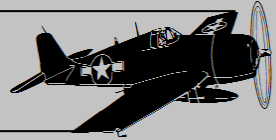


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Cover: Chris Tynan's Fokker Triplane

FLIGHT LINES

HAMILTON MODEL AERO CLUB INC.

March 2017

www.hamiltonmac.org.nz

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CLUB NIGHT	Wednesday 8 th March	7.30 pm
VENUE	Beerescourt Bowling Club	
	68a Maeroa Road - Hamilton	

THEME: Grant shows photos of Jets & lots of other stuff??

Bulletin Printing *Compliments of Gallagher*

Presidents Report

Well, it would seem that even if you don't make it along to an AGM, you can still get elected as president! I guess that means no one else wanted to take on the task of writing these monthly bulletin articles! AGM's generally seem to provide a bit of interest, but from reading the minutes it appears Gordon did a great job in my absence and the business end of things rolled through nicely.



You have a new committee elected, but apart from a couple of changes it remains much the same. We welcome back Mike Wilson as Bulletin Editor and also Colleen Tynan who has agreed to act as Caterer....(which we all agree is the most important office in the club!)

One of the more satisfying things about our clubs AGM is that we get to acknowledge those club members that have made a difference to our club and modelling across NZ in general. This year we celebrated the efforts of Brian Howser who has been a stalwart of the Control Line scene for many more years than he would like to admit too. Brian has represented NZ numerous times, contest directed national and local events and been team manager for NZ international teams to mention just a few of his achievements. We know that Brian has made a huge impact on the Control Scene in NZ and for that we are proud he remains an HMAC member.

Following the AGM I'm told that Alwyn Graves gave a very interesting mini talk on the origins of RC modelling in the Hamilton Club and across NZ. Thanks Alwyn for putting that together, it's a shame I had to miss it.

As I write this article, this month's club night topic is yet to be finalised. However I can assure you we will be providing more of the same sorts of thrilling entertainment and engaging subjects of interest that you have become accustomed to! So note your

calendar now and make sure you come along and kick off the new club year in style.

Last month's club flying event was a Heli Rally sponsored by Hobby Hangar. I ventured out to the field on the Saturday morning and the place was certainly over run with visitors from all parts of the north island. This was great to see and the guy's all seemed to be having a great time with lots of flying and the usual excited pilot chatter. It was good to hear that some of our fixed wing pilots also took the time to pop out and see what these guys are up to. As we currently only have a small handful of heli pilots in the club, we miss out on seeing what heli's can really do. Some of the top guys really do put on an exciting show and have skills that I can only but envy! Thanks to Kevin and Hobby Hangar for promoting a successful event and also providing a donation to the club for the use of the field.

This month's club flying event will be our first Float Plane flyin for the year. This one will be up at lake Puketirini in Huntly, as Lake Kainui is still too busy with water skiers at this time of the year. The gates will be open from 9am and a rescue boat will be on hand. Bring along your lunch and make a day of it as I'm sure we will still have some summer weather on offer!

The big reminder for the month is that Club Subs are due. These need to be paid up before the 1st of April. MFNZ are being quite clear this year in their approach to subs, essentially if your subs are not paid on time you will not be insured for flying activities. For our members this means you will not be able to fly at our site after the 1st of April until you rejoin. So please don't put it off until the very last minute, jump on line and pay your subs on time and make the life of our treasurer a happy one ☺

Coming up on the calendar, there are a number of events around the local area that you might want to check out. The web calendar has the most up to date event information we can source, so make sure you keep an eye on it. One of the more important upcoming events of note is the Brett Cudby Memorial flyin at the New Plymouth Club in a couple of weeks. This is a popular event and I hear there is some local interest in attending this year, so if

you haven't ventured away in a while, this might be a good opportunity to get a flying weekend in, away from home. Well that's my lot for the start of the new club year. I am heading off to yet another airshow this weekend... to Ohakea this time. Having ventured down to Masterton for the Wings over Wairarapa Airshow that was totally rained out, my fingers are crossed, my toes are crossed and I've stocked up on sunscreen in vain hope that it will be fine!

So until next time, see you at the club night or float plane day and above all else.....let's be careful out there!

Grant



Bugger...that hurt !

Captains Report

Well here we are again preparing for another year of stories, the occasional idea and hopefully something of interest.

The calendar has been quite full lately as clubs try to cram as many events into what was looking to be a mediocre summer. Because these are great events some members have been clocking up the k's. Events like the Nationals, Awatoto Warbirds, Tokoroa Jets, Galatea IMAC & Pylon up Pukekawa to name a few.

Unfortunately while some of these events were on, my job had me on the road clocking up a few k's myself and since I was going to be away for 10 – 12 days I thought I would throw one of my few foamy's in the service van for any down time that might eventuate with an assortment of batteries to make it go should the chance arise.

It was 5 days into the work trip and about 1200k to this point before I had a 4pm end to my working day and the sport grounds at Milton (50k south of Dunedin) looked like a good place to have



a little fly.

Remember I said I put batteries in, well I should have put some spare four bladed props in too! Being a tail dragger and nice lush grass on the field first take off was a fail - bummer. Set of side cutters and the now three blade became a two, didn't seem to affect performance too much and had a good couple of flights before a group started to assemble for cricket practice and I thought I should vacate their pitch.

Another two days and about a 400k round trip to Invercargill and back gave me the opportunity to head north towards Dunedin

where I could call in at the Dunedin Model airfield. I called in 6 months ago on a previous trip and they offered me a flight but my dyslexic (read mode two) made it ill-advisable for their models sake.

This time I was prepared, well props aside I was prepared, I got there about nine o'clock and there were only two club members present, one was cutting the runway and taxi ways in very long grass, I mean a farmer would be happy to bail it!

About 20 minutes and the strip was in pretty good shape even for my nose happy plane. A bit of a socializing and I found the Dunedin guys seem to favour the convenience of electric power with only one glow powered model that day, plenty of gliders and smaller built models, lots of foamies and some drone racing practice going on too. Great bunch of guys to fly with and will try to fly there again next trip time permitting.

With lots more Aeronautical events coming up (full size at Ohakea, Omaka) and the Brett Cudby memorial in New Plymouth there are a few more k's to clock up before this year is out.

So make use of the good weather and catch you at the field.
Chris T

Fees for the 2017/18 Year

PLEASE NOTE THAT THE FOLLOWING FEES ARE DUE TO BE PAID BY 31ST MARCH 2017. That's this month!!

Under the revised rules set by Model Flying New Zealand, you will not be able to Fly from any registered MFNZ club flying field from 1st April 2017 if your renewal fees have **Not** been paid. Subsequently, you will not be covered by the MFNZ flying insurance after that date. Hamilton Model Aero Club will need to enforce this requirement.

The 2017-18 HMAc/MFNz combined subscription fees are as follows;

SENIOR	\$165.00
RETIRED R/C	\$145.00 (70-Yrs and over)
FAMILY	\$175.00
JUNIOR (if over 18 years from 1 April 2017 you become a senior)	\$ 55.00
CONTROL LINE ONLY	\$105.00
FREE FLIGHT ONLY	\$105.00
ASSOCIATE	\$75.00

Note, MFNZ fees have been increased by \$5.00, but our club fees have remained the same as last year, which gives us the values above.

Your club fees can be paid by internet banking to the Hamilton Model Aero Club Account: 03 0314 0215645 00 Please ensure you put your full name on the payment and subscription type. Where practical please email the secretary that you have done so.

Alternatively, you can send a cheque to Alan Rowson, 18a Mahoe Street Melville, Hamilton 3206

Or post to the: Hamilton Model Aero Club Inc,
PO Box 1333, Hamilton 3240.

Thank you for your co operation.

Alan Rowson

Secretary/ Treasurer

Email: alan48linda47@gmail.com

The Lure of the Fletcher

Bruce Pickering

I suppose most New Zealand aero-modelers have at some time or other had a hankering to build a Fletcher FU24 Agricultural model.



I have succumbed to this urge four times over the years—there is something appealing about its “oversized model” appearance. At the field almost a year ago, while indulging in some casual banter with a pilot whom I shall not name—initials GF— I was challenged to

build another one, “A big one – and make two, one for me!” Well, who could resist such an invitation?

I already had good 3-view drawings from Pacific Aerospace, so it wasn’t long before I had a few lines drawn on paper. The biggest I could carry in my car, with the wing divided into three parts and a removable tail plane, was 2.440 metres (96 in). So, 96 inches it was. With the theory ringing in my ears, “It takes half the time to make two as it does to make one,” work began one day in March.

I decided to build the fuselages on stocks, in a way similar to how a boat is built. The wing and tail plane are of foam; the tail plane is balsa sheeted and covered with dope and tissue. After inserting spars, undercarriage sockets, etc, the wings were sheeted with fibreglass/epoxy—one layer of 78gm cloth, followed by epoxy/micro balloon filler, sanded to fair any depressions, then a layer of 46gm cloth. I also covered the fuselage with one layer of 46gm cloth.

During one inspection visit by GF, I mentioned that I would like to fit a hopper in mine, which elicited an enthusiastic response: “Yeah, yeah, that sounds good to me!” I had intended to make them from litho plate but decided that all that metal near the

receiver might not be very bright. So I knocked up some moulds and vacuum formed them out of styrene—one advantage of vacuum forming is that it's quick and easy to make multiples.



On another visit I reflected on the idea of a sliding canopy: “Oh yeah! A sliding canopy would be really good. Then you could easily get at the fuel tank,” opined GF. Actually, it wasn’t all that hard to make the canopy slide on rails, but I did stop short of the “Good idea to make it servo operated.”

I wanted the undercarriage to be scale, so I made some patterns and cast the outer sections in aluminum, machining them to finished size. The oleo legs I simply turned from 16mm machinable aluminum. I scoured various likely places for suitable springs, but finding nothing adequate, I ended up rolling some on the lathe out of music wire. As an added function, on my ones I slipped in a slug of cured silicon to act as a buffer in case of the oleo bottoming in a heavy landing. Eventually it turned out there was too much bounce in the nose leg, so I removed the spring and inserted some pieces of rubber—making landings much easier. One frequent topic of conversation was “What colour are

you going to paint yours?” GF was sure he wanted all yellow, and eventually found a photo of one, albeit an Australian aeroplane. Since I had spent some years in Gisborne, where Fieldair



dominated the skies, I went for one of theirs—EMV, which I selected because that was the easiest lettering to cut into stencils. I use Dulon lacquer because it is easy to patch if/when

repairs are necessary. The logo and other writing I made from water slide transfers—bringing back distant memories of childhood—which I applied before over coating the model with Dulon Clearcoat.

Total finished dry weight is 9.7kg (21.4lb), giving a wing loading of 32 oz/sq ft.

So the next question is: How does it fly? Well.....it flies just like a Fletcher, trundling off into the air effortlessly, fairly heavy on ailerons, doing beautiful wingovers at the end of each run. I can carry 2 or 3 kg of “fertilizer,” which spreads reasonably well.

Awatoto Warbirds 2017

Gordon Meads – Photos Alan

A group of hardy souls from HMAC ventured to Awatoto for the annual Model Flying Hawkes Bay “Warbirds” event held in February.



The weather gods were smiling and gave us a lovely fine two days of sunshine with a sea breeze straight down the strip which kicked in on time, each day, at 11am. Perfect!

Attending from HMAC were Alan Rowson, Grant Finlay, Chris & Coleen Tynan and Gordon Meads. Also there, cracking the whip in the starting box was Ryan Cadwaller (Rhino) who can't make up his mind where his allegiances lie! However he was doing a great job keeping things moving, so good work!

Also spotted having one flight with a borrowed plane was Jarrod Briggs. Of course he flew it like he stole it....just what we like!!

Dave Crook was also seen lurking in the crowd.

Again this year it was a slickly run, well organised event although I think the numbers may have been slightly down on previous years. However this gives more flying time for those that are there. The numbers of public that came through the gates to watch looked very high so there was plenty of interest and hopefully they saw a good show.

As always there were some very nice planes on show and also some very impressive flying. I believe the standard has got better

in the last few years.

One thing that has become quite noticeable to me is the number of "exotic" engines that have been fitted into some of these planes. Lots of radial engines.....mmm, I could just drink in those sounds all day!

On the first day Chris had a bit of bad luck with his



large Mustang. A hard bounce on landing appears to have jarred the servo tray loose, so as he went to go round for another attempt control was pretty much lost. The plane then did a death dive into the adjoining paddock very close to going into the river. A shame as it was performing very well.

Alan's Sopwith Tabloid had a flight with Grant on the sticks and it staggered around the sky in a realistic manner...needs more power Alan! However the aircraft did well as it won the prize for the WW1 category, well done.

There several very good WW1 slots with 5 or 6 planes up at once



flying around in "sorta" formation. They looked very impressive against the clear blue sky.

I was flying my Sopwith Pup but was badly outnumbered by the German hordes, so was lucky to escape alive! There always seemed to be a certain red Fokker triplane on my tail! However I managed to use 7 litres of petrol through it over the weekend so must have done a fair bit of flying without being shot down!

Grant was roped into taping an FPV camera onto the wing of his Tiger Moth which he flew around with great gusto. The video was transmitted back to a large TV and also a set of goggles. This

was a huge hit with the public with lots of oh and ah's plus a couple of "I feel a bit sick"! This was very good PR which was organised and supplied by Jonathon Shorer.

Lots of other flying was done by other aircraft belonging to our HMAc members without any other dramatic incidents.

There were however a couple of other nasty crashes, one involving a very nice jet, but overall fairly incident free compared to some years.

This is a great Annual event to attend which does not disappoint from a flying or spectator point of view and I highly recommend anyone to attend next year.

Workshop Spy report

Lyndons been busy

Continuing with our attempts to spy into members workshops, next month we have a special pry into Brian and Warren Setters man cave...well actually, I think the cave is the whole house and I'm sure Warren sleeps with some of his models! So keep an eye out for that in next months issue. But in the mean time, I took a quick peek back into Lyndon's workshop that we visited mid May last year. At that time Lyndon was busy creating a dust storm in the workshop that was migrating throughout the whole house.



Fortunately that part of his Mustang project has now come to an end and the model is taking serious shape. The plug and moulds for the fuselage have been finished and a moulding has been taken out for evaluation and sizing up the internal structures. The

wing moulds are now under action too. However, before getting too deep into the wing construction, Lyndon has been looking into producing retracts for the model. With such a large model, the price of commercial units is astronomical, so in true aero modelling fashion, Lyndon is designing and engineering his own set. These are constructed from stainless steel rather than aluminium as the weight won't really be an issue and strength is more important than weight. They are spring down and air up, so if there are any air leaks, this just means the wheels stay down, which isn't a real problem now is it! A fair bit of lathe work, lots of grinding, cutting and braising have seen a fairly impressive set of retracts appear from the workshop, even more so when you see them in action. Next steps are to design and construct a working set of oleo legs and wheel axels for them before fitting them into the wing design.

Choosing your first set of building plans

A few guys have emailed me asking what would be a good plane to start with, as a first project to build with balsa wood.

The best place to start has always been a kit. Before the Chinese started building everything for us, hobbyists used to build a lot of planes from kits. There just aren't as many kits any more because of decreased demand, but there are still a few out there, and I still think that's the best place to start if you want to learn how to build. Check out Balsa USA, Sig and Great Planes for an assortment of nice kits that you can use for learning. Sig has the Kadet Senior or Seniorita, which are legendary trainers. Balsa USA has a plane called the Student Trainer which is specifically designed to teach new builders. They also have a basic trainer called the Stick 40. And Great Planes still sells the PT-40 trainer kit, which is a classic, as well as the PT-20 and PT-60.

After you build a kit, or if you want to skip the kit, then how do you choose a plan to build? You don't want to get a super complicated plan and find that you're in over your head. Another danger is that you might get an inferior plan that doesn't include enough information for a beginner.

Before the internet was such a big thing people used to read hobby magazines. There isn't much use for magazines any more, but there is one thing I miss about them. Most RC magazines used to feature construction articles every month, and they published a catalog where you could buy copies of all of their plans. The editors wanted to make sure their plans were of high quality, so the designers were expected to conduct flight tests,



refine the design if necessary, and deliver a good product.

In the digital age, I am still a big enthusiast of magazine plans. You can still buy the plans from all of these catalogs, now online. My favorite plans

resource has always been RCM. I have nearly a hundred different RCM plans, and they've all been good. Some have been better than good! Unfortunately the magazine and catalog are no more, but fortunately almost all of the RCM plans have been uploaded and can be found in internet archives such as Outerzone.co.uk. Model Aviation also has a great catalog, as do Model Airplane News, and Model Builder. All of the aforementioned catalogs offer high quality designs that will not leave you wondering about important details.

Sooner or later you'll find those cheap CDs on eBay with ten billion plans on one disc. These can be a good resource, but there is a risk to the beginner because some of the plans are

terrible. If you're not an expert, you would probably be better off obtaining a good set of plans that you can count on from one of the classic RC plans catalogs, and then if you want to download plans for free later you'll know what you're doing. I really think you will gain valuable knowledge by seeing a good set of plans first. That way you will know when you see a terrible one. If you are interested in free downloads, check out Outerzone. This site has tons of vintage magazine plans, which can be printed at a local print shop.

Assuming you are going to buy or download a set of plans, how do you decide which one to get? The first factor to consider is the date on the plans. Back in the old days the designs were more complicated. Fuselage bulkheads often had so many cutouts they looked like jigsaw puzzle pieces. Engines were mounted on hardwood rails. Wings frequently were built with sheet wood spars, and the ribs had lots of cutouts and notches. Some time in the 1970s designers started simplifying the designs quite a lot. Engines are now mounted on nylon mounts, wing spars are square and the top one usually lines up with the bottom one, fuselage bulkheads are usually simple shapes with few notches. So get a new-style plan to start with and you'll be a lot happier.

If I had to recommend one plane for a beginning builder, you just can't go wrong with the Q-Tee, designed by Lee Renaud. It's simple, it's easy to build, it flies great, and it's a really good looking plane. If you want to learn how to build, this is one of the best projects you can choose to start with. There were a few other innovative designers who changed the state of the art of model building from the older, more complicated style to the modern, simple style. The most prolific of them were Joe Bridi, Fred Reese, and Ken Willard. Also, Dick Tichenor and Bob Wallace designed a lot of good looking, easy to build planes. Look for planes by these designers and you can't go wrong.

Coming Events

March 5th	Rotorua MAC Model Airshow
March 8th	HMAC Club Night Meeting
March 12th	Float Plane day at Huntly's Lake Puketirini (date to be confirmed)
March 18-19th	Brett Cudby Memorial Flyin - New Plymouth MAC
March 22nd	Balloons over Waikato 22nd to 26th March
March 26th	Waikato Champs RC Pylon Competition Clausens Farm, 244 Telephone Road, Puketaha HN.
March 31st 31st – 2nd	HMAC Subs Due!!! No pay, no fly Taupo RC Soaring Aerotow event Taupo MAC, Centennial Dr.
April 7th-9th	Precision (Pattern) Aerobatics - Trans Tasman Competition – Awatoto, Hawkes Bay
April 8th-9th	RC Soaring F3B Competition – Matamata
April 9th	Cambridge MAC Glider/Vintage Rally day
April 12th	HMAC Club Night Meeting

Flight Lines Deadlines 2017

April Bulletin – 31 March

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

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