Dancing Wings SE5.a 1.6M

https://www.dwhobby.com/products/16m-se5a-airplane-wingspan1620mm-arf-15-balsawood-scale-airplane-scg42-covering-finished-version-arf

On the website, they list the flying weight of the aircraft at 3.1 Kg or 6.8 pounds. On a slow-flying scale plane of this type, 100 watts per pound is a good power level, so something around 680-700 watts would fly the plane very well. They call out a 14-inch prop on the website, so we just need to find a motor that will run on 4 cells, and produce around 700 watts of power on a 13 to 14 inch prop.

Looking at our BadAss line, the BA-3520-790 would be a good choice. This motor, running on a 4-cell LiPo battery with an APC 13x5.5-E prop will give you the following full throttle performance numbers.

Volts – 14.8
Amps – 47.6
Watts – 705
RPM – 9734
Thrust – 114 ounces (7 pounds 2 ounces)
Speed – 51 MPH

If you did want more performance from the model, you could also run a 14x6-E prop and get these performance numbers.

Volts – 14.8
Amps – 57.4
Watts – 849
RPM – 9390
Thrust – 133 ounces (8 pounds 5 ounces)
Speed – 53 MPH

This motor is rated for up to 70 amps of current, and since you should always round up the max motor current to the next size ESC, the BadAss Rebel V2 80-amp ESC would be a great choice for this motor. The ESC comes set for all the normal default settings, but if you need to ever change any parameters, we do have a Programming Card that makes parameter changes easy.

If you prefer to use a wood prop, we also have our BadAss Wood Electric Props. The 13x6 and 14x6 would give similar performance to the APC 13x5.5 and 14x6 props.

To complete the power system, a 4-cell 4000mah battery would be a good size.

Here are links on our website to the items listed above.

BadAss BA-3520-790 Motor: https://innov8tivedesigns.com/badass-3520-790kv-brushless-motor.html

BadAss Rebel V2 80-amp ESC: https://innov8tivedesigns.com/badass-rebel-v2-series-brushless-esc-80a.html

BadAss ESC Programming Card: https://innov8tivedesigns.com/badass-rebel-v2-series-brushless-esc-lcd-programmer.html

BadAss 4-cell 4000mah LiPo Battery: https://innov8tivedesigns.com/badass-45c-4000mah-4s-lipo-battery.html

APC 13x5.5-E Prop: https://innov8tivedesigns.com/apc-13x5-5e-propeller.html

APC 14x6-E Prop: https://innov8tivedesigns.com/apc-14x6e-propeller.html

BadAss 13x6 Wood Prop: https://innov8tivedesigns.com/badass-wood-electric-propeller-13x6.html

BadAss 14x6 Wood Prop: https://innov8tivedesigns.com/badass-wood-electric-propeller-14x6.html

That plane shows a spinner cone nut in the photo above, and we do have those available too. The BA-3520 motor has a Metric M6x1.0mm thread on the prop adapter, so you would need to use that size prop nut. We have them in both silver and black at the following link.

https://innov8tivedesigns.com/products/spinners.html?cat=317