

ISR PSS “Warbird Slope Racing” Rules

1. Model Aircraft Requirements.

1.1 PSS Warbird Class. The intention of these rules and this class is to provide a structure for the racing of PSS warbirds. This class is intended recreate the Reno style races modified for Slope Soaring. Any piston driven **military** aircraft is eligible to race. Trainers, fighters, bombers, recon planes or support aircraft. No fantasy planes or concept planes, there had to be at least one example built to be legal. No jets, no rocket planes, no gliders, and no civilian aircraft. Warbird with a Civilian paint scheme are allowed. An example of this would be the ‘Miss America’ Reno racing P-51 Mustang.

1.1.1 The model PSS warbird slope glider must be constructed primarily of EPP foam with exceptions listed below. Gliders may be allowed or may be disqualified at the CD’s discretion for rules violations. Aircraft should be as close to scale as practical. The spirit of this event is scale warbird racing! (No super skinny, stretchy looking, modified planes will be allowed)

1.1.2 Wings shall be primarily foam (EPP). No hard material is allowed in the first 20% or 2” of the wing. The wing may be covered with film covering material, (such as Ultracoat, Coverite, Solartex, or similar), vinyl tape, mylar, fiber reinforced vinyl tape or any combination of these. Wood, metal, solid plastic, carbon fiber, Kevlar or any resin impregnated fiber material on or in the wing will not be permitted (except control surfaces and spars, see 1.1.3 & 1.1.4). Servos must be no closer than 1 inch from the leading edge at any point. Wings may be stretched to a maximum of 25% of the scale span. (using the scale fuse length as a guide)

1.1.3 Wing spars of any material are permitted provided they do not violate the provisions of item 1.1.2 above. Maximum total cross sectional area for spars shall not exceed 1 sq.in. Moveable control surfaces at the wing trailing edge (ailerons) are not considered part of the total spar cross section nor are sub-trailing edge materials.

1.1.4 Control surfaces, tail and winglets shall be constructed of wood and/or coroplast type material. They may be covered with film covering material, vinyl tape, fiber reinforced vinyl tape or any combination of the three. Control surfaces may be composite bagged or glassed over foam or wood material. Tail surfaces can be up to 20% enlarged in relation to the fuse for stability purposes.

1.1.5 Fuselage - The fuselage shall be primarily foam (EPP) and may be covered with iron on film/fabric covering material, vinyl tape, fiber reinforced vinyl tape or any combination of the three. A hard plastic or wood spinner may be used with a maximum diameter of 3.5”. Spinners with sharp points are not allowed. No composite materials

shall be used to cover or glass the fuse. Fuse profiles must be within 10% of scale in width, length and height.

1.1.6 Thrust Power - No plane shall possess any form of thrust power. Engines, electric motors, compressed gas or chemical propellants are prohibited.

1.1.7 Wing Span - The maximum allowable wingspan shall be 60 inches.

1.1.8 Weight - A maximum flying weight of 5 pounds (80 ounces) shall apply.

1.1.9 AMA Number of Models rule does not apply to this class. If a glider is damaged in this class, the pilot may fly any other model that meets the specifications of this class, including a borrowed one that is another pilot's primary entry. Once the pilot's primary glider is repaired, that glider may be used again so long as deemed safe by the contest director.

1.1.10 Ballast can be added but must be carried internally. No external ballast is allowed.

2. Contest Rules

2.1 Pilot duties – All pilots or designated replacements shall work as base B judge during the event. Exact assignments will be posted prior to the start of the first round. Generally after a pilot completes a heat race and lands, the pilot or designated replacement reports to base B to judge for the 2nd heat after the one flown. For example, pilots in heat one judge for heat three. Pilots in the next to the last heat judge for the first heat. So if there are six heats, the pilots in heat five judge for the heat one. The number of pilots in each heat may differ. The CD shall modify the assignments to fit the situation. If a pilot or designated replacement is late for a base judge assignment, the pilot receives TWO (2) penalty points (or a public flogging).

2.2 Heat Race – Pilots will be given the signal to launch. The race will use a flying start, similar to a sailing start in yachting. After the First Time Mark (FTM), any pilot may enter the course to signify the beginning of the heat race. FTM times will be set by the CD prior to the first round, but may be changed throughout the competition between heats to accommodate various changing conditions. Once all planes are airborne a 60 second count will begin. Any pilot crossing the start before “zero” is called will have to go back or loop around.

2.2.1 Pilots shall fly the heat race according to AMA rule 10.4 on page 118 of the Competition Regulations for 1999-2000 which states that all turns shall be away from the slope except during landing. Slope racing is a figure 8 pattern, turns are away from the slope, staying outside and crossing to the inside around the halfway point, traffic permitting. Stay inside during the approach to the turn and again, turn away from the slope. Callers should watch for opposing traffic

2.2.2 Starter, Pilots and Lap Counters shall stand at the pylon designated as Base A. The Starter is responsible for keeping track of the leader. If the leader is passed, the Lap Counter of the passing plane may be asked if his plane is passing for the lead, or just making up a lap.

2.2.3 Judges shall stand at the pylon designated as Base B.

2.2.4 Heats, Laps - There shall be 8 laps per heat race, that's 16 legs with 15 turns. Winner is the first to complete the 8 laps. MoM (Man-On-Man) is not a timed event. The accuracy of the lap count is critical.

2.2.5 Downed planes - A pilot may not re-launch or retrieve a downed glider once the race has started. The pilot must wait until the heat is over and the CD signifies the course is clear before retrieving a downed glider. This shall be considered a DNF.

2.2.6 No launch - If a pilot does not launch at the start of the heat, the pilot will receive a DNS.

2.2.7 DNF - If a pilot started the heat and drops out of the heat for any reason including a collision, the pilot will get a DNF. This includes if a pilot launches, but crashes before crossing the start line at the first time mark, this pilot will receive a DNF.

2.2.8 DNF All - If all planes go down prior to or during the heat race for lack of wind or lift, the heat race will be restarted when conditions permit.

2.2.9 Contest aborted race - The Contest Director, Safety Officer or Starter can abort the heat race at any time when safety is an issue. Examples are: a) Glider disrupting pilots, judges, or bystanders. b) Another flying object, including wild life enters the course or its close proximity.

2.2.10 Pylon cuts - If a racer cuts (Turns before getting a flag), he must go back and until he gets a flag. (If a racer gets the flag and then the flagger calls a cut the turn counts and the racer should continue.) **Once a flag is dropped a cut cannot be called!**

2.2.10.1 Flaggers - Always keep your eye on the plane you are flagging for! A turn shall be indicated by the appropriate flagger lowering his flag from above his head to the ground. The flag should be dropped as soon as ANY part of the glider crosses the line. Do not anticipate the plane breaking the line. Drop the flag quickly and once you have, leave it down until the plane clears the area. The pilot's caller will judge the turns at their side. If the contest director or assistant is in a position to call the near side turns he may do so.

2.2.11 Penalties - Any aircraft that flies on the slope side of the pylons at either base A or Base B will be penalized one lap. A safety line does not apply and an aircraft is allowed to fly inside the line of the flags as long as they do not turn inside the flags. (if you pass a pylon on the inside you are penalized one lap)

3. Race Course - The racecourse shall generally be 100 yards from Base A to Base B pylons.

4. Scoring – Heat race points are awarded as follows:

First Place – One (1) point

Second Place – Two (2) points

Third Place – Three (3) points

Fourth Place – Four (4) points

Did Not Finish (DNF) –Max Number of Pilots in a Round per Class + One, not to exceed Five (5) points

Did Not Start (DNS) –Max Number of Pilots in a Round per Class + Two, not to exceed Six (6) points. (Did not launch)

Example: There are two rounds, Round One with 4 pilots and Round Two with 3 pilots. If a pilot in Round 2 gets a DNF (crashes on course), he will receive 5 points (4+1).

Winner of a class is the pilot who receives the least amount of points.

General Notes:

The ISR and it's officers reserve the right to restrict any pilot or plane from participating in the event for reason of safety or rules violations, unsafe piloting practices or unsportsmanlike conduct.

All radio equipment must meet the current AMA and FCC rules.

The consumption of alcoholic beverages is prohibited during the event.

The *Warbird Slope Races* are an ISR club event. The event is not sponsored or hosted as an advertising venue for manufacturers. Manufacturers shall not use the ISR or ISR event results in their advertisements without prior written consent.