



Tale Feathers - August 2003

Wagga Model Aero Club Inc.

P.O. Box 2043
Wagga Wagga 2650

Home Page: <http://www.waggamac.org.au>

President:	Kevin Little	Ph (02) 6926 1134 ah
Vice-President:	Steve Sutherland	Ph (02) 6925 4503 ah steve.sutherland@agric.nsw.gov.au
Secretary:	Ronda Lampe	Ph (02) 6926 2445 ah ronbillampe@dodo.com.au
Treasurer:	Tony McAtamney	Ph (02) 6933 1388 ah TMcAtamney@bigpond.com.au
Committee Members	Ben Taber	
	Bill Lampe	
Web Site & Newsletter	Greg Wilson	Ph (02) 6925 1771 ah gwilson@csu.edu.au
Editors	Wayne Hadkins	Ph (02) 6925 7301 ah wayneh@optusnet.com.au

Talefeathers - August 2003	1
Newsletter Distribution	1
Website	1
A New Year - A New Executive	2
Farewell Bob White	2
Alternative Aeroplanes & Material	2
Hall of Fame	4
ARF Hints & Tips	4

Welcome to the August 2003 edition of 'Talefeathers'. First off, thanks to Craig for stepping in and keeping *Tale Feathers* going last year. We are going to try and follow on with regular monthly issues – basically, you have two choices – contribute and thus see your own info in this newsletter, or don't contribute, and get what we give you!?! This time, we'll be trying to integrate *Tale Feathers* more with the website and vice versa. For example, expect to see web links and other web info in *Tale Feathers* and copies of *Tale Feathers* available for download on the website. Greg and I have put a lot of effort into the web site to up date it and add useful information and features for WMAC Inc.'s members and friends. Please let us know what you think.

Newsletter Distribution

Way back in the April 2000 newsletter, the option of distributing the newsletter electronically was raised – It is now August 2003 and we are finally doing it - never let it be said that this Club rushes into anything!?! For those of you that are on email, we will be emailing to you notification when the newsletter is available for downloading from the Club's website. It will be in Adobe PDF format - the Acrobat PDF viewer is available free on the internet and it works on both IBM & Macs. There is a link from the "documents" page to get it if you don't have the PDF viewer yet. Those of you who don't have email facilities will receive a conventional hard copy.

Website

The following pages are currently being over hauled or going onto the website as you read this (all can be reached direct from the *site map* page):

- ? The main page (index.html) with contact details for the current Exec and links to the other pages
- ? Mem_pics.html – pictures of members & their models with a brief description
- ? Fundays.html (club comp dates, meeting dates, etc)
- ? Sitemap.html & updates .html – keep track of new pages and changes to existing ones
- ? Plastic.html - A new page on alternative building materials and aeroplanes such as Bruce &

Warren's SPAD aeroplanes, foamies, combat, etc

- ? A new Checklist page - airframe checking; preparation for tuition; sailplane & power checklists, etc
- ? Arf_help.html - hints & tips on "building" and repairing ARF's
- ? Instructor.html - An instructors page (names, a picture of each instructor, contact details, etc)
- ? Special_contacts.html - A new Special interest contacts page, as approved at the May 2003 meeting
- ? Halloffame.html - details of the induction of Col Taylor and Wayne Hadkins into Wagga Wagga City's *Sporting Hall of Fame*
- ? Frozen.html - a little harmless humour
- ? A "links page" - to include interesting links to sites such as MAAA, VMAA, local clubs, interest groups (e.g. AEFA, APAA), Col Taylor's site, etc
- ? Documents.html - a "documents page" that includes PDF copies of all Club forms (membership application, proxy, office bearer nomination, WW2 entry, etc.) & documents such as constitution, flying rules, newsletters past & present, check lists, etc., etc.
- ? WW2 and Heli heatwave pages with lots of pictures
- ? A new "for sale" page (including the occasional "specials" from Col Taylor perhaps????) - any thing wanted or for sale, let Greg or Wayne know.

To start things off, John Tonks sent us this - check it out:

Hey Guys,

try this link page, god it's got some stuff on it, not all seem to work on my ISP but there's some weird and wonderful ideas.

Cheers, JT

<http://www.glasgow-barnstormers.org.uk/howto.htm>

A new year - a new executive

Congratulations to the new Exec - details are at the top of the first page of this newsletter. Give them your support. Thanks to the old Exec for a "steady as she goes" year. The challenge for the incoming Exec will be to erode some of the apathy of previous years, but then, who cares?

Farewell Bob White †

Regrettably, long time Club member and card carrying No. 1 "shed dweller", Bob White passed away in July. Bob died peacefully in his sleep. Bob was always there, watering the pit area & car park trees in summer and catching the sun in winter, all the time watching our comings and goings. Somehow, I think he is still watching. †



Les Hale (left) and Bob White "catching some rays"

Alternative Aeroplanes and Materials

Corrugated Plastic Sheet and Aluminium Channel

Bruce Barter and Warren Bailey decided to have a go at building planes from "core flute" corrugated plastic sheeting and aluminium channel. The construction was based on information obtained from the SPAD - Simple Plastic Airplane Design website (www.spadtothebone.com). Bruce has had to modify some of the construction to suite locally available materials and adhesives.

The flying "For Sale" sign did fly, but it really was not much fun. The aspect ratio was too low for the 'quasi-jedelsky' profile it used. In the search for better performance, we came up with the "Realty Bipe". It still needs to have the incidence angles sorted out properly, but it does fly much better and shows much promise!!



Not one to rest on his laurels, Bruce went looking for something else to try from the SPAD site. He found the *Hell On Rails*, or HOR for short. Bruce modified it to use a V-tail. It flies very nicely on a .28 cu. ins. engine with the 4 basic controls of ailerons, elevator, motor and rudder (using vtail mixer on the Futaba Tx). Inspired by the success of the small HOR, Bruce recycled the 'fuselage' and tail feathers off the flying "For Sale" sign (his 1st SPAD aeroplane) into another larger HOR. This one uses a .47 cu. ins. engine and has an undercarriage. The excellent, vice-free, flying characteristics are similar to the smaller version, but the extra power makes for much more fun!!

When in Florida in 2002, I spied this combat model at the Remote Control Association of Central Florida (RCACF) flying field. Power was a Dub Jett .32 with tuned exhaust. The fuselage was an aluminium baseball bat and the wing was a foam core covered and re-enforced with coloured self adhesive tape. The tail feathers were core flute. Everything was held together with zip-ties, *silastic* and rivets!?!



The high aspect ratio (long wings) are to increase the chance of catching an opponents streamer during a bout. Normally 5 aeroplanes contest a bout which lasts typically 5 minutes.

Foam Combat Wings



WMAC's own Ian Strachan has developed his own combat aeroplane. It is a flying wing. Typically, it uses a .32 engine with tuned pipe, which makes it very lively indeed. For example, it is much quicker and more agile than the Florida Combat model above. The aeroplane uses a plywood "fuselage", foam cored wing and conventional fin and elevons. The wing is covered with iron on fabric covering and has some fibre-glass re-enforcement in strategic locations. Ian produces foam cores for this fine flying machine.

Foam Slope Soaring Wings

Ian has also developed a flying wing for slope soaring use. The aeroplane uses a plywood "fuselage", foam cored wing and core flute fin and elevons. The wing is covered with coloured self adhesive tape and has some fibre-glass re-enforcement in strategic locations. It is VERY popular with the WMAC members - Ian also produces a semi-kit of foam cores, ABS mouldings and core flute parts for this fine flying machine.



What Else?

Perhaps one of the simplest airframes you can make is out of 25mm thick styrene foam sheet. Cover it with brown paper and watered down PVA, then paint it. If you want to get fancy, you can radius the LE and TE,

but they fly without this refinement!?! I have flown deltas, flying witches, flying carpets, flying irons, etc all using this construction technique and they are remarkably robust.

If you've done something similar, let us know.

Hall of Fame

Wagga Wagga City Council
Sporting Hall of Fame

The flying of model aircraft has often been considered by many, both inside and outside of the sport, to be "just a hobby". However, it is officially recognised as a sport, and pursued by many involved in the sport with just as much (or more) dedication and passion as other sports men and women involved in more "mainstream" or "traditional" sports. All our members are licenced through the MAAA with a Federation Aeronautique Internationale (FAI) Sporting Licence, Class F. The FAI is the International Body that oversees **all** aerospace related activities, World Championships and world records.

Two WMAC Inc. members have been inducted into the Wagga Wagga Council's 'Sporting Hall of Fame' as Wagga Wagga resident sportsmen who have represented Australia in international competition. They are Col Taylor (F3A aerobatics World Championships) and Wayne Hadkins (Electric Flight World Championships).

Col Taylor (pictured on the left) represented Australia at the F3A Aerobatics World Championships in the USA at Pensacola, Florida, in 1983.



Wayne Hadkins (pictured on the right) represented Australia at the inaugural F3E Electric Flight World Championships at Lommel in Belgium in 1986 and again at the F5B Electric Flight World Championships in Winterthur, Switzerland in 2002.

While this is great for Col & Wayne personally, the **real** importance is the recognition and legitimacy that it brings to this, our chosen sporting activity. It is disturbing to hear of a few Club members questioning the decision of the Hall of Fame selection Committee. The simple fact is, because ours is so "non-

mainstream", they researched our sporting bona fides far more than they previously had any other sport.

ARF Hints & Tips

Either new to the sport of R/C or an experienced R/Cer - if you are new to Almost Ready to Fly (ARF) air craft, hopefully you will find some useful hints and tips here. However, if you've learnt some valuable ARF lessons, please share them with us.

New to R/C....

OK - you want to get into R/C, so you've visited the local shop and picked up that big box of bits. Now you want to turn it into the plane on the box cover. The beauty of an ARF is that most of the work has already been done for you. Conversely, you must realise that the jobs that are left for you to do are still critical to getting a successful R/C aeroplane into the air - do them right and you'll be rewarded appropriately. If at all possible, it's always better if you can enlist the aid of an experienced builder to run you through the necessary tasks, or try and look at a completed (and preferably flown) aircraft the same as, or very similar to, yours so you have the outcome clearly in your mind before you start.

1. read the instructions, then identify all the bits, then re-read the instructions again!! Don't ever under estimate the importance (and benefits) of this obvious step!?!)
2. Remove ALL covering material from the timber where any items that are to be glued together come into contact. e.g. on the tailplane & fin where they glue to the fuselage, or on the face of the wing ribs where the 2 wing halves butt together or under the ply mounting plate for the aileron servo.
3. Test fit ALL components at least once without the glue before even considering reaching for the glue bottle. Are the items a loose fit? If so, get some packing material of the same type as the materials that you are joining. Are the items a very tight fit? - If so, get out the sand paper (220 grit) and carefully sand the components until they are a "snug" fit (but not a tight fit). If you have to force it, then it's too tight!!
4. When joining components such as the fin or the tail plane (also known as the horizontal stabiliser) to the fuselage, make sure they are correctly aligned as per the instructions before the glue sets. Make sure they remain securely held in place while the glue is drying.

5. Use epoxy laminating resin, spread thinly with a brush, to fuel proof the engine and fuel tank compartments. Also coat with epoxy any bare timber exposed to the elements - e.g. wing dowels, cutouts for push rod exits, wing saddle, ends of control surfaces, etc.
6. Install the radio gear as per the instructions. Don't squash the rubber grommets on the servos (use those little brass ferrules that came with the servo). Check that the control surfaces move in the correct direction and have the movement indicated in the instructions.
7. Make sure the assembled aeroplane balances on the correct Centre of Gravity (CofG) with the fuel tank empty. Make sure the aeroplane balances literally when you support it only at the nose and tail (i.e. wing tips are balanced)
8. With the control sticks and trim levers centered, make sure the assembled aeroplane tracks straight across the ground when you give it a push. If it doesn't then fix it!! (re-centre the nose wheel on a tri-cycle setup or re-centre the tail wheel on a tail dragger setup)
9. Charge your transmitter (Tx) and Receiver (Rx) batteries for 24 hrs before flying, with the charger that came with the radio. Always make sure both are switched off when not in use.
10. At the field, NEVER switch on until your key is in the keyboard and you are actually preparing for flight. Switch off straight after each flight and then remove your key from the keyboard.
11. Seek out an experienced instructor for a pre-flight inspection (to double check every thing is OK) then for the first flight and for your subsequent tuition

Welcome to a great sport - Good Luck and Always Have fun!!

Experienced R/Cer....

1. Doesn't matter how good you think you are, always - read the instructions, then identify all the bits, then re-read the instructions again!! Don't ever under estimate the importance (and benefits) of this obvious step!?!
2. Remove ALL covering material from the timber where any items that are to be glued together come into contact.
3. Test fit ALL components at least once. Pack loose fitting components, and sand items that are a very tight fit. If you have to force it, then it's too tight!!
4. Make sure the fin and tailplane are correctly aligned as per the instructions before the glue sets. Make sure they remain securely held in place while the glue is drying.
5. Fuel proof the engine, fuel tank compartments and any other bare timber exposed to the elements - e.g. wing dowels, cutouts for push rod exits, wing saddle, etc. - with epoxy laminating resin.
6. Install the radio gear as per the instructions. Are the control surface throw and directions correct?
7. Check the Centre of Gravity (CofG) and lateral balance with the fuel tank empty.
8. Check that the assembled aeroplane tracks straight when you give it a push along the ground.

Next month, we'll have a quick look at ARF triage, should the worst thing happen. If you do decide to repair it, then where to start, what to look for, etc....

NEXT GENERAL MEETING
11/08/03 8.00 PM
Wagga Leagues Club (meeting + ??)

Next Club Event – tba (suggest something to an Exec. Member)

Next Club Competition
Fun Fly - Sunday 31/8/03 - starting at 1.00 PM