

Rules for Provisional Limited B Class

1. With the exception of the following requirements, all RCCA Open B class rules and scoring will be used.
2. Airplanes: Aircraft deemed ready for combat shall have an all up dry weight of no less than 3.25 pounds (52 ounces). There is no maximum weight restriction. All aircraft shall have a maximum wingspan of 64 inches, with no more than 600 square inches of wing area (a root/tip chord chart will be developed in order to expedite pre-contest inspections for the CD).

3. Engines, Propellers, RPM

3.1 Engine Displacement. Maximum total nominal shall be .29 cu. in. Engine must be complete with carburetor and muffler. Carburetor must be fully R/C functional as intended by the manufacturer and servo operated. The muffler must be expansion chamber type with no internal pipe (which would effectively increase its length and there allow "tuning"). The front of the muffler must be closed and "flow through" mufflers are not allowed.

3.2 Electric Motors.

The use of electric motors is acceptable as long as the aircraft meets the weight requirements as detailed in Section 2 with batteries in place, and the RPM limits.

3.3 Engine Shut Off.

The pilot must be able to shut off the model's engine(s) by radio control with the plane in any position, (e.g., a servo dedicated to throttle control or a kill switch).

3.4 Propellers

An unmodified APC 10x3 or MAS 10x4 propeller shall be used. Propeller may have coatings applied for balance purposes.

3.5 Exhaust Systems

Exhaust systems designed to increase performance through a "tuning" effect or use of an internal pipe or similar arrangement, are not allowed. Examples include, but are not limited to, tuned pipes and mousse cans. The front of the muffler must be closed and "flow through" mufflers are not allowed.

3.6 Maximum rpm

The maximum rpm shall be 15,000, measured on the ground with the carburetor barrel and throttle stick full open. Pilots are expected to bring their planes to the meet ready to

meet the RPM limits, and should provide their own tachometer. Pilots should tach their own aircraft at the contest prior to official RPM testing, and at other times during the contest to ensure conformance. It is the sole responsibility of the contestant to present an engine and aircraft that meet the specifications of the event.

The contest director will determine the frequency of RPM testing. The contest director may choose one or more of the following approaches to ensure engine RPM compliance at a Limited B Combat contest:

- i. The Contest Director or his/her designated technical inspector may test every contestant's engine for maximum RPM compliance before the first round of the contest. In addition competitor's engines may be randomly tested during the contest. A competitor may be tested more than once during an event. If, in the opinion of the contest director, engine RPM testing is required more frequently to ensure that all participants are in compliance, the CD may choose to have each engine tested in any round by the pilot's judge.
- ii. The contestant may choose to have technical inspector or judge adjust the engine's needle valve to achieve maximum RPM for the check, or may elect to have inspector "pinch" the fuel line to achieve peak RPM. If the contestant chooses the "pinch" check method the inspector will hold the tachometer on the engine and he/she will "pinch" the fuel line to peak the engine's RPM ability. If the engine exceeds the limit of 15,000 rpm, the engine and airplane to which it is attached are declared ineligible for combat and may not be launched for combat.
- iii. The contestant is allowed to make changes necessary to meet the specifications. The contestant may change fuels, make adjustments to the carburetor to limit its peak travel or utilize restrictions to the intake or exhaust system which limit the engines performance to that which is at or below the maximum allowable rpm specification. An ineligible engine and airplane may be tested after the pilot makes adjustments to his engine to bring it into rpm compliance. Testing may be conducted from "Start engines" through "End combat" of each round. If the contestant fails to achieve the RPM specifications the plane is ineligible from combat and may not be launched for combat. If engine adjustments/fuel/etc. are changed after compliance is established, the tach check should be repeated.

iv. Any engine, which in the CD's opinion is running over the limit in any round, may be tested at the end of that round.

6. To encourage participation, aircraft meeting ALL requirements of the RCCA SSC or 2548 classes will be allowed to fly in Limited B (please see applicable rules for each class).

7. GRANDFATHER CLAUSE To further encourage participation, during the 2005 season, aircraft with wingspans of up to 72 inches will be allowed to participate in Limited B, as long as they meet all other requirements of this class.