

Figure 1: SCB geometries tested in NextWing

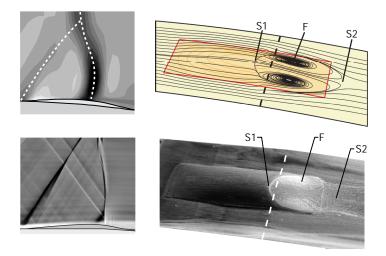


Figure 2: Comparison of shock structure and surface streamlines observed in CFD (top) and experiment (bottom)

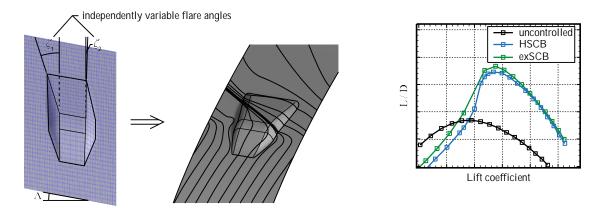


Figure 3: Parameters for modifying tail flanks; resulting bump shape and skin friction lines on swept wing; L/D polars comparing new bump with classical shape

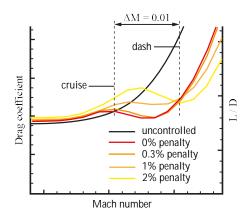


Figure 4: Polars comparing SCB performance with uncontrolled airfoil for various allowable cruise penalties

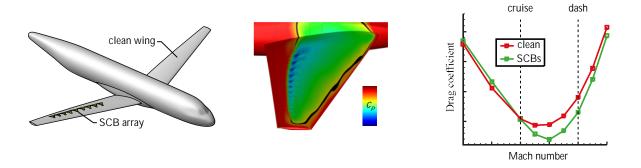


Figure 5: SCB on wing/fuselage combination and computational results

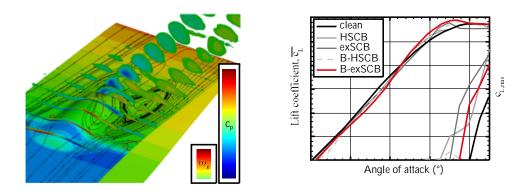


Figure 6: Computed skin friction lines, pressure contours and vorticity for HSCB in buffet; airfoil lift characteristics

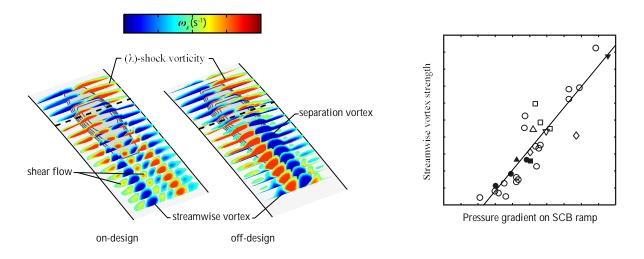


Figure 7: Flow structures produced by SCBs at different operating conditions; correlation of vortex strength with pressure gradients on SCB ramp