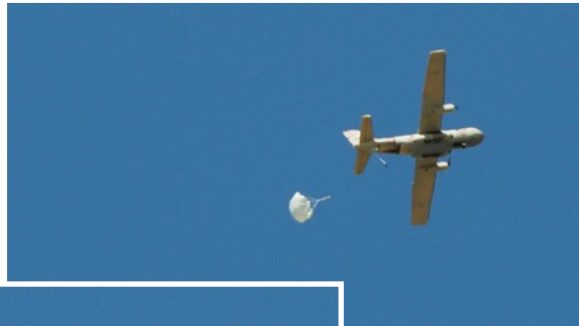
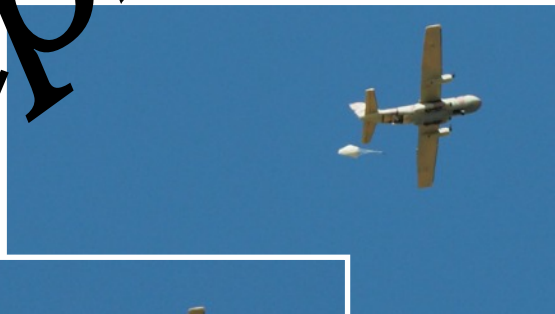
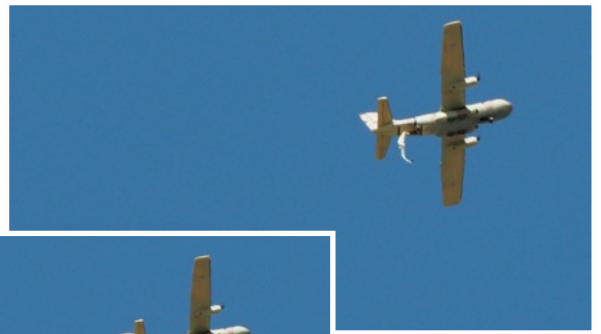


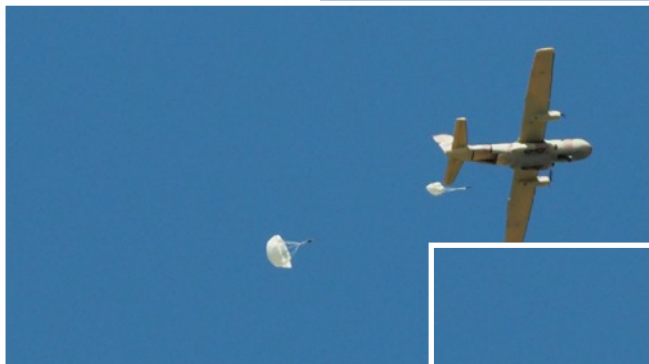
October 2018

Editor: Brian Oakes

Wingtips



Photos show Ken Griffiths' Spartan, this year's Heracles Challenge winner, now equipped to drop parachutes. The photos are taken 1/10 second apart.



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Wingtips is the Belconnen Model Aero Club newsletter, this issue published 15 October 2018



Working Bee



Recent heavy rain caused water to run down the hill and under the clubhouse. This, in turn, led to the concrete blocks that partly support the clubhouse sinking a little and resulting in the springiness that you may have noticed on the verandah.

Left, during the working bee on 20 September, some of the club's mid-week members dug a drain to prevent water passing under the clubhouse. [That's if it ever rains again! Ed].



Above, and right, club President Graham Parkins and member Ken Griffiths (legs only visible) putting packing onto the concrete blocks under the verandah.

Snake

The Field Officer has reported the presence of a brown snake at the field. Watch where you walk!

On the subject, please don't leave bread out for the birds. Mice eat bread and snakes eat mice!!

Transmitter Wanted

Peter Beath would like to get a used DX5 (serviceable) if someone has one surplus to requirements.





Above, One of Merv Wright's models, a Wot 4 XL Mark 2, is powered by a 120 ASP 2-stroke.

Below: Merv Wright's twin looks to be a DC-3 but is called 'Sky Bus' by maker Dynam. Merv has found that contra-rotating props helps to keep the machine running straight on take-off. 3S lipos provide the electricity.



Right and above right, Peter Ederle's Super Chipmunk has a wingspan of 2030 mm (80 inch) and is powered by a 35cc RA DLE. Although the airframe is over 15 years old, the model is highly aerobatic.

Below, the carbon fibre wing spars are visible on Len Ricardo's Radian XL glider by E-Flite.



Reminder: NAAS Mammoth Fly-In

A Mammoth Fly-In is to be held at the National Aeromodelling & Aviators Society's field on Friday to Sunday 2, 3 and 4 November. All model aircraft are welcome, but there's a special WWI theme, machines of that era helping to remember the end of the Great War in 1918.

The entry fee is \$20 and, of course, only MAAA members may fly. Food and drinks will be available over the weekend, and there will be a roast dinner on the Saturday night costing \$30 per head. For directions to the field go to www.naas.org.au

As many BMAC members know, as a member of CanberraUAV, I just recently participated in the Outback Challenge in Dalby, Queensland.

No one completed the challenge this time. We came third on points, which brings no prize, however; we did

achieve the best performance in avoiding the dynamic no-fly zones, which brought us \$10,000 - equal to the first prize.

Jack



Above, the Pilatus Porter ARF flies largely autonomously. The eight rotors visible on the wings allow it to land in a ploughed field and take off again.

Right, the duck visible in the pilot's seat is CanberraUAV's mascot.



From the editor:

For those not familiar with Outback Challenge, teams fly an Unmanned Aerial Vehicle, that is, an aircraft piloted by remote control or onboard computers. (An armed full-size UAV in a war zone is called a drone.) However for the Challenge a UAV is essentially a model aircraft of some kind. Teams are required to conduct an aerial search for a "lost hiker" named Outback Joe, then render some kind of assistance, even though Joe is well out of sight of the take-off point.

CanberraUAV have been successful in the past, and now the organisers of the event have made the challenge more difficult by requiring that the rescue aircraft find Joe autonomously, land near him, collect a "blood sample", take off and fly back to base. The search area is now many kilometres from the base – too far for an electric rotorcraft – so CanberraUAV use an aeroplane modified to take off and land like a multicopter. Amazingly, the group have been able to

have its petrol engine start, stop and re-start when required.

The plane is a 2.7 metre Pilatus Porter ARF made by VQ.

Wingtips doesn't have space for more detail of what is a very complex operation. For more information about this year's Challenge click on this link:

<http://canberrauav.org.au/outback-challenge-2018-debrief/>

The sum of the official daily facebook blog can be read here:

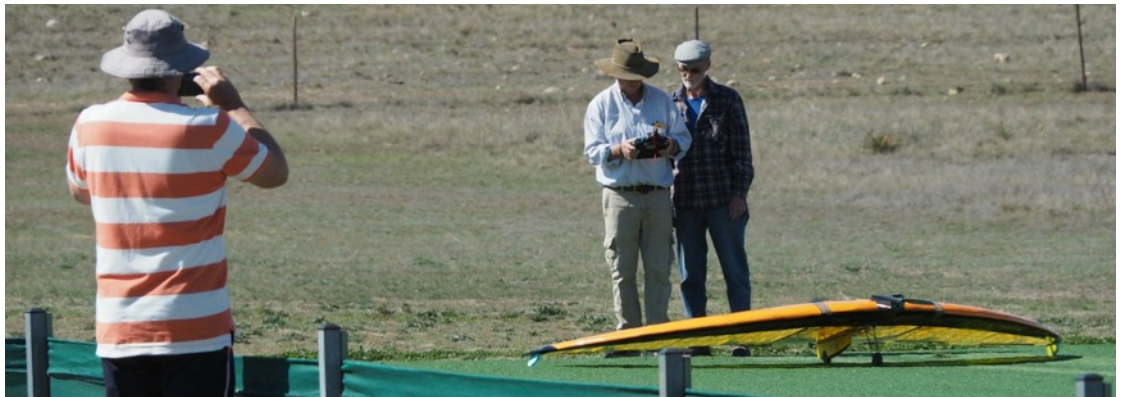
<https://uavchallenge.org/>



Above, Ron, (right) and Ken Griffiths carry the Parabel out to the flight line, while Ron's grandson Max carries the transmitter.

Below, Mick Pasfield photographs the scene before the maiden flight.

Ron's Horton Parabel, is a pre-WW2 flying wing design. The Horten brothers, Walter and Reimar, designed aircraft in Germany before and during World War 2. They pursued the idea that the most efficient aeroplane consisted only of a wing, and based its shape on the Zanonia or Java Cucumber. The seeds of this plant are shaped like a swept-back wing and fly great distances, obviously to help propagation. *



The shape of the wing of the Parabel was parabolic, that is, a U shape that is steeper towards its vertex. (For those who remember high school maths, a graph of the equation $y = x^2$ is a parabola.)

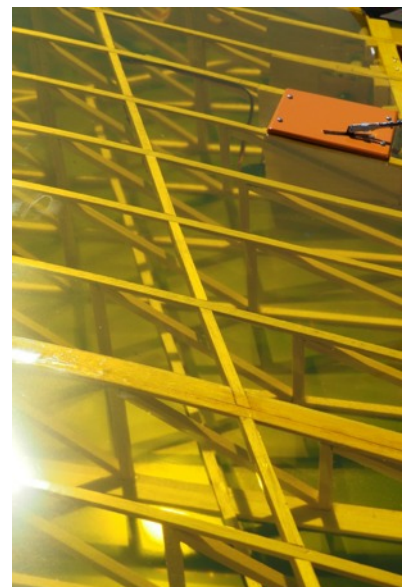
The Parabel was an experimental glider which, for reasons that are uncertain, never flew. Ron's model is electric powered and still in its development stages,

however it has flown very well already. During the maiden flight, applying power made the nose pitch up, so Ron gave more down thrust and the second flight was better.

If you want to see it fly, click on this link:

https://youtu.be/Uf4bj69P_Gw

* For those with long memories, Wingtips has featured another model with this wing planform. It's Mike Leys' Taube, seen in the February 2017 issue. The BMAC website has a link to that issue.



Above, the Parabel takes to the air on its maiden flight.