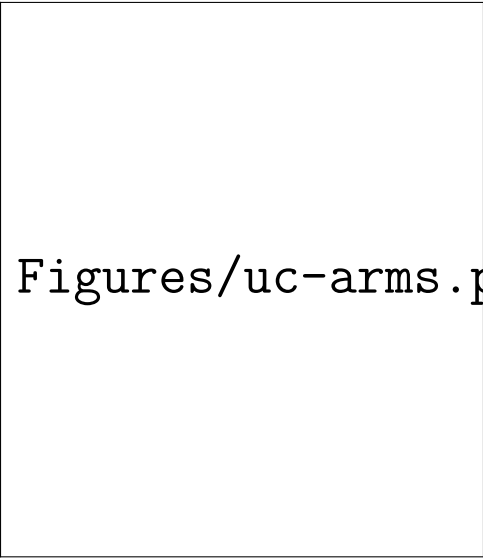


Propulsion Systems for VTOL Electric Vehicles

Masters Project Report



Figures/uc-arms.pdf

Department of Engineering
University of Cambridge

Samuel Peter Drury

Supervised by: **Dr Sam Grimshaw**

February 17, 2021

****Notes****

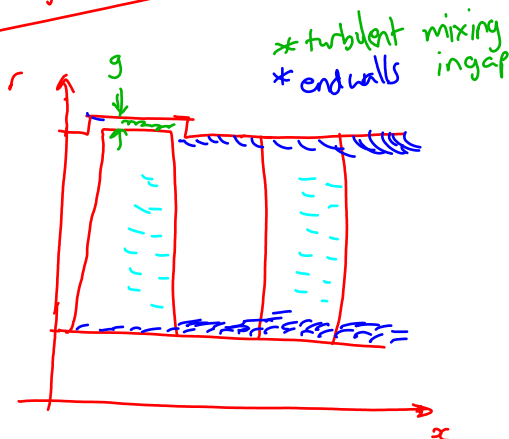
1 Intro

2 Writing up Loss Model

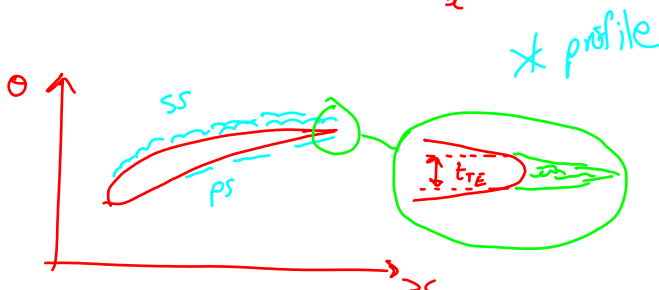
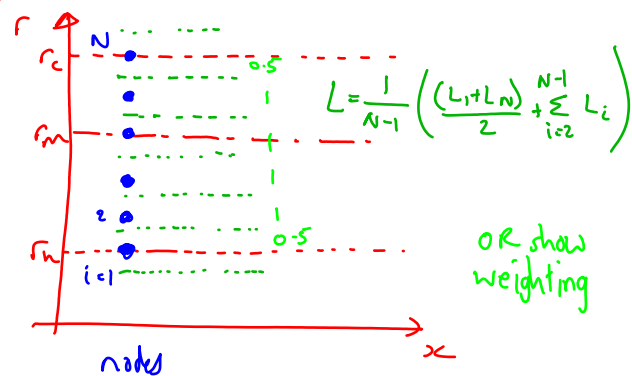
1. Start with V1, then highlight issues (isentropic etc)
2. Show how losses arise in each blade row
3. Calculating losses
 - (a) Profile loss (Dickens)
 - (b) Base pressure loss (Dickens/Denton)
 - (c) Shroud loss (Yoon)
 - (d) Endwall loss (Dickens, maybe more with greater research)
4. Show how aero efficiency calculated using (entropy) losses

3 Diagrams to use

Summary of losses



Calculating (base, profile)



* base pressure (wake) loss

4 Introduction

Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetur.

4.1 Intro subsection

Spacings

4.1.1 Subsub

4.2 Second Sub

5 Section 2

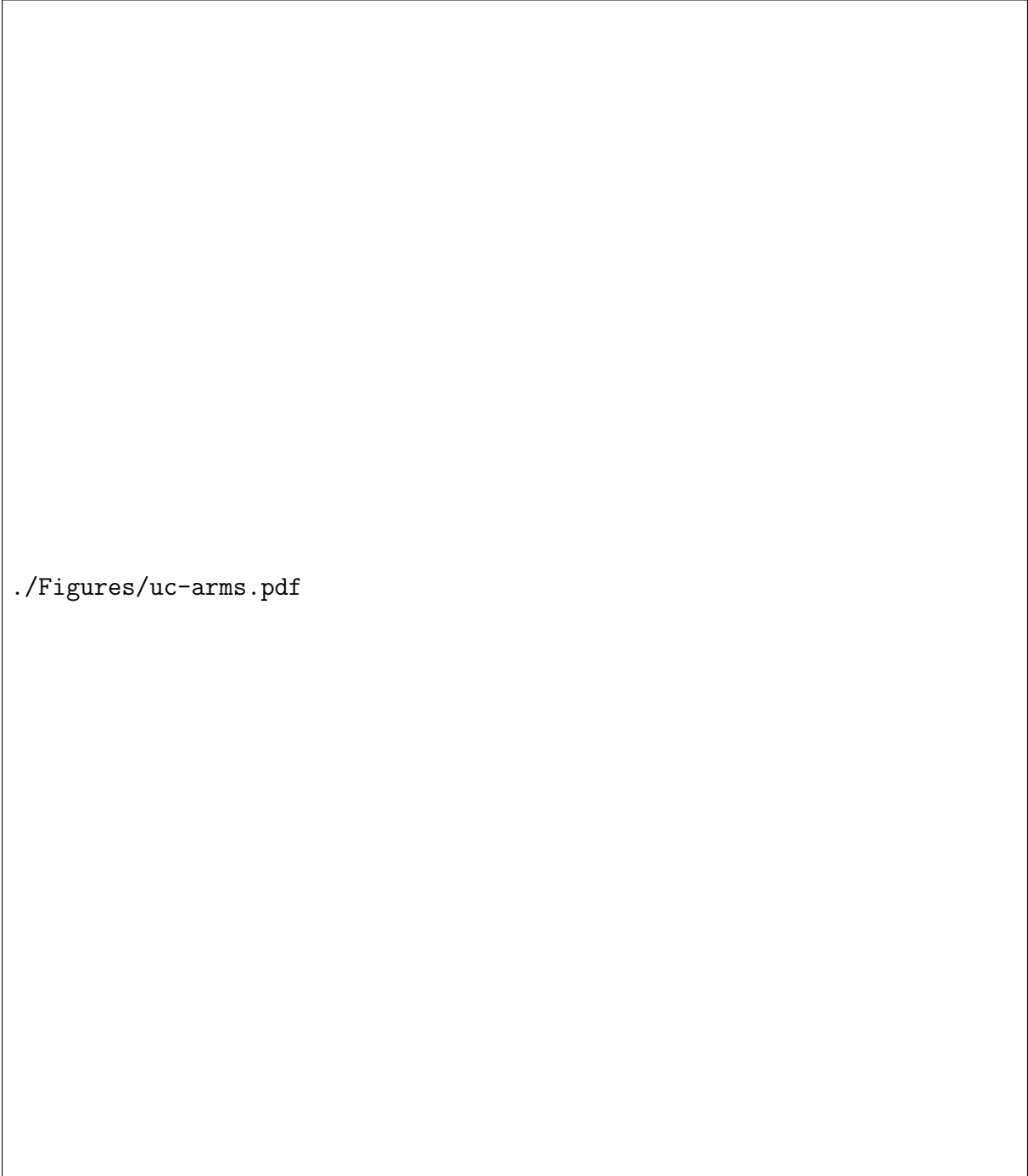
Section 3 (unnumbered, not in contents)

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Paragraph Header Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

6 Escaped characters

Slashes are awks \& { [] \$ (used for math, needs escaped)



`./Figures/uc-arms.pdf`

Figure 1: This is just a long figure caption for the minion in Despicable Me from Pixar

Quotation marks! 'at both ends' "double" "doubles" 'single'

7 Paragraph and line breaks; spacing

This has nothing to do with the `\paragraph` command

Line break

Blah (no indent)

Paragraph break by double enter in source code, giving indent

Blah

Blah2

Double double

Looking at `newpage` vs `clearpage`, former is less strict

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Sed commodo posuere pede. Mauris ut est. Ut quis purus. Sed ac odio. Sed vehicula hendrerit sem. Duis non odio. Morbi ut dui. Sed accumsan risus eget odio. In hac habitasse platea dictumst. Pellentesque non elit. Fusce sed justo eu urna porta tincidunt. Mauris felis odio, sollicitudin sed, volutpat a, ornare ac, erat. Morbi quis dolor. Donec pellentesque, erat ac sagittis semper, nunc dui lobortis purus, quis congue purus metus ultricies tellus. Proin et quam. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Praesent sapien turpis, fermentum vel, eleifend faucibus, vehicula eu, lacus.

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	BREAK FROM CONTENTS	

–i–asdf Item 1

–ii–asdf Item 2

(a) Further In - note this list is not subject to the noitemsep/nolistsep

i. Roman

–iii–asdf Item 3

- First Item

- 1 hyphen

- 2 hyphens (width of n)

- 3 hyphens (width of m)

- Norty arrow, using inline math mode

get an ugly output Silly item