

Silent and Efficient Supersonic Bi-Directional Flying Wing

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Concept:

- Revolutionary Concept for Supersonic Flight
- Symmetric about both longitudinal and span axes
- Flying Wing Rotate 90° between supersonic & subsonic
- Remove aerodynamic conflict between low speeds and high speeds
- Slender supersonic configuration naturally translates to high subsonic aspect ratio
- High performance at both subsonic & supersonic speeds
- Preliminary Business Jet Configuration ($M=1.6-2.0$) achieves High L/D_p with high aerodynamic efficiency
- Remove sonic boom due to smooth ground over pressure signature (no N-wave)

Proposed Tasks:

- 1) Design refinement with CFD;
- 2) Mission analysis;
- 3) Wind tunnel testing verification

