



February 2017
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Wingtips

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With the field closed due to the total fire ban on Saturday 11 February, several members assembled at Lake Ginninderra to fly in the cool conditions.



Seen at the Lake

Above, Ken Griffiths' scratch-built Seawind. It's made from sections of blue foam glued together then shaped. There's fibreglass under the hull to protect it from damage.

Left and below left, Bob Raadts' Icon A5, a tiny foamy from E-Flight. It's equipped with the AS3X receiver, featuring built-in stabilisation.



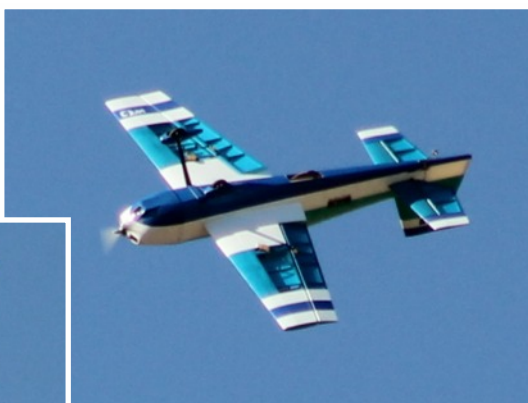
Above, Ken Griffiths' Tundra, a foam ARF from Hobby King.



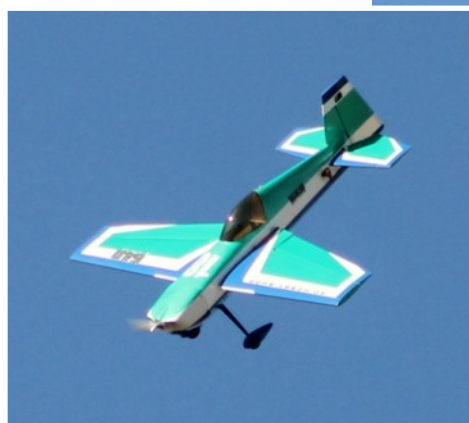
Above right and right, Mike Ward's Senorita (seen in Wingtips before) has been equipped with new engine, namely an OS FS-48 Surpass, but this stopped in flight. Mike retrieved the model with Ken Griffiths' boat.



Seen at the Field



Nick Philippa's Extra 540 from 3D Hobby Shop, being put through its paces.



Below Grant Manwaring's Playboy Old Timer powered by an OS 40H. It's one of two fuselages he has that use identical flying surfaces, the other being a pylon style. Grant is preparing for the Old Timer meeting at Canowindra over the Easter long weekend.

General Meeting at the Field

The next BMAC General Meeting will be at the field on the morning of Saturday 25 February.

There'll be two \$50 vouchers from Monaro Models as Lucky Door Prizes. Of course, these can only be won by members who are attending!

Also it's a swap meet – bring something to sell or swap; and be sure to pack some money as there may well be a model that you just *have* to add to your fleet.

After all this, you're sure to be hungry, so Max will be arranging a sausage sizzle.



Pre-Flight Checklist

Do you enjoy crashing your model aircraft? Of course not! But some crashes can be avoided by making these few simple checks before take-off:

- For those who use receiver batteries, check the battery under load. Don't just look at the voltage.

- Check that each control surface moves, and in the right direction!
- Confirm that your receiver's fail safe is working by holding the throttle partly open then switching off the transmitter. The throttle must close.
- Do the range check.

NAAS Fun Fly

Friday to Sunday 24, 25, 26 February 2017, NAAS members warmly invite all model aviators to a Fun Fly-In at their facilities. (Go to <http://www.naas.org.au/> for directions to the field.)

This is an opportunity for aeromodellers to visit the Willie Emmett Field and see what they have been working on. Entry fee is \$15 for the weekend. All flyers must hold a current MAAA membership card.

Mike Leys' Taube



Mike built the Taube years ago from a Balsa USA kit, but put it aside because he didn't like the way it flew. After eight years of storage Mike brought it to the field and has decided he now likes its sedate flight. Something must have changed in the eight years, he told Wingtips, and it can't be the model so it must be the pilot!

It has just rudder and elevator controls. There are no ailerons, but it is quite stable in flight despite there being next to no dihedral (see below). This is curious, as it's



generally thought that a model aircraft without ailerons needs dihedral for lateral stability. In fact, page 45 of Andy Lennon's book *The Basics of R/C Model Aircraft Design* suggests that a shoulder-wing model without ailerons needs 6 degrees of dihedral. We'll return to this issue later.

The full-size Taube was designed in 1911 by Igo Etrich and, despite *taube* meaning *dove*



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in German, the wing planform was based on the papery winged seeds of *Alsomitra macrocarpa* or the Javan cucumber (seen below in a photo by Scott Zona). When the seeds fall from the fruit they can glide long distances.



Etrich made aircraft from his Taube design, and other manufacturers also made versions. Its wingspan was 14.3 m and maximum speed 54 knots (100 kph). It exhibited very stable flight, which made it most suitable for observation. Some aeronautical history: in 1911 the Italian aviator Giulio Gavotti, dropped the world's first aerial bomb which he did from his Taube monoplane. It landed on a target in Libya. Needless to say the appearance of faster and more manoeuvrable aeroplanes at the start of WWI made the Taube obsolete.

So, we return to the question of why Mike's model is laterally stable despite the lack of dihedral. Lennon's book also says: "Sweepback acts like dihedral. In level flight, 2 or 3 degrees of sweepback are equivalent to 1 degree of dihedral." Both the seed and the Taube wing are swept back, which explains why both fly as they do.

CAP Expo

As in previous years, the club will have a display at the Connect and Participate Expo. This will be held on Saturday 25 March 2017 from 11am to 4pm at the Old Bus Depot Building, in Wentworth Avenue, Kingston.

BMAC Secretary Neil Moffat is organising our display and would be pleased to have some help on the day, and some models to show. Contact him if you think he could use one of your models. Even if you don't have a model to lend, drop in on the day to say hello to the BMAC organisers and maybe answer some questions from members of the public.



Indoor Flying



Seen at the indoor flying on 14 January 2017 are the DualSky Breeze (right) and the E-Flite UMX AS3Xtra belonging to Alistair Dally of the Namadji club.



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