



# 'UPWIND'

October 2010

THE HOME OF UNMODIFIED RADIO YACHTS.  
KYOSHO SEAWINDS - TAMIYA YAMAHAS - FAIRWINDS -  
WHITBREAD 60s – ONE CLASS DESIGNS



## INVITATION 2010 ANNUAL MEETING AND PRIZE GIVING

**Date:** Sunday 14<sup>th</sup> November 2010

**Time:** 3:00pm (after sailing starting at 1:00pm)

**Where:** AAFL club rooms,  
Onepoto Domain – 'The Pond'

**Buffet meal:** Fingerfood

**Cost:** No cost – club is funding the social  
Partners and guests most welcome

**Door ticket:** \$ 5.00 per ticket -  
Raffle prize draws

**Drinks:** Soft drinks provided

**Committee:** Nominations and volunteers are  
required for the 2011 season  
committee. All positions available

For catering purposes, please RSVP to  
**Peter Andrews by November 5<sup>th</sup>**

**Phone:** 479 4894

**Email:** [pfa@xtra.co.nz](mailto:pfa@xtra.co.nz)

This years annual meeting, AGM and prize giving will be held on Sunday November 14<sup>th</sup> in the AAFL club rooms by the side of the Onepoto Domain pond.

The meeting commences at 3.00pm which is at the conclusion of the days sailing. Sailing is due to start at 1.00pm – weather permitting.

Club funds are to be used to pay for the use of the AAFL club room, provide non-alcoholic drinks and finger food.

We will also be running some raffles at \$5.00 per ticket.

**Bonus:** If you pay your 2011 club subscription at the AGM, you will receive a free raffle ticket.

At the AGM we wish to elect new club committee members. All members are encouraged to serve their

time on the committee and if you have not done so before, we ask that you nominate yourself for a position.

All positions are available for nomination.

President  
Secretary  
Treasurer  
Newsletter Editor  
Min' 3 Sailing Committee

The committee meets no more than 3~4 times a year and it is not too onerous to organise each weeks sailing.

Please give your support to the club and attend the annual meeting – let Peter know by November 5<sup>th</sup> if you will be attending and whether or not you will be bringing a partner.



## **Racing Program**

The club sails four seasonal race series, Summer, Autumn, Winter and Spring, each year plus the Aggregate Match Racing series. Holiday and family weekends are informal fun sailing days where the racing format is chosen by the attendees.



### **Seasonal Series:**

The seasonal series are sailed on 7 days, the best four day scores for each member are totalled for the overall series placings. This allows for three discard days, which may be because the racing is cancelled due to weather or pond conditions, or is each member's non-attendance or worst sailing results.

Each racing day for a series is a set of six races. These alternate between three scratch races, where the fleet all start at the same time, and two handicap races where each member has a performance handicap between zero and 60 seconds and starts at that time during the countdown. The final race has a divisional start where the A, B and C divisions each start together at times set by the race committee but usually 0, 30 and 60 seconds.

Five of the six races may count towards the series results with each member able to discard their worst race result.

Referees are given an assessed result for that race based on the average, rounded down, of the other race results after discarding the worst.

If racing starts but is later abandoned due to changes in conditions then at least four of the races must have been completed for the results to be counted. The results are scaled upwards after dropping one race, by 5/3 or 5/4 if four or five races were completed.

### **Handicaps:**

Individual performance handicaps are recalculated each competition day based on the results of the three scratch races. A division members can only have handicaps in the range 0-20 seconds while B division can be 0-40 seconds and C division 0-60 seconds.

The change at each recalculation will be only 10 seconds, while 10 seconds can be lost immediately it take two weeks to gain 10 seconds, this being indicated by a plus sign when the next gain may result in change.

### **Divisional Series:**

The last race of each seasonal series race day is started by division. The overall placings count towards the day's racing but results are also recorded within each division and these count towards the member's divisional results. An award is made to the top scorer in each division.

In 2010 there were two Divisional series, each running alongside two seasonal series. This allowed the racing committee to adjust the member between divisions twice in the year.

### **Donations**

On club racing days, but not holiday weekend fun days, the jar is on the table for competitors' \$1.00 entry fee donation.

### **Aggregate Match Racing series:**

The Aggregate Match Racing series is sailed on nine race days in the year, a maximum of six results are accumulated by each member. The winner of the series is the challenger for the Match Racing Cup which is sailed against the defender who is the current holder of the Match Race Cup.

Each race day has four rounds of races. The match selection procedures, rules of the series and the start procedures for match racing can be downloaded from the web site at <http://Azonic.co.nz/NZRYS>.



### **Change Proposals:**

Changes to the format of these series may be proposed at the AGM or prior, and discussed at the AGM so that they can be voted on by all members.

## Proposed 2011 Schedule:

21 Nov 10		Summer	1
28 Nov 10		Summer	2
5 Dec 10		Aggregate 1	
12 Dec 10		Summer	3
19 Dec 10		Summer	4
26 Dec 10	Christmas	break	
2 Jan 11	New Year	break	
9 Jan 11		Aggregate 2	
16 Jan 11		Summer	5
23 Jan 11		Summer	6
30 Jan 11	Anniversary	Fun Day	
6 Feb 11	Waitangi	Fun Day	
13 Feb 11		Summer	7
20 Feb 11		Autumn	1
27 Feb 11		Autumn	2
6 Mar 11		Aggregate 3	
13 Mar 11		Autumn	3
20 Mar 11		Autumn	4
27 Mar 11		Autumn	5
3 Apr 11		Aggregate 4	
10 Apr 11		Autumn	6
17 Apr 11		Autumn	7
24 Apr 11	Easter/ANZAC	Fun Day	
1 May 11		Aggregate 5	
8 May 11	Mother's day	Fun Day	
15 May 11		Winter	1
22 May 11		Winter	2
29 May 11		Winter	3
5 Jun 11	Queen's Bday	Fun Day	
12 Jun 11		Winter	4
19 Jun 11		Winter	5
26 Jun 11		Winter	6
3 Jul 11		Aggregate 6	
10 Jul 11		Winter	7
17 Jul 11		Spring	1
24 Jul 11		Spring	2
31 Jul 11		Spring	3
7 Aug 11		Aggregate 7	
14 Aug 11		Spring	4
21 Aug 11		Spring	5
28 Aug 11		Spring	6
4 Sep 11	Father's day	Fun Day	
11 Sep 11		Aggregate 8	
18 Sep 11		Spring	7
25 Sep 11		tba	6
2 Oct 11		Aggregate 9	
9 Oct 11		tba	7
16 Oct 11		tba	
23 Oct 11	Labour Day	Fun Day	
30 Oct 11		AGM	
6 Nov 11		Aggregate 1	
13 Nov 11		Summer	1
20 Nov 11		Summer	2
27 Nov 11		Summer	3
4 Dec 11		Aggregate 2	
11 Dec 11		Summer	4
18 Dec 11		Summer	5
25 Dec 11	Christmas	Fun Day	

The year's events have been drifting later each year. In 2009 the AGM was at the end of November and we managed to pull it back to mid month this year. For 2011, I propose that we start the Summer Series straight after the AGM so that next year's will be in October.

## Turnigy Servo Tester

When there is a problem with the electronic and electrical system in a boat it is often very difficult to identify exactly which component is the cause.

Having a second complete and working setup as a test system allows components to be swapped between them. When the problem moves to the test system then this shows which component is faulty. However, some faults are intermittent or marginal and even this swapping does not show where the problem lies.



Using special test equipment should give better results. The Turnigy Servo Tester can test and compare up to three servos at a time and has manual and automatic modes, plus a mode to centralise the servo.

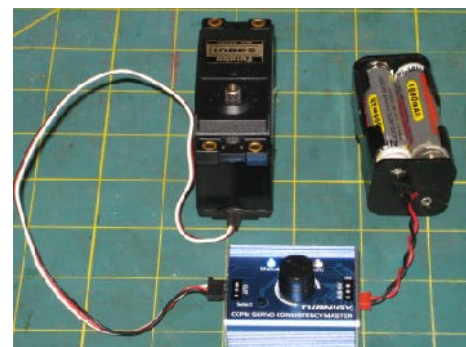
A battery box is connected to the right hand side and there are three connectors on the left for servos. The 'select' button changes the mode cyclically between Manual, Neutral or Automatic.

In automatic mode the servos will be swung through their range continuously, which will give them a thorough test, as well as seeing how well the batteries will stand the drain.

This mode is also useful for comparing servos for speed and travel. Connect two or three to determine which is faster.

The knob is used in Manual mode to swing the servos through their whole range. It can detect if there are 'flat spots' in the range that cause sticking or shuddering. It can also be useful to measure angular travel to check this, or to compare with other models.

The device is available from HobbyKing.



## Race Results 2010

### Summer Series

1st	Geoff McGill	48
2nd	Kevin Webb	55
3rd	John Dowler	68

### Autumn Series

1st	Kevin Webb	50
2nd	John Dowler	54
3rd	Bruce Watson	57

### Winter Series

1st	Geoff McGill	45
2nd	Richard Plinston	58
3rd	Kevin Webb	66

### Spring Series

1st	Kevin Webb	41
2nd	Geoff McGill	56
3rd	John Dowler	65

### Divisional Series 1

A	Kevin Webb
B	Ivan Fraser
C	Terry O'Neil

### Divisional Series 2

A	Geoff McGill
B	Ivan Fraser
C	Gary Irwin

### Aggregate Match Race Series

1st	Geoff McGill	45
2nd	Peter Andrews	42
3rd	Kevin Webb	41

### Match Race Cup

TBA

## Changes to the Divisions

The results of the series scratch races sailed by each member are accumulated and an average calculated by dividing the total score by the number of races sailed, including DNFs.

These are then sorted to order. The list is then divided into 3 roughly equal parts to set the Divisions. Individual adjusts to the order or the split by the racing committee.

## Sail Settings on 100



I don't know who took this picture on my camera but it shows nicely the sail setup on 100 going to windward in strongish winds. The lines on the sail show the shape quite well, especially from this angle.

The heel shows that the wind is quite strong. As the boat heels the driving force goes further to leeward and this tends to turn the boat towards the wind (rounding up). This needs to be countered by moving the centre of pressure forward relative to the keel area.

You will see that the rudder is ineffective at this heel angle. The main effect will be to raise or lower the stern and to produce drag. The less need for rudder the better.

It can be seen that the jib is fairly tight in with the maximum draft about 35% aft. The lowest part of the main has a deep draft which flattens with the top half twisting off and being quite flat. There is some backwinding from the top of the jib. This twist has reduced the power from the top of the main and kept the drive low to reduce the heel.

This shape in the mainsail has been caused by having a slack leech. Tighten the backstay and the distance between the boom end and the mast top will reduce. Raising the boom end or moving the mainsail down the track will also do this.

By keeping the jib fully powered and reducing the effective area of the main the centre of pressure will move forward, just as required to keep the boat straight.

In lighter winds, with less heel, the twist in the mainsail can be reduced by tightening the leech and the boom brought closer to the centre line. This gets more power from the main and takes the effective centre of pressure aft to keep balance with a more upright stance.

## Basic Sailing Rules:

### 4 main right of way rules:[Part 2,Section A]



Rule 10. Boats on a port tack shall give way to boats on starboard tack.

Rule 11. When boats are on the same tack and overlapped, the boat to windward (the boat closest to the wind) shall keep clear of a leeward boat.

Rule 12. When boats are on the same tack and not

overlapped, the boat that is astern shall keep clear of the boat ahead..

Rule 13. When a boat is tacking (changing tack) it shall keep clear of boats that are not tacking .

### 4 rules with general limitations: [Part 2,Sec B]



Rule 14. Even if you have right-of-way, it is your duty to avoid a collision, once it becomes apparent that the other boat is not giving way.

Rule 15. If you acquire right of way, you must initially give the other boat room to keep clear, unless you get right of way because of the other boat's actions.

Rule 16. A boat that changes course, even if it has the right-of-way, shall do so in a manner that gives the burdened boat a chance to "keep clear" and give way.

Rule 17. If you catch up with another boat and you want to pass it to leeward, you may not sail above you proper course i.e you shall not luff higher than you would have done if that boat wasn't there.

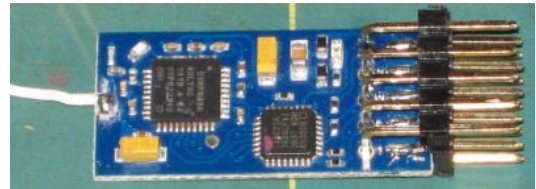


## OrangeRx 4Ch 2.4Ghz Receiver

The Spektrum DX5e was one of the first cheaper 2.4GHz radio control sets. Previously only the more expensive computer controlled sets operated in this band. The 2.4GHz band has the advantage of selecting its own channel(s) from the ones that it detects as not being used and so different radios do not interfere and there is no issue with having to find and buy crystals.

The DX5e transmitter and receiver set can be bought for around \$200, but a receiver on its own is \$160. This makes it expensive if the receiver fails, or if a second boat is required to share the one transmitter.

Manufacturers use the channels in different ways so that usually devices must be matched, and sometimes even within a brand some ranges are incompatible with others.



The "OrangeRx Spektrum DSM2 Compatible 4Ch 2.4Ghz Receiver" works with the DX5e and can be bought for \$US13 from HobbyKing. I added one to an order and the landed cost was under \$30. At the time I was using a DX5e with 100 and the receiver had failed after getting wet, but it worked again later so I can put this aside as a spare.

I have tested the OrangeRx and it binds and operates correctly. It only has a single aerial compared to the Spektrum's two (and the HobbyKing's twin receivers) but for a boat this will be adequate.

## Wall of Shame - Cars in Handicap Space:

The car alongside the motobike had a pass, but how was he to get the wheelchair in ?



# NEW ZEALAND RADIO YACHT SQUADRON

**PO BOX 65-344  
MAIRANGI BAY  
AUCKLAND, NEW ZEALAND  
TEL: 09 479 4894**

President	Richard Plinston
Secretary	Peter Andrews
Treasurer	Julie Adamson
Sailing Committee	Geoff McGill
	Kevin Webb
	Bruce Watson
	Neil Purcell

The opinions expressed in this newsletter are those of contributors but not necessarily those of the New Zealand Radio Yacht Squadron. All correspondence to New Zealand Radio Yacht Squadron other than for the newsletter should be addressed to The Secretary.

## MEMBERSHIP & MEMBERS AMENDMENT APPLICATION

### Members – please complete if you or your boat details have changed

Name:.....  
Postal Address:.....  
.....  
.....  
Contact Phone No  
.....Home  
.....Bus.  
.....Email

Name of Yacht: .....  
Make/Model: .....

Radio Frequency\*: .....

Sail No\* .....

**\* Please check radio frequency with NZRYS register before buying a boat with shop supplied radio crystals**

I wish to apply for membership @ \$30.00 per annum.  
(\$20.00 if under 21) until April, thereafter reduced rates.  
\$10.00 extra for each additional radio frequency. (Max' 1 additional frequency)  
\$1.00 per official race weekend – payable at the pond.

I understand that the above details are to be available for the Committee and hereby agree to abide by the rules of the New Zealand Radio Yacht Squadron N.Z.R.Y.S.

Signed by  
Applicant.....

on this .....day of .....201...

Please post to:  
The Secretary  
New Zealand Radio Yacht Squadron  
PO Box 65-344,  
Mairangi Bay

Note: Membership expires 30th September each year.

## Member's Frequencies

Non-finacial members may have their frequency reassigned to a new member.

	<b>27 MHz</b>
<b>0.000</b>	<b>Geoff McGill</b>
<b>26.995</b>	<b>Kevin Whitehead</b>
<b>27.020</b>	<b>Richard Plinston</b>
<b>27.045</b>	<b>Neil Purcell</b>
<b>27.070</b>	<b>Brian Bassett</b>
<b>27.095</b>	<b>John Macaulay</b>
<b>27.145</b>	<b>Garrick Rocard</b>
<b>27.170</b>	<b>Peter Vernon</b>
<b>27.195</b>	<b>Paul Taylor</b>
<b>27.220</b>	<b>Patrick O'Hanlon</b>
<b>27.245</b>	<b>Gerald Moss</b>
<b>27.255</b>	<b>Gordon Stephenson</b>
<b>27.280</b>	<b>Terry O'Neill</b>
	<b>29 MHz</b>
<b>29.745</b>	<b>James Glidden</b>
<b>29.765</b>	<b>Tom Clark</b>
<b>29.775</b>	<b>Kevin Webb</b>
<b>29.785</b>	<b>John Dowler</b>
<b>29.805</b>	<b>Club Boat</b>
<b>29.825</b>	<b>Bill Monaghan</b>
<b>29.845</b>	<b>Allen Reynolds</b>
<b>29.865</b>	<b>Peter Andrews</b>
<b>29.885</b>	<b>John Chittenden</b>
<b>29.905</b>	<b>Ian Clark</b>
<b>29.925</b>	<b>Simon Adamson</b>
<b>29.945</b>	<b>Dave Harley</b>
<b>29.965</b>	<b>Peter Buxton</b>
<b>29.985</b>	<b>Brett Bakewell-White</b>
	<b>40 MHz</b>
<b>40.530</b>	<b>Harry Bowles</b>
<b>40.790</b>	<b>Club Boat</b>
<b>40.810</b>	<b>Trevor Speight</b>
<b>40.850</b>	<b>Ivan Fraser</b>
<b>40.870</b>	<b>Bruce Watson</b>
<b>40.890</b>	<b>Bruce Watson</b>
	<b>Other</b>
<b>72.350</b>	<b>Geoff Atkinson</b>
<b>2.4 GHz</b>	<b>Harry Bowles</b>
<b>2.4 GHz</b>	<b>John Perkin</b>
<b>2.4 GHz</b>	<b>Trevor Jones</b>
<b>2.4 GHz</b>	<b>Gary Irwin</b>

If you are not in this table then you were not financial in 2010 and your frequency may be reassigned to a new member.

Systems using 2.4GHz do automatic channel searching and do not clash with each other.