E-Flite P-51

Those 4-blade scale props that come on the ARF Foamie planes look nice, but they not very good for going fast. Those props are constructed from 4 individual blades that are held to the spinner backplate with a pair of sheet-metal screws. The stock motor is an E-Flite BL4650-460Kv or a Spektrum 4258-460Kv motor, depending on which variation of the plane you have. The prop is listed as being a 15.5x11 inch size, and the weight of the plane is listed as 96 ounces (6 pounds) in the manual. With a 460Kv motor running under load on a 6-cell battery, the prop is only going to be spinning a little over 8000 RPM, so you are limited on your speed because of that. The other issue is that due to the design of the stock 4-blade prop, if you try and spin it much over 10,000 RPM, you risk having it come apart in the air. You will get the best performance from a 2-blade prop matched to an appropriate motor.

In our BadAss Motor line we have our 3530 series motors. These are 43mm in diameter and 56mm in length, so they are very close in size to the stock motor. We have a 3530-470 and a 3530-570 that work good on 6 cells in planes of this size. To get the RPM that you need to go faster, you could go with the 3530-570 motor. On 6 cells, this motor will spin props at a little over 10,000 RPM. It will spin props like a 12x10, 12x12 or 13x8. You can also use a 13x10 prop but that pushes the motor right to its max current on the ground, but once you get up in the air, you are OK.

Here is a link to that motor, and you can click on the link to the Performance Data Chart for the motor and look at the different props we ran on it.

https://innov8tivedesigns.com/badass-3530-570kv-brushless-motor.html