

# Auckland Soar

Radio Control Soaring Club

**Issue Number 186**

**July - August 2015**



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[www.aucklandsoar.org.nz](http://www.aucklandsoar.org.nz)

# Your New Committee

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## Editor's Notes

***On the Cover:*** A Maxa flies overhead at Thermal Thaw 2015.

Hi everyone,

*It was discussed at the recent A.G.M. - that my thoughts as Editor were that there was a lot of duplication between this publication and what is on the club website.*

*Several pages (e.g. Club Points, Thermal Thaw, Ambury News), were already on the website as well as being updated in the Newsletter.!*

*So for this issue I have done several things as a try-out:*

- 1. Added a blog to the website - just so anyone can see what changes, updates, additions have been done, and when.*
- 2. Put the updated Club Points on the Website. (Removed from the Newsletter.)*
- 3. Added a report and Images for Thermal Thaw 2015 on the website. (Removed from the Newsletter.)*
- 4. Updated the Ambury Antics page with some (reasonably) recent image content . (Removed from the Newsletter.)*
- 5. Have created a Slope Newz page on the website and will 'activate' it when I get some content for it.*
- 6. Added link buttons to the three (live) website pages listed above, on Page 5 of this issue.*

*I welcome some / any feedback on just what you, the membership think about these changes. As I've said many times before, the Newsletter/Website is Not mine, it is Yours - the club membership.*

*Talking of the A.G.M. same numbers attended as previous years, the club fees will remain at the current level (I hope you have paid them by now?) and the club is in a good financial position and membership is increasing.... always good signs.*

*Apart from the Thermal Thaw held on 7th June, the weather has not really cooperated since then, so no real activity, making this an even smaller issue.*

*If you have any content/images etc, please let me know or send them too me.*

*What I get really determines the size of the issue when I'm putting it together.*

*Reminder - Not sure of the exact dates that Lambing will be happening at Ambury, so have used Last Year's dates. Just be aware NO Flying is possible during that time at Ambury!*

*That's all from me.  
Happy soaring,*

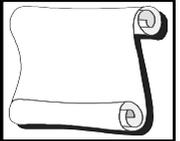
Brett

# Coming Events

AS - [AucklandSoar](#) championship points

<b>July 2015</b>			
5th	Fly for Fun	AS	Ambury
12th	ALES Electric Event	AS	Ambury
19th	Slope Event	AS	T.B.A.
19th	Ambury Closed for lambing		
26th	Slope Event	AS	T.B.A.
26th	Ambury Closed for lambing		
<b>August 2015</b>			
2nd	Slope Event	AS	T.B.A.
2nd	Ambury Closed for lambing		
9th	Slope Event	AS	T.B.A.
9th	Ambury Closed for lambing		
16th	ALES Electric Event	AS	Ambury
23rd	Slope Event	AS	T.B.A.
30th	Thermal Event	AS	Ambury

# Club Notices



## FLYING AT AMBURY

As we don't want to get on the wrong side of the Rangers.... remember:

If we do get that perfect day and you feel the need to have a fly; you get to Ambury and there are no people

flying or sheep on our usual field **Do NOT** just wander in and fly.

Please, take the time to find one of the Rangers and seek their permission to fly on the field.

(See also below for a new method of contacting the farm staff)

Also do **Not** just drive onto the field without seeking permission to do so first.

(The park staff can get a bit annoyed if you just drive on in - as the field can be quite soft underfoot - especially over the winter months - and cars do cut it up a fair bit.

We have a good relationship with the Park Rangers - let's not ruin it.

**Also Note - Ambury is now a non-smoking park!**

**Ambury CLOSED for Lambing 19 July to 9th August**

**(These dates may change.)**

## Field Safety

Just remember to get another person to check that model over Before you fly, even if you have flown it last week.

Also, don't just walk a couple of paces into the field or away from the cars and just throw the model off.

Most Sunday's there are quite large numbers of people in the park including children - so you need to ensure if anything were to go wrong that you are a sufficient distance away from them for safety.

Our tenure of the site depends on our good safety record - lets not put it at risk!



## AN ALTERNATE METHOD OFF CONTACTING THE FARM STAFF AT AMBURY

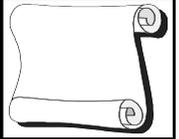
If you have been to Ambury recently, you will have seen the small hut that has been erected off the road near the fence of the field we use. This is an information centre for the park and also contains a phone link to the farm staff.

A small point is that there is No 'handle' to pick up!

We assume you use the button below the speaker?



# Club Notices



As per my Editor's Notes, it was discussed at the A.G.M. that there was a lot of duplication between the Newsletter and the Club website.

I have now changed this and removed three pages from the Newsletter accordingly.

Direct Links to the now updated website content can be viewed by clicking on the buttons below:  
(You don't need to go to the Website homepage)

**CLUB POINTS PAGE**

**THERMAL THAW 2015 PAGE**

**AMBURY ANTICS PAGE**

Any feedback on these Newsletter changes or on the web content itself would be appreciated!

Email – [brettrob@orcon.net.nz](mailto:brettrob@orcon.net.nz)





## TRIMMING FLYING WINGS

The goal in trimming a flying wing is to get the center of gravity as far aft as possible and still maintain stable control over pitch. Since the flying wing has very little tail moment there is a tendency for the wing to be very pitch sensitive.

I think some sort of exponential control is necessary to control most flying wings in the pitch axis. The roll axis is not as sensitive. Differential aileron mixing is not recommended because it usually results in pitch input while rolling. The tail moment on a flying wing is the distance from the elevon to the center of gravity. This is usually not very far so the elevons don't have much leverage. This is why the CG. is so critical. If the wing is too nose heavy, It will require alot of upward deflection of the elevons to fly level. This results in a lot of unnecessary drag and sometimes a nose high attitude in level flight. It also makes the wing far more stable in pitch response so it is best to start the trimming procedure with some extra weight on the nose and a little reflex in the elevons.

I have used the following procedure for trimming R/C aircraft for some time and it is quite painless. You start by finding a neutral trim for the wing. This is best done by setting up everything as per the instructions (or your eyeball) and putting some additional weight on the nose. I use tape and lead. Then add a click or two of up trim and either run with the plane or ride a bike (mobile wind tunnel) while holding the plane level.

This will let you know if it is close to It's flying trim. At this point I like to use a bungee to simulate a hard throw. I tape a hook a couple inches in front of the C.G. so the plane will take off straight without trying to rotate as if it were on a hi-start.

This will produce a manageable launch that is high enough for trimming. On first launches I hold a little bit of up elevon just to make sure it doesn't slam into the ground. I usually have to put some down input to the wing after it comes off the hook because I always set them up with too much up trim the first time. At this point you will probably add some down trim and start launching harder.

Once you have the wing flying level in trim, you can move the nose weight back an inch or two. This will cause it to have too much up trim so the process starts all over again.

I generally keep moving the weight back and re-trimming until I can barely control the pitch, then I move it forward until I like it. This determines the C.G. and the balance point you want for controllability.

When you are sure about the C.G. you can dial in the wing for It's best glide ratio and speed. This is very simple. When the wing is trimmed and flying level you simply add a click of down trim and watch the wing. It should nose down a bit and speed up. If it pulls out of the shallow dive by itself add another click of down trim and watch it again.

You keep adding a click of down until it stops pulling out of the dive by itself, then add one click of up trim and you are finished. Most gliders actually have a normal oscillation cycle where they are going through the sky in repetitions of shallow diving

and pulling out, but it is so shallow that it isn't noticeable if the plane is in trim. Get to know the speed that the wing likes to fly at when in level trim. It will probably be much faster than

you thought it would be. It is important to let it fly at this speed If you are trying to maintain a good glide ratio. If you pull back on the stick and try to "float" it, it will sink much faster than if it were at It's cruise speed.



## CLUB DVD LIBRARY



**Yes, believe it or not the club does actually have a pretty Comprehensive Soaring-based DVD / Digital Library that is available to all members.**

**Quite a range of titles are available.**

**Just contact:**

**Ted Bealing [ted@pl.net](mailto:ted@pl.net) or Andrew Reid [andrewrei@gmail.com](mailto:andrewrei@gmail.com)**