

East Coast Swamp Flyers RC Club #973

“Extreme RC Combat Event”

Rules and Regulations for Pilots (Rules and Regulations for Paintballers follows)

1. Objective. To recreate the excitement of aerial combat with Air to Air, Air to Ground, and Ground to Air engagements in an enjoyable, safe competition that will be interesting for spectators and challenging for the contestants.

2. General. All AMA and FCC regulations covering the R/C flier and his or her plane and equipment shall apply to this event. Every contestant shall sign the AMA Flight Safety Declaration Form, and attest that he or she meets the requirements stated therein. Contestants are expected to act in a safe and sportsmanlike manner at all times. Any conduct by a contestant deemed by the Contest Director (CD) to be hazardous or unsportsmanlike will be cause for immediate disqualification of that contestant from the event at the discretion of the CD. The judgment of the CD on safety matters shall not be protested. The builder-of-the-model rule does not apply to this event. There shall be no limitation on the type of equipment fitted to the model, or the number of controls, except as specified in the following sections. The contestant shall be allowed only one (1) model per round (except as noted in section 4.5), but may switch to an alternate model of his/her choice for any following rounds. All models flown must be safety inspected for airworthiness and inspected for compliance with the model weight and engine class requirements for which they are participating prior to the competition by the Contest Director or a CD appointed representative prior to competition.

2.1 Safety:

Safety for spectators, contest personnel and contestants is of the utmost importance for this event. The CD has the authority to enhance safety requirements to suit the need of the flying site and the contestants. The Combat Engagement Line, Safety Line, Pilot Line and Spectator/Pit Line should be clearly marked for the duration of the event. Spectators shall maintain a distance from the Combat Engagement Line of at least 500 feet for every 1.0 cu. in total displacement of the largest displacement aircraft in the contest. **All individuals forward of the Spectator/Pit Line shall wear protective hardhat**, as outlined in the Official AMA National Model Aircraft Safety Code, while combat flights are in progress. Each pilot is responsible for obtaining such headgear and shall have the sole responsibility to provide for his or her own protection.

3. Model Aircraft Requirements:

Any aircraft design may be used if it meets the following guidelines:

3.1. Engines. Engine size must be .55cu in or less. Mufflers or tuned silencers are required but may not exceed eight (8) inches in length. No other engine restrictions are in effect. Two-stroke, four-stroke, or diesel engines (stock or modified) that satisfy the displacement requirements are acceptable. All engines must have some sort of rounded spinner or safety cover on the propeller shaft, such as an “acorn nut” or AMA safety nut. No bare threads are allowed.

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

3.3 Artificial Devices/Substances. There will be no structures, or devices allowed on the model that could aid in the cutting of an opponent's streamer. Sticky fluids/sprays are permitted. Wing tip skid plates are allowed, but must not extend forward of the leading edge of the wing tip.

4. Contest Field Rules:

4.1 Contest Site: The contest site will be comprised of the areas/lines described below:

4.1.1 Combat Arena: The Combat Arena shall be an area of limited width and depth to be determined by the constraints of the flying facility and at the discretion of the Contest Director. The minimum width shall be 420 feet. The boundaries of the Combat Arena designate the only location where aircraft may engage in the act of combat. Once an aircraft leaves the Combat Arena, for any reason whatsoever, the act of combat by, or against, that aircraft must cease immediately.

4.1.2 Combat Engagement Line: The Combat Engagement Line shall be a line immediately adjacent to the Combat Arena. (See Contest Site Diagram attached) Planes may not engage in combat behind this line under any circumstances. (See these rules, Section 6, Scoring, for penalties to be imposed due to a violation of the Combat Engagement Line.)

4.1.3 Safety Line: The Safety Line shall be a line no less than 25 feet behind the Combat Engagement Line. At no time during the contest may an aircraft be flown behind the Safety Line except during the launch thereof (See Sections 4.1.5 Launch, 4.1.6 Landing and 4.1.8 Penalty Exceptions below). (See these rules, Section 6, Scoring, for penalties to be imposed due to a violation of the Safety Line.)

4.1.4 Pilot Line: The Pilot Line shall be a line no less than 15 feet behind the Safety Line. This area is where the pilots will stand during combat. Pilots must remain behind the Pilot Line at all times, except when launching or retrieving a landed aircraft. Permission for anyone to move beyond the Pilot Line to retrieve a downed or landed aircraft before all aircraft have landed at the end of combat is at the sole discretion of the Line Marshall. (See these rules, Section 6, Scoring, for penalties to be imposed due to a violation of the Pilot Line.)

4.1.5 Launch: Aircraft shall be launched from a point at least 15ft (aprox 6 steps) in front of (closer to the Combat Zone) the Pilot's Line. The launcher should not cross the Safety Line to launch. A pilot and/or their helper may cross the Pilot's Line and move forward to the above designated "Launch Zone" for the express purpose of such launch. Any plane, retrievable or not, is subject to all rules and penalties regarding any or all line violations."

4.1.6 Landing: Any landing, regardless of the reason, cannot be made any closer to the Pilot Line than the Safety Line. Any violation of the Safety Line on landing will incur the penalties designated for a Safety Line violation. No portion of the aircraft can be on or over the Safety Line. For this purpose the string and streamer(s) will not be considered part of the aircraft. (See penalty exceptions in Section 4.1.8.)

4.1.7 Spectator/Pit Line: Spectators shall maintain a distance from the Combat Engagement Line of at least 500 feet per cubic inch of engine displacement (See AMA Safety Code). The largest engine displacement allowed to compete in the contest shall be used to determine the required setback of the spectators from the Combat Engagement Line. Only contestants and contest personnel wearing hardhats may enter the area in front of the Spectator/Pit Line during combat. There must be a minimum of 40 feet between the Pilot Line and Spectator/Pit Line.

4.1.8 Contest Site Setup Example: Determine spectator location (spectator line), measure out to the combat engagement line the required distance for the largest engine displacement competing in that event (500 feet per cubic inch of displacement), determine where pilots will stand for flying (Pilot Line) then measure out 15 feet from Pilot Line for the Safety Line. If, with these measurements, the Combat Engagement Line is at least 25 feet in front of the safety line (Pilot Line can

be no closer than 40 feet behind the Combat Engagement Line) and there is a minimum of 40 feet between the pilots and the spectators you are good to go.

5. Contest Combat Rules

5.1 Contest Structure. The contest shall consist of 4 teams with each team consisting of 5 or more pilots. The contest shall consist of 8 non-elimination rounds. Each round will consist of two teams competing against each other. Each team will compete in 4 rounds. After each round the scores will be totaled. At the end of the contest, all the rounds will be totaled for each team's final score. The team with the highest final score in the contest is the winner. In case of a point tie, a simple coin toss shall be used to break the tie. The CD may option for a fly off or spot landing to break the tie if the pilots are in agreement.

5.2 Launching. Aircraft may be launched by hand, dolly, landing gear or catapult. Every contestant is allowed the use their Judge to help with starting, launching and retrieving the pilot's model.

5.3 Round Structure. Each round shall consist of:

5.3.1 Preparation/Preflight. The CD or Line Marshall shall ensure that each pilot has a judge, then he or she will announce that there is one (1) minute until the "Start Engines and Launch" signal.

5.3.2 Scramble/Launch. A call/signal to "Start Engines and Launch" begins a window of ninety (90) seconds for launching aircraft into the Combat Arena (no combat is allowed during this period). The period ends when the last aircraft is airborne, or ninety (90) seconds has elapsed, by the call/signal to "Start Combat".

5.3.3 Duration/Combat. The combat period has a duration of ten minutes. The combat period and all combat scoring begins at the call to "Start Combat". The combat period and any combat scoring will end after the call to end combat. The CD and Judges are responsible for keeping the time and advising the pilots of the time left or time passed during the round. The CD, Line Marshal and Judges are responsible for encouraging, or reminding the pilots to keep their aircraft near the center of the Combat Zone and at a reasonable distance and altitude in relationship to the Combat Engagement Line. Judges are also responsible for tallying up their individual pilots score.

5.3.4 Restarts/re-launches. If a contestant's aircraft fails to launch on takeoff or must land any time during the Combat Period and is still airworthy, an unlimited number of restarts are allowed within the time between "Start Engines" and "End Combat" is called, provided the aircraft is down in an area that allows for its safe retrieval. The area of safe retrieval is that area between the Combat Engagement line and the Safety Line. This rule is in place for the safety of pilots. No part of the pilot or aircraft retriever's body may cross the plane of the Combat Engagement Line. An aircraft straddling the Combat Engagement line where a portion of the airplane may be secured for retrieval without any part of the retriever's body crossing the Combat Engagement Line is allowed. To be retrieved all or some part of the aircraft must be on the pilot's side of the combat engagement line. In the case where only the streamer or the string of the streamer is on the pilot's side of the Combat Engagement line, retrieval is not permitted. In all cases the pilot or retriever must first have the permission of the contest official monitoring the line before attempting to retrieve the aircraft.

5.3.5 Landing/Stand Down. Landings will begin after the phrase/signal to "End Combat" has been given. Aircraft will land in an area designated by the CD and/or

Line Marshall forward of the Pilot Line. Line rules are enforced. Aircraft known to be low in fuel are given first opportunity to land.

5.4 Change of Aircraft. During a round, no change of aircraft is allowed once the pilot has launched or attempted a launch. Between rounds, the contestants may freely choose from any aircraft available to them. All aircraft switched during a round, prior to an attempted launch, must be on the same frequency.

5.5 Inter-round Safety Inspection. The CD or his/her appointed representative may, at his/her discretion, re-inspect any aircraft that he/she suspects may have become unsafe. If the CD pronounces the aircraft unsafe it will not be flown until the aircraft has been repaired and resubmitted to the CD for inspection. The CD is obligated to inspect an aircraft resubmitted for safety inspection as soon as the aircraft is presented. If it passes inspection the aircraft is immediately available for use. The judgment of the CD on safety matters can not be protested.

5.6 Streamers and string are provided by the CD to ensure uniformity. Crepe paper and cotton string are recommended. Streamers will be thirty (30) feet long and no less than five-eighths (5/8) inches wide and no more than one (1) inch wide, attached to the model by a cotton string extending at least five (5') feet from the tail of the model. (At the discretion of the Contest Director, alternate streamer materials not meeting these specifications may be used if weather conditions prevent the use of standard streamer material).

6. Officials:

6.1 Contest Director. A Contest Director (CD) will be in charge of each event. The CD or his/her representative will lay out and prepare the field and check each aircraft for conformance to displacement and safety requirements. The CD or his/her representative will be responsible for the making of flight matrices for all rounds of the contest. The CD or his/her representative will use the start signal once the 90-second launch window has elapsed or if all aircraft are airborne. At the end of the 10 (ten) minute round the CD or his/her representative will signal to the pilots to cease combat. The CD or his/her representative shall also tally scores from the individual aircraft judges for each individual in the competition. Streamers for the event will be supplied by the CD or his/her representative.

6.2 Judges: There will be one (1) judge for each aircraft flown per round. Each judge is responsible for helping the pilot visually inspect the plane during flight to ensure that if it has received paintball damage or been in a mid-air collision that it is still safely flyable. Judges are responsible for encouraging, or reminding the pilots to keep their aircraft near the center of the Combat Zone and at a reasonable distance in relationship to the Combat Engagement Line. Help with starting, launching and retrieving the pilot's model. Register points gained or lost by the aircraft being judged, according to the scoring list. After the landing of that aircraft, the judge will inspect the aircraft and tally up all paintball strikes.

6.3 Line Marshall: The Line Marshall will signal all Combat Engagement Line, Safety Line and Pilot Line infractions. The individual judge scoring any plane confirmed as having crossed the Combat Engagement Line, Safety Line and/or Pilot Line by the Line Marshall is to inform the pilot of the infractions. If a pilot is disqualified for that round the judge will ask the pilot to land immediately.

7. Scoring:

Streamer cut (other than your own)	100 Points
Balloon string cut	100 Points
Balloon breaks	200 Points
Landing on the carrier	150 Points

Crossing Combat Engagement Line

This penalty is only enforced during the Combat Period, which is defined as the time between Start Combat and Stop Combat. Pilots who cross the Combat Engagement Line during the combat period while engaged in combat (i.e. not landing or taking off) shall receive a verbal warning by the Line Marshall. Pilots who commit a second or third violation in the same round shall have 25 points subtracted for each violation from the teams score. Should a fourth offense occur in the same round, 100 points shall be subtracted from the teams score and the pilot shall lose any points earned in that round and be required to land immediately and remain grounded for the remainder of the round.

Crossing Safety Line

During each round, the first time a pilot's plane crosses the Safety Line during the combat period, he will be verbally notified by his judge or the Line Marshall of the violation and have 100 points subtracted from his teams score. If a second offense should occur in the same round, the pilot shall again be notified verbally of the violation, have another 100 points subtracted from the teams score, lose any positive points earned in that round, and be required to land immediately and remain grounded for the remainder of the round.

Crossing Pilot Line

The first time a pilot's plane crosses the Pilot Line he will be verbally notified by his judge or the Line Marshall of the violation, have 300 points subtracted from his teams score, lose any positive points earned in that round, required to land immediately, and remain grounded for the remainder of the round. If a second offense shall occur in the same event, 300 points subtracted from his teams score, loss of any positive points earned in that round, and the pilot shall be required to land immediately and remain grounded for the remainder of the event.

Penalty Exceptions: Planes that cross the Combat Engagement line, Safety Line or Pilot Line due to loss of control that is a direct result of a midair shall not be subject to penalty. However, if an aircraft is involved in a midair and it is determined by the pilot and the pilot's judge to be able to safely continue, and the aircraft is reengaged in combat, the pilot forfeits any opportunity to have the penalty exception apply to a future violation due to that midair, regardless.

7.1 Loss of streamer. A streamer shall be considered lost if it was improperly secured or broken in any way other than being cut by an opponent. Streamers lost or cut or not fully extended during launch for any reason shall be considered to have launched without a complete streamer. In these cases the pilot must land and secure another streamer, and the pilot is denied any positive scoring until a new streamer is attached.

7.2 Mid-air and Paintball Damage. Any pilot involved in a midair collision or that has sustained extensive paintball damage must disengage from combat, and leave the combat arena to the left, right or above, if possible. At the moment of impact, the plane shall be considered dead from scoring or being scored against. If the pilot can maneuver safely to an area outside the arena, and he/she and the Line Marshal both agree that the plane can safely continue, the plane shall be deemed alive and the pilot may re-engage. If the plane is deemed unsafe, the pilot shall land immediately beyond the Safety Line. If a flying facility makes the safe landing

impossible due to its size restrictions, the pilot shall remain airborne in an area away from the Combat Arena, pilots and spectators. After the round is complete and all other aircraft have landed, the pilot may be given clearance to land the crippled aircraft. It is the CD's responsibility to give a "heads up" warning in such case. At no time shall a pilot attempt to land a crippled aircraft inside the Safety Line or near the pilots during the round. Aircraft that midair during launch are considered failed launches, and shall be treated as if the plane failed to launch.

7.3 Optional Spot Landing. The CD can use a Spot Landing for points if he so chooses. The Spot Landing shall take place after completion of the Round and score 40 points. The plane must land within and remain within the designated area. The Landing Area (size and location to be determined by the CD) shall be located on the runway in the Combat Area. After each aircraft has landed the area shall be cleared for the next aircraft to land.

7.4 Streamer Cut Scoring

7.4.1 A streamer cut is defined as any time one contestant's aircraft removes any part of a streamer attached to or being towed by another contestant's aircraft between the announcement of "Start Combat" and "End Combat".

7.4.2 Cutting or removing any streamer being towed by another contestant's aircraft will be scored as a cut.

7.4.3 A cut must be observed and confirmed by a judge to be eligible for scoring. The decision of the judge(s) regarding scoring of cuts is final.

7.4.4 If two streamers intertwine during combat and any part of one becomes removed, the pilot whose streamer remains intact will be awarded the cut.

7.4.5 If more than two streamers are intertwined, the pilot(s) whose aircraft retain the original portions of their streamer will score the cut(s).

7.4.6 If two streamers become intertwined and any portion of both are removed, both pilots will score a cut.

7.4.7 Multiple cuts on multiple streamers towed by a single aircraft in a single pass count as one cut.

7.4.8 Multiple cuts on a single streamer in a single pass count as one cut.

7.4.9 Streamers not being towed by a contestant's aircraft (i.e. floating unattached) are not eligible for scoring.