AIAA
SHAPING THE FUTURE OF AEROSPACE

4th AIAA CFD High-Lift Prediction Workshop
Sponsored by the Applied Aerodynamics Technical Committee

Co-located with the
3rd Geometry and Mesh Generation Workshop

June 5-6, 2021
at the **AIAA Aviation and Aeronautics Forum and Exposition**
Washington, DC, USA

HLPW Objectives:

- Assess the numerical prediction capability (meshing, numerics, turbulence modeling, high-performance computing requirements, etc.) of current- and next-generation CFD technology/codes for swept, medium-to-high-aspect ratio wings for landing/take-off (high-lift) configurations.

- Develop practical modeling guidelines for CFD prediction of high-lift flow fields.

- Determine the elements of high-lift flow physics that are critical for modeling to enable the development of more accurate prediction methods and tools.

- Enhance CFD prediction capability for practical high-lift aerodynamic design and optimization.

General Information:

- Participation in the high-lift prediction studies is not required to attend the workshop; everyone is welcome.

- Open, unbiased forums are included in the workshop to discuss the results and promote cross-pollination of best practices.

- Slightly modified format aimed at boosting the collaborative nature of the workshop, based on community feedback.

- The HLPW-4 test cases will utilize the High Lift Common Research Model (CRM-HL) landing configuration, and will focus on CFD prediction for flap deflection effectiveness and maximum lift ($C_{L,max}$). Data obtained from testing of the NASA 10% semi-span model in the QinetiQ 5-metre wind tunnel will be used for comparison.

For more information, visit the HLPW website:
http://hiliftpw.larc.nasa.gov or send email to: hiliftpw@gmail.com

HLPW-4
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