NEWSLETTER

Club Website

The Club has recently taken up the BMFA's free of charge domain and hosting service. This service allows the club to have an online presence. The Club web page can be found at https://hhmac.bmfa.org .

2019 Show and Tell Evening.

Our 2019 Show and Tell evening took place on the 26th of March and was well attended. A good variety of winter projects were brought along ranging from micro light indoor aircraft to a massive 3.77m Motorised Glider.

Chairman Jack welcomed everyone and introduced our two guest speakers Professor Darren Ansell and Innovation Manager Billy Beggs both from UCLan.

Darren gave a very interesting presentation on his involvement with the Cambodian Military who are using Drones developed at UCLan by Darren's team to detect land mines from the air by either sensing chemicals emitted when the mines start to deteriorate, or their presence just under the surface due to the very slight temperature difference in the overlying soil. The presence of any mines can be accurately pinpointed and in a single flight the area the size of a football pitch can be mapped, something which took days by traditional means.

Billy then spoke about UCLan's continuing work with Graphine and described their most recent UAV project named Juno, a 3,5m span Graphine/Carbon Fibre flying wing. Our Chairman, Jack Lumley, is also involved in this project, offering his advice on the propulsion and control system. Juno is a follow on to UCLan's Prospero project which our Club Secretary, Dave Ringland flew at Farnborough 2016. Billy concluded his presentation by inviting the Club to view UCLan's facilities in the not too distant future.

After a short break, it was time to view the winter projects. Of note were.....

Dave Womersley's Swift S1 glider. Designed for competition aerobatics and high energy flight, made in eastern Europe by Topmodel cz. and purchased from T9 Hobby Sport in Bradford, the model spans 3.77m and is semi scale. Wings and tailplane are foam plus carbon strengthening and covered in Profilm. Fuse is a glass moulding, including the rudder. The kit includes a retract and spoilers, but Dave chose not to have either, prefer instead crow braking. The motor is a 365kv Hacker with Jeti 75A opto esc and 6S 5000mah lipo's, (2x3S), Performance figures on 16x10 are 1370w, 63A,

6400rpm. Target figure was 100w/lb, so the 13lb model is close to that. Servos in the wing and on elevator are Hitec 5245mg digitals, which have very good resolution and should have adequate power. The large rudder has a Futaba S5402.

Keith Dobson brought along his WW1 SE5. Built from a Dennis Btyant plan circa 1970, it spans 53” and weighs in at about 5lbs. A Sarik laser cut wood pack was used and Keith has spent about 5 years, on and off, to get to this stage. Keith plans to put an RCV58 in it but, prior to putting the finishing touches to it, it’s going to fly with an electric set up that is already flight proven. Keith reported that assembly is time consuming but fortunately it will fit in the car in flying condition, with about 1" to spare!

Andy Holden showed his Seagull Chipmunk , approx 5th scale, 80 inch span - weight 10lb. In Canadian trainer colours (trainer yellow). The model includes Flaps + Landing lights. The Englne is a Saito FG 21 (21cc 4 stroke petrol) and radio by FRSKY. Andy has incorporated a few mods to the basic kit in the form of spin strakes and the canopy is attached with magnets, plus a hatch for switches. The model is based on the Shuttleworth Collection '671' example.

A superbly finished Durafly Messerschmitt BF109-E in Battle of Britain colour scheme was displayed by Jon Wiggall. One of the standard Durafly foamie Warbirds from Hobbyking and available in two colour schemes it required all the decals to be applied by hand - time consuming but not particularly difficult.

Jon has fitted a Turnigy servo slow to one undercarriage leg to stagger both the retract and extension times on the two legs and added some mesh gauze to the radiator intakes under the wings which were all sprayed up black. Fake antenna wire is standard twisted button thread wiped over with PVA.

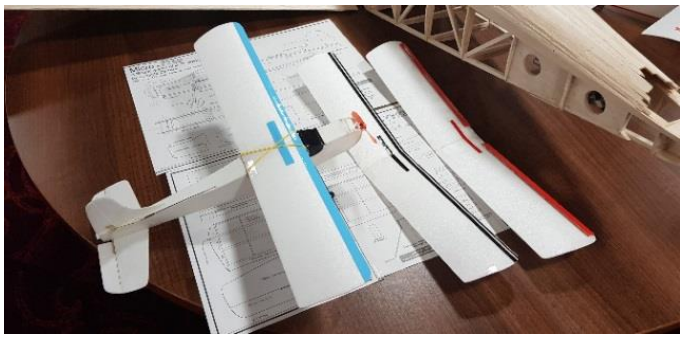
Jon explained that the pilot as supplied is a particular let down of the ARTF kit being too small and not even in Luftwaffe flying clothing. The real BF109 was actually a small aircraft, so Jon purchased a German 3d printed pilot from Real Model Pilots in 1/9th scale, requesting the standard Iron Cross be added round his neck as a customised extra. The pilot came unpainted and took about 3 weeks of evening work to paint him!

With the cockpit floor removed to add Fritz with minimal external "butchery" Jon also took the opportunity of adding a scanned BF109e instrument panel from a photograph stuck on cardboard from the Eduardo 1/4scale instrument panel kit for a BF109e. He then added a 3D printed gun sight. A quick semi scale solution that worked well.

John Cartmell brought along an Aeronaut Triple Thermic motor glider, still very much work in progress. Span will be approx 2.5 mtrs and power will come from a 28/36 Overlander Thumper outrunner motor driven by a 3cell 1300mah LiPo. Prop to be decided! The model is an all ply and balsa kit so lots of building practice. It has a butterfly tail and aileron plus spoilers, and hopefully it will appear at HH sometime this summer.

Bob Welton brought along his now complete Bristol Fighter F2b from the Flair kit. The model has had three flights in the capable hands of LMA Show Pilot Andy Johnson. Further test flights are planned by Andy once a six axis gyro stabiliser has been installed to help improve its dodgy handling characteristics. Bob also showed a Cambrian Models FW190 Fun Fighter which has occupied him these past dark winter nights.

A little and large showing of an indoor Mini Tyro, the third model in Roy Taskers continued development of this small indoor model to get it “just right”, and in the large corner Ron Ingram brought along his Beech 18 twin engine balsa and ply model built entirely from plans. The model is still very much under construction airframe wise and the amount of work already undertaken was clearly visible.



Apollo 11 Moon Landing 1969

Fifty years ago David Bowie released ‘Space Oddity’. Bowie’s Major Tom reached the top 5 in the charts. 9 days later man was to walk on the surface of the moon.

On the 16th July at 13.32 GMT the Saturn V rocket carrying the lunar modules was launched from the Kennedy Space Centre, Florida (formally Cape Canaveral). Astronauts Neil Armstrong, Buzz Aldrin and Michael Collins

After one and a half orbits of earth the astronauts head for the moon, three days later they are in lunar orbit. Collins remained in the Command Module orbiting toe moon whilst on the 20th July the Armstrong and Aldrin in the Lunar Module landed on the moon at the Sea of Tranquillity at 21:18 hrs GMT on 20th July. Just over six hours later at 03:56hrs GMT Neil Armstrong climbed out of the Lunar Module onto the moon's surface with the words ~That's one small step for man; one giant leap for mankind' Shortly afterwards Buzz Aldrin joined him to become the second man to walk on the moon. They moon walk and explore for two and a half hours before climbing back into the Lunar Module.

The Lunar Module departed the moon's surface at 17;54 to be reunited with the Command Module for return to earth. Apollo 11splashed down in the Pacific Ocean off Hawa on the 24th July landing approximately 13 miles from USS Hornet.

6 further moon landings 10 more astronauts will walk on the moon. Appollo 17 was last moon landing mission 11th to 19th December 1972. On 14th December Gene Cernan became the last human to step onto the surface of the moon.

A Question of Safety – Situation Awareness

Trawling through back issues of the club newsletter I thought Gilly's article on 'Situational Awareness' was worthy of a reprint.

Situation awareness involves being aware of what is happening around you to understand how information, events, and your own actions will impact your goals and objectives, both now and in the near future. Lacking SA or having inadequate SA has been identified as one of the primary factors in accidents attributed to humans
In very simple terms, it involves using your senses such as sight and sound to build up a mental image of the big picture, so that you can anticipate what is likely to happen next, which in turn allows you to make better decisions. In a nut shell SA is 'knowing what is going on so you can figure out what to do'.
Out on the flightline, a lot of SA is built up by talking to each other, which is why we call 'taking-off', 'low pass', 'landing' etc. It gives you a rough idea of where the other aircraft is and what the pilot's intentions are. So, talking (and listening) to the other pilots is important.

Model aircraft don't have fuel gauges but running a timer on your transmitter allows you to keep track of your remaining endurance, which in turn allows you to anticipate your likely landing time. When someone calls 'landing' you need to understand how that impacts on your remaining endurance and if your SA is good, you already have an idea of whether you need to call a fuel priority or can wait until the other aircraft has landed and vacated the landing area.
In addition, the sounds a model aeroplane makes tell you a great deal about what is happening and not just the model you are flying. With experience, you learn to recognise the sounds associated with a model that is out of control or getting dangerously close to you!

Finally, your peripheral vision is important, particularly for collision avoidance or noticing people out on the runway retrieving a model – of course, they should have told you beforehand but people do forget.
Good SA is something you develop with experience. When you first learn to fly, all of your concentration is focused on your model but as the flying becomes more second nature, you release spare mental capacity to become more aware of what other people are doing. Have a think about some of these things the next time your out flying but don't forget the most important rule in aviation – first and foremost and above all else, fly the aeroplane – everything else is secondary.

Wanted

Looking for a Wots Wot or Acro Wot preferably of the electric persuasion.. Should you have one you no longer need/want please contact Keith Dobson keith@kdobson.plus.com