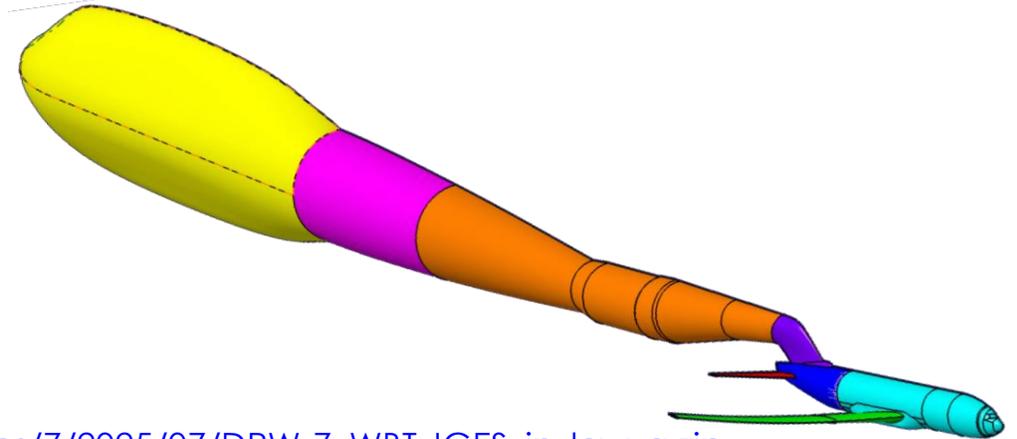


Test Case 2b: T&I Study (Wing/Body/Tail)

- **CRM Wing/Body with Upper Swept Strut**

1. Wing/Body/Horizontal Tail (2.7% model scale in tunnel)
2. Wing/Body/Horizontal Tail + **Upper Swept Strut**
 - Wing deformed to matching condition (from DPW7)
 - Aft strut surface (shown in yellow) replaces interface to arc sector



- **Geometry**

- https://commonresearchmodel.larc.nasa.gov/wp-content/uploads/sites/7/2025/07/DPW-7_WBT_IGES_in_low_q.zip
- https://dpw.larc.nasa.gov/DPW8/Test_Environment/Test_Case_1/Geometry/Sting_No_Arc_Sector_Bulb_noRotation_2025_09_03.igs

- **Conditions & Reference Units**

Mach	Re _c	T _{static} (120° F)	α
0.85	5×10^6	579.67 R 322.04 K	-1.50°, 0.00°, 1.50°, 2.50°, 2.75°, 3.00°, 3.25°, 3.50°, 3.75°, 4.00°, 4.25°

Sref (semi-span grid)	Cref	Semispan	Moment Center
216.77544 sq.in	7.5195 in	31.23225 in	(156.0003, 0.00, -0.00035)

- **Comparison metrics**

- Forces / Moments
- Sectional C_p distribution
- Residuals (Flow & Structural Solver)

Comparison Data
NTF197: r92,r97,r99
NTF215:
NTF229:
Ames216: