



DIMENSIONS AND GENERAL DATA

WING SPAN	26.1 FT	ENGINE LYCOMING	0-235 L2C
WING AREA	94.8 SQ FT	RECOMMENDED FUEL	100LL OR 100/130
CABIN		MAX FUEL CAPACITY	52 GALLONS
LENGTH	100 IN	MAX GROSS WEIGHT	1325 LB
WIDTH	23 IN		
HEIGHT	37 IN		

Figure 1. Dimensions and General Data

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
WING (Eppler 1230)		
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> "
CANARD		
Incidence	L 0.87° R 1.5°	<u>0.6°+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> "
WINGLET		
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
ELEVATOR		
Left		
Weight	3.7 lb	Less than 3.9 lb
Mass balance	16° TEU	12-26° TEU
Travel		
Trailing edge up	19.1°	20° <u>+2</u> ° TEU
Trailing edge down	18.2°	22° <u>+2</u> ° TED
Free play (static)	0.04 in.	-----
Right		
Weight	3.5 lb	Less than 3.6 lb
Mass balance	22.0°TEU	12-25° TEU
Travel		
Trailing edge up	18.5°	20° <u>+2</u> °TEU
Trailing edge down	23.9°	22 <u>+2</u> ° TED
Free play (static)	0.04 in.	-----
AILERONS		
Left		
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. <u>+0.3</u> in. TED
Trailing edge down	2.0 in.	2.1 in. <u>-0.3</u> in. TED
Free play (static)	0.1 in.	-----
Right		
Weight	5.5 lb	-----
Mass balance	0.1° TEU	Bottom or top surface level
Travel		
Trailing edge up	1.87 in.	2.1 in. <u>+0.3</u> in. TEU
Trailing edge down	2.0 in.	2.1 in. <u>-0.3</u> in. TED
Free play (static)	0.2 in. TEU center 0.02 in. TED	
RUDDERS		
Left deflection	5.9 in.	6 in. <u>+0.5</u> in.

Table 3. Control System Rigging (cont)

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