# AePW-4 High-Angle Working Group Meeting


March 12, 2026

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# Agenda, March 12

- Workshop
- BSCW Experiment Status
- Workshop Contributors
- Data Preparation
- Next meeting, April 9.

# Agenda, March: Workshop

- Workshop
  - AIAA Aviation, 8-12 June 2026
  - DPW-8 and AePW-4 Workshop is on the weekend before AIAA Aviation, 6-7 June 2026.
  - Workshop registration fee will cover both DPW and AePW participations.
    https://www.aiaa-dpw.org/logistics.html
  - No AIAA Aviation conference fee is necessary, unless you are presenting a paper.
  - Virtual option is available at the reduced fee.
  - We are planning special sessions at AIAA SciTech 2027 to present key findings from the workshop.
- AePW will be on Saturday in Hillcrest ABCD, 120 people classroom style
  - DPW will be next door in Solana Beach AB (60 people)
  - Two separate AV systems, two separate Zoom links
  - We may swap the Saturday rooms based on registration numbers
- The two groups combine on Sunday in Hillcrest.
- Virtual presentations: ask for pre-recorded presentations, and then presenters can be on-hand, virtually, for Q&A?

# Agenda, March: Workshop

**AIAA Drag Prediction and Aeroelastic Prediction Workshop**

*6–7 June 2026*

This workshop will advance state of the art in both the DPW and AePW fields while collaborating and advancing multidisciplinary aerodynamics topics.

Registration does not include access to the forum.

LEARN MORE

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|---|---|
| Early Member: | $399 |
| Standard Member: | $499 |
| Early Non-Member: | $549 |
| Non-Member Standard: | $649 |
| Early Student Member: | $99 |
| Student Standard Member: | $149 |
| Virtual Attendance: | $299 |

# Very Preliminary AePW Workshop Schedule

- Introduction (Bret)
  - Background, History, Scope, OC Committee Introduction, Joint DPW-AePW idea, etc.
- Keynote talk?
- Break
- HAWG
  - Introduction (Pawel)
  - Participant talks
  - Summary / data-comparison (Pawel)
- Lunch
- HSWG:  RC19 and HyMax, or just RC19?
  - Introduction (Kirk)
  - Participant talks
  - Summary / data comparison (Kirk)
- Break
- LDWG:
  - Bret will present this
- Future directions

# Agenda, March: Workshop commitments

- Workshop commitments
  - Reminder:
    - Case 1: 3D wing flutter prediction at Mach 0.80 and angle-of-attack sweep: 0° – 6°
    - Case 2: 3D wing flutter prediction at Mach 0.74, 0.76, 0.78 and angle-of-attack 3°
    - Case 3: 2D wing flutter prediction at Mach 0.80 and angle-of-attack sweep: 0° – 6°

| Organization | POC | Case 1 | Case 2 | Case 3 |
|---|---|---|---|---|
| NASA | Pawel Chwalowski | x | x | x |
| Duke | Jeff Thomas | | | x |
| ZHAW/ETH Zurich | Marcello Righi | x | x | x |
| University of Liverpool | Daniel Nash | x | | |
| Technion | Daniella Raveh | x | | x |
| Hokkaido University | Ryoya Kikuchi | x | x | x |
| USAFA | Adam Jirasek | | | |
| RMIT | Michael Candon | x | | x |
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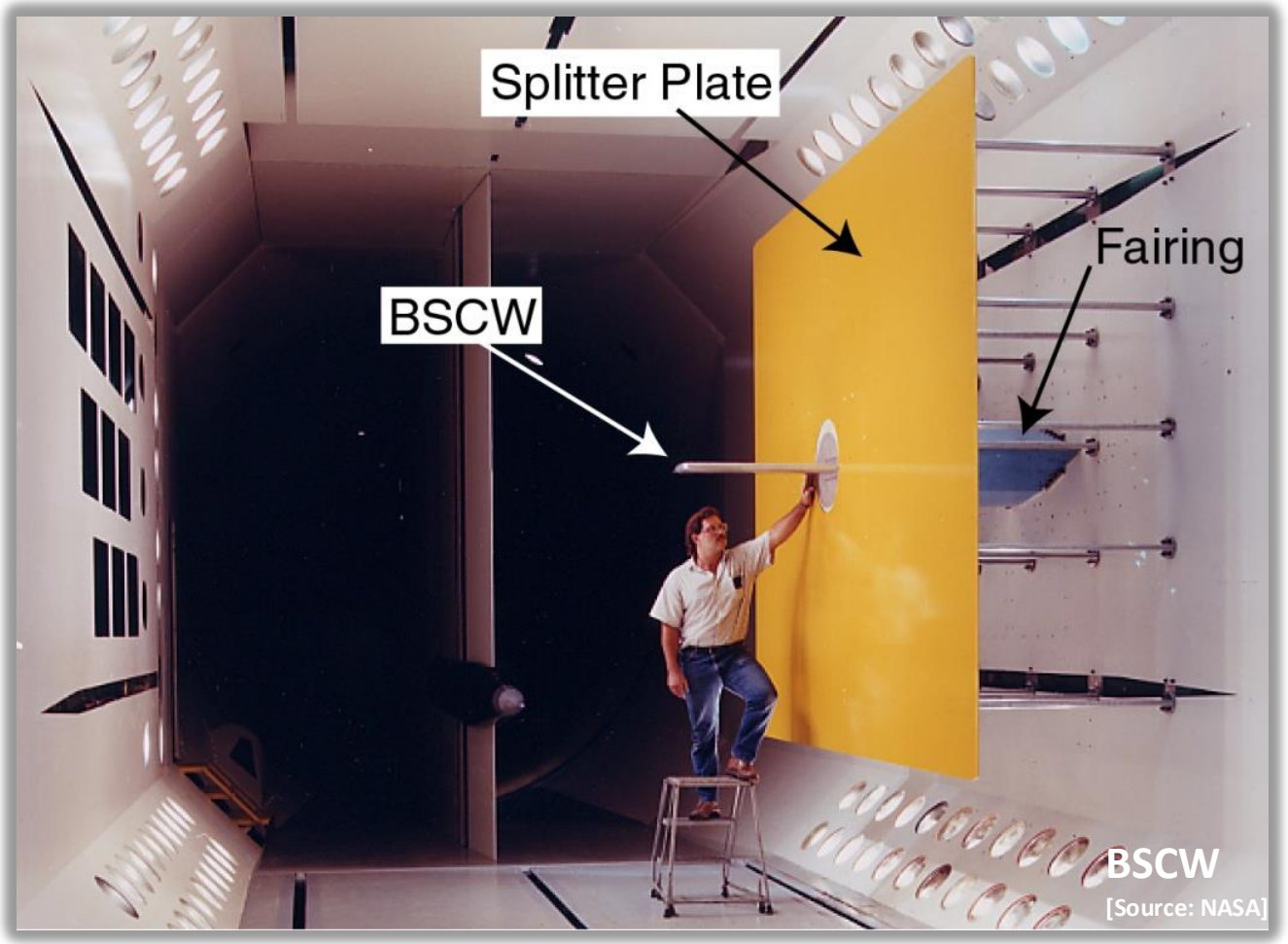
# Agenda, March 12: BSCW Experiment Status

- BSCW experiment schedule
  - First phase is completed
  - Bret will provide an update



# Agenda, March 12: Data Preparation

- Data preparation
  - Steady rigid: CL, CD, and Cm coefficients (moment reference point: mid chord) at ALL mesh resolutions.
  - Surface Cp in Tecplot format: I will extract Cp vs. x/c at 60% and 95% wingspan (3D).
- Time domain solvers
  - Temporal history of generalized displacement/velocity at ALL Qs at ALL mesh resolutions
    - Columns: ( time | mode1 displacement | mode1 velocity | mode2 displacement | mode2 velocity )
    - File name request: {Team}_Dataset{#}_Case{#}_Mach{#}_AoA{#}_Q{#}_{Mesh}_Dt{# in seconds}.dat
      + Example: NASA_Dataset1_Case1_Mach0.80_AoA5.0_Q169_Coarse_Dt0.0001.dat
      + Teams provide 'Dataset' information as a table (perturbation size/type, turbulence model, limiter settings, etc.)
  - Table with YOUR flutter dynamic pressure and flutter frequency prediction at Mach and AoA
- Frequency domain solvers: flutter dynamic pressure at Mach and AoA
- If you are using your own grids, please send them to Pawel
- **Data submission deadline is May 29.**

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