

On our club sailing days you might find one of these three classes ;

1) International 1 Metre Class..

(A small fast yacht which planes readily downwind.)

These yachts have strict limitations on the rig design but have very few restrictions on hull shape other than the minimum weight (4.0kg) and the maximum hull length of one metre. In the 1 Metre class you will see many different hull shapes. These yachts are sailed to the same rule all over the world with world championships held annually. One such World Championship was held in Wellington (and run by the WYRC) in 1997, with a fleet of 60 yachts.

Competitive second hand 1 Metre yachts typically change hands for between \$500 and \$3000 for the leading edge international versions. One of our members (Mike Garden) builds a leading edge model that has won the NZ Championship. Building you own yacht from scratch is encouraged within the rules and some boats have built for quite minimal cost by those with the skill and patience to do so.

For further information contact:

Noel Bradbury (04) 566 4318 or email: noelbrad@xtra.co.nz

2) EC12

(A large traditional yacht which looks very graceful on the water)

These yachts are modelled on the 1964 Americas cup tank-testing models and show the characteristics of large yacht thinking of the day. This is a strict **one-design** class with tight controls over rig and hull. The hulls (which are serial numbered) are all fibreglass and can only be obtained new from an approved builder. The new hulls are bare and are finished off by the owner. Second hand EC12's can be purchased from \$200, with tidy yachts costing between \$500 to \$900. A new boat with all the best gear and sails may cost \$1500 to get in the water. The great thing about this class is the close racing with the oldest boat in New Zealand (Long Tack) still able to win races against the newest yachts.

For further information contact:

Ian Hull-Brown (04) 479 4111 email: sailing@goldenhorn.co.nz

3) AC15 (An exact replica of Team New Zealand's 1995 Americas Cup winning yacht)

These are our largest and fastest yachts and provide spectacular racing and amazing downwind speed in stronger winds. Members of this club have developed these boats from scratch primarily with match racing in mind, and many of the yachts to date have followed the colour schemes of America's cup yachts. They are built exclusively by one of our members and now have a rigid one-design set of rules, which are administered by our club. They are available for sale through the WYRC. Potential purchasers are encouraged to first gain some experience in another radio-controlled class within our club. Price on Application.

For further information contact:

Con Renner (04) 566 8835 email conr@xtra.co.nz

RADIO CONTROLLED SAILBOAT RACING

WELLINGTON RADIO YACHT CLUB (Inc)



Radio Controlled Sailing in the Wellington Area

Since June 1984 the Wellington Radio Yacht Club (Inc) (WRYC) has been racing model sailboats locally. Our club is one of many from all across New Zealand that is affiliated to the New Zealand Radio Yachting Association (NZRYA) which in turn is affiliated to Yachting New Zealand. (YNZ) Every year National regattas are sailed, inviting Radio Controlled sailors from other areas to join in.

Our club meets to sail, season and weather permitting, every Sunday afternoon throughout the year at about 1.00 PM. We alternate our programme on Sundays between racing and *Club Days* (these are to allow members to tune and practice with their boats) On Race days we schedule in about 7 races and finish up for the day by 4.30PM. The layout of the course marks, rules and the procedure used when racing are identical to those used by sailors of full-scale sailboats.

The location of our sailing sites alternate between Seaview Marina (Lower Hutt) and Whitby Lake (Paremata).

The Club meets at the Lowry Bay Yacht Club, Seaview Marina on the first Tuesday in each month commencing at 7.00p. m..

You are invited to come and visit us. We look forward to handing you a transmitter and showing you what fun it is to sail by radio-control.

The classes of boats our club sails are described on page 8.

Type of Club Membership:

Membership in the WRYC is open to anyone who shares the goals of the organization. There are three categories of Membership: Full, Superannuate and Special, Country or Junior. Membership provides eligibility for entry into all the Club's events, one vote in the affairs of the organization (Country or Special excepted) and other benefits.

Subscriptions: (currently) Full \$50

Superannuate \$40

Special etc \$20

(Additional \$10 for NZRYA membership)

For further Information Contact:

Colin Anderson (04) 527 8601 Or

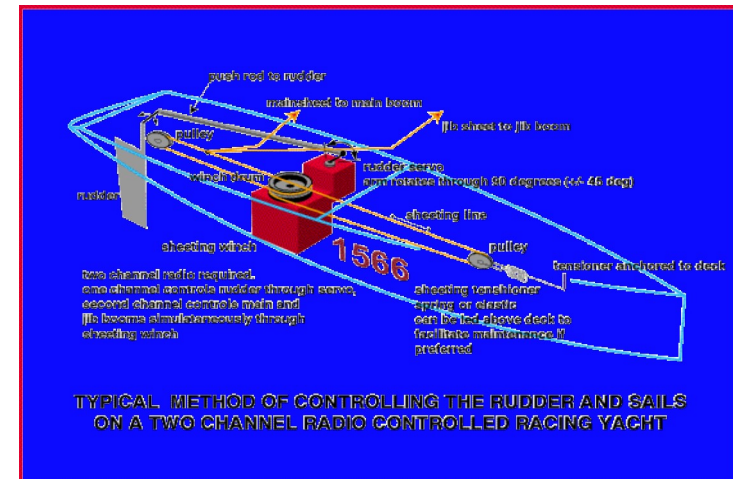
Email: colin.anderson@xtra.co.nz

Left 'stick' moves up and down to control the mainsail and jib

Right 'stick' moves left and right to control the rudder



band (34 transmitting channels). This permits, in theory, a total of 46 boats to sail imultaneously on one stretch of water. However, regattas are usually organised in such a way that no more than 18 boats compete in any one race. This does not restrict the number of entries, as a multiple fleet system, with promotion and relegation is employed when regatta entries exceed 18 boats.



TYPICAL METHOD OF CONTROLLING THE RUDDER AND SAILS ON A TWO CHANNEL RADIO CONTROLLED RACING YACHT

Feel Up to the Challenge? Then What Next?

'Phone John McPherson (04) 568 3237,

come to a Meeting;

visit the WRYC web site;

<http://www.wryc.wellington.net.nz>

or the NZRYA Site at <http://radioyachting.com>

to find a club in your area.

Happy Radio Sailing – It's a great sport

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dead downwind on a 'run' to the leeward buoy before beginning their final beat to the finish line.

How to Win Races

- To win races a number of quite different 'qualities' are required:-
- A fast boat
- Good quality sails and an understanding of how they work (read a good book on the subject)
- A sound knowledge of the racing rules (buy a good book - like Paul Elvstrom explains the Racing Rules of Sailing)
- An understanding of race tactics (there are some good full-size yacht racing videos available)
- Optimum rig/sail trim for all 'legs' of the course
- A good start - i.e. on time and in a good position when the start horn sounds
- Lots and lots of practice
- Some luck

Radio Control

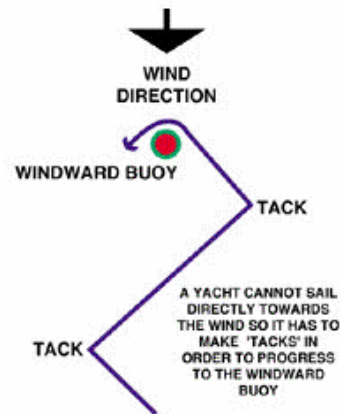
Yachts are controlled by a handheld radio transmitter (see illustration) sending instructions to an onboard receiver. The radio signals are used to control a variety of functions depending on the class of yacht being sailed.

For example, the International One Metre Class allows only the rudder and sails (main and jib together) to be controllable from the shore (see control diagram).

Other classes allow more controls including sail trimming devices such as backstay adjustment or, in some classes, even a spinnaker. Two control frequency bands are commonly used for yacht racing in NZ.

These are the 27MHz band (12 transmitting channels) and the 40MHz

DIAGRAM III



An Introduction to Radio Controlled Yacht Racing

Are you up to a real challenge?

Racing high performance radio controlled yachts is an exciting, challenging and very satisfying pastime. Getting involved is easy if you follow a couple of simple guidelines, like joining a local club and seeking advice from a competent member.

The sport of radio controlled yacht racing is made up of three distinctive elements - designing, building and racing. For those not wanting, or able, to design and build their own yacht, these stages can be circumnavigated by purchasing an already completed yacht either from a commercial builder or, second-hand, from a club member.



On the left is shown a One Metre yacht built from the Robbe Windstar kit (available from Mike Brown (04)565 0670) for those wanting to build and race but not design. The design of all classes of yacht are strictly controlled by 'rules' - this stage therefore should only be undertaken by those with some yacht design knowledge and a copy of the rules.

Who Looks After the Sport?

The sport is administered in NZ. by the New Zealand Radio Yachting Association (NZRYA), affiliated to the International Sailing Federation, (ISAF), Radio Sailing Division.

The NZ's model yachting association Web address is:
<http://www.Radioyachting.com/NZRYA.htm>

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The Rules

Racing follows the same rules (The Racing Rules for Sailing 2005-2008) as those used in full sized yacht racing - with a few minor changes to account for the fact that helmsmen are not in the yacht but on the shore.



The Course

Most races follow the standard 'Olympic' course (see diagram I) using three buoys set out in a triangular arrangement as shown. The second illustration (diagram II) shows how an arrangement of eight buoys allows a course to be set for any wind direction. This layout was used in the 1968 Acapulco Olympics. The purpose of the 'Olympic' layout is to ensure skippers' skills are tested on all points (directions to the wind) of sailing.

The Beat to Windward

After the start skippers are faced with a 'beat' against the wind which - will involve tacking the yacht a number of times before reaching the windward buoy. The course therefore actually sailed to the windward

buoy takes the form of a zig zag and not a straight line as shown (see diagram III). The beat is a very tactical part of the course - many places can be won or lost on the beat.

The Broad Reach

After rounding the windward buoy the yachts sail a 'broad reach' which is the fastest direction, relative to the wind, a yacht can sail.

The Gybe

At the wing buoy the yacht has to 'gybe', which in full sized yachting the one of the most dangerous manoeuvres a yacht can make. The manoeuvre requires great skill to effect safely and efficiently. A gybe causes the main sail to 'flip' violently from one side of the yacht to the other.

The Second Reach and Beat

The gybe is followed by another broad reach down to the leeward buoy where the yacht begins another beat up to the windward buoy.

The Run and Final Beat to the Finish

After rounding the windward buoy a second time the yacht now sails

DIAGRAM I

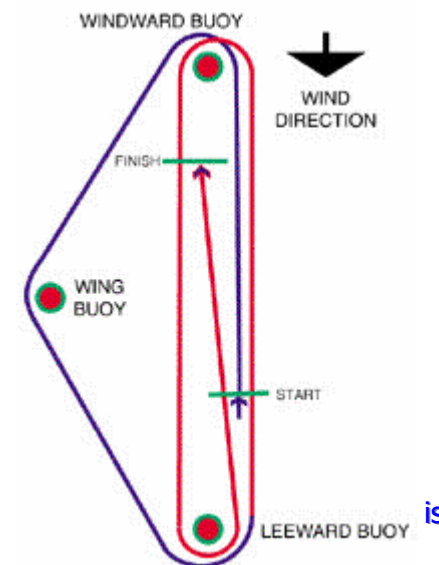
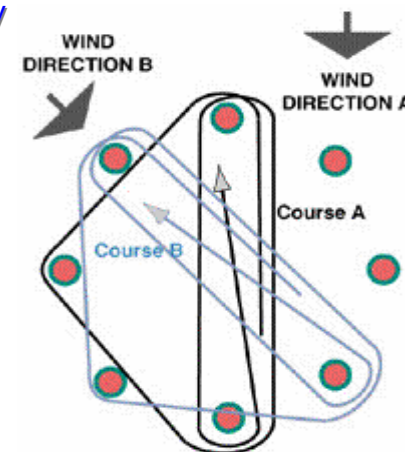


DIAGRAM II



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