

My Love of Helicopters Part VII

by Walt Schoonard

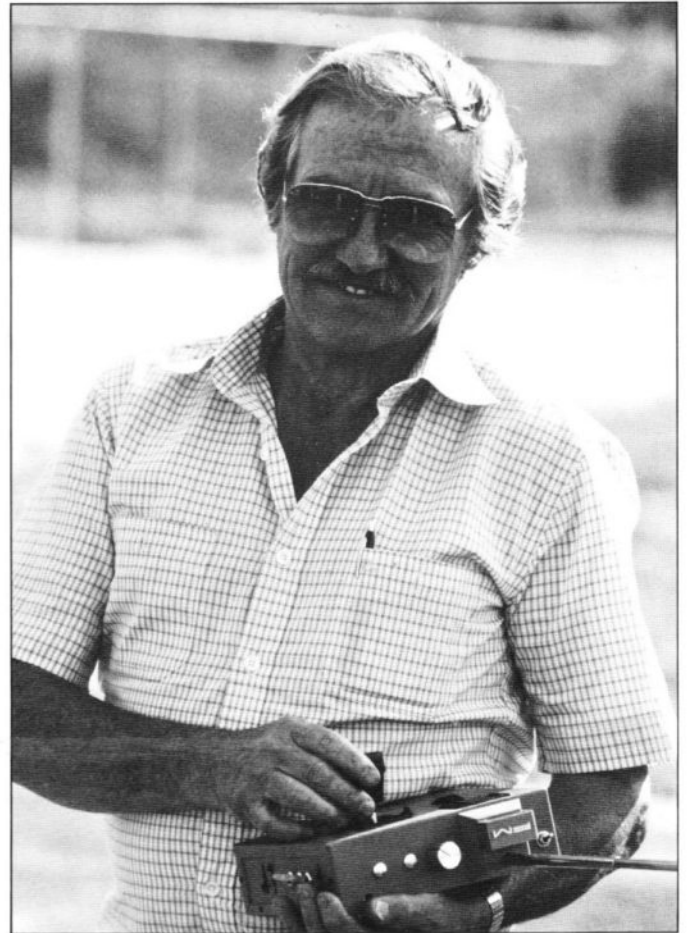
We certainly have come a long way – and in a relatively short time. Consider if you will, that radio-controlled helicopters are the fastest growing segment of the R/C sport. We can hover and fly, hands off; we can do almost every aerobatic maneuver known to man – and some unknown. We can do precise dead-engine autorotation, in many cases, directly to a predetermined spot only a foot square. We can go directly from flying R/C helicopters to the real thing and fly unbelievably well without any previous experience. I have a video cassette of myself doing just that in a Twin Star helicopter at over 6000 feet above sea level. The helicopter had five passengers, and I don't think that I scared any of them, excluding myself, of course! I was able to take off and land, hover, do rudder turns and slips – and even cross country flight. Where did all this accomplishment come from? From flying radio-controlled helicopters and from single-stick experience.

When you stop to think that Dieter Schlüter spent over ten years struggling to get a ten-second controlled hover, ten years of designing, of trial and error, ten years of frustration – but never giving in to discouragement! We can all be extremely grateful to Dieter for his untiring devotion and dedication. Some circles of people in the world try to discredit his efforts by claiming that he was not the first. It can be documented that he was, indeed, the first, and that's final.

Why is this sport growing so fast now after years of slow stagnant progress? Many factors are involved. R/C helicopters are becoming more precise, and easier to build and fly, more diversified in their design and functions, more available, and the parts are much more plentiful now, too! Another factor is that helicopter information is being disseminated from many sources, further flying fields are being lost every day, and the public is learning that helicopters can be flown almost anywhere. Furthermore, many people are becoming bored with the sport of R/C aeroplanes and are trying a more challenging aspect of R/C.

The building of an R/C helicopter is a great pleasure in itself. From the moment that you open the box and start to read the directions and to study the detailed isometric drawings that are furnished in many kits, the excitement begins. The Japanese were the first to introduce the detailed drawings, and now many others have included them in their kits. Dieter Schlüter has used them in the Superior, Heli-Star, and now in the new Champion helicopters. I am sure that my opinion is biased, but I think that Schlüter has the best drawings and the best packaging in the industry. His isometric drawings are so well done and so clear that, in many cases, you don't even have to read the written instructions. I do, however, recommend that you always read the instructions because they contain many clarifying and helpful hints. His drawings show where to use Loctite, grease, and even where special care must be taken during construction. If these drawings are followed closely, you can be assured of a well-working model!

Because I am so deeply involved with this business and have the opportunity to evaluate so many new kits, the first thing that I look for are the drawings. Many first and lasting impressions come from the detailed drawings and the



packaging. The real thrill begins as you step by step begin to construct the model. Your mind begins to portray visions of the rotors turning smoothly, the power coming on, and this beautiful creation lifting up into the air. Exciting? You bet it is! If you can get bored with radio-controlled helicopters – then you must also get bored with sex!

Most of the modern kits fit together like a Swiss watch, and many of them perform just as smoothly and reliably. While I am writing this article, Cliff Hiatt (1984 AMA National and International Champion – both FAI and Expert) brought back one of his award-winning Superior helicopters because he is now flying the new Schlüter 'Champion Long Ranger' helicopter. His Superior looks like new after being flown hundreds of times over the past year and a half and has never crashed! In fact, he has not had even one component failure in all of that time. This speaks extremely well of the 'Superior' helicopter and of Cliff's pre-maintenance procedures. Cliff flies every day and sometimes several times a day, if his work load permits him to do so. To see him fly is indeed a thrill because he flies so very smoothly. You can never see a command go into his machine. His maneuvers are smooth and precise with no blade noise. Each lift-off and landing is by degrees. His helicopters all sound happy, which is a phrase coined by

another good helicopter pilot, Tony Frackowiac.

I was very anxious for Cliff to fly the new 'Champion Long Ranger', but how do you get him to change, when he beats everyone that he flies against with his fabulous 'Superior'? He said, "I'll try it but don't get your hopes up too high because I am perfectly satisfied with my 'Superiors', and I am competing in the World Championships, and I don't

want to change now." Well, Cliff and my son, Ted, began a rush building job because time was short, to get the unknown 'Champion' flying. We did not have the drawings, no instructions, no set-up procedures – only the burning desire to try it out. Two weeks later, Cliff lifted his beautiful 'Champion' into the air. The enclosed picture tells the story of complete relaxation and pleasure. His first comments were "It sure has possibilities!" Within a half of an hour, he was doing long slow rolls and perfectly round loops. Even the radio and engine were brand new with zero time on either – so the Enya-all chrome had to be run very rich. A week later, Len Mount (British Champion 1984) asked Cliff if he had done an autorotation. Cliff said "No, I am not ready to do one quite yet, but, what the hell, let's go for it!" This was a 92 degree day, with zero wind, a brand new helicopter with a scale fuselage, and its first autorotation!! Cliff climbed it up, nose-in, about seventy-five feet and then shut it off! It came down slowly, nose high, into a perfect soft landing – right beside him! Cliff's elated comment was, "It's



Relaxed Cliff Hiatt & Ted Schoonard on Cliff's Champion Long Ranger's first lift off.

a pussy cat!" Now he has two weeks' flying time of flying his 'Champion', and he is now perfectly comfortable in wind or calm weather in any maneuver. What is he going to fly in the World Championships? You guessed it – his 'Champion Long Ranger' helicopter.

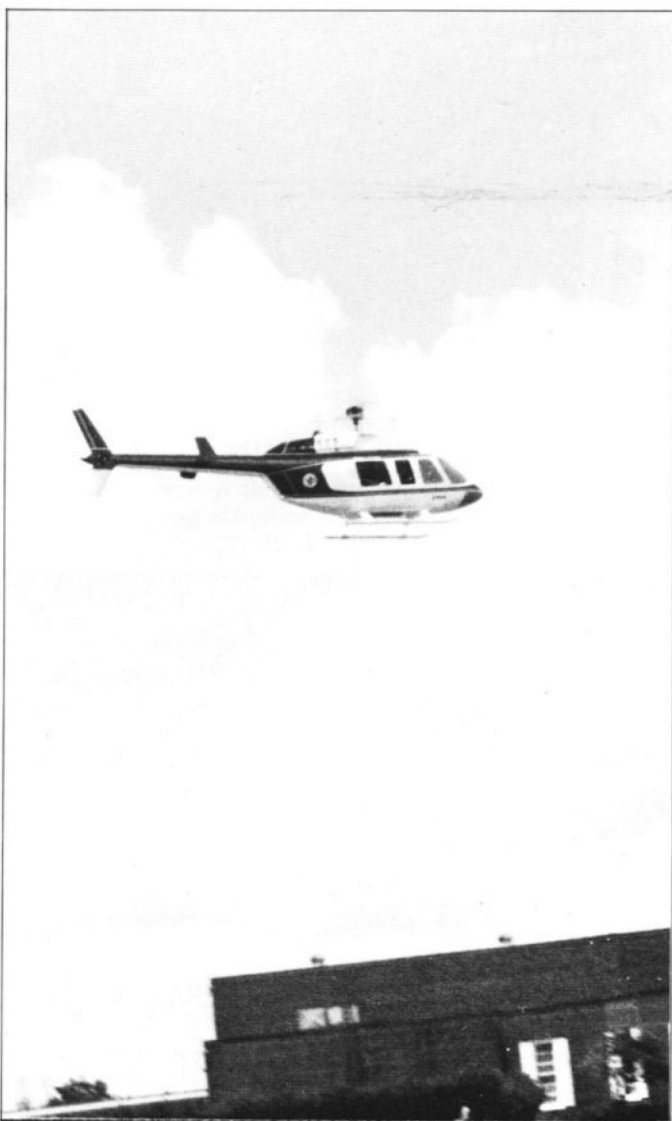
The development of radio-controlled helicopters has progressed to the point that you can now fly a full-scaled fuselage model, in some cases, lighter than in a 'pod-and-boom' configuration. The possibilities are beyond imagination.

Years ago, in order to fly a fuselage, we had to laboriously build the mechanics into the fuselage with many bulkheads and formers. This took a hundred or so hours in some cases, and we usually ended up with a very heavy model with drastically reduced performance. Then, if you had a mishap and broke the shell, you could not fly again without a major and very lengthy rebuild job, which, in turn, made it all that much heavier!

Dieter Schlüter was the first to introduce fuselages that permitted the mechanics to be slipped into the fuselage in a single unit. Many others have now done the same. Schlüter has now developed mechanics with special gear ratios and very light construction that make them even more practical to fly in his super-light fuselages. His fuselages have become the standard of the industry as to scale, details quality of finish and fit, and ease of construction, as well as the lightest available. They are designed so that no strengthening bulkheads are needed. The mechanics can be built, radio-installed, pushroded, motor and muffler fit, and the whole unit set up ready-to-fly before installing into the fuselage. Installation and removal is a matter of minutes. Now you can see why they are the standard of the industry. I have been advocating fuselages for some time, and now there is a wide range of them available, all what we call the hang-on type.

Here in our business, things are happening so rapidly that many customers call several times a week just to ask "What's new?" We get a real charge out of this because, in many cases, they had asked the same question just the day before.

See you at the World Helicopter Championships.
Walt Schoonard



Cliff's Long Ranger in very realistic flight — Beautiful.