An insight into different personalities within the helicopter world

JOHN GRIFFITHS

by Diana Cameron-Tough

A few weeks ago, I dropped in on John Griffiths in his shop near Slough for a chat, for the second in my series on persons in the R/C helicopter world. I intended to talk to him about himself and his life with choppers, but although it started off that way, we soon deviated to subjects nearer to John's heart – his current projects and his new technological advancements. All this is by way of an explanation of what was intending to be articles on people and their views whereas this one turned out be be something a little different. It shows something about John that he is much happier talking about a five bladed head, than himself.

However, just for the record: .... He opened his first R/C shop in Slough High Street in December 1976. Before that he worked in computers, a subject he is still keenly interested in. In those early days he classed himself as a mad 'crash a day' merchant, and could not 'fly to save his life'. John was spending so much on spares that he thought it might be cheaper to open his own shop. He found he did not need to be an expert and be able to perform loops and rolls to sell models – just know about helicopters and be able to hover, to check that a machine was properly set up. "There are two different types of customers", he said, – "some like to follow leaders, and others just like good friendly advice, and if you were quite truthful and said that you were not good enough to do much more than hover, people liked that and accepted it quite happily." I rush to point out here, that John has improved somewhat, from those days, so much so that he has been picked for the team to represent the UK at the European FAI Championships in Holland this year. He continued, "So, to be a helicopter specialist all it really requires is good service, technical knowledge and the ability to at least hover and possibly fly a circuit. Obviously you can give so much more when you've done a lot more. You can't expect aerobatic pilots and you advice, if you can't loop and roll, or expect scale modellers to ask your opinion if you've never won a good scale competition. The advantage of trying to get to the top, is that once you are there, you can offer advice to nearly everyone except other top fliers, and they won't take advice from anyone else anyway".

John, on a grey day, competing at the Eurocup '83.

In the early days John was flying/crashing a collective pitch Heli Baby. He said that it used to just about break up in mid-air. It had the ability to clip the tail boom, in mid-flight! They sold the fixed pitch version as well, which he says was a lot better.

Someone who helped him a lot, with his flying and with his shop, was Pat Dubock. He feels a great deal of gratitude to him, without whom he doesn't think he would ever have got off the ground!

Another model he used to sell was the Kavan Jet Ranger. "An excellent model in its time" he says, "but they just never kept up to date – such a pity, as it was the very best in its day".

However, we soon started to talk about the Kalt helicopters that we were surrounded by, and his current projects.

***R/C Helicopters**: When did you first start distributing the Kalt range?*

John: About three years ago. I felt that I had to start importing a range, in order to survive. We went over to Japan, and liked what we saw at Kalt.

***R/C Helicopters**: What do you think of Kalt Helicopters?*

John: I think the Baron 50 is one of the best models I've ever seen. The 60 is also better than any other model I know, but it's expensive, so you would expect it to be good for the price – £375. It out does any other aerobatic machine on the market, the only problem is that we haven't had enough competition success to prove it. It's won the All Japan Helicopter Contest, and the Nationals FAI contest in the States. Gary Richardson and John Wallington fly them over here, and also quite a few people are starting to realise how good they are. Hopefully we will have some wins this year.

***R/C Helicopters**: Do you compete much yourself?*

John: I just don't have enough time to get out and practise, to cut the caper myself. I can do well in the Scale competitions because to fly scale, you've just got to slow yourself down, think scale, and do some innovations that will make it more interesting. You must also have a good looking model that flies well. Now I can cut the cake there, as the flying ability is there and I can also make a model look nice, as I have the time in the shop and also all the little bits and pieces. When it comes to FAI, its a different kettle of fish. I've got the model but not the time that's required to go out, set it up, check it, reset it, and keep on rechecking and resetting it up. Then you have to practise roll, roll, roll, over and over again. I just don't seem to get out to fly enough. We are lucky in that the flying site is just behind the shop, so it's not far to take customers, but that type of flying is my priority, as it is my bread and butter.

***R/C Helicopters**: What did you learn from the flying you saw in Japan?*

John: When I watched the All Japan Helicopter Contest, I noticed that nearly all the entries in the FAI competition had fuselages. Bubble and Boom types got down marked drastically. We all know they shouldn't, but they do. They also got down marked for screaming in the hover – definitely infradig to have a high rotor speed in the hover. They had their machines set up with more depth than most people over here, and I liked it and certainly want to duplicate the same sort of thing myself. You do however still need a Bubble and Boom to practise on, because if you have an accident with a lovely fuselage you're going to make a hell of a mess of it.

***R/C Helicopters**: This takes us neatly on to the lovely fuselage that is in front of us, John. Tell me about it?*

Continued on page 35.

John: It's a Kalt Long Ranger fuselage, which we have copied, as it is just too expensive to fly fuzes in from Japan. It was designed to suit either the scale or FAI enthusiast – so too is the new Bell 222 fuz. They are scale perfect and hold the Baron 60 type of mechanics – quite powerful machines. They should be good enough to win a scale contest, alternatively have the power to do aerobatics.

It will fulfil the two requirements to do well in an FAI contest. Firstly it will make the judges interested, as it is a bit different, looks pretty, and is certainly more inspiring. Secondly, when you are doing the low level hovering manoeuvres, as I said, you don't want a model screaming its head off. If you have a model where the rotor speed is running steady, perhaps not necessarily slow, but at least steady it sounds a lot better and certainly looks more realistic, when it is in actual fact doing FAI manoeuvres. Now when you come to doing your manoeuvres at 100-150 feet, you can afford to wind it up a bit as no one is going to take a great deal of notice. It's up high, and moving fast.

This makes a nice contrast between the two aspects of the FAI and consequently you get more depth to the competition than we do at present.

***R/C Helicopters**: What is special about this Long Ranger fuselage?*

John: It is designed especially light, as it uses cloth, instead of chop strand mat. The latter is cheap and easy to produce, but difficult to control the thickness. It is normally 2¼-2½lb, you can't make it much less. With cloth you can cut the weight in half and it's just as strong. It is also easier for the modeller to work with, as there are no hairy bits and it's much more even without the little lumpy bits you usually get inside. So, you have here a fuz that is very strong, light weight, and consequently it makes aerobatic work even more feasible.

***R/C Helicopters**: What about for its scale application?*

John: We are adding quite a few nice little accessories with this model. An exhaust pod comes with the kit, but we also have skid covers, console/instrument panels, covers for the tail gear box, the new exhaust system, windows, window grilles and we soon hope to have seats. These are all the little items which help to make a pretty scale model. We aim to make kits with all these items along with a good set of plans and instructions. That about completes it, and gives you all you need to get a good final result. The next thing will be to include the mechanics.

John seen here flying his lovely Westland Sea King in RAF Rescue colours.

***R/C Helicopters**: What are the scale kits you get from Kalt?*

John: The Jet Ranger, Aerospatiale Squirrel, Bell 222 and Hughes 500D.

***R/C Helicopters**: What about the conversion kits?*

John: One day Kalt sent over a fuz conversion kit for the Baron 50. We looked at it, realised the potential, and said that's not a bad idea. This was when kits were really only bubble and boom, or scale, not a combination of the two. It was about 2-2½ years ago. We could see how helpful it was to the modeller to buy one kit to suit many different situations, thereby saving you money. You could learn with a bubble and boom, get it set up perfectly, possibly experiment and expand it mechanically, then get a fuz, make it look pretty and even win scale competitions with it – not a bad buy. If you try and learn on a pretty fuselage machine, if you take time out to look at it in the air, you're likely to put it into the ground!

***R/C Helicopters**: That's the nice thing about the Baron 20 – so small, yet it has a fuselage.*

John: We're actually going further with that one. We are producing an extremely light, plastic fuz, so light that you won't even notice it's there. There will also be a good range of bits and pieces to go with it. The Baron 20 is a very good little helicopter in its frame situation, will even do aerobatics, but load it up with 1½-2lb of fibreglass and you're asking rather a lot – especially if it is hot and the engine is warming up a bit. There is also a strain on the clutch which is possibly not designed for the additional weight. So the fuz we are producing will only weigh a few ounces, and will be cheap and easy to replace if it gets smashed. The present fuz is OK if you have a .28 engine, but considering there are hundreds flying around with .25 engines, we felt we needed to improve their flyability with a fuz.

***R/C Helicopters**: How did you start producing your own fuselages for conversion kits?*

John: After the first Jet Ranger that Kalt brought out we started to expand into these areas ourselves. You see, I must admit that my ultimate flying is a really nice scale model performing as the full size – very fulfilling. The ones I really like are not the two and four seaters, but those really big bulbous ones that have that 'they shouldn't fly 'look, and look like they are defeating gravity to get off the ground. They operate in terrible conditions, and the pilot and crew seem as if they are in a capsule protected against the environment, the wind and rain lashing outside. All tucked up nice and warm inside, they go out and rescue someone from the elements. Great.

***R/C Helicopters**: Which was the first fuz you produced?*

John: This was the Lynx. It came unexpectedly as the mould was going begging. I adapted it to have a removable top, so the Baron 50 type mechanics could drop in. It became very popular.

The next thing we did was the Puma, which was the first sort of biggey one, however it was never popular. I think the trouble is we don't have a nice one to show people. Then there was the Sea King, my lovely Sea King. (Remember the colour photograph in the inside cover of Issue 1.) That really is one of the very best of the big ones, and very pretty.

Then followed the Squirrel and the Wessex (This is pictured on

Continued on page 36

page 10 of Issue 3). The latest is a Westland Whirlwind – one of the old three bladed helicopters. We haven't had a lot of interest yet, but again we haven't had time to build one ourselves, to show what it can look like. There is also the 222, Jet Ranger, Hughes 500D and Bell 47G – all designed for the 50 size mechanics, and now we have the 222 and the Long Ranger which are designed for the 60 size mechanics.

***R/C Helicopters**: What about the Chinook, that we photographed for Issue 2. (Page 41)?*

John: This is one of the projects I have on at the moment. It is very tricky, and the model has not flown yet, but every time I have a few hours spare I do some work on it.

The last time we tried to fly it, we could get one end off the ground or the other, but not the two at the same time. Then I put twin 60s in, but the strain on the gear drive was too much, and the weight too heavy – nearly 40lb. We decided we were going from the sublime to the ridiculous. Someone had one of our twins flying at the Slough Fly In, you should have been there.

***R/C Helicopters**: Next year, definitely. I hear you are developing a five bladed head?*

John: Yes, for the Sea King. This is a 'blue sky' project – whether it will come to anything is another matter, after all, how many people really need a five blade head? The four blade head is a Kalt one. It works well, so we copied it for the three and five blade heads. We use Kalt blade holders and centre hubs, and get the special plates made up ourselves.

***R/C Helicopters**: Are they difficult to set up?*

John: All multi-bladed heads are the same to set up. They need slightly shorter rotors, there is a lot more lift, and also a lot more drag on the engine, unless you use washout blades. We've started to use them on the four blade for more power efficiency. We have manufactured our own fibreglass washout blades and also aerobatic ones. We have had a lot of success with them, and there has been no sign of any strain showing on the blades when I loop and roll with them on my Baron 60. We are, however, trying to sort out the problems of these multi-bladed heads, at the moment – to find the secret that will make them work as efficiently as the flybar two bladed heads, if possible.

KKK have done some amount of work towards this with their new flybarless two bladed head. It's probably the best I've ever seen, but it's still not particularly brilliant in the hover. You've got to be careful. You have the same problem with flybarless as multi-blade heads. It's very interesting, and I've always wanted to solve the problem.

***R/C Helicopters**: What do you think of the weighted blades on the Robinson?*

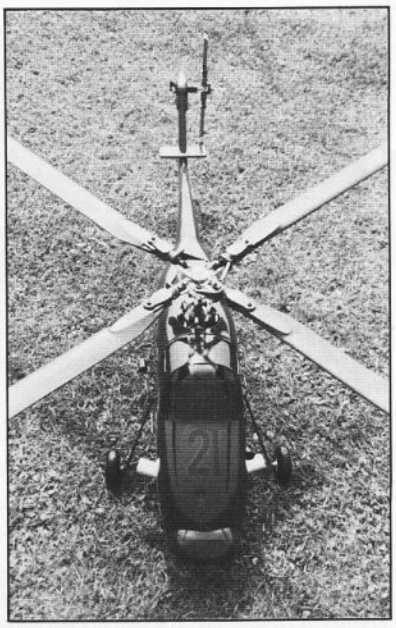
John: The amount of lead in those blades does worry me. That lead really does travel far, if the blades are whacked, and you can end up not only hurting yourself, but hurting other people as well. No one minds if you kill yourself – it's your own fault, but if you hurt someone else it's a national disaster. We've not had an accident in many years, so let's keep it that way. Our wash out blades are the same weight, and just as hard, but they will not travel.

***R/C Helicopters**: Tell me about your new rotor heads?*

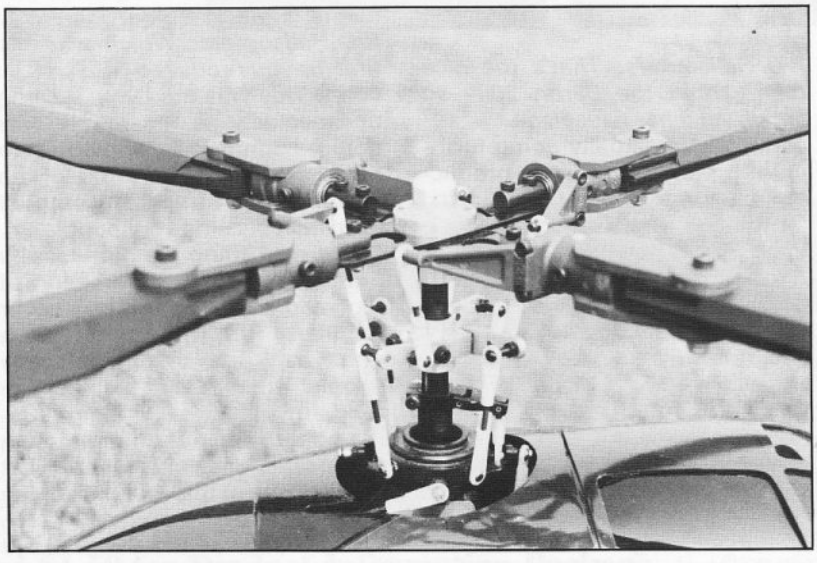
John: We now have 5 rotor heads for our models. 3 are standard type, but we also do two new heads, which came through a few weeks ago, and are already proving quite successful. They are similar to the Baron 20 head, but bigger, and they use a simple flat plate system across, instead of the main rocking carriage with rubber dampers. The flat plate gives the damping, depending on the thickness of the plate, and we do, do, several thicknesses. The plate also holds the blade holders, so it is a lot cheaper and requires less maintenance as there are no rubbers, bushes or rockers to wear. It seems to perform very similarly to the normal head. We have two versions – one for the aerobatic fanatic which has a black head, and is very similar to our top black head – everything is ball raced, including the part where the flybar actually goes through the cage, but the centre part is a flat plate. It is about £80 cheaper than the top black head.

The other version is for the average club flyer, the difference being it is not ball raced on the fly bar cage, but everything else is. That's about £20 cheaper than the normal K1 SB head. This is the one I've been flying on the Sea King over the last year, and it's performed very well.

John is also experimenting with a computer control system, that we talked about in Issue 1, as indeed he is exploring many computer applications in the model world. What with his film and TV work, his many varied projects, working in his shop, flight testing customers' models and building and flying his own models, John is indeed a very busy man. I was fortunate that he could spend the time to talk to me, and I wish him well with all his projects and thank him for taking the time to chat to me.



The four bladed head on John's Westland Wessex.



The Kalt Four Bladed Head.