



Flight Desk

April 2009

The official newsletter of Chesham Model Flying Club Ltd

Volume 21

Issue 2

April Club Night

Chesham White Hill Centre

Wednesday April 15th

20:00

Dave Bishop aka DB Sound

The voice of many Flying Shows

Editors Ramblings

It is Bank Holiday Monday as I add my contribution to the Newsletter. Until today, the weekend had been a complete washout on the flying front and then the miracle happened. It was good to share the field with the others flyers that were there.

Last Newsletter I retold the story of the Sopwith Camel build, which is still unfinished. I confess that I got my Biplane fix by flashing the cash. A magazine advert, a moment of weakness, and a Spad X111 was mine. It used the running gear earmarked for the Camel and it took very little time to complete. It has flown. It has landed. It is typical of Biplanes,



though and it flies best in low winds. The first flight was a true test of skill to get it back to earth in one piece in the wind, but it was worth it.

So what has been your latest project? Richard Ginger contributes the story of the Meteor to this Newsletter. Where is your story? It is a thin edition this month and this is YOUR newsletter.

As always, you can contact me (Colin Hooper) at:

webmaster@cheshammodelflyingclub.co.uk

Secretary's Notepad

The events of note for the next few months:

April 15th	Club Night WHC @ 20:00 Dave Bishop
April 19th	Competition Newground "Balloon Harassing"
April 26th	AHA Flying @ Newground (No club flying)
May 4th	BBQ @ Newground
June 14th	Competition Newground "Timed Flight"
June 17th	Silent Night Pednor 18:00
June 20th/21st	Weston Park Model Air Show
June 27th/28th	Wings and Wheels @ North Weald
July 12th	Competition Newground "Bombing the Tablecloth"
July 11th/12th	Flying Legends Airshow @ Duxford
August 19th	Silent Flight @ Newground 18:00
August 31st	Newground Bank Holiday BBQ
September 6th	Competition Newground "Scale"
October 4th	AHA Flying @ Newground (No club flying)
October 21st	Club Night @ WHC 20:00
December 16th	Club Night and AGM @ WHC 20:00
December 26th	Boxing Day Flying @ Newground

CHAIRMAN'S SOAPBOX

MORE NEW MEMBERS

A warm welcome to all the new members. The info' sent to you by our Membership Secretary Dave Anderson should explain all you need to know regarding your membership. If you are unsure of anything, in particular any of the club rules, whether general or site rules, simply ring anyone on the committee who will soon put you right. We pride ourselves in the excellent image we have established for ourselves, as being a friendly helpful club. I'm pleased to say that the 'atmosphere' at either of our sites is hard to fault, and this factor is important when we are all sharing a common aim, - not least to have a good time! There are no restrictions on the amount of enjoyment you can have, as long as you stick to the rules, of course.

It's now your club too! - I hope you make many new friends - good luck and safe flying!

CLUBNIGHT WED. APRIL 15 - WHITEHILL CENTRE FOR 8.00PM

It's that lovely man Dave Bishop, the 'voice' of many Model Shows, including the legendary Halton Show, which is sadly no more. He has been retiring for at least the last ten years, but he can't stop! In fact, - I've just checked it out, - he was our speaker exactly ten years ago at the April 1999 Club night. He'll be talking about anything and everything including his fond memories of the distant past. This will, I promise, be good entertainment, - please make an effort and - **be there!**

A.H.A. TEAM TRIALS - SUN. 26 APR NEWGROUND

Your committee has approved the use of Newground by the Aerobatic Helicopter Association. Club members please note, - there will be no club flying either before or during the trial including any planned lunch break. Club flying can take place after the trial, when all A.H.A. participants and officials have vacated the field.

This may not be before 3.30pm, and of course depends on conditions at the time.

If anyone wants to visit to see precision aerobatics heli' style, then of course you are free to do so. Please respect the fact that this is 'serious stuff', - do nothing that might affect the concentration of both pilots and the officials in charge of proceedings. There will be an agreed safe

viewing area designated on the day by the A.H.A., - and in the interests of safety you should, as always, be **'Alert at all times'**!

CLUB COMPETITIONS

Don't forget the competitions coming up at Newground, especially if you have pledged to enter. The next one is this coming Sunday at Newground. It's the now popular 'Balloon Bursting Competition'. The organiser is Richard Ginger, he'll be there for sure with his new 'bargain buy' he has sourced for the club. It's the Helium Gas Bottle trolley making its debut! Even if you are not taking part, - **be there!**

ROYAL INTERNATIONAL AIR TATTOO - RIAT 2009

Last year's show was washed out by the torrential rain. This year's show at Fairford in Gloucestershire is Sat 18th / Sun 19th July. A **Saturday only** ticket is £34.95, and a **Sunday only** the same, BUT if you want to keep it 'flexible' and choose your day at the last minute, - i.e. if one day's weather is forecast bad, then a ticket for either day is £39.95! - starting to become a rip-off! As I understand tickets at these prices have to be bought in advance. If you go there to buy a ticket on the day, - you could have a problem. Duxford's Flying Legends Airshow is the weekend before, 11th / 12th July.

Humpy

Events Corner

"EVENTS"

We started off the season with our first club night in February with Ian Tunstalls talk on the history of gliding. Despite an initial problem with the A/V set up, which was soon rectified by Bob Bennett going home to fetch another laptop, (thanks Bob), the evening went well. Although I'm not particularly a gliding fan I did find many interesting points throughout the talk. The club night was well supported and thanks to you all for turning out!

"FORTHCOMING EVENTS"

Wednesday 15th April sees our second club night of the year and this time we have the one and only Dave Bishop giving us a talk. Who is Dave Bishop I hear you ask! He is of course better known as DB Sound. If you haven't heard of DB Sound then you haven't been going to the shows! Yes, Dave is the famous voice you'll hear at the likes of "Wings and Wheels" and "The Southern Model Aircraft Show" to name but two!

Dave is quite a character and always gets a laugh from the crowd. Now he's coming to entertain us at the Whitehill Centre on Wednesday 15th April 2009 at 8.00pm so don't be late!

The Sunday after the club night, Sunday 19th April, we have the balloon bursting competition organised by our very own Richard Ginger starting at 10.00am sharp! Particularly for the new members I'd like to just say, don't take the word competition too literally, this is definitely a "Fun Day" with nail biting and entertaining action from the onset!

If you are "solo" and have a fixed wing aeroplane you can take part. All you have to do is take off and over fly the patch at around 10ft and watch the balloons burst. Easy! And when you've finished laughing there's the BBQ, so bring your food, cook, chat and make merry!

The AHA will be at Newground on Sunday 26th April to conduct their trials. There will of course be no club flying whilst the trials are conducted! You are welcome to attend and spectate if you wish!

Next up is the May Day Bank Holiday & BBQ bash at Newground! Yes folks May is only a few weeks away! Monday May 4th is indeed spring bank holiday, though spring is already upon us! So why not come along and spend the bank holiday at Newground? The BBQ will be there, as always, for you to cook your breakfast, lunch, or tea, or indeed all three if you want to make a day of it! Wives, girlfriends, children, family and friends are all welcome. As with previous bank holidays we will be hiring in toilet facilities so there's no excuse for not having a family day out!

Come along for a couple of hours or all day, or just for your usual flying! I'm sure there will be a club trainer there should any guests/relatives wish to try their hand under the supervision of one of our willing instructors! Do you really want to go to B&Q or Ikea? No? Well come to Newground instead and enjoy the fresh air and some outside cooking!

Without wishing away too much of the year don't forget June brings us the infamous "Bombing Competition" courtesy of Dave Anderson on Sunday 14th June and a Silent Flight evening at Pednor, Wed 17th June. More about those in the next issue!

Ray Birdseye, CMFC events coordinator events@cheshammodellflyingclub.co.uk Tel 07703 768354

Members Ramblings

METEOR MONOPLANE

I have a great love of multi cylinder four stroke engines - there is no doubt that they sound right and add realism to a scale model. A few years ago, flicking through the Traplet plans catalogue, I noticed an aeroplane designed specifically for the Saito 53cc five cylinder radial. At the time, however, I opted for the Morane Saulnier which perfectly accommodated the three cylinder Saito 28cc engine. This powerplant uses three FA 65 cylinder/head units. The five cylinder R325 uses five of these, cleverly mated to a common crankcase. I had been so impressed with the R170 over the last four years (always starts, no "dead sticks ") that the prospect of owning the R325 was just too tempting. These motors are made to special order; last July I ordered one. At the same time I sent off for the Meteor plans and the relevant back number of Radio Control Scale International.



The Meteor is a large high wing tail dragger and at quarter scale spans 96 inches with a projected all up weight of 21lbs. I was fortunate to obtain a reprint of an American aviation magazine article detailing the Meteor which included three view drawings. The Meteor was an American built aircraft; actual photographs are very rare and only six were built, the first in 1932 which was not the best time to market a new plane in the USA. The original power plant was a Kinner 5 cylinder radial developing 100 hp. A look at the three view drawings showed that the model plans were an accurate enlargement. My model would therefore be built to a true scale outline with an engine that replicated the original. I chose

NC12294, believed to be the second plane built and the example featured on the drawings and the plan.

I have never spent more than six months building any of my models; they will not reach the dizzy heights of detail and finish necessary at top competition level. My target has always been practicality and flyability with a reasonable appearance. The Meteor would have to fit in the Mondeo and I anxiously checked the dimensions. It would fit, just. To play safe, however, I planned to make the tailplane detachable.

Work commenced with the main fuselage formers and undercarriage support plates. I intended to follow the plans and instructions thereon as



far as possible. However, the beauty of building from plans is that you can modify things to suit your own preferences for radio installation and access - you can also build in strength at key areas, e.g. the undercarriage. The fuselage is $\frac{1}{4}$ inch square spruce and load bearing formers are from laminations of quality birch ply. It's all fairly conventional and not really difficult but there's lots of it and it looks HUGE indoors. On the full size all flying surfaces are operated by push/pull wires, even the ailerons; I chose to use conventional pushrods for these but closed loop for the rest. Each elevator half uses a separate servo driving a slave bellcrank assembly. For access purposes I built a series of hatches on the model underside. The complete top deck was built in one piece then cut into segments. I used blue foam, with rolled veneer and an outer skin of litho plate (very thin aluminium), which overlaps the top longerons slightly and all the segments are screwed into place with tiny self tappers. This nearly drove me potty but was worth the effort.



The undercarriage replicates full size and incorporates telescopic suspension with the damping supplied by several "O" rings on each leg. Big airwheels (Dubro) provide more cushioning. At this size and weight the U/C has to work and withstand the shocks of lumps and bumps and the inevitable less

than perfect landings. The tailwheel is steerable and is driven by a small closed loop, with springs, directly from an inner pair of holes in the rudder horn. The tailplane, elevators, fin and rudder are fully built up and I used carbon rod plus bamboo skewers to give strength to the leading and trailing edges. Each tailplane and elevator half fits to the fuselage on carbon rods sheathed in alloy tubes and these fit into carbon tubes permanently fitted in the tail of the fuselage. A socket screw through an alloy bracket on each side below the leading edge makes a secure fitting and bracing struts and wires are fitted in scale positions. The entire tailplane assembly will come off if required.

The wings are built in three sections, the (cabane mounted) centre and left and right outer panels. The wing section is an accurate Gottingen section, which has a very slight undercamber and a Phillips entry on the leading edge. Wing struts are from 6mm carbon tube with a combination of alloy, brass tube and steel end fittings. The length is adjustable. As on the full size, the struts are load bearing structural members. The rigging is simple and the struts fold flat under each wing half for transport. Carbon rod/alloy tube joiners run into carbon tubes let into the centre section. Drilled alloy plates under each wing joint, front and rear, secure the wing roots with a series of caphead screws into substantial ply blocks. The strut fuselage end fittings drop into brass tubes attached to the front and rear undercarriage pivots and are secured with nylocked caphead bolts. The struts are sheathed in proprietary alloy streamline section tubing which emulates the full size.



It was a major job to set this lot up with the correct wing incidence and to ensure that everything was square and symmetrical. I finished off most of the work outside in good Winter light, picking the nice calm days.

Covering is silver glosstex apart from the fuselage front section which is all aluminium panels, and the last top deck segment. I chose chrome profilm which goes easily round compound curves and was more manageable right at the tail. The rest of the fuselage top is left in polished litho plate like NC12294.

Navigation lights are fitted and I made my own wingtip mouldings. The nav. light system is totally separate from all other wiring and uses a separate on board battery. Dash boards are fitted complete with scale instruments. A Pete's Pilot now sits in the rear cockpit. All radio switchgear is located behind the front cockpit access door in a small panel.

I paid particular attention to the engine installation and glow system. The Saito uses two plugs per cylinder, the rear five are connected "live". The front five assist combustion throughout the entire throttle range. An on board glow system is essential for this engine and the best available is made in the USA by McDaniels trading as Sonictronics. They do a whole range catering for 1 to 18 cylinders. I ordered mine over the Internet. Not cheap, but it's a proven system and very flexible. I wired mine up via the throttle with a separate toggle switch on the rear

dashboard so I can switch the glow off during priming, etc. The point at which the glow comes on and off can be set by a potentiometer on the main unit. Power is from a four cell 2000mah Nicad pack which I made up from some old but still good electric flight batteries. Current draw is quite high at about 10 amps but the pack can easily be recharged via a fly lead which exits through the cockpit door panel. Experience has shown that I get three longish flights without recharging. A "booster" pack can also be connected for extended ground running.

A Dubro 24oz tank supplies the fuel - 15% Nitro Wildcat Helimix which contains 18% Klotz oil, fully synthetic, NO castor. I use this in all my four strokes. Saito have obviously spent much time and money on developing this engine. It is essential, as with all "multis", to avoid a hydraulic lock due an excess of fuel in any of the cylinders - usually the lower two. Any attempt to turn the engine over too vigorously, even by hand, will damage the internals and an electric starter is a big no no. Remember that the propeller is sized to suit the total capacity, not one cylinder of a shade over 10cc! (I personally hate electric starters, I have seen more damage caused by their improper use than anything possible by hand. OK, you don't get your hand too near the propeller and if you have a pumped engine you do need one. The major problem, in most cases, is that a leccy starter will try to turn things over far too quickly, the geared ones are possibly the best bet:-) Sorry!

You can't choke the Saito in the conventional way - Saito have drilled a hole in the cup under the main carb inlet. A clever piece of plumbing requires you to prime the engine via the inlet tubes to two of the top cylinders and a syringe is supplied for this. The engine must be turned over slowly by hand to ensure that there is no hydraulic lock. All four strokes need to be "wet" and you will feel a "bump" with the glow on indicating that a quick start is available. The rev. range for this motor is 1,700 to 7,500 and I use a 20 X 8 Master Classic prop., balanced on a decent (Topflite) balancer. As with all multi's, this engine is smooooth and vibration is very low. This means less strain on the airframe and on board electrics. Above all, the sound is unbelievably realistic, particularly at lower throttle settings. Tickover is rock solid.

At the time of writing the model has had about 20 flights at Newground in varying wind strengths. Ground handling is good but the point of rotation and final rollout on landing must be into wind if more than 5 mph or so. All high wing models require care and proper use of the rudder in flight and I am gradually getting used to the flying characteristics. I personally don't couple rudder and ailerons via a mixer. Full size light

aircraft don't and this leaves the pilot free to kick the back end round if necessary. However, aileron differential at two up/one down is used to counteract adverse yaw and this could probably be increased to three to one.

Radio gear is 2.4Ghz via a Futaba FF9 TX module. The elevator servos are 3010, the rudder a 3305 and each aileron is driven by a Perkins metal geared high torque mini. The throttle employs a Ripmax SD200 mini. RX pack is a Sanyo 2700Nimh, all switchgear is heavy duty and failsafe on throttle is set to idle in accordance with BMFA/CAA regulations for models over 7kg dry weight.

A set of decent vinyl decals have now been added and so far no problems have been encountered. As with all models, the more you fly it the better and I hope to take the Meteor to some of the more informal shows and fly-ins this season.

I should like to thank my fellow Clubmates for suffering clouds of exhaust smoke during ground running and special mention must be made of the following:-

Reprinted article/drawings	-	Mike Smart (Aylesbury)
Litho plate/springs	-	Richard Johnson
Dashboard prints, enlarged drawings and moral support during build	-	Kenneth Walker
Spare sub C pack	-	Mike Martin

Kenneth Walker is also building one of these aircraft - I think it's the next one that the factory produced! Awaited with great interest!

Cheers. RG

Instructors Corner

Al has been on a well earned rest and is skipping this newsletter.



The Instructor Rota

The instructor rota has been combined with the year planner that Ray puts out. Please contact the duty instructor on the Wednesday before the training day. If you do not call he will assume that no training is required and will make other arrangements to have a social life.

In the event that the weather makes training dubious, it is a good idea to check with the instructor before leaving for the field.

Committee

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Richard Ginger	01296 688030	
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2009 Year Planner

2009	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T
January				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
February							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28			
March							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
April			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
May					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
June	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30							
July			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
August						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
September		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30						
October			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
November							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
December		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					

C O M	Committee Meeting		Club Night WHC = White Hill Centre		Pednor Event SFE = Silent Flight Evening		Newground Event CMP = Competition BBQ = Bank Holiday Barbeque BOX = Boxing Day Flying		Newground No Club Flying AHA = Aerobatic Helicopter Association
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