## M.A.A.A. Heavy Model Permit

Way back when a 30cc powered model was considered a whole new territory, the weight limit for a model aeroplane was 5KG. In addition to lobbying C.A.S.A to up the weight limit the original intention of the M.A.A.A. Heavy Model Permit was to have a second set of eyes run over the model.

Any model that weighs more than 7KG but less than 25 KG is designated as a "Large Model" and the Law requires that a Heavy Model Permit be issued by the M.A.A.A.

Today many off the shelf 30cc powered A.R.F. models can easily weigh in under 7 KG but it is most likely the increasingly popular 50cc engines will tip the scales therefore more and more modellers will have to obtain one of these permits.

There is a variation on the 7 KG trigger point which depends on the motive power. Gliders are easy enough, if the weight exceeds KG a permit is required. Piston powered aeroplanes and helicopters are weighed dry, ie without fuel. Electric powered craft must be weighed with batteries so if the all up weight (with batteries) exceeds 7KG, the model must have a permit.



Frank Curzon gives the 60cc powered Bellanca 28-92 the once over.

Inspectors are rated for Fixed Wing and Rotary Wing and rounding it all off, turbine power requires a Turbine Permit regardless of weight.

There is plenty of ancedotal evidence to suggest the thought of obtaining a permit is too hard for many modellers who do not wish to subject themselves to the perceived rigours of the process. So they stay under the weight limit. One often misunderstood requirement is that a Heavy Model Inspector must be present for the test flights. Flying the model first to sort it out prior to the

Evidence of my

ability to produce

an authentic finish in keeping with

the times when

they slapped

those aeroplanes

together just prior

to a race.

inspection flight is not only breaking the Law but it leaves the pilot open to financial hardship should an accident occur. Any Insurance Company would drop the claim faster than an unrestricted Robart retract on 100 P.S.I. lowers a wheel.

I have had quite a few Heavy Model Permits issued (and some of them are still flying) and it's no big deal. Hopefully this should shed some light on what is involved.

My model is a Bellanca 28-92 scratch built from plans that were blown up from a three view. This rather unusual subject to race at the Golden Era Air Races at Adelaide next year is being built to the minimum airframe and weight requirements in the rules. Construction is conventional balsa ply in all the usual areas with carbon fibre under the top and bottom 3mm balsa wing skins. This was in preference to the usual practice of fibreglass cloth over the top because the



Wing mounting.



Hinging and control horns and full depth ply spars.



Engine mounting.



Wing skins are 3mm balsa with carbon fibre sandwiched in between the foam core. A 3/4 span full depth spar was added before vacuum bagging the entire wing.

covering will be Solartex. The iron on woven fabric will save weight in preference to paint and stay in keeping with the original aeroplane.

Inspectors prefer to have a precursory look at the airframe before construction is too advanced. That way any potential structural deficiencies can be noticed before the aeroplane is sheeted or covered up. If the model has been purchased second hand or it is an A.R.F. of course that option is not available. If the Inspector is not available as construction progresses a good option is to take some photographs of your work which is what I did with the wing because I wanted to press on. This is not a requirement with a large model permit but it is a requirement for Giant Models which are within the 25-50 KG range.



Very glad not to hear a crack or a creak with this 37 kg static weight test.

The critical areas of any model are the high load bearing components such engine mounts, fire-wall, undercarriage, wing spar and tailplane-fin, spars and mountings as are linkages-control horns, hinges and servo selection. Torsional rigidity of control surfaces are also very important.

It is often said that the rest are a collection of parts and structures to keep those critical components flying in close formation along the intended flight path.

Keen observers of these photographs will note my building prowess is such that I cannot cut once and have the part fit. The permit process is not about that but more concerned with structures and linkages and of course the pilots ability to fly the aeroplane safely. Remember it is a legal requirement that also involves maintaining insurance cover which is why I took the opportunity to have an experienced set of eyes give my high speed pride and joy the once over during construction.

It also pays to check the MAAA website as rules do change regularly so it would pay to be aware of the requirements before you start. Most State Associations do list your nearest M.A.A.A. approved inspector.

Stephen Green.

The M.A.A.A. is the Australian National orginisation for aeromodelling as well as the International representative. The Executive represents aeromodellers to the Federal Government on the very important matters of airspace and the exclusive use of frequencies.

When the Federal Government regulates it is the M.A.A.A. that represents you. Among the important fuctions the MAAA performs are: Providing a variety of insurance policies for the aeromodeller including Public and Products Liability\*

Representing Australian aeromodellers on the International Aeromodelling Commission of the Federation Aeronautic Internationale through membership of the Australian Sport Aviation Confederation, thus providing the right to enter World and Continental Championships.

Providing low cost loans to clubs for the purpose of flying fields and for the development of existing fields.

Assisting clubs with legal advice on matters affecting flying field tenure.

Promoting safe operation of model aircraft and in compliance with the Regulations of the Civil Aviation Safety Authority.

\* Only available through participating affilliated State/Territory Associations.



To be an M.A.A.A member you need to join an State/Territory affiliated club and that brings even more benefits.

What if you live in an area where there is no club?

If there are enough modellers why not form your own?

Or else, many clubs have country members affiliation at a reduced cost and that will make you an M.A.A.A member.

To contact your nearest model aero club check the website, email, write or phone the Model Aeronautical Association of Australia. Inc www.maaa.asn.au PH 07 3207 9067 secretary@maaa.asn.au

## SO WHY JOIN A CLUB?

Get Help and Assistance

Experienced fliers can help you along the way. Flying instruction is available at participating clubs.

Associate with like minds Share experiences, find outs what's new, what's in, what's out.

## Have INSURANCE COVER

As an M.A.A.A. affiliated club member, you're covered by insurance policies applicable to aeromodelling including Public and Products Liability

Protect your investment in the hobby

Be represented by Australia's largest Sport Aviation group with representation in Canberra R/C frequencies and flying fields are just two of the important policies that this representation includes.

POLITICIANS RESPOND TO NUMBERS