

**THE GREENVILLE  
MODEL YACHT CLUB  
HANDBOOK**



**Dedicated to the memory of Dennis R. Headberg  
Founder of GMYC**

**Handbook Created by  
Russ Warmath and Mike Ouellette  
Version 2.0 2026**

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## Editor's Note

The Greenville Model Yacht Club (GMYC) created this handbook/captains log as a means to educate, inform and train GMYC new members.

All pages not created by the Greenville Model Yacht Club contain the author's name or information on the original document. Most of these documents encourage free printing and distribution. They are not for selling.

This handbook is to be used as a training and information tool by club members, as well as a logbook for race training and club regattas. The handbook is in this format so that when information changes or there are updates, we do not have to reprint the entire handbook.

Print the handbook and put it in a loose-leaf binder. Or you may just keep it in electronic form and print out only those pages you wish to use for training purposes. You may also print in a smaller format and put in a smaller notebook.

The logbook portion will become a valuable learning tool. Its focus is on setting up, tuning, and attention to detail in regard to preparation of your boat.

Welcome to GMYC. We look forward to you racing with us!



# A Tribute to Our Founder

## **“SPYDER, THE ORIGIN”**

*My very close friend of 45 years, Dennis Headberg, was the founder and first Commodore of the current Greenville Model Yacht Club sailing out of Lake Cooley in Spartanburg County. I had been sailing Soling 1M r/c sailboats for several years in FL and had been telling Dennis how much fun these little boats were. Eventually he had to find out for himself and ended up driving from his home in St. Augustine, FL to Jacksonville, FL to meet a man that had 2 EC12's and another guy with one. Anyway, Dennis called me on the way back home as excited as I've ever heard him explaining how much fun he had and that even his thumbs were red.*

*That was the start of Dennis's r/c sailing career. He built a Soling 1M and shortly thereafter moved from St. Augustine to Simpsonville, SC. When that happened, we had to find a r/c sailing club and the closest one was Queen City in Pineville, SC. That was quite a drive for me, 3 hours, and for Dennis it was 2 ½ hours but we did this drive every 2-3 weeks and loved it. Queen City raced Seawinds, not Soling 1M, giving us quite a bad handicap. It didn't take long for us to order 2 Seawinds to be competitive.*

*One afternoon I drove down from Brevard, NC to Dennis's home to get in some trial runs against each other with the Seawinds. We went to a mutual friend of ours from FL who lived on the lake in the development where Dennis lived. When we put our boats in the water, Dennis noticed a very small spider attaching itself to the mast crane on his boat. We sailed for several hours on that lake and at the end of the day, the spider was still there. Dennis looked at the spider, then at me, then back at the spider and back at me exclaiming that the spider was SMILING at him. I'm not so sure the spider was smiling but that's what Dennis claimed. He decided right then and there to name his Seawind 'SPYDER'.*

*Dennis later bought a Dragon 95. I had been sailing a Dragon in FL for a little while and this seemed the next logical step for Dennis. As was typical for him, he was doing research and came across Dragon Skins, looking for something special for his Dragon. He contacted them and worked with them to develop a custom-looking smiling SPYDER logo.*

*The original Seawind SPYDER and Dragon 95 SPYDER are still regularly sailing in GMYC events. In honor of Dennis, the club has decided to use the Smiling SPYDER as its logo, something I'm certain he would be very proud to know.*



*Fair winds, my friend, we miss you.  
Barry Sellick*



## From the Commodore

On behalf of the Greenville Model Yacht Club, I welcome your participation in our club. We are here to assist you, as needed, in learning all about model yacht racing, sailing, model yacht building and tuning your boat.

Our goal is to create a fun and learning environment in our training, race practices and regattas. I encourage you to attend as many race practices as you are able and to participate in our Regattas even though you may be new to the sport. Do not be afraid to make a mistake while 'practice racing' your boat. We all make them. It is how we learn and improve our skills.

Lastly, use this handbook to learn about the Greenville Model Yacht Club, sailing, racing and boat tuning. Ask any member any questions you may have about our club and sport.

We hope you will enjoy this sport as much as we do!

Ron Rash  
Founding Member  
Commodore 2020-2024  
Greenville Model Yacht Club

**\*\* Newly Appointed "SeaWind Region 3 Director"**



## GMYC History

The Greenville Model Yacht Club was founded by the late Dennis R Headberg. Dennis's dream was for the club to be a "Teaching Club" with a focus on "Having Fun." He wanted our members to enjoy a fun hobby with great people. As Dennis did, we will always focus on fellowship and good sportsmanship or "The Corinthian Spirit."

## GMYC Philosophy

The Corinthian Spirit refers to a sense of fair play, sportsmanship, and honor exhibited in competitive scenarios, particularly in sports. It emphasizes grace in winning and losing, respect for opponents, and adherence to ethical behavior over solely focusing on achieving victory at any cost. The term originates from ancient Greece, where Corinth hosted the Isthmian Games, sporting events where athletes competed not only for victory, but also to showcase their moral character and values. Today, the Corinthian Spirit is often invoked to encourage a balance between competitiveness and sportsmanship in various arenas beyond sports, emphasizing integrity, respect, and honor in all endeavors.

## GMYC Identity – Our Decal and Burgee

The 3 sailboats racing on the pennant represent the 3 classes we sail.

**D95, Seawind, and EC12 'Plus'.**

The double meaning of the 3 vessels on the decal and the burgee are the GMYC mantra.

**"Fun Fair Fellowship"** (i.e. learning)



## Membership Information

The Greenville Model Yacht Club is located in the Greenville-Spartanburg area of South Carolina and was established to promote Model Sailboat Racing in Upstate South Carolina and Mid-Southern North Carolina.

We race on Lake Cooley in Spartanburg County. The nearest exit is exit 68 off Interstate I-85. The address is 100 Cooley Dock Road, Inman South Carolina.

We enjoy camaraderie and the excitement of sailboat racing, while teaching young and old sailing and sportsmanship.

## The AMYA

We are a sanctioned club affiliated with the American Model Yacht Association, [www, theAMYA.org](http://www.theAMYA.org). Our club is AMYA #398. Please link yourself and your boat to: Class to Club #398. Current AMYA annual dues are \$50.

At the AMYA site, we encourage all members to register their boat/s with the class secretary of that boat's fleet. The registration of your boat will allow you to have a unique identifying number on your sails. To do this, contact the class secretary for your boat/s through the links you will find on the AMYA website. Most boat registrations cost \$7.00-\$10.00 as a one-time fee.

## GMYC

Currently, our club's (GMYC) annual dues are \$40.00. Annual dues are paid to the club treasurer. Those funds are used to support the website, purchase annual registration decals for the rescue boat, purchase race equipment, support club picnics and other small items for the club.



We have a racing schedule focusing on Dragonflite 95 and the Seawind Class. Another growing class is the EC 12, as well as other big boats. Our racing and Regatta schedule is established by the Board of Directors annually and is posted on our club website, [www.greenvilemodelyachtclub.com](http://www.greenvilemodelyachtclub.com).

In the event of a change in schedule due to weather, you will be notified by email.

Racing days start with a skippers meeting and then we all proceed to the launching area. We sail to the location of the racecourse. There will be a starting line that will be perpendicular to the wind direction. There will be a 2-minute count down timer used to start races. At the final second you will start and begin your upwind "*Beat*". Be careful not to be over the starting line early. There will be a "*Windward Mark*" directly upwind from that starting line. From the "*Windward Mark*" you will "*Reach*" to an "*Offset Mark*" where you will start your downwind leg to a "*Gate*" or "*Leeward Mark*" (Usually, two marks that you will go between) and then return to an "*Upwind Beat*" to the Start/Finish line. For further examples of racing/courses, visit the GMYA website.

All sailor's course and boats behaviors are governed by a set of rules set forth by United States Sailing. [www.ussailing.org](http://www.ussailing.org) The Racing Rules of Sailing govern sailboat racing around the world. We teach rules during skipper meetings, as well as on the water during practice.



## Contact Information Officers and Directors 2026 - 2027

**Commodore:** Ron Rash [elrrlr@msn.com](mailto:elrrlr@msn.com)

**Sec/Treasurer:** Joe Brothers [brothersjd51@gmail.com](mailto:brothersjd51@gmail.com)

**Web Master:** Paul Reynolds [paulrey58@hotmail.com](mailto:paulrey58@hotmail.com)

**Past Commodore:** Mike Doyle [unodoyle@icloud.com](mailto:unodoyle@icloud.com)



## 2025 Event Schedule



<u>Month</u>	<u>DF 95</u>	<u>SeawWind</u>	<u>Open Sail</u>
March	4th 18 <sup>th</sup>	11th 25 <sup>th</sup>	29th
April	1 <sup>st</sup> 15 <sup>th</sup>	8 <sup>th</sup> 22nd	
May	6 <sup>th</sup> 20 <sup>th</sup>	13 <sup>th</sup> 27th	
June	3 <sup>rd</sup> 17 <sup>th</sup>	10 <sup>th</sup> 24 <sup>th</sup>	
July	1 <sup>st</sup> 15 <sup>th</sup>	8 <sup>th</sup> 22 <sup>nd</sup>	29 <sup>th</sup>
August	5 <sup>th</sup> 19 <sup>th</sup>	12 <sup>th</sup> 26 <sup>th</sup>	
September	2 <sup>nd</sup> 16 <sup>th</sup>	9 <sup>th</sup> 23 <sup>rd</sup>	30th
October	7 <sup>th</sup> 21 <sup>st</sup>	14 <sup>th</sup> 28th	
November	4 <sup>th</sup> 18th	11th	
<b><u>Club Picnic</u></b>	<b>TBA</b>		



*\*\*All race day Skippers meetings are after the days racing.*

*Also found on [www.GreenvilleModelYachtClub.com](http://www.GreenvilleModelYachtClub.com)*

## **Class Boats We Race**

### **DF 95**

The DragonFlite 95 is a Restricted One Design boat that is meant to compete within a strict set of rules to ensure a true test of a skipper's ability to tune their boat and race it well.

### **Seawind**

A One Design Class sanctioned in April 2003. The Seawind is built by one manufacturer and sold through many outlets. The Kyosho Seawind, Seawind SE, and Carbon Seawind model yachts are meter- long replicas of a late 1990's early 2000's America's Cup yacht.

Length - 39.37 inches (one meter)

### **EC12**

Based on a 1962-63 vintage design for a full-size International 12 Meter. This medium-sized yacht's hull must be initially purchased from a licensed builder. Decks and sails are strictly controlled, purchased, or made from scratch. Almost all other equipment is up to the owner.

Length - 58 inches

### **Santa Barbara**

The Santa Barbara is an original design expressly for model yacht racing with the classic lines of a full-size yacht. This large sized yacht's hull and keel must be initially purchased from the manufacturer. Decks and sails are strictly controlled but may be purchased or made from scratch. Almost all other equipment is up to the owner.

Length – 70 inches

### **Star 45**

Based on the full-sized Star Class of Olympic and International fame. Builders are allowed variability in materials but dimensions are closely controlled.

Length – 45 inches



# Sailing Terms

## Basic Sailing Terms:

**Ease:** To let out the sails

**Trim:** To pull the sails in

**Luffing:** The flapping of the whole sail

**Flogging:** When sails are over eased

**Windward:** Towards the wind

**Leeward:** Away from the wind

**Starboard Tack:** The wind is coming from the starboard (right) side of the boat.

**Port Tack:** The wind is coming from the port (left) side of the boat.

## Basic Right of Way Rules:

**Starboard – Port:** Port-tack boat must keep clear of starboard-tack boat

**Leeward – Windward:** Windward boat must keep clear of leeward boat

**Clear Ahead:** Clear astern boat must keep clear of the clear ahead boat

**Tacking:** A boat "past head to wind" (i.e., "tacking") must keep clear of other boats

**Sail vs. Motor:** A boat using motor power must keep clear of a boat using sails.

## Points of Sail: Sailboat Maneuvers:

**Coming-About (Tacking):** In this maneuver, the bow of the boat goes through the eye of the wind as one changes from a close-hauled point-of-sail on one tack (direction) to a close-hauled point-of-sail on the other direction.

**Jibe:** In this maneuver, the stern of the boat goes through the eye of the wind as one changes from a broad reach on one tack (direction) to a broad reach in the other tack (direction).

**Head Up:** Change the boat's course toward the wind

**Head Down:** Change the boat's course away from the wind



**Bear Away / Fall Off:** To head away or off from the wind

### **Basic Boat Terms:**

**Bow:** Front of the boat

**Stern:** Back of the boat

**Starboard:** Boat's right side looking forward

**Port:** Boat's left side looking forward

**Deck:** Top of the boat which covers the hull

**Mast:** The main and highest spar in the center of the boat to which the jib and mainsail are attached.

**Boom:** The horizontal spar which extends aft (backwards) from the mast to which the foot of the mainsail abuts.

**Standing Rigging:** Supports the mast and includes the Backstay, Forestay, Shrouds

**Shrouds:** Cables which give lateral stability to the mast

**Spreaders:** Horizontal spars which spread the shrouds from the mast

**Forestay:** A line or cable which supports the mast from the bow of the boat

**Backstay:** A line or cable which supports the mast from the stern of the boat

**Boom Topping Lift:** A line which extends from the boom to the mast

**Running Rigging:** Lines which control and adjust the sails

**Halyard:** A line used to raise a sail. (Main sail halyard, jib halyard, spinnaker halyard)

**Sheet:** Line used to adjust a sail against the force of the wind. The mainsail has 1 sheet.

**Boom Vang:** A line which places downward tension on the boom.

**Outhaul:** Places backward tension on the clew of the mainsail. Flattens the lower one-third of the mainsail.

**Cleat:** A metal or plastic device used to secure a line. There are many types of cleats.

**Block:** A device used to change a line's direction.



## Sails:

**Mainsail:** The sail aft of the mast which is attached to the mast and the boom.

**Headsail/Jib:** The sail between the forestay and the mast. Also called the headsail. There are several sizes of Jibs.

## Parts of the Sail:

**Head:** Top of the Sail

**Tack:** Front lower corner of a sail

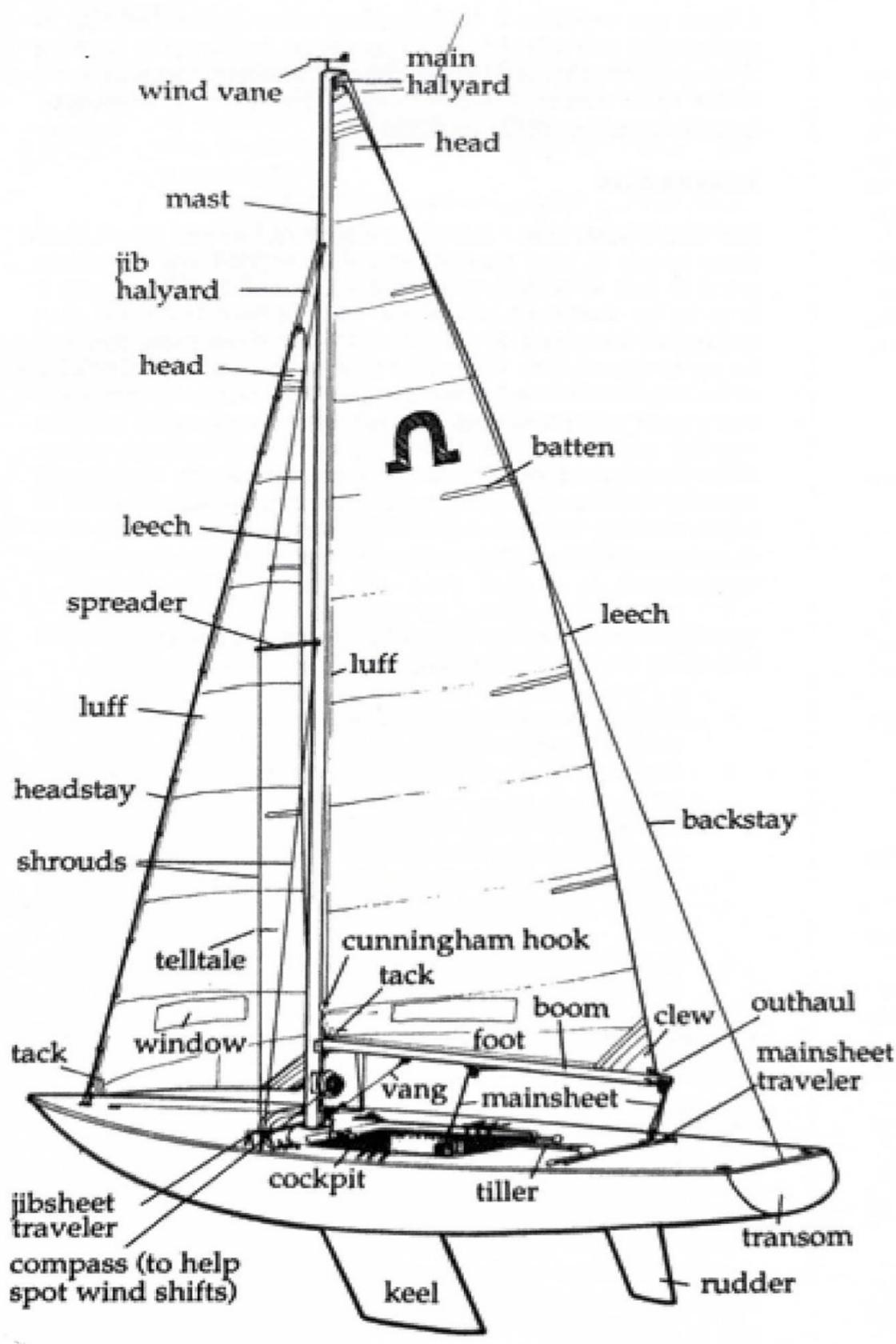
**Foot:** Bottom of the sail

**Luff:** Forward edge of a sail

**Leech:** Back edge of the sail

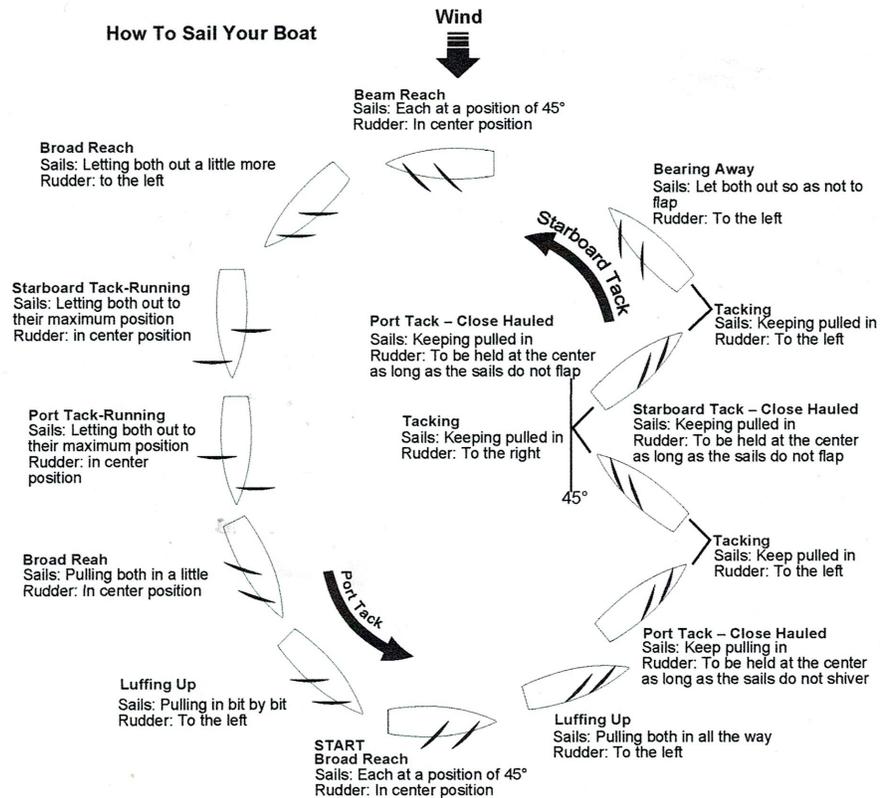
**Clew:** Bottom back corner of the sail





## BASIC SAILING TERMINOLOGY

Unlike propeller driven boats that you basically point and accelerate, sailboats present an interesting challenge. Sailing requires constant reaction to water movements, any wind gusts and any wind direction changes. These reactions then require adjustment of the rudder and sails in order to find the best possible course. There is no substitute for actual 'on-the-water' experience and after your first couple of outings you may want to read through this manual again in order to help you to gain a better understanding of the 'art' of sailing. While learning to sail, it is a good idea to pick up on as much sailing terminology as possible. This will make it easier to grasp some aspects of the sport.



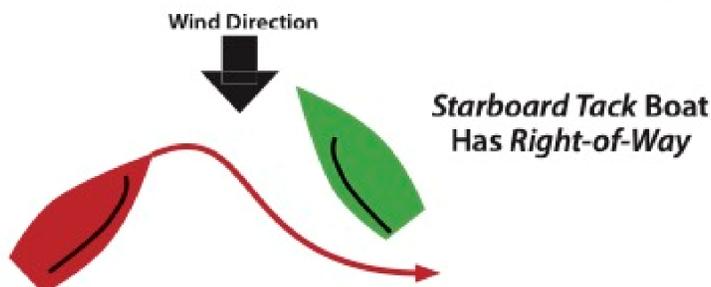
### IMPORTANT NOTICE

- Only sail your DragonFlite 95 in still bodies of water. Never sail it in running water such as rivers or tidal waters. If you loose control of the boat you could loose it forever!
- Never attempt to swim after a stalled or stuck boat. Wait patiently for the boat to drift ashore or be rescued.



# RACING RULES ALL RACERS SHOULD KNOW

By Ken Quant



In sailboat racing there are no out-of-bounds lines on the floor or referees to call fouls. The rules are self enforced and administered within the fleet. A basic understanding of just a few important rules will help ensure that everyone has fun and gets home safe.

The specifics of the sailboat racing rules are mind-numbingly detailed and written to cover all potential incidents. **DON'T WORRY** - You do not need to know everything about the rules to go out and have fun and be safe. By reading and understanding the following rules and terms, you should be able to get around the course without fouling another boat or causing an accident.

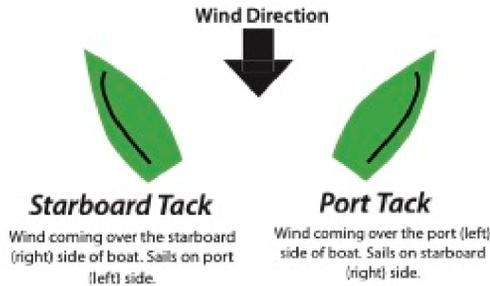
## These rules should only be thought of as a beginning!

To get an official copy of the complete rules, join US Sailing at [www.ussailing.org](http://www.ussailing.org) Members receive an official copy of the current rules as a membership benefit. For a plain language discussion of the rules, look into purchasing Dave Perry's book entitled "*Understanding the Racing Rules of Sailing*" at the same site.

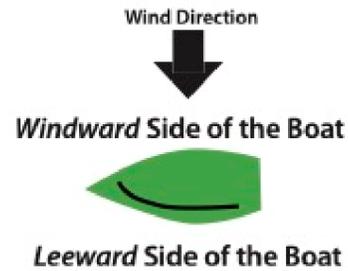
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# BASIC TERMS

## Starboard Tack vs Port Tack



## Windward vs Leeward



## Right-of-Way

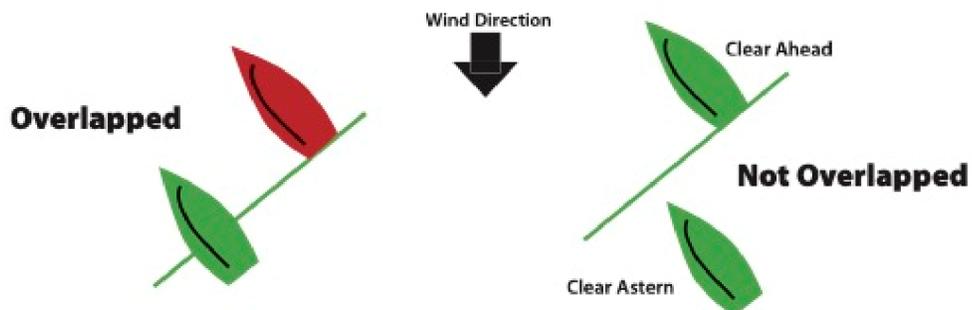
When one boat has the *Right-of-Way*, the other boats is required to *Keep Clear*.



**Avoiding Collisions - All boats are required by rule to avoid a collision if possible!**  
*Right-of-Way* is no excuse to cause a collision.

## Overlapped Boats

A boat *Overlapped* to *Leeward* has *Right-of-Way*. Overlaps are established from the transom.



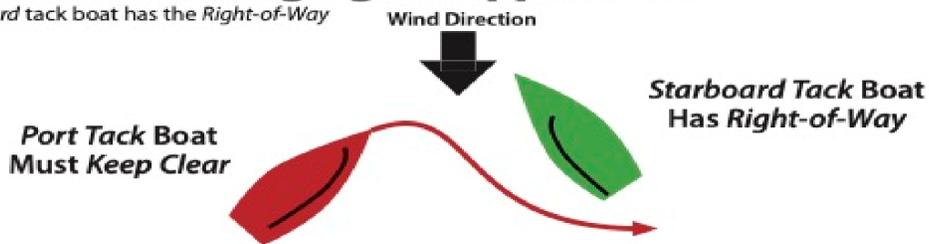
## Other Terms Used In This Discussion

- Close Hauled** - A boat sailing as close to the wind direction as possible
- Head-to-Wind** - A boat pointed straight into the wind. Sails will be luffing.
- Inside** - A boat positioned between the mark and another boat
- Outside** - A boat positioned with another boat between them and the mark
- Proper Course** - The course a boat would sail to get to the next mark as quickly as possible
- Room** - The space a boat needs to maneuver properly given conditions

# BASIC RIGHT-OF-WAY SITUATIONS

## Two Boats Converging on Opposite Tacks

A Starboard tack boat has the *Right-of-Way*



## Two Boats Overlapped Sailing On the Same Tack

Leeward boat has the *Right-of-Way*

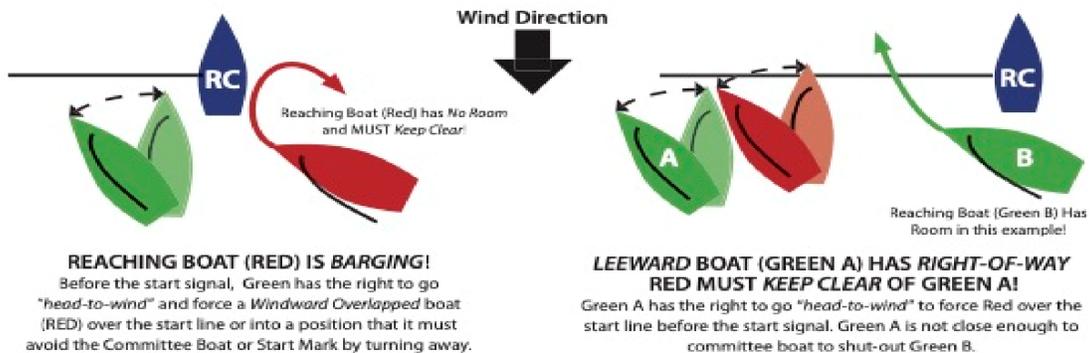


**NOTE:** This Rule applies for two boats near each other on the same tack. However, remember that any approaching *Starboard Tack* boat will have *Right-of-Way* over all *Port Tack* boats

## No Barging at Start

A *Leeward* boat has *Right-of-Way* at the start and is allowed to sail above her *Proper Course* to shut-out any boat heading into the start before the start signal. After the start signal, the *Leeward* boat must assume her proper course.

Basically, any boat to leeward that you can potentially hit should be considered a brick wall.

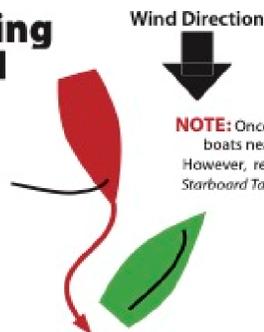


## BASIC RIGHT-OF-WAY SITUATIONS

### Same Tack Boats Converging on Different Points-of-Sail

#### Leeward Boat has Right-of-Way

In this example, both boats are on *Port Tack*. As they converge, the *windward* boat (Red), which is sailing downwind, has to *Keep Clear* of the *leeward* boat (Green).

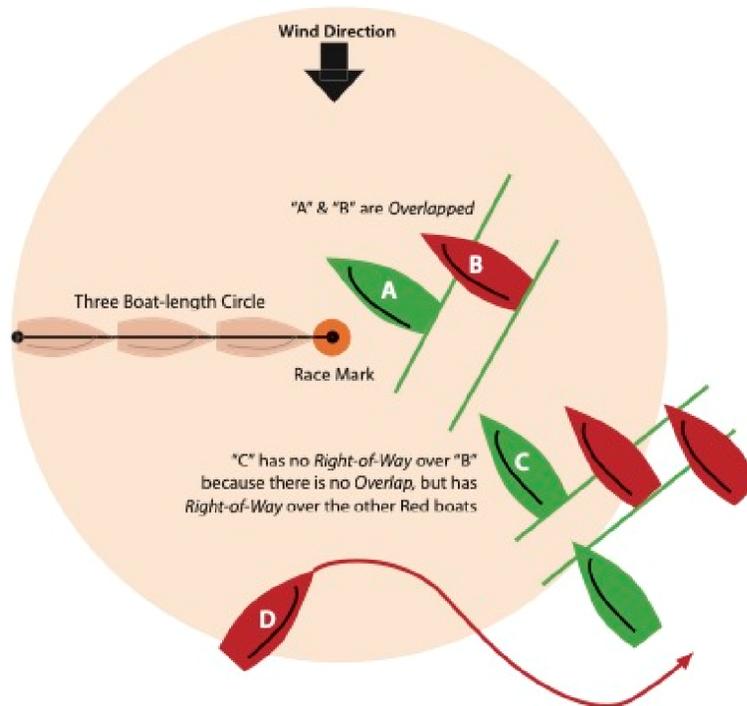


**NOTE:** Once again this rule applies for two boats near each other on the same tack. However, remember that any approaching *Starboard Tack* boat will have *Right-of-Way* over all *Port Tack* boats.

### Boats Converging at Mark

An *Inside* and *Overlapped* boat (Green A) within three boat-lengths of the mark has the *Right-of-Way*. In general, any *Overlapped* outside boat (Red B) must *Keep Clear* and give room to any boat between them and the mark.

A boat coming into the mark on *Port Tack* (Red D) must be able to complete its tack without obstructing the progress of an incoming *Starboard Tack* boat. If a *Starboard Tack* boat has to adjust course, you fouled them.



---

## **IF YOU ARE FOULED**

---

1. Avoid Contact!
2. Hail the word, "PROTEST" to the boat that you believe created the foul.
3. Raise a Red Protest Flag somewhere visible from your stern
4. At the finish, notify the Race Committee that you plan to issue a protest giving the name and/or sail number of the offending boat.
5. Once onshore, find a race official to fill out the appropriate paperwork.

## **IF YOU FOUL ANOTHER BOAT**

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1. Avoid Contact!
2. If you believe you fouled another boat, promptly get clear of all other boats and do two complete circles in the same direction consisting of two tacks and two gybes. Once the circles are complete, you can rejoin the race without further penalty.
3. If you do not think there was a foul, continue sailing the race with the understanding that you are racing under protest. Once the race is complete, and not necessarily on the same day, a protest committee will hear the incident to determine which boat was correct. If you are wrong, you will be Disqualified (DQ) from that race.

## **IF YOU HIT A MARK**

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1. Promptly get clear of all other boats and do one complete circle in the same direction consisting of one tack and one gybe.

**NOTE** - You have NO rights over any other boat during the time you are doing penalty circles. Make sure you are clear in both time and distance from all other racers during starting your circles.



1st July 2021 <b>DF95</b> <b>TUNING GUIDE</b> Phil Burgess - 0413 200 608 burgessfamily10@bigpond.com		MAST		HEADSAIL			MAINSAIL			
		Bow Bumper-hull joint to front crane hole (mm)	Gate Position (0 at front)	Foot Depth (mm)	Boom Angle - boom to mast centre (mm)	Twist - mid leech to mast (mm)	Foot Depth (mm)	Cun'ham - downhaul pressure	Boom Angle - boom to centre line (mm)	Twist - middle batten to backstay (mm)
Select the rig size for the lightest wind conditions for each race (i.e. Set up for the quieter lulls rather than gusts or bullets)										
These are <u>base</u> settings for the middle of each wind range. Learn to adjust depending on the boat's performance to achieve a balance setting involving little steering.										
Rig	Base	1135	5	25	55	60	30	None	35	60
<b>A</b> (up to 12Kts)	Light Winds & Flat Water	1131	4	28	45	50	30	None	40	45
	Small Waves	1136	6	25	35	50	25	None	15	45
	Big Waves	1133	7	30	50	75	40	None	33	65
<b>B</b> (10-15 kts)	Base	980	5	30	40	45	30	Slight	20	55
	Small Waves	980	6	30	38	32	30	Slight	20	45
	Big Waves	970	4	28	50	60	30	Slight	23	70
<b>C</b> (14-20kts)	Base	855	8	15	60	65	35	Firm	20	45
	Small Waves	850	8	15	40	25	20	Firm	15	45
	Big Waves	845	8	30	50	50	35	Firm	25	50
<b>D</b> (Over 20kts)	Base	790	8	15	60	65	35	Firm	20	45
	Small Waves	793	8	15	60	70	30	Firm	20	45
	Big Waves	793	8	15	55	75	20	Firm	25	55



## SeaWind Quick-Reference Tuning Guide

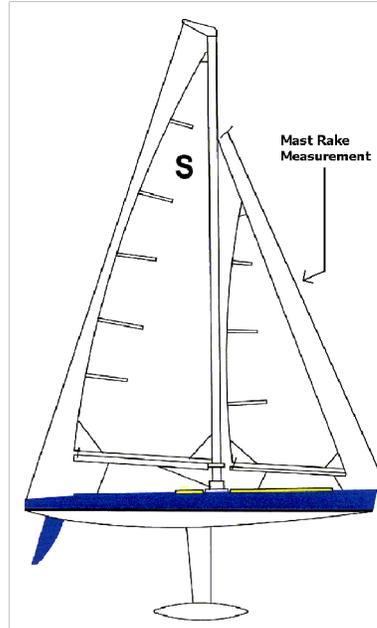
Congratulations on your purchase of a SeaWind Class racing yacht! This tuning reference guide is designed to give skippers new to RC sailboat racing some basic ideas toward the setup of their boat. They were compiled for the SeaWind Class Owners Association by the 2005 SeaWind National Champion, Doug Lanterman. These measurements are only supposed to provide a starting point for your own experimentation. **Tips for Measuring Mast Rake**

We've found that an easy alternative to using a measuring tape at the pond is to measure at home, and use a permanent marker to make marks on the jib halyard where it enters the fairlead on the mast for the various settings indicated. Then, at the pond adjust the jib halyard to line up with the marks you made (you may consider using different colored markers to more easily distinguish between settings). **Main Sail Twist**

A good starting point for main twist with the boat on its side is to have the middle batten (the third one from the bottom or top) parallel with the centerline of the boat, the bottom batten slightly pointing in and the top batten parallel with the boom. This setting is used for all conditions except when the wind is constantly above 7 knots.

### Sail Camber Using Inhaul Adjustments

To fully utilize this tuning guide—in particular, the main and jib sail camber settings, it is necessary to outfit your boat with 'inhaul line' adjusters within class rules. There are a variety of ways to do this, and for some good examples, please consult Doug Lanterman's full tuning guide article published in Model Yachting Magazine, and also available in Adobe PDF format on the SeaWind Resource Center web site. Measure camber using a tape measure.



Wind (Knots)	Light 0-2	Optimum 3-7	Strong 8-15	Extreme 15+
<b>Mast Rake</b> (top of forestay to tip of bow)	52" (1320 mm)	51 9/16" (1310 mm)	51 1/8" (1300 mm)	50 3/4" (1290 mm)
<b>Main Boom</b> (degrees from centerline)	5°	5°	8°	10°
<b>Jib Club</b> (degrees from centerline)	15°	15°	15°	15°
<b>Back Stay Tension</b>	Loose	Barely Tight (no mast Bend)	Tight (some mast bend)	Very Tight (flat main sail)
<b>Shroud Tension</b>	Set shroud tension to make mast straight from side to side when viewed from top with boat laying on either side.			
<b>*Main Sail Camber</b> (base of sail to boom centerline with boat laying on it's side.)	1" (25 mm)	1 3/16" (30 mm)	3/4" (20 mm)	3/16" (5 mm)
<b>*Jib Sail Camber</b> (base of sail to boom centerline with boat laying on it's side.)	9/16" (15 mm)	1" (25 mm)	3/8" (10 mm)	3/16" (5 mm)

# EC12 Tuning Guide

## Chesapeake Performance Models Shared with Public

*“When answering a question on the EC12 FB page about basic rig tuning my friend Ernest Freeland thought it would be interesting to take my reply and run it through AI to get a polished EC12 tuning guide. Came out pretty cool I think. Thanks E”*

### Basic Setup

#### Mast Positioning:

Mast Base Pin: Place 25.5” aft of the tip of the bow.

Mast Alignment: Ensure the mast is perpendicular to the deck.

Mast Bend: Set approximately 3/16” of mast bend for light winds.  
(This is optimized for John B Sails.)

#### Main Boom Adjustment:

When fully sheeted in, the main boom should be about 1/2” to 3/4” off the centerline, depending on your sailing style (pincher or footer).

#### Simulated Wind Conditions:

With the boat on its side, gravity should simulate about 4-5 knots of wind. Ensure there is some twist on the leach of the mainsail.

The jib, via the topping lift, should mimic the main sail's twist.

#### Jib Boom Position:

The projected aft centerline of the jib boom should be inside the chainplates.

#### Backstay Tension:

Apply very little backstay tension in light winds. Transverse wrinkles from the clew to about 1/3 up the mast indicate excessive mast bend beyond the mainsail luff curve.



## **Adjustments for Increasing Wind**

### **Backstay Tension:**

As the wind increases, add a little backstay tension to maintain sail shape.

### **Counteracting Mast Bend:**

Increase jumper tension to counteract the mast bend.

Move the lower shrouds aft by one hole in the chainplate to pull the mast back into column and increase headstay tension.

### **Jib Twist Adjustment:**

Check and adjust the jib twist (topping lift) as increased headstay tension may affect it.

Wrinkles in the jib can result from stretched sails or overnight jib halyard tension. Ensure the jib halyard adjustment bowsie is just slack when gently lifting the jib headboard. Adjust tension to remove any sag wrinkles.

## **Marking and Returning to Base Settings**

### **Base Settings:**

Mark your base settings to easily revert the boat back after experimenting with trim or different conditions.

By following this guide, you can ensure your EC12 Meter remote control sailboat is tuned effectively for various wind conditions, maintaining optimal sail shape and performance.



# Captain's Training/Racing Log

(Use this section to plan your practice sessions and regattas. Copy these pages for each practice and regatta)

Captain: \_\_\_\_\_ Date: \_\_\_\_\_

Boat Type: \_\_\_\_\_ Rig Used: \_\_\_\_\_

Sail Number: \_\_\_\_\_ Wind Direction: \_\_\_\_\_ Wind Speed: \_\_\_\_\_

Goals for campaign year \_\_\_\_\_

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Goals for today's training/regatta:

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Plan for today's practice/regatta:

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# Boat Tuning

Boom angle: \_\_\_\_\_ Jib angle: \_\_\_\_\_

Foot depth main: \_\_\_\_\_ Foot depth jib: \_\_\_\_\_

Main twist: \_\_\_\_\_ Jib twist: \_\_\_\_\_

Headstay length: \_\_\_\_\_

Race Result Tables: Practice \_\_\_\_\_ Regatta \_\_\_\_\_

Race #	R 1	R 2	R 3	R 4	R 5	R 6	R 7	R 8	R 9		R 10	R 11	R 12	R 13	R 14	R 15	R 16	R 17	
Start Position																			
Final Position																			
Points																			
# of Penalties																			

# Results

Did I get Good Starts? \_\_\_\_\_

Was my boat fast? \_\_\_\_\_

How was boat pointing? \_\_\_\_\_

Did I play shift well? \_\_\_\_\_

Were my tactics good? \_\_\_\_\_

How were my weather mark roundings? \_\_\_\_\_

How were my leeward mark roundings? \_\_\_\_\_



What I learned: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Improvements to work on in practice: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What I need help with: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Additional Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# Equipment Checklist

## Sailboat:

- Receiver batteries charged
- Extra battery charged
- Extra bowsies
- Rigging line
- Hatch cover tape
- A-Sail set
- B-Sail set
- Boat stand
- Instruction manual

## Electronic:

- Transmitter batteries charged
- Extra transmitter batteries charged
- Receiver batteries charged
- Chargers
- Power source for battery charging
- Instruction manuals

## Miscellaneous:

- Toolbox (see recommended tools/supply list)
- Lunch, water
- Chair
- Gloves
- First aid kit, Sunscreen, Meds



# Pre-Sailing Checklist

## Hull:

- Check for hull damage
- Check Rudder - centered
- Check Keelson/bulb - tighten
- Check hull rubber nose

## Deck:

- Check deck for damage
- Check all rigging deck connections
- Check rudder post connections
- Check drain plug
- Check mast hull connection
- Check mast position

## Sails:

- Check sails for wear
- Check sail mast, boom and jib boom
- Check all sail rigging
- Check boat setup - foot - twist-boom angles
- Check all rigging connections

## Electronics:

- Inspect all servo connections
- Check for charged receiver battery
- Boat on/off switch - ON
- Inspect all connections in hull
- Test Transmitter range - batteries charged

**Before boat goes in the water, make sure both transmitter and receiver are turned on!!!**



## Tool/Supply List

- Long Needle nose pliers
- Model makers pliers (set of small pliers)
- Small hobby screwdriver set
- Mini wrench set metric
- Thread Zapper
- Tweezers
- Small knife
- Zip ties (small)
- CA Glue (Krazy glue)
- Electrical tape
- Exacto/razor knife
- 6" metal metric ruler
- Mini (fishing) scissors
- 6' Taylors cloth measuring tape
- Braided fishing line 50lb. Test
- Black sharpie
- Manuals for: Boat and Charger
- Extra parts for your specific boat/s
- Servos for your boat
- Rigging line
- Bowsies
- Connecters
- Towel for drying boat
- Extra electronic connectors (battery, servos)
- Battery Charger
- Extra batteries (Charged)



## Resources

Greenville Model Yacht Club on Facebook

GMYC <https://www.greenvillemodelyachtclub.com>

AMYA <https://www.theamya.org>

Dragon Flight Class Owners <https://dragonflite95.us>

DF Racing World Information <https://dfracing.world>

International Radio Sailing Association <https://radiosailing.org>

US Sailing <https://www.ussailing.org>

Dragon Sailing <https://radiosailing.net>

Dragon Skins <https://www.dragonskinsusa.com/df95>

SeaWind <https://kyoshoamerica.com/seawind>

EC12 [www.ec12.org](http://www.ec12.org)

Horizon Hobby <https://www.horizonhobby.com>

AMain Hobbies <https://www.ainhobbies.com>

NOTE:

GMYC By-Laws <https://www.greenvillemodelyachtclub.com>



# Notes

