Construction & Competition Parameters:

3. a. If kits are used, the airplane does not contain any pre-glued joints or pre-covered surfaces.
3. b. Boron filaments are not used in the construction of the airplane.
3. c. Total airplane mass throughout flight ≥ 9.5 g.
3. d. The wing(s) have horizontally projected wingspan ≤ 45.0 cm and wing chord ≤ 9.0 cm.
3. d. The horizontal stabilizer has horizontal projected span ≤ 28.0 cm and chord ≤ 7.0 cm.
3. e. Variable-pitch propellers that include mechanisms to actively change the blade diameter or angle are not used.
3. f. A capacitor ≤ 3.0V, 5.0F powers a DC motor, which directly drives the propeller. Gearboxes are not used and the capacitor is charged with no more than 3.0V sourced from up to two 1.5V alkaline cells no larger than “D” size. The capacitor label and charging battery label are visible and show manufacturer ratings. The power system on the airplane only includes a propeller, motor, capacitor, switch, wires, and connectors. The charging system only includes battery cells, battery holder, wiring, connectors, and/or resistors.
3. g. The airplane is labeled so that the Event Sup. can easily identify to which team it belongs.
3. h. Students are able to answer questions regarding the design, construction, and operation of the device per the Building Policy found on www.soinc.org
5. b. Participants do not receive outside assistance, materials, or communication once they enter the cordoned off competition area to practice, to trim, for inspection, or to compete.
5. i. Before the preflight period, the team demonstrates their capacitors are discharged by connecting to the motor and the propeller does no turn.
5. n. Participants do not steer the airplane during flight.

PLANE MEETS ALL CONSTRUCTION AND COMPETITION PARAMETERS ABOVE

FLIGHT LOG

4. a-c. Is flight log complete, incomplete or not present? (Circle one).

A complete Flight Log must include the following:
- Materials used to construct the plane
- A labeled diagram or picture that identifies and describes the parts of their plane
- Appropriate metric units for all numerical values
- A front cover labeled with the Team Name and Number for the current tournament
- Recorded data covering ≥ 6 parameters (3 required, ≥ 3 additional) for ≥ 10 test flights
- Info from 4.c. if a 3-D printer, laser cutter, CNC machine or similar device was used

1ST FLIGHT

Which airplane from above was used?

2ND FLIGHT

Timer 1

Timer 2

Timer 3

General Rule: The team is disqualified. (Notify the team and their coach as soon as possible.)