

Specifications: Little Toot Biplane

TYPE:	Single Seat, Sport Biplane
WINGS:	Fabric covered with wood ribs, and dual 1" spars. Braced biplane type with Cabane and I-struts
AILERONS:	Fabric covered all metal full-length ailerons on lower wings only.
FLAPS:	NONE
AIRFOIL:	NACA 2212 wing section.
SWEEPBACK:	8 degrees on the top wing.
DIHEDRAL:	2-1/2 degrees of dihedral on lower wing.
INCIDENCE:	2 degrees on both upper and lower wings.
FUSELAGE TYPE 1:	Tubular chrome-moly steel structure from cockpit forward, aluminum monocoque aft of cockpit.
FUSELAGE TYPE 2:	Full tubular chrome-moly steel structure.
TAIL TYPE 1:	Cantilever all aluminum structure. Trim tab in port elevator.
TAIL TYPE 2:	Tubular 4130 chrome-moly steel, fabric covered. Trim tab in port elevator.
MAIN GEAR:	Fixed cantilever spring steel from Cessna 140/120, or new aluminum gear with integrated brake line.
BRAKES:	Hydraulic disc.
TAIL-GEAR:	Steerable tail-wheel.
POWER PLANT:	Four-cylinder engines up to 200 HP. Six cylinders up to 250 HP
ROLL RATE:	360 degrees in 3 seconds
STRESS ANALYSIS:	10 positive/10 negative G's
SEATS:	Single
CANOPY:	Optional sliding canopy or open windscreen.
BAGGAGE:	Aft of pilot's seat.
WING SPAN (BOTH):	19'-0"
FUSELAGE LENGTH:	16'-6"

Specifications: Little Toot Biplane

TOTAL HEIGHT: 7'
WEIGHT EMPTY: 914 lbs.
GROSS WEIGHT: 1320 lbs.
MAX WING LOADING: 10 lb's/sq foot
MAX POWER LOADING: 13.7 lb's/sq foot
MAX SPEED: 200 Mph
STALL SPEED: 48 Mph

MAX SPEED AT SEA LEVEL

125 horse power: 135 Mph
150 horse power: 150 Mph
180 horse power: 165 Mph

NORMAL CRUISING SPEED

125 horse power: 125 Mph
150 horse power: 135 Mph
180 Horse power: 145 Mph

MAX RATE OF CLIMB

125 horse power: 1600 foot per minute
150 horse power: 2000 foot per minute
180 horse power: 2150 foot per minute

RANGE (Standard with wing tanks)

125 horse Power: 260 Statute Miles
150 horse Power: 240 Statute Miles
180 horse Power: 220 Statute Miles

FUEL CAPACITY

Fuselage tank: 19 gallons max
Opt. wing tanks: 18 gallons max
Total capacity: 37 gallons

MAX CROSS-WIND COMPONENT

15 Mph

V-SPEEDS

V ₂ min (min takeoff speed):	65 MPH
V _{FTO} (Final takeoff speed):	70 miles per hour.
V _C (most efficient cruising speed):	125 MPH
V _D (design diving speed):	200 MPH
V _{DF} (demonstrated flight diving speed):	160 to 180 MPH in aerobatic configuration
V _{FC} (Max speed for stability characteristics):	90 MPH
V _H (Max speed in level flight at max power):	138 mph.
V _{LOF} (Lift-off speed):	55-60

Specifications: Little Toot Biplane

VMC (Minimum control speed in flight):	48 mph.
V _{mcg} (Minimum control speed on the ground):	40 mph.
VMO (Maximum operating limit speed):	180 mph.
VNE (Never exceed speed):	200 mph.
VNO (Maximum structural cruising speed):	138 mph.
VR (Rotation speed):	60 mph.
V _{Ref} (Landing reference speed):	70 mph.
VSO (Power off stall speed):	48 mph.
VY (Best rate of climb):	100 mph.