FEBRUARY 2007

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The articles and views expressed by our members, are not necessarily the views of the editor or committee and therefore we reserve the right to modify and or refuse an article if it is considered in the best interest of the club.

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CLEAR

DOPE

Indoor Kit Scale Comp Seaford Indoor Meeting Crystal Frequency Chart Flight Sim For Free

CHICHESTER AND DISTRICT MODEL AERO CLUB

Chichester and District Model Aero Club

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CADMAC WEBSITE

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CLIMB & GLIDE COMPETITION

Saturday March 10th—Thorney Island—12 noon start NB. All competitors will use the same model i.e the CADMAC Club Trainer

Cover photo:

Sukhoi on the runway - at you command - from the Free Flight Simulator featured by Toni Reynaud pp 12 - 15.

Some years ago, while I was at the Nationals I found myself sitting on the grass admiring a gorgeous Tiger Moth, built by someone who, judging by his work was clearly an Expert Modeller of Scale Aeroplanes. Now, the Tiger Moth is often confused with the Stampe, a different but perhaps similar-looking biplane. The name of the Stampe should of course be pronounced something a bit like 'Stomp', with a soft 'o', but sometimes those who don't know this pronounce it more like the word 'Stamp'.

I placed a small object on the grass in front of me, and then, feeling a wave of pure evil sweeping through my veins, I struck up a conversation with the Expert Modeller. It went something a little bit like this;

Me: That's a stamp, isn't it? I've always liked stamps.

EM: It's not a Stampe, it's a Tiger Moth'

Me: Really? I'm pretty good at recognising stamps 'seen quite a few you know.

EM: It's a Tiger Moth. But some people do think they look like the Stampe.

Me: Well, it looks like a stamp to me.

EM: It's definitely not a Stampe. Really.

Me: Are you sure? It does look pretty stamp-shaped.

EM: Look, I know what it is! And it's not a Stampe!

At this point I paused, reached into the grass and carefully examined the object, which had '1st written in its top right hand corner. I resumed the (by now slightly strained) conversation:

Me: (innocently, while looking at the object) What's this then? EM: (weakly) HaHa.

Fortunately a few seconds later he did see the funny side of my questionable humour, and we went on to have a pleasant conversation about his beautiful, model.

Andrew Gibbs





DIARY OF COMING EVENTS

The following is a list of proposed CADMAC Club events for your information

Legend: Club-nights Outings Competitions Others				
March	04	Indoor Flying at West	tergate CANCE	ELLED
March	10	Climb & Glide	Thorney	12 noon
February	17	Indoor Flying	Seaford Coll	2 - 5 pm
March	08	Club Auction	Fishbourne	8.00 pm
April	08	Indoor Flying at Wes	stergate CANCE	ELLED
April	12	Indoor Comp	Fishbourne	8.00 pm
April	14	Bomb Drop Comp	Thorney	12 noon
May	10	Skittles and Buffet	Fishbourne	8.00 pm
		18		-

Editorial

Thorney Island Wind Map



http://www.xcweather.co.uk Colin Stevens sent this link to a very useful planning tool. Just point to any of the wind arrows anywhere in the UK and you'll get an instant wind forecast and history.

Ever more Humour

Along with another of the frequent T&R contribution from Cobbo this month we have a piece of situation comedy from 'Whacky' Andrew Gibbs and the first of a wonderful source of aeromodelling cartoons created by Brian Pardoe of the Sutton Coldfield R/C Aero Club. CADMAC member Steve Harrison kindly gave me a CD of Brian's work which mostly centres around the weekly experiences of the Sutton Coldfield members. I'm sure you'll recognise the similarity with situations and characters in our club.

ONOURS FOR ARRY

CADMAC member Harry Hook is pic-

tured above receiving his 'Bomb Drop' Trophy and Certificate from Competition Secretary Ray Beadle. Harry wasn't able to attend the presentations at this year's AGM due



to family commitments so the award was made at the January Club Meeting.

The competition win marked a vast improvement over the year, not only in Harry's bombing skills but also his piloting skills - there's always a tendency in this comp to watch your bomb fall to the ground, instead of keeping your eyes on your model - as Harry discovered last year!

No such problems in this year's comp though and he ran out a clear winner.

Ame



Minutes of the Committee Meeting Tuesday 2nd January from Toni Reynaud Hon Secretary



Present Tony Chant, Toni Reynaud, Ray Beadle, Bruce Smith, Keith Wood, Ken Knox, Gavin Bidwell, John Fowler, Morris Campbell

Apologies Harry Walton, Mick Blundell.

Matters arising from previous minutes Nil

Correspondence Tony C passed round a diagram which he had received from Defence Estates delineating our flying area on Thorney Island, Tony will communicate with them to clarify the use of a 20 meter strip to the east of the main runway which we use as the pits area. All Committee members are to reaffirm the flying area limits to all members on a opportunity basis.

An ex-member, Mr M Jones, visited the flying site on Thorney Island, and was noted to be apparently speeding on the peri track. He was told of this at the time, and has since been sent an official letter regarding the incident and the possibility of losing this site for such an offence.

There was a discussion on the best way to ensure that the Membership List held at the gate on Thorney Island. Bruce S will include a note in a future Clear Dope to inform members that members must always show their membership cards when accessing Thorney Island. Tony C will talk to Defence Estates ref Access Control.

Club/Membership issues Keith W stated that BMFA subs are up by £1 this year, and that a £1 rise in the Club subs would be exactly in line with inflation. This was agreed by the Committee. The possible expenditures for this year were discussed. A double sided colour laser printer for Clear Dope and an LCD projector and radio microphone for club evenings were suggested. Acceptance proposed by Tony R, Seconded by Ken K, unanimously accepted. These items are to be investigated for initial and running costs by Tony C and Bruce S.

Monthly meetings/social programme

December - The AGM. A buffet has been arranged.

January – Membership Renewal evening.

February – Roger Blake will give a talk on low-tech repairs to hi-tech gliders.

March – Club Auction.

April –Indoor Flying

May – Skittle evening and Buffet

June – evening flying – control-line, park flyers and free flight. BBQ

July - evening flying - control-line, park flyers and free flight. BBQ

August - evening flying - control-line, park flyers and free flight. BBQ

September – Club Auction.

October – TBA

November – TBA

December – AGM

Toni R to ask Bruce S to put a note in CD asking for feedback on the possibility of a social dinner & dance evening. Bruce S has volunteered to drive the minibus for club outings this year.

The model should rotate on its own axis. The entry and return tracks should be within half a wingspan displacement and at the same altitude.

so you may need to use ailerons in one direction or the other as it rotates through the stall turn to compensate. For your first few attempts, fly the manoeuvre the straight forward way and notice what happens. While you are holding the rudder, concentrate on the wings and vary the ailerons as required to compensate for the roll. High wing planes look like they're trying to do a split-S or to roll over on their back while they're ruddering around. In this the case, you will have to hold in some opposite aileron during the turn. i.e. If you put in right rudder for the stall turn, you'll need to use left aileron to compensate. Low wing planes without enough dihedral can also need aileron in the same direction as the rudder.

Once you start to feel comfortable with your stall turns you can extend your practice and experience by flying back and forth along a narrow corridor beyond your active runway area (and preferably inside the normal club circuit end-legs) performing upwind and downwind stall turns at the end of each

pass.

Don't forget - positioning, attitude, altitude and entry speed are all important factors for a good manoeuvre. Practice only makes perfect what you practice!



STALL TURN

STALL TURN OR HAMMERHEAD

Hairybatics #4

This manoeuvre is normally used as a turn around at the end of a pass in front of yourself. Stall Turn is technically not an accurate name because the plane never actually stalls. The airspeed may be very slow, close to zero, but since there is no wing loading during the turnaround, there is no stall (at zero G wing loading, a wing does not stall). The plane is flying throughout the manoeuvre with all the control surfaces effective (although sometimes only marginally so).



Description

The Stall Turn starts with a quarter loop into a vertical climb. When the plane stops climbing, it pivots around its vertical axis (which is now horizontal). The nose moves in a vertical circle from pointing up through the horizon to pointing down. The model then moves vertically down to pick up speed again and the manoeuvre is finished off with the last quarter of a loop to horizontal flight.

Positioning

Line up parallel to the runway, at full power and at a safe altitude. The manoeuvre is usually performed on the windward leg of your circuit and after the plane has passed in front of you. You do the stall turn off to one side and you can see the top of the plane as it goes through the manoeuvre.

Safety

The upwind approach should always be made at the far side of the 'active' area of the runway otherwise the return trajectory of the model would constitute a downwind pass. Also the direction of the rudder used during the turn-around should always take the model away from the flight line or spectators.

Flying the manoeuvre

After lining up, when the plane is past you and nearly to where you usually turn around:

- 1. use up elevator to pull the nose up as if you were starting a loop. Don't jerk in the up but ease the model up until it's climbing vertically and then release all the up elevator;
- 2. Use ailerons if necessary to keep the wings level during the climb.
- 3. Cut power to idle and watch the deceleration but before the model loses all its airspeed;
- 4. Put in full rudder for the 180⁰ turn, then after the turn, release the rudder;
- 5. Ease in the power and up elevator to recover to level flight from the dive again using ailerons, where necessary to keep the wings level.

Compensation

You may find that your plane has a tendency to roll when you put the rudder in

Competitions There are eight competitions to take place during the course of the year. Possible new competitions could be the basic "A" test flying pattern or a "Scramble" event, where the pilot takes off, flies one circuit and lands. The time is taken, then the pilot must repeat the take-off and landing twice more as close to the original time as possible. Seconds less or more that the initial flight are counted, and the pilot with the lowest score wins.

The sum of £200 was allocated for trophies and engraving.

Toni R/Ken K to find out dates of possible Club Outings to modelling events and pass these to Ray B so that he can arrange competition days. The events will probably include Hop Farm, Wings and Wheels, Wroughton.

Training Nothing to report.

Safety Morris C said that he will try to continue in the same low key as the previous Safety Officer, but will also approach flyers who he thinks need to be informed of possible unsafe flying practices. He will purchase two Safety Officer HiVis jacket, one each for Porthole Farm and Thorney Island. Ken K will arrange to have them printed with the title. The first committee member to arrive at each site should wear the jacket (until the Safety Officer arrives) as a reminder to all flyers present that safety should always be a consideration.

Morris suggested a working party to clear plant growth from the runway on Thorney Island. On the day, there will be no flying until the work has been completed. The use of the windsock is to be restarted at Thorney Island. Morris and Bruce will sink pipes into the ground at three places as permanent mounting points for the windsock pole.

Keith W and Ray B invited the Safety Officer to visit Porthole Farm in an official capacity. This was accepted.

Communications

Bruce S - CD is on track for printing this month. He is to update/issue Committee ID cards. Website maintenance and updates are in hand.

Thorney Island Nothing to report.

Trundle The Club paid VAT on the licence fee for use of the Trundle. KW has queried this with Goodwood Estates as normally licences, rents etc were zero rated. Awaiting a response.

Porthole Farm Nothing to report.

Indoor flying 26 people attended the Indoor Flying meet at Seaford College in December. attended and the Club is in profit at this stage. Allen M is asked to investigate ways of improving the experience (informal comps for radio and free flight?). Gavin B was asked to get location maps of Seaford College and Westergate onto the website. **BMFA** Nothing to report.

AOB Keith W said that there are four new membership applications this month. They were discussed and approved. There is also a requirement that the list of club instructors and examiners should be sent to the BMFA for the Annual Ratification by them. The list was agreed.

Bruce S requested an updated membership list to assist with the distribution of CD. Morris C asked whether there is to be a Gala Day at Porthole Farm this year. After discussion, Ray b agreed to organise it. The provisional date is Monday 28th May. Ray B asked for the noise meter for use at Porthole Farm. Tony C will pass it to him.

5

Next meeting Tuesday 6th February 2007, 20.00

Ioni

MESSAGE FROM OUTER SPACE

My request for E mail addresses in the last Clear Dope obviously caught members at a busy time of the year. I only had one member respond. Too date, I have the E mail addresses of just 27% of the membership.



electronically. May I repeat the plea for members to let me know their E mail address. Send it to me at:

keithwood@supanet.com **Treasurer & Membership Secretary**



BMFA Indoor Kit Scale Competition Earls Court, Sunday 7th January 2007.

A new venue for Indoor Free flight and a new competition format. Brompton Hall was the venue, sponsored by Sams Models and Replikit. £5 got me a days flying from 10 am to 6pm, and with take away Pizza shops in the Brompton Road what more could a country boy ask for. - and the parking was free!!

The new competition format has come about as a result of falling attendance figures at Indoor scale events.

The Kit scale class has been devised to encourage more modellers to have a go at competitive indoor flying without being daunted by the need for extensive documentation and highly complex models

A well built basic kit model that flies realistically is all that is required. Well thought I, my Piper Cub needs to get out before the Nationals so I duly entered.

There were 18 entries, although only 12 actually flew. Yes it is not a foregone conclusion that everything will work. But then if it was easy where is the challenge.

Your correspondent managed 7th out 12, if I can persuade the model to ROG . it will do a lot better.

The event was well attended, with the flimsy squad wafting about high in the gloom of the ceiling.

My next day out is the Southern Area meeting at Crawley in February when I shall try and coax my EZB to stay aloft for about 7 minutes, I can dream cant I ?

Bryan Stichbury.

one to model their own planes, including the physics of the models which define the control responses and flying characteristics – I haven't looked too closely at that as yet. The scenery I have settled on is Switzerland, because it has mountains in the background an allows me to find the runway easily. As before, software is available to create new scenery and superimpose photos on it – I suppose the ultimate would be a simulation of Porthole or Thorney complete with pits full of club members!

So what are my conclusions? I think this sim in particular has a value in enabling me to keep my hand in at times when I would not otherwise be able to fly. It is quite realistic in many ways, but from the forums on the internet is not as realistic as some of the commercial sims, but for free, who cares? The final test will be to get a couple of good pilots on it, flying planes similar to their own (Pitts, Formosa, Chubby Lady, Edge, helicopter) and see how they rate it. Watch out for entertaining club evenings! As a footnote, I must state that I have been in electronics all my working life, so I found the fiddling with wires, plugs and circuit boards fairly easy. I do not recommend anyone else to take this route unless they feel fairly competent to do so I would be happy to give advice and assistance to anyone contemplating trying the same thing.





www.smartpropoplus.com/BlueAndGrey/ default.asp

One of the sites to download planes for FMS: http://rcp.web.infoseek.co.jp/fms aircraft e.html Software and instructions for creating your own planes: http://rcp.web.infoseek.co.jp/Rc hp2/fms/Metasequoia e.htm back to the runway. The necessity for a well set up approach was being reinforced all the time, so I decided that the sim was going to be some use after all.

I had to return the TX to my son, so after racking my brains for a while I remembered an old (25 years!) 4-channel Futaba Tx which was laying around in the attic. I got it and checked it over, but still it had no buddy-box plug. I took the back off and peered around inside, and found that the control section of the circuit board was completely separate from the RF



section, connected by a plug and socket. I disconnected the two parts of the circuit board, got a battery and wired it in, and when I switched the Tx on I got a battery indication on the meter. First step OK. Next I fired up the laptop and started the Winscope oscilloscope and using the previously made interface lead, located the control output on the circuit board – all pulses present and correct and responding to the stick inputs. The next step was to solder the interface lead directly to the circuit board and connect the

battery in a more permanent fashion, then try the new Tx with the sim. All worked as advertised, so I now have a working 4-channel portable flight sim!

More surfing round the internet allowed me to download more planes – I have flown a Pitts (ground loops on take-off very easily!), C-130, scale Harvard, Chubby Lady, GWS Formosa and A10, two or three helicopters (VERY difficult!), Cessna 182, Fokker triplane, Sopwith Scout, Easy Wind old-timer,



Stryker, Edge 540, and many more. I have not yet tried any floatplanes or gliders. There is also software and a comprehensive tutorial to enable any-



For further information e-mail *planenutz@hotmail.co.uk* or phone Pete 07851 013160 or Morris 07900 907505..who are Plane Nutz

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SEAFORD INDOOR MEETING from John Riall

The last time I went to an indoor meeting it was with Peter Daer at the Fareham Sports Centre some years ago so I decided to poke my nose in at December's Seaford College meeting. It was well attended with a diverse range of models being flown from F/F rubber to off-the-shelf Woolworths R/C foamies, RTF and complete with radio for under £30.

The control of these models is intriguing with a two channel infra-red transmitter controlling two small electric motors—full power for climbing and low power plus varying the power between L and R motors for turns - there's no control surfaces

at all. All up weight is about 9.6g and they fly well, as do the little Pico Z helicopters, once you have mastered them. (Report in Jan. RCME) All sold as toys but it was serious flying in the hall. One ingenious modeller had stripped out the gear and motor from one of the foamies, carved a Vulcan bomber from foam, used the gear and motors and fitted aileron trim tabs - it flew very well and got me thinking about using this gear. It makes you wonder about how far this will go in the future. Full house 'Peanut' scale seems a reality!

One particular R/C model stood out and demanded a closer look. A Sopwith biplane. Its owner did not fly it very high, but very sedately, circling at low level. Couldn't blame him, not wishing to mid-air. Closer inspection revealed tiny 1.7g servos, close loop con-



bits box I had an old 5-pin plug, so I smashed that to pieces and just used the pins! The lead I ended up with was just two wires to the 3.5 mm plug and a shorting link for the Tx.

Having sorted out the physical side of things, I downloaded the FMS and controller interface software. I installed the FMS, then I followed the in-



basic sport models, an electric Transall twin, a glider and a helicopter. They can take off the runway, be hand launched, or in the case of the glider be towed up or flown off a slope. Extra scenery is selectable with the slope, an island or a runway in Switzerland, as is wind speed and direction.

I chose the Transall for the first flight, because I have the Multiplex Twinstar and the Aerovan, both electric twins. I found it quite realistic to start with, but had difficulty

led the FMS, then I followed the instructions for setting up the interface. This included downloading a PC based oscilloscope to check that the control waveform from the Tx was reaching the PC – quite interesting to see.

Having got all this done over a couple of days, I was eager to see what happened next – fire it up and fly! The default scene is a basic runway in flat scenery and blue, slightly cloudy sky and a clubhouse and four trees to try to miss with the plane. Planes on offer were a couple of



getting it back to the runway because The scenery was so flat and I was flying too high, so had no point of reference. However, after a couple of dozen tries (and several non-destructive crashes) I was managing circuits and bumps. Not with ease or style or great smoothness, but I was getting

FLIGHT SIM FOR FREE from toni reynaud

I have often seen model flight simulators advertised, and have wondered if they would be any use on those days when it rains a lot or blows too hard, or even when there's nothing on TV in the evenings. Would one really help keep flying skills up to scratch, or are they just toys? However, as I am reluctant to spend too much money on an unknown item and the cost varies from £50 to £150, I decided that it was not for me. However, trawl-



ing the internet I came upon FMS, a free Model Flight Simulator put together by a couple of chaps in Germany. Investigation showed that a special lead is required to go between your own Tx and the PC, and that these cost $\pounds 12 - \pounds 25$, depending on whose advert you read. There was also a link on the FMS website to a page which showed how to link to the mic or line input to the PC, and this is a really cheap and simple interface, so I decided to have a go at

it. The site told me that I needed a 3.5 mm jack to connect to the PC, and a plug to connect to the Tx trainer lead socket, so I checked both my trannies to decide on the type of plug needed and found that neither had a buddy-box connection! Relating this tale to my son, he said "Mine has – borrow that for a while."

His Tx needed a 6-pin Din plug, so I went off to Maplins to get the bits – no 6-pin Dins! However, in my



trols, the lightest of RXs and a lipo battery. It was all built up from balsa and was a very convincing scale model indeed.

Peter Daer's biplane had many flights. It looked a little large for indoor flying but Pete confidently pilots it round the hall. Judging height while doing aerobatics is essential - hitting the floor (or roof) while looping leaves foamy bits everywhere. Some were flying outdoors in the calm conditions and this seemed a lot safer.



Terry Burley was kept busy trimming members 'full-house' helicopters. While he was trimming a troublesome one, George Clarridge told him it was for 9 to 12 year olds on the box so he should leave it alone! Well, I saw the funny side of the remark!

That's enough of the R/C side. The stars were the Free Flight models. Alan Whipp's little Peanut, rubber, scale Zero was flying very well. There is great skill involved in trimming a model such as this and it was absolutely delightful to watch, as was Bryan Stichbury's microfilm model - flying so sedately with the prop revolving about every second. The ornithopter type models too were fascinating to view - these model are definitely not toys.

I even had my first indoor R/C flight that day courtesy of Pete's IFO and I was

getting quite attached to it. I felt sorry for several older modellers, shivering in that unheated hall and I was glad I had taken my flask with me. I came away thinking, 'What a diverse hobby aeromodelling is.' Members who have not seen indoor flying should do so.

You would not be bored. Its non-stop flying with a very diverse range of models.



Frequency Crystal Survey

I've been asked recently by quite a few club members to once again publish the survey of frequency crystals in use on our various R/C flying sites. It was originally published April 06 in light of the new factors affecting our flying codes of practice:

- 1: There has been an additional allocation of 35 MHz frequencies for out sport;
- 2: We have split electric 'light' flying frequencies from electric 'power' flying frequencies on out Thorney site: and
- 3: Helis, gliders and electric 'light' flying have their own separate 'base' on Thorney Island with peg-board and allocated frequencies. (81 90 MHz)

My aim, in producing the survey results in this tripartite format, is to make it as useful as possible for members, so that the next time you purchase a set of crystals you will be able to opt for the less used frequencies (or even un-used frequencies) to suit your particular flying needs. Eg. week-end electric flying at Porthole Farm.

Hopefully the bar charts of frequencies and their distribution are self evident.

I/C Power - both F/W and Heli



Electric - light, power and heli





In all, 61 of our 120 members made the effort to respond to the survey which isn't too bad, I suppose, as I know that there are quite a few members who do not fly R/C.

UHF and 27 MHz

I have not published formalised data for these since only one member indicated the use of UHF frequencies and four members provided 27 MHz information of which there were 2 Red, 1 Orange one brown and 1 Blue.

My thanks to those of you who took the time and effort to respond.

