

## **Open Spot Landing Contest Rules for MASA Launch August 23, 2008**

This will be an Open Spot Landing Contest, which means any kind of recovery may be utilized, provided it fits within the NAR rules outlined below. Additionally, Art Gibbens has 18 MRC B4-4 engines to donate to fliers that wish to help the NAR Safety Committee gather more data on the use of old yet safe motors that have become decertified for NAR launches. These particular motors became decertified on July 1, 2000. They've been in his range box longer than that. At the picnic launch in Ostego last year he launched 9 of these motors with no CATOs. Over the many years of using them he has never had one CATO. He has also discovered that they have longer than advertised delay times, more like 5 to 6 second delays compared to an equivalent Estes engine. The top three entries using the MRC B4-4 motors will also earn prizes in the form of a free kit to build. The overall winner will also win a prize in the form of a model to be built. The contest is open to all single stage rockets on their first flight of the day, whether or not they use the MRC B4-4 motors or not.

Additional information on the MRC engines for those of you unfamiliar with them is that they are a smidgen shorter and skinnier than an equivalent Estes motor, so if your rocket uses friction motor retention, you'll need more tape. Standard metal retainers work just fine if that's what your model has for engine retention. They come without igniters, but Estes igniters work well.

Lastly, for clarity's sake, all entries in the contest must be declared by signing in with the contest director (Art Gibbens) before flying. This will facilitate the gathering of the necessary data for the expired engines to send on to the NAR and help keep the event organized.

Happy landings!

### **60 Spot Landing Competition**

#### 60.1 Scope

Spot Landing Competition comprises three events open to single-staged entries. The purpose of this competition is to land the entry so that the tip of its nose cone is closest to a predetermined spot on the ground.

#### 60.2 Control

The entry may not be remotely controlled or remotely guided.

#### 60.3 Recovery

Each entry must deploy its recovery device fully and completely before touching the ground. Each entry must comply fully with the provisions of [Rule 3.5](#).

#### 60.4 Separation

An entry must not separate into two or more unattached pieces.

#### 60.5 Number of Flights

Each entry shall be allowed only one official flight. No practice flights may be made.

#### 60.6 Scoring

Spot Landing Competition shall be scored as follows: the distance between the tip of the nose cone (or motor nozzle if the model has no nose cone) of the model and the target spot shall be measured by the officials. If the tip of the nose cone lands more than 50 meters from the spot, the model shall not place, but shall receive flight points; otherwise, the model shall be given a score equal to its distance in meters. The contestant achieving the smallest score shall be the winner.

#### 60.7 Classes

Spot Landing Competition shall be divided into three classes:

##### 60.7.1 Parachute Spot Landing

Each entry must deploy a parachute, with dimensions no less than 15 centimeters square or 15 centimeters in diameter for recovery purposes.

##### 60.7.2 Streamer Spot Landing

Each entry must deploy a streamer with dimensions not less than 25 millimeters by 300 millimeters.

##### 60.7.3 Open Spot Landing

Any type of recovery device allowed, provided it conforms to the provisions of [Rule3.5](#).

#### 60.8 Non-Return

Any model that cannot be returned to the officials shall be scored as if it had landed over 50 meters from the spot.

#### Weighting Factor 4