Final Report Feedback

Joseph Spencer *
Brigham Young University, Provo, Utah, 84601

I. Introduction

I sent my final report to both Judd Mehr and Adam Cardoza. They each gave me feedback, which I used to update my final report for presentation. Diff.pdf shows the significant updates I made after receiving feedback. In general, the final document has much more content and better flow than the first and second drafts. The final report is available through this link.

Because many of Adam's and Judd's comments were similar, I should clarify that I have labeled changes from the first draft to the second draft "J" and changes from the second draft to the final report "A."

II. Judd

Judd was the first to give me feedback on this report. I made most of the changes between the first and second drafts and added much of the content to the final submission because of his comments. A summary is listed below.

- Abstract - Add more material to the abstract including motivation, relation to readers, and a brief summary of the report, research, findings, conclusions, and perspectives.
- Nomenclature - Remove "=" signs and adjust units in nomenclature.
- Introduction - Add significant content to introduction, splitting it into three paragraphs for motivation, context, and outline.
- Procedure - Clarify explanation of Julia language and Xfoil.jl package. Clarify which package does which thing. Also clarify use of the $n = 1.1$ safety factor. Make sure you use clear and consistent terminology throughout report.
- Optimization - Be sure to use consistent terminology for which optimizer was used.
- Methodology - Include content from project 1 and project 2. Include more math and figures in the methodology section so someone unfamiliar with the project could produce the same results.
- Results - Clarify discussion of airfoil identification remaining the same. Add and discuss a thrust constraint.
- Discussion - Clarify language again! Also explain why you expected different results. Move process discussion to procedure section.
- Conclusion - Write more stuff in the conclusion
- Miscellaneous - Include more content from projects 1 and 2. Use consistent names for variables and a consistent

---

*Undergraduate Researcher, Brigham Young University FLOW Lab.

citation style, and check grammar before final submission. Change from passive to active voice.

III. Adam

Adam checked my second draft pdf. It had some updates to the beginning sections from Judd's comments. Some of his additional feedback was similar to Judd's, and some was slightly different. Feedback from both Adam and Judd was considered.

- Abstract - Change title and author name. Update wordings and terminology to be more descriptive and less repetitive.
- Nomenclature - Remove nomenclature table, because these terms are well-known.
- Introduction - Remove paragraph labels added in second draft. Clarify wording about objective function and add references to statements made about Julia.
- Methods - Change multiple sections to only methods and results. Add discussion of what different Julia files in the project are.
- Methods - Explain why the safety factor $n = 1.1$ was used. Explain the optimization function and clarify the inputs, or include it in the optimization table. Correct citation style.
- Results - Make sure it is clear that the optimizer could never change the airfoil or rotor. Discuss why these results were obtained and what they mean. Discuss rotor solidity in more depth.
- Results - Clarify wording to distinguish between angle of attack, twist, angle of rotation, and inflow angle.
- Conclusion - Discuss findings much more in-depth. Also discuss their meanint.
- Miscellaneous - Fix capitalization in figure and table labels.