

## WILLAMETTE MODELERS CLUB LOW-DOC SCALE RULES

**Philosophy** – This is a relaxed event that showcases a modeler's building, trimming and flying skills through the construction and flying of most-realistic aircraft. It is hoped that these models will make the audience gasp, groan, applaud, and cheer-on the entrant's craft as it flies on to another successful flight. Or not.

**Eligibility** - Any free flight model of a human-carrying aircraft that has flown successfully in its full-scale form is eligible. In the case of an obscure prototype, documentation is critical. The Builder-of-the-Model Rule applies. Models may be powered by rubber, gas, CO<sub>2</sub>, Jetex, Rapier, or electric motor. Gas engines are limited to .15 cu. in. displacement.

**Documentation** - Documentation can be any three-view from a commercial source –books, magazines, the internet. A plan is not a three view. A contestant-prepared three view is not acceptable. Photos are welcome but should be limited to enhancing details, colors, markings, etc. Photos cannot be substituted for a three view.

**Flights** - The contestant will be allowed six attempts to make three official flights. An official flight lasts longer than 20 seconds and is required to accrue a flight score. Timing will start at the moment of release, or upon tow-release in the case of glider, and will end just before touch down. The highest single official score will be used.

**Take -off** – Contestants may elect to take-off from either a table or the take-off ramp, at their choosing, for no penalty.

**Repeat Winners** - Once a contestant has won three times with the same model, the model must be retired for a year.

**Static Judging** - Judging will include 5 areas of appearance: Fuselage - 10 points; Wings including struts and bracing - 10 points; Tail including struts and bracing - 5 points; Miscellaneous and Details - 5 points; and Color and Markings - 5 points. Total possible – 35 points.

**Flight Judging** - Realistic flight in three areas is observed during the flight score period. A smooth, realistic take off - 5 points; a steady, stable Cruise - 15 points; and a gradual, stable descent and approach - 15 points. Total possible – 35 points with a required minimum flight duration of 20 seconds.

## WILLAMETTE MODELERS CLUB LOW-DOC SCALE JUDGING GUIDE

**Some Givens** – Scale models require some enlargement of the tail surfaces or length added to the landing gear to facilitate flight. The new outlines should resemble the scale outlines in general proportion and shape. Flying wings accrue “tail” points in the same proportion as “wing” points. A model that looks like the real thing and flies like the real thing is what this event is all about.

**Fuselage, Cowl, Canopy, Windshield, Windows, Landing Gear, Tail Wheel, Cooling Inlets, Radiators** - General shapes and proportions. How convincingly are areas of solid material and fabric represented? Size and number of stringers? Are all elements of the canopy, windows or windshield represented and transparent? Is there canopy or window framing? Are cooling inlets or radiator housings and radiators present? Other three-view features present?

**Wings, Struts, Bracing** – General shapes, proportions and airfoil. Are metal and plywood areas represented well and are all ribs shown? How well-done is the separation of control surfaces? Are all struts and bracing present? Is rib tape shown? What about fairings, blisters and fillets?

**Tail, Struts, Bracing** – Same as the wing where appropriate.

**Miscellaneous Details** – These are things like lights, hand grabs, steps, cockpit coaming, mirrors, direction finders, louvers, armament, control horns, cables and pushrods, cowl flaps, panel lines, rivets, carrier hooks and other small items shown in a three view.

**Color and Markings** – The color scheme should be true to the period as should the markings. Paint or tissue are equally appropriate. How well done is the application? Are letters and numbers the same type and scale-sized? National insignia should be appropriate to the topic.

**Flight Judging** – The best flight is smooth, steady, stable, with no extreme attitudes through the entire flight. The flight is scored up to, but not including, contact with the ground at the end of the flight.