



Table 1. Principal Dimensions

Height

Left winglet tip	93.2 in.
Right winglet tip	93.9 in.
Length (nose to spinner)	183.1 in.
Wing span	315 in.
Canard span	142.1 in.

GROUND CLEARANCES

Left Wing tips	37.1 in.
Right Winglets	37.0 in.

PROPELLER

Horizontal	45.3 in.
Vertical	16.5 in.

CABIN

Length	
Front	70 in.
Rear	54 in.
Width	
Front	36 in.
Rear	35 in.
Height	
Front	36 in.
Rear	35 in.

Table 2. Airfoil Geometry

Airfoil	Average Measured	Tolerance
<b>WING (Eppler 1230)</b>		
Incidence	L 0.51° R 0.48°	<u>+0.5°</u>
Sweep	L 25.0° R 24.3°	<u>+1.1°</u> of each other
Chord (BL 106.25)	L 31.50 in. R 31.15 in.	31.35 in.
Thickness (% chord @ BL 108)	L 15.9% R 15.8%	-----
Dihedral	L -1.6° R -1.4°	-----
Leading Edge Fuselage station location Root Tip	114.2 156.5	FS 113.9 <u>+0.3</u> FS 156.0 <u>+1.0"</u>
<b>CANARD</b>		
Incidence	L 0.87° R 1.5°	0.6° <u>+0.3</u>
Sweep	None	None
Chord	13 in.	-----
Thickness	19% at 41% M.A.C.	-----
Dihedral	L -0.18° R -0.15°	0
Leading edge fuselage station location	18.3	FS 18.6 <u>+0.3"</u>
<b>WINGLET</b>		
Mean aerodynamic Chord	20.3 in. upper 26.0 in. lower	-----
Thickness	12% M.A.C. upper 11% M.A.C. lower	-----
@ M.A.C. Span	L 56.3 in. R 56.9 in.	-----

Table 3. Control System Rigging

Control	Average Measured	Tolerance
<b>ELEVATOR</b>		
<u>Left</u>		
Weight	3.7 lb	Less than 3.9 lb
Mass balance	16° TEU	12-26° TEU
Travel		
Trailing edge up	19.1°	20°+2° TEU
Trailing edge down	18.2°	22°+2° TED
Free play (static)	0.04 in.	-----
<u>Right</u>		
Weight	3.5 lb	Less than 3.6 lb
Mass balance	22.0° TEU	12-25° TEU
Travel		
Trailing edge up	18.5°	20°+2° TEU
Trailing edge down	23.9°	22+2° TED
Free play (static)	0.04 in.	-----
<b>AILERONS</b>		
<u>Left</u>		
Weight	5.4	-----
Mass balance	Bottom surface 2.7° TEU	Bottom or top surface level
Travel		
Trailing edge up	1.87 in.	2.1 in.+0.3in. TED
Trailing edge down	2.0 in.	2.1 in.+0.3in. TED
Free play (static)	0.1 in.	-----
<u>Right</u>		
Weight	5.5 lb	-----
Mass balance	0.1° TEU	Bottom or top surface level
Travel		
Trailing edge up	1.87 in.	2.1 in.+0.3in. TEU
Trailing edge down	2.0 in.	2.1 in.+0.3in. TED
Free play (static)	0.2 in. TEU center 0.02 in. TED	
<b>RUDDERS</b>		
Left deflection	5.9 in.	6 in.+0.5 in.

Table 3. Control System Rigging (cont)

Control	Average Measured	Tolerance
Static force (at full deflection)	36.6 lb	N/A
Right deflection Static force (at full deflection)	5.75 in. 27.3 lb	6 in. $\pm$ 0.5 in. N/A
<b>LANDING GEAR</b>		
<u>Main</u>		
Toe-In Left Right	0.29° 0.21° 4.0° left 4.9° right	0.25-0.5° per side
Caster angle Tread (between center line of main wheels)	62.15 in. (empty)	-----
Fuselage station Size Pressure	109.7 500 x 5 40	FS 110.5+1 500 x 5 35-40 psi
<u>Nose</u>		
Castering Friction Size Pressure Gear Actuation cycle Gear warning Wheel base (nose to main gear center line)	3.1 lb TER 3.7 lb TEL 2.80/2.50 40 psi 18.3 lb extend 0.4 in. 92.1 in. (empty)	2-4 lb Standard 40-45 psi 10 lb load last 0.1 in. -----
<b>PROPELLER</b>		
Diameter Pitch Track Landing airbrake actuation load	62 in. 66° 0.1 in. 39 lb	62 in. 66° $\pm$ 0.1 in. 40 lb