

HOVERING

WITH JIM MORLEY

ABOUT

European Championships 1984

Just about to happen when you're due to read this, the European Championship event for helicopters is to be held at Eibergan, Holland. This is actually the first contest to F3C standards, previous events at Vilvoorde and Bretons were technically slightly different and called the Eurocup events.

Anyway, the horrific fact is that in spite of the organisers advising and sending invitations to a number of people it was only by the skin of the teeth (or hovering on the rotor blades if you prefer) that there was a British team at all.

Trouble was, that to comply with regulations, qualifying trials had to take place by the 15th March. Last year's names were not acceptable, so Len Mount arranged a meeting at very short notice to be held at the High Wycombe club field at Chinnor. The short notice meant a few who should have been there were not and one promising contender was ineligible through not being an SMAE member.

Some excellent flying proved that it could be done but the cold and penetrating moisture — it was almost rain — caused problems and those with glasses needed windscreen wipers (they could have been wind powered).

Len Mount proved his superiority flying his 'Hybrid Heliboy' (Hybrid because it has a lot of Len Mount in it) and scored 2636. Nigel Nixon scored 1984 with an 'SST Jetranger' and proved that fixed wing competition is good training for a helicopter event and John Griffiths returned a score of 1835 using a tremendous amount of sky with the *Kalt* 'Baron 60 Longranger'.

Those three make up the team to go to Holland and we wish them every success. The more so since they will be entirely self-funded and have worked so hard for it.

Other scores in the trials were a very creditable 2423 by Carl Ever with *Schluter* 'Superior', pity about the membership technicalities but it must be remembered that successful teamwork needs members who



Left: Len Mount's Hybrid Heliboy achieves the best slow roll ever seen with a helicopter, photographed at High Wycombe. Star Ranger in background.

follow the rules. Vago Nordigan wasn't on form with his 'Star Ranger', but then at an event which caught some people away, some without a model in one piece and all without an answer to the weather (there were moon boots and even newspaper reinforcement in evidence) it is not surprising.

The flying programme consisted of five compulsory manoeuvres.

1	Hovering M	K-6
2	Hovering Circle	K-6
3	Horizontal Eight	K-8
19	Landing	K-6
20	Auto-Rotative Decent and Landing	K-9
and four chosen from		
4	Double Pirouette 720°	K-8
5	Top Hat	K-8
6	Nose-In Circle	K-9
7	Shovel	K-9
8	Pilots Promenade	K-8
9	Stall Turn	K-6
11	Loop	K-8
12	Split S	K-8
13	Immelmann	K-8
14	Observation	K-10
15	Roll	K-9
16	Rolling Stall Turn	K-9
17	540° Stall Turn	K-7

Don't throw them away

Mr. A. G. Tosh has taken a lot of trouble to write a long account of his success with an American 'Revolution R.R.60'. The editor in his wisdom has decided that since the model is out of production it would therefore not be relevant to many readers and to pass it on to me for comments in this column.

Now an awful lot of people don't get on with their first helicopter, no matter what make it is, and begin to get results when they have learned a bit. It was very easy to go wrong with the R.R. 60 though some liked a hairy model, and it got a bad name in this country with eventually the firm going out of business in the States.

Mr. Tosh got it right fairly early on and was happily flying it while puzzled by remarks like 'if you can fly that you can fly anything'.

He says the first step is to ignore the maker's instructions! Well, I haven't seen them but I know a lot of people do that — hence models without oil in gearboxes — swashplates upside down — U/C members on backwards, etc. — even some flown without being glued together. Anyway — his set up — with a *Webra* 'Speed 60' with a dust-bin silencer (No tuned pipes note) is as follows:

Swashplate movement 8mm for 0° to 10° pitch on main blades. Well forward C.G. and a 12 x 3 in. tailplane at 10° positive incidence pitch/throttle relationship is with very abrupt throttle opening and nearly constant 10,000 to 11,000 rpm on engine at all collective settings.

I reproduce those figures because you don't often see throttle degrees/pitch/stick movement relationships given. Thank you Mr. Tosh.

Another hybrid brought to my attention is a 'Hughes 500' by Mr. M. O'Sullivan. He has discovered that it is relatively easy to graft the *Morley* 'Hughes 300' mechanics into the old non-collective *Model Flight Accessories* 'Hughes 500' body. The *MFA* 'Hughes 500' had a lot of advantages, like accessibility and ruggedness, but it did tend to come out heavy



Left: poor pre-event publicity cut down attendance for this FAI European Champs. British team trials at High Wycombe.



Left: John Griffiths' shop, the largest helicopter shop in the UK. Long Ranger is John's Baron 50 team machine. Nationals winner Wessex and Sea King above John and foreground is all black Bell 47 for film use.

and of course it was not collective pitch, being very difficult to modify to accept that essential feature for learning to fly with.

Pitch/Throttle Relationship Rigid Rotor Revolution 60

Transmitter ratchet clicks from zero	Main rotor pitch degrees	Engine rpm	Throttle open degrees	Remarks
0 Low trim	-1	0	0	Just stopped
0 High trim	0	7500	12	Ground idle
5		10000	28	Approach
10 Half	6	11000	40	Still air hover
15		10500	50	
20 Full	10	10000	55	

Helicopter versus Submarines

I would like to thank those who showed interest in the little problem of the electric helicopter lifting off inside the perspex box on the scales.

Just suppose the helicopters were replaced with submarines in water. Would you expect the scales to tip over if the submarine was on the surface compared to when submerged?

Actually, going back to the helicopters, if the box was big enough the scale would tip over on lift-off of one model and it would be supported on the energy of rotating the air within the box. So gradually it would heat up!

Incidentally, it would have to be a very big box. Not only is there a ground effect

phenomena with helicopters, but there is also a ceiling effect and try hovering low close to a wall one day — but don't blame me if you break something.

The largest in the UK

Some few columns ago I said I would photograph and feature the Nationals Scale

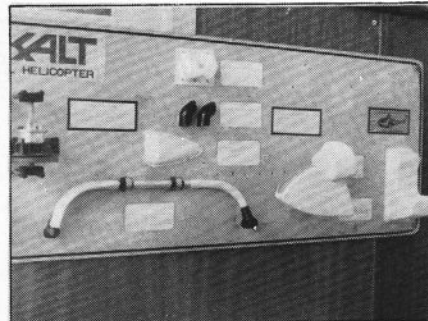
Championship winning model for you. Unfortunately the opportunity never arose and now the model is semi-retired hanging up in its owner's establishment, the largest helicopter shop in the UK.

If you look at the adverts you will know that I am talking about John Griffiths and *Slough Radio Control*. He has for the last year been housed in a nice obvious position in the Bishop Centre, near Maidenhead, and if he's not selling *Kalt* helicopters — or other radio control requirements — he will be making his own models behind the partition.

When I arrived he was spraying an all black 'Bell 47g' for the film '1984.' By far and away the most obvious thing in the shop is the number and variety of helicopters hanging up. Not just the ever popular 'Jet Ranger' and 'Fish Head' functional models but John's 'Wessex', the 'Sea King', the 'Puma' and other unusual ones. I envy him the time he must spend in doing the detail panel lining of his models. Done with a lining pen and fuel proofed.

Latest product from *Slough R/C* is a range of vacuum formed accessories. Notably skid leg fairings and instrument console plus seats.

Naturally, he has things up his sleeve — it's better that way in case they don't work —

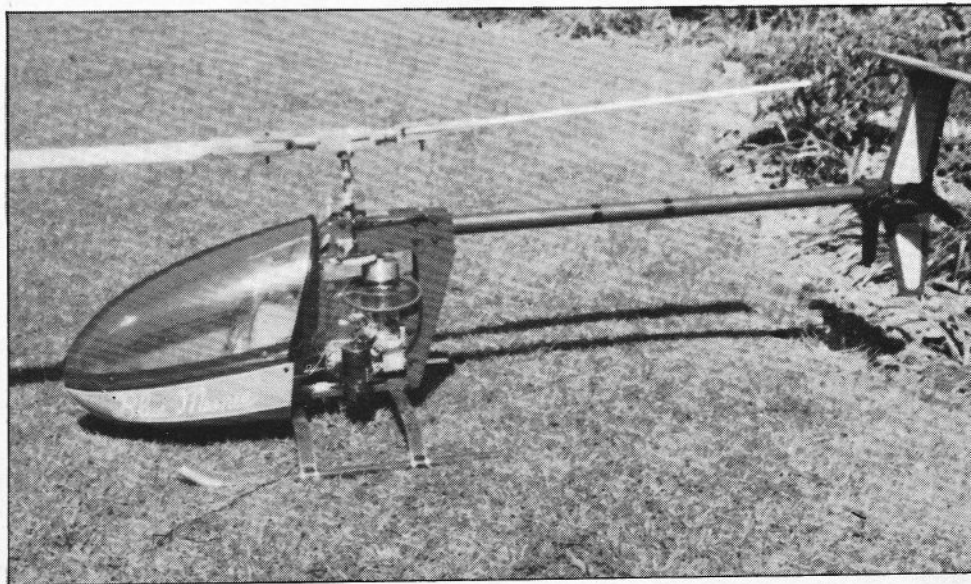


Above: vac formed helicopter accessories from Slough R/C.

Below: long lasting Revolution RR60 christened 'Blue Meims' see in 'Don't throw them away.'



Above: John Griffiths' Kalt Baron 50 Long Ranger at High Wycombe. Used an awful lot of sky.



RADIO CONTROL MODELS & ELECTRONICS

Looks like a fair bit of travelling for some but the standard will go up and new blood will be found. We really can't let the rest of Europe supply all the winners for World Championships.

United Helicopter Association

Another body reviving with a burst of enthusiasm in 1984 is the United Helicopter Association. The committee comprising John Griffiths as Chairman, Mike Binns, Editor/Treasurer; John Wallington, Secretary; Len Mount, Competition Secretary; Peter Kidson, Scale; Mike Crogger, Member Secretary. A fair degree of delegation of duty there so perhaps it will now be an active body. They reckon on a Newsletter at least quarterly and three meetings with events for beginner/intermediate/scale and FAI.

Subscription is £5.00 with compulsory £5.00 SMAE membership but UHA membership entitles you to free entry to events. These days for some events that is significant.

The more effort put into our hobby no doubt the better it will be for us all, although as I have said many times the average helicopter flyer does it for personal satisfaction or interest and is a loner. Not in front of the club members!

Maybe that is changing now with a great many more capable flyers about and the competition between the 'camps' having been too obvious at times. The BRCHA has been criticised for being too much of a British Radio Controlled *Hirabo* Association and the UHA the *Kalt* Association. Attempts to equalise with the Morley Collective are not to be left out either! Competition is healthy, so they say, and as said the more effort put into the sport the better for us all, but there should be care that events like the SMAE Nationals and overseas teams should not be spoilt because of aggression.



Above: MFA Hughes 500 body fitted with Morley MkIII mechanics by Mr. M. O'Sullivan.

but it's an interesting place for helicopter enthusiasts so keep up the good work John.

British Radio Controlled Helicopter Association

Newsletter 1 of 1984 from the BRCHA was rushed out in time to tell members about the

FAI Trials for the Eibergen event and to announce that Andy Beswick is taking over the editorial chair from Roger Warman. Roger is now the one to send you £6.50 membership fee to. Lucky Chap!

The BRCHA is running a series of events to encourage FAI schedule competition and improve the schedule flying in this country. *Ripmax Models* have donated the Max Coote Memorial Helicopter Trophy to be awarded for points scored at these events. Leicestershire and Essex will already have been run, leaving Nottingham on May 20th, Norfolk on June 10th, Hertfordshire on July 1st, Bedfordshire on July 15th, Bucks. and Devon to be announced.