

**NEXT MEETING IS ON  
TUESDAY 13th MARCH 2007**

The Newsletter of WRCS Inc.  
PO Box 349  
Brookvale NSW 2100

Warringah Radio Control  
Society Incorporated  
(Incorporated under the Association Incorporation Act 1984)



# **NEWSLETTER**

**MARCH 2007**



**The smiles tell it all!! Another year of competition has started with Glider & Electric Day, report inside**

**MEETINGSMEETINGSMEETINGSMEETINGSMEETINGS**

**The next meeting will be on Tuesday, 13 March 2007 at Tennis Cove, Eastern Valley Way, starting at 7.30 pm. The next meeting after that will be on 10 April 2007.**

**POSTAGE  
PAID  
AUSTRALIA**

# COMBAT DAY



Sunday,  
18 March  
2007



Classes: Sport,  
Open, Stock.



THIS IS A FUN  
EVENT WITH  
SAFETY  
PARAMOUNT



Competition Director - Warren Lewis

## Warringah Radio Control Society Inc.

President	Kerry Smith	0412 722 090	
Vice President	Mark Rickard	9451 2824(h)	
Hon Secretary	Brian Porman	9488 9973(h)	
Treasurer	Peter Barnes	9489 0353	
Flying Instructor	George Atkinson	9947 4812(h)	0414 972 118
Editor	Tom Wolf	9371 0843(w)	9371 0823(h)



## Beer

Recently, scientists for the U.S. Drug Agency suggested that men should take a look at their beer consumption, considering the results of recent analysis that revealed the presence of female hormones in beer. The theory is that drinking beer makes men turn into women. To test the theory, 100 men were fed 6 pints of beer each.. It was then observed that 100% of the men gained weight, talked excessively without making sense, became overly emotional, couldn't drive, failed to think rationally, argued over nothing, and refused to apologise when proven wrong. No further testing is planned.

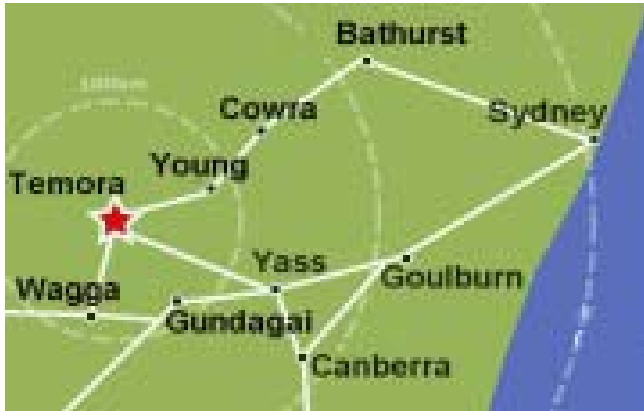
# WORTH A VISIT!



## Temora Aviation Museum

Temora has a rich and noteworthy aviation history having been home as the largest and longest lived of the flying schools established under the Empire Air Training Scheme during World War II. Since the school ceased operation in March 1946 (making it the last WWII flying school to close), Temora has continued its aviation heritage becoming the preferred airfield for a growing number of sport aviation activities including gliding, parachuting and ultra-light aircraft operations.

The museum was incorporated in late 1999 and the hangar facility was completed in February 2000 and David Lowy donated the initial aircraft for the collection. The museum was opened for public viewing in June 2000. In late 2000



construction commenced on the exhibition buildings, containing display space, theatre, admission entrance, gift shop, a children's playground and picnic area. These were completed and opened to the public August 2001.

The display hangar was completed in November 2002 and all aircraft are housed in this new hangar with the original hangar becoming a customised restoration and maintenance facility.

More info: <http://www.aviationmuseum.com.au/>

# CHALLENGE QUIZ -no prizes

Doug Radford has submitted this Quiz, there are 27 common (and not-so-common) names of American and British aircraft from WWII buried in these letters.

The aircraft names may be vertical, horizontal, diagonal, spelled left to right, right to left or up or down.

G	R	A	B	A	L	T	I	M	O	R	E	H	T	H
N	A	F	O	R	T	R	E	S	S	B	S	A	U	C
I	N	O	S	N	A	U	K	S	D	I	R	R	U	H
L	G	A	T	O	C	E	R	I	F	T	I	P	S	I
R	I	N	O	S	D	U	H	D	R	A	M	L	U	F
I	D	A	N	M	L	N	R	E	D	N	A	S	Y	L
T	A	P	L	U	I	O	S	R	E	D	A	V	N	I
S	U	R	L	A	W	E	L	L	I	N	G	T	O	N
X	N	O	T	S	N	K	I	N	I	G	N	E	O	R
A	T	I	L	T	A	C	L	L	E	H	A	M	H	T
F	L	T	R	A	M	T	A	P	L	O	T	P	P	N
I	E	D	A	N	F	T	O	S	T	R	S	E	Y	E
L	S	O	T	W	A	F	M	K	T	Q	U	S	T	S
A	S	F	A	C	T	R	U	S	A	E	M	T	I	N
H	T	R	O	F	U	A	E	B	B	D	R	L	B	A

Please submit your answers to the Editor, but there are no prizes, this is just for fun. The full list will be published in the May Mag.

# FROM THE MAS & MAAA NEWSLETTERS

We don't usually re-publish editorial stuff from these Newsletters because we assume that all our Members read them, but the January/February 2007 issue notified some very important material for the attention of all fliers:

## **MAS NEWSLETTER 6/2006**

### **Addition to the List of Approved 2.4Ghz Equipment**

The MOP058 – 2.4GHz Equipment Policy has been amended to include the newly released 2.4GHZ Spectrum DX7 radio system. Please note that the following note applicable to 2.4Ghz operations was added to the Policy;

Because of the wavelength of the radiated signal from the transmitter to thereceiver, there is more likely to be interference caused by metal or carbon fibre components in the airframe than with the lower frequencies used up to now. Whilst the technology may overcome the interference to some extent the user has to be aware of the possibility of “on board” generated interference. In the event that the airframe contains either significant amounts of carbon fibre or metal, or if the modeller suspects there might be a problem, then testing the range in various directions from the model whilst on the ground and comparing the range with the same antenna arrangement, at the same height and orientations, but outside the model is a wise precaution.

Please read the entire MOP058 document to get a better understanding of the operations, restrictions and possible limitations of the various 2.4GHz equipment.

### **Frequency Synthesized Radio Control Equipment.**

Equipment of this type is now available in Australia and its use is likely to increase dramatically over a very short time. Transmitters of this type do not use a specific crystal to determine the operating frequency. The M.A.A.A. Frequency Sub-Committee has produced a policy/procedure (MOP053) to enable them to be safely used at our fields as well as how Testing Stations should certify them.

# A GOANNA TALE

photos courtesy Sean Bremner



The goannas around the field are very active at the moment, large goannas can be seen wondering freely about the BBQ area and they appear generally oblivious to us humans. There were however 2 incidents worthy of reporting.



First of all, Peter Papas is counting his toes. After a big lick on it, Peter's left big toe was found to be almost too appetising for one of our collection of large goannas (about 4 ft long). Next time he may wear closed-in shoes instead of sandals.

In any case, at least Peter stayed close to the ground and in fact the way he jumped when startled had the goannas scurrying off into the bush at an incredible haste.

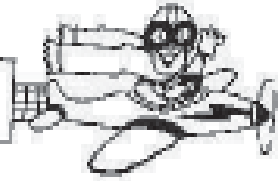
Anyone who understands goanna behaviour will tell you that if you are confronted by a goanna the wisest thing to do is to stay low, because if a goanna is startled it climbs to the highest tree (or other tall object). Now goannas don't have their nails trimmed and can cause a lot of facial scarring if they climb on humans and up to the top.

Obviously Lynette Austen didn't know this and when confronting a goanna she leapt on top of the table. Anyway, the danger went away and she can tell a funny story about her confrontation with the reptile.

Those at the field renamed that goanna species as a "golynn".

## COLUMN 9.9

(incl. GST)



As decided at the February meeting, the Newsletter (in the PDF format that it goes to the printer so that the pages are in booklet format and back-to-back) is now on the Website. The members will find this hard to read, but is correct if you wish to print off a colour Newsletter for yourself.

You have some good days, you have some bad days. Recently the winds were so gusty that Grant Furzer decided he didn't want to risk putting a plane up and started packing up. A gust of wind picked up his loose wing and smashed and broke it. Then as almost an act of foregiveness by the heavens, Grant was bringing in a model on a deadstick and clipped the top of a tree ... you guessed it! The model flew right through the tree and a safe landing resulted, no damage to the aircraft.

## RES IPSA LOQUITUR

(Things that are self-evident)



Any one involved with the use of these should get the full information from the Manual of Procedures part on the M.A.A.A. Web Site. The key principle is that they should not be allowed to transmit until the specific frequency has been reserved on the keyboard, as is the case with a crystal-controlled transmitter. Because of the possibility of mistakes being made due to lack of familiarity with the new technology those who get this equipment have to be more than normally careful to ensure that they know what is required and then follow it.

### **Mass of Electric Models with respect to Heavy Model Permits.**

The question has been asked, with respect to the classification of a Heavy Model, is the mass of an electric model with or without the batteries. As required by M.A.A.A. rules, all model aircraft with a mass greater than 7Kgs, dry, ie without fuel, is required to have a Permit to Fly. An M.A.A.A. Heavy Model Inspector issues this permit.

The M.A.A.A. Policy with respect to the “dry mass” of an electric powered model is that it includes the mass of the battery used to power the model in flight. The rational behind this policy is that the battery is considered to be the fuel tank, and the electrons the fuel. The mass of the fuel tank, even though it is empty, (or uncharged) is included in the “dry” mass of the aircraft.

### **Heavy Model & Gas Turbine Permits**

Members are reminded that model permits to fly only last 3 years. It is their responsibility to arrange a renewal of the permit with an M.A.A.A. Inspector before the permit expires.

### **MAAA NEWSLETTER 1/2007**

#### **UAV and Insurance**

CASR Part 101 has been operating for some time and there still appears to be a little confusion as to the difference between a UAV (Unmanned Aerial Vehicle) and a Model Aircraft. According to the C.A.S.A. regulations. A model aircraft is used for sport and the pleasure of flying it. A miniature aircraft that is used, or intending to be used, commercially or for gain is a UAV. The only exception to this is the use of a model aircraft commercially for pilot training purposes.

If you are using, or intending to use, your model aircraft commercially or for gain, such as aerial photography etc, you are operating a UAV not a model aircraft. Your activities therefore come under the CASA regulations for UAV's. If you work for a company or organization that is using or working on UAV's, then when you fly their UAV it is not a model aircraft, even though at the time you may consider that your are flying it for fun.

It should be noted that autonomous flight of model aircraft is not permitted by the M.A.A.A., see MOP044 – Internal Navigation and Stabilisation, and therefore would also not be covered by the M.A.A.A. Insurance policies.

The M.A.A.A. insurance policy is specifically for model aircraft as defined by C.A.S.A. regulations and M.A.A.A. Manual of Procedures. Therefore, any M.A.A.A. Affiliate Member flying or dealing with a UAV or autonomous model aircraft is definitely not covered by the M.A.A.A. Insurance policies. Any activity involving UAV's or autonomous model aircraft at an M.A.A.A. Affiliate Club is also not covered

by the M.A.A.A. Insurance policies. Therefore it is highly recommended that if a club wishes to allow its facilities to be used or hired for the flying of UAV's or autonomous model aircraft a condition of the hire/use should be that M.A.A.A. Affiliate Members should not be allowed access to the flying site. This is to ensure that any insurance claim that may arise from the activity cannot involve the M.A.A.A. policies.

It is also highly recommend if clubs wish to allow the operation of UAV's or autonomous model aircraft at the facility the committee should obtain proof of insurance cover and a signed statement that the UAV operators were wholly and totally responsible for any claim arising during their operation at the flying site. Clubs should also be aware that if their lease with their land owner is for the flying of model aircraft, if UAV are allowed to be flown you may be invalidating you field lease.

#### **Heavy Models & GT Models - Certification of new pilot.**

To obtain a "Permit to Fly" for a heavy or a gas turbine powered model, the pilot must demonstrate a suite of manoeuvres to the satisfaction of the Inspector.

## **CORRECTIONS**

Yet more gremlins got into the act. The Feb issue of the Mag used an old WRCS contact list, no we haven't had a mid-term change of guard!

You could tell that your Editor used last year's Mag as the template because the date for the Glider/Electric day was for 2006!! This was all corrected before the electronic Newsletter was put onto the Website.

Your Editor apologises, but is it an indication of how many read the Mag that only one Member brought my attention to these glaring errors?!?

And then, a most reliable source has had their information disproved by Patrick Boutonnet who writes in connection with the article entitled "Boeing Blended Wing 797" :

"The "Silent aircraft initiative" is sponsored by the Cambridge University and the Massachusetts Institute of Technology (MIT) <http://silentaircraft.org/>

Researchers have unveiled a conceptual design for a silent, environmentally friendly passenger plane called SAX-40: <http://news.bbc.co.uk/2/hi/business/6113418.stm>

TruthOrFiction.com went straight to the source, the Boeing Company. A spokesperson said that it is not true that Boeing is developing a commercial blended wing aircraft. He asked that we help stop the perpetuation of the story.

What is true, according to Boeing, is that Boeing Phantom Works, the company's advanced research and development organization, is doing research on the blended wing body design as a potential military aircraft.

Boeing has built a scale model to test its low-speed flying characteristics in a wind tunnel. There are also plans (as of 7/13/07) to flight test a scale model. <http://www.truthorfiction.com/rumors/b/b797.htm> "

AND SO, argument rages ... and we don't want to hear any more about it



Round 3 of Thermal saw a great flight from Graham of 5'01" but sadly without landing points but he was looking very happy – there's another one who will be doing Friday afternoon gliding! David was the only one to get landing points, Mike might have completed a third max landing if he hadn't chosen the trees instead! Here Monte launches for AI.

In the last round of electric David again put in a great flight of 5'01" from only a 19 sec motor run while John Channon did 5'17" with some

spectacular swoops and near misses of the ground and the trees! Doug, David, Mike and George all got landing points (harder with electric due to the higher speeds and inertia).

So, when the points were added up it became clear that .....

**Thermal Glider**

1st A.Zuger      2nd D.Foster      3rd G.Swalwell      4th M.Minty

**Electric Glider**

1st D.Foster      2nd J.Channon      3rd A.Zuger      4th G.Kaley

Trophies were given out and with a new one as well. The family of our late member John Meek had donated a perpetual memorial trophy for thermal gliding to commemorate his life and pleasure in gliding. This year it was awarded top AI Zuger who will keep it for the next year. Here are the winners (left to right Graham, David, John and AI) who of course, are grinners! Thanks to Mike Minty and Mark Rickard for organising the event and for the helpers like Monte for timing and bungee retrieval.



**Report by Mike Minty**

The permit identifies the pilot and the manoeuvres that he/she is allowed to perform with that particular aircraft. If at a latter time the pilot wishes to add to the manoeuvres that they and the model are certified to perform, they must have an appropriate Inspector to certify the pilot for the new manoeuvres and note them on the "Permit to Fly". If the owner wishes to allow another pilot to fly a heavy or gas turbine powered model then that person, and the manoeuvres he can do, must also be noted on the permit by an appropriate inspector. To assist a person to be added to the pilot list for a particular model, a pilot already certified for the model is able to "instruct" another pilot, of a minimum bronze wings standard, to operate the model. This can be done with a "buddy box" or by the single transmitter instructional technique. Once the person is competent on the particular model they can then ask an appropriate inspector certify them and their suite of manoeuvres on the aircraft permit form

**EDITOR'S COMMENT:** These are the Rules that apply at our and all other fields and are not subject to any individual interpretation or "mid-week Rules".

## TWILIGHT GLIDING

Friday Afternoon Gliding continues to attract the stalwart few of Mike Minty, Mark Rickard, Al Zuger (also flying some hot electric aircraft) and Harry Hubmann (also known to let a few volts loose) and they were joined recently by David Menzies



seen here with his V tailed hand launch glider. After a couple of chucks he used the bungee and was well pleased with the results. Mark has another slopie which he is replacing with a thermal glider. So why don't you join us for the few Fridays left of Daylight Saving?

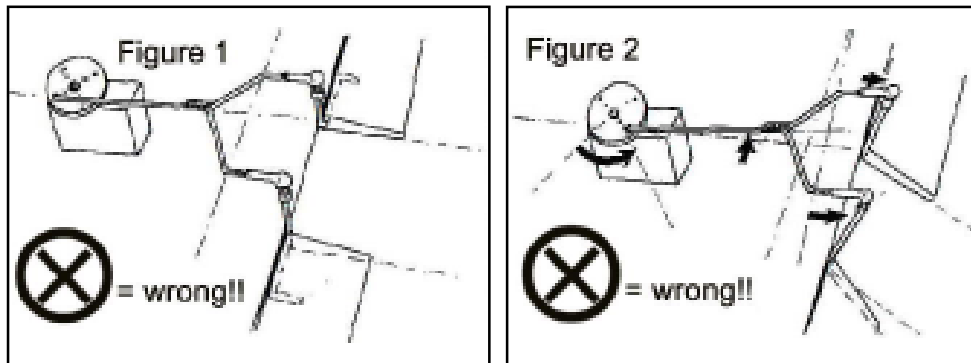
# DON'T GET INTO A FLAP!!

Flaps are advantageous on sport or scale aircraft as they reduce the stalling speed enabling a model to have a shorter take off run and really slowing it down on landing approach.

However if they are not set up properly you may find yourself in a FLAP!

Uneven flap movement, even a small amount, can have the effect of rolling the aircraft as it would with ailerons. So setting up flaps to move down EXACTLY THE SAME AMOUNT on each side is essential to avoid disaster. A model that is wanting to roll when it is on final approach with low speed and low altitude is asking for trouble.

It's no time to take the fingers off the main control sticks and grappling to retrim for straight flight moments before touchdown. One common mistake is to set up the flap linkages as shown in **Figure 1**. The servo wheel or arm is horizontal in relation to flaps.



**Figure 2** clearly shows how the flaps rods will move. The left flap will have a slightly greater movement downwards compared to the right, it may be barely discernable to the eye but even 1mm or 2mm extra flap across the span will make the model roll unwantedly.

Doug was first up in Electric with his Hawk 1400 but it went straight in to the ground and was not able to fly again! David launched his Spectra that shot up rapidly and after only a 20 sec motor run did 4'59" with a 20 point landing – grate start! Al flew a "pod" powered Spirit 100 glider that climbed slower than Davids needing 54 secs of motor to get enough height to turn in a 5'09" flight but with no bonus. Mike had a very erratic flight to give only 1'22" followed by Mark and his Albatross who did 5'06" but in is enthusiasm for landing points came in fast, did a cartwheel and lots of bits fell off! You can see the state of his wing tip here. Next up was a visitor from Blacktown, George Kaley, who put in 4'19" with his Protec 7. John Channon did a 4'29" with his Hobby 2x2 plus a perfect 30 point landing. Tom Wolf turned up with an electric glider never having flown it or electric before. It didn't survive it's first flight but at least he turned up to try .....unlike some members who didn't – mentioning no names as we never do.



Round 2 of Thermal saw a general improvement in flight times and landings with Graham, Al, Mike, David and John all posting landing points but with Al again doing an excellent 4'55" flight time. Round 2 of Electric saw a perfect 5'00" flight from Al closely followed by David with 4'57" and he and John also got max landing points. All but Mike got flights of over 4'30" in that round, Mike



managed to find the trees and damaged a wing but with some 2 inch tape from Graham had it repaired for Round 3.

During the lunch break Al flew Patrick McGrath's slope soaring Jetstar off the bungee. It made a great whistling noise but obviously didn't stay up too long.



# February 18th Thermal and Electric Glider Day

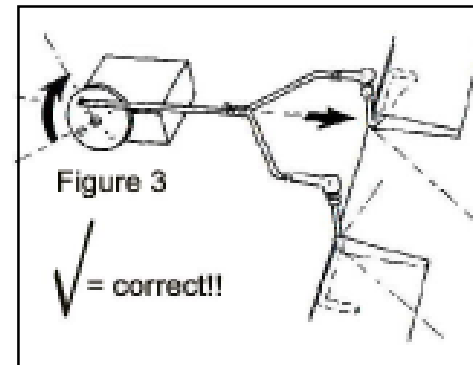
Once again the Gods smiled on the day and it dawned bright and sunny with a pleasant breeze blowing from the ocean. By 9.30 the bungee was out and a few practice flights were under way. Mark Ter Laak had his very pretty Spirit 100 on the line as it had never been bungeed before and he hadn't done it for many years. Soon after him was Graham Swalwell with his Windstar who had never been up on a bungee before and made a not very auspicious start by pinging off early and finishing up in the top of the trees on the other side of the field but with no damage! Mike Minty led the pilot briefing at 10.00 am with Mark Rickard talking about safety and flight control and Round 1 as ready to go. It was decided to fly alternate Thermal and Electric rounds and try and get in 3 rounds with the usual 5 minute target time plus a spot landing bonus of up to 30 points.

Doug Radford was first up with a Hi-Fly that he had bought from Mike Minty 20 years ago and put in a respectable 2' 54" considering



he had not flown off a bungee for about the same amount of time. Next up was David Foster with his Gentle Lady (shown here with Doug launching) showing the way with 3'21" but no spot landing points. Graham was next up and got 2'45" and was very happy! Mark had problems pinging off early but it was up to Al Zuger to show what could be done with his Sig Riser turning in 4'53" plus a 20 point landing. Both Mike Minty with his Aquila and John Channon with his Sagitta

made under 3 min flights though Mike got a 30 point landing and John a 20 pointer.



The simple solution is to set up the flap servo flat with the servo wheel arm vertical in relation to the flaps as shown in **Figure 3**. This will ensure the SAME movement of the flap linkages and torsion rods.

The only area of concern now is to have the ball links connected to the torsion rods

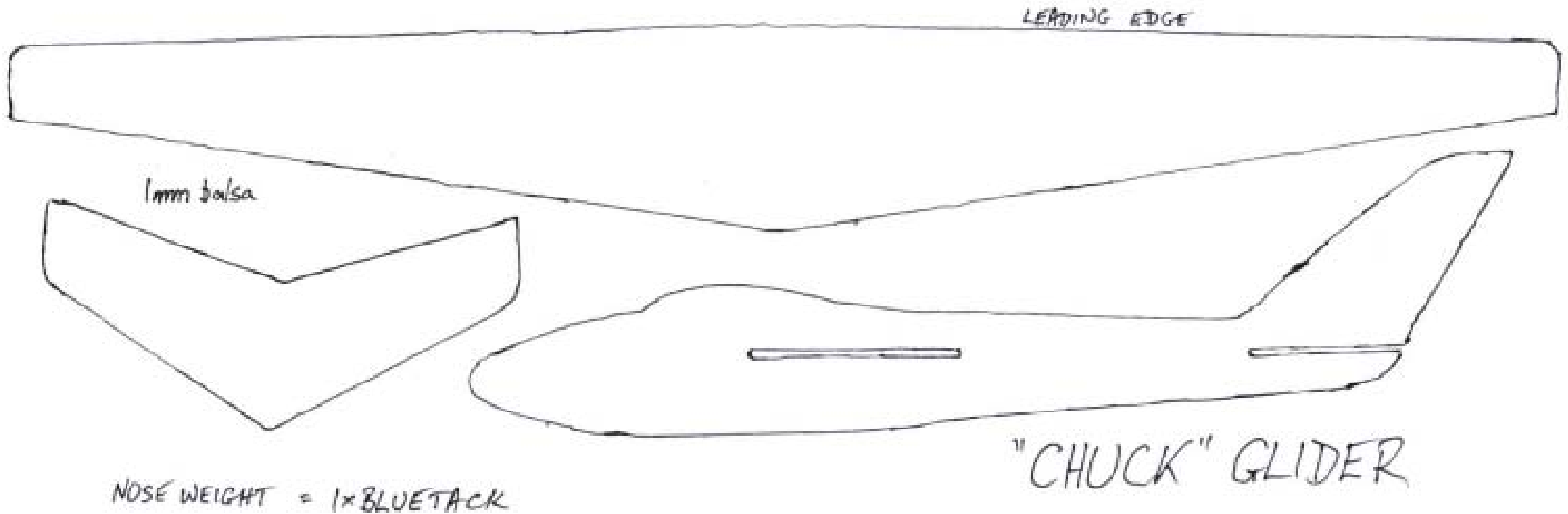
at EXACTLY THE SAME HEIGHT, above the flaps, otherwise we are back at square one with uneven flap movement.

Once the flaps are set correctly they can be left alone and will provide a very useful function on your model.

## USEFUL HINT ... ACHIEVING A SMOOTH FINISH

Pull old nylon hose over balsa fuselages then dope into place (can also use resin for harder finish). Adds lots of strength and gives smooth seam-free covering.





## THE "CHUCK" GLIDER

In response to those Members whose children (and grandchildren) enjoyed the "chuck" gliders at the Christmas Party (as well as those not-so-little devotees) we include a break-down copy of the glider that you can cut out of 1mm balsa. Please make sure that the grain runs the length of the plan. ENJOY!!

AND if you have any interesting toys, games or other kid's activities, please share it with your fellow Members, after all the greatest enjoyment we have is our hobby, so why shouldn't we enjoy our time with the children and grandchildren?!?