Holdfast Model Aero Club Inc.

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August 2014

HOLDFAST BUZZ

Inside this issue:

The Good Old Days

Back in the 50's, RC modelling was quite primitive, but still a lot of fun despite the failures. Ross Lloyd recounts his early days of getting started in the hobby. Full story on page 4.

Advertise What you Want to Buy or Sell on our Web Site
Send details & photos to Geoff Haynes — buzz@holdfastmac.com.au

The HMAC newsletter is your vehicle for sharing information, experiences, building projects, etc with your fellow members. If you have photos of your latest model, a construction in progress or handy tip you'd like to share, please send it to Geoff at buzz@itapps.com.au for inclusion in a future edition of BUZZ.

Kingsley Neumann

"...The most important part of our facility is our flying surface. We must take steps to improve the quality of the turf ..."

From the President

The Committee has been considering the propositions for some capital expenditure at the Club. A resolution was passed at the AGM agreeing to go ahead with weather proofing at the flightline subject to some financial constraints including a full investigation into the possibility of financial grants. Our hard working secretary, Ian, has presented a number of possibilities. Unfortunately they all involve a lengthy lead time before an application can be made. This invariably means that to obtain such grants we will have to delay the development because grants will not be made retrospectively.

We have not abandoned the flight line. Far from it in fact. We are serious about the project but it will take time.

Meanwhile, following on from another discussion at the AGM, it was decided that the cramped tractor shed is a definite safety hazard. It would be possible to raise the roof of the shed but any money spent might be wasted if we subsequently decide to renovate our old shed. There have been a number of plans put forward which are most interesting. The most promising one is to build a new shed for the tractor and build it large enough to incorporate a food preparation area and additional storage. This would enable us to demolish the old shedding and perhaps incorporate an outside covered area linking the shed to the existing verandah. Nothing has been decided as yet and as soon as the Committee has settled on a design this new proposition will be put to Members.

The most important part of our facility is our flying surface. We must take steps to improve the quality of the turf. This would involve moving sprinklers and top dressing regularly. We have a very large area to care for and the harsh winter and summer seasons don't help. And neither do the rabbits! We will be moving forward in this area starting with our annual working bee. A date will be announced next month.

The Committee welcomed Ted Carter on board and we farewelled Mike Mildren after many years of service. Mike will still be around the place doing his usual tasks with the weed spray and any number of handyman jobs.

An interesting item to come out of the last MASA meeting was that a Gold Wings (power) instructor can now make assessments of Helicopter flyers (including Multi Rotors) and Glider flyers for the purpose of MAAA Wings achievements. This does not mean that the Instructor can teach helicopter or glider flyers how to handle their machines. It simply allows the Instructor to assess, in accordance with the test schedule. So if you think you are ready for a Bronze or even a Gold Wings test, we should be able to accommodate you within our own Club.

Things are a bit quiet on the Flying Training side right now. The weather has a big effect of course. Our Membership stands at around 80 Flying Members at the moment and we could do with a few more. If you do see people standing around in the public area why not give them a friendly greeting and try and gain a recruit. First impressions are lasting and that friendly chat might well pay off.

Kingsley Neumann

Torque of the Town

On Monday 28 July Ray Vincent brought along his latest show and tell to the clubrooms.

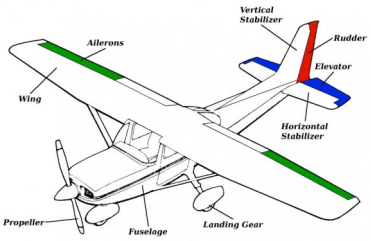
Its a 7 cylinder radial engine which is to be installed in a 1/3rd scale Sopwith Pup which he has been building for the last few months and expects to fly it by the time this Newsletter arrives.

Details are:-

Radial 7 cyl. 4 stroke glow plug engine.
77 cc., 4½ H.P. Swings a 22 X 10 prop.
Made in India by "Evolution".

Ground School - part 1 — by John Jefferson

Do you remember getting a "Principles of Flight" hand-out from the club? It's been available for a number of years and provides an explanation of the basic principles of how an aircraft flies. Essentially the hand-out is a condensed version of the BAK (Basic Aeronautical Knowledge) publication which student pilots use when preparing to fly full size aircraft. Although we fly model aircraft, the principles are the same as they apply to full size aircraft, i.e. control function, forces acting on the airframe, climbing, turning, landing etc.



If you are a newcomer to flying model aircraft, it is strongly recommended that you familiarise yourself with the primary and secondary effects of the controls. If you are preparing to undertake your bronze wings test, as well as demonstrating your proficiency in the air, the club also requires you to sit for a theory test which includes some of the elements outlined in the Principles of Flight. So, let's have a look at some of those elements.

Primary function of the controls

Ailerons
The ailerons control the angle of bank and rate of roll. If you move the stick a small amount to one side the roll is gentle. If you keep on moving the stick the roll is faster. Once you have achieved the desired angle of bank you need to centre the stick otherwise the model will keep rolling, and when inverted will likely start a spiral dive. Not recommended, particularly when the model is at low level, unless you are intending to execute a roll and take corrective action to stop it losing height.

Elevators
The elevators control airspeed. Yes, that's correct; once the model is flying it's primarily the elevators. If you raise the nose, the airspeed decreases, if you lower the nose the airspeed increases. The airspeed changes with every change of attitude. Accordingly, the elevators control the airspeed and attitude of the nose.

Rudder
The rudder controls movement of the model in the yawing plane, i.e. moving the nose left or right. The rudder is used to counteract slip (sideways slipping in towards the centre of the turn) or skid (sideways skidding outwards from the turn). When entering or exiting a turn the aileron and rudder are used together – left aileron and left rudder, or right aileron and right rudder. We are fortunate that modern transmitters can be programmed so that the rudder can be automatically operated in the correct direction whenever the ailerons are used. But beware, this may not be useful in situations such as aerobatic manoeuvres or when coming in to land. If you are thinking of setting up this function on your transmitter, it would be worthwhile to make it switchable, i.e. turn it on or off as needed.

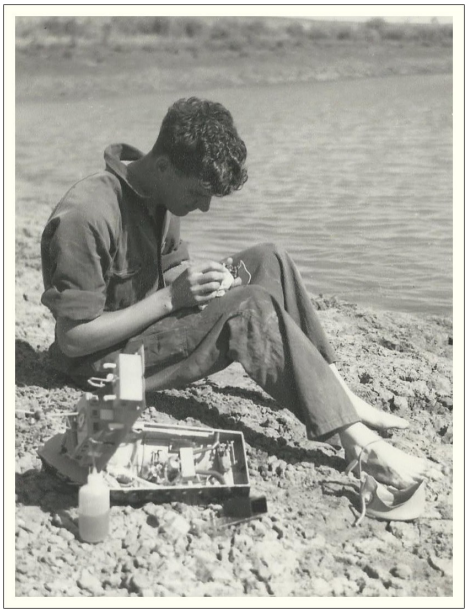
Throttle
The throttle controls altitude. Yes again, that's correct. Altitude is maintained with an appropriate power setting. Reduce the power and the model will begin to descend. For example, when setting up for a landing, attitude and airspeed is controlled with the elevators while the rate of descent is controlled with the throttle.

So, to summarise, the four primary controls are:
- ailerons – which cause rolling/banking;
- elevators – which cause pitching movements;
- rudder – which causes yawing; and
- throttle – which controls altitude.

In the next instalment we'll look at some secondary effects of the controls. In the meantime, keep those thumbs busy on the transmitter sticks and burn some methanol, petrol, diesel or kerosene if you are a jet jockey; or squeeze some electrons out of your battery packs.

The Good Old Days - by Ross Lloyd

I have been having a lot of fun over the last year or so building and flying models that were popular in the 1950-60's which is when I first became interested in aero modelling. It is often assumed that interest in things from ones youth is driven by the desire to re-live the so call "***good old days"***.



In my experience the ***good old days*** were anything but! In 1955, whilst still at High School, I started building and flying control line models. I lived in the country so I depended on the articles in the Aeromodeller magazine for the necessary information on building and flying. Along with several friends we built Taipan trainers powered with, in my case, an ED Bee. Then tried to teach ourselves to fly. Getting the motor to start was a triumph and a half circle in the air before crashing was considered a big leap forward.

In 1960 when I started work as a Technician-in-Training with the PMG I applied my new found skills to building radio control systems using the designs from the RCM&E magazine. My first radio consisted of a ground based transmitter and a 2 valve single channel receiver. It was fitted to my friend Geoff's model boat. (We thought that was a safer bet than an aeroplane) The boat got about 20 meters from the bank of the dam and then sank under the extra weight of the radio and batteries.

The rebuilt radio was installed in an Aeroflyte Invader. The information on the box lid specified a .15 sized motor but because the radio used a 22.5 Volt 'B' battery about the size and weight of a 1lb of butter I fitted a GloChief .35 and made sure that I had plenty of movement on the escapement operated rudder. The wings and tailplane were held on with rubber bands looped around dowels through the fuselage.

Immediately after launch the aircraft went into an almost vertical climb and was threatening to disappear out of site so some control input was called for. One press of the button for a right turn seemed in order. It worked. The aircraft snapped violently to the right whilst the rolling motion caused the rubber bands holding the tailplane to slip off the dowels and the tailplane began drifting daintily to earth.

The fuselage arrived somewhat quicker after completing a screaming power dive from about 200 feet up. When it hit the ground the large 'B' battery travelled forward from its place behind the wing destroying everything in its path. We really should have put more rubber bands on that tailplane!

Now we have high quality reliable radios and small microprocessor based modules that can emulate the old single channel escapement mechanisms, the famed Galloping Ghost or the multi-channel reeds. So I, or anyone else who is interested, can appreciate how much fun ***could*** have been had with these old designs and simple control systems if we had had reliable radio.

So why I am I building 1950's designs and using single channel radio? The same reason I have been playing model aeroplanes for the past 55 years ---------- JUST FOR FUN

Ross Lloyd

"...The fuselage arrived somewhat quicker after completing a screaming power dive from about 200 feet up ..."

Holdfast Model Aero Club

ANNUAL AUCTION

Friday Nov 7th 2014

Cosgrove Hall, 50 York Avenue, Clovelly Park

ADMISSION
$5.00
Juniors: Free

Doors open at 7:00 pm for set up only.

Trading tables operate from 7:30 pm.

Auction of larger items starts at 8:00 pm

Cool drinks, tea, coffee and biscuits on sale

HOLDFAST MODEL AERO CLUB

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Newcomers to R/C modelling are catered for by setting aside every Sunday morning from 10 am when qualified instructors will teach all aspects required for the safe operation of the model. During the training period no other models are allowed to fly, ensuring the least possible distractions to the student.

Pylon & Combat Competition Results - August 3, 2014

Open class pylon
Tom Jacobsen (Noarlunga) 109
Peter Robertson (HMAC) 99
Greg Leigh (Noarlunga) 97
Graham Paterson (HMAC) 89
John Yianni (Connie) 67
Claudio Cerro (HMAC) 19

Standard class pylon
John Jefferson (HMAC) 70
Ian Cole (HMAC) 68
Les Mepham (HMAC) 67
Peter Oliphant (HMAC) 44
James York (Noarlunga) 1

WWI combat
Barry Grivec (HMAC) 6
Merv Harris (HMAC) 1
John Jefferson (HMAC) 1
Max Thomas (HMAC) 1

WWII combat
Barry Grivec (HMAC) 1
John Jefferson (HMAC) 1

SCHEDULE OF EVENTS

- Wed Sep 3 - MASA Meeting
- Fri Sep 5 - Social Meeting
- Sun Sep 7 - Pylon & Combat
- Wed Sep 17 - Committee Meeting
- Fri Oct 3 - Social Meeting

MAAA Membership Cards

Members are reminded that your new Membership cards are now available – if you are financial of course!

The Club tries to save money by not posting them out to your home address unless you specifically request it. There is a neat set of "pigeon holes" on the wall in the old shed where you will find you will find your 2015 card. Just pick it up and remember to carry it with you when you are flying. This is especially important if you visit another Club.

Instructor Roster (September - October)

Date	Instructor	Instructor	Assistant
AUG 31	Ross Lloyd	John Jefferson	Trevor Baudinette
SEP 7	Peter Robertson	Matt Jamieson	Max Thomas
SEP 14	Graham Paterson	(Open)	Ted Carter
SEP 21	(Open)	Ross Lloyd	Trevor Baudinette
SEP 28	John Jefferson	Peter Robertson	Max Thomas
OCT 5	Matt Jamieson	Graham Paterson	Ted Carter
OCT 12	Ross Lloyd	(Open)	Trevor Baudinette
OCT 19	Kingsley Neumann	John Jefferson	Max Thomas

Our thanks go to those keen instructors who offer their assistance to train new pilots. Some even turn up even when they are not rostered on. Advanced Flying Training is available on request, so if you want to brush up your flying for a Wings test, please arrange a session with one of the Instructors. There are still a number of "Solo Only" flyers out there who could easily qualify for the Bronze Wings.