

P10232 – ‘Airframe C’ Assembly Plan

The following is the build order and approximate duration of construction for each part of the plane along with a short description. Construction of Airframe C began on 3/16/2010 and is expected to be completed by 4/30/2010.

- 1 Main body structural assembly – approx 2 weeks including assembly rigs
 - Assembly rigs created to aid in alignment of wings and tail pieces
 - All body ‘boxes’ assembled and glued
 - Tail section assembled and stringers glued
 - Tail attached to main body
 - All main structural components of the body attached
 - Does not include wing or tail
- 2 Wing and Tail Structural Assembly – approx 1 week
 - Wing spars attached to wing box / Tail spars attached to tail box
 - Wing ribs and stringers attached to wing spar / Tail spars attached to tail box
 - Balsa paneling connected to wing structure where appropriate
 - Leading and trailing edges glued in place
 - Control surfaces attached and pinned
 - Servo mounts selected and installed (servos not installed yet)
- 3 Wing fiberglass, monocote, and servo assembly – approx 1 week
 - Final assembly of wing and wing box / tail and tail box
 - All wires run for servos inside wing and tail
 - All miscellaneous sensor wires run (eg. pitot tube)
 - Fiberglass coverage of inner half of wing
 - Monocote covering on outer half of wing, vertical and horizontal tail parts, and all control surfaces
 - Servos installed after monocote and fiberglass
- 4 Install all electronics – approx 4 days
 - Motor mounted
 - Batteries installed, placed to balance plane, and secured
 - Radio installed
 - ESC installed
 - ESC, battery, motor wired
 - Radio wires run to all control surfaces, UBEC, and ESC
- 5 Plane final assembly – 9 days
 - Monocote plane body
 - Verify wing box attachment
 - Confirm plane weight and balance
 - Confirm control of control surfaces
 - All access hatches created and secured
 - Program radio / ESC
 - Finish all outstanding build items