

WATFORD WAYFARERS



MODEL AIRCRAFT CLUB

Affiliated to the BMFA (Club No.269)

News



Although the weather has meant limited flying in the last month, that hasn't meant a lack of activity at Bovingdon. Two work parties have made a good start on enclosing the space under the trailer in preparation for the secure storage of the new mower. Many thanks to [Paul Robinson](#), [Andy Stimson](#) and [Gary Field](#) for the work to date. The only thing left to do is to procure and fit the locks for the door and the security for the mower itself.

In the meantime, the patch has been mown most weeks by [Arthur Peacop](#) and yours truly though while we had the dry weather it was growing very little. The rabbits are still digging though I could be persuaded that there's less activity following the arrival of significant amounts of rain. Please remember that there is a bag of soil under the trailer and repairing the damage doesn't take long (considerably less time than repairing your undercarriage!).

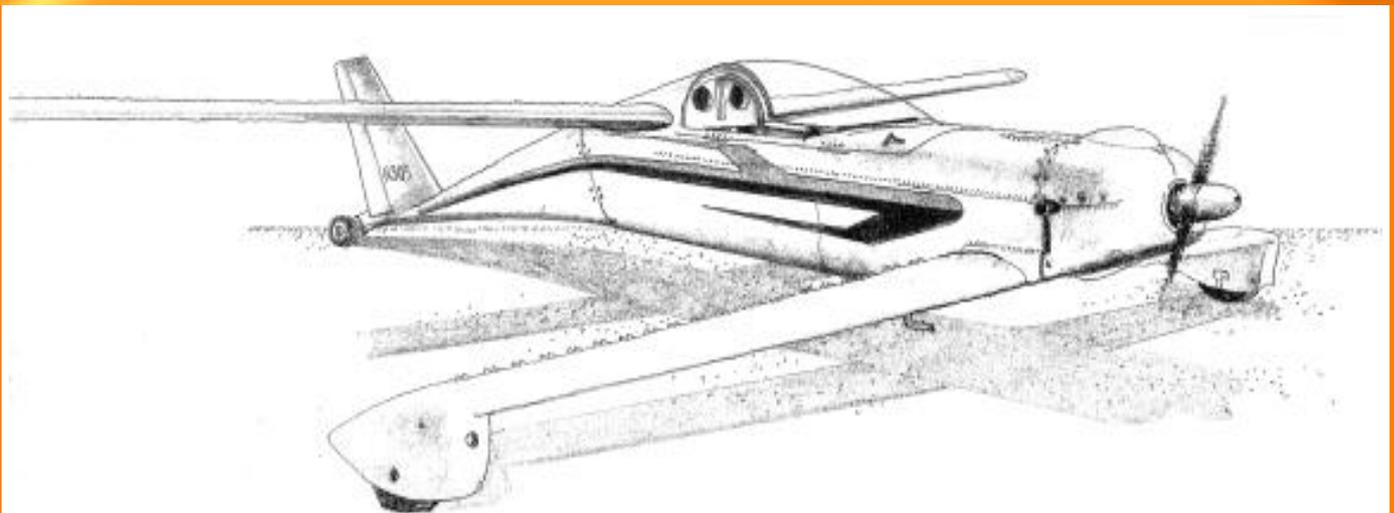
Meanwhile, there has been a problem with rubbish tipped at the heli site but this has been cleared and new padlocks fitted. [Steve Roberts](#) and [Roger Mayo](#) have recently been competing at an event in Austria as practice for the F3C European championships later in the year. See the link on the web site.

Andy Todd

Membership

Hopefully everyone who took advantage of the offer to pay 2011 membership in two instalments has paid their outstanding dues. If you haven't then this is the final reminder that anyone who hasn't paid by 30th June will cease to be a member and will have to pay the £50 joining fee to rejoin.

What's this?



In 1977, this revolutionary design was awarded the 'Outstanding New Design' award by the Experimental Aircraft Association. A full 20 years later, in 1997, Roy Shannon began building one and on completion in 2003, Roy's first flight went superbly with only very minor changes required to the trim system. Powered by a tiny 22 hp Onan generator engine the newborn aircraft cruised at 100 mph while guzzling just 1.6 gallons of fuel per hour, an extraordinary achievement for any home-builder.

Another drawing from The Aviation Book by Fia O Caoimh. Do you know what it is? Answer next month.

Maynard Hill

Maynard Hill made his mark on aviation history in 2003 when one of his remote-controlled model aircraft became the first to fly a record-breaking 1,882 miles across the Atlantic on less than a gallon of fuel. Hill's TAM (Trans Atlantic Model) 5, with a wingspan of 6ft and weighing less than 11lbs, flew from Newfoundland to Ireland with a few drops of fuel to spare, in a time for the flight of 38 hours and 23 minutes.



A retired engineer, Hill had reason to savour his moment of triumph: 24 test prototypes of his design had made it into the air and failed, crashed or disappeared. But he was certain he could build a model aircraft that could stay aloft for long enough to fly across the Atlantic.

In August 2002, TAM 1 climbed to 1,000ft bound for Ireland before falling into the ocean. Two days later TAM 2 stalled and met the same fate. TAM 3 disappeared in a rainstorm eight hours and 479 miles out. Having made adjustments to his computerised autopilot system, Hill returned to Newfoundland the following

Maynard Hill with TAM 5 before its transatlantic launch Photo: WASHINGTON POST

Newfoundland the following

year, launching TAM 4 into a cloudless sky over Cape Spear. Contact was lost 430 miles out. Someone joked that the Bermuda Triangle may have had a cousin over Greenland; or perhaps the Icelandic Navy was in need of target practice.

Undaunted, the next day Hill launched TAM 5 which climbed rapidly, turning gracefully before disappearing out of sight heading towards Ireland. By 11pm, satellite data showed the tiny aircraft still aloft at a satisfactory altitude, making approximately 43mph with no tailwind. The following morning, the little plane, nicknamed The Spirit of Butts Farm, after the farm in Maryland owned by Beecher Butts where it had been tested, was roughly 560 miles out, but Hill noted some ominous data from satellites monitoring its telemetry. The aircraft's four-stroke engine was supposed to be regulated at 3,900rpm, but the readings ranged from 3,100 to 4,100rpm and altitude was bouncing between 280 and 320 metres, suggesting a porpoising flight path.

"The Spirit trotted along all day Sunday," Hill reported. "Over the mid-ocean it picked up a 5-10mph tailwind and was cruising at 50-55mph. I went to bed at roughly 10pm, fearful that the cool of night would increase the viscosity of the fuel, taking the engine from lean to dead."

When he awoke at 4am, there had been no satellite data for three hours, and Hill believed the plane was lost. It was agreed to stand down the officials in Ireland who were making a special six-hour trip from Dublin to the landing site at Mannin Beach, Co Galway. Just then, data from one of the satellites confirmed that TAM 5 was not only still flying, but was now far enough east to be in warming sunshine, and had shed a lot of fuel weight. By 9am local time the Spirit was a mere 70 miles from the Irish coast.

The landing was a cliffhanger. The engine had been set to run for roughly 37 hours, and Hill worried it might stop a couple of miles short of the landing site. At 2pm Irish time, the Spirit of Butts Farm hove into view at Mannin Beach, and one of the Irish officials took manual control, banging the rudder stick hard right to kill the engine. A mobile phone link was opened to Hill as the Spirit made a dead-stick landing approximately five feet from the designated spot. At 2.08pm, hearing over the phone link the shout "It's on the ground!", Hill led a whooping cheer, buried his head in his wife's shoulder "and wept unashamedly for joy".

The plane's tank contained less than two ounces of fuel – a quarter of a cupful. "In the model airplane world, this is no different from Armstrong landing on the moon," Carl Layden, an official observer of the feat, announced.

Years before his transatlantic feat, Hill had carved a niche in the aero modellers' hall of fame. In the 1960s, he set 25 world records for speed, duration and altitude, flying his radio-controlled aircraft as high as 26,990 feet, as long as 38 hours and as fast as 151mph.

Sadly, Maynard Hill died earlier this month aged 85. If you would like to read a longer description of his achievements, you can find it at <http://www.progressiveengineer.com/profiles/maynardHill.htm> and there is a link to a short autobiography covering this venture and his earlier life on our web site.