

National Science Olympiad 2014 – Rotor Egg Drop B

Supervisors will record this information for each team & each team is encouraged to use this form as a **pre-tournament Checklist!**
Supervisors can also record team results on the excel Rotor Egg Drop spreadsheet found at www.soinc.org

Team Number: B__ Team Name: _____

Student Names: _____ Final Score: _____

Construction and Competition Parameters

3.a: The device uses wings or blades that rotate around a central axis to slow the descent of the egg and no energy-producing mechanism of any type is used to power the rotor(s). Y N

3.a: Commercial rotor assemblies are not used and the device is not and does not contain an airplane, a balloon, or a parachute. Y N

3.b: Students seal the egg in the provided plastic sandwich bag and place it in the provided cup. Y N

3.c: Students mount and suspend the cup from the bottom of the helicopter device in such a position that the cup will be the first thing to contact the floor. Y N

3.d: No other shock absorbing or cushioning materials are used either inside (including trapped air) or outside the bag or cup to protect the egg before the cup contacts the floor. Y N

3.e: The entire device, including the cup in launch and flying configuration, fits into a 51cm x 51cm x 51cm cube in any orientation. Y N

4.b: The entire helicopter is impounded before the start of the event and no modifications are made other than to attach or extract the egg and cup from the helicopter. Y N

IS THIS HELICOPTER FREE OF ANY CONSTRUCTION AND COMPETITION VIOLATIONS? 1. Y N

Others

5.b: What is the mass, in grams, of the helicopter (without the egg and cup)? 2. _____

4.c: Did the competitors request another egg because they broke theirs before the drop? 3. Y N

4.g: Is the egg broken after the drop (i.e. having a crack leaving a wet spot on a paper towel)? 4. Y N

Participation Points Only (i.e. Device cannot be judged) 5. Y N

Disqualified (notify the team and their coach as soon as possible) 6. Y N

Descent Time: 4.e (To the nearest 0.01 second)

7. _____ sec

8. _____ sec

9. _____ sec