Miles Sparrowhawk

Seagull’s latest ARTF marks a refreshing departure from the norm, but will the gamble pay off? David Ashby thinks so...

When F.G. Miles, the aircraft designer and business owner, decided to compete in the 1935 King’s Cup Air Race he gave the task of producing an aircraft to his wife. Blossom, as she was known, was a skilled aircraft designer in her own right yet had just eight weeks to produce an aeroplane. With neither the time or the facilities to create something from the ground up, she took a Hawk, shortened the fuselage, improved the streamlining, reduced the wingspan by 5ft, reduced the height of the undercarriage, moved the legs outwards and away from the propeller slipstream and, finally, installed extra tanks to enable the 140hp Gypsy Major engine to complete the 953 mile course without a re-fuelling stop. The Hawk had become the Sparrowhawk.

That he didn’t win the race in 1935 came as a huge disappointment to Miles although consolation came from the fact that his designs had taken the first three places. The Sparrowhawk competed between 1936 and 1938 finally winning the race as the converted Sparrow Jet in 1957.

Miles’ designs have, for good reason been popular with scale builders over the years and a good number of Messengers, Masters and Magisters, to name but a few, have appeared at scale competitions and fly-ins. An ARTF version of an aircraft such as this would, until recently, have been pretty unthinkable, this for several reasons, not least the commercial viability of producing an ARTF kit of a relatively obscure 1930s racer. That said, here we have it, and for courage alone full marks must go...
to Seagull, particularly as the company has produced not one but two Sparrowhawks for the ARTF market. A larger 85” span version for 50 - 62cc petrol engines complements the 71” model you see here. Aimed primarily at the club flying market, then, this one weighs about 12 lbs and suits 1.20 - 1.80 four-stroke motors.

SUBLIME
Seagull has quietly been improving the quality of its products over the last few years to the point that models are now as good as, if not better than, any of the mainstream R/C ARTF brands. A bold statement perhaps, yet the fit and finish of this Sparrowhawk is quite sublime. Ply and balsa parts are beautifully selected and cut, the Profilm has been applied with love and care while the fit of parts is simply faultless. Oh, and the hardware is very good, too.

Scale buffs may point to some minor variations against the full size machine, particularly in the cockpit area, yet the model offers a good canvas for those wishing to scale her up with additional detail.

For a 12 lb R/C model, the Sparrowhawk is remarkably simple and straightforward in terms of construction and operation. There are no flaps or retracts with which to complicate matters, the cowl is huge and plenty big enough to accommodate engines with modest trimming, while the radio requirements are only fractionally more complicated than a standard .40-size sport model.

Seagull state that the Sparrowhawk requires four-channel radio with six servos and whilst six servos is indeed correct, four-channels won’t be enough if a flaperon mix is to be used for the aileron servos and an elevator mix for the twin elevator servos. Granted, Y-leads and servo reversers could be used to reduce the channel tally should one prefer.

PIECE OF CAKE
The model can be assembled very quickly, indeed there’s nothing to tax the intermediate or experienced builder and the word ‘easy’ springs to mind when looking back over the process. The instruction manual is fine and while some differences were apparent between the model pictured and the one on my workbench, the way forward was always apparent. Take the rudder for example, the...
Perhaps I’m nit picking but it would have been better to get those twin elevator servos hidden away in the fuselage, wouldn’t you say?

There’s bags of room under the cowl for my O.S. 1.20, and larger motors too. Seagull suggest a 1.60 - 1.80 four-stroke although she flies very well with the smaller engine.

required beyond a simple glue bond. After all, the fin is a large structure and the stress imposed by the large stabiliser in flight can’t be underestimated. Accordingly, I added a dowel retention lug (much like you’d have on the leading edge of a wing) to the front of the tail unit, whilst the rear end slots through a protruding \( \frac{1}{4}\)" sq. piece into which a retention screw can pass from the rudder post.

On engine installation I need only say that the process is entirely conventional and straightforward. The cavernous cowl easily encases motors in the recommended range although I decided to down-size from Seagull’s suggestion and fit an O.S. 1.20 four-stroke which seemed plenty enough for a 12 lb model of this type. When it comes to cowl preparation, the fuselage sides, through which retention screws pass, seem to be made from soft balsa and will need additional ply reinforcement pieces to provide a secure fixing. In addition, whilst it’s suggested that you fashion a centrally positioned air inlet hole below the spinner, I couldn’t help but cut an offset opening, as evident on the full-size. This combined with a large exhaust hole on the side has been sufficient to prevent the engine overheating throughout in flight.

To the final touches then, and while some of the pre-applied stickers are hardly of 1930s vintage, the tail wheel too small to convince, the instrument panel too ‘21st century’ and the plastic pilot’s gender difficult to determine - none of these quirks are beyond redemption. Besides, they’re possibly the only areas where some small measure of traditional modelling can be employed.

I added \( \frac{3}{4}\) lb of lead at the nose to balance my model, although readily accept that the task might not have been necessary had I fitted a larger engine. Actually, you’ll find a handy little step, just behind the motor, that’s the perfect place for additional weight should the need arise.

LIKE A BIRD
Range checking at the field revealed some glitching. A tube for the receiver aerial has been built into the
Whilst the pilot supplied with the kit is pre-painted, I added one or two embellishments to improve the appearance.

The fit of parts is beautiful and the covering superb - one of the best ARTF’s I’ve ever seen.

In aviation terms, the 1930s haven’t really been my era... Until now that is! What a super aeroplane.

Seagull has quietly been improving its quality levels over the last few years...

model at the factory and this directs the aerial through the fuselage, the final few inches protruding at the tail. All well and good were it not for the fact that the fuselage has closed loop wires and long servo leads running the full length, so perhaps a glitch or two should have been expected? Repositioning the aerial so it exits the fuselage just behind the pilot cured the nasties.

So, how does she fly then? We’ll let’s talk take-off first. Long grass will have a tendency to drag on the spats as the model accelerates along the ground, indeed the drag can be sufficient to tip the nose unless plenty of elevator is employed. That’s all well and good yet bucket-loads of elevator can often result in a model lifting off before flying speed has been reached and, of course, stalling. Not a pleasant prospect, although I’m pleased to say that the Sparrowhawk suffers no such reaction. Moreover, it’s blessed with delightfully benign stall characteristics that’ll even allow you to make the odd mistake. Accordingly and with perhaps a little more elevator held in than I’d normally find comfortable, the Sparrowhawk will rise gracefully into the air. Once there, I found Seagull’s suggested initial control throw movements just about right, with the exception of the elevator which, from the start, should be closer to the \( \frac{7}{8} \) suggested for aerobatic flying.

The fix, as far as take-off worries are concerned, is to cut the grass or fit larger wheels. In truth, larger wheels are beneficial in many ways, not least because the 3” items supplied with the kit are woefully undersized in comparison to a scaled version of those on the full-size. What’s more, there’s acres of room in the spats to accommodate larger ones. So, not only do larger wheels look better, they’ll raise the spats off the ground, improve the ground handling and assist with achieving the centre of gravity.

Although Seagull suggest a larger engine, I’m perfectly happy with the urge provided by the 1.20 which pulls the model around perfectly well and indeed in a very scale-like manner. Truth is, she’s plenty fast enough with this power plant in my opinion.

Flying? Ah yes, so how does the Sparrowhawk fly? Well, this is a very nice aeroplane. As I mentioned earlier, she’s bereft of any nasty traits. I’ve tried to provoke a stall from the
The closed loop rudder servo is hidden just behind the main wing under this neat hatch.

I’ve fitted standard servos all round and, as you can see, the hardware is perfectly fit for purpose.

She’s quite a picture don’t you think? Meet my new favourite.

Me flying a 1930s racer? I must be getting old! Seriously, you’d have to try hard not to like this one.

but try as I might she just doesn’t want to bite and gently mushes, noddling her nose a little in the process. Meanwhile the Sparrowhawk has a very regular sport / aerobatic flight envelope that lends itself to big graceful pattern-like manoeuvres. Fast? Yes. Furiou’s? No. She’ll handle standard aerobatic manoeuvres with the ease and grace that you’d expect from a 1930s vintage racing plane.

The roll rate seems just right at the suggested starting point and although a faster response could be encouraged by increasing the aileron throws, the Hawk really wouldn’t look right being thrown around. In reality, she responds very positively to control and goes exactly where you put her.

Landing this model is very straightforward. As a floaty old bird her benign handling characteristics make landing a non event, although, as with take-off, a combination of long grass and small wheels may induce a nose-over before she finally comes to rest.

WILL IT SELL?
This model deserves to do well not least because Seagull have had the courage to produce a kit of an unusual aircraft. On the ground and in the air the model has appeal and presence in spades. What’s more, it flies very well. Kit construction and quality are excellent and whilst it wouldn’t suit beginners or those seeking their first low-winger, it should appeal to anyone seeking a scale ARTF that doesn’t have the complication of flaps and retracts. Assume a level of false modesty when you take it to the patch for the first time and your clubmates will think you’ve built it yourself!

DATAFILE

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