

STUDY OF SHORT PERIOD BEHAVIOUR FOR BWB UAV MOHD SAFUAN BIN ROSLI (2006134919)

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ABSTRACT

This project presents a study of short period behavior of a Blended Wing Body Unmanned Aircraft Vehicle (BWB UAV). A previous study on BWB UAV preliminary design has been done. Information gathered related to BWB UAV and flight dynamic stability of aircraft has been carried out. This project began with literature study on the revolution of aircraft development, identification and introduction of aircraft anatomy, started to familiar with the basic formulation regarding to flight dynamic and stability. Furthermore, the study proceeds with the derivation of the short period approximation and followed by obtaining the analysis final result and taking a conclusion. It was found that the short period behavior of this BWB UAV as not effectively damped. It is important that short period behavior do a further analysis on flight dynamic stability and design which is beyond this project.

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