

# Stechmücke (Mosquito)

Indoor Ultralight Floater  
Designed & drawn by Gordon Johnson 6/02  
Wingspan: 19 in  
Wing area: 129 sq. in.  
Weight: 23.4 grams

2-degrees down thrust  
and 2-degrees right thrust.

135mAh Lithium Polymer  
battery held on with  
1/16x1/32 inch magnets.

Battery mount,  
2 layers 1/32  
balsa sandwich

Receiver mount  
2 layers 1/32  
balsa sandwich

1.1in

2.3

Landing Gear:  
wheels are 2 layers 1/32 balsa  
oriented cross grain, sand round  
on Dremmel tool, glue aluminum tube  
in for hub, color tire with marking pen,  
use 0.8mm CF rod 4.25 in long for  
landing gear, glue and wrap bent  
piano wire on end for wheel axle.

Alternate battery  
mount for 120x3  
NiMh pack

8mm CF rod CA'd on  
to hold between fingers  
when balancing plane  
for CG 2.3 in back from LE

Aluminum tube to  
join ends of CF  
rod together.

7.75in

4.25in

Kevlar thread loops both  
sides and middle of wing

7in

0.8mm CF rod hooks (4)  
for dihedral thread CA'd  
with two wraps of kevlar  
thread.

16.5in

0.6in

Equipment used:  
Mabuchi 10mm M20-LV motor (Toytronics)  
6:1 gearing (Didel 60t spur, Kenway 10t pinion)  
Kokam 135mAh Lithium Polymer battery  
Westech 6.3x4.7 inch (16x12 cm) CF prop  
Dynamics Unlimited RFFS-100 receiver

Make 2 dihedral threads 14.75 inches long  
with a knotted loop at each end (see article).  
After covering wing, 1st thread is looped  
over LE hook and TE hook on one wing  
tip. 2nd thread is looped over LE hook on  
other wing tip, through 1st thread, and then  
to TE on the same wing tip to pull dihedral  
into wing. After aligning wing to have no  
twist, spot CA threads where they cross.  
Then shrink covering with iron, being  
careful to not touch CF rod forming  
perimeter of wing.

1/32 in 5 lb. density  
contest-grade balsa

6in

2.2mm CF tube

5/8, 13/32, and 7/32 inch  
lightening holes

1/16 in 5 lb. density contest-grade  
balsa, covered both sides with  
RA Microlite or equivalent

Cutout for  
rubber-band hinge

Actuator cutout  
(also rudder)

Tail skid: 2  
layers 1/32 balsa

