stern, or sandwiched in the hull.

Inflatables rely on air in the hull, in several separate compartments. In rigid inflatables, the air is around the gunwales.

Boaters may have the misconception that wooden boats will float when swamped. This is not necessarily true.

Boaters can add extra flotation in the form of air bags or spray foam. Some improvise using pop bottles, ping pong balls, pool noodles styrofoam peanuts or bubble wrap.

The basis of the flotation is the air tanks. Their integrity is very important. It can be compromised when the tanks are used for storage or simply by leaving the plug out. Often there are inspection ports providing access to the inside of the air tank. This is handy for inspection and repair. There are accessories available to secure a dry bag inside the inspection port. Access to the dry bag requires opening the inspection port, which compromises the air tank for however short a time. Imagine a kayaker wanting to call for help when threatened by heavy weather and large waves. He has a VHF radio, stored inside the hull. He opens the inspection port to retrieve the radio, just as a large wave washes into the boat, making matters worse.

Sometimes there are hatches to accommodate larger items, even coolers (look at the back end of a Wayfarer). When the hatch is off, the large opening certainly compromises the flotation.

Again, these boats have backup flotation and will not sink even when swamped. But when swamped they are not maneuverable or particularly safe. Nor are they convenient to rescue. Retrieving a sailboat with only the bow above water is quite a project.

The local Chestermere paper featured a picture of my Fireball at a regatta, completely swamped with a sailor swimming. The only part of the hull visible was the forward deck. The inspection ports had an iffy “bayonet” closure. Kevin and Jeff (names have been changed - or have they?) were not aware that they were usually closed with duct tape. Jeff made the front page of the paper. Kevin, sadly, was hidden by the boat.

Boaters need to be very careful opening the hull, and very careful to close it up.

One racer removed his hull plug on a hot day and was rewarded with a puff of air from his airtight hull. I admired his persistence as he tried to explain to a French exchange student, in sign language, why the puff was such a good thing. Little things mean a lot!

Safe Boating Guide

The Safe Boating Guide is the Canadian entry-level reference for boating safety information, including legal requirements. Every boater should have a current copy - they are free and widely available, including [online](#). The latest edition, as well as being up to date, is very well organized compared to prior editions.

[Quiz](#)

Pre-Departure Check

Our pre-departure check should include checking the weather forecast, filing a float plan, and checking the boat.

Weather Forecast

Weather information from Environment Canada, and others, is widely available. We can check the weather online, by telephone, in the newspaper, on television, on a VHF weather channel, on a weather radio, or by personal observation.

Float Plan

A sample float plan is included in the [Safe Boating Guide](#). It should include information on where you are going and when you expect to return, how many people and what equipment are on board, and what the vessel looks like. It should be filed with someone who would know (and care) whether you return on time. An informal float plan at a sailing school would be that another coach knows where you were going and expects you to return at the end of the day.

Vessel Check

The [Safe Boating Guide](#) details the safety equipment required on board, which varies with the size of vessel, power, and other facilities. This list at a minimum should be checked.

We also should have a checklist of recommended equipment, parts and supplies and communication gear (including fuel, first aid kit, emergency action plan, and athlete medical information). Using the checklist will prevent omissions.

In addition, we should go through a list of pre-departure procedures (vent fuel tank, connect fuel line, pump bulb, choke, connect kill cord, start engine, choke, warm up, cast off, depart at controlled speed, take in fenders).

One place to look for these procedures is the safety material in the CYA Technical and Fundamental coaching manuals. CYA also publishes text books covering this material.

Please review this excellent [safety information](#) from the [CYA](#).

Characteristics of a good Rescue Vessel

Your rescue boat is likely also your coach boat. (I prefer not to call it a “crash boat”).

According to Sea Cadets, a good rescue vessel should be

- large enough to carry several people
- powerful enough to overcome adverse wind, waves and currents, while towing
- steered with a wheel
- shallow draft
- equipped with a re-boarding device (a swim ladder)

Rigid and inflatable vessels each have their own pros and cons.

These slides and the material that follows are from the Sea Cadets Small Craft Rescue Award materials.

Rescuing small craft

- [Perpendicular position](#)
- [Head-on position](#)
- [Canoe over canoe T-rescue](#)

Boat Handling

Stopping Distance

- This is the distance the vessel takes stop once the throttles are not engaged.

Stopping distance is a factor of the boats size, weight and design; therefore, it will differ for each vessel.

- The Canadian Yachting Association outlines the procedure for determining the stopping distance of your vessel in the as follows:
 - i. Steer a steady course at a moderate speed
 - ii. Quickly move the throttle to idle
 - iii. Shift to throttle to neutral
 - iv. The distance the boat glides to a stop is the stopping distance of your vessel.
 - v. A modification to this drill can be done by following the first two steps and for step three the coxswain shifts the motor into reverse and gives it a little power.

Docking/Slipping

- Have the fenders and mooring lines prepared before coming along side to dock
- Come in at a 45 degree angle at low speed
- When the front of the bow is about two to three feet away from the wharf, bring the vessel parallel with dock
- Put engine in reverse to draw the stern into the wharf
- Back out or push off wharf
- When slipping, vessels are usually more maneuverable in reverse

Figure Eight Turns

- Figure eight turns are used to develop boat-handling skills in various types of situations. It also helps to develop a better understanding of the powerboats minimum turning circle, which directly affects its ability to maneuver on the water.
- To develop these skills, step up a course on the water consisting of two markers a fair distance apart. The distance between the markers and their direction in relationship to the wind and wave conditions can be modified to simulate different rescue situations. The powerboats must then drive around the markers forming a figure eight.

Steering Backwards

- Always look backward any time the engines are in reverse or the vessel has any aft way on and remember that where the engine points the stern will go.
- Ensure that a safe speed is used when steering backwards as water can come over the transom.

- A vessel's propeller design and hull shape can affect the vessel's maneuverability and thus its ability to stop in emergencies.

Towing

A rescue vessel must be equipped for towing. This means there must be strong points to secure a towed vessel. These range from “D” rings in some inflatables to strong horn cleats or bollards around the deck on a rigid craft. Some boats also have a relatively strong bow eye. If your towing boat is a sailboat, strong points include the mast step and the attachment points of the stays.

Towing Bridles

A towing bridle distributes the load over several strong points. The tow line is tied to the bridle. The adjustable nature of the rolling hitch makes it handy for the purpose. Towing bridles can be rigged on both the towing vessel and the towed vessel.

This link advertises a commercial towing bridle. The illustrations give the basic idea.

<http://www.ropeinc.com/towline.html>

A towing bridle can also serve to attach the towline as low as possible, to keep the bow up. Here is an article specifically about towing sailboats with a power boat:

http://www.tanzer16.com/articles/towing_bridle/towing_bridle.html

A canoe should also be towed with the towline below the bow. The towline can be looped around the hull and a bowline tied underneath.

Towing Precautions

- Bail water from the towed boat if possible
- Sails down, centerboard halfway up (if towing a sailboat)
- Someone should steer toward the towline (if towing a sailboat)
- Use towing bridles
- Someone in the tow boat must watch the towed boat
- Use slow speed as little acceleration as possible
- Stopping distance will increase
- Maneuverability will be affected
- Use a floating tow line
- No one should be “in line” with the tow line as a snapped line can recoil
- Keep the line away from the propeller
- Use a fairly long tow line, adjusted to keep the boats on the same part of a wave.

Boats can be towed astern (single or in a chain), off the quarter, or alongside.

The material that follows is from the Sea Cadets Small Craft Rescue Award materials.

Alongside Tow

- This tow is most effective in calm seas and is recommended for short distances.
- This method of towing requires the vessel being towed to position itself alongside the vessel that is towing with its transom slightly ahead of the towing vessel.
- The passengers in the vessel being towed take hold of the gunwale of the towing vessel.
- The vessel being towed must steer slightly towards the towing vessel so the towing vessel can maintain steerage over both vessels.
- The operator of the towing vessel must take care to tow at a slow speed and to ensure that fingers are not pinched between the vessels.

Modification:

- This tow can be conducted tandem by placing the two vessels being towed on either side of the towing vessel.
- Ensure that the transoms of the vessels being towed are slightly ahead of the towing vessel.
- This is a more complicated tow and both vessels being towed must steer with the towing operator.
- Constant communication between all three vessels will help to ensure safe steerage.
- The vessel conducting the tow must direct the vessels being towed prior to attempting any change in course.

Bridle Tow

- This method of towing is used for long distance tows and is effective in heavy seas.
- It can take a few moments to set up if the bridle is not pre tied.
- The bridle allows for the weight of the tow to be distributed evenly across the transom of the towing vessel. As a result higher speeds can be used during this tow.
- A line approximately 1½ times the transom width is tied at either end to the D-rings on the towing vessels transom, forming the bridle.
- A second line, the towline, is attached to the centre of the bridle using a bowline.
- The line is then secured to a low and stable point on the vessel being towed.
- The operator of the towing vessel receives hand signals from the vessel being towed through a spotter. This is the person appointed to keep a lookout over the vessel being towed.

- The vessel being towed can assist with the tow by steering for the stern of the vessel ahead.
- With this method of towing, the length of the towline cannot be adjusted easily. Therefore, as a safety consideration, during heavy weather, use an extra long line.
- Care must be taken in heavy seas to ensure that the vessel undertow does not overtake the vessel ahead.

Modification:

- This tow can be conducted with multiple boats using one towline or multiple towlines.
- If one towline is used the painters of the vessel being towed must be staggered on the port and starboard sides of the tow line and tied to the towline using a rolling hitch.
- If multiple towlines are used, the painter of the first vessel is either attached to the towline using a sheet bend or the towline is attached directly to a secure point on the first vessel in the tow.
- The painter of each of the vessels being towed is then attached to a secure point on the transom of the vessel ahead.
- This type of tow is often referred to as "chaining the vessels" and is the most common type of bridle tow.

Off the Quarter Tow

- This method of towing is used for moderate distance tows and is most effective when the operator of the vessel being towed can maintain steerage.
- A towline is attached to a single D-ring on the transom of the towing vessel.
- Care must be taken to ensure that the vessel being towed does not overtake the towing vessel.
- Modifications to this tow are not recommended.

General

- There must be a spotter on board the towing vessel to monitor the vessel being towed and to ensure that the towline does not get caught around the engine and propeller.
- All occupants in the towed or towing vessel should sit in and balance the boat.
- The towline on the vessel being towed should be tied as low as possible to a reinforced part of the boat.

- Adjust the length of the towline so that the towing vessel crests a wave at the same time that vessel being towed does.
- Tow at a safe speed by incrementally increasing the throttle so as the slack in the towed boats line tightens and the vessel adapts to the new speed.
- If possible the towed vessel should steer to where the towline is attached on the towing vessel.
- Both boats will have a loss in maneuverability and steerage while towing.
- Stopping distance needs to be increased when under tow.

Towing a Sailboat

- Follow the guidelines outlined above
- Ensure centerboard is half way down and that the sails are dropped.

Towing a Canoe

- Towing a canoe is called tracking.
- It is done with long lines.
- The upstream line should be done bridle fashion to lead out from the forefront of the canoe.
- The towline is wrapped around the forefront of the canoe.
- This towline is secured in place with the bowline, which must be tied so that the knot is at the bottom of the canoe. This ensures that the front of the canoe rides slightly higher in the water when being towed and it is free from being pulled by any current.
- This has been adopted from the Regional Cadet Instructor School Pacific - Basic Canoe Instructor Reference Manual, Section Eight.

[Quiz](#)

Boat Handling for Sailboats

Those who coach from sailboats should be able to demonstrate the following skills:

- Stopping at a predetermined point with the object (MOB) on the windward side
- Moving the sailboat forward and backward
- Capsizing the sailboat, capsize recovery
- Reaching assist from the sailboat
- Throwing assist from the sailboat
- Paddling the sailboat
- Sculling, pumping
- Towing

A [sailor](#) who demonstrated some of those skills at the 1988 Olympics won the gratitude of the sailing community while demonstrating exemplary sportsmanship.

[Quiz Index](#)