

DPW-8 & AePW-4

Buffet Working Group



June 17, 2025

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Buffet Working Group Look Ahead

- No July meeting
- AVIATION Special Session
- Fall → Test Case 3 launch

DPW-8/AePW-4: A Collaborative Approach to Drag & Aeroelasticity

Monday: Workshop Overview

3:30

Architecture, Scope, and Goals of the Multidisciplinary DPW-8/AePW-4 Workshop

3:50

DPW-8/AePW-4 Scatter Working Group: An Overview of Mini Workshops 1 and 2

4:10

DPW-8/AePW-4 Buffet Working Group: An Overview of Mini Workshops 1 and 2

4:30

Overview of the Finite Element Models for the DPW-8/AePW-4 Hybrid Working Groups

4:50

AePW-4 High-Angle Working Group: Overview of Progress and Future Directions

5:10

National Transonic Facility Public Geometry Release and Summary

Tuesday: AePW-4 High-Speed Working Group

3:30

AePW-4 High-Speed Working Group: Overview of Progress and Future Directions

3:50

ITA and Embraer Aeroelasticity Cooperation in Preparation for the AEPW-4

4:10

Correlation of Mathematical Model with AFRL RC-19 Aerothermoelastic Experiment

4:30

Computations of the HyMAX Experiment in Support of a New Aeroelastic Experiment

Wednesday: Buffet Hybrid Working Group

3:30

Transonic shock Buffet URANS Simulations of the ONERA OAT15A Airfoil with SU2

3:50

RANS, URANS and Hybrid RANS/LES Computations of the ONERA OAT15A Using CFD++

4:10

charLES Buffet Simulations of the ONERA OAT15A Airfoil for DPW-8/AePW-4

4:30

USM3D-ME Buffet Simulations of the ONERA OAT15A Airfoil for DPW-8/AePW-4

4:50

CREATE-AV Simulations for the DPW-8/AePW-4 Buffet Working Group: Part I

5:10

CHAMPS' Contributions to the Eight Drag Prediction Workshop Buffet Working Group

Thursday: Further AePW-4 Applications

3:30

Embraer Contribution to DPW-8/AePW-4: Part I

3:50

Shock Buffet and Stall Flutter Modeling with Tunable Turbulence Parameters

4:10

Study of Transonic Flutter and Shock Buffet on Benchmark Supercritical Wing

4:30

Flutter and Limit Cycle Oscillation Envelope of the Pazy Wing using a ROM

Test Case 2 Open Discussion



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