



Alfa Model FW190A-8

With the Alfa 'Butcher Bird', you don't have to go brushless for good performance
By Simon Wright

CML Distribution have sole UK rights for the Czechoslovakian Alfa Models range of small electric powered scale war birds, and I was pleased to receive their FW190-A8 for review as the full size is one of my favourite aeroplanes.

The model is supplied in a large box with a handle that doubles as a transport/storage case. Opening the box reveals the compact size of the model with its one piece 850 mm span wing and pre-built fuselage held in place with bubble wrap and cardboard ties.

The structure is a monocoque with a small amount of Lite-ply used for the load bearing firewall and battery tray. Moulded from the extruded polystyrene foam (EPSF) with a hard external skin including panel lines, surface detail and the paint finish, the foam



Ailerons are hinged using foam. Horn, snake and solid wire inner are ready fitted. Note panel lines



Aileron servo opening and snake wires. Detail of foam with hard skin clearly visible here

material looks something like Depron and the hard skin seems to be a very thin plastic. All the main airframe parts are hollow keeping the weight to a minimum; the wing weighs 67 g and the fuselage 82 g.

The wing comes out of the box with ailerons ready-hinged using the foam skin. Control horns, snake outers and the solid wire snake inners are ready connected. An aperture for the aileron servo is pre-cut with the snake wires positioned ready for connection.

A very nice vacuum formed plastic cowl pushes onto the fuselage which incorporates a Lite-ply



Lite-ply bulkhead is pre-drilled to suit the MPJ gearbox. Blanking piece can be glued in place to fit an outrunner

bulkhead and servo – battery tray to carry the loads. The elevator snake is pre-installed and is, like the ailerons connected to the control horn. A clip on hatch provides access to the battery and radio bay.

There is little to say about the hardware pack, it contains a couple of clamp

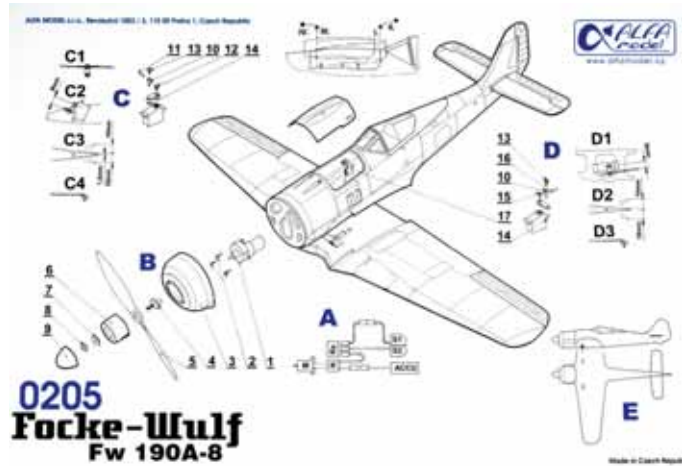


Open the box to reveal wing and fuselage complete, apart from decals, motor and radio gear





Wing seat area includes moulded fairings and single fixing point



A4 instructions are ample for the task



Standard motor pack includes spiral two-tone spinner, 9" x 6" APC prop with adapter, MPJ 5:1 gearbox, 300 motor and ESC. The 8.4 V 1200 mAh NiMH cell pack is extra



The only real 'modelling' involved is cutting, joining and painting the pilot bust



Neat little 2 mm connectors are included; I swapped for standard 2 mm goldies

spiral finish, a 9" x 6" APC prop and matching adaptor, an MP Jet spur gearbox (5:1 ratio) fitted with a 300-size brushed motor which is in turn hard wired to the TMM 10 amp ESC. An 8.4 V 1200 mAh NiMH battery and two pairs of neat 2 mm gold connectors complete the package. With a pair of 8.4 g Blue bird servos for elevator and aileron control I only had to source a receiver.

The motor and gearbox assembly is fixed to the bulkhead with 3 small self tapping screws



Tail is pre-fitted with horn and pushrod connected. Semi-recessed tailwheel is moulded in

connectors, hook and loop strips, a blanking piece and three screws. Vacuum formed shells for a pilot bust are included and he should look good in the cockpit with its clear canopy and moulded in instruments.

Waterslide decals are supplied with the kit and these include schemes for either an A7 or A8. A large exploded view drawing combined with the 4 pages of A4 instructions should be ample for the assembly task.

Assembly

The instructions state that the model is almost finished; you only have to apply decals, install the propulsion unit and the R/C equipment, so the 3 hour target looks attainable.

Selection of suitable gear is detailed in the instructions with a complete airframe weight (no battery) of less than 320 g and a maximum all up weight of 440 g. CML were kind enough to include their power pack sent with the review model. This includes a neat two-piece spinner with black and white



Neat clip on hatch provides access to battery and radio bay



BMS371 servo is supplied with 2 horns and (thankfully) 2 tiny horn fixing screws





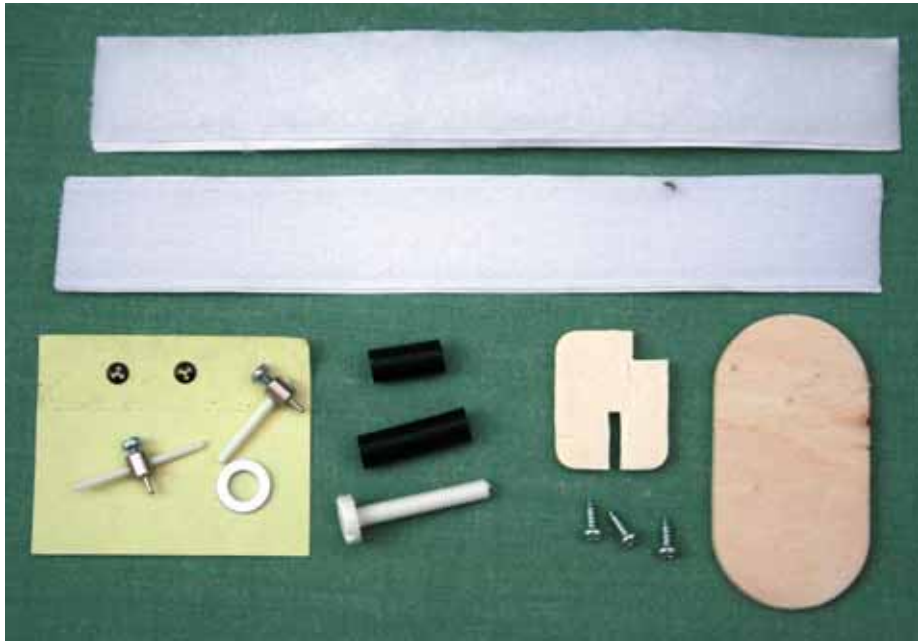
Wing has moulded in detents for balance point

into pre-drilled pilot holes before the cowl is slid on and held in place with a drop of cyano. The spinner halves are also joined with a 'cyano tack'.

The elevator servo is screwed in place while the aileron is glued into its aperture. Clamp connectors with a plastic tube sleeve are fitted 8 mm along the servo arm. The wing needed relieving to give sufficient access to the aileron clamp connector.

At this point the build had taken less than an hour so I decided to 'build' the pilot. He went together well with an overlapping joint giving plenty of area for the adhesive.

With 'Mad Max' drying out the decal sheet was attacked with the scissors before applying to the model. The decals are water



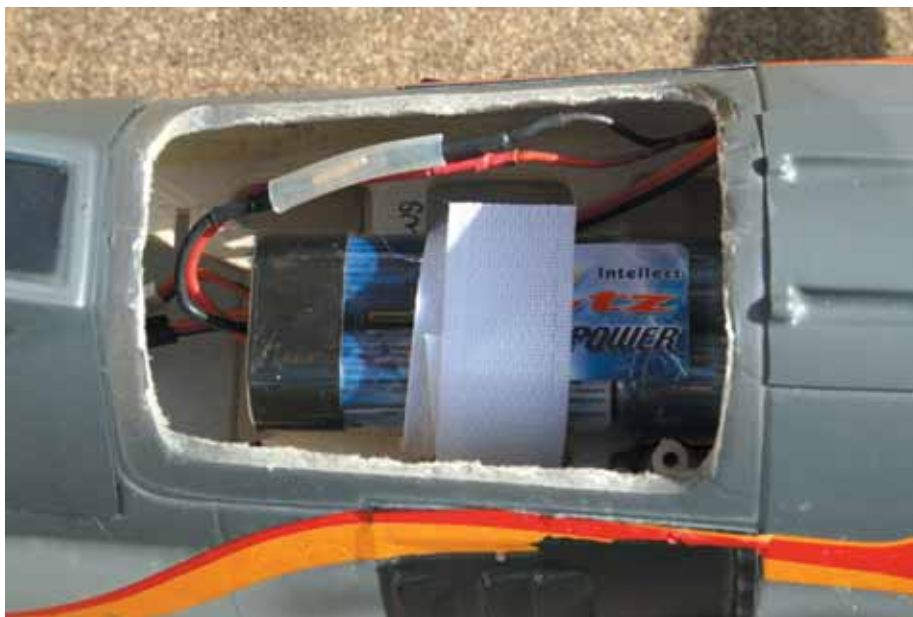
Not a lot to the hardware pack, note clamp connectors for elevator and ailerons



Waterslide decals includes scheme for either an A7 or A8



Packs used for test included 7 and 8-cell AR and a 2S LiPo



Battery sits on Velcro™ with another loop around the cells for security



Synthesised receiver sits beneath cockpit, well clear of ESC and motor noise





Cockpit looks better with a driver installed



With decals applied the FW190 looks like a proper scale model

slide and took me longer to apply than the rest of the build; they are very thin and break easily. The following day while handling the model I tore some off! Obviously, I had used too much water and pressure, washing the adhesive out. I mixed some canopy glue and water then applied this around the decals, capillary action soon had them floating and more adhesive was added. After another night drying they were secure.

The wing has moulded indents at the balance point, which is easily achieved by adjusting the flight battery position. With a compact synthesised receiver fitted beneath the cockpit, well clear of ESC and motor noise the FW190 weighed in at 310 g.

Preflight

The TMM speed controller is LiPo compatible and must be programmed for brake or battery type before use. I found the instructions quite difficult to understand and it took me some time to absorb the programming method with its bips and bleeps. When it clicked I could reprogram from LiPo to NiMH in about a minute.

Running through my 'Medusa' analyzer, the brushed motor and 5:1 gearbox combo takes 105 W (12.5 A) out of the 8.4 V battery which pushes the little ESC way past its limit but it seemed to cope okay. The 7-cell pack takes the all-up weight to 470 g and this should give the FW190 reasonable

performance with an input power loading of 100 W/lb.

With a selection of 7 and 8-cell packs plus a 2200 mAh 7.4 V GWS LiPo in my flight box the little 'Butcher Bird' was taken to the flying field for its first airing.

First Sortie

The supplied 7-cell pack was fitted and the FW190 released at full throttle, the handle-launching skid

built under the wing may not be scale but it does make hand launching extremely simple. There was no sink from a gentle push into wind and the FW190 climbed out with plenty of power and thrust evident before throttling back at about 30 feet altitude for some circuits. The model is fairly stable and the specified control movements give fast but not skittish responses. Without a rudder turns have to be of the bank and yank variety.

With a little altitude the throttle was cut and elevator hauled in to test the stall, the model sat nose high as it slowed and then descended dead straight with no sign of the dreaded wing drop. Going back to aerobatics, rolls can be flat out twinkle rolls or slow barrels to suit your taste while loops can be pulled from straight and level flight with the model tracking well through quite large manoeuvres. Inverted flight needed a

lot of down elevator and didn't feel too comfortable; perhaps the C of G is a little too far forward?

The 1200 mAh pack gave excellent duration with over 15 minutes of flying and dozens of low passes completed before the model was brought in for landing due to cold

fingers rather than a flat battery. (It only took 930 mAh when it was recharged)

For the second flight a 7-cell pack of 600 cells was fitted, this saved 35 g off the AUV but seemed to give considerably less power with performance more akin to a gentle park flyer. The lighter weight was noticeable in the flight performance but after 5 minutes the model was landed for another battery change. With an 8-cell pack fitted, performance was up on previous levels with the FW190 cruising around low and slow at 1/2 power before opening up into large loops and reversals.

The last flight pack tested (after reprogramming the ESC) was a 2200 mAh





7.4 V GWS LiPo, I didn't expect much from this battery due to its low voltage. It surprised me with its flight performance, it didn't have the vertical performance of the 8.4 V pack, needing a few moments to accelerate the airframe before pulling up but was probably the best combo overall. This battery saved 60 g over the standard NiMH pack allowing the model to float around a little better, and perhaps because the C of G was slightly further aft it allowed the FW190 to really groove around in low level beat ups. Duration wasn't an issue either; my fingers went numb well before the battery was flat.

Many thanks to my wife, Heather, for the flying photography!

Summing Up

If you are in the market for a near-scale small electric-powered model of the FW190 you won't go far wrong with this little beauty from Alfa Models. It is as ARTF as you can get, nicely made and produces a fine flying model that can be flown fast or slow. I had a problem with the decals but the problems may have been of my own making. Summing up in reviewers technical parlance...

It's nice... very nice! **Q&EFI**



Q&EFI Specification

Model Information

Name: Focke Wulf Fw 190A-8
Part Number: AM0205
Manufacturer: Alfa Model, Czech Republic
Distributor: CML Distribution Ltd
Tel: 01527 575349
Email: sales@cmldistribution.co.uk
Price: Kit: £84.99 RRP
 Speed 300 propulsion set: £44.95
 (Does not include cell pack)
Construction: Foam/ply

R/C Functions

1 Elevator
 2 Ailerons
 3 Speed Control

Model Specifications

Wingspan: 850 mm
Length: 730 mm
Wing area: 12.0 dm², 186 sq inches, or 1.3 sq ft
Motor: 300 brushed with 5:1 gearbox or equivalent
 100-150 W Brushless

Dislikes

Decals could be a little more user-friendly

Likes

Quality
 Quick build
 Performance

