Bubble–Dancer RES Fuselage
M.Drela 20 Feb 02

1/16" brass tube soldered to pushrod

1/4" x 1/2" basswood side rails

11mm radius servo horns

uni CF strips

AA NiCd 600mAh 3.2 oz

Hitec 555 0.8 oz

JR341 0.63oz

1/4" x 1/2" basswood servo rails

rudder pushrod 0.029" stainless

elevator pushrod 0.05" CF rod

15 deg elevator servo horn bias gives more up-elevator throw to allow for spoiler-to-elevator mix

Six wraps of uni CF strips around bulkhead to transfer to wing bolts

4 layers 1.7 oz Kevlar

1/4" x 1/2" basswood side rails

1/16" brass tube soldered to pushrod
Snap−in pushrod 2x full size

wire pushrod
carbon pushrod
heat−shrink, thin CA

1/64" ply filler strip

10−32 Nylon bolts

Bulkheads:
Rock-hard horizontal-grain 3/16" balsa, sandwiched in 1/32" ply sheets. Saturate with thin CA inside drilled hole. Nylon nut is in slot, held with fiberglass.

Lead ballast
28 oz max
4.3 in^3

Filed nut jammed against unthreaded shank

Six wraps of 3K CF or Kevlar tow 1/32 ply doublers around bulkhead/beam assembly to transfer towline load to wing bolts.

1/4" x 1/2" basswood servo rails

23.5" x 0.5" 3 layers laid up with Kevlar shell

1/32 ply doublers

Two layers 23.5" x 0.5" 3 layers laid up with Kevlar shell

0.029" stainless

0.05" CF rod

glass/microballoon/epoxy fairing

deck cutout

1/64" ply filler strip

3/4" wide basswood

filed nut jammed against unthreaded shank

HS−81

bent 8−32 Allen bolt

0.67
boom angle 1.0 degree

antenna inside boom

7.5" x 0.3" x 0.021" prepreg CF

Two layers 23.5" x 0.5" 3oz Uni CF laid up with Kevlar shell

Two layers 12.0" x 0.5" 3oz Uni CF laid up with Kevlar shell

two layers 2oz bias glass wrapped around hook beam

wing angle 1.0 degree

led nut jammed against threaded shank

boom angle 1.0 degree