

Using These Theory Notes

These notes are not intended to totally cover the theory in each stage but instead to provide a guide for students of the RYA Youth Sailing Scheme to supplement their learning from courses and activities.



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Ropework

Figure of Eight



- Also known as a 'stopper knot'.
- Used commonly to stop the mainsheet coming out of the block.

Watch a Figure of Eight knot tutorial here:

• Ropework – Figure of 8 Tutorial

Cleat Knot

• Commonly used to tie boats to trailers and to cleat halyards on the Fevas, Vibes Quests etc.



Sailing techniques & manoeuvres

Can be responsive crew under instruction

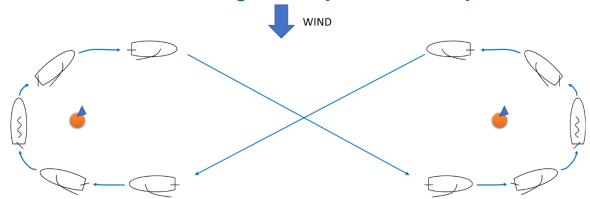
- It is important for the person helming (steering) the boat that they communicate with the crew.
- The crew helps balance the boat and warn the person helming (steering) of any oncoming boats etc.
- Therefore, we always recommend that whoever is helming the boat counts down when they Tack or Gybe (Turn the boat) i.e. Tacking in 3,2,1...

Can steer when sailing and being towed

- Firstly, let out the mainsheet and let the sail flap. If your boat has a jib, then un-cleat that too.
- The boom is now going to swing in the wind, so make sure you keep your head down to avoid getting a bang to the head.

• The person helming (steering) the boat should now steer/point the boat towards the engine of the instructors boat.

Can steer on a reach and go about (reach to reach)



- The sails on the boat should be set half-way out as the boat is positioned on a Beam Reach.
- At the two marks ensure you tack at them.
 - o Tacking is a method to turn the boat.
 - One way to remember which way is a tack, is that to tack a boat you must **push the tiller towards the boom** and NOT towards yourself.
 - During a tack the boat goes head to wind momentarily which causes the sail to flap and depower slightly, then eventually fills with wind again.
 - While tacking the boat ensure clear communication with the other people on your boat and make sure to mind your head as the boom travels across the boat.
 - Also look around before you tack to make sure you don't crash into another boat.
- The course should look like a figure of eight.
- While on the figure of eight course watch out for other boats and make sure you give space between your boat and other boats to avoid crashing.

Understands the effect of basic boat controls

- The main sail on the boat is the main way to power up and depower your boat. For example, when the boat is on a reach, your sails should be half-way out. If on a reach and the boat becomes overpowered, then you can let your mainsheet out a little and depower the boat.
- More information on boat controls will be covered in Stage 2. This is also known as the 'Five Essentials'.

Understands the basic principles of stopping, controlling speed and getting out of irons

- To an extent the only way to stop a boat fully is when they are tied up or on a trailer. However, we can slow a boat down.
- To slow down the boat:
 - 1. Let the mainsheet out a little to depower the main sail. NOTE: When on a 'Run' or "Broad Reach' going down-wind you need to pull in the mainsheet.
 - 2. If your boat has a jib, then let that out first before letting your mainsheet out.

Can call for assistance

- If you need to get an instructor's attention on the water, the main way to do this is to call us
- A few reasons you may need to call us over is:
 - 1. For clarification on the current session.
 - 2. For assistance to fix something.
 - 3. If someone is feeling unwell etc.

Can put on personal buoyancy correctly

- Firstly, ensure you have the correct buoyancy aid for your age and height.
- The instructors will ensure you have the correct one for your first few sessions until you become familiar with the buoyancy aids, with regards to the sizing and how to correctly adjust them.
- Ensure all straps are tightened to a tight but comfortable fit.
- Buoyancy aids are designed for watersports such as dinghy sailing, windsurfing, kayaking.
- The buoyancy aid provides the person wearing it the mobility to swim in the water. Whereas a lifejacket restricts movement once it's been inflated.

Buoyancy Aid



Lifejacket



Capsize recovery

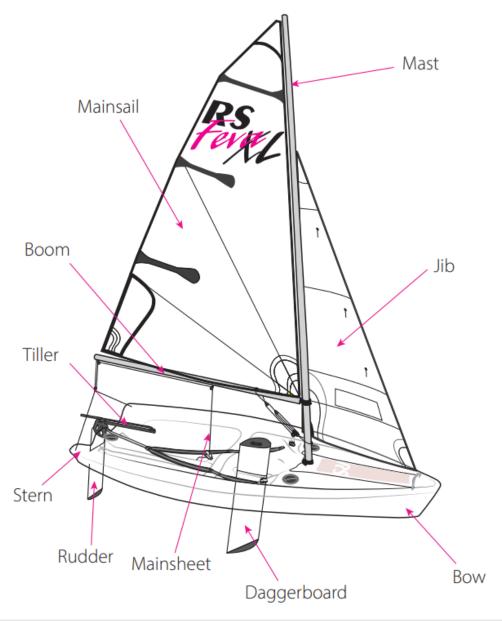
Understands the importance of staying with the boat.

- Generally, it is easier to spot a boat in the distance than someone trying to swim to land.
- Your boat will float and keep you out of the water and warmer than being in the water.
- On all the sessions provided by the INSS a safety boat will always be out keeping an eye on all the boats and can assist if you require help.

Sailing Background & Theory

Can name basic parts of a boat

For example; hull, mast, rudder, tiller, centreboard, sheets



The boat depicted is the RS Feva. Our sister company, Irish National Marine Services, is the RS Sailing agent in Ireland. If you're interested in the Feva, or any of the RS Range, check out RS Sailing's website, www.rssailing.com. If you'd like more information, contact Irish National Marine Services.

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What each part does...

- Mainsail: The mainsail of a boat is often the largest sail
- **Jib:** A foresail (headsail), that is in front of the mast.
- **Boom**: Is a spar that is along the bottom (foot) of the mainsail.

- **Bow:** The forward part of the boat.
- Hull: The underbody of a boat.
- Mast: A pole made from aluminium, carbon fiber or wood. The front (luff) of the mainsail is next to the mast.
- **Mainsheet**: A single line/rope used to control the main.
- Jib Sheet: A line/rope that controls the jib, with one end tied to the clew of the jib.
- Outhaul: A sail control that attaches to the mainsail and pulls the main to the end of the boom.
- Rudder: In the water that is used to control the direction of the boat.
- **Tiller**: Attached to the ruder and helps to steer the boat.

Understands what action to take to help those in distress

- If someone is in distress the first thing would be to call for assistance from the instructor of the group.
- Also let you sail out and slow the boat down. Do keep in mind then your sail will begin to flap so keep your head down.
- The main thing to do is remain calm and wait for your instructor who will take care of the rest.

Understands local hazards

A local hazard when sailing is considered something that could cause damage to the boat or a disruption to a sailing area. For example, in Dun Laoghaire the following are considered local hazards:

- The rocks at the back beach and the rocks along the pier walls.
- Fishing pots; the line/rope can get stuck on the daggerboard/centreboard of the boats.
- The slipway can be a local hazard at low tide when it gets a little bit slippery.

Away from Dun Laoghaire, the presence of the following could include local hazards:

- Ferry and shipping operations
- Bridges and powerlines running over water
- Areas of particularly strong tidal flow

Understands how to prepare for a tow

- Firstly, let out the mainsheet and let the sail flap. If the boat has a jib, then uncleat that too.
- The boom is now going to swing in the wind, so make sure you keep your head down to avoid getting a bang to the head.
- The person helming (steering) the boat should now steer/point the boat towards the engine of the instructors boat.

Clothing and equipment

- Understands personal safety and knows what to wear for sailing (including head and footwear)
- You might consider wearing sunglasses all year round to help prevent the glare and UV.

• Even in Ireland you can get burned all year round so would definitely recommend wearing suncream while on the water.

Summer/ Hot weather sailing	Winter/ Cold weather sailing
Suncream	Suncream
Long Wetsuit	Long Wetsuit
Сар	Wind Breaker/ Kag
Sunglasses	Hat
Swimming togs for under the wetsuit	Swimming togs and thermals
Booties/suitable footwear i.e. no flip flops	Gloves (preferably Neoprene gloves)
Buoyancy Aid	Sunglasses
	Booties/Suitable footwear i.e. no flip flops
	Buoyancy Aid

Meteorology

Has knowledge of wind direction. There are a few methods to obtain the wind direction:

- o Flags
- o Burgees at the top of yachts.
- o Single Moored boats these are boats that are only tied up from the front/bow of the boat and will point into the wind.