Flight Mechanics

Peer Review - Project 2

Paper by: Pedro Lopes Lupion
Reviewer: Nikolaos Koukis

Saturday 28th February, 2015

1 Technical Work

Pros	Cons
(+) (Figure 2) Explanatory graph - Descriptive legend is also included	(-) (2nd paragraph of Performance Model analysis) The resulting forces on the airplane are equal to zero only in the vertical axis.
(+) (Table 1) Very descriptive table	(-) (Figure 2) No stall lim is included in the graph
(+) Data graphs (Fig 4,5) are correct	(-) Figure 3 is totally wrong. The α, qdyn limits are also not specified
(+) Nice idea of comparing the derived Clp graph with the one extracted from the Draken database (fig. 6)	(-) (Unsteady aerodynamic derivative) Procedure of deriving the analytical equation of ϕ is not explained
(+) Formulas for calculating $C_{lp}, C_{l\beta}$ seem to be correct	(-) References are not properly cited - Refer more to books rather than webpages
	(-) Matlab code implementation should not have been included

2   Content - structure of report

Pros	Cons
(+) Good format for the overall text	(-) 1st page should not have been numbered
(+) 2 column document - looks more formal	(-) 3rd paragraph in introduction doesn't have a ceratin purpose - lots of repetitive words
	(-) "In this project the aerodynamic performance of this fighter is analysed" $\rightarrow$ not only..
	(-) Extremely simplified vocabulary especially for a technical document
	(-) Code Implementation is included. The reader doesn't care about the matlab methods that are used
	(-) (2nd paragraph of Performance Model analysis) The governing differential equations are neither parallel or perpendicular but refer to the horizontal, vertical movement
	(-) Unconsitent format, font for equations
	(-) Equations 6 should be written in more general way, include symbols not actual numbers

3   Overall Impression

Although the final results seem to be logical many of the steps included in their computation are not properly explained. The format of the report should also be taken into consideration since it reflects the general picture of the work done. Use a more consistent style (same font, same spacing etc.) for mathematical equations. Last but not least the vocabulary used should be significantly improved since it doesn't help the reader at all in undersanding the ideas projected in the paper.