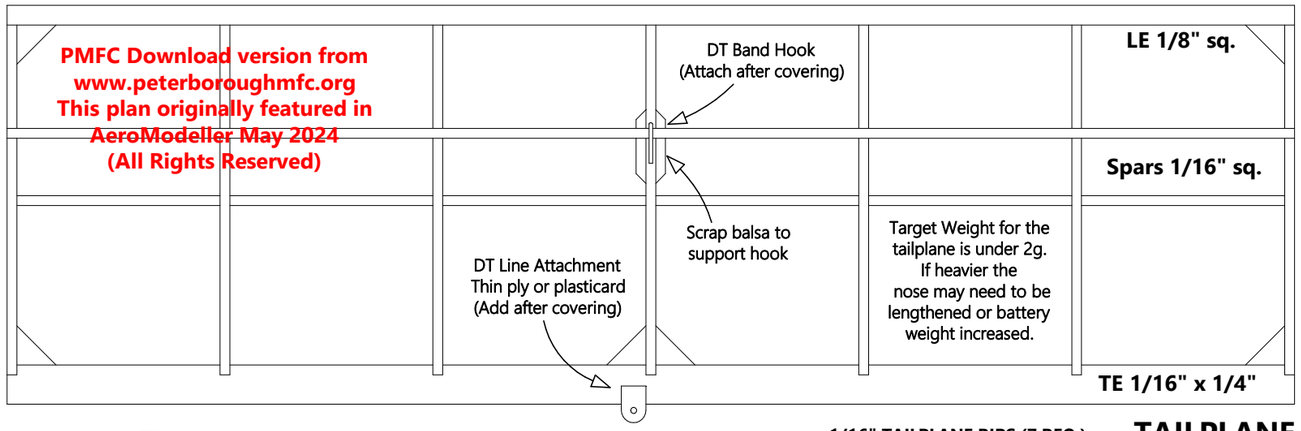
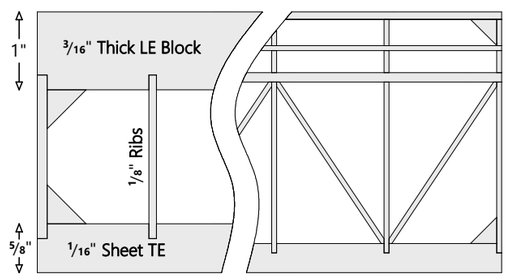


TAILPLANE

1/16" TAILPLANE RIBS (7 REQ.)

Geodesic Wing
6% Airfoil

Spar Options: ① ② ③

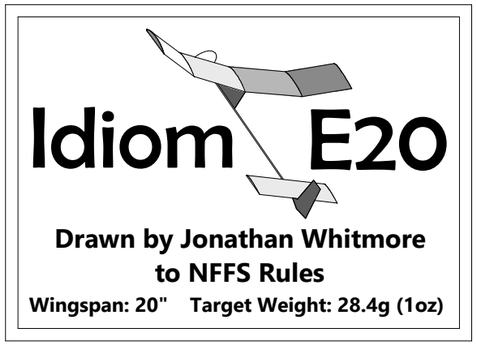


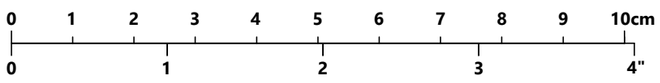
1:2 Scale

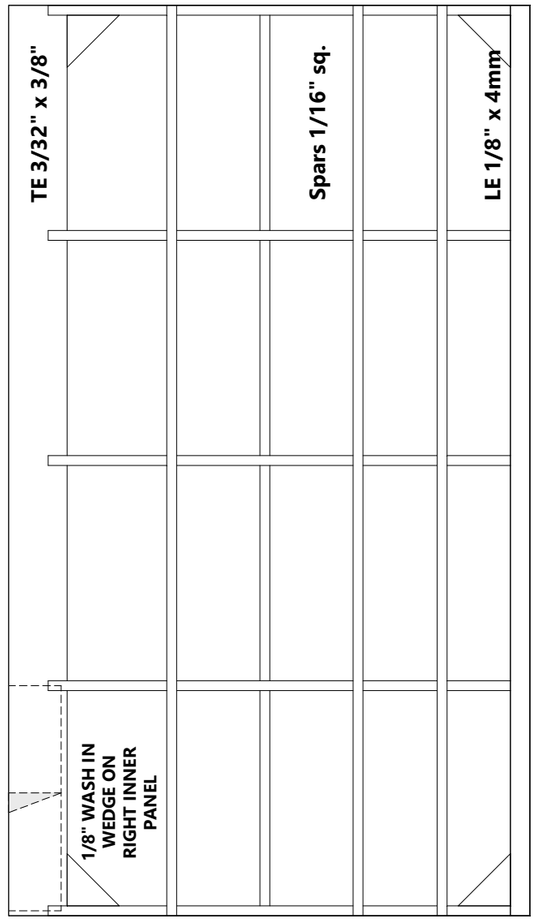
Semi-Solid BE5017FB 5% Airfoil

ALTERNATIVE WING CONSTRUCTION IDEAS

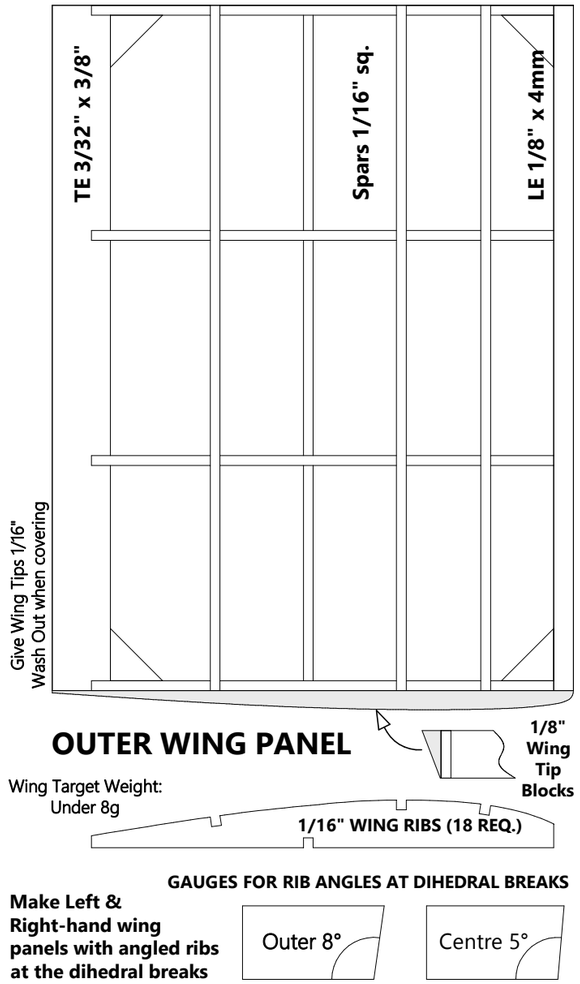
Semi-Solid Balsa (left) suits thin CLG-style airfoils. A wing blank is made up of LE block and wider TE, notched for 1/8" ribs. Airfoil shape is sanded into this. Thin Built-Up wings (right) may need geodesic ribs for stiffness and thinner spars must be engineered for strength. Spars options include: 1. Thin carbon caps on a light balsa web.
2. Box spar from 1/32" balsa.
3. T or I Beam spar from 1/16" balsa. Spars must be notched to allow for ribs. Ø3mm carbon tube spars could be used but must be very light.







INNER WING PANEL



OUTER WING PANEL

Wing Target Weight:
Under 8g

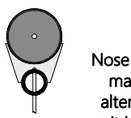
1/16" WING RIBS (18 REQ.)

GAUGES FOR RIB ANGLES AT DIHEDRAL BREAKS

Make Left & Right-hand wing panels with angled ribs at the dihedral breaks

MOTOR MOUNT

Shape from balsa block with correct thrustline offsets. Mount motor in heatshrink tube. Glue and secure with tape.



SECTION THROUGH MOTOR MOUNT

8.5x20mm CORELESS MOTOR

1S 180mAh LIPO (4.6g)

Nose length may be altered to suit heavier 220mAh battery or overweight tailplane

Wing Incidence +2.5°
ref. flat bottom
Wing Chord 85mm

CENTRE OF GRAVITY
45-50mm from Wing Leading Edge

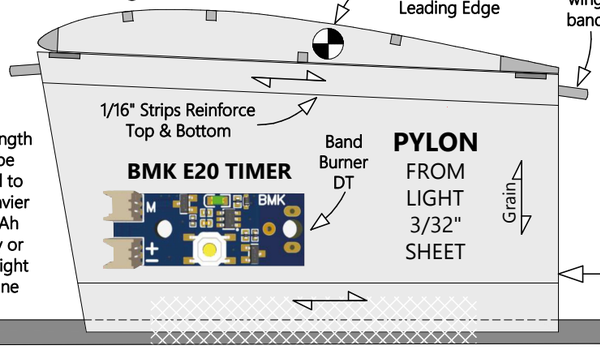
Dowels to secure wing band

1/16" Strips Reinforce Top & Bottom

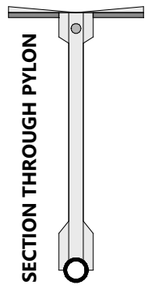
BMK E20 TIMER

Band Burner DT

PYLON
FROM LIGHT 3/32" SHEET
Grain



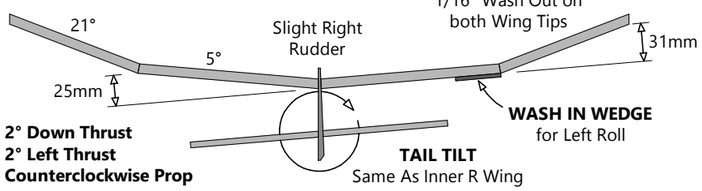
SECTION THROUGH PYLON



Nose to Pylon Base 90-95mm

Groove pylon to suit boom and reinforce with light (18gsm) glass cloth

TRIM SETTINGS - REAR VIEW



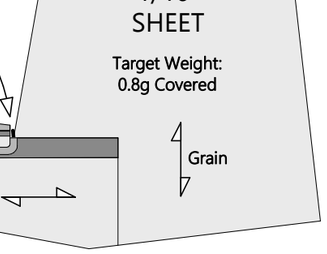
2° Down Thrust
2° Left Thrust
Counterclockwise Prop

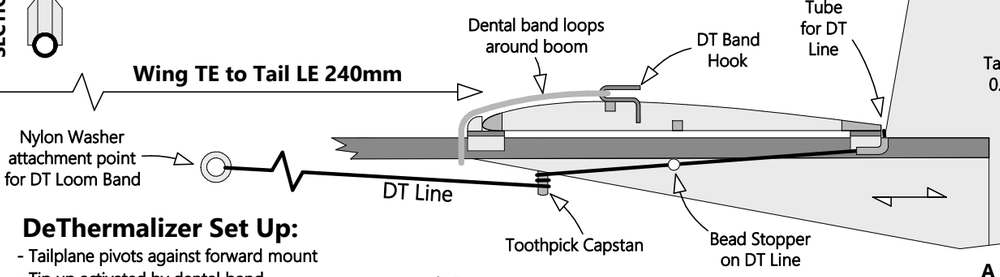
Wing TE to Tail LE 240mm

FIN

FROM LIGHT 1/16" SHEET

Target Weight: 0.8g Covered



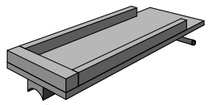


DeThermalizer Set Up:

- Tailplane pivots against forward mount
- Tip up activated by dental band
- Tail is held down at TE by DT line
- Line secured by wraps on capstan
- Bead stopper sets DT'd tail angle
- Loom band hooks on band burner

PROPSAVER
22SWG Wire
(Drill Through Boom)

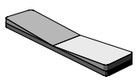
BATTERY TRAY
Size to fit Battery and position for correct CG



Vertical grained 1/8" balsa forms grooved base

WING MOUNTS

From 1/32" Ply
Use scrap balsa to support Wing



2° Down Thrust

Hole through base

Dowel for dental band securing battery

2° Left Thrust

Cross-grained balsa

Wing Mounts 5x22mm

Set Wing Mounts into top of Pylon

Carbon Tapered Boom

Ø4.4mm x c.490mm (3.5g)

Forward Tail Mount Strip forms DT Pivot

TAILPLANE MOUNTS

From 1/32" Ply
Support with scrap balsa
Use 5° Left Tailplane Tilt

(Rear View)

Forward Tail Mount 6x18mm

Rear Tail Mount 5x18mm

A Full Parts Sheet is available at www.peterboroughmfc.org