

Critter Crunch

Location: Main Events room

Rules 3. 3

The Denver Mad Scientists Club, Sept. 2016 . This version supersedes all previous versions.

O. Spirit Rule:

- A. No Cheating! You know, like intentionally subverting the rules.
- B. Frankenstein Rule: In honor of the most famous Mad Scientist, and of Mad Scientists everywhere, the audience may verbally behave like an offended and outraged populace towards any and all critters/operators that they deem offensive and outrageous.

I. Critters:

- A. Critter size at the start of combat will be a 12-inch cube. The critter must be able to stand alone on the combat surface within these dimensions until combat begins. After the start of combat, the 12-inch cube restriction no longer applies and the critter may transform to fighting mode in any way not otherwise restricted.
- B. Class 1 critter weight limit is 20 pounds. Class 2 pounds. A 2. 5% error factor is allowed to account for variations in scales.
- C. Critters may be powered by any source socially acceptable (OSHA approved) for indoor use. Critter power source must be 100% contained in the critter and packaged appropriately for expected abuse.
- D. Control pendants, cables, or other external control devices do not count against the critter weight or size. Critter control may be by any means not prohibited by rules I(C) or II(E). However, radio-controlled critters must be able to operate on at least two frequencies (or, perhaps, an R/C tether combination) to avoid radio frequency conflicts.
- E. All critters must be capable of movement at a rate of not less than two inches per minute.
- F. No critter may, under any circumstances, present a hazard to the judge(s), spectators, the opposing operator(s), or the hotel. No critter may in its operation cause damage to anything other than the opposing critter or the combat surface. Any questions regarding the acceptability of any weapons should be addressed, as far as possible, before the event.
- G. All critters must conform to the general rules of the hotel and the convention.
- H. All critters will be subject to a technical inspection prior to combat. Failure to disclose any operating principle shall be grounds for disqualification. Judges may restrict any function deemed excessively hazardous.
- I. Weapons directed specifically toward attacking critter control systems (cable cutter, R/C jamming, etc.) are not allowed.
- J. Critters (including multipart critters) are allowed to have only one designated operator.

II. Combat:

- A. The current "combat surface" is defined as the surface of an unfinished wood platform 8-in long by 8-in wide and 4-in high.
- B. The combat volume is defined as the combat surface and the airspace above it to the height of whatever ceiling is present, not including the ceiling or anything attached to it.
- C. Leaving the combat volume entirely is considered a loss. Up to 50% of the critter may leave the combat volume provided that the remaining portion is capable of movement per rule I(E). In the case of two-part critters, the heaviest and/or main part of the critter must be designated and clearly marked as the main or 51% part. The other part is considered expendable. Loss of the main part is a loss for both.
- D. No part of any operator's body may intentionally impinge on the combat volume during combat.
- E. Projectiles:
 1. A projectile is defined as an object thrown with the expectation that its kinetic energy will affect its target.
 2. Projectiles, if employed, must be tethered. Tethers must be no longer than four feet.
- F. Non-projectile, loose items may be deployed from your critter but must be picked or cleaned up to the best of your ability after combat.

III. Judges:

- A. Judges shall be impartial non-participants.
- B. Judges may declare a contest completed at any time.
- C. Judges' decisions are final.

IV. Competition:

- A. The manner of elimination (single elimination, double, etc.) will be at the discretion of the competition organizers, and will be announced prior to the competition.
- B. Critters will start on opposite sides of the combat surface with the aft end of the critter even with the edge of the combat surface.
- C. The critters must be ready when the combat begins. Combat will not be restarted due to mistakes, radio conflicts, or other setup problems. A brief pretest may be allowed by the judge(s).
- D. Victory:
 1. To claim victory your critter must show mobility and be at least 50% within the combat volume. You will be declared defeated if your critter has been rendered immobile, or if 51% or more of the critter is outside the combat volume.
 2. If both critters are immobile, the critter controlling mobility is declared the winner.
 3. If both critters leave the combat volume, last one out wins.
 4. Absent a clear victory, combat will proceed for 3 minutes after which the judge(s) may declare a winner, a draw, or grant more time.

E. No critter shall be required to compete within 10 minutes of its previous combat to permit recharging of batteries, replenishment of expendables, damage repair, etc. Machines requiring excessive time to prepare for their next combat may be declared defeated by forfeit at the judges' discretion.

Clarifications

The following are some clarifications and examples to aid builders in the Critter Crunch. These are based on the questions we get asked most often.

Power Source:

The most obvious is batteries, but don't be limited. Any source designated by OSHA as suitable for indoor use is okay. This includes, for example, a four-stroke internal combustion engine powered by propane. Please include a tilt switch for shut off if it is turned over, where appropriate.

Combat Surface:

Check with the organizers before spreading oil slicks or deploying chainsaws. Cleanup is the sole responsibility of the critter operator(s).

Deployables:

In the interests of keeping the construction simple, self-retraction of deployed appendages is not required. That is, you may hand-prepare your critter to fit the 12-inch cube, although it must fit the cube unassisted. Deployments must be an automatic function.

Spirit of the Rules:

It is not the wish of the organizers to disqualify entries on niggling technicalities. Rather, the rules should be interpreted as broadly as possible to permit the widest variety of endeavor.

Projectiles:

A stream of liquid is not a projectile. Something that is tossed, so as to disperse or place it across the table, is not a projectile. Use common sense and don't quibble.

Expected Abuse:

From paragraph I(C) : Note that your critter may, during the course of competition, be severely damaged or even destroyed. Past competitions have seen critters equipped with pneumatic cylinders, spear-throwing CO2 cannons, and flame throwers. Please consider this when packaging your power source if it involves such potential hazards as acid (batteries), flammable liquids (engines), or plutonium (reactors).

Developing an emotional attachment to your critter is recommended, as it contributes to creative vengeance!

Autonomous Critters:

At present there is no separate division for autonomous critters. An autonomous competition demonstration may take place during the 2-pound competition on Sunday morning.