

**Review Form 3**

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|--------------------------|---|
| Journal Name:            | <b>Archives of Current Research International</b>   |
| Manuscript Number:       | <b>Ms_ACRI_126863</b>   |
| Title of the Manuscript: | <b>A more detailed physical explanation of an aircraft flutter mechanism - Part II: The concept of Structural Actuator Saturation</b> |
| Type of the Article      |   |

**Review Form 3**

**PART 1: Review Comments**

| <b>Compulsory</b> REVISION comments   | <b>Reviewer's comment</b>  | <b>Author's Feedback</b> (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here) |
|---|--|---|
| <p><b>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</b></p>                        | <p>This manuscript is significant for the scientific community because it delves deeply into the physical mechanisms behind flutter, a critical concern in aeroelasticity that affects the safety and performance of aircraft.</p> <p>The torsional and bending movements within dynamic modes and identifying the destabilizing effects of phase shifts, it offers a precise understanding of how flutter develops at high speeds.</p> <p>I appreciate this paper for its innovative approach of treating structural wings as physical actuators, bridging mechanical behavior with control theory concepts.</p>  |   |
| <p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>  | <p><b>Yes</b></p>  |   |
| <p><b>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</b></p>   | <p>The abstract is generally comprehensive, clearly outlining the key mechanisms of flutter and the approach taken to analyze torsional and bending dynamics.</p> <p>The abstract does a good job of explaining the study, but a few changes could make it clearer and more impactful. Starting with a straightforward statement of the study's main goal would help readers understand the purpose right away</p>   |   |
| <p><b>Are subsections and structure of the manuscript appropriate?</b></p>  | <p>The structure and subsections of the manuscript appear appropriate, given its focus on explaining the mechanisms behind flutter in aircraft.</p>  |   |
| <p><b>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</b></p> | <p>This manuscript is scientifically strong and technically solid because it carefully explains how bending and twisting movements in aircraft structures can lead to flutter. By breaking down each movement and analyzing their phases, damping, and frequencies, the authors provide a clear and detailed view of how and why flutter happens. The use of numerical simulations to track these changes adds accuracy and makes the findings reliable. I also appreciate the unique approach of viewing the aircraft wings as physical actuators, which helps link the results to practical applications in aircraft design, making the study both thorough and useful for real-world engineering.</p> |   |
| <p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p>   | <p>Yes, the references are sufficient and recent.</p>  |   |
| <p><b>Minor</b> REVISION comments</p> <p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>   | <p>Yes, the language of the article suitable for scholarly communications.</p>   |   |
| <p><b>Optional/General</b> comments</p>   |  |   |

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**PART 2:**

|   | <b>Reviewer's comment</b>  | <b>Author's comment</b> <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i> |
|---|--|---|
| <b>Are there ethical issues in this manuscript?</b> | <i>(If yes, Kindly please write down the ethical issues here in details)</i> |   |

**Reviewer Details:**

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|----------------------------------|-------------------------------|
| Name:                            | <b>Subash Dhakal</b>          |
| Department, University & Country | <b>Anna University, Nepal</b> |