



This version of the 'Butcher Bird' offers easy flying and fine performance.
Review by John Wheeler

Ultrafly Focke-Wulf 190

No fewer than 40 different versions of Kurt Tank's FW190 were produced. So, describing an aircraft as an 'FW190' is as generic as referring to a 'Spitfire'.

The later versions had in-line engines but their use of annular radiators gives the impression that they are radials. Ultrafly's model is one of the earlier BMW radial-engined variants, an FW190A.

The Kit

The box is fairly substantial with the components packed individually in polythene bags separated by cardboard packing pieces to ensure they do not move during transit.

The airframe is made up of six main components; the fuselage and cowl, two wing halves and the tailplane and rudder. The quality of the building looks superlative. The cutting of the parts is by laser and they

have been lightened wherever possible. The Lite-ply seems to be of sound quality.

The fuselage is a little unusual in that the top half from the firewall to aft of the canopy is a single, clear plastic vacuum moulding. It has been beautifully sprayed 'body colour', after being fitted to the fuselage. It is a good idea allowing things like cannon blisters to be easily and convincingly moulded but the downside is that the cockpit is sealed off and there is no pilot.

All of the hardware components needed to complete the build are provided. The review version also included an outrunner motor and a matched ESC and suitable propeller.

Motor Installation

When undertaking a review I always attempt to adhere to the instruction sheet as it is there for a purpose. But with so few components, the instructions are largely superfluous. The wing is detailed first for

assembly followed by the tailplane and fin/rudder but I dived in halfway through at the installation of the motor and cowl as I prefer to have those installed before I fit the empennage as without it, the fuselage is easier to manoeuvre around the building board.

A cross is etched onto the front of the wooden motor mount to ensure that the motor's radial mount is positioned correctly. One should note that it isn't central but offset to take into account the side thrust. The motor box itself is built to incorporate three degrees of side thrust and two degrees of down thrust.

Here's a tip not shown in the instructions for fitting a radial cowl to ensure that the crankshaft end actually comes out of the cowl in the centre. Using a pair of compasses draw a circle to a slightly lesser diameter than the cowl's front aperture on a piece of paper. Ensure that the centre is well marked. Cut out the disc slightly larger than you have



resultant debris will fall out if you turn the fuselage upright and tap it.
 The pushrods for the rudder and elevators are of different length. 'Z' bends need to be made on them at one end and keepers are supplied for the other end. A trap for the unwary, they are not slotted as is usual so have to be fitted onto the pushrods before the right angle bend is made with pliers.

The lightening holes in the servo tray serve a good purpose in that the servo wires can be tucked out of sight. It's a neat installation and there was plenty of room for the two-part receiver from my Spektrum 2.4.

Battery Installation And Balancing

The C of G is shown as 40 – 45 mm on the centre section from the front wing mount, not the leading edge. It is possible to move the chosen battery backwards and forwards to obtain the balance. You should apply some sticky backed 'Hook & Loop' to your battery to ensure it stays where you intend it to. There is already fixed a 'Hook & Loop' strap for battery retention. There isn't a battery box cover and the aperture for access is simply a cut out in the cowl. I stuck some tape over the aperture for flight just in case.

Control Throws

I was a little baffled by the control throw suggestions which recommend 5 mm min and 7 mm max on the elevator. I assumed it was a total of 10 mm or 14 mm so that was OK, about what I would have thought. But on to the ailerons, the suggested throw is 15 mm min and 20 mm max. They couldn't possibly mean 40 mm total could they? An inch and a half? I don't think so. I set them up with 15 mm total on full throw. There is a small amount of differential built in. I adjusted the rates in the Tx to give something less than this for the initial part of the first flight at least. After the first flight I tweaked up the transmitter to give me 120% movement on the ailerons, a total of 20 mm, i.e. 12 mm up and 8 mm down. I have not

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seen an instruction sheet that recommends exponential rates as well, but Ultrafly suggests 20+, 15+ and 10+ on elevator, aileron and rudder respectively. I usually put in a little more than this but each to his own. If you are not using the exponential properties of your transmitter, ask a seasoned flyer what they are for and how they will help you improve your flying.

Flying

I fly from a turf farm and I wondered how those small wheels would cope, but holding in full up elevator soon had the Wulf in the air. There was plenty of power but it soon became obvious that I needed full rates on the ailerons to put it through its paces. Even so, it was a delight to fly and with low rates anyone with a little experience on an aileron trainer would find it quite benign. Loops were quite large and it tracked as straight as an arrow. Rolls were reasonably axial but there is quite a lot of dihedral so a little work on the elevators is needed to get it around in a reasonable fashion.



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Whilst the breeze was quite light at ground level, it was a bit bumpy at around seventy feet so I climbed and put it into wind to check the stall. I throttled back and gently applied up elevator to a point where there was absolutely no ground speed. Blow me it was hovering! It was coming gently down as if it was an autogyro and may even have landed if I had let it, but I applied full throttle and was away again. With the timer beeping at five minutes I lined up for a landing which was a piece of cake until the last inch when the turf got the better of those small wheels and it nosed over. No damage except for a crack in one of the wheel doors. Because of the damage to the wheel door I removed the undercarriage for the second flight. I also racked up full aileron deflection to the 120% already noted. My son did the honours with the hand launch. Standing quite still holding one hand under the cowl and the other behind the wing it really didn't need much of a shove to get it airborne.



