MODEL AERONAUTICAL ASSOCIATION OF AUSTRALIA INC.

Newsletter

NO. 2/2006

President: Mike Close, PO Box 146, West Pennant Hills NSW 2125
Telephone: 02 9872 6469 Fax: 02 9871 0408
Vice President: Theo Merrifield, 25 Jecks St, Rockingham WA 6168
Telephone - 089 528 3124
Secretary: Ivan Chiselett, 1 Watson Ave, Mont Albert Nth. Vic 3129
Telephone (03) 9897 1220 Fax (03) 9897 1445
e-mail; secretary@maaa.asn.au
Treasurer Gary Anderson, PO Box 471 Devonport Tas. 7310
Competition Rules Secretary. Fred Adler 18 Ivory St. Noranda WA. 6062
e-mail; maaatechsec@touch88.com.au

M.A.A.A. Internet: http://www.maaa.asn.au

Manual of Procedures

The Manual of Procedures is a "live" document and is continually being updated. Please check the M.A.A.A. web site form time to time to ensure that you are aware of the latest editions of the documents.

Synthesised Radios & Permit Forms

On the Heavy Model and Gas Turbine Permit forms there is space to note the frequency channel of the radio installed in the model. With the introduction of the synthesised radios the nomination of a particular channel is not relevant for these type of radios.

Therefore, where a Permit Form requires the entry of the frequency channel and a synthesised type radio is installed in the model, the words "Syn" should be entered as the frequency channel.

F3D Team Trials – 2007 World Championships

The Pylon Chairman has advised that the team trials for the 2007 World Championships will consist of State Pylon Championships, February 2006 to February 2007; 2006 AMPRA Championship Cohuna, 10th to 12th June 2006; and the 2007 Nationals in Albury/Wodonga. Please contact your Pylon Special Interest Group for more information. The 2007 F3D World Championships are to be held at the AMA's headquarters in Muncie Indiana.

Instruction of Non M.A.A.A. Affiliated Members

It appears that some members are of the belief that if they are instructing a person using a "buddy box" the student is covered by the instructors, ie M.A.A.A., insurance policy. **WRONG**. It is irrelevant what type of training system is used, the M.A.A.A. Visitor Policy, and relevant Club rules, apply to all non affiliate members receiving instruction. Check out the Visitor Policy (MOP042) in the Manual of Procedures section of the M.A.A.A. web site.

2.4 GHz Radio Equipment.

As many of you will know radio control equipment which operates in the 2.4GHz frequency band has become available for model aircraft use. This is an exciting prospect and many manufacturers are known to be looking at introducing the technology. Up till now, although a few experimenters may have used the band, remote control aircraft equipment has not been available commercially and so the band has not been approved for use by M.A.A.A. members under the Manual of Procedures. This has effectively meant that ,even though it was legal to use the frequencies in Australia under one of the Class Licences issued by the Australian Media and Communications Authority, it has not been covered by the M.A.A.A. and its insurance policy,.

When the M.A.A.A. was advised that the first equipment was to become available it commenced consideration as to whether, and under what conditions, the M.A.A.A. would allow its use. The M.A.A.A. President, who is also the Chairman of the Frequency Sub Committee, was fortuitously going to the USA for a meeting of the equivalent AMA Committee, at which the use of the band was to be one of the major agenda items.

As a result of information obtained at the meeting and the tests carried out by the M.A.A.A., the use of the 2.4 GHz band has been approved for model aircraft use by the M.A.A.A. Because of the international requirements for the band, and the technology implementing them, when the radios are switched on they find a new frequency that no one else is using in the immediate area. This is generally referred to as collision avoidance. Although it can be done using a different technique the effect is that in this band, frequency keys for a specific frequency are not longer needed due to the unit selecting the frequency.

However this band is not exclusively for model aircraft and there are many other users including computer networks and cordless telephones. These have the potential to emit more power than may be radiated by some model aircraft transmitters and of course have the potential to interfere. Because of the mandatory requirement for "collision avoidance" for all equipment, the likelihood of inference from outside sources is significantly reduced but there is still some, particularly near to sites that may have other equipment operating on the band. Also the technology is still being developed and, unlike on 29 and 36 MHz, there is currently no standard, actual or informally accepted, for how the equipment interoperates. This means that not all equipment is going to be suitable for all applications. For example, there is 2.4 GHz commercial R/C product being sold that the manufacturer considers is only suitable for cars.

In order to be able to guide the members the M.A.A.A. has produced a Policy and Procedure Document, MOP 058, which is available on the M.A.A.A. web site. This identifies the specific equipments that are currently approved for use and details any restrictions. The latter may include types of models or distances that the models

may fly away from the transmitter. This will be updated as new products become available. To guide members there is also some information on the use of the band for aircraft applications and how clubs should control it. Anyone wanting to use equipment on this band is strongly recommended to read the information before doing so.

Due to the sophistication of the equipment, the M.A.A.A. will not be requiring individual radios owned by members to be tested. However as the equipment is effectively type approved it has to have a "C Tick" applied by the manufacturer/importer to show that the performance is traceable, that it conforms to the Australian Radio- communications Standards and so is legal to use in Australia. This is a small label with a tick inside what then looks like a letter 'C' together with a code to provide traceability. It should be emphasised that use of the radios outside the specific limitations imposed by the M.A.A.A., or modifying the equipment, such using parts of it with or within other transmitters, will not be covered by the M.A.A.A. MOP's.

Obviously at this stage it is a fluid situation and we would expect that as more radios become available, and more field experience is gained, then there will be further developments in the M.A.A.A. position. If you use or are thinking about using this frequency band then please check the web site regularly.

Heavy Models & Gas Turbine Powered Models – Test Flights

As defined in the M.A.A.A. Manual of Procedures, a model with a dry mass, ie without fuel, greater than 7kgs and all Gas Turbine powered aircraft require a Permit to Fly. Any member flying a Heavy Model, or Gas Turbine powered model aircraft without a valid Permit to Fly is not conforming to M.A.A.A. rules. It is highly likely that should a model without a valid permit crash and/or causes damage or injury the M.A.A.A. insurance policy would not respond and the pilot would be liable for all damages claimed.

I have received a couple of reports where members have flown Heavy Models without permits and have crashed. In these situations the pilot is extremely foolish. If the crash resulted in property damage the pilot would no doubt scream blue murder as the Insurance Company may sue the pilot to recover their payout.

The main reason for the requirement of Permits to Fly is safety. The issue of the permit requires a fresh set of experienced eyes to inspect the aircraft prior to the test flight. It also has the advantage of having the Inspector, who is experienced with large models, able to assist and advise the pilot during the test flight. It is all about improving the chances of a successful flight and greatly improving safety.

To repeat, to fly a model with a dry mass of over 7kg or powered by a gas turbine requires a Permit to Fly to be issued by an M.A.A.A. Inspector PRIOR to the test flight of the model. To fly a model without the necessary Permit to Fly could have serious consequences as described above.

Safety

Once again I have to report that another serious hand injury has been caused by a propeller. I know I may sound boring but this is so serious. We do not want any of our members being injured and it is all of our responsibilities to ensure that we are vigilant to potential accident situations.

In this case it appears that the model was being started with a mechanical restraint but unfortunately it was not hard up against it. When the motor started, the model leapt forward into contact with restraint, only about 75mm or so, but the instinctive action of the modeller on seeing it lurch forward put his hand out and into the spinning prop.

A few safety messages;

- Make sure that the model is hard against the mechanical restraint when starting the motor. Better still, get a mate to hold the model as well and assist you when starting.
- Make sure the mechanical restraint is very secure.
- Do not rely only on mechanical restraint when running the motor at high power settings, get a mate to assist by also holding the model.
- Ensure that the motor is at low throttle before starting
- Ensure the motor can be shut down by the throttle lever of your transmitter.
- Always set your throttle servo so that it rotates the same way for all models. That way if you select the wrong model on the transmitter, the throttle will be correct and will not be full throttle when you think it is low.
- Never fly at the field on your own. If you get a serious injury you may bleed to death before you can get assistance. This has happened more than once overseas.
- Remove the glow driver and do all adjustments to the motor behind the motor.
- Ensure that spark ignition motors have a "kill" switch easily accessible on the model and ensure your start up assistant knows where it is.
- Do not "choke/prime" motors with glow driver attached. Spark ignition motors must have ignition switch off when "choke/priming".
- Do not assume that a glow motor will not start without a glow driver. They do, not often, but they do.
- It is not recommended to hand launch "pusher" type aircraft. Even small electric one cut hands and fingers. Make a launch dolly, it prevents many cuts to hand and fingers.

The injury prevented may be your own. Let's have no more prop hitting hands and finger injuries.

World Championship Web Sites.

In 2006 several World Championships are being held. For those members wishing to keep informed about them please find below a list of the championship and the associated web sites.

F2 – Control Line – Spain - July 16 to July 23 2006
Web site; http://www.safa-grial.com/wc2006/Index.html

F5B - Electric – Pitesti 120 km NV of Bucharest-Otopeni International Airport
19-26 August 2006 Web site; http://www.frmd.ro/

F3J – Gliding - Martin (Slovak Republic) 30 July to 6 August 2006
Web site is www.rcmklub.sk/

F4C – Scale – Sweden in Norrköping at the former Air Force Base at Bråvalla.
14-23 July 2006 Web Site; www.scalechamps-in-sweden.se/index2.asp