

0 AoA
207EF FWO No Gear 25D Elevator Deflection
Wing, Canard, Mid-Wing, Port and Starboard Wing Panels,
LHS/RHS Elevator, LHS/RHS Aileron, LHS Vertical/Yawboard,
RHS Vertical/Yawboard, and Fuselage Aerodynamic Coefficients, Forces and Moments
50 Kts., 0 Ft., 0 AoA, 0 Beta
12-24-2018

207EF FWO Aircraft:

AERODYNAMIC COEFFICIENTS

Force Coefficients

Lift Coefficient: -1.09

Side Force Coefficient: 0.00413

Pressure Drag Coefficients: 0.0637

Friction Drag Coefficients: 0.00879

Total Drag Coefficients: 0.0724

Lift-to-Drag Ratio: -17.20

Related Force Coefficients:

CFx: 0.0637

CFy: 0.00413

CFz: -1.09

Moment Coefficients (about CG Reference)

Pitching Moment Coefficient: 1.04

Roll Coefficient: 0.105

Yaw Coefficient: -0.0132

Related Moment Coefficients:

CMx: 0.105

CMy: 1.04

CMz: -0.0132

AERODYNAMIC FORCES AND MOMENTS

Surface Forces

Lift Force is: -5,025.94 N (-1,129.93 lbs)

Side Force is: 18.94 N (4.26 lbs)

Pressure Drag Force is: 292.23 N (65.70 lbs)

Friction Drag Force is: 40.34 N (9.07 lbs)

Total Drag Force is: 332.57 N (74.77 lbs)

Related Aerodynamic Forces

FX: 292.23 N (65.70 lbs)

FY: 18.94 N (4.26 lbs)

FZ: -5,025.94 N (-1,129.93 lbs)

Moments (about CG Reference Point)

Pitch: 6,404.71 N-m (4,724.11 lbs-ft)

Roll: 651.25 N-m (480.36 lbs-ft)

Yaw: -81.61 N-m (-60.20 lbs-ft)

Related Moments

Mx: 651.25 N-m (480.36 lbs-ft)

My: 6,404.71 N-m (4,724.11 lbs-ft)

Mz: -81.61 N-m (-60.20 lbs-ft)

The Reference Area is: 11.33 m² (121.94 ft²)