

4th Annual - Reach for the Stars Rocket Contest

Rules Synopsis

Two on-site adult Judges required

One must be a Public Official / School Admin, Police or Fire Officer, Scout Leader, etc.
Host may act as judge / Judges should not be contestants

From National Association of Rocketry / Pink Book - Spot Landing event

“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.”

Rockets must be constructed, prepared and launched by the contestant.

Assistance is limited to verbal coaching. See complete contest rules for details.

1. Target (center clearly marked & easily visible) should be placed 20 feet downrange from launch pad.
2. Rocket must be propelled by an “A” engine and landed by parachute
 - a. Target must be fixed to ground to prevent accidental movement.
Ex: a nail through a piece of paper or small flag on dowel.
3. In an order selected at random, each contestant will launch and mark their landing spot.
 - a. First touchdown spot of the tip of the nosecone for each rocket should be immediately marked.
Note: a golf tee or similar device makes a good marker
 - b. A launching angle of less than thirty degrees from the vertical must be used. (NAR Pink Book)

In the event that the judges cannot agree on the touchdown spot - the touchdown will be determined as a point halfway between the two points in question.

4. The three contestants with the closest landings launch again and mark the second landing spot.
 - a. The distances from the target will then be measured.
5. Measurements must be taken in feet and inches to the nearest 1/4 inch.
 - a. Metric measure may be used but must be carefully converted before submitting National Entry.

Note: Only the winning contestant needs to be measured with accuracy. All others may be estimated.

6. Record as 50 feet any:
 - a. landing at a distance greater than 50 feet.
 - b. landing that does not reach the ground (landings in trees, ponds, etc.)
 - c. rocket unable to fly.
 - d. rocket that cannot be returned to the judges.
 - e. rocket that separates into two or more unattached pieces.
7. Closest average distance wins!
(landing one distance, plus landing two distance, divided by 2, equals average distance)
8. Fill out, sign and submit National Contest Entry Form
9. Award certificates. This can be done at a later date if desired. (i.e. parent night, awards banquet, etc.)

4th Annual Reach for the Stars Rocket Contest – Quick Reference Guide

Rocket	Length 11 ½” to 15 ½”	Diameter 7/8” to 1 ¼”	No added weight
Parachute	Plastic Minimum four shrouds 8” to 14” in length	Diameter 11 ½” to 14 ½”	All or part of spill-hole <u>may</u> be removed (max 4 ¼” diam.)
Fins	3 to 5		
Engines (motors)	A8-3	A6-4	See rules for details
Launch Rod	Length 38” maximum	Launch Angle less than 30° from vertical	
Target	20’ downrange	Clearly visible	stationary