KEEP
CALM
AND
CLOSE
YOUR EYES

Think

What was the best presentation you have seen?

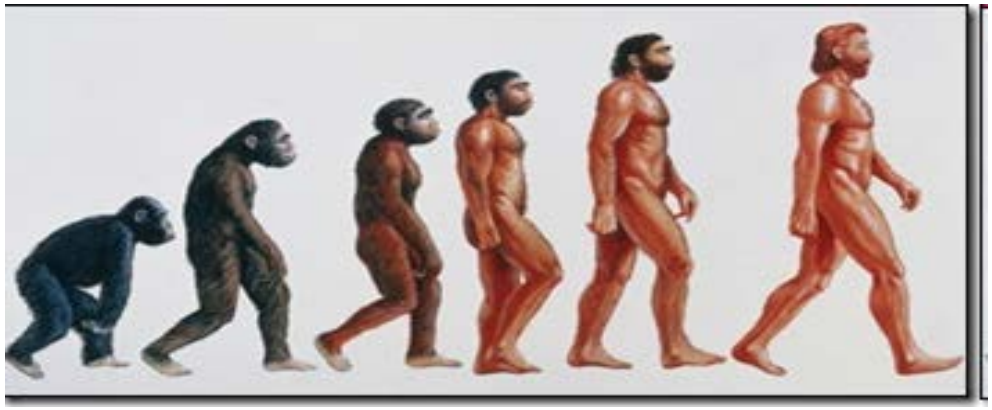
Why?

Basic Tips

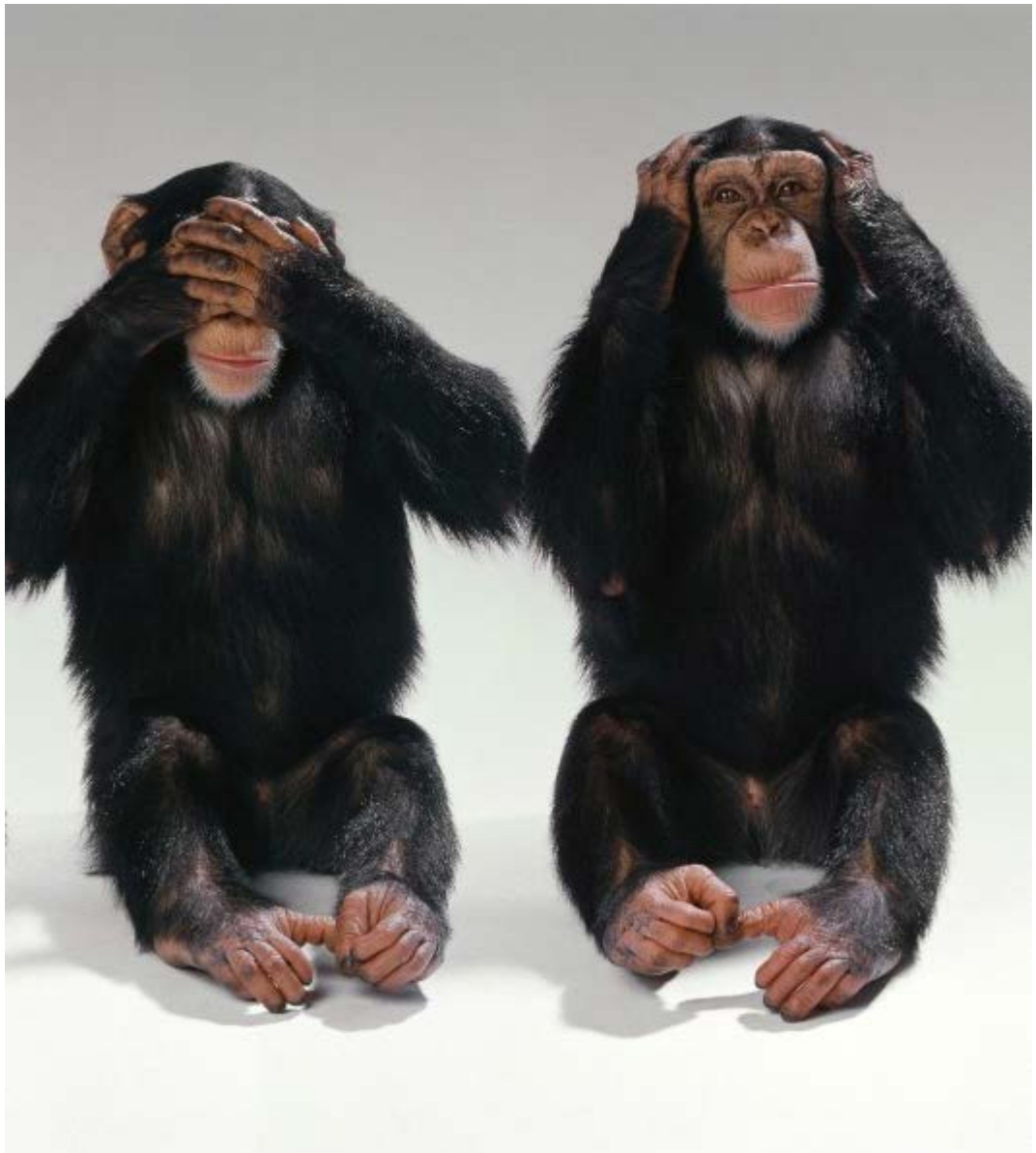
A great resource

- Presentation Skills 1. Use Visual Aids (http://www.presentationmagazine.com/Essential_presentation_skills_1_visuals.htm)

Consider audience level



Graphics? Text? Speech?



Can all graphics can be read from the back of the room?

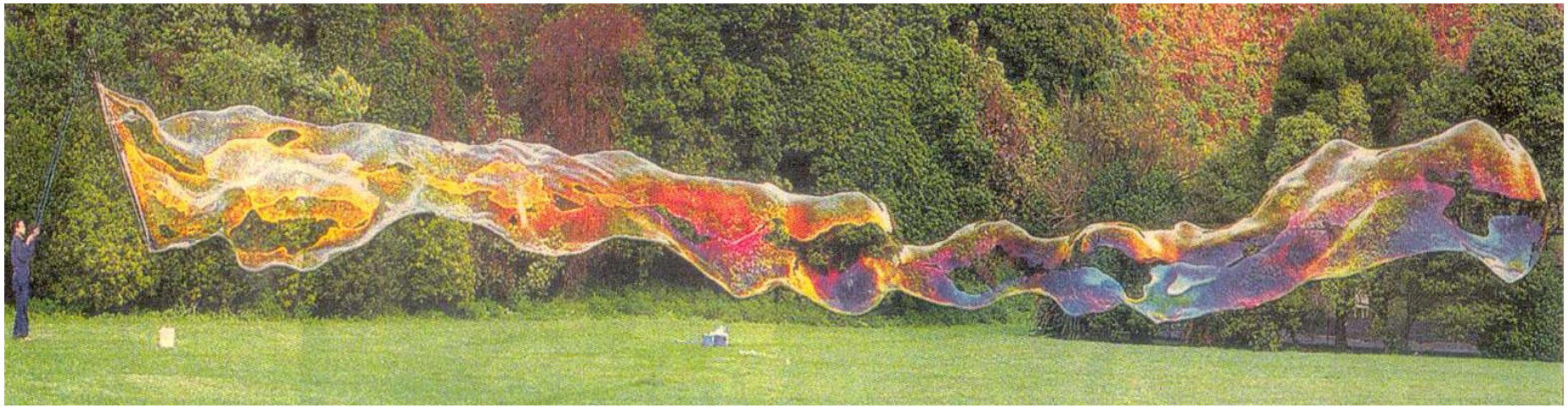
Consider

- Timing, including start up/ run down
- General rule – about 1 slide per min
- Starting do not wait for computer
- Check your presentation on the actual computer
- Have a backup plan – videos often crash
- Content - simplify the project but give evidence of the effort
- What key thoughts do you want the audience to take home

http://www.presentationmagazine.com/Essential_presentation_skills_1_visuals.htm

Consider

- Ensure clarity at all times, even from back
- If it seems too simple it is about the correct level
- Do you need an overview slide
- Invite Industrial partners
- Show hardware if relevant
- A picture paints a 1000 words, a graph a 1000 data points



PRESENTATION:

- Was the presentation well prepared?
- Were the graphics clear, including text and could they be read at the back?
- Were the graphs/analysis/concepts well explained?
- Was the presentation well timed including time for questions?
- Were the objectives clear?
- Was the speaker clear, enthusiastic? CONFIDENT

CONTENT:

- How challenging was the technical/ analytical/computational problem? PAIN
- What was the quantity of work done? AMOUNT
- Did the project fulfill the objectives?

CONCLUSIONS QUESTIONS:

- Did the student draw meaningful findings?
- How well were questions answered?

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Tips - Colors and Backgrounds

- Colours in graphs – check that the key daya can be seen – often the default colours in Excel are not good – especially yellow

- Always use dark text on light backgrounds, or light text on dark backgrounds

  Bright Green on Black and Bright Orange on Black

  but they don't always look great!

- Avoid fancy backgrounds – they often distract from the points you're trying to make

- Stay away from the template backgrounds provided in Powerpoint.

Tips - Slide Presentation

- Spelling and (gross) grammatical errors are unforgiveable – you will lose marks for them.
- All graphs and images must be appropriately labelled (including axis titles, legends and units) and explained
- Do not use fancy slide Transitions and Standard powerpoint backgrounds.
- Do not use automated timings etc
- Videos are effective but will frequently stuff up – have backup plan when they do?

How many mistake can you see on this slide?

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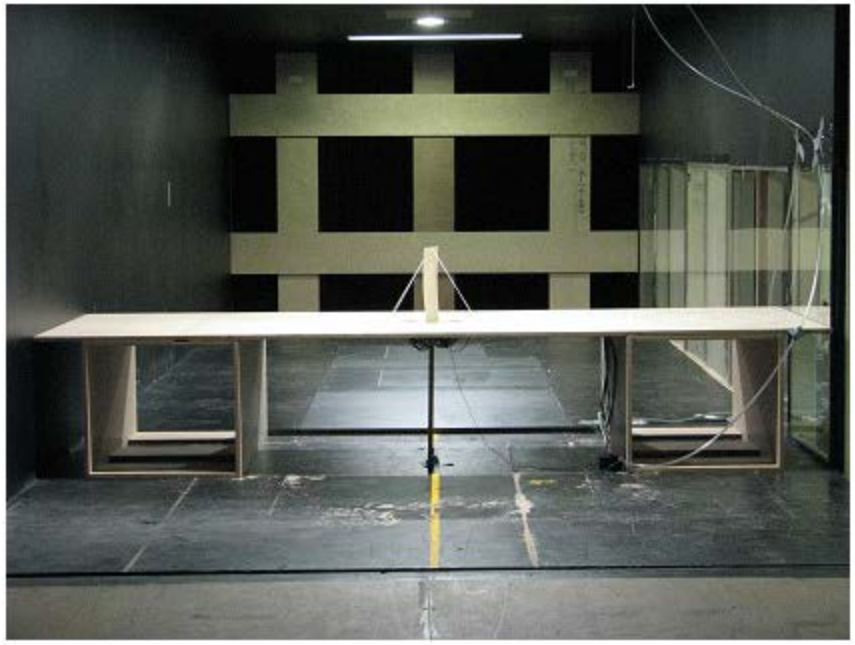
Tips - Slide Presentation

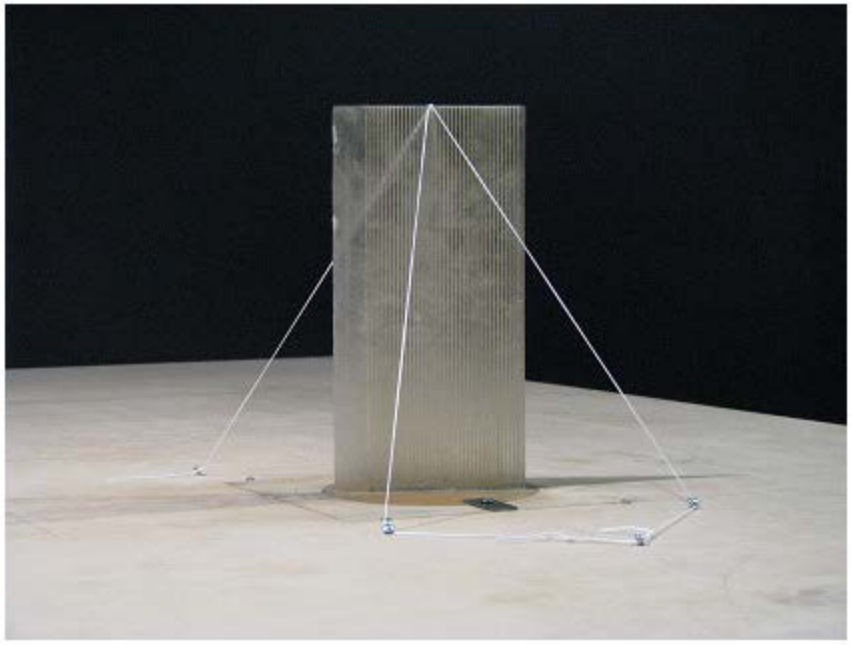
- Practicing at the venue minimises chances of things going wrong.
- If (sorry when) things go wrong (videos freeze, format screws up, noisy aircraft flies overhead etc.) what will you do?
- Have a plan and take charge of the situation – the show must go on!

Methodology

Pictures

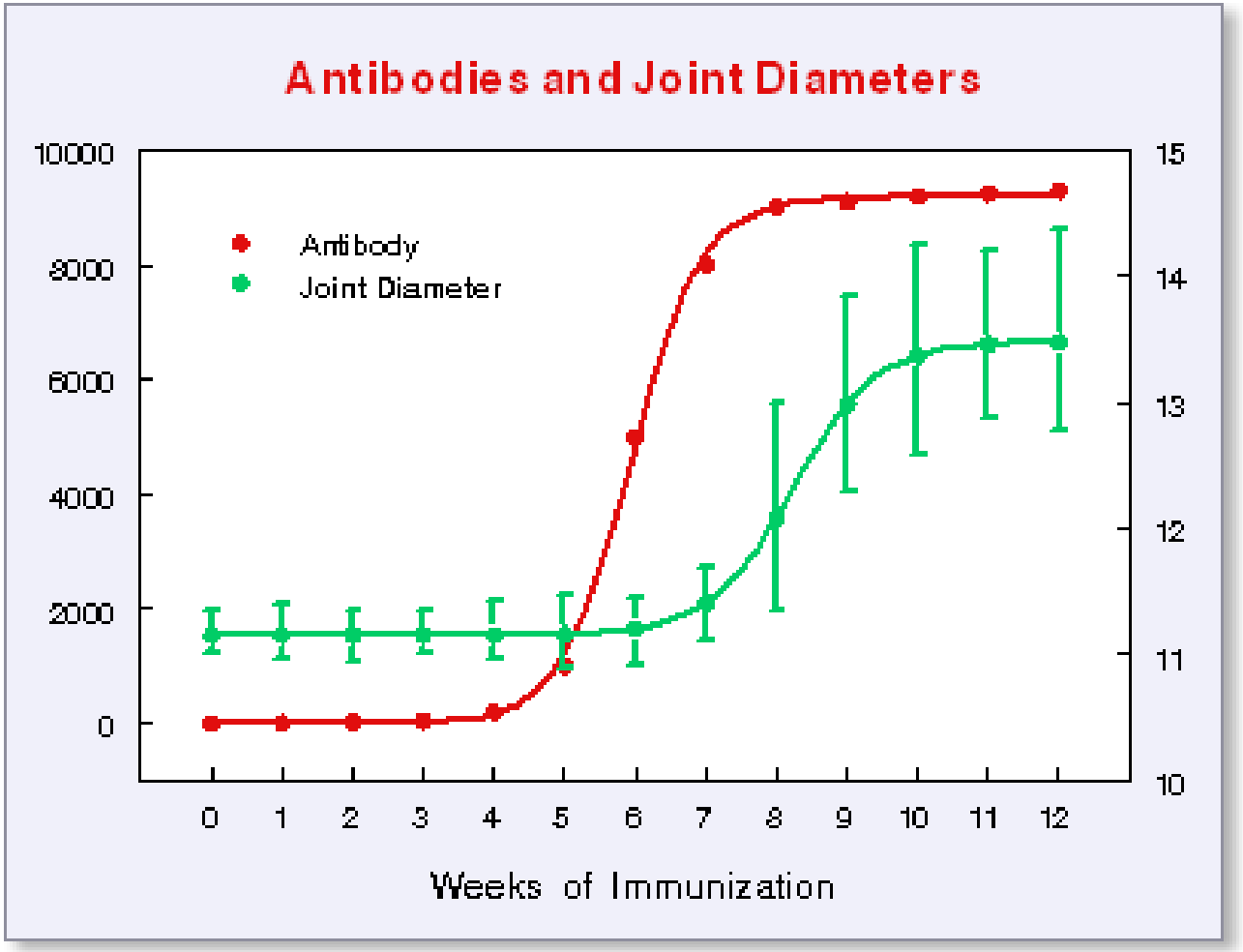


Wind-tunnel test section

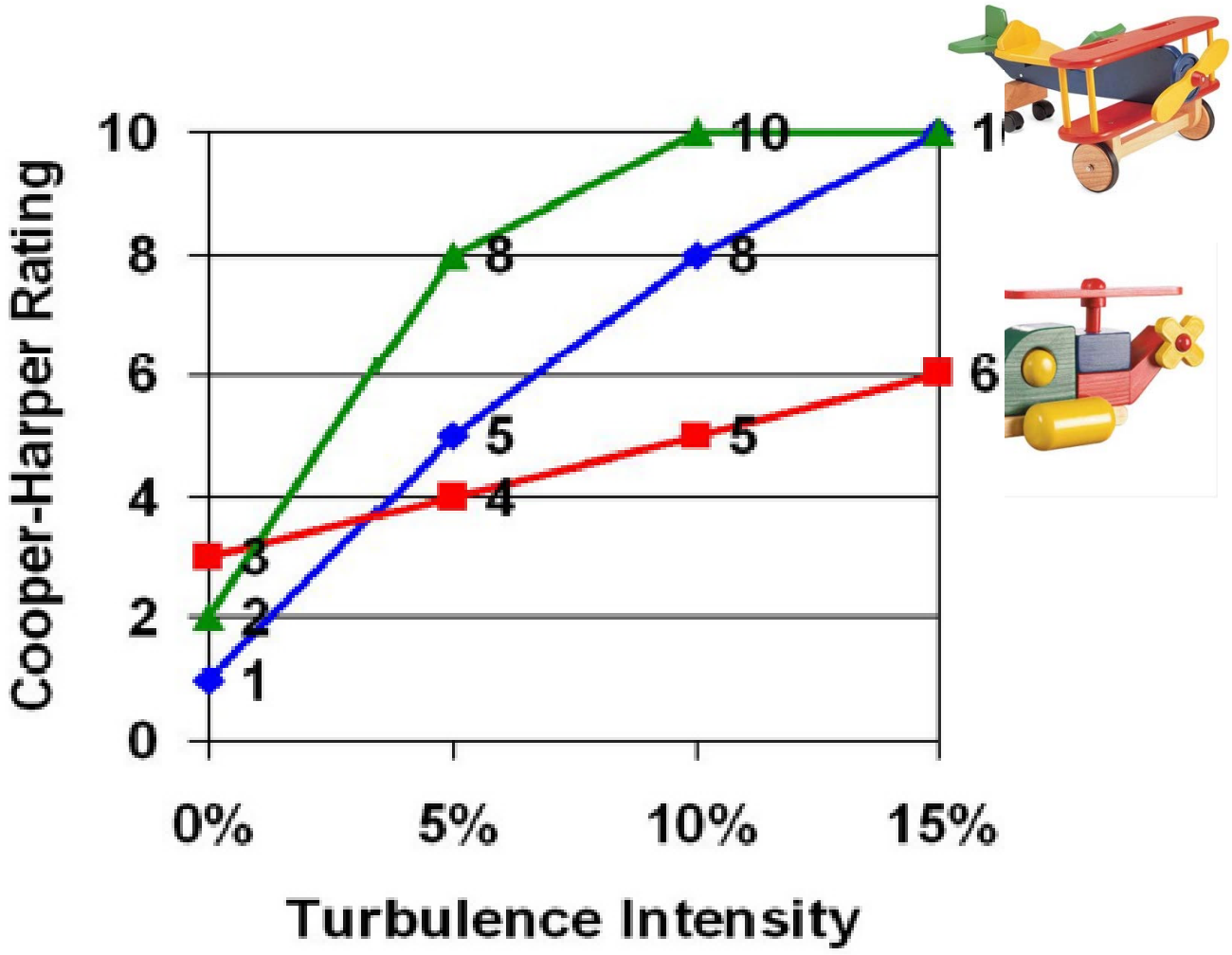


Pressure-tapped aerofoil

All graphs and images must be appropriately labeled (including axis titles, legends and units) and explained. When first showing graphical data try to show error bars and clearly explain the axes and the data



Comparison of Handling in Turbulence



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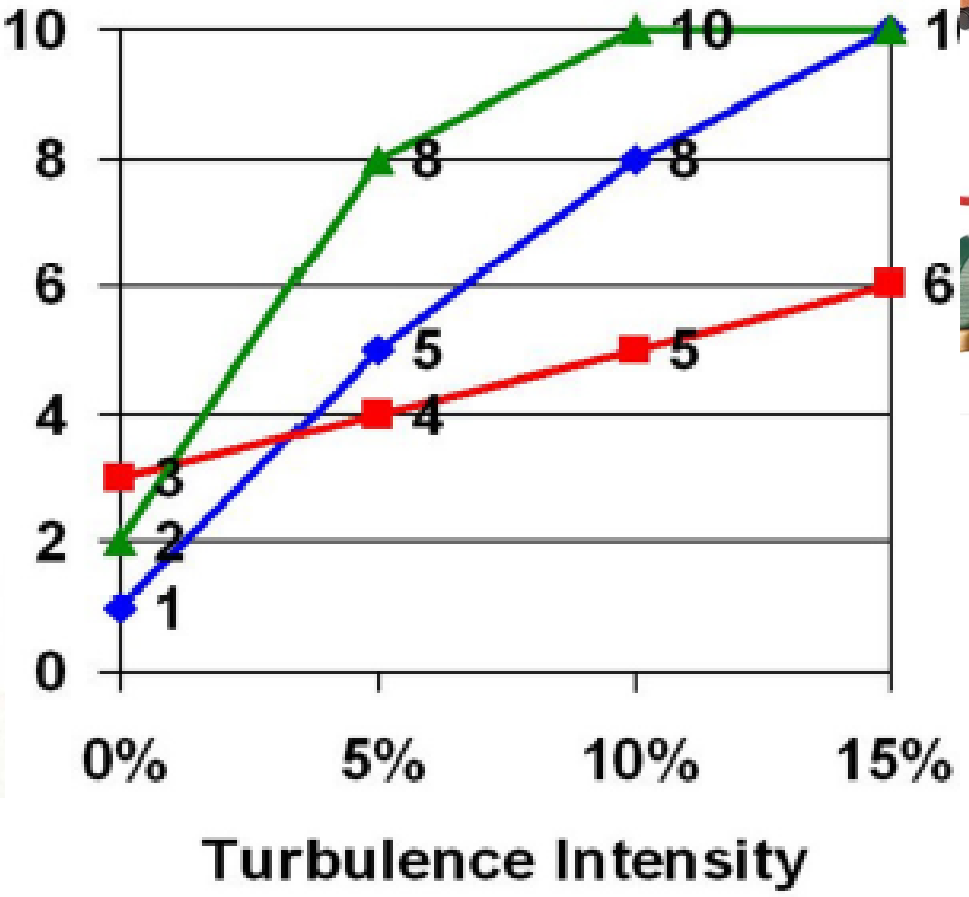


Technical Content

It is essential that all technical content presented be accurate; any obvious errors will lower the audience's opinion of your work, and diminish its potential impact.

Consider error estimations.

Final Slides

Conclusions

- What big things have you concluded?
- Single line dot points

Recommendations

- Where to from here?

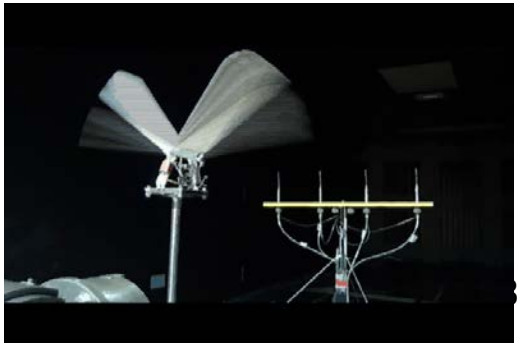
Examples

Conclusions

- Reducing span gives greater roll rates from turbulence since roll inputs do not reduce as much as polar MOI
- Most undesired motions caused by turbulence can be effectively rejected by IMU with closed loop systems
- Direct normal force control is very effective
- Wing pressure sensing may offer lead-forward advantages to minimise roll rates
- Servo saturation (and possibly life) is a problem

Future Plans

- Crash less often…….
- Reducing scale for fixed wing craft using IMUs
- Pressure and strain sensing – feeling the air
- Examining the gust rejection mechanisms in flapping – both for man-made and natural fliers



Questions?

Question Time

- Prepare in advance – think about the questions you would ask, and prepare answers (with slides at back), perhaps:

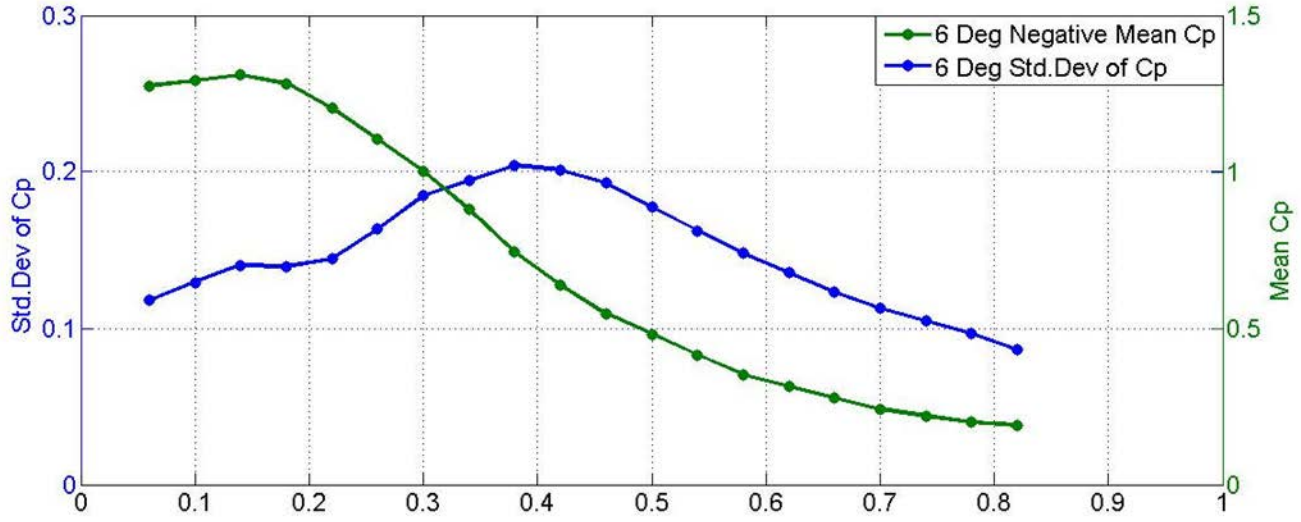
  What were the limits of your model or experiment?

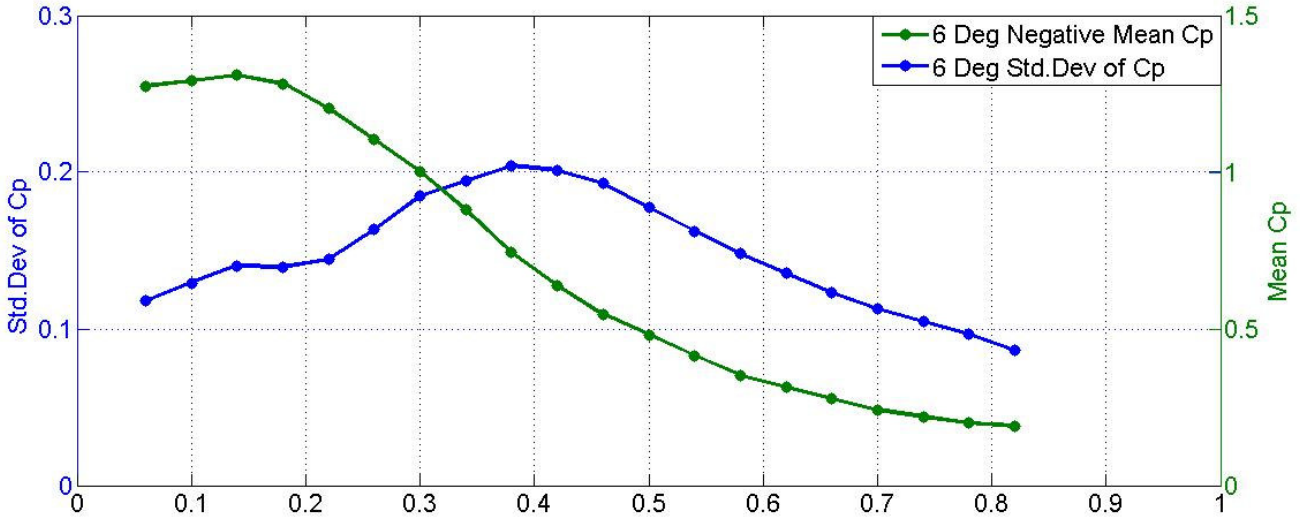
  Why did you settle on particular assumptions?

  Which choices were arbitrary?

- Listen to questions carefully – ask if you do not understand.
- Don't rush – take a moment to think about your answer.
- Don't take questions personally.
- Don't be defensive.
- Accept that the questioner may be raising a valid point.
- You don't always have to have an answer – but you should have an idea of how to get the answer.

Flow visualisation helped confirm result




6 Deg Negative Mean Cp
6 Deg Std.Dev of Cp
Std.Dev of Cp
Mean Cp
0.3
0.2
0.1
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1
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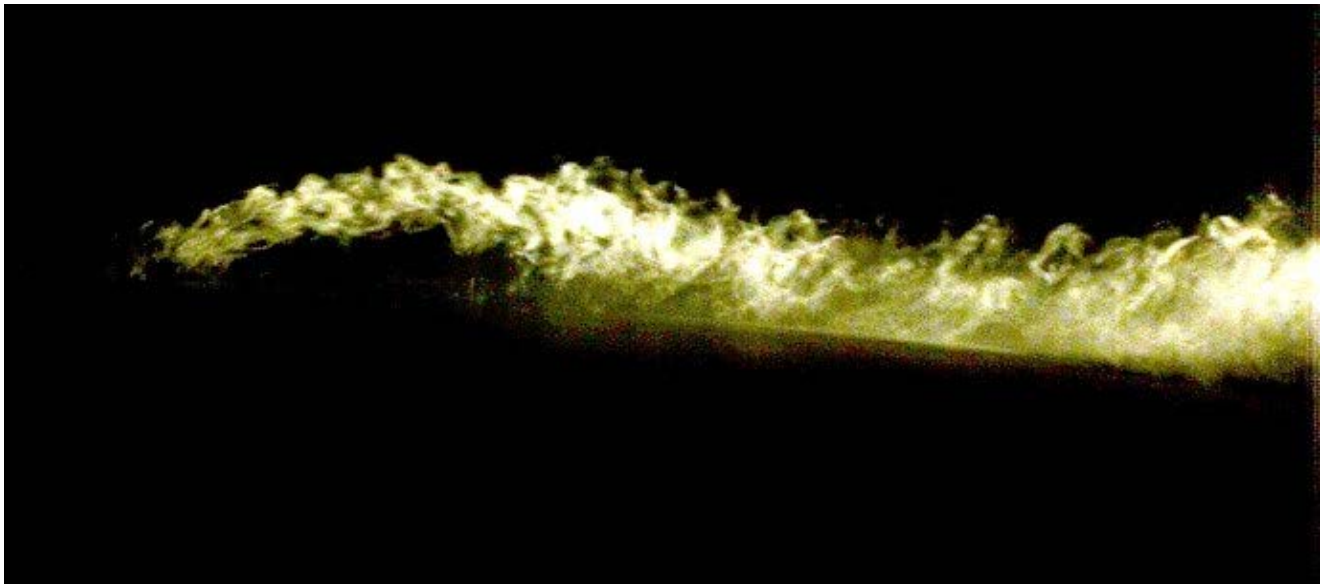
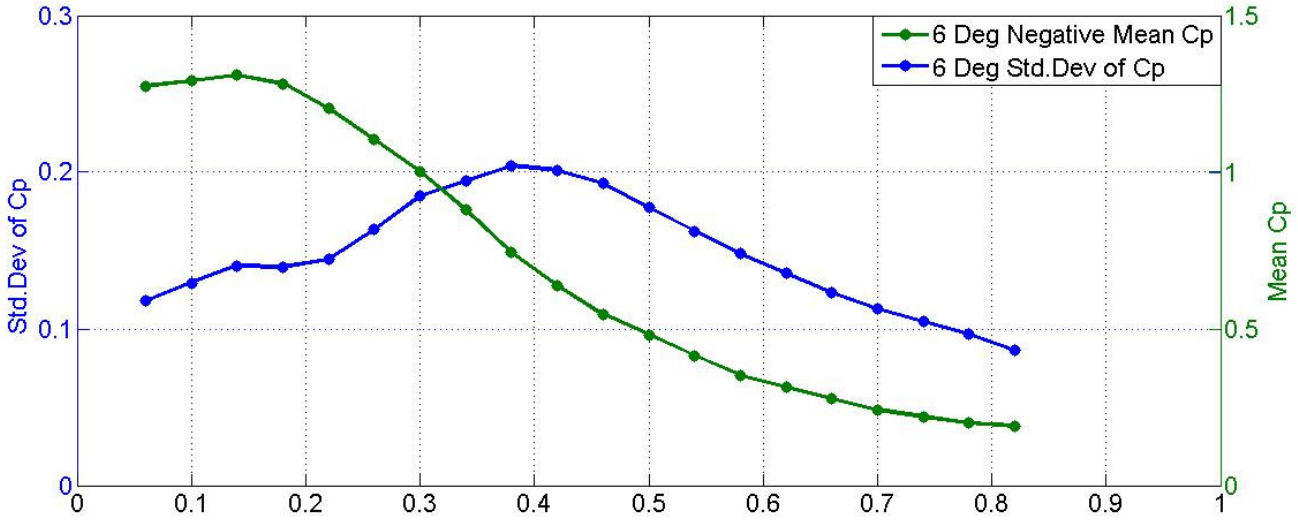
1

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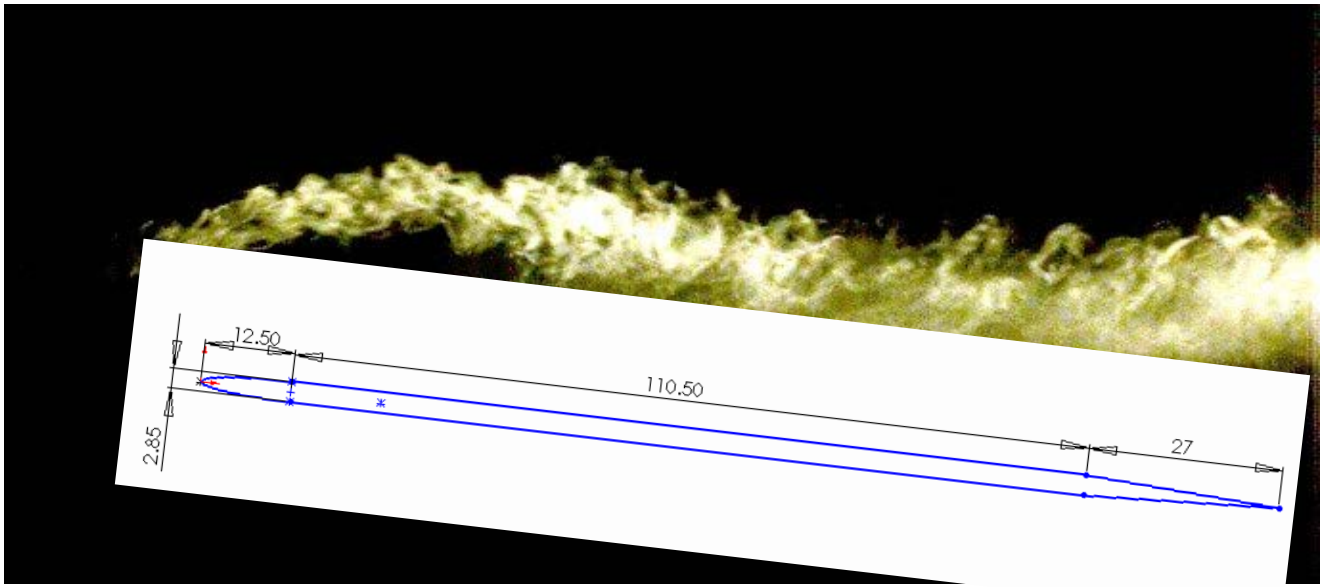
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27
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Questions?