

4. CONCLUSION

From the result of the propeller dimensional calculation and numerical simulation that has been done, it can be concluded that

1. The designed propeller for 25 kg MTOW plane using NACA 4412 has dimension 0.3 m radius, 0.026 m hub radius, with the range of angle of attack $13.08^\circ - 1.594^\circ$ and blade angle $13.709^\circ - 1.6918^\circ$ from root to tip, also has a minimum 0.005 m and maximum 0.0475 m chord length.
2. The analytical calculation and numerical calculation are not the same but have a close value with a difference is 4.8 %. We know that the thrust force has close value with the design calculation thrust with the result that the design process is supposed as expected.

