

Welcome to the National Twelve Owners' Association



Dear National 12 sailor

Welcome to the National 12 Owners' Association. The Association organises many events and activities during the year and I would like to take this opportunity to introduce these to you.

Coaching sessions - these are aimed at introducing the basics of 12 sailing and improving your skills. Sessions cover boat handling, setting up the rig, boat speed, crew work and racing tactics. There are several coaching sessions across the country (dates and venues are shown in the fixtures list), please come along and get the most out of your 12.

The **GILL National series** - we organise a national series of events which aim to provide good racing and an enjoyable weekend whether you are new to racing or a seasoned open meeting sailor. These events include talks on different aspects of 12 sailing and family friendly social events. There are additional prizes for family teams, young sailors and none-double-bottom boats sailing for the Admirals Cup. Again check out the fixtures list to find the events near you - these events are well worth travelling for.

There are also lots of **regional open meetings** across the country which include both single day and weekend events. There are bound to be several near you, wherever you are in the country. Complete enough and you will qualify for the overall regional series.

The **Championships** - Burton Week is the annual championships. It is always a fantastic week with plenty of sailing, lots of fun off the water and prizes for the whole fleet including; new helms, lady helms, young sailors, Admirals Cup boats and many more . . .

www.national12.org - there is a wealth of information on the class website including

- Discussion group: ask other people in the class what they think about . . .
- Event reports and details of fixtures including directions to clubs.
- Race & series results
- Tips and tricks

The **e-mail group** - the "smartgroup" e-mail list will keep you in touch with what's going on in the class (e.g. details of open meetings, things for sale etc). The e-mail list is moderated so you won't receive spam - you can easily join up from the website.

As an Association we are always interested to hear the views of members so if you have any ideas or comments on any aspects of the class then please contact us.

I hope this pack helps you get started sailing your National 12.

Enjoy your Twelve sailing

Class Chairman

National Twelve – starters guide

The Twelve is a light responsive dinghy that rewards good crew team work with great sailing. They are also easy to sail with a vast range of crew weights and strengths. The short 12' hull means that fore – aft trim is important to avoid nose diving or dragging the stern and the wide beam (up to 2m) means side to side heel is critical. The amount of nose diving or heel will depend on the design. In light winds the Twelve will slice through the water effortlessly and in strong winds they will plane downwind and fly up wind. Here are some basic hints to enable you to get started in a Twelve, this touches on crew work and also the numerous controls on the Twelve which enable the power of the rig to be controlled.

OVERVIEW OF RIG & SAIL CONTROLS

Outhaul

Controls the fullness (power) in the bottom half of the main sail

Cunningham

Controls the fullness in the top half of the main sail

Kicker

Controls the leech tension in the main sail, in particular the top of the sail this is set in conjunction with the top tell tale

Top tell tale

Indicates how the wind is coming off the top of the sail, this is quite long on the Twelve so kicking strap tension is critical. Sensitivity will vary depending on whether you have an aluminium or carbon mast

Shrouds

Provide sideways stiffness for the rig, and also encourage fore-aft bend which is controlled in conjunction with the mast controls.

Jib halyard

Adjusts the mast rake, letting it off rakes the mast back (reduces power), pulling it on rakes it forwards

Mast control

Ram / Lowers / Strut – controls the bend in the mast, more bend = less power.

Dangly Pole

Used to provide extra jib power down wind by tightening the jib leech



In general the following can be done to control the power in the rig at different points of sailing.

	UPWIND	DOWNWIND
INCREASE POWER	Straighten mast by pulling on lowers or mast ram	Straighten mast using the lowers Release cunningham, outhaul and leeward shroud Rake mast forwards Use dangly pole
DECREASE POWER	Bend mast by releasing lowers/mast ram Pull on cunningham Rake mast back by easing forestay	Pull on leeward shroud Pull on outhaul

UPWIND

Controls: SET POWER TO SUIT CONDITIONS

- Set rig power to suit wind strength and crew weight. As soon as helm and crew are fully hiked out you should start to de-power. This keeps the rig efficient as letting the sails flog causes turbulence. It is generally best to de-power using the controls in the following order:
 1. Release mast ram or lowers to allow mast bend
 2. Rake mast back
 3. Use more kicker
 4. Finally apply Cunningham
- Always set the Kicker to keep the top tell tale streaming.

Crew work

- Helm should sit comfortably on deck and the crew should move around to balance the boat.
- The helm and crew should keep an eye on the stern wave and sit forwards to avoid dragging the transom, a nice clean flow off the back of the boat is desirable. Also helm and crew sit together to eliminate any 'rocking horse' effect.
- Helm should not use much rudder movement
- Sail the Twelve flat – absolutely flat by playing the mainsheet, . . .however good you are you can always sail flatter!

TACKING

Twelves roll tack beautifully in light winds but can be tricky in strong winds. When tacking use as little rudder as possible, start the tack using a little rudder initially, more rudder movement can be used during the middle on the tack.

Crew work

Roll tack in light winds:

1. Helm pushes the tiller away to initiate the tack
2. As the boat goes through head to wind the crew should move towards the helm to roll the boat into the wind until the deck touches the water.
3. The helm crosses the boat in one smooth movement as the boom comes over and lets out a couple of feet of mainsheet.
4. The helm pulls the boat up on the new tack bringing the boat upright and pulling in the mainsheet at the same time – this helps to flick the top batten round.
5. The crew simultaneously balances the boat either providing assistance to or counter-acting the helm. The jib should be pulled in smoothly at the same time as the main, pulling in the jib early will stall the sails.

Flat tack in strong winds:

The steps are the same as for light winds except the crew does not roll the boat into the wind, instead the helm and crew move together across the boat.

REACHING

Reaching is the fastest and most exhilarating point of sailing in a Twelve. To get the most you will need the rig set to its most powerful.

Controls: MAX POWER

- Lowers or mast ram on
- Leeward shroud off (if adjustable)
- Outhaul off
- Cunningham off
- Kicker – so the top telltale streams nicely
- Centre board $\frac{1}{2}$ up
- Dangly pole out to provide jib leech tension.

Crew work

Keep the boat flat. Helm and crew should be positioned as follows; in planing conditions you should be aiming for the boat to plane level sitting back in the boat to prevent nose diving, in light winds you will be looking to sit forwards to prevent the transom dragging. Crew needs to watch the jib all the time to ensure it is



constantly trimmed for the best effect. Helm should be playing the main to ensure that maximum effect is made of all gusts.

Nose diving; if the nose starts to dig then two things can be done,

1. Pump the jib
2. Point the boat up into the wind.

It is better to avoid the nose dive in the first place, this may require the helm and crew to move a long way back in the boat – (the helm's bum hanging off the transom and crew's back touching the tiller is a common sight in strong winds) – keep alert though as if the wind dies you will need to move forwards quickly to prevent the transom dragging.

RUNNING

In light winds the Twelve will slice efficiently downwind. In strong winds team work and quick reactions are vital.

Controls: MAX POWER

The controls should be set the same as for reaching with the kicker eased slightly.

Team work

Helm and crew sit as far apart as possible (side to side, directly opposite each other as shown in the photo), this makes the boat more stable. The boat should be sailed flat or slightly heeled to windward to raise the lower part of the sail into better wind. The fore-aft trim is set the same as for reaching and as gusts hit the helm and crew should move back together to prevent nose diving.

PHOTO: Helm and crew sit on opposite decks as far apart as possible to stabilize the boat., dangly pole out to goose wing the jib, outhaul eased and shroud off to allow the boom as far forwards as possible



GYBING

In light winds the Twelve will gybe effortlessly and come out as fast as she starts. However, in strong winds, good team work is required in order to keep both helm and crew dry. Very different techniques are needed for light and strong winds.

Roll gybe in light winds

1. Pull the leeward shroud back on
2. Crew moves towards the helm to heel the boat to windward to initiate the roll – the more heel the better (the deck should be touching the water)
3. Helm uses a small amount of rudder to help the boat turn.
4. Helm crosses the boat as the boom comes over
5. Helm pulls the boat up and pulls in a few feet of mainsheet to help the top batten flick. As with roll tacking the crew moves to either aid or compensate for the helm's movement.

Gybe flat in strong winds

1. Pull on the leeward shroud
2. Leave the centre board half up (this reduces the pressure on the rig as the boat is pulled up on the new tack)
3. Helm pulls in a couple of feet of main sheet to pull the boom off the shroud
4. Crew generally moves to the middle of the boat and stays there during the gybe
5. Helm starts the turn and uses a small amount of windward heel to help turn the boat
6. Helm crosses the boat as the boom swings across
7. Helm ensures the rudder is in the centre as the boom hits the other side - this is best if the tiller extension is held firm against the deck to keep the rudder in the middle
8. Crew now waits to see which way the boat is going to heel and reacts quickly to keep the boat flat and prevent rolling to windward (death roll) or leeward (broach). Watch for the nose dive on exit from gybe particularly if crew has moved forwards for the gybe but does not move back quickly enough. Pulling in the jib quickly on the new side can help avoid this.

These are some guidelines to help you get started. As you practise you will work out new and no doubt better ways of working as a team in your Twelve. To help you practice these skills why not come along to a National 12 coaching day? Once you have mastered the basics, try some of the more advanced techniques as described in the other articles.

Graham Camm & Amelia Hall