

LEARN TO SAIL

WHITE SAIL THEORY FOR THE MARTIN 16
4th Edition

ORIGINAL VERSION BY

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This book belongs to: _____

ACKNOWLEDGMENTS

From Kerianne Boulva & JP Roux-Groleau

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1.0 PREFACE

Welcome to the Martin 16 Learn to Sail theory! This booklet is designed to give you the basic tools you need to feel knowledgeable and comfortable as you explore the wonderful sport of sailing. To get started you will learn important tips on clothing and safety, as well as the parts of the boat and how to rig. You will also learn how to make knots to secure your boat's ropes. Most importantly, you will learn how to navigate your boat by learning the different points of sail, how to change direction and the right of way rules. Lastly, a good sailor also needs to be aware of his surroundings and know how to read the weather. While the basics of sailing are applicable to any boat, this book takes into special consideration one of the most common accessible Learn-to-Sail boats, the popular Martin 16. So what do you say? Let's learn some fun.



2.0 PROPER ATTIRE TO GO SAILING

Before rigging the boat and heading out of the harbour, a sailor needs to equip himself against the sea's temper. Here are some good tips that will keep you comfy:

- 1) Headwear: A simple baseball cap or brimmed hat that covers your face well, will provide shade and coolness in summer heat – don't forget a string or a lanyard that ties it to your life jacket in case of a windy day! In cold weather, a tuque is a good idea to prevent heat loss through the head
- 2) Sunglasses: Again, with string to keep them from falling off. It is also important to selectively choose your piece of eyewear. Due to the highly reflective nature of water, sailors get a double dose of sun when on the water. Sunglasses that are polarized or marked UV400 should be worn at all times.
- 3) Sunscreen, lip balm: for the best protection possible, a sunscreen with SPF 30 will do the trick.
- 4) Polyester or wool shirt: on cold days, one needs warm clothing. Moreover, wool and polyester will still keep you warm if they are wet, as opposed to cotton shirts, which retain dampness and take an awfully long time to dry. Learn to layer in cold weather : 1) A Base layer to wick away sweat 2) a Mid Layer to keep warm 3) a Shell layer to keep out wind and water
- 5) Wind Breaker: an absolute essential when heading on the water, especially on a splashy day
- 6) Bathing suit: if you are planning on getting wet (do we ever really plan for it?)
- 7) Personal Flotation Device (PFD, commonly nicknamed lifejacket) with a whistle: a must-have for ALL SAILORS.
- 8) Shoes: to protect your feet from cuts and bruises in the boat.
- 9) An extra pair of clothing, just in case!

Boat Fun Facts

When sitting in the boat, the right side is called STARBOARD (GREEN) and the left side is called PORT (RED).

*If you have a disability, take a moment to consider if the nature of your disability may be a factor when choosing clothing. Is heat regulation a problem? Does bulky clothing limit your ease of movement? Do you cut or bruise easily, and could clothing choice help manage this issue? Talk to your instructor if you have any questions about proper clothing for safe and enjoyable sailing.

3.0 BOAT PARTS

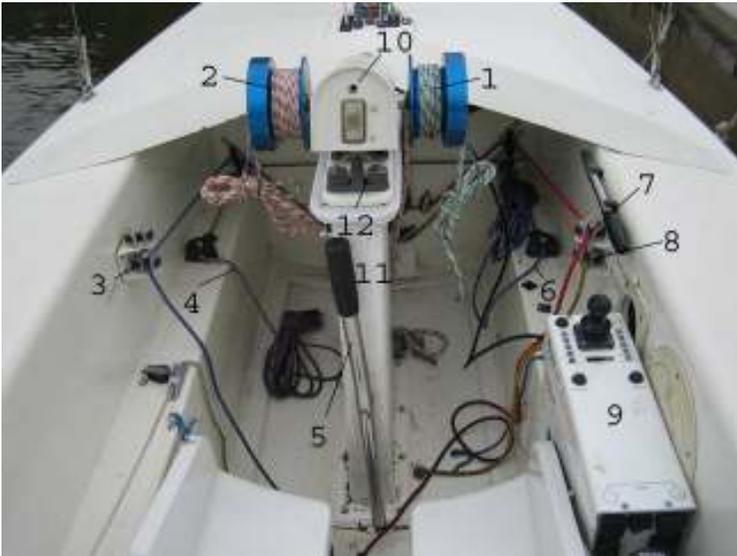
In order to be a good sailor, you need to know your boat from head to toe. Understanding what each part does will help you maximize your boat's potential. Here are some major boat parts, illustrated on a Martin 16, but these basic parts are common to almost any sailboat.

3.1 The boat in general



- 1) Jib
- 2) Main Sail
- 3) Forestay (metal wire on the front of the boat)
- 4) Shroud (metal wires on the side of the boat)
- 5) Boom Vang
- 6) Rudder
- 7) Keel (Centerboard in dinghies)
- 8) Bow of the boat (front of boat)
- 9) Stern of the boat (back of boat)
- 10) Bridle (rope triangle in the back)
- 11) Boom
- 12) Mast
- 13) Batten

3.2 The Cockpit of the Martin 16, with assistive devices rigged



1. Main Sheet
2. Jib Sheet
3. Outhaul
4. Jib Halyard
5. Tiller
6. Main Sail Halyard
7. Boom Vang
8. Cunningham
9. Autohelm
10. Windlass (sheets in and sheets out with autohelm in order to trim sails)
11. Centerboard Trunk
12. Main Sheet and Jib Sheet cleat if not using windlass

3.3 Parts of the Sail



3.4 More parts

There are more parts to the boats, such as:

- Block: it is a pulley through which you pass a rope



- Spreaders: they are situated between the shroud and the mast



- Shackle



- 1) Split ring
- 2) Clevis pin
- 3) Shroud Adjuster



- 1) Pintle
- 2) Gudgeon
- 3) Rudder plate
- 4) Rudder retainer pin
- 5) Rudder blade

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- Gooseneck: the boom fits into the gooseneck to attach



to the mast.



Centerboard trunk,
as shown in a dinghy

Automatic bailer: this type of bailer is usually found on the bottom of the cockpit on small dinghies.



Dagger-board trunk type of boat . Note the black hiking straps,
used for hiking to flatten the boat as it “heels” or leans in the
wind

Mast step



Painter or Bow line which is a line that is attached to the bow of the boat and is used to tie a
boat to a dock.

4.0 RIGGING AND DE-RIGGING THE BOAT

4.1 Rigging

Setting up the jib:

1) Find the jib *halyard* and attach the shackle to the *head* of the jib



2) Now, you can tie the *tack* and the *clew* of the jib to its small boom



Tack of the jib (at the bow)



Clew of the jib

3) Hoist the jib as high as possible and cleat the jib halyard

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Now for the main sail:

- 1) Grab the main halyard and tie it with a bowline (or shackle it) to the head of the sail.
- 2) This step is the same as for the jib. You need to secure the tack to the gooseneck and shackle the clew of the main sail to the boom. Systems may differ slightly from boat to boat, usually you will see a pin or shackle for these jobs.



Tack of the main sail



Clew of the main sail

- 3) Hoist the main sail and you are almost ready to sail.

Make sure that the sails go up cleanly and are not twisted when they are hoisted. If you use assistance when rigging due to the nature of your disability, be sure to know your boat parts and the sequence of operations well so you can give clear guidance to the person helping you.

4.2 Added Rigging

Installing the Autohelm

- 1) Place the *autohelm* to the right of the skipper's chair so that its back rests near the small protruding post, which will support the piston. (If you happen to be a lefty, you can install the autohelm box on the left – most boats only have one post for the piston and the piston wire should reach from the port side of the boat to the piston post on the right.)
- 2) You then need to install the black piston that will be used to steer the boat. Make sure that it is plugged into the autohelm.



- 3) Next, connect the black piston to the metal rudder rod. Secure them to each other with a quick pin. Make sure the pin holds securely but can be released quickly if need be – in case of autohelm failure, a sailor or companion can remove the pin to revert to steering manually.



- 4) Test that the autohelm works by moving the joystick left and right.

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Installing the windlass

1) Unscrew the bolt closest to the mast on the keel *NEVER unscrew both bolts at once! The keel will fall out*



2) Slip the back of the windlass (metal slotted plate) in between the washer and the bolt.



3) Tighten the bolt to make it snug.

4) You then need to put the sheets (ropes) on the blue rollers. Bring each sheet *under* the roller towards your seat, and wind it around continually from inboard out. Pass the remaining rope through the hole on the rollers, cleat it and coil the excess.



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5) Plug the Windlass into the Autohelm. You may need to use the jib fine-tune to assure that the main and jib are in sync (at the same approximate angle to the centerline of the boat). In most Martins the other end of the jib exits at a cleat near the port-side sail controls (by your left elbow).



For the “sip n’ puff” system, the straws plug into the two white extremities at the front of the autohelm. The picture above illustrates the two white extremities. Some boats use an external sip n’ puff connector, which is simply a small box with similar connections.

6) Make sure everything is working. If the response of either the windlass or piston seems slow, you should charge the autohelm box before using it on the water.

4.3 De-rigging

As for de-rigging, do the steps in reverse. You also need to fold or roll the sail at the end. But most importantly, you need to know how to ship shape: coiling ropes.

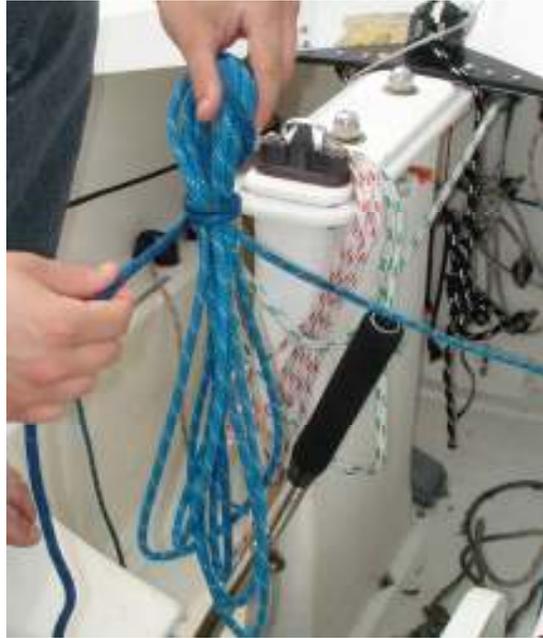
Coiling ropes

1) Coil the rope so that it forms a loop inside your hand.



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2) When there is not much rope left to coil, you start rolling the rope around the loop you have formed.



3) In order for the rope to keep itself coiled, you need to secure it at the end by doing a simple knot.



5.0 LOTS OF KNOTS

Now that we have seen the different parts of the Martin 16, we need to see one of the quintessential skills needed by a sailor: tying solid knots.

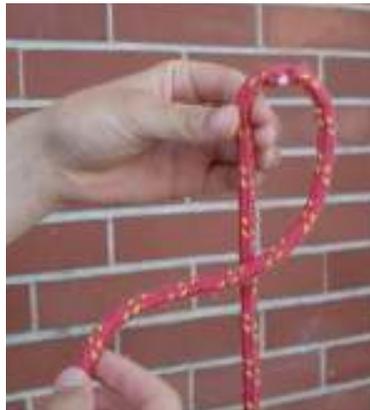
5.1 Eight Knot

The Eight Knot is very useful knot. It is primarily used to stop a rope going through a block.

Step 1: Take one end of your rope.



Step 2: Make a loop with the end of your rope.

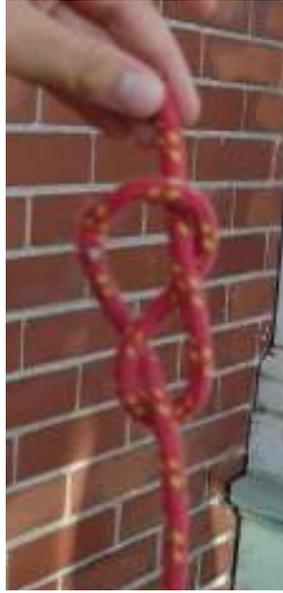


Step 3: Wrap the end of your rope around the loop.



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Step 4: Once done, bring the ends of the rope through the loop.



Step 5: Pull to tighten the knot.



5.2 Bowline

This knot can be used to tie the main sail halyard to the head of the main sail or tie the mainsheet to the bridle.

Step 1: Make a loop with one the end of the rope as shown. Take careful note of how the rope overlaps itself.



Step 2: Take the end of the rope and pass it through the back of the loop.



Step 3: Pull the end of the rope through the loop.



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Step 4: Wrap the end of the rope around the main rope.



Step 5: Bring the end of the rope through the loop on the left.



Step 6: Pull on the end of the rope and hold the bigger loop to fasten the knot. Ask your instructor for the bunny story to help you remember!



5.3 Reef Knot

This knot is very useful when tying two ropes of the same diameter.

Step 1: Grab both end of the rope.



Step 2: Take the right end and bring it over the left end.



Step 3: Roll the right end around the left one.



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Step 4: You are now halfway through the knot.



Step 5: Take the new left end and wrap it over the right one.



Step 6: Tuck it through the knot, hold both ends of the ropes and pull.



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Step 7: You have now a reef knot. A good little trick for this knot is to say “*right over left and then left over right.*”



5.4 Sheet Bend

This knot is of similar use to the Reef Knot except that it is used to tie two ropes of different diameter.

Step 1: Make a half loop with one end of the thicker rope.



Step 2: Take the thinner rope.



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Step 3: Pass the thin rope through the back of the thick loop and wrap it behind.



Step 4: Pass the thin rope end through the new loop you have created.



Step 5: Hold on to both pieces of the thick rope loop and the ends of the thinner rope and pull.



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Step 6: Here is the Sheet Bend.



5.5 Round Turn and two Half Hitches

You can use this knot to tie the boat to the dock when there are no horn cleats installed.

Step 1: Lay your rope around the pole.



Step 2: Make a loop around the pole.



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Step 3: Once the loop completed, lay one end of the rope over the next.



Step 4: To complete the first half hitch, pass one end of the rope around the other and pull.



Step 5: Once the first half hitch completed, lay one end of the rope over the next.



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Step 6: Complete the second half hitch by passing the end of the rope through the loop that is formed in the previous step.



Step 7: You now have a Round Turn and two Half Hitches!



5.6 Rolling Hitch

This knot is usually used to tie a rope to the body of a line in situations such as towing a boat.

Step 1: Place the rope to be attached (in this case, the lighter coloured one) over the darker the rope that we are tying to.



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Step 2: With the lighter coloured rope, make a loop around the darker coloured one. Pay close attention to how it is wrapped around!



Step 3: With the lighter coloured rope, make another loop around the darker coloured one.



Step 4: Once you have completed the second loop, make a third loop to the left.



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Step 5: Pass the end of the lighter coloured rope through the third loop.



Step 6: Hold on to both ends of the lighter coloured rope and pull. Voilà!



5.6 Tying a painter (bowline) to a horn cleat

Horn cleats are often found on docks and are used to tie the painter of a boat to the dock in order to keep the boat from sailing away.

Step 1: Take the painter and pass it around the horn cleat.



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Step 2: Take the end of the painter and start passing it around the “horns” of the horn cleat by crossing it from left to right and right to left.



Step 3: Now comes the tricky part. To make sure that the painter stays securely tied to the horn cleat, you must keep crossing it from one “horn” to the next but this time you must make a loop out of the painter before putting it around the “horn”. Look carefully the image below.



Step 4: Once you have done the loop, pull on the painter in order to tighten it and voilà! You have tied your boat to the dock! Check that the lines lies smoothly on itself and makes a neat, snug fit on the cleat.



Learn to Sail

Now we have seen the basics of sailing. With this knowledge in hand, we can dress properly to sail, rig our boats and tie strong knots. Now let's understand how the boat moves.

6.0 SAILING WITH THE WIND

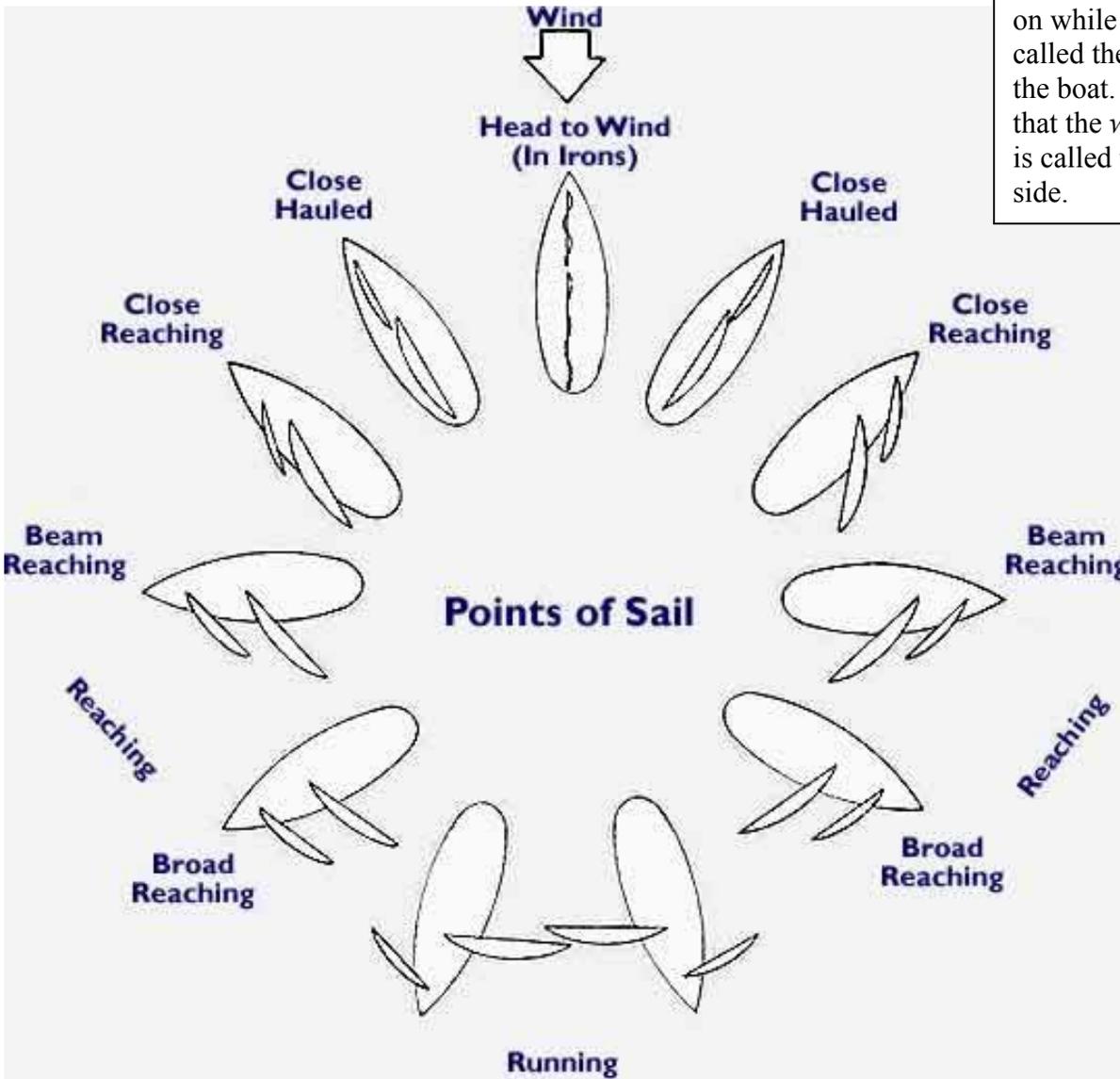
In order for a sailboat to move it needs wind - this concept is fairly straightforward. However, making the boat go where we want it to go is another ball game. First, we need to understand ways of seeing the direction of the wind. Then we can start looking at the different positions the boat can take *relative to* the wind. Once we have seen that, we will learn how to trim the sails and change directions when need be!

What is today's Wind Direction?

Try using:

- 1) Flags
- 2) Pick up grass and let it fall to see in what direction the wind blows it
- 3) Have a wind indicator
- 4) Point your face into the wind ☺
- 5) The pieces of yarn tied to the shrouds of the boat (telltales)

6.1 Points of Sail



Boat Fun Facts
 The side that the sails are on while on a tack is called the **leeward** side of the boat. The other side, that the *wind strikes first*, is called the **windward** side.

Heading Up

Bearing Off

STARBOARD TACK

PORT TACK

6.2 Trimming the Sails and the Centerboard

(See diagram above)

Boat Fun Facts

When pulling in the sails, the proper sailing term is sheeting in. When letting out the sails, the proper sailing terminology is sheeting out.

1) **Close Haul (“Beat”)**: Sails are practically as tight as they get and the boat is heeling a lot. As for the centerboard in a dinghy, it should be all the way down.

Remember, in an accessible boat, the keel/dagger board always stays down!

2) **Close Reach**: Sail trim is in between Close Haul and Beam Reach. Sheet out $\frac{1}{4}$ and lift the centerboard $\frac{1}{4}$.

3) **Beam Reach**: Sails are let out half way and the centerboard is halfway up.

4) **Broad Reach**: Sails are let out between half way and all the way, about three quarter. The same is true of the centerboard; it should be up by that amount.

5) **Run**: Sails are all the way out and the centerboard is all the way up. You will have the sensation that there is less wind since the wind will be coming from behind you.

6.3 Heading Up/ Bearing Off

Heading Up: when a boat moves closer to the wind *without tacking*

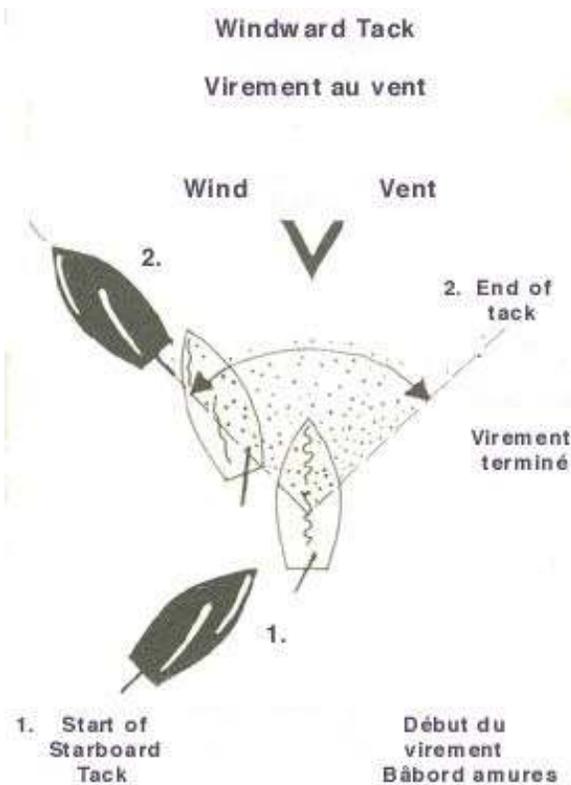
Bearing Off: when a boat moves away from the wind *without gybing*

Boat Fun Facts

When a boat is **heeling** it means that it is leaning to the leeward side (the side on which the sails are).

7.0 CHANGING DIRECTION

7.1 Tacking



A sailor can rarely reach a destination without having to change directions a few times. It is therefore essential to be comfortable when tacking.

Tacking is what happens when the bow of the boat crosses through the wind (momentarily through irons) and the sails change sides. It is important to have a considerable amount of speed when tacking, otherwise you will stay in irons. See diagram.

3 Steps to Tacking:

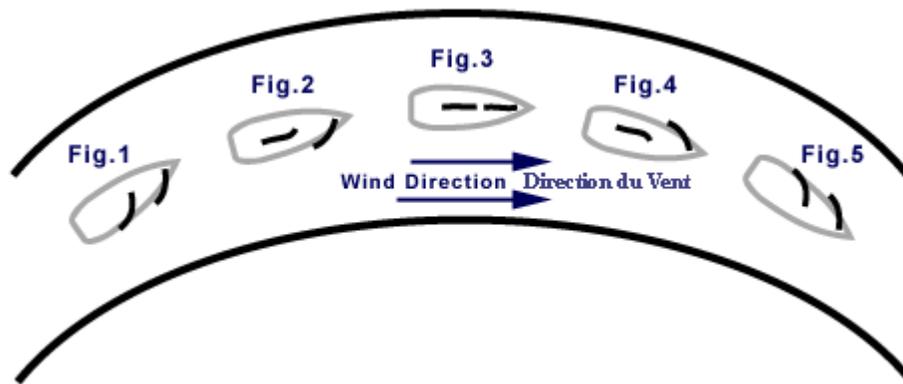
- 1) Check if your surroundings are clear and make sure your companion is ready. Something like, “Ready about?” or a clear, pre-determined signal you have decided with your partner.
- 2) If the answer is “Ready” say: “Tacking.” Then turn the tiller into the direction you want to go. *recall that in most sailboats, tiller direction and boat path are inverse – you may need to remind new Martin sailors that in this boat, it’s *Left to go left, Right to go right!*
- 3) You will see the sails flapping as they pass over your head. This means that your boat is facing the wind (Irons). Once the sails have switched sides and the sails are full again, bring your tiller straight in line with the keel box or centreboard trunk (see cockpit diagram).

7.2 Gybing

Gybing differs from tacking because this time it is the stern of the boat that crosses into the wind as opposed to the bow. To complete a smooth gybe in windy or wavy conditions, try to make sure that you gybe while you are on top of a wave in order for the gybe. See diagram below and talk to your instructor about gybing techniques.

3 Steps to Gybing

- 1) Check your surroundings and say to your companion: “Ready about?”
- 2) If the answer is “Ready” say: “Gybe Ho”. If it is windy, make sure that you are on top of wave. This will depower the sail and ease the gybe. Turn the tiller in the direction you want to go.
- 3) Unlike tacking, the sails are going to change sides rapidly. Brace yourself – the sails also have much further to travel. Once they have switched sides, bring the tiller back to the center to continue onto your desired course.



In heavy winds, the boom may slam across quite abruptly. You can practice sheeting in slightly ahead of time to lessen the blow, and talk to your instructor about other techniques for smooth gybes

8.0 THE LANGUAGE OF TICKLERS

Where are they?

Ticklers come in pairs, with one on each side of the sail, directly opposite of each other. Since there is



one tickler on each side of the sail, you need to remember that one is facing you – this one is the **windward tickler** – (you can clearly see it) and the other is behind the sail – this one is the **leeward tickler**.

What do they do?

Ticklers are extremely useful tools in sailing. They allow you to “see” how the wind moves along your sail. Air is fluid, this means that it acts similarly to water. For example, when you take your hand and pass it through water, you see tiny little whirlpools. When you pass your hand through the air, the same thing happens but you can’t see it. This is where ticklers come in handy, because they are so light, they are carried easily by the air flowing around your sails and can show you what that air is doing.

Understanding ticklers takes some time. Be sure you are comfortable with the concept of windward (closer to the wind) and leeward (further from the wind) before discussing ticklers - otherwise, the concepts can get confusing!

How do they work?

If both ticklers are flowing smoothly – that means parallel to each other and streaming cleanly – then the air flow around your sail is also smooth, which is a good thing. If one or both ticklers are swirling or flapping, that means that air on one or both sides of the sail is turbulent – which is not a good thing! You can correct the turbulent airflow by one of two ways, either 1) Adjusting the boat’s angle relative to the wind (leave the sails alone) or 2) Adjusting the sail’s angle relative to the boat (leave the boat’s path alone)

Corrections by tickler

If the *windward tickler* is turbulent, you can either 1) *Bear off* slightly or 2) *Sheet in* slightly

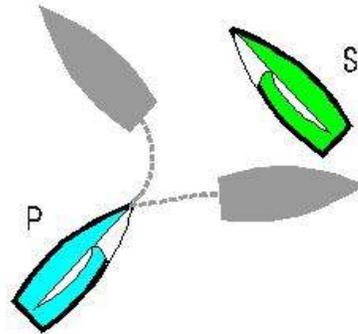
If the *leeward tickler* is turbulent, you can either 1) *Head up* slightly or 2) *Sheet out* slightly

With practice, these corrections will become instinctive. With even more practice, you will notice other subtle clues to turbulent air flow – small changes in sail shape, decrease in boat speed – and you will be able to correct even more quickly.

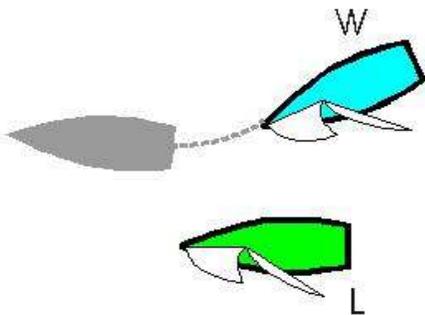
9.0 SEAMANSHIP

9.1 Right of way rules

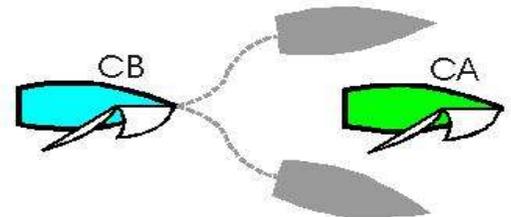
1) Right of way rule 1: Port tack (P) gives way to starboard tack (S)



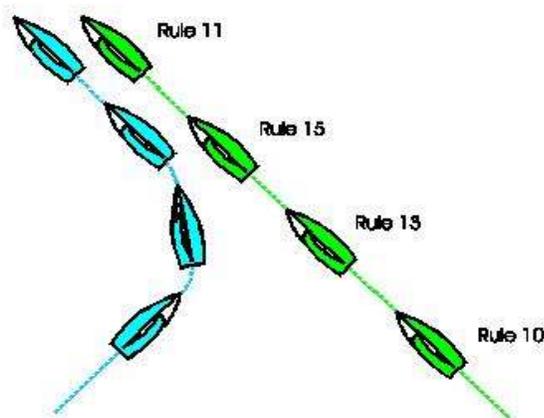
2) Right of way rule 2: Windward (W) gives way to leeward (L) boat when both are on the same tack



3) Right of way rule 3: An overtaking boat (CB) must keep clear of same tack boat that it's overtaking (CA)



4) Right of way rule 4: A boat that is tacking or gybing must that is sailing straight



keep clear of a boat

The Golden Rule:

5) Avoid COLLISIONS at ALL times ☺

9.2 Basic Racing Rules

What exactly is a sailing race? When two or more sailboats follow a pre-determined course each with the intent of being first of the finish line – that is a race! One ‘race’ means that there is a start signal (whistle or gun) when all the boats racing must begin at the same time. All boats go around a series of ‘marks’ (usually large inflated buoys) and must complete a certain pre-determined pattern such as a counter-clockwise triangle before crossing the finish line. The first boat to complete the race course wins.

All the right of way rules that are mentioned above are always applicable in racing, but a quite a few more come into account. It is a necessity that any sailor who is competing in a race knows at least the basic racing rules for the sake of good seamanship and fair racing. Complete sailing rules are available in the *Racing Rules of Sailing*, the internationally sanctioned rule book that is updated every four years (after each Olympic regatta).

1) The one minute rule: If you are over the start line within one minute of the start and the “I” flag is up (yellow flag with a black circle in it), you must either round the pin (buoy on port side of the start line) or the Race Committee boat. If there is no I flag, you are required to duck the line completely before starting.

2) If you hit any of the race marks on the course, you need to do a 360° turn.

3) If you hit another boat on the start line and you were in fault (meaning that you didn’t have the right of way), you are obliged to complete a 720° turn (two tacks, two gybes) as a penalty. In the Martin 16 fleet, the 720° turn is typically replaced with a 360° turn.

If you are interested in racing and all its rules, you can inquire about joining a Learn to Race program once you have completed your Whites Sail.

10.0 WIND AND WAVES

Wind Speed in KM/hr	Wind Speed in Knots (approximately)	Wave Appearance
3 to 7	2 to 5	Small ripples on water
8 to 15	5 to 10	Significant ripples
16 to 20	10 to 15	Small waves with occasional whitecaps
21 and over	15 and over	Large waves with abundant whitecaps

11.0 GEOGRAPHICAL HAZARDS

On every lake, there are certain hazards that we need to keep an eye out for. In Lake Saint-Louis, there is a current moving eastwards. It is important to understand how this affects your sailing. Current can be annoying when you are trying to reach a destination. Another important thing to keep an eye out for is shallow water. Different buoys normally indicate this. For example, the bay to the left of the Point-Claire Yacht Club is very shallow (and should be Martin 16 free). Other things you need to know about our lake are the sandbar which can be found on the south side of the lake just before the Saint Lawrence Seaway. To the east, near Dorval there is also a sunken lighthouse which is a navigation hazard.

The sandbar is in the middle of the lake and it is about 2 to 5 feet deep. The sunken lighthouse is between Pointe-Claire Yacht Club and Royal St-Lawrence Yacht Club and is surrounded by three yellow buoys. This sums up the major hazards on Lake St-Louis.

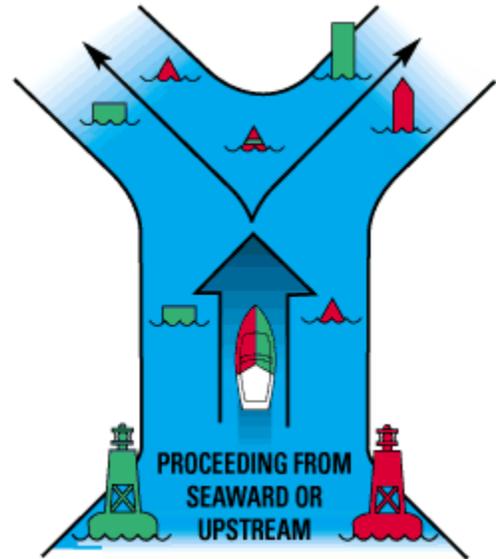
The Channel is there to make you avoid hazards such as shallow waters. As long as you stay within the barriers marked by the channel buoys, you will be free of any danger. But it is most important to understand how it works!

Channel Markers

The Channel is there to make you avoid hazards such as shallow waters. As long as you stay within the barriers marked by the channel buoys, you will be free of any danger.

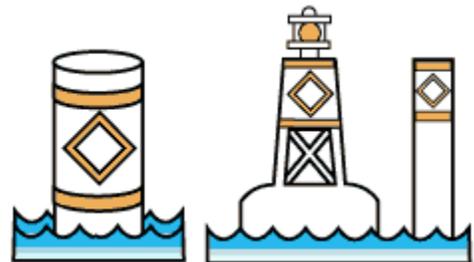
But it is important to understand how it works!

When going “with” the current, you must keep green marks on your right hand side (green in sailing = starboard = right). When going against the current, the opposite is true. In the diagram shown on the right, you can observe a boat going upstream. This means that the boat is going against the current. A reminder for this rule is “*Red-Right-Returning*” (keep red buoys on your right hand side when returning home)



Other important buoys that you should know about are bifurcation buoys. These buoys have green and red bands on them. When passing one of these buoys, it is the top band that will define which channel is safer. For example, if a green band is on top, the safest way is to pass on the starboard (right) side, and keep the buoys on your port side (left side).

The buoys that you may see in the diagram to the right are hazard buoys. This type of buoys indicates rocks or shoals. It is white in color and has an orange diamond with two parallel orange stripes.



12.0 FAQs

How do I choose my personal flotation device (PFD)?

The PFD is the most important tool a sailor has, so it is important to take your time when choosing a PFD. You will most probably find it in a nature and boat store. When you are choosing your PFD, it is important to look at the inside where you will find information about the vest. You will find the weight that the vest can support and whether or not it is approved by the Canadian Coast Guards. In Canada, an approved PFD is required by law. It is very important to check both of these things before buying your PFD. Make sure to choose a comfortable, snug fit that is adequately easy to get on and off. If the nature of your disability makes fitting a PFD tricky, talk to your instructors for ideas of styles that might be good choices for you.

What is hiking?

In high winds a sailboat heels. In order to remedy to this situation, a person hikes. In order to accomplish this, the person needs to slip his or her feet under the hiking strap of the boat and lean outwards. This action helps to flatten out the boat and translates to a smoother, faster sail. It is important to note that hiking really only applies to boats that do not have a keel (dinghies). Hence, on the Martin 16, you won't need to hike!

What is capsizing?

This occurs when the boat flips onto its side (usually in heavy winds). The skipper and the crew need to go on the dagger-board/centerboard to bring it back up. Fortunately, the Martin 16 is a keelboat and will never dump. On the other hand, it is still useful to know what to do in such a situation – you never know who you will be sailing past out there, or what help you could offer a fellow sailor!

Capsized Boat Procedure:

- 1) Clear yourself from the boat to ensure that you are not tied to any lines.
- 2) Call out your companion's name to make sure that she or he is alright.
- 3) The bow of the boat must be brought into irons (look at the points of sail diagram).
- 4) Once that is done, a person must heave himself/herself onto the dagger-board/centerboard and stand on it to bring the boat back up.
- 5) As soon as it is upright, hold on to your boat and readjust its heading to make sure it is in irons.
- 6) The skipper and the crew may re-enter the boat through the stern.

What is the procedure when there is a man over board?

If one of your crew mates happens to fall out of the boat, you must make a loop to head back towards him and pick up the person on the windward side of your boat. You must keep an eye on your crew mate at all times in order for you not to lose sight of him. Approach them on their leeward side so that the wind will not push the boat over top of them. As you approach them, let all your sails out and head into irons to diminish your speed.

What do I do when I get towed?

In the event that the wind died or that there is bad weather coming your way, towing will be used to bring you in. If you have a long enough line in the boat (15 meters of floating line), tie it to your mast with a fitting knot. Then have someone in the safety boat tie the line to his boat. Just sit back and steer to follow the safety boat in.

What are the different types of boats?

The Martin 16 is a keelboat because it has a keel that keeps it from dumping. If a boat doesn't have a keel but has two sails and an integrated centerboard, it is called a centerboard boat. Another type of boat is a catamaran. It has two hulls instead of one and is usually faster than most other sail boats. The fourth type of boat is a cat rigged boat. This kind only has one sail such as the Laser or the Byte. The fastest type by far is the sailboard or what some call the windsurf board. The last type of sailboat is the Sloop Rigged Boat. These boats were very popular in the past. They are characterised by an almost ship-long keel.

What is hypothermia?

When a person is exposed to cold for an extended period of time the body's temperature drops. This can be highly dangerous if not treated. Thus it is extremely safe to overdress when going sailing. Some of the symptoms of hypothermia are blue lips and blue fingernails, shivers, fever and speech impairment. Should this happen to you, you should head to shore as soon as possible and get warm!

Is there any safety equipment needed to sail?

Yes, the Canadian Coast Guard requires you to carry the following items: tow line (15 meters of floating rope), whistle, life vest, flashlight, paddle and a bailer. These requirements are applicable for any boat that is no longer than 6 meters.

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