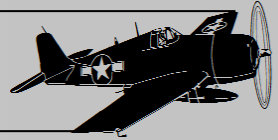


September
2017

Flight Lines





Night Visionaire | **BNF** | \$349 | Basic

NOW WITH FREE BATTERY

3D Performance
Versatility
with a virtual
Safety Net



SAFE



Needed to complete:
Spectrum™ full-range 4+ channel
programmable transmitter with
DSM2@DSMX® technology.
3S LiPo compatible balance charger.

Available from your local specialist RC Store or phone 0800 82 82 83 for your nearest dealer.
Distributed by H.O.T. LTD, Hamilton, New Zealand. www.flite.co.nz, proud sponsors of many RC events.

FLIGHT LINES

HAMILTON MODEL AERO CLUB INC.

September 2017

www.hamiltonmac.org.nz

PATRON

Graeme Bradley

PRESIDENT	Grant Finlay	027-273-7461
VICE PRESIDENT	Gordon Meads	021-125-2911
SECRETARY	Alan Rowson	07-843-3889
TREASURER	Alan Rowson	021-025-93002
CLUB CAPTAIN	Chris Tynan	022-353-9231
BULLETIN Ed.	Mikey Wilson	mikeywilson@gmail.com

COMMITTEE:

Mike Sutton		
Lyndon Perry	021-2588506	
Sel Melville	027-4823459	Finger Safety Officer
Mike Wilson	021-1689243	

WEB SITE	Mike Wilson	mikeywilson@gmail.com
CATERER	Collen Tynan	

CLUB NIGHT	Wednesday 13th	7.30 pm
VENUE	Beerescourt Bowling Club	
	68a Maeroa Road - Hamilton	

Club Night Theme: Oshkosh Airshow & Pearl Harbour plus other stuff

Club flying day: Lake D Float Planes

Cover Page: Working Bee “stop work” meeting

Bulletin Printing *Compliments of Gallagher*

Presidents Report

Grant

I'm back... a big thanks to Gordon for filling in the presidents report space in last month's Bulletin whilst I was swanning off looking at thousands of aircraft at the Airventure Oshkosh Airshow in the States.

Being away in the sunshine of a northern hemisphere summer certainly lifts the spirits from our dreary winter weather and I would highly recommend putting Oshkosh on your bucket list. Now I'm back to NZ and looking forward to the start of daylight savings, which as I write this is now less than a month away...yeee haa.

Club Night: Last month's Club night was well attended and well received with a good number turning up to hear our guest speaker Scott Spooner, Waikato Area representative from Model Flying New Zealand. Scott was also speaking on behalf of his work employer,

Aeronavics and he gave a very interesting talk about commercial construction and operation of UAV's. This was followed up with some interesting photo's/videos and

discussion about dynamic soaring which is one of Scott's passions. The excessive weight in a couple of the dynamic soaring gliders that he brought along was astounding to say the least, and you would wonder how they ever stayed airborne. The speeds these models do is phenomenal considering they are non powered gliders!



This month's club night will be a mixture of items including a report and photo show by myself of the recent AirVenture Oshkosh Airshow in the states that I attended last month. As always, if anybody has anything else to share at Club night please let me know and we will fit that in. There's always time to include a show and tell of anything else of interest that you may have come across, experienced or been a party too.

Club Flying Event: Due to the field damage we didn't hold a monthly club flying event at the club field in August. However we did get a break in the weather and were able to get the runway rolled. This meant we could pull together a last minute working bee to spread a load of topsoil around and sow some grass seed. The soil we got free of charge thanks to Gordon's efforts and this was used fill up the worst of the holes left in the field after the roll. Thank you to everyone who turned up at short notice following our text message, email and website notifications. We really appreciated you turning up for the morning, more hands making light work! This was followed up with a load of free barbecue sausages for those that had managed to make it to the working bee and hadn't missed the fact it was on. Thanks again guys, a



really good effort. We hope to get the field rolled again soon before it dries out and hardens up too much.

This month's flying event will be another trip out to Lake D at Horotiu for floatplanes and as usual should provide more laughs and fun, well at least for those that don't drown their aeroplanes that is. The rescue boat will be on hand and hopefully a couple of visitors from other clubs may get there as well. The weekend following the float plane day is a scale event scheduled at the Cambridge Club. This is just a fun fly event for scale like aircraft and nothing serious to scare you away! With the weather on the improve this should be a fun event and worth the trip to Cambridge. Note that Cambridge is tending towards being a noise sensitive club due to the close proximity of neighbors', so please be considerate and be wary of bringing aircraft that could be considered excessively noisy.

The Driveway Bridge...great news. I have been informed that the paper work has been signed off and the work to replace the bridge is due to commence around the second week of September. They reckon it should take about a week to complete all the necessary construction work, so if everything goes to plan we should be back to using the normal access road before the end of the Month. I will post a notification on the Web site as soon as we get the news it's open for traffic. There might even need to be a wee celebration me thinks!!

Well that's my lot for the Month. Hope to see you out flying or at the club night. Play safe.

Grant.

Captains Report

Chris

Yay we have our air strip back and I'm sure those of you that can fly mid week have taken the good weather to brush up on your

flying skills. Big thanks to Gordon once again for his organisation skills and John Reekers for rolling the field.

Thank you to all the members whom attended the working bee to fill the bigger holes and dips and with a little time and grooming it will be as good as ever.



Another thanks to the Cambridge guys for the invitation to use their strip and I'm sure the invitation is reciprocal and they come and fly with us some time soon.

Don't forget there are still a few events organized at Cambridge Model Aero club to attend like the Scale event 24th September and the glider day 7th October, so don't stop supporting events there just because we have our strip back.

As expected the weekend is here and although they were reporting a fine Saturday following the brilliant week and to be fair it did start out that way, but by the time we got to Waharoa it was overcast, and drizzle followed soon after.

We headed to Waharoa as Auntie was keen to maiden his new Blanik glider with Lyndon piloting Auntie's Giant Stick tow plane. Stan with his Spitfire came over to see if the engine was running as it should (it wasn't) so I offered to take a look at his Kolm engines carburetors over the next few days as there is something not right in there.

I took over my Mustang and broke a prop by missing the field by a plane width (think I need new glasses as my depth of vision is, well obvious).

Although I had a spare prop and swapped it over the fickled weather was not really conducive to sorting any kind of issues and I packed up a little disgusted with myself and the weather.

Lyndon and Auntie still did a number of flights in spite of a bit of crud weather and the Giant Stick having trouble pulling the big Glider up, but they were still flying when we left around 3.30.

You begin to wonder what's up. If it's not the strip out of commission it's the weather, will someone up there give us guys that have to work during the week a break already!

Alans SE.5a





Here are some photos of the SE5a, that I am building at the moment, this was taken a few weeks ago. Now getting to the stage of covering it in Sig Coverall.

The ailerons rudder and elevators have now been hinged. The model is being built off a Balsa USA plan and is 1/4 scale with a 80in wing span. It will be powered by a 26cc Zenoah engine. May be have it finished for the summer flying if everything goes to plan.

Aunties New Scale Glider

This is the latest addition to my fleet of aircraft. It's a Blanik scale glider made by E-flite with a 4m wingspan and weighing in at around 22lb...that's according to the specification sheet...I'm too scared to weigh it!



The model is an ARF and they say it takes about 15-20 hours assembly time. Mine took a couple of years collecting dust though, before the 20 hours of assembly!

I test flew it at Waharoa at the weekend with Lyndon on the Giant stik tow plane and myself on the Glider. Unfortunately the Tow plane with 50cc was somewhat stretched towing a 20 plus pound model and we could only manage a straight tow to about 300 feet before separating.

However we completed a number of these short flights and the glider certainly showed some promise with some warmer bubbles of air indicating the model should thermal okay.

It felt smooth on the controls, was pretty much in trim off the board except it may be a little nose heavy as it required some up trim for level flight. The flaps and airbrakes are best described as awesome and fun!

So all up, a very pleasing



test fly day with thanks to Lyndon for being the Tow Pilot!

For Sale Notice: Hi All, I have been given the task of selling on behalf of Iris Charlsworth, a lot of Tom's flying bits and pieces. There is quite a selection of tools, batteries, props and odds & sods. I would like to ask the members to bring some cash along to club night as they might see something they would like to buy.
Thanks, Erl Kean

Wanted to buy: Heat Sealing Iron for iron on covering
Contact: Jack Godfrey 07-8544081

Analysing the foam wing



Use of the foam wing in model aircraft construction has been around now for some years. This type of wing has some really

great advantages, but has NOT "taken over" model plane construction. Some kits and designs use a foam wing, some do not. Interestingly, most ARF (almost ready to fly) kits have even stayed with labor intensive "built up" wings, with conventional rib and spar design. Why? Oddly enough, the list of advantages is nearly equaled by a list of disadvantages. Weighing these points against each other, we find that preferences - on the part of a



manufacturer, a designer, or builder - may be the deciding factors, every bit as much as technical considerations. The principle behind the foam wing is pretty simple. We just use the SKIN of the wing for all the load bearing strength. The skin can be very thin plywood, balsa, obeche or other exotic woods, or wood plus fiberglass. The foam is there to lend the proper shape to the skin, and to stabilize it from deformation under load - such as buckling under compression. The actual strength of the foam contributes very little to the bending strength of the finished wing.

Just using wingskin to carry all the loads may seem inadequate until you realize how much of it there is. Consider a wing sheeted with 1/16" balsa, a very common composition. Going from the leading edge back to the trailing edge, every inch of the 1/16" balsa is the same amount of balsa as a 1/4" square spar! If our wing has a chord of 10 inches, that would be the same amount of balsa as TEN 1/4" spars! Or five 1/4 by 1/2" spars. Or whatever; -

this is plenty of beef. And note that all the beef is where it does the most good - right out at the outer periphery of the wing.

Let's examine some of the foam wing advantages: Shorter building time. This may be arguable, but most builders feel that building a foam wing is quicker, less tedious, than conventional construction.

Manufacturing ease. Once the proper cutting jigs and equipment is on hand, foam cores can be cut in great numbers with minimal effort. The foam wing certainly requires less work in drawing plans; the whole concept is far simpler.

Strength/Stiffness. This is an area where the foam wing really shines. Foam wings tend to be very stiff - they resist bending and twisting far better than the conventional design. For high performance aircraft, this is essential; most pattern planes, larger aerobatic planes, and ducted fan/turbine planes use the foam wing exclusively.

Accurate, Smooth Shapes. A conventionally built up wing that is not fully skinned will have slight irregularities where the open spaces meet solid structure. And the covering will have slight concavities in the open areas. The fully skinned foam wing will be smooth, and accurately follow the airfoil shape throughout the entire structure.

Tapered Wings are easily Reproduced. All that is required for the foam wing is the shape of the root and the tip airfoils to accurately scale everything in between.

Washout or Twist is Easily Incorporated. Positioning of the root and tip templates during foam core cutting will determine any twist or washout in the final completed wing. Aerodynamic washout (ie. progressing to a more stall resistant airfoil shape out toward the wingtips) is just as easily accomplished in the cutting process.

Foam Wing DISADVANTAGES: Weight. The completed foam wing will generally be slightly heavier than a comparable wing of conventional construction. This will vary with the choice of wingskin weights, the type and amount of bonding glue used, and other construction considerations. The technique of building a

foam wing is very different than conventional wing construction; this is only a problem if the builder is intimidated by learning new building methods. Covering. Applying covering requires more care - the foam core or the bonding agent may be damaged by the use of too much heat in the covering process. If the model is to be painted, however, this is considerably eased by the full skin. Hard Points. Attaching or mounting landing gear or servos to a foam wing is trickier - there just isn't much in the way of solid structure to bolt on a landing gear, for instance. Properly designed mounts must be built into the wing to carry the appropriate loads. Repairs? A damaged foam wing may be difficult to repair - there are techniques to do this but its more difficult and time consuming than just splinting a couple of ribs or spars on a conventional wing structure.

SO- are foam wings for you? Like so many other things in the world of model aviation, it all depends. It depends on just how strong your model must be. The importance of a totally accurate shape. How heavy is permissible. Your building preferences. Or, maybe that's just what came with the kit!



In the mean time
at HMAC field....!

Lost & Found!
Alan's Wallet

Coming Events

Sept 2017

[HMAC Club Night Meeting](#) – Oshkosh Airshow and Pearl Harbor
September 13, 2017 7:30 pm - @ Beerescourt Bowling Club Club
Rooms, 68A Maeroa Road (behind the tennis pavilion)

[HMAC Float Plane Day @ Lake D \(Kainui\)](#)

September 17, 2017 9:00 am - @ Lake Kainui (D), Lake Road,
Horsham Downs.

[Cambridge MAC Scale Day](#)

September 24, 2017 - @ Cambridge MAC, 191Maungakawa Road
(Opposite letter box 188)

October 2017

[Cambridge Soaring Series: ALES and Bungee/Winch Competitions,
with Sport Glider Flying](#)

October 7, 2017 10:00 am - @ Cambridge MAC, 191Maungakawa
Road (Opposite letter box 188)

[HMAC Club Night Meeting: Buy Sell & Swap Night](#)

October 11, 2017 7:30 pm - @ Beerescourt Bowling Club Club Rooms,
68A Maeroa Road (behind the tennis pavilion)

[RC Scale Competition - Waharoa Airfield](#)

October 14, 2017 - @ Matamata-Piako MAC, Jaggars Road, Waharoa
(Matamata) - 9am start, \$15 entry fee. Contact Gwyn 027-2984819

[HMAC Monthly Themed Flyin - Radar Speed Gun Fun](#)

October 15, 2017 9:30 am @ HMAC

[RC Soar Championships - Multiple events](#)

October 26, 2017 - October 29, 2017 @ Hawkes Bay (confirm site
location with organisers)

Flight Lines Deadlines 2017

October Bulletin – 24 th September

**For further up to date event info please visit:
<http://www.hamiltonmac.org.nz/>**

Official newsletter of the
Hamilton Model Aero Club Inc.
P.O. Box 1333, Hamilton

Website: www.hamiltonmac.org.nz