GLIDEPATH

The Journal of Wessex Soaring Association. June 2021
BMFA Club No 2759

From the Editor

Bit of another lightweight Glidepath this month I am afraid, but then I can only publish articles if members send them to me.

I think we have gained one just new member this month, Gary Blandford-Hull, who has written a short history of his modelling background. I do try and ask all new members if they would like to do this, by way of introducing themselves to the rest of club, though I think I may have forgotten to ask some of the other people who have joined this year. Therefore if any other new members would like to drop me a paragraph or two about their modelling experience and current activities I will include them in a later edition of Glidepath

Finally a reminder I am planning to hold the Limbo event on June 13th; full details of this rather unusual event are given later. Hopefully I will manage it this year because in 2020 I had to give up, as all three of my attempts were called off due to the weather.

From the Chair

Hi all, hope you are all keeping well, not so much flying in May due to the rather soggy conditions, but amazingly the Bank Holiday brought good weather.

E Soaring 1 (or should that be 0)

Well, it was that time again, to dust 'em off and charge 'em up! The weather over the bank holiday weekend was uncharacteristically good so it looked like we would be able to get this year's series underway on Sunday 30th . Unfortunately when we arrived at Chalbury we found that we have been allocated a different field to one of our normal ones, but it really was not suitable due to its small size and the presence of power lines crossing it.

Doug phoned up the Mr Caines the farmer, who said that we could use field 13 as we had been doing, but seeing at it was now in long grass he did not want use driving into it , or trampling too much of it down. There was though parking for at least 10 cars just to the south of it, but to avoid having to spread out too much we abandoned the competition and just had a fly in instead with everybody staying along the southern edge of the field.

It appears Mr Caines has not been very well lately and has been struggling to keep on top of the farm work, so we should be grateful that we at least had somewhere to fly even though the competition could not go ahead. We planning to contact him in about a weeks time to try and find out what the field situation is likely to be over the coming months.

Picnic Site

The latest update on this site is that CDMFC (Christchurch and District MFC) are taking on the licence from the M.O.D. The ministry will only deal with one club and wish to ensure that anyone flying on their land is insured via the BMFA.

The annual licence fee is £180, which CDMFC will pay. Anyone flying at this site must become a member of CDMFC (£15) and be a member of the BMFA; which is of course also a requirement of WSA membership. CDMFC usually charge a joining fee, but this will be waived. If you wish to join CDMFC or if you have any questions, please email Alan Butterworth or myself.

Slope Tour

Each year I have organised a "Slope Tour" mainly aimed at new members, however on quite a few occasions existing members have come along for the fun. I plan to cover the usual sites plus, where available, Death Valley and Dalton's.

I propose to run it this year on Sunday 6th June. If you are interested in coming along ***please contact me via email*** at martinburr9@gmail.com

Slopeside by Pete Carpenter

As far as I am aware there is no change regarding the Oxo/Swallowcliffe situation. There is also still no change with Stoney Down so for the time being we can continue there as we have done.The situation regarding the other slopes is shown below. Please use your own common sense and apply the countryside rules. Therefore if things look different at a site, particularly if it involves crops or livestock, please do not enter and contact me on pete.carpenter12@gmail.com or 01722 328728.

1) Winklebury (W to NE wind) - Available.
2) Norrington Down (S to SW wind) - Available.
3) Donkey Valley (SE wind) - Available.
4) Swallowcliffe (NW to NNE wind) - Not Available.
5) Quarry (W to WNW wind) - Available. Access to the slope must be via the Stony Down / Berwick St John route only. Launching and landing from the slope face is OK, but the slope is perfectly flyable from the Berwick St John field. You may encounter some paragliders as they also have permission from the farmer to fly there. In this case it is best to have a friendly chat with them and see if you can agree separate airspaces for models and paragliders.
6) Oxo (WNW to NW wind) - Not Available.
7) Horses/Barbara's Field (WNW to NW wind):- Available.
8) Daltons 1&2 (NW to NNW wind) - Available.
9) Crockerton (NW to NNW wind) - Available subject to rules in slope guide.
10) Death Valley (SW wind) - Available until early summer
11) Berwick St John (SW wind), Stony Down (ESE to SE wind) - Available. Code on gate padlock is 5823 . Please do not over fly the parked cars on your landing approach at Stony Down.
12) East Bowl (NEE to E wind) - Available. There is a gate with a keycode, which is 7850. The shepherd is Mr.Fletcher (red Toyota pick-up) and he has asked that anyone parking on the track put a little note on the dashboard of their car, letting him know that they are a WSA member.

There are also a number of public slope sites, particularly in the Purbecks that anybody can fly form. A list of these is maintained on Christchurch Club's website so please have a look there for details.

Flat Field Update

As Martin explained in his section earlier the field situation at Chalbury is rather uncertain at the moment so if you are planning on going there I suggest you contact me first so I can update you on the latest arrangements.

If you are the first to arrive at Chalbury go to the green box in the farm yard.

1.The field number is shown on the small plate on the box front . LEAVE THAT WHERE IT IS.
2. Remove the large red plate from inside the box and place it on the box front. It indicates the WSA are on site.
3. Also take the required equipment out of the box and to the flying field, i.e peg board, bungees etc.
4. If it is an event where you are expecting a large number of people take the corresponding field number out of the box and place it on the fence hook at the road entrance to the drive. There is no need to put the number on the hook if you are flying there alone or with just a few other people
5. The last to leave the site, ensure everything is replaced in the box, including the red plate and number on hook if used, but LEAVING THE FIELD NUMBER INDICATOR ON THE BOX FRONT.

Be aware of the field condition, e.g. after rain. Do NOT leave wheel spin marks. If in doubt, park off the lane outside the field. Leave space for farm traffic.
Be aware of footpaths across the fields, Do not launch if walkers are on the paths. Do not launch if horse riders are nearby.
No low flying over power lines. **No flying over farm buildings and the cottage, AT ANY HEIGHT, or immediately upwind of the farm complex.**
Fly SAFELY at all times. Especially launching and landing. Do not launch over cars and do not approach a landing over other flyers, fly a proper circuit.

Report any problems to the flat field rep, Doug Bowmann.

New Member Notes by Gary Blandford-Hull

Having just joined WSX I am looking forward to getting out and flying again. It has been a long time since I was last on any slopes. Roger asked for a potted history of my modelling background, so here goes.

I started in modelling with the original Airfix 1:72 plastic kits in my early teens which would have been the early 1960's. From there I progressed to building some Keil Kraft rubber band models such as the Spitfire. I then moved onto building a small glider built in balsa wood, which I used to fly having launched it by handline. I did not then do any more model building for several years then but eventually built another hand launch glider, which unfortunately was destroyed on first launch attempt.

That was the end of modelling as I then took up flying single engine aircraft, qualifying with a PPL for tail wheel aircraft that lasted for a few years. About 20 years ago I was introduced by my wife to a qualified glider instructor, John Dabill, who was heavily involved in RC model aircraft and I spent several years going out RC flying with him on various slopes etc. Unfortunately, he succumbed to cancer but I carried on for a while flying his models. This brings me to the current era, where I am in the process of renovating two of his models which I hope to fly again soon. One is a slope soaring flying wing, the name escapes me I am afraid, and a Chris Foss Middle Phase 2, which is ready to fly.

Limbo Event by Roger Crickmore

By popular demand demand I will once again be organising the annual Limbo competition on 13th June. For those members unfamiliar with the limbo it is a thermal soaring event where the real fun comes at the end of each flight. To score the model must pass through two poles about 3m high and 6m apart. This is relatively easy in calm conditions but in stronger winds it becomes rather trickier and collisions with the poles are not unknown.

The competition rules are:
Competition time is 10:30-12:30
Each competitor can have 3 attempts to score, each attempt to be declared before launch.
Target time = 10 min, seconds deducted for either over or under flying this time.

To score the entire plane must pass between the poles (without touching them) before landing
There is a 30 second bonus for spot landing
Maximum model span =2.3 metres
Launch by bungee or electric motor (150m height limit)
Any one wishing to use a bungee must provide and lay it out themselves
Timing and verification of passing between poles to be carried out by another member
Single best flight counts

Anyone not wishing to take part in the competition is of course welcome to come along and just fly for fun, or watch those prepared to risk denting their models in this rather unusual competition.

Altimeter 1970's Style by Roger Crickmore

These days if you want to to know how high you went in your flight its is relatively easy; you just need to use one of the height limiters that log the altitude during the flight, then download this information to your computer. Those people with telemetry from their model are of course able to go one better as your current altitude transmitted to you during the flight.

When I first started aeromodelling back the 1970's the situation was rather different and some people used a much more basic of recording the maximum altitude reached. Most altimeters still work on the principle that they measure the decrease in air pressure as the altitude increases and this is surprisingly rapid; for example the air pressure at the summit of Ben Nevis (1345 m) is 15% lower than at sea level. Modern electronic sensors use the change in pressure to flex a small diaphragm diaphragm whose electrical properties change when it is strained. These can be made very small, enabling them to fit inside your altitude limiter or possibly watch and smart phone.

Earlier pressure gauges more mechanical in operation such the aneroid barometer which uses a small, flexible metal box called an aneroid cell (capsule). The capsule is evacuated and is prevented from collapsing by a strong spring. Small changes in external air pressure cause the cell to expand or contract which drives mechanical levers such that the tiny movements of the capsule are amplified and displayed on the face of the aneroid barometer. Although these have existed for over a century I do not think ones small enough for a model aircraft were made. I did buy a portable one back in the 1980s for measuring my altitude while out mountain walking; I recall it was about 5x5x2 cm in size and only showed the current altitude.

The operation of a 1970s style altimeter is shown in the figure below, which I have copied from the book 'Radio Controlled Soaring ' by Dave Hughes. It consists of a narrow transparent tube sealed at one end with the other end filled with water to a particular mark so that the length filled with air is 31.3inch (I will stick with the original imperial measurements).

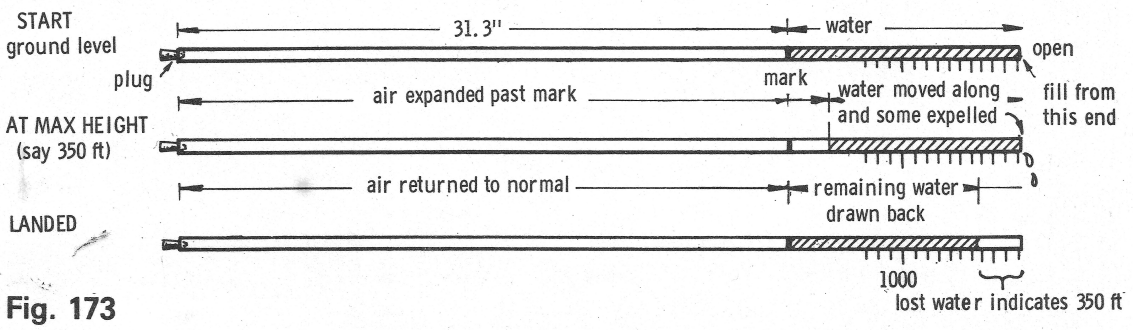
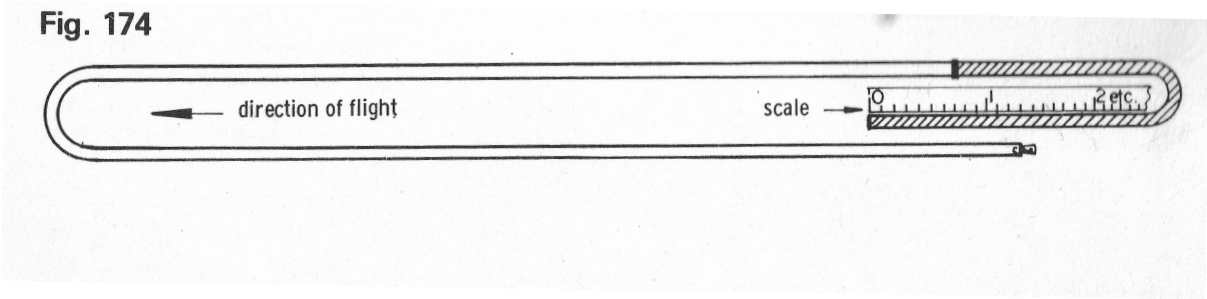


Fig. 173

As the the model climbs the sealed air inside the tube expands so that its pressure matches that of the reducing external pressure and this forces a certain amount of water out the end of the tube. By landing the air inside the tube will have contracted to its original volume, drawing back in the remaining water. The maximum altitude reached is indicated by the length of tube at the end which is now empty of water. Clearly the longer the length of tube filled with air the more water will be expelled for a given change in altitude and the value of 31.3 inch was suggested because it was a reasonable

length to fit on a model and meant that 0.1 inch of water would be expelled for every 100ft of maximum altitude.

One problem was that a hard launch or landing could result in losing extra water from the tube giving an incorrect reading, though it was found that mounting the tube as shown below largely prevented this for happening.



It occurs to me that the instrument could be improved by halving two different diameters of tubing with that containing the water to be expelled being a smaller diameter than that filled with air. Since for a given volume of air, the volume of water expelled will be the same if the water filled tube was half the diameter of the air filled one (so a quarter the cross section area) the length emptied of water would increase to 0.4 inch/100 ft making it more accurate to read.

I am not sure how well this device actually worked but this was the sort of equipment we had to use in the days before cheap and readily available microelectronics. Anybody fancies building one to see how well it agrees with a modern system ?

Calendar

Sun 6th June	Slope Tour
Sun 13th June	Limbo Event
Sun 20th June	E soaring round 2
Sun 18th July	E soaring round 3
Sun 15th Aug	E soaring round 4
Sun 19th Sept	E soaring round 5
Sun 17th Oct	Multitask

(Each following Sunday will be the fallback date for the e-soaring events)

Contacts

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