3 - Marksmanship

Marksmanship training involves learning to fire the cadet air rifle. You will be taught many lessons about marksmanship, but the most important is safety. Before you actually fire a rifle you must have a thorough understanding of how to safely handle firearms.

All firing is done on a range, which is a place designed specifically for marksmanship. It could be in a specific building, outside, or even set up in a classroom. An adult, or officer, who is trained to supervise all firing, runs the range. This person is known as the Range Safety Officer (RSO). You must obey every order that the RSO gives as they ensure that your marksmanship program is safe.

10 Safety Rules

You are responsible to know the rules about firing an air rifle. This means following these precautions and procedures to ensure everyone's safety:

- Always treat a rifle as if it is loaded
- Never point a rifle at anyone.
- Always have the safety catch in the "on" position (No Red)until ready to safely fire the rifle.
- Always point a rifle in a safe direction.
- Keep fingers off trigger unless ready to fire the rifle.
- Always wear ear and eye protection.
- Never fire more than one pellet at a time.
- Never run or fool around on the range.
- Always follow the directions of the Range Safety Officer.
- Always read and follow local Range Safety Orders.

Range Safety Orders are usually posted in the range or just outside the door and you must read them prior to participating

in any range activity. You may recall from Chapter One that Range Safety Orders can also be found in your corps Standing Orders. The most important thing to remember and put into practice is that SAFETY COMES FIRST.

Characteristics of the Rifle

When you fire in the Sea Cadet program you will use the Daisy 853C air rifle. We refer to the cadet rifle as a rifle. It is not a pistol, gun, shot gun or assault rifle, it is a rifle.

The rifle fires 177 calibre pellets, which are known as ammunition.

The Daisy air rifle is a single pump pneumatic, straight pull-bolt action. This means the rifle is pumped once to compress air and it is this pressure which expels the pellet when the trigger is pulled. Do not pump the rifle more than once per shot. Pumping more than once may damage the pressure chamber and all related seals.

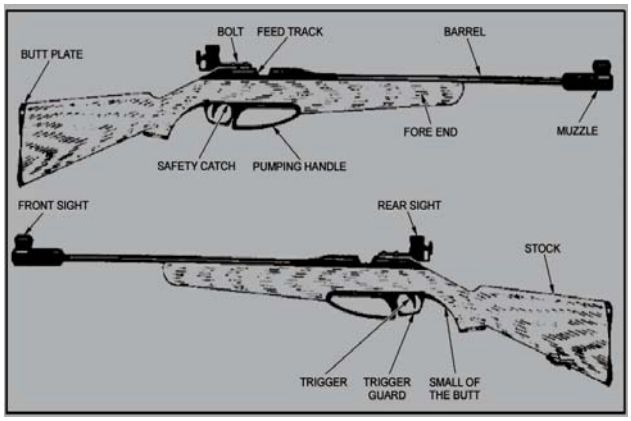
Did you know that early settlers held marksmanship contests in nearly every settlement in Canada? This makes the sport of marksmanship one of our country's first recreational pursuits.

Parts of the Rifle

The basic components of the rifle are:

- The Action, which contains the parts that load, fire, and eject the cartridge
- The Stock, that by which the rifle is held
- The Barrel, which is the metal tube the bullet passes through when fired

Look at the following diagrams. They show the parts of the rifle you need to know before you actually fire.



Care and Cleanliness of the Air Rifle

Continuous firing of the air rifle causes a build-up of residue in the barrel. This residue takes two forms: leading and caking. "Leading" residue results from traces of lead pellet that are left inside the bore as the pellet travels down the barrel. "Caking" results when residue from compression chamber air blown into the bore condenses in the barrel.

One way that air rifles are cleaned at the corps is by firing .177 calibre felt cleaning pellets. The natural elasticity of the felt results in compression of the pellet during firing, forcing it to expand to the diameter of the barrel, and thus ensuring that the entire bore is cleaned and polished. Felt cleaning pellets are used as part of the regular maintenance of your air rifles at the corps.

Range Commands

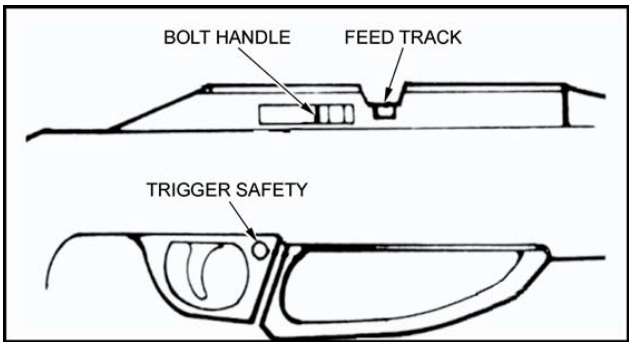
You are now ready to proceed to the range for your first fire. Remember that the Range Safety Officer will lead you through all the steps. Do not talk when you are on the range and obey everything the RSO tells you. If you are not sure about a range command, raise your hand and wait for the RSO to answer your question. Treat all rifles as if they are loaded and NEVER point a rifle at anyone.

The RSO will group you into what is called a relay. When it is time to fire, the RSO or a senior cadet will lead the relay into the range and assign a firing position. The range personnel will ask cadets to stand behind their firing position and wait for these commands:

COMMAND	ACTION
"RELAY #_, COVER OFF FIRING POINT"	▪ Stand up, move behind firing point and await further commands.
"ADOPT THE PRONE POSITION"	▪ In accordance with procedures in page 85. ▪ Put on eye and ear protection.
TYPE OF FIRING	▪ This command includes information about the range and type of shoot. i.e., Relay #_, 10 m, five rounds, Grouping, On Your Own Time
RELAY, LOAD COMMENCE FIRING"	▪ Pick up and hold the rifle with your left hand. ▪ Ensure the safety catch is in the ON (no red) position. In accordance with safety precautions, rifle should already be in safe status with bolt open fully to the rear and pump lever left partially open. ▪ Pump the rifle as indicated. When the pump lever is fully extended, pause about three seconds. ▪ Load the pellet or 5-shot pellet clip (the flat end faces forward). ▪ Place the safety catch in the OFF (red) position. ▪ Aim rifle at the target. ▪ Squeeze the trigger. ▪ Open the bolt. ▪ Repeat sequence for each shot. ▪ Place the safety catch in the ON (no red) position and partially open the pump lever immediately after firing the practice. ▪ Lay down the rifle.

MAY BE GIVEN	ACTION
"RELAY, CEASE FIRE"	▪ Stop firing immediately and put the safety catch in the ON (no red) position.
"RELAY, CEASE FIRE"	▪ Put the safety in the OFF (red) position and continue the practice.
"RELAY, UNLOAD"	▪ Pick up the rifle. ▪ Remove 5-shot pellet clip. ▪ Pump the rifle. ▪ Close bolt ▪ Place the safety catch in the OFF (red) position.. ▪ Aim rifle at target. ▪ Fire the action. ▪ Open the bolt. ▪ Place safety catch in the ON (no red) position. ▪ Open the pump lever 5-8 cm (2-3 inches). ▪ Wait to be cleared by range staff. ▪ Lay down the rifle ▪ Remove eye and ear protection.
"RELAY STAND UP"	▪ Stand up and leave equipment on the ground.
"CHANGE TARGETS"	▪ Move forward, walk down the lane to remove old targets and replace them with new ones. Return to the firing point.
"CHANGE RELAYS"	▪ Shooters who have just fired pick up their personal equipment and move off the firing point. The new relay covers off behind the firing point. Return to the firing point.

These are the most common range commands. Remember if you are ever uncertain of what to do, raise your hand and someone will come over and help.



Daisy 853C Operational Manual

Figure 6-2-1 Safety Catch

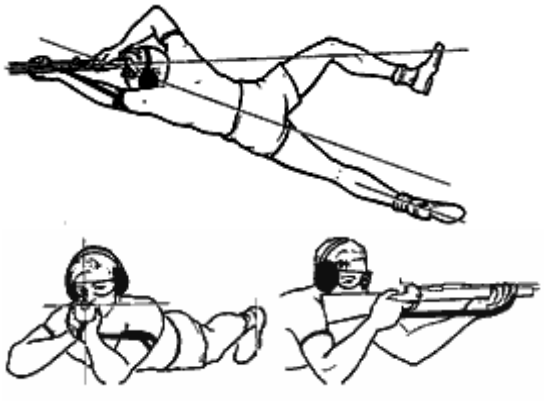
Firing Essentials

When it is time to fire you will be asked to take the prone position. The prone position allows you to attain the most accurate aim and smallest group size or scores. It provides steadiness and comfort from which to fire, so that your firing will be at its best. With practice, lying down to fire will feel comfortable in no time at all.

Speaking of lying down, did you know that Gabriel Dumont, commander of the Metis forces during the NorthWest Rebellion, was buried standing up? Legend has it that Dumont was buried vertically on the banks of the South-Saskatchewan river to allow him to see the enemy coming from the river side.

These are the steps to assume the prone position:

- Lie down on the firing mat facing down range.
- Turn your body five to fifteen degrees left from the line of fire.
- Spread your legs apart.
- Keep your right heel on the ground and toes pointed outward.
- Point your left toes out in line with your left leg, heel in the air.
- Bend your right knee and bring it up toward your right elbow.
- Lift your torso off the mat by taking the weight on your elbows.
- Adjust these points until you are comfortable.



This position is for a right-handed marksman. If you fire left handed you will have to do the reverse.

As a beginner, your greatest difficulty will be in holding the rifle steady. You will probably use a rifle rest such as a sand bag or pile of books to start and once you perfect marksmanship skills you will replace the rest with a sling.

Use of sling:

- Place the sling into bracket.
- Left hand rest in the sling and against bracket.
- Place the left hand around the forestock lightly.
- The sling is run around the back of your left hand.
- Adjust sling to support weight of rifle.
- Left elbow is slightly to the left of the rifle.
- Right elbow is placed a comfortable distance away from the body and supports very little weight.
- Right hand placed around the small of the butt with a light hold.
- Butt plate fits snugly to your shoulder.
- Right eye is approximately 8 cm from the rear sight.
- A triangle is formed with your left arm and the rifle barrel.

Loading and Unloading the Rifle

When the command to load the Daisy air rifle is given, the following steps should be taken:

1. Pick up and hold the rifle with your left hand.
2. Ensure the safety catch is in the ON position. Following individual safety precautions, the rifle should already be in safe status with bolt open fully to the rear and pump lever partially open. Close the pump lever at this time.
3. Place the sling on the rifle. Establish a good position and correct sight picture.
4. Pump the rifle. This method can be done in three different ways:

- Option one - Remove the butt from the shoulder and rest it on the mat. Partially open the pump lever with the right hand to the small of the butt. Grasp the pump lever with your left hand halfway up the lever. Lift the rifle upwards until the pump is fully extended while keeping your left elbow stationary. To avoid pinching the left hand, the use of a glove is recommended.
- Option two - Slightly turn your body on its left side, turn the rifle sideways, grasp the pump handle with your right hand and the forestock with your left hand and open the pump sideways until the pump handle is fully extended while keeping your left elbow still.
- Option three - Coach assistance. Remove the right hand from the small of the butt. Hold the rifle loosely in the left hand. The coach should move in and pump the rifle using both hands.

5. When the pump handle is fully extended, pause for about three seconds. (This is very important; if done incorrectly, the rifle will have insufficient air pressure).
6. For option one, bring the rifle down, thereby returning the pump lever to the closed position. For options two and three, bring the pump lever to the closed position.
7. Load the pellet or 5-shot pellet clip (the flat end faces forward).
8. Close the bolt.

When the command to fire the Daisy air rifle is given, the following steps should be taken:

1. Place the safety catch in the OFF position.
2. Aim rifle at the target.
3. Squeeze the trigger.
4. Open the bolt.
5. Repeat parts 3 to 7 of loading the Daisy air rifle and parts 2 to 4 of firing the Daisy air rifle.
6. When firing is complete, place the safety catch in the ON position, and partially open the pump lever.
7. Lay down the rifle.

When the command to unload the Daisy air rifle is given, the following steps should be taken:

1. Pick up the rifle.
2. Remove the 5-shot pellet clip (if used).
3. Pump the rifle.
4. Clos bolt.
5. Place the safety catch in the OFF position.
6. Aim rifle at target.
7. Fire the action.
8. Open the bolt.
9. Place safety catch in the ON position.
10. Open the pump lever 5-8 cm.
11. Wait to be cleared by the range staff.
12. Lay down the rifle when ordered to do so.

If this all seems confusing, don't worry. Loading and unloading is a simple process that will become second nature after a few practices on the range.

The Canadian Firearms Centre safety training teaches that the vital four "**ACTS**" of firearm safety. The acronym "**ACTS**" stands for:

Assume every firearm is loaded.

Control the muzzle direction at all times.

Trigger finger must be kept off the trigger and out of the trigger guard.

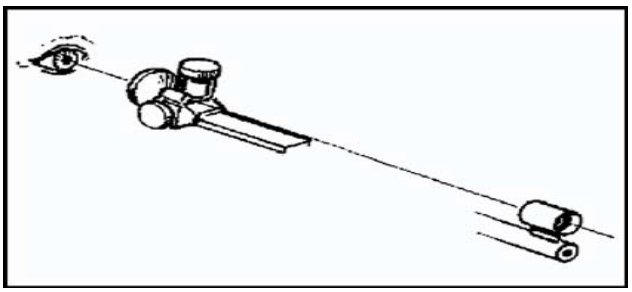
See that the firearm is unloaded – prove it safe.

AIMING THE CADET AIR RIFLE

Cadets must constantly strive to maintain proper sight alignment, while obtaining a sight picture. It is the most critical element of the aiming process.

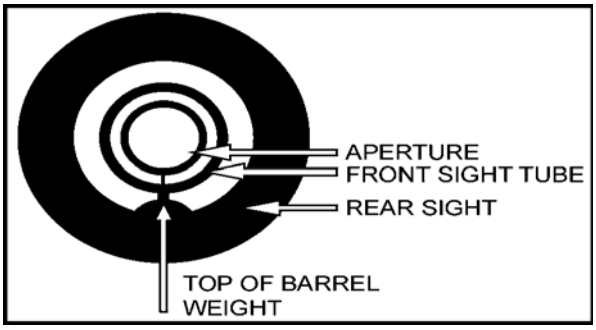
The **aiming process** consists of: adopting a comfortable position; and ensuring proper body alignment with the target.

Sight Alignment. It is the alignment of the eye, the rear sight, and the front sight. When cadets bring their eye 5 to 15 cm from the rear sight, they will find that the small hole is large enough to look through and see all of the front sight. Proper sight alignment is a matter of centering the front sight tube in the rear sight. The tube will not quite fill the rear sight and cadets will be able to see light around the outside of the tube; we call this a “line of white”.



Cadet Marksmanship Program Reference Manual

Figure 6-3-4 **Sight Alignment**



Cadet Marksmanship Program Reference Manual

Figure 6-3-5 **Line of White**

Sight Picture. To obtain a proper sight picture, a bull’s-eye is simply added to the innermost ring. The goal during the aiming process is to maintain proper sight alignment while keeping the bull centered in the front sight.

Conclusion

Many skills must be developed for good marksmanship. It takes time and practice and a great deal of self-discipline. You have learned the basics about firing a rifle and now know that safety is the most important lesson of all. Complete the following quiz to see what you have learned.

Answer True or False to the following statements:

A. The Range Safety Officer is in charge of all personnel on the range.

True False

B. The stock is the metal tube the pellet passes through when fired.

True *False*

C. The prone position is the steadiest position to fire from.

True *False*

D. Treat all rifles as if they are loaded.

True *False*

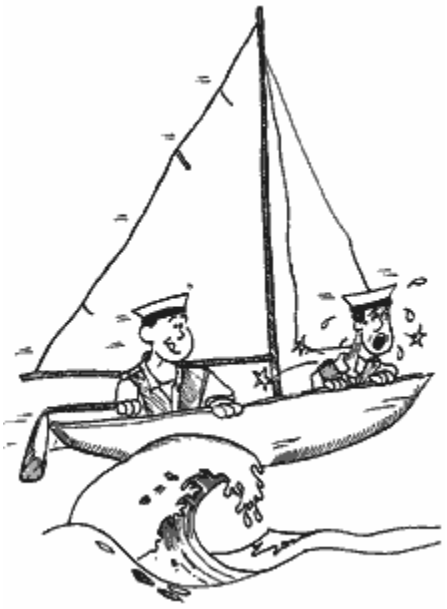
E. The Range Safety Officer will divide you into groups for firing, called relays.

True *False*

4 - SAILING

Long before yachting evolved into the pleasure sport it is known as today, sailing was the only method of transport across the seas. During the 1600's, being a sailor was akin to being thrown in jail, as conditions for the crews were far from enjoyable. Bad weather, rough seas and the very real threat of pirates made the life of a sailor quite miserable and far from the exhilarating experience we enjoy today.

As a Sea Cadet, you will have many different sailing opportunities and experiences. Eventually, you will need your White Sail Level II to be promoted to Petty Officer First Class, so start now! You may participate in sail weekends at the provincial sail centre, learn to sail at your corps, skipper a boat at summer camp, or race other sailors at regattas. Sailing is an exciting sport and this chapter is designed to give you the theoretical background you require. However, the only way to truly appreciate sailing is to get out on the water and do it!



Sailing Clothing

As with all sports, there is required clothing and personal equipment that must be worn when sailing. Certain items are worn all the time and some are dependent upon the weather conditions.

The most important piece of personal safety equipment to be worn is the Personal Flotation Device (PFD). When choosing a PFD check for the following:

- Suitable for the weight and size of the wearer by reading the tag on the PFD
- In good repair
- Fits snugly so that it will not slip off in the water
- Department of Transport (DOT) approved (check the tag on the PFD)

In Sea Cadets, you are issued with a PFD that meets DOT standards. It is to be worn every time you are in or around water, as well as in the sailboat. You may have the opportunity to sail outside of cadets as well, at your family cottage or Local Yacht Club, so know what to look for in a PFD.

In addition to a PFD you are required to wear proper footwear in the sailboat at all times. This means a soft-soled shoe, like a running shoe or deck shoe. Hard-soled shoes like your cadet boots definitely don' t qualify! Sandals are also not allowed as they can slip off easily or get caught up in the rigging. Proper footwear protects your feet from being cut or injured in the boat.

When you are first learning to sail you will be issued a helmet (also affectionately know as a brain bucket) to wear in the sailboat. It protects your head from injury in the event of accidental gybing. Did you ever wonder why they call the boom a boom? That's the noise it makes as it hits your head - BOOM!

Helmets, soft-soled shoes, and PFD's are standard requirements for sailing. The type of clothing you wear depends upon the type of weather. There are three main types of weather and appropriate clothing:

Hot, sunny day

- sunscreen
- hat
- light clothing
- cadet PFD
- shoes
- helmet

Cold Day (cold weather, cold water)

- warm hat or wool toque
- sweater
- warm pants
- wetsuit/drysuit (is a possibility but not a necessity)
- cadet PFD
- shoes
- helmet

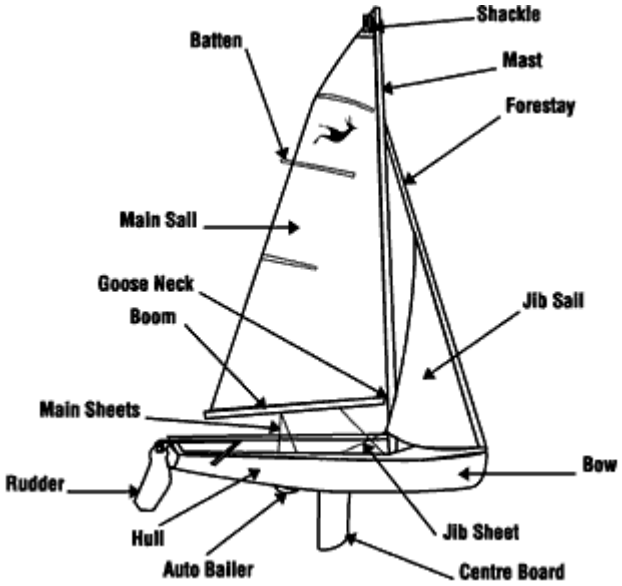
Rainy Day (or wet sailing)

- layered clothing
- waterproof jacket and pants
- cadet PFD
- shoes or boots
- helmet

This is just a guideline for sailing. You don't need expensive wet or drysuits to enjoy the sport of sailing, just use common sense when dressing for the weather.

Parts of a Boat

The sailboat is a finely tuned instrument. Each of the parts on the boat has a specific use and function. With practice, it won't take you long to learn the names and uses of the different parts.



Speaking of poles, do you know which country owns the North Pole? No one! The earth's northernmost geographic point has never been claimed.

- Bow is the front end of a boat.
- Stern is the back of a boat.
- Mast is a vertical spar (pole) which supports the sails.
- Boom is a horizontal spar which holds the bottom of a sail.
- Mainsail is a large sail set behind the mast.
- Jib is a small sail set ahead of the mast.
- Gooseneck is a hinged fitting which links the boom to the mast.
- Daggerboard (not fixed in the boat) centreboard (fixed in the boat) prevents the boat side slipping while sailing.
- Halyards are control lines used to hoist a sail and hold it up.
- Rudder is a hinged blade mounted at the stern which steers the boat.
- Tiller is the handle attached to the top of the rudder which is used to steer the boat.
- Tiller extension is a stick attached to the end of the tiller which allows the skipper to sit further out to help stabilize the boat.
- Mainsheet is a line used to control the mainsail.
- Jibsheet is a line used to control the jib.

How a yacht sails

The wind, the sun, the wide open skies and a sailboat can be a recipe for a beautiful day of sailing, but before you head out on the water for the first time you must be able to identify wind direction. This can be done through various visual clues, including:

- Waves and ripples moving downwind on water's surface
- The way sails are oriented when allowed to flap freely
- The orientation of wind indicators and weather vanes
- Motion of low clouds (High clouds can fool you!)
- Smoke from chimneys or ship's funnels
- Flags
- Positions of boats tied to moorings or docks (Careful you may be mislead if there's a strong current.)

In addition to visual clues the wind can also be felt on your face, hands and the back of your neck. Try closing your eyes, and through sensation only, determine where the wind is coming from.

When the wind blows over water it causes waves to build up. The strength of the wind can be estimated by the size of these waves. Remember, the longer the wind lasts and the wider the expanse of water, the larger the waves tend to be. Be careful also to not assume the wind and waves are coming from the same direction as the wind is constantly changing.

Did you know that the word "yacht" comes from the Dutch word "yaghen" meaning to hunt, chase or pursue?

You probably know that a sailboat moves on the water because of the wind, but do you know how? There are three elements that cause a sailboat to move forward:

- Your weight in the boat controls balance.
- The sails control propulsion.
- The rudder controls direction.

When you move around in a sailboat you change the balance, and balance affects how well your boat sails. Generally, you want your boat to be flat in the water. Your sailboat is sensitive to sudden movements, so move carefully.

Propulsion is the wind pushing on the sails. Without a centreboard or daggerboard, the wind will push your boat sideways. As soon as you put your board down in the water your boat will move forward. This is because it pushes the opposite way as the wind on the sails. Think about when you squeeze a tube of toothpaste and it comes out the end of the tube. The opposite pressures cause forward motion. This is the same thing that happens in your boat. You can sail in any direction as long as it is not directly into the wind.

By moving the tiller, which controls the rudder, you can steer your boat. It has the same function as the steering wheel in a car, except when you push your tiller one way the boat goes in the opposite direction. It won't take long to perfect this skill.

With practice you will soon understand how these three forces work together.

Rigging a Sailboat

The best way to learn how to rig a sailboat is to rig a sailboat, so the information in this section is very basic. Use this checklist as a guide when rigging your boat. The first thing you do is check to ensure you have the following equipment:

- Sailboat with mast stepped
- Sails and sheets
- Rudder and tiller
- Daggerboard, if required
- One paddle or an anchor with not less than 15 m of rope
- One buoyant heaving line of not less than 15 m in length
- Bailer
- Sound signal
- Personal Flotation Device (PFD) for each crew member

Some equipment is needed to sail the boat, and some equipment is for safety. All sailboats are required by law to carry safety equipment, including paddles, bailer, sound signal, and PFDs. This meets the Canadian Coast Guard regulations regarding the type of boat that you sail. Because sail instructors conduct all Sea Cadet sail training, they will usually carry the paddles, bailer, and sound signal in their safety boat for you. For further information, look at the Canadian Coast Guard Safe Boating Guide.

There is a logical order to follow when rigging a boat and it is important to do these steps in sequence:

1. Gather equipment ensuring numbers all match.
2. Position boat bow into the wind.
3. If boat is on shore, avoid standing in the cockpit.
4. Fit sail battens.
5. Bend on sails.
6. Attach halyards.
7. Hoist jib sail first.
8. Ensure boat is head to wind, then hoist the mainsail.
9. Secure halyards and coil excess line.
10. Attach sheets.
11. Fit rudder and tiller.
12. Ensure centreboard is secured in the upright position (if on shore).

After you have finished sailing, you will probably be asked to derig your boat. Follow these steps:

1. Lower and remove sails.
2. Remove and stow rudder and tiller.
3. Secure the boom and centreboard (where applicable).

Once you have derigged your boat, you will have a pile of sails to put away. Don't just stuff them in the sailbag, as there is actually a specific method for folding and bagging sails:

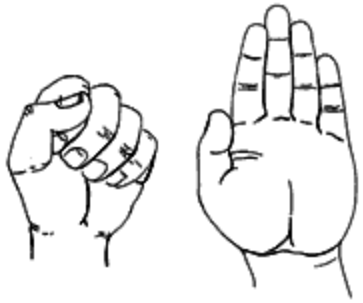
- Remove battens (if removable) and place in sail bag.
- Lay the sail flat, so as free of wrinkles.
- Ensure sail is clean and dry.
- Start at foot and fold up to square off foot.
- Fold remaining sail down in a zigzag fashion so that each fold stacks on top of the last.
- Roll or fold the stack loosely beginning at the luff.
- Place in bag with sheets or leave sheets outside bag if wet.

Finally, before you head out on the water, it is important to properly secure your gear. If you are carrying your own safety equipment, tie your paddles and bailer to the boat and attach your sound signal (whistle) to your PFD. Coil all lines neatly to avoid tangling in the event of a capsize. Did we say capsize? Don't worry, capsizes are a normal part of sailing and nothing to fear. With knowledge and practice, you will find capsizing a "breeze" (some breezes are stronger than others!). One of the first sailing lessons you will learn is how to self-rescue in the event of capsize, so prepare to get wet!

Capsize Procedures

Unless you're doing it for practice, capsize usually comes as a surprise. One minute you're sailing along and the next minute you're in the "drink". Having been caught off guard, it's important to stay calm.

The first thing to do is check yourself. Make sure that you are not injured or caught up in the rigging. Next, check your crew for the same. It is important that you both stay with the boat. Never leave your boat and attempt to swim to shore, or for help. You are the most visible to rescuers if you stay with your boat. Should you require assistance, an open hand indicates that you need help. A closed fist means you are okay.



By following these steps you will have your boat righted in no time at all:

1. Check yourself, check your crew.
2. If any sheets are cleated, release them.
3. Skipper swims to centreboard and pulls it all the way out, crew swims to bow and brings the boat head to wind.
4. Skipper climbs onto the end of the board and leans back to right the boat, crew holds the bow head to wind.
5. Skipper climbs into boat over transom and helps crew in.

At this point your boat is probably full of water. Using the bailer you tied into your boat, and the automatic bailer, sail off to drain the water. A sailboat is designed to withstand the rigors of capsize and before long you'll be back sailing.

Sometimes a capsize will result in your boat **turtling**. Normally, in a capsize the boat lies on its side with the mast and sails just under the water, but when we turtle, the mast points straight down and the boat bottom is up. Occasionally, you may even find that you end up under the turtled boat, but don't panic, there is a pocket of air for you to breathe.

If you end up under the hull, make sure you are not caught on anything, take a deep breath and bob under the hull to come up outside the boat. Remember that your PFD will pop you back to the surface.

A turtled boat is a bit more difficult to right. Begin by tossing a jib sheet over the bottom of the hull, behind the daggerboard/centreboard. Next, climb on the hull and pull back against the jib sheet to bring the mast back to a horizontal or capsized position. Often, the assistance of a safety boat is required.

Your First Sail

So, you've learned the parts of the boat, how to rig and derig, and what to do in the event of a capsize. You are now ready for your first sail. This section is designed only to give you some pointers as the best way to learn is by actually sailing.

There will probably be two people in your sailboat. One is known as the skipper and one is the crew. In cadets you might hear the skipper referred to as the coxswain. Each crew member has a specific job to do. The skipper steers the boat, controls the mainsheet and is ultimately responsible for making sure that the boat is handled safely. The crew balances the boat from side-to-side, keeps a lookout for other boats, and handles the jib (on sloops).

The skipper should sit on the windward side of the boat (opposite the boom) about even with the end of the tiller. If you always steer from this position, it's easier to see the sails, to sense changes in the wind, and to avoid becoming disoriented during maneuvers. The crew sits just ahead of the skipper, about even with the centreboard.

When you are first learning to sail, you will probably be assigned as crew in the sailboat. As you gain experience and confidence, you will be given opportunity to act as skipper.

We have already learned about wind direction and the forces that make a boat sail. We know that a boat cannot sail directly into the wind, but how does it sail with the wind? There are specific points of sail that are used to determine where your sails and centreboard are set in your boat. It all depends on where the wind is coming over your boat.

The first time you sail you will probably zoom around all over the place, getting a feel for the boat. Eventually, you will need to refine your skills to sail a specific course or direction. Depending on where the wind is, you will use different points of sail to reach your destination. It's all a matter of how you steer, trim your sails, and handle your boat:

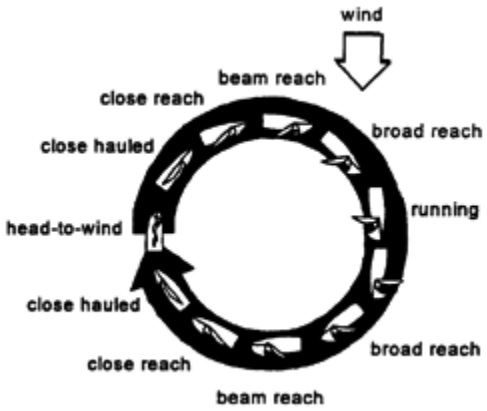
- Running is sailing directly away from the wind. Sails are all the way out; centreboard is all the way up.
- Broad reach is sailing with the wind coming over one corner of the stern. Centreboard is 3/4 up, sails are 3/4 out.
- Beam reach is sailing with the wind coming over the side of the boat. Centreboard is 1/2 up, sails are 1/2 out.
- Close reach is sailing with the wind forward of the beam. Centreboard is 1/4 up, sails are 1/4 out.
- Close hauled is sailing as close to the wind as you can. Centreboard is all the way down, sails are all the way in.

Depending on which side of the boat your boom is on determines which tack you are on. If the boom is on the starboard side, you are on a port tack. If the boom is on the port side, you are on a starboard tack. Except, when you are running, the tack is also determined by which side the wind is coming over. If the wind is coming over the starboard side, port tack, and if the port side, starboard tack.

What happens if you want to change the tack you are on? For example, if you want to sail directly upwind, but you know you can't sail directly into the wind, how do you do it? This is done through a series of maneuvers called coming about or tacking. The act of turning the boat into the wind until the sails refill on the other side. The skipper will push the tiller towards the sail and as the boat passes through the eye of the wind, the skipper and crew will duck under the mainsail and switch sides. By completing a number of tacks, you can reach an upwind destination.

A similar maneuver called a gybe is used to change tacks when sailing downwind. The skipper will pull the tiller away from the sail, and as the stern passes through the wind, the skipper and crew will duck under the mainsail and switch sides. Be very careful with the boom as it can quickly swing from one side to the other and crack unsuspecting crew members in the head.

When you go from one point of sail to the other you will either head up or bear off. Heading up is turning your boat towards the wind, and bearing off is turning your boat away from the wind. As a crew member it is your responsibility to ensure that the sail and centreboard are set correctly each time you head up or bear off to a new point of sail.



Quiz- Fill in the blanks for **capsize procedures:**

1. Check _____, check your _____.

2. If any sheets are _____, release them.

3. Skipper swims to _____and pulls all the way out, crew swims to _____and brings the boat head to wind. _____climbs onto the end of the centreboard and leans back to right the boat, _____holds the bow head to wind.
4. Skipper climbs into boat over _____and helps crew in.

5 - Physical Fitness

As learned in first chapter, one of the aims of Sea Cadets is to promote physical fitness. We do this through participation in a program called The Canadian Active Living Challenge. This program is designed to get you involved, and keep you in involved, in living a healthy lifestyle.

Active Living. Your Way. Every Day.

Active living means . . .

- Valuing physical activity and making it part of your day.
- Doing activities you find satisfying and fun.
- Being active in ways that suit your routine and your body.

Active living means taking things in stride. . . doing what comes naturally. Skateboarding and swimming. Dancing and karate. Walking, wheeling, or working in the garden. Playing frisbee in the park with your friends.

But active living is more than just living actively. It also involves cooperation and caring, peace and harmony. It means. . .

- Experiencing the simple pleasure of being in motion.
- Reaching out and helping others who wish to be active.
- Living lightly on the land.

Active living means different things to different people, but it has something for everyone.

Your Physical Fitness Level

At the corps, you will participate in the PACER Fitness Assessment, once at the beginning of the year and then again near the end, to record your progress.

Benefits of Physical Fitness

Active living is defined as "a way of life in which physical activity is valued and integrated into daily living". It focuses on the individual, recognizing that everyone is different. It is social, knowing that outside influences affect our choices and opportunities for participation. Lastly, it is inclusive, allowing all Canadians to be active participants.

Active living encompasses the entire physical activity experience. Along with the simple bodily movements of physical activity, active living can engage the 'whole' person.

- Mentally
- Emotionally
- Socially
- Spiritually

Active living contributes to individual well being . . . not just through the 'experience of the moment' but through the knowledge, skills, level of fitness, and feelings of self-esteem that develop over time.

So, what are the benefits of being physically active?

- A positive use of free time. . . FUN!
- Makes you feel better
- Increased independence, especially for people with disabilities and older adults
- Increased opportunities for socializing
- Increased opportunities to learn new activities
- Stronger and more flexible muscles
- Increased energy
- Improved posture
- Sounder sleep
- Stress reduction
- Improved balance/coordination
- Improved digestion
- Maintenance or improvement of body weight and composition
- More efficient heart and increased lung capacity
- Improved academic performance

As with all activities, there are pros and cons. Some points to remember about being physically active include:

- Too much of any one activity could cause an overuse injury to the muscles or bones involved e.g. shin splints may occur in people who constantly run and/or jump on hard surfaces.
- Contact sports expose participants to the possibility of impact injuries e.g. twisted knee in football.
- A person who is compulsively active and does not eat properly could have trouble maintaining a healthy body weight (i.e. they may become too slender).

More importantly, what are the problems with being physically inactive:

- Have more difficulty achieving or maintaining an appropriate body weight
- Get "puffed-out" more easily
- Feel too weak to do things you'd like to do
- Injuries due to inflexible muscles
- No energy to do anything
- Boredom

Aerobic Endurance	**Muscular Endurance**
Brisk Walking	Sailboarding
Running	Kayaking
Cycling	Canoeing
Skating	Rowing
Cross-country skiing	Tennis
Skatboarding	Weight trainnig
Non-stop activity play	Baseball
Hiking	Sit-ups and push-ups
Jumping rope	Volleyball
Soccer	Football
Basketball	Gymnastics
Ice hockey	Downhill skiing
Field hockey	Badminton
Dancing	Softball
Snowshoeing	Table tennis
Marching	Goal ball
Wheeling	

Muscular Strength	**Flexibility**
Weightlifting (power)	Dancing
Shot-put	Rhythmic gymnastics
Long jump	Cool-down movements
Pole-vaulting	Figure skating
Hammer throw	Yoga or stretching exercises
Javelin	Gymnastics
High jump	Warm-up movements
Ski jump	Diving
Martial arts	Synchronized swimming

It is obvious that the benefits of physical fitness outweigh the problems, so let's look at different activities to help develop physical fitness

Do you know how much the Stanley Cup weighs? The hockey trophy is silver plated over aluminum and weighs 14.5 kilograms (about 32 pounds).

Personal Fitness Goals

Now that you've found your starting point and understand the objectives of the Canadian Active Living Challenge, it is time to set your own goals. It is important to be honest in setting personal goals. There is not a pass/fail standard and your goals can be changed as needed to accurately reflect your expectations. Ask yourself the following when setting goals:

- What I want to get out of this program is. . .
- What I'm willing to do to reach my goal is. . .
- What will have to change is. . .
- How I will measure my progress is. . .
- I am setting the following goals for myself. . .

You can now set up your own Personal Activity Program. Decide which activities you will do each day of the week. Your corps will help you to set up your program but it is up to you to complete an activity each day. You can use the activities listed, or come up with your own ideas. The important thing is to do something you want to do.

Once you have started your own personal activity program, it is your responsibility to participate on a daily basis. Your corps will have some fitness activities planned, but the day-to-day activities are on your initiative. To measure your progress in the program, complete the Physical Fitness Assessment Form once again and compare the results. Remember that this is not an end point, but only an assessment of your progress.

HOW TO DEVELOP GOALS

"T" is for timing which represents the completion date of the goal. Ask the following questions to the cadets

'S-M-A-R-T' goals:

Specific: What specific activity can you do to help you reach your goal? Your goal should be concise and

focused on one specific outcome (your goal cannot be too vague).

Measurable: How will you measure the achievement of the goal? What will you feel when the goal is achieved?

Achievable: What might hinder you as you progress toward the goal? What resources can you call upon?

Relevant: What will you get out of this?

Timing: When will you achieve this goal? What will be your first step?

EXAMPLE OF AN ACTIVITY PLAN

Goal: To be able to run for 20 minutes.

Specific: I want to be able to run for 20 minutes continuously.

Measurable: I will keep track of my running progress every week. When the goal is completed, I will feel great for achieving my goal.

Achievable: Possible hindrances – weather, injuries. No resources are needed for this goal because I can run outside.

Relevant: I will improve my cardiovascular fitness and endurance.

Timing: I will achieve this goal in 11 weeks by continuously walking and running for a total of 20 minutes, until I can run for 20 minutes straight.

ACTIVITY SCHEDULE

Week 1. Run 1 minute, walk 1 minute continuously for 20 minutes, 3 x per week.

Week 2. Run 2 minutes, walk 1 minute, continuously for 20 minutes, 3 x per week.

Week 3. Run 3 minutes, walk 1 minute, continuously for 20 minutes, 3 x per week.

Etc.,etc…. until …..

Week 10. Run 10 minutes, walk 1 minute, continuously for 20 minutes, 3 x per week.

Week 11. Run for 20 minutes continuously.

Conclusion

Although your corps will help, you are ultimately responsible for achieving the program you have set-up. With hard work and dedication you can meet the challenge. Congratulations on your commitment to live your life to its fullest!

6 - Canadian Citizenship

One of the aims of the Sea Cadet program is developing citizenship. What exactly does this mean? Being a good citizen is being an active member of your town or city by volunteering in activities that benefit the community. There are always community projects to be completed, which rely on the help of volunteers. Your corps will ask you to help with many different activities. As a Sea Cadet you are expected to participate enthusiastically. It can be lots of fun!

Community Service

Maybe a service group needs your help to provide assistance to less privileged members of the community. Service groups are dedicated to providing help to the less fortunate, raising funds for research, and providing medical treatment. Volunteer work is rewarding and will leave you feeling good about helping out.

Here are some volunteer ideas:

- Canvas for the HEART AND STROKE FOUNDATION.
- Volunteer at your local food bank for an afternoon.
- Collect non-perishable food to donate to your food bank.
- Teach someone to read.

Did you know that the Order of Canada was established on July 1, 1967, Canada's 100th birthday? It honours Canadians who have made outstanding contributions at the international, national, or local level.

In addition to be a good citizen, what does it mean to be a Canadian citizen? We live in one of the best countries in the world. Canadians enjoy a high standard of living with many rights and privileges. We have excellent health care, education, and employment opportunities.

What are our expectations of you as a good Canadian citizen?

- Be loyal to Canada.
- Obey Canada's laws.
- Respect the rights of others.
- Respect private and public property.
- Care for Canada's heritage.
- Support Canada's ideals.

CANADIAN SYMBOLS

Canadian Coat of Arms

His Majesty King George V appointed the Canadian Coat of Arms to Canada in the court of Buckingham Palaceon 21 November 1921.
Canadian Heritage Website, www.canadianheritage.gc.ca

Test your knowledge of Canadian symbols:

What Am I?

_____

Notes about me:
_____
_____

_____

Notes about me:
_____
_____

_____

Notes about me:
_____
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_____

Notes about me:
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Notes about me:
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_____

Notes about me:
_____
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_____

Notes about me:

_____

_____

NAME **SIX <u>COMMUNITY SERVICE GROUPS</u>** OFTEN FOUND IN CANADIAN COMMUNITIES:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

REMEMBRANCE DAY OBSERVANCES

Every 11th of November Remembrance Day is held to commemorate Canadians who died in the First and Second World Wars and the Korean War. The first Remembrance Day, originally called Armistice Day, was conducted throughout the Commonwealth in 1919. The day commemorated the end of the First World War, on Monday, November 11, 1918 at 11 a.m., the eleventh hour of the eleventh day of the eleventh month. The symbol of Remembrance Day is the poppy, popularized by LCol John McCrae's poem *In Flander's Fields*.

BATTLE OF THE ATLANTIC (NAVY)

The greatest battle the Royal Canadian Navy (RCN) fought during WWII was the Battle of the Atlantic. Winning this battle was of vital importance to the war effort in order to resupply the battlefields. The freedom of the oceans was also vital to the survival of Britain. If the allies ever hoped to invade mainland Europe and defeat Hitler's armies, they needed Britain as a staging ground, and would require more men, food and equipment. The supply lines across the Atlantic from North America to the United Kingdom became increasingly more important. It was a fight to the death against a highly trained enemy for supremacy of the Atlantic Ocean. It involved tens of thousands of ships and hundreds of thousands of sailors.

The Battle of the Atlantic was the longest battle of WWII, and was fought from September 1939 to May 1945.
Canada's navy began WWII with 13 vessels and 1819 personnel, and ended it with the third largest navy in the world. At war's end, the RCN had over 600 ships and over 90 000 members, including 6 500 women who served in the Women's Royal Canadian Naval Services ("WRENS"). The RCN lost over 2000 sailors and 32 ships, and more than 300 sailors were wounded.

The contribution of the merchant navy was also significant. When the war began, Canada had 38 oceangoing merchant vessels of 1000 tons or more and 1450 merchant crewmen. Over 400 merchant ships were built in Canada during the war, and Canada finished the war with the fourth largest merchant navy in the world. Approximately 1600 Canadian merchant seamen died. Escort of merchant ship convoys was the RCN's chief responsibility during the Battle of the Atlantic. By mid-1942, the RCN, with support from the Royal Canadian Air Force (RCAF), was providing nearly half the convoy escorts, and eventually carried out the lion's share of escort duty.
In the raging ocean storms, bitter cold and ice packs of the North Atlantic more than 25 000 merchant ship voyages were made over the duration of the war. During the 2060 days of war the convoys provided 90 000 tons of war supplies a day to the battlefields of Europe. Success came at a great cost in human lives, lost ships and cargo, and as a result of tremendous courage and determination.

The most intense phase of the Battle of the Atlantic occurred during 1941-1943.

The Battle of the Atlantic is honoured on the first Sunday in May, at locations across Canada.

BATTLE OF BRITAIN (AIR)

The Battle or Britain parade is held in September each year to commemorate the Battle of Britain and honour the members of the Air Force who died in this battle and others. The Battle of Britain was entirely an air battle and was one of the most decisive battles in all history. During the autumn of 1940, the Commonwealth Air Forces defeated the German Luftwaffe. It is believed that Great Britain would have been invaded had the Battle of Britain been lost. The Royal Canadian Air Force is proud of the active part it played in the historic battle.

Conclusion

To be a good citizen you have to make an effort. You must care not only for yourself, but also for your family and for society. Good citizenship demands participation, involvement and contribution. A good citizen will strive to make a worthwhile contribution that benefits the country as a whole and not just themselves.

7 - Teamwork / Leadership

Positive Social Relations for Youth

Harassment and abuse is not tolerated or accepted in our program. As a Sea Cadet you have rights and responsibilities with regard to harassment and abuse, and to work to prevent problems through conflict resolution. This is outlined in the Positive Social Relations for Youth (PSRY) program. Part of being a Sea Cadet involves taking part in this training and knowing what your rights and responsibilities are.

There are officers at your Corps and Sea Cadet Summer Training Centre that are specially trained to help answer your questions or assist you with difficult situations. These are called Unit Cadet Conflict Management Advisors (UCCMA).

RIGHTS AND RESPONSIBILITIES OF CADETS

As a cadet I have the right to:

• be treated fairly and with respect
• belong
• feel safe
• be included
• learn
• seek help
• be heard
• make decisions
• be protected from emotional, physical and sexual abuse and all forms of harassment
• use the law
• say "No" to unwelcome Behaviour

As a cadet I have the responsibility to:

• treat others with respect
• not exclude anyone
• help protect others
• respect personal boundaries; honour "No's"
• tell the truth
• listen
• not dominate others
• not misuse my power
• control my anger
• not harass anyone
• not abuse anyone
• get help if I need it

RIGHTS RESPONSIBILITIES
KIDS HELP LINE 1-800-668-6868
DND CF HARASSMENT HELP LINE 1-800-290-1019

PARTICIPATE AS A MEMBER OF A TEAM

- RESPECT THE LEADER AND OTHER TEAM MEMBERS

The ability to work with other people in a team is a useful skill. A sincere respect for other people is a great asset. In order to be an effective team member one must respect what the leader is asking the team to do. It is also important to respect the opinion and views of the other members of the team.

- COOPERATE WITH OTHERS

In order for the team to effectively and efficiently achieve an objective the members must cooperate. Through cooperation a great deal more can be achieved than by working alone.

- ADMIT MISTAKES AND LEARN FROM EXPERIENCE

In a team setting one must be able to admit when they are wrong and learn from the mistake. This will make the team stronger and create a better outcome.

- ACCEPT CONSTRUCTIVE CRITICISM

Constructive criticism is observations or thoughts about ways to improve the manner in which a task was completed. Leaders will often provide constructive criticism to members of the team. This criticism is given to assist individuals develop as team member and eventually become leaders. Members must learn to take this criticism and use it in a beneficial way.

QUESTIONS

Q1. What is constructive criticism?

Q2. What does it mean to admit mistakes and learn from experience?

Q3. Why is it important to respect the leader and other team members?

Five Responsibilities of a Follower in a Team

- ASSUME RESPONSIBILITY

Team members should be prepared to assume responsibility when needed. The team leader will often delegate duties to team members and rely on these members to be prepared and willing to take on the responsibility.

- BE HONEST

Team members must be honest with others in the team. Most people will believe and want to work with someone they trust. Honesty is an important characteristic of a good follower. In order to complete objectives, team members must trust each other and be honest.

- ACCEPT OTHER TEAM MEMBERS FOR WHO THEY ARE

It is important to be sensitive to other people's wants and needs and to changes in these wants and needs. Acceptance and understanding of individual differences will allow the group to communicate and cooperate.

- KNOW THE JOB AND BE PREPARED

A good follower needs to be knowledgeable about the group's goals. An effective follower should be organized and prepared.

- COMMUNICATE CLEARLY WITH OTHERS

A follower must be able to understand and communicate with the leader and other team members.

Communication works in two directions, listening and speaking. The ability to listen to others is essential in receiving correct information and implementing the strategy outlined for the team.

SELF-ESTEEM

Self-esteem encompasses how people view themselves. This includes, but is not limited to:

- how much individuals like themselves;
- how valuable they feel they are; and
- how comfortable they are with themselves.

SELF-CONFIDENCE

Self-confidence encompasses how individuals portray themselves. It is a major factor that can influence ones ability to perform within specific situations. By having high self-esteem, a strong level of self-confidence can be developed.

GOAL MAPPING

Goal mapping is an activity that allows people to recognize their personal motivations. Setting goals that can be achieved both in the short and long terms are beneficial to both the individual and the team. The more aware people are of others, their habits and desires, the more successful they can be in creating stronger team energy.

Q1. Why are self-esteem and self-confidence important factors in effective team building and leadership?

Q2. How can a goal mapping exercise be effective in planning short- and long-term goals?

Q3. How can goal mapping be a useful tool with respect to effective teams and leadership?

CHARACTERISTICS OF A SUCCESSFUL TEAM

Communication. Clear communication is essential to an effective team. Team members must feel comfortable sharing ideas and concerns with each other and the leader.

Mutual Cooperation and Support. It is hard to be innovative when you are not sure how others will react to your ideas. Team members must be aware that even if people disagree the objection is to the idea, not to the person presenting it. Members of a team must have the right to a certain level of trust that precludes backstabbing, gossip, and negative behaviours aimed solely at making someone look bad.

Share a Common Goal. When a team understands the purpose for a task they have a heightened motivation to work together towards the completion of it.

High Esprit de Corps. When each member of the team has a sense of pride and belonging to the team, it is more likely they will want to be part of the team. This sense of belonging will enable the group to become more cohesive and willing to work together to accomplish the task.

ADVANTAGES OF EFFECTIVE TEAMWORK

Includes Everyone and Ensures a Better Outcome. In a team setting people feel that their contributions are valuable. A strong group performance is generated from strong individual efforts. When many individuals are working together to accomplish a task, different ideas and opinions mesh together to provide a sound outcome.

Tasks Are Easier When More People Are Involved. When the responsibility and workload are shared among the team members and the team works together to ensure everyone stays on track, the team will offer support to those who need it.

Increases and Develops Communication. Teamwork is an opportunity for people to interact in new ways by forming relationships and communicating with new people.

Communication is the key to ensuring members are carrying out their role in accomplishing the task.

COMMUNICATION

Effective communication skills are key to any successful group or team and are an important factor in becoming an effective leader. A leader who can communicate effectively with the team will move the team towards a positive outcome.

Communication works in both directions. When one person is delivering a message, the team members must be listening to ensure they receive the message correctly. Part of becoming a leader is developing good listening skills. Team members should feel comfortable enough to bring forth ideas to the leader and feel that their idea are heard and taken into account.

SELF ESTEEM SCALE

To get a sense of your level of self-esteem, place a check mark on the scale on the activity below which best describes you. For example, if you are more likely to act toward the item on the right, then the x would be placed closer to the right, and vice versa.

Throughout the year, feel free to revisit this scale and use it as a tool to monitor how your self-esteem in different areas may change.

	5	4	3	2	1	
Make your own decisions?						Let others make them for you?
Look for answers to problems?						Let problems defeat you?
Take risks?						Play it safe?
Control your moods and thoughts yourself?						Let someone else's bad mood get you down?
Feel exhilarated when you work hard?						Feel as if you haven't accomplished anything, when you work hard?
Accept responsibility?						Make excuses, find fault, lay blame.
Measure yourself against your own standards?						Measure yourself against other's standards?
Speak up, set limits, voice your thoughts honestly?						Swallow your opinions, your thoughts, your wishes?
Stand straight and look people in the eye?						Slouch, with downcast eyes, looking sideways at people?
Respond flexibly to changing circumstances?						Hold on to what you've always done and thought because it's easy and comfortable.
Feel self-confident and self-assured?						Feel shy, nervous, and awkward?

8 - The Canadian Navy

"The Sea Element of the Canadian Forces"

The current resources of the Canadian Navy include:

- twelve Halifax class Canadian Patrol Frigates (CPFs) (multipurpose);
- three Iroquois class Destroyers (DDGs) (air defence and antisubmarine);
- two Protecteur class Auxiliary Oil Replenishers (AORs) (replenishment);
- twelve Kingston class Maritime Coastal Defence Vessels (MCDVs) (coastal surveillance and mine counter measures);
- four Victoria class submarines;
- aircraft – CH-124 Sea King helicopters and CP-140 Aurora long-range patrol planes (though they are operated by Air Force personnel, they act in support of naval operations); and
- miscellaneous auxiliary vessels (firefighting vessels, tugboats, diving tenders, etc.).

The Canadian Navy also makes use of 24 Naval Reserve Divisions across Canada.

The Halifax class Canadian Patrol Frigates include:

- Her Majesty's Canadian Ship (HMCS) Halifax 330
- HMCS Vancouver 331
- HMCS Ville De Québec 332
- HMCS Toronto 333
- HMCS Regina 334
- HMCS Calgary 335
- HMCS Montréal 336
- HMCS Fredericton 337
- HMCS Winnipeg 338
- HMCS Charlottetown 339
- HMCS St. John's 340
- HMCS Ottawa 341

Figure 9-1-1 HMCS Ottawa 341

The Iroquois class Destroyers include:

- HMCS Iroquois 280
- HMCS Athabaskan 282 and
- HMCS Algonquin 283

http://www.navy.forces.gc.ca/iroquois/about/ship_about_e.asp

Figure 9-1-2 HMCS Iroquois 280

The Protecteur class includes:

- HMCS Preserver 510; and
- HMCS Protecteur 509.

http://www.navy.forces.gc.ca/preserver/gallery/ship_gallery_e.asp?x=1&page=9

Figure 9-1-3 HMCS Preserver 510

The Kingston class Coastal Defence Vessels include:

- HMCS Kingston 700
- HMCS Glace Bay 701
- HMCS Nanaimo 702
- HMCS Edmonton 703
- HMCS Shawinigan 704
- HMCS Whitehorse 705
- HMCS Yellowknife 706
- HMCS Goose Bay 707
- HMCS Moncton 708
- HMCS Saskatoon 709
- HMCS Brandon 710
- HMCS Summerside 711

http://www.navy.forces.gc.ca/brandon/about/ship_about_e.asp

Figure 9-1-4 HMCS Brandon 710

The Victoria class submarines include:

- HMCS Victoria 876
- HMCS Windsor 877
- HMCS Corner Brook 878
- HMCS Chicoutimi 879

http://www.navy.forces.gc.ca/victoria/gallery/ship_gallery_e.asp?x=1&page=13

Figure 9-1-5 HMCS Victoria 876

Sea King Helicopter

http://www.airforce.gc.ca/equip/ch-124/seaking2_e.asp
Figure 9-1-6 CH-124 Sea King Helicopter

Aurora

http://www.airforce.gc.ca/equip/CP-140/aurora1_e.asp
Figure 9-1-7 CP-140 Aurora

Visit the Canadian Navy Website at www.navy.gc.ca for the most up to date information on the fleet and its supporting aircraft.

CANADIAN NAVY PARTICIPATION IN WORLD ORGANIZATIONS
Operations that the Canadian Navy participates in include: North American Treaty Organization (NATO); the United Nations (UN); other international missions working in cooperation with other international navies; and protection of Canadian coasts and Canadian controlled waters and other domestic needs.

CURRENT CANADIAN NAVY OPERATIONS
Current operations that the Canadian Navy is involved in include:

NATO: It currently consists of 26 countries from North America and Europe. Its primary function is to safeguard the freedom of member countries, based on the principles of democracy, individual liberty and international law.
Canada has maintained a vessel in the Standing Naval Force Atlantic since its inception.

UN deployments:
The UN is an international organization that describes itself as a "global association of governments facilitating co-operation in international law, international security, economic development, and social equity." It was founded in 1945 at the signing of the United Nations Charter by 51 countries, replacing The League of Nations which was founded in 1919. Peacekeeping operations began in 1948 with the first mission to the Middle East.

Some recent UN operations include:
Iraq and Kuwait; Golan Heights; Yugoslavia and the Balkans; Rwanda; Haiti; and Ethiopia, Eritrea.

Canada is the only member country of the UN to have committed personnel to every UN operation;
As of 2006 there have been 92 missions.

CIVILIAN MARITIME COMMUNITY
Types of civilian vessels that can be found in Canadian waters include: cargo vessels (e.g. bulk carriers, container vessels, Roll-On/Roll-Off [RORO] vessels, lakers [used for transportation on the Great Lakes], and liquid food product carriers); tankers (e.g. crude oil carriers, Liquid Natural Gas [LNG] tankers, bulk ore carriers, chemical tankers); passengers vessels (e.g. cruise ships, ferries, river boats, yachts); fishing vessels (e.g. trawlers, seiners, factory ships); government services (e.g. ice breakers, buoy tenders, fisheries and customs patrols); research vessels (e.g. oceanographic research, hydrographic survey vessels); support vessels (e.g. tugs, firefighting vessels, heavy lift ships, barges, floating cranes); and offshore oilfield development vessels (e.g. production, storage and offloading vessels, supply vessels, anchor handling, drill ships).

Navy:
Part of The Canadian Forces

THE CANADIAN FORCES INCEPTION
The first small steps to form the Canadian Forces might be considered to be established in 1868 when Canada's Department of Militia and Defence was established with a budget of $900 000, taking over from provincial or Canadian militias, which were disbanded by 1869. At the time the intention was to create a militia force to support the British troops in Canada to drive out any invading force. However, in the fall of 1871 the British troops were withdrawn from Canada, leading to Canada taking moderate steps in producing its own forces.

The country established two field artillery batteries to protect Quebec City and Kingston. Thus the regular army began its formation. This was expanded in 1883 when the first cavalry school corps (Royal Canadian Dragoons) was established in Quebec City followed by infantry corps (Royal Canadian Regiment) in Fredericton, Saint John and Toronto.
In 1964, Defence Minister Paul Hellyer tabled a white paper in Parliament, which concluded that a unified command structure – one which amalgamated the Navy, Army and Air forces – would better serve Canadian interests.
The modern Canadian Forces was formed on February 1st, 1968 when Bill C-243, The Canadian Forces Reorganization Act, became law. At this time the Canadian government merged the Royal Canadian Navy, the Canadian Army and the Royal Canadian Air Force into a unified structure. Canada remains one of the few developed countries in the world to organize its military forces like this. The integration of the Canadian Forces continued in 2005 when the CDS, General R.J. Hillier, announced an initiative to introduce a joint force

management structure in the Canadian Forces to make them more "streamlined, integrated and effective."

3 BRANCHES OF THE CANADIAN FORCES

NAVY
The Canadian Navy first came into being on 4 May 1910 with the passing of the Navy Bill of 1910.
Currently the Canadian Navy consists of three headquarters:
MARLANT (Maritime Forces Atlantic) – Halifax;
MARPAC (Maritime Forces Pacific) – Esquimalt; and
NAVRES (Naval Reserve) – Quebec City.

LAND
The land branch of the Canadian Forces consists of three components: Regular Force; Reserve Force; and Canadian Rangers.

AIR FORCE
At the outbreak of WWI Canada had no air force. In 1914 Canada sent the Canadian Aviation Corps, made up of three personnel and one American built Burgess-Dunne biplane to accompany the First Contingent overseas. This can be considered the first modest attempt at the formation of Canada's air force.

Currently the Canadian Air Force consists of 13 wings spread out across Canada.

MISSION AND OBJECTIVES OF THE CF
The mission of the Department of National Defence and the Canadian Forces is to defend Canada, its interests and its values, while contributing to international peace and security.
Under Canadian defence policy, the
Canadian Forces are called upon to fill three major roles:
1. Protecting Canada.
2. Defending North America in cooperation with the United States of America.
3. Contributing to peace and international security.

QUESTIONS
Q1. Name one of the roles of the CF.
Q2. Where are the maritime forces located?
Q3. In what year did the Royal Canadian Air Force originate?

The CF functions in a joint capacity for many of its international commitments. However, each element has a distinct set of responsibilities:

NAVY
- Surveillance and control of Canadian waters.
- Support of army and air force operations.
- Support to other government departments (fisheries, search and rescue, drug enforcement, environment).
- NATO deployments.
- Humanitarian operations including disaster relief (food and medical relief, and personal and technical aide).

ARMY
- National defence.
- Canada/US defence of North America (NORAD).
- Contribution to peacekeeping missions.
- Civil defence.
- Humanitarian operations including disaster relief.

AIR FORCE
- Surveillance and control of Canadian airspace.
- World wide airlift of CF personnel and material.
- Support operations of the army and navy.
- Support to other government departments.
- Search and rescue.
- Humanitarian operations including disaster relief.

QUESTIONS
Q1. What role is common to all three elements?
Q2. Which two elements have search and rescue as one of their principal roles?
Q3. What is meant by humanitarian operations?

9 - Ropework

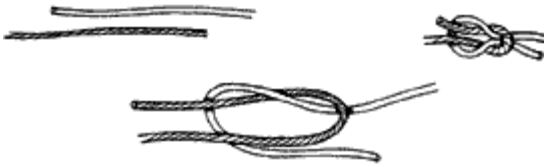
Seamanship is an important part of Sea Cadet training and it all begins with basic knots.

A knot is: Used for anything that is not a bend, splice or hitch.

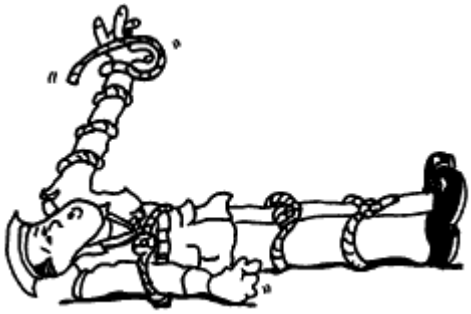
A hitch is: Used to secure a rope to a spar, ring or hook.

A bend is: Used to join two ropes together.

You can practice knots, hitches and bends anywhere. All you need is a piece of line and patience, so get some rope and let's get started!



A Reef Knot is used to tie two ropes of equal thickness together. It is the standard knot for reefing a sail.



A Figure Eight Knot is a stopper knot that prevents the end of a rope from sliding back through a block or fairlead. It may be used in the end of jib and main sheets.

A Sheet Bend ties two ropes of unequal thickness together. It may be used in sailing to secure the main halyard to the clew outhaul when de rigging or it may be used to secure the forestay to the bow deck plate.

• A Clove Hitch secures a rope to a rail or a spar (remember a spar is a pole). It may be used during a single tow when the line is attached to the mast.

Did you know that in the days of sailing ships the mark of a good seaman was his ability to work with rope? With the passing of the tall-masted sailing ships, the amount of rope required onboard vessels today is greatly reduced.

- A Rolling Hitch secures a smaller rope to a larger rope or spar. It may be used for attaching a painter or bow line to a tow line when more than one boat is being towed or to hang some object from a vertical rope or spar.

A Marling Hitch lashes long bundles such as sails, hammocks, and awnings. It may be used for securing a mainsail to the boom for temporary storage.

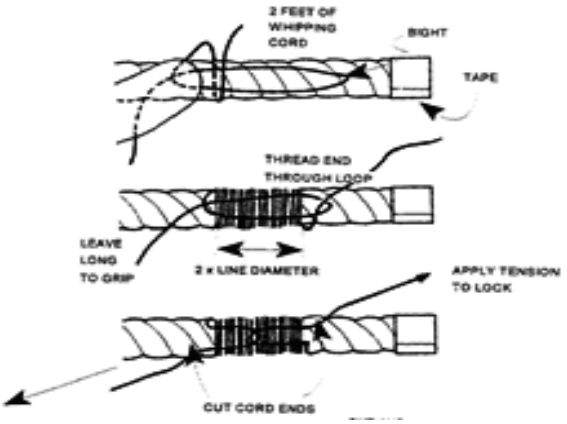
A Round Turn and Two Half Hitches secures a heavy load to a spar, ring, or shackles. It may be used to tie the bow line of a boat to a ring on a dock.

A Bowline makes a non-slip loop in the end of a line. It may be used for attaching sheets or halyards to sails or it may be used as a rescue knot that could be thrown to someone who needs a lifeline.

Common Whipping

A whipping is used on the end of a line to prevent it from becoming unlaid or frayed. The steps are as follows:

- Hold the line in the left hand, the end to be whipped sticking out in front. Have a piece of whipping twine ready.
- Lay the twine on the line so that the loop end is even with the end of the line and hold the other end under the thumb where the whipping will start (this is called the bight).
- Wind the cord tightly around the bight to a length of twice the line diameter.
- Pass the cord end on the last turn up through the bight loop and slowly pull both cord ends.
- When the bight (or slack) moves to the centre, the new loop will be locked at the centre and both ends of the cord can be trimmed off.
- Trim the line half a line diameter from the end of the whipping and heat seal if the line is nylon or polypropylene.



Conclusion

Mastering the basics of knots, bends, and hitches is the first step in developing good seamanship skills. You should be proud of the skills and abilities you have acquired. They form the foundation of all seamanship training to come.

Test your seamanship knowledge by answering the following questions:

1. **Draw a line to match the term to the correct definition:**

Knot — Used to secure a rope to a spar, ring or hook.
Hitch — A term for anything that is not a bend, splice or hitch.
Bend — Used to join two ropes together.

2. Answer **true or false** to the following statements:

a. A Figure Eight knot is used to join two ropes of equal thickness.
True False

b. A Reef knot is a stopper knot.
True False

c. A Sheet Bend ties two ropes of unequal thickness together.
True False

d. A Clove Hitch secures a rope to a rail or spar.
True False

e. A Bowline is used on the end of a line to prevent it from becoming unlaid or frayed.
True False

f. A Common whipping makes a non-slip loop in the end of a line.
True False

10 - Naval Communication

Ship's Terms Commonly used at the corps:

Gash/Gash Can - Garbage or a garbage can.

Stand Easy - A break.

Secure - To close up, put away gear.

Head(s) - Toilet(s).

Duty Watch - A division that is selected on a rotational basis that is responsible for corps preparation and cleanup.

Scran Locker - Lost and found.

Out Pipes - The commencement of classes or the end of stand easy.

Pipe - Sound produced from a boatswain's call. The notes played have a specific meaning/message.

Colours - The ceremony of hoisting the national colours, usually in the morning or at the beginning of the training day.

Liberty Boat - When all personnel are dismissed for the day and may go ashore.

Bulkhead - A wall.

Deckhead - The ceiling of a ship.

Deck - A floor.

Ship's Company - The complement of a ship (this would include a sea cadet corps).

Sunset - The ceremony of lowering the national colours at the end of the training day.

Gangway - Any recognized entrance, passageway, or traffic route within a ship.

Captain - The Commanding Officer (CO).

Runner / Messenger - The person that is used to pass messages from the Main Deck to the Commanding Officer or Officer of the Day.

Canteen - The ships store

Galley - The ship's kitchen.

Boatswain's Stores - A storeroom for cleaning gear.

Pipe Down - An order meaning to keep quiet.

Kye - A hot chocolate drink or snack.

Coxswain - The senior petty officer on a ship/most senior cadet position.

Stand Fast – Stop moving, (Stand Still).

Belay - To make fast a rope, or to cancel an order.

Aye Aye, Sir/Ma'am - Order understood and will obey, an appropriate response to an order from an officer.

Port - Left side of the ship.

Starboard - Right side of the ship.

Ship's Office - Administration Office.

Brow - Entrance/exit of ship where personnel must salute as they come aboard or go ashore.

Ship's Log - A logbook that keeps track of the ship's routine.

Quartermaster - At sea, the quartermaster is the master seaman, leading seaman or able seaman who is the helmsman. In harbour, the quartermaster is the senior member of the gangway staff and is responsible for supervising the boatswain's mate and the security of the brow. At a corps, the quartermaster is usually responsible for greeting guests and filling in the logbook.

11 – Boatswain Call

How to Sound Pipes

The expression to pipe generally means, to make the sound on the Boatswain's Call and to give the spoken order, which it may qualify. Most pipes, however, are orders in themselves and do not require any verbal addition.

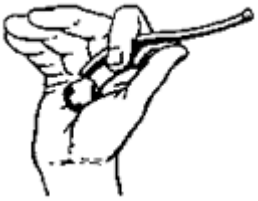
A variety of notes and tones may be obtained with the Boatswain's Call by manipulating the fingers and varying the breath blown into the mouth of the gun, but certain notes and tones are only used in piping in the Canadian Navy.

Holding the Boatswain's Call:

- Hold in the right hand between the index finger and thumb.
- The thumb should be on near the shackle.
- The side of the buoy rests against the palm of the hand, and the fingers close over the gun and buoy hole in such a position as to be able to control the exit of air from the buoy to the desired amount. Care must be taken that the fingers do not touch the edge of the hole in the buoy or of the hole in the end of the gun, otherwise all sound will be completely choked.

The Two Main Notes:

- Low Note - produced by blowing steadily into the mouth of the gun with the hole of the buoy unobstructed by the fingers.



- High Note - produced by controlling the exit of air from the hole of the buoy, which is done by closing the fingers around the buoy, taking care not to touch the edges of the hole or the end of the gun.

TYPES OF PIPES

The General Call is broken into two sections, separated by a very short pause in sound. The General Call begins with a quick low to high note, combined, lasting approximately one second. After this, a short low note will be followed by a three-second high note back to a low note. This pipe will last a total of four seconds.

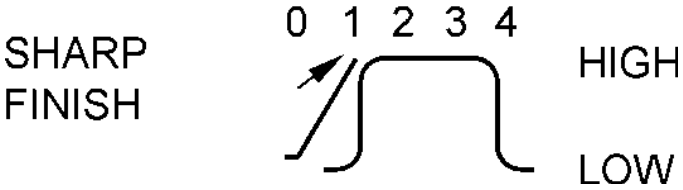
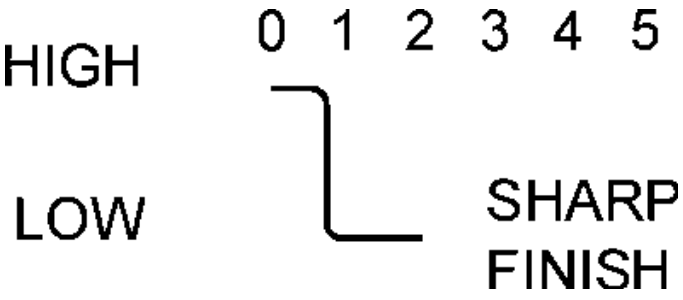


Figure 11-2-1 General Call Notes

The Carry On consists of half a second high note followed by a two-second low note.



The Still consists of an eight-second high note. Although this call is simple it is often difficult to maintain breath for the entire eight seconds.

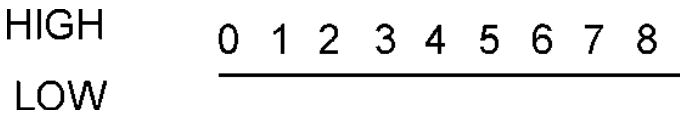


Figure 11-2-3 Still Note

PURPOSE OF EACH PIPE

Pipes have been used for many years aboard naval ships. They are still currently in use today to gain the attention of a ship's crew or to pass on instructions to crewmembers. Each pipe has specific purposes as well as specific reasons for their usage. The following are the purposes for those pipes, which are familiar to most sea cadet units.

General Call

Purpose: The General Call is used to gain the attention of the ship's company before passing an order.

Still

Purpose: The Still is used to pipe all hands to attention as a mark of respect, to order silence on occasions

such as rounds, colours and sunset, or to stop all work in the vicinity in order to prevent an accident.

Carry On

Purpose: The Carry On is piped after the reason for the Still is completed.

12 – Ring the Ships Bell

BRIEF HISTORY
The ship's bell bears the name of the ship and the date of her launching. Unless the ship's bell is damaged,
it remains with the ship until she is sold or broken up, at which point it will either be presented to some public body or offered for sale. If offered for sale, preference will be given to anyone who served in the ship.

DEMONSTRATE HOW TO RING THE SHIP'S BELL

The bell is rung with two strokes of the clapper in quick succession, followed by a one-second pause between rings.

For example, five bells will sound "ding-ding", pause, "ding-ding", pause, "ding". This is done to make it easier to count the number.

On the hour, the bells are rung in even numbers; on the half hour the bells are rung in odd numbers as follows:

eight bells	0800
one bell	0830
two bells	0900
three bells	0930
four bells	1000
five bells	1030
six bells	1100
seven bells	1130 and
eight bells repeats itself.	1200 - at which point the cycle

HOW THE 24-HOUR CLOCK WORKS
The 24-hour clock uses the numbers 0 – 24. To convert conventional time into 24-hour time in the p.m., simply add 12 to the conventional time. For example, if it is 7:00 p.m., add 12 (7 + 12), which equals 19, therefore it is 1900 hours. A handout of a 24-hour clock is located in Annex G for the cadets.

0000 – 12:00 a.m.	0100 – 1:00 a.m.
0200 – 2:00 a.m.	0300 – 3:00 a.m.
0400 – 4:00 a.m.	0500 – 5:00 a.m.
0600 – 6:00 a.m.	0700 – 7:00 a.m.
0800 – 8:00 a.m.	0900 – 9:00 a.m.
1000 – 10:00 a.m.	1100 – 11:00 a.m.
1200 – 12:00 p.m.	1300 – 1:00 p.m.
1400 – 2:00 p.m.	1500 – 3:00 p.m.
1600 – 4:00 p.m.	1700 – 5:00 p.m.
1800 – 6:00 p.m.	1900 – 7:00 p.m.
2000 – 8:00 p.m.	2100 – 9:00 p.m.
2200 – 10:00 p.m.	2300 – 11:00 p.m.

1815	Officer of the Day Onboard, Open School
1825	Cadets to Set up Parade Area, RPO
1835	Cadets to Muster for Colours, Coxswain
1845	Colours / Inspection / March Past
1900	Period 1 Class
1930	Secure
1935	Period 2 Class
2005	Stand Easy
2020	Period 3 Class
2050	Secure
2055	Evening Quarters
2100	Muster for Sunset
2105	Duty Watch and Liberty Boats to Muster
2115	Liberty Boats
2120	OOD Rounds
2125	Duty Watch Dismissal

The Phonetic Alphabet

In order to say "A" in the military, the phonetic alphabet is used -"Alpha". How often has someone on the phone said "V" and you hear "B" or other 'sound alike' letters. With no margin for error, this system prevents that kind of confusion.

Alpha	Bravo
Charlie	Delta
Echo	Foxtrot
Golf	Hotel
India	Juliette
Kilo	Lima
Mike	November
Oscar	Papa
Quebec	Romeo
Sierra	Tango
Uniform	Victor
Whiskey	X-ray
Yankee	Zulu

13 – A Sailor's Dictionary

Abaft	Further aft than; never use the term "Aft of"
A'cock-bill	Anchor clear of the hawse pipe, up and down and ready for letting go
Adrift	Absent, late
Aft	In the direction of the stern
Ahoy!	A call for attracting attention between nearby ships or boats.
Aloft	Above
Athwartships	In a direction from side to side in a ship
Avast	An order to stop
Awash	Level with the surface of the sea
Back up	To assist in holding
Batten down	To secure closed or shut
Beach	Shore or ashore
Beam end	When a ship is completely on her sides; confusion
Bear a hand	An order to assist
Below	Down
Berth	A place to sleep or for a ship to secure to
Between decks	Any space below the upper deck and inside a ship
Bilge	The very bottom of a ship's hull; also nonsense
Bitter end	Inboard end of ships anchor cable

Board	The old name for the side of a ship. To board and enter means to enter a ship (forcibly) “Inboard” means inside the ship, “Outboard” outside the ship, “Starboard” means right side and “Larboard” (Port) means left side
Boot topping	The black band around a ship at the waterline
Brick	A shell (in gunnery)
Brightwork	Polished metal fitting, often brass
Broach	To unintentionally swing the ship around broadside to a wave
Broadside	The full side of a ship
Brow	A gangway between two ships or from ship to shore
Capsize	To overturn
Carried away	Removed or lost due to sea or wind action breaking items from the ship
Cast off	To let go
Check away	To pay out a rope or wire under control
Chock-a-block	Full, no room to put anything else in
Clean	To change from one type of dress to another
Cleat	A piece of metal or wood with two horns, around which ropes are made fast
Crest	The highest point of a wave
Derelict	A ship, abandoned by her crew, but still afloat
Dhobey	Laundry - and hence DHOBIWALLAH - Person doing the ship’s laundry
Easy	Carefully or slowly
Eyes of the ship	The extreme forward end
Fair	Favourable or unobstructed
Fake out	To lay a wire or rope on the deck in a wide zigzag pattern, so that it is free for running
Fathom	Nautical measure, 6 feet
Fiddle	Fitting on a table to keep mess utensils from sliding in bad weather
Fleet	A general term meaning the ships of a navy
Flotsam	Any floating cargo, stores, or damaged equipment which have floated off a wrecked or damaged vessel
Founder	To sink
Furl	To fold or roll up an awning or sail
Grog	Traditional Navy drink
Handsomely	Slowly, carefully
Haul taut	To pull tight
Holiday	A gap or space; area missed when painting
Irish pennants	Rope yarns or loose stray rope ends
Jetsam	Stores or equipment deliberately thrown over side to lighten ship
Jettison	To cast overboard
Junk	Old rope
Jury rig	Temporary, make shift device
Killick	Leading Seaman
Landfall	First sight of land after a sea passage
Lay Up	To take a ship out of service; (storage)
Lee	Opposite side to that upon which the wind is blowing
Make and mend	Time set aside to repair and replace kit
Mess traps	Food utensil kit

Overhaul	To overtake; to examine and repair; to haul apart the blocks of a tackle
Port	A viewing window or opening in the ships side
Proud	Sticking out, not in line
Refit	To repair
Roundly	Rapidly or fast
Sculling	To leave lying about or unattended
Scuttle	A round port hole
Secure	To make fast; to stop work
Shipshape	Neat and tidy
Sister ships	Ships of the same class
Silent hours	Hours between lights out and calling the hands, only emergency pipes are made
Skulk	To avoid duty-usually in the sense of hiding
Snug	Properly secured; tight
Spell	Period of time
Spindrift	Spray blown from the crests of waves
Square one's own yardarm	To put oneself in the right without regard to others
Stanchion	A supporting post for a guardrail, etc.
Stone frigate	A Navy shore establishment (ship on land)
Stow	To put away
Strike	To haul down
Sullage	Wet garbage
Swallow the anchor	Retire from the Navy or sea going life
Taut	Tight; to haul taut
Trick	A short spell of duty on a particular job
Work ups	To exercise the officers and crew of a ship in all their duties

14 The Duke of Edinburgh's Award

(Note: if you are not yet 14 years old, keep this for future reference).

The Duke of Edinburgh's Award Young Canadians Challenge is a challenge from His Royal Highness Prince Philip to young people between the ages of 14 and 25 to reach for their best and qualify for three separate awards (Bronze, Silver and Gold) through award activities arranged in four separate sections:

- services;
- expeditions and explorations;
- skills; and
- physical recreation.

International Declaration: "The Award concept is one of individual challenge. It presents to young people a balanced, non-competitive program of voluntary activities which encourages personal discovery and growth, self reliance, perseverance, responsibility to themselves and service to the community."

• **Duke of Edinburgh Award Pins** shall be worn centered on the left breast pocket of the uniform jacket. Only the highest award earned held shall be worn.

The Bronze award is usually presented in the local community, for Silver there is a provincial ceremony, and Gold is presented by a member of the Royal family on visit to Canada.

This program is optional and tri-service. Mandatory school and job activities cannot be used.

To become a participant in the program, you must register (talk to your corps officers about this). You will receive a Record Book. This book contains all the information you need to complete the requirements for each level, and to record your progress.