From the Pits.

The Newsletter of the Weston Model Flying Club

www.weston-model-flying-club.freeserve.co.uk

January 2002.

Editorial

Welcome to the first newsletter of the new year. As I write the weather in January is certainly not suitable for flying but hopefully it will improve soon. We are all looking forward to a better year than last with no repeat of the F&M problems, and the search for the new flying field (see below) should make for an interesting time.

AGM

I can't say the AGM was well attended, with only 26 members present, but it did mean more free food for those who did attend!

The new committee for 2002 was elected and the full list is given below.
Steve O'Brien was elected as our new chairman. The posts of membership secretary and treasurer have been combined into one and **Tom Flynn** is now our administration officer.

The 2002 Club Fees were set as:

Full members:	£54 (£32 + £22 BMFA)
OAPs:	£36 (£14 + £22 BMFA)
Juniors	£15 (£3 + £12 BMFA)

2002 Committee

POSITION	NAME	PHONE	EMAIL
President	Pat Teakle	01934 822147 or 0973 951812	
Chairman	Steve O'Brien	01934 877047	sjo@globalnet.co.uk
Vice Chairman	Kevin Aldridge	01934 853159	kevin@orchard-computers.co.uk
Secretary	Ian Armstrong	01275 392 995	iarmstrong@cix.co.uk
Admin Sec.	Tom Flynn	01934 518636	tflynn@gwipl.co.uk
Social Secretary	Bill Holyoake	07719440404	wigwag@btinternet.com
Safety Officers	Paul Lathall Mike Adams	01934 642883 01934 516237	plathall@hotmail.com
Committee Member	Mike Pope	01934 516869	mike516869@cs.com
Bulletin Editors	Steve, Tom & Ian	As above.	
Chief Examiner	Terry Davis	01278 420436	
Club Examiner	Paul Lathall	01934 642883	paull@labcaire.co.uk
Club Examiner	Mike Adams	01934 516237	

Clubman of the Year

Those of you who were at the AGM will recall that, as usual, we held a secret ballot for Clubman of the Year. This year's worthy winner was our president, **Pat Teakle**, who was presented with the shield at the December meeting.

Club Meetings

John Stennard, who writes the Indoor Flying column for RC Model World, will be giving a talk on the subject at the March club meeting (7th March). John is well known on the indoor flying circuit and usually brings along an electric helicopter to demonstrate. It should be an interesting evening.

New Flying Field

As mentioned in the October Newsletter a Sub Committee was formed to find a suitable flying field which was available for purchase. They were also to investigate means of funding the purchase. The Sub Committee have quietly gone about this task over the last few months and have held numerous Meetings to formulate a strategy and put it into action. As a result a little while ago you may have seen an advert in the Weston Mercury looking for "land to be purchased by an established club". That was us and we had a reply offering us two plots of land near Banwell. The first of up to 10 acres was ideal but for houses in the immediate vicinity. The second plot was in the ideal location with vehicular access but it was too small.

What did we did learn from this first attempt, was that the land would be more expensive than we anticipated. Our next line was to approach Land Agents in the area. We were offered some land near Yatton - obviously too close to Woodspring Wings. We were then offered 10 acres at Hewish, but it was beside the main road.
But we have met with a positive response from one Land Agent and at the time of writing we have seen a field suitable for flying with good access and good parking. It is some 6 acres and the only stumbling point is the asking price. We are in the midst of negotiations with a view to getting the price at a satisfactory level for all those concerned. As these talks are at a critical stage, I hope you will forgive me if I do not disclose the exact location other than to say it is in the Weston Area.
Once and if a figure is agreed we will then call an extra-ordinary general Meeting to discuss whether we proceed with the purchase.
If we do not agree on this field we will then continue our search until something comes up. So as you can see the Sub Committee has not been dragging its feet. But they would still welcome your help - if you see or know of any suitable land for sale please contact them.

Gerry Crossman,
Chairman of Sub Committee.

Fun Fly League 2001

Last year's Fun Fly League has come to an end. It started back in January with a pylon race (five laps around the length of the field), won by **Tom Holian** (although **Lance Bell** provided the most entertainment value with a highly over-powered 3-channel Junior 60!).

The next scheduled event was lost due to Foot & Mouth, so we resumed in May with a climb & glide at the airfield. This was won by **Paul Lathall**.

Next was a timed flight (stay in the air for as close as possible to 4 minutes without the use of a watch or timer). **Kevin Aldridge** came first here.

After several postponements for bad weather, the September event took place in mid-October! **Steve Ball** won the dead-stick spot landing.

The final event of the year was a new idea, 'judged flying', where the contestants had to fly two rectangular circuits and land, being judged for style and smoothness etc. **Jamie Cuff** managed near-perfect scores to take this one.

And who won the overall league? Well, that would be telling, you'll have to come to the February club meeting, when the winner's trophy will be presented.

Thanks to the 13 people who entered at least one of the events. It's good fun and we're doing it again this year. Why not join us?

Safety

A recent article on the BMFA web site described an incident when a flight box caught fire after an electrical short, causing an explosion and serious burns to someone. The point here is that the methanol on model aircraft fuel burns with a colourless flame, and you it is not always obvious when a fire is burning.
The BMFA recommends that fuel is stored on the outside of a flight box, or if inside then have plenty of drain holes so that fuel & vapour cannot accumulate.
It's also worth ensuring that your battery terminals are covered so they can't be shorted out if anything falls across them.

New Year's Day Fun Fly

Separate from the League described above, a one-off event was organised by **Lance Bell** and **Mike Adams**. In perfect conditions with cloudless sky and no wind, 5 events were held including dead-stick loops, climb & glide etc. Lance came top, but disqualified himself, as he didn't think it fair to organise it and then win it! That left a play-off for first place between **Pat Teakle** and **Ian Armstrong**, narrowly won by Pat. The day was declared a great success by all there.

Featured Model

Forgive the indulgence, but since I'm editing this newsletter I thought I'd start off with my own model. If you can contribute a similar article about your favourite model for the next issue please let me know. It doesn't have to be scale, anything interesting will do.

Gloster Gladiator

The real Gladiator was a transitional aircraft, being the RAF's last biplane fighter and the first with an enclosed cockpit. It came along in 1937 too late to make a major impact, being superseded in front-line service within a year by the Hurricane, but Gladiators gave a good account of themselves in the fringe areas of the War like Malta and North Africa.

My model is built from the Brian Taylor plan, and is 1/7 scale giving a wingspan of 56" and a weight of 9.5lb. It's powered by a Laser80 4-stroke, mounted inverted within the cowl, which gives plenty of power and sounds great in the air. It's never let me down in over 40 flights.

Brian Taylor plans are known for their accuracy and this one is no exception, faithfully reproducing the rib spacing and the complex shape of the lower wing where it joins the fuselage. Covering is Solartex for the fabric areas, Glosstex for the panelled bits at the front, and Litespan for the tail, to keep the weight down. Although the latter was very effective in keeping the tail light, resulting in the CG coming out right first time, I have to say that I was not impressed with Litespan, it doesn't stretch very well and I found it very difficult to get around even modest compound curves, leaving a number of creases. Perhaps there's a knack. The few painted bits like the cowl and canopy frame were sprayed with silver Solarlac to match the coverings.

The dummy engine is made from discs cut from card and balsa, sprayed with black and silver then finished with matt fuel-proofer to give a 'dirty aluminium' look.

I'd originally intended to paint the markings but eventually I cut them out of coloured Solartex because it was quicker and the flying season was here! The markings are of K7985, which served with 73 sqn of the RAF in 1937-38.

The Glad is very much a fine-weather model, I only fly it in very light winds otherwise it jumps around due to the low wing loading, but in the right conditions it's a joy to fly and doing low slow passes or landing with all flaps down it looks great.

If you want to see more I've put some pictures on my own web site at www.cix.co.uk/~iarmstrong. And of course I'll be flying it again when the weather improves.

How Does A Wing Create Lift? Part 2

Firstly in order to understand the following explanation as to how lift is created it is necessary to understand Newton's three laws of motion. I'm sure this is unnecessary but for those of you who were snoozing during physics lessons many moons ago a brief recap.
Newton's first of motion states that a body at rest will remain at rest. Or a body in motion will continue in a straight line unless subjected to an external applied force.
Newton's second law states that force = mass times acceleration.
And finally
Newton's third law states that for every action there is an equal and opposite reaction.

The explanation as to how lift is created can more easily be understood if the Coanda effect is first considered. If you open a tap creating a fine trickle of water and then place a glass held horizontally just into the flow, you will notice that the flow appears to attach itself to the glass and flows underneath, instead of following the forces of gravity. Considering Newton's laws of motion as there has been a change of direction of the water flow by Newton's first law there must have been a force on the flow water, and considering Newton's third law there also must be an equal and opposite reaction to that force.
This is in effect what is happening to the airflow over the surface of the wing. As the air flows over the curved upper surface it is bent in accordance with the Coanda effect so in the same way as the glass and water there must be a force on the air to bend it down and by Newton's third law there must be a reaction which is lift.

You may think this does not work on a symmetrical wing but due to the angle of attack of the wing the airflow under the wing is of a more parallel nature.

There have in the past apparently been other explanations as to how lift is created and as such how an aeroplane can fly, the main one being that as a plane flies forward the wind hitting the underside of the wing due to its angle of approach is forced down words and thus the reaction to this force imparts lift on the wing.
Having researched this complex subject by scratching at the surface the conclusion that has to be made is that all these three explanations are in action at the same time so in effect Mr Bernoulli provides us with15% lift, the wind hitting the underside of the wing and Mr Newton's explanation provides the rest.

Dr Graham Legg's article (RC Model World sept2001) from which this explanation has been simplified does go on to explain the effect of angle of attack of the wing in great detail but believe me all we need to know is that you must have some. Perhaps some lead in the tail would help????

Simulators

As I write this it's a Sunday morning, the rain is pouring down and looks to be set in for the day, so that's another weekend's flying gone. However, anyone with a PC can always keep their hand in with a model simulator.

I've recently been trying **FMS**, a free program obtainable from the Internet (**http://simulator.home.pages.de**) Of course to some extent you get what you pay for, so FMS may not be as good as some commercial systems, but you can't argue with the value for money! You will need a transmitter interface, which you can make up yourself if you can handle a soldering iron, or you can get one from a couple of sources on the Internet.

The current release of FMS is Beta 7 and it's still being developed, albeit rather slowly. About 20 models of all types from gliders to jets are supplied with it, and you can download many more from other web sites. There are 5 landscapes with a number of variations of each.

The graphics are fairly good, especially some of the models, but flying characteristics are, shall we say, variable. Nevertheless, it does make learning the basics easy and of course safe. For example, I've never flown a helicopter, but I've taught myself to fly the one on the simulator. The number of crashes involved would have been rather expensive using a model…

If you have any experience of other simulators to share, send me a short review for the next newsletter.

Events

Forthcoming events this year:

Thursday 7th February 2002, 8pm	Club meeting at the Bristol Hotel
First fine Sunday in February…	First fun fly league event of 2002
Thursday 7th March 2002, 8pm	Club meeting at the Bristol Hotel. Talk from John Stennard on indoor flying

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For Sale

Carousel, 61 engine (Enya?), with servos.
Tel: Steve Hines 07813 505096

For Sale

1. Draper compressor, unused
2. Spirolux scroll saw, ideal for balsa

Tel: Bernard 01934 838643

Sunset Times for 2002

As you all know, flying at Wick must stop 15 mins before Sunset on any day (or 1745 on Sat & 1545 on Sun, if earlier). Here are the sunset times for this year.

All times are GMT except between 0100 on the last Sunday in March and 0100 on the last Sunday in October when the times are BST (1 hour in advance of GMT).

JANUARY		FEBRUARY		MARCH	
5	1619	2	1703	2	1754
12	1628	9	1716	9	1806
19	1639	16	1729	16	1818
26	1651	23	1741	23	1830
				30	1841
APRIL		MAY		JUNE	
6	1953	4	2039	1	2119
13	2005	11	2050	8	2125
20	2016	18	2101	15	2130
27	2028	25	2110	22	2132
				29	2132
JULY		AUGUST		SEPTEMBER	
6	2129	3	2056	7	1945
13	2124	10	2044	14	1929
20	2117	17	2030	21	1913
27	2107	24	2016	28	1857
		31	2001		
OCTOBER		NOVEMBER		DECEMBER	
5	1841	2	1644	7	1604
12	1826	9	1632	14	1604
19	1811	16	1622	21	1606
26	1757	23	1614	28	1610
		30	1608		

Safe Landings,

Ian, Steve & Tom