

## 5. CONCLUSIONS

### 5.1 Conclusion

In this study, modal analysis simulations and experiments were conducted on the quadcopter to examine the effect of adding dampers on its vibration response. It was found that Sorbothane provides effective damping, but its soft and easily damaged characteristics make it not recommended for use. Therefore, Neoprene was chosen as the damping material for the quadcopter because it produces minimal vibration response after Sorbothane. The simulation and experimental results have errors due to the assumptions made in the simulation. However, the error values are below 10%, which is considered acceptable.

### 5.2 Advices

For future research, flight testing is highly recommended to ensure the data obtained aligns with the actual conditions of the quadcopter.

