



- Fuselage Notes--all stringers are 1/16" square balsa:**
- Sides--build one side frame over the Right Side view and one over the Left Side view
    - Use 3/32" square balsa for the longerons, crossbraces, and verticals at each end
      - Dampen the longerons before pinning
      - Allow to dry completely to set their curvature before unpinning
    - Add one side "s" former F2 through F7 to each side where shown on plan
  - Top--pin the side frames over the Top view
    - Add top "t" formers F2 through F7
    - Add keels K1 and K2
    - Add 1 stringer between the fuselage and scoop/turtleck on each side
  - Bottom--unpin the assembly and add bottom "b" formers F2 through F7
    - Add Saddles S between F3 and F5
  - Ends--add F1 and F8, trim the ends of the longerons if necessary
  - Nose Block--stack parts C1 through C4 using center opening for alignment
    - Glue this assembly to F1 and sand to shape
  - Fit the wing
    - Remove lower longerons between F3 and F5
    - Fit wing in pocket against saddles
    - Fit paper wing panels to each side of fuselage

- Motor Notes**  
 The prototype was designed around the old AR6400 brick and brushed motor. The motor gearbox was siliconed to a balsa plate in the nose. The newer 2S brushless brick and motor would be a better choice today. Outlines for a motor mount for the eFlite BL180 have been added to the Parts Outlines sheet.

- Landing Gear Notes**
- Build two struts by joining the U1's and U2's
  - Bend .032" music wire to reinforce the struts
  - Make an axle from .032" music wire
  - Fit the assembly together as shown in the inset with the axle below U3
  - Make each rim by joining two U4's with grain 90deg apart
  - Wrap each rim with foam cord for tires
  - Reinforce the center wing ribs with scrap balsa as shown, drill holes, and plug the finished landing gear assembly in place
  - Rig kevlar line from the axle to the wing blocks as seen on the full-scale Pete

- Tail and Wing Notes:**
- Outlines for Wing Tips and Tail Group are laminated from two plies of 1/32" x 3/32" balsa stripped from the kit wood
  - Glue tail parts in numerical order into laminated tail group outlines
  - Tail Group Bracing is 1/16" x 3/32" balsa
  - Wing Attachment
    - Wire wingpin in leading edge slips into reinforced hole in former F3
    - Use rare earth magnets hold trailing edge in place

SPECIFICATIONS	
Wingspan	20"
Length	17.75"
Weight	3oz
Wing Area	75.0 sq in
Power	UMX Brushed or eFlite BL180
Battery	180mAh

**INFIELD ENGINEERING<sup>™</sup> by Paul Kohlmann**

Title: **1/12 Scale Howard DGA-3 "Pete" Racer**

Size: **C** | Dwg. No.: **DGA-3 Pete plan** | Rev: **B**

Scale: 1:1 | Weight: 2.5-3.5oz | Sheet 1 of 2

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