

*Fourth Annual
Reach for the Stars Rocket Contest
2010 Celebrations*

Rules & Regulations

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*Fourth Annual
Reach for the Stars - Rocket Contest
2010 Celebrations*

Open for ages 10 to Adult

It's as simple as **3...2...1...**

3... Build Rockets.

2... Launch & Mark Landing Spot.

Three closest rockets to target - launch again.

1... Closest average landing **WINS LOCAL EVENT!**

Enter Local winner's results into the national contest.

*Closest of all entries (one at each level) submitted to Contest
Headquarters by the deadline - WINS NATIONAL EVENT!!*

Entry Deadline June 15, 2010

**3 National winners celebrate at the
*October Sky Festival,
Coalwood, West Virginia***

**3 National winners celebrate at the
*Astronaut Hall of Fame,
Kennedy Space Center, Florida***

There will be a maximum of six national winners.

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Helping Kids Reach for the Stars, Reach for the Stars Rocket Contest*

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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 .95” to 1.25”	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

A. Purpose

1. The purpose of this contest is to foster an interest in model rocketry and space science and to promote the *Helping Kids Reach for the Stars* program.
2. The goal of the program is to give kids the opportunity to build and launch a solid-fuel powered model rocket.
3. The intent of the program is to honor *Christa McAuliffe*, her vision and her mission.

B. Eligibility

1. Open to anyone residing in any of the United States except where prohibited by law.
2. Contestant must be at least ten years of age at time of launch.

C. Prizes

1. One national winner at each level for each contest will be awarded the Grand Prize as outlined below – maximum 6 winners.
2. Contest hosts are encouraged to award prizes at the local level.

GRAND PRIZES - to be awarded to the 6 National Winners

- * Weather permitting. In the event of cancellation due to circumstances beyond our control, the celebration will be held at a time and location to be announced.

Travel expenses and applicable taxes not included.

Reach for the Stars Rocket Contest / Astronaut Hall of Fame Celebration

3 National Winners Celebrate at the

Astronaut Hall of Fame - Kennedy Space Center Visitor Complex

First Saturday in August (to be confirmed)

★★★ Includes tickets to *Kennedy Space Center - Visitor Complex* for contest winners and 3 guests each

★★★ **Launch** * your winning rocket & receive your trophy at the historical *Astronaut Hall of Fame*

★★★ Special tour of the *Astronaut Hall of Fame* for the Winners and their families

★★★ Visit the *Rocket Garden & Astronaut Space Mirror Memorial*

★★★ Ride the *Shuttle Launch Experience*

★★★ Includes two nights accommodations at the *Country Inn & Suites* (Cape Canaveral) per winner

.....*and more!*

Reach for the Stars Rocket Contest / October Sky Festival Celebration

3 National Winners Celebrate at the **October Sky Festival, Coalwood, W. VA.**

First Saturday in October (to be confirmed)

★★★ Receive trophy from author *Homer Hickam* - *Rocket Boys* (made into the movie *October Sky*) after the parade at the *Coalwood Clubhouse*

★★★ **Launch** * your winning rocket from **Cape Coalwood** with the original *Rocket Boys* giving the countdown.

★★★ Includes one night hotel accommodations per winner

.....*and more!*

D. Important Dates

Fourth Annual - Reach for the Stars Rocket Contest

September 1, 2009 - Sale of Contest Kits and mailing of *National Entry Forms* and certificates begins

Note: Local contests can be run at any time.

June 15, 2010 - National Entry Forms must be received at contest headquarters.

Forms may be sent to us via mail, e-mail or fax. (206) 350-7880

June 18, 2009 - Winners and Local Contest Hosts notified

June 20, 2010 - Winners posted on our website

August 7, 2010 (to be confirmed)

Astronaut Hall of Fame Launch and Celebration

at Kennedy Space Center Visitor Complex, Florida

October 2, 2010 (to be confirmed)

October Sky Festival Launch and Celebration

in Coalwood, West Virginia

E. Contest Registration / on-line at SciConServices.com or by mail.

Registration Package includes: *National Contest Entry Form, Achievement Certificates for each contestant, Local Winner's Certificate, Host's Certificate(s) and Flight Log.*

Contest Registration Fees

12 to 24 contestants Group Registration \$50 plus \$1 per contestant

25 contestants or more Group Registration \$100 plus \$1 per contestant

★**Note:** *Fees included in price when ordering contest rockets and supplies from TheRocketman.net or SciConServices.com.*

Orders can be placed:

- on our website via *PayPal* or *Credit Card*
- by fax or e-mail with a *Purchase Order*
- by *check* or *money order* payable to **SciCon Services** mailed to:

Reach for the Stars Rocket Contest Headquarters

1683 Siesta Drive, Sarasota, Florida 34239

★**Note:** Checks will need extra time to process and clear

Important note: When rocket kits are purchased from sources other than *TheRocketman* or *SciCon Services* they must adhere to the specifications outlined in section H.

Proof of this must be shown in the form of published specifications from the manufacturer included with copy of purchase receipt.

If no such information is available measurements must be made and signed by the local contest judges. Photos can be used to substantiate measurements.

Failure to submit this information with the National Contest Entry Form will void the entry.

F. On-site Judges

1. Two adults (over 21 years of age)

One must be a Public Official / School Admin, Police or Fire Officer, Scout Leader, etc.

a. Host may be a judge

b. Judges should not be contestants

c. Relatives of participating contestants should not be judges.

2. Judges will determine the landing spot of the rocket's nose cone and oversee the measurement of the distance from the target.

a. The target should be clearly marked and easily visible prior to the first contest launch.

3. 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. Information and measurements may be recorded in the *Flight Log* provided for recording and averaging all entries.

5. Decisions of the judges are final.

6. *National Contest Entry Form* must be completed and signed the day of the local event.

G. Three Contest Levels

All contestants must build, prepare and launch their own solid-fuel powered rocket.

Direct adult supervision recommended for those under 12

Age at time of launch.

★★★ **Kids Contest / Ages 10 to 14**

★★★ **Intermediate Contest / Ages 10 to 18**

★★★ **Open Contest / Ages 10 to adult**

H. Contest Supplies

This is a national contest. Supplies are limited. Order early!

1. Rockets must fit the following specifications:

11 ½ to 15 ½ inches tall

7/8 to 1 ¼ inches diameter

11 ½ to 14 ½ inch plastic parachute

3 to 5 fins

Examples – **Estes**

Alpha (#1225), *Alpha III* (#1256), *Generic E2X* (#1764),

– **Quest**

Astra (#1004), *Quest Astra III* (#1610)

– **Custom**

Freedom (#10024), *Sierra* (#10031)

2. Parachute Recovery

All rockets must use a 11 ½” to 14 ½” plastic parachute

- a. Minimum of 4 shroud lines for recovery.
- b. Shroud lines must be 8” to 14” in length from parachute to nosecone
- c. All or part of the pre-marked ‘spill-hole’ or a section no more than 4 ¼ inches in diameter may be removed.

Note: Nothing may be done to prevent full opening of the parachute.

3. Launch Rod

- a. Must be of standard construction – maximum 38 inches in length.

4. Engines

Estes A8-3 Engine (#1598)

Or an engine with the following specs

- Propellant 0.11 oz.
- Total impulse 2.5 N
- 3 second delay

Quest A6-4 Engine (#5740)

Or an engine with the following specs

- Propellant 0.12 oz.,
- Total Impulse 2.5 N
- 4 second delay

5. Launch Equipment

- a. model rocket launch pad
- b. launch rod (not to exceed 38 inches)
- c. launch control

6. Measuring tape

- a. Able to measure distances up to 50 feet and as small as ¼ inch. A tape shorter than 50 feet may be used; however attention must be paid to accuracy.

7. Modeling supplies

- a. Glue, sandpaper, hobby knife, scissors & paint (optional).

See detailed specs at www.SciConServices.com

8. National Entry Form

- a. Must be signed by:

- ★ Winner (parent or guardian signature needed for minors)
- ★ Three rocket contest participants
- ★ Judge #1 - May be Contest Host / over 21 years of age
- ★ Judge #2 / over 21 years of age

- b. Must be received at contest headquarters by **Contest Deadline** (See Section D).
- c. We are not responsible for lost, stolen, misdirected or postage due entries.
- d. Entries must be on original, numbered form.
Submission by fax, mail or e-mail accepted.

9. Certificates – with inspirational quotes from *Christa McAuliffe*

Achievement / “Push yourself as far as you can. Reach for the Stars!”

Awarded to all contestants who build and launch

Local Contest Winner / “Push yourself as far as you can. Reach for the Stars!”

Awarded to the winner of the local contest

Contest Host / “I touch the future. I teach!”

Awarded to those who run the local event

School / Group / “What are we doing here? We are reaching for the stars!”

Awarded to the organization that hosts the local contest

10. Flight Log

Included in *Registration Package* or available via mail request.

Form may be used to record flight data. Provided for your convenience.

I. Local Contests

1. A minimum of 12 participants is required for each local contest.
2. Individual contestants can enter only once per year for each celebration – maximum 2 local contests per year.
3. Participants must be registered for an event prior to launch.
4. One National Entry Form is supplied per Group Registration.
5. Use of our *Pause-for-Science*© *Rocket Construction* video disc is optional. It is provided as a construction aide only, to make rocket building easy for both the instructor and the participant.
6. Any model rocket building and launching should follow the rules and precautions set forth by the rocket manufacturer and the *National Association of Rocketry*.
7. All laws and regulations regarding model rocket flights for your location should be observed.

J. Procedures

Construction

Direct adult supervision recommended for those under 12

All contestants must build and launch a solid-fuel powered rocket.

1. Model rockets must comply with all specifications in this document (see section H) and the *NAR, Model Rocketry Safety Code*
2. The rocket may not be remotely controlled or remotely guided.
3. No modifications can be made to the original rocket design except for parachute spill-hole as specified in these rules.
4. No weight may be added.
 - a. Glue and paint must not be applied in a fashion to add excessive weight.

5. Parachute must be 12 to 14 inch, plastic
 - a. Parachute modification is limited to removal of all or part or none of the center circle / spill-hole (maximum 4 ¼ in. diameter).
6. Contestants must build their own rockets.
 - a. Assistance in construction and launch is hands-off only.
 - b. You can demonstrate (i.e. *Pause-for-Science*® video) and verbally direct.
7. Construction, preflight preparation, aim and launch must be done by the contestant. (Except in cases of physical limitation – local judges decision will determine assistance needed)

Launch

Practice launches are encouraged. However, once competition begins – all launches count.

1. Target (center clearly marked & easily visible) should be placed 20 ft. downrange from launch pad.
 - a. Target must be fixed to ground to prevent accidental movement (Ex: a golf tee through a piece of paper or small flag on dowel will work).
2. Contestants must do all of their own launch prep. (i.e. parachute packing, engine and igniter insertion, aim of launch rod, attachment of micro-clips, etc.)

Note: In the event of a physical limitation preventing the contestant from performing these tasks. Help may be offered. The contestant should direct the steps being performed.
3. In an order selected at random, each participant will launch their rocket and mark its landing spot. Touchdown spot should be immediately marked. (a golf tee or similar device makes a good marker)
4. Three Contestants with the closest landings to the target launch a 2nd time to determine winner of local competition.
5. Measurements of the winning entry must be taken in feet and inches (*to the nearest 1/4 inch*) and recorded.

Note: Only the winning entry needs to be measured with accuracy. All others may be estimated.
6. Closest average distance among top 3 competitors wins. Distance is measured from the first spot the tip of the nosecone touched the ground to the target –
(Distance of 1st landing plus distance of 2nd landing divided by 2)
7. 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.
8. During the contest, ignition of the engine constitutes a flight. If an engine fails to ignite, the engine, igniter or both may be replaced.
9. Certificates of Achievement should be awarded to all contestants who launch.
10. Local winners' entry form should be sent to **National Contest Headquarters.**
(see section E)

K. Contest Rules

VOID WHERE PROHIBITED

1. Winners will be notified 48 hours and posted on our website within 72 hours after contest deadline.
2. Decisions of the judges are final.
3. Employees of *TheRocketman / SciCon Services* and their immediate families are not eligible.
4. Winner's accommodations and travel (if provided) are for the *October Sky Festival* or *Astronaut Hall of Fame* awards ceremonies only. If winner cannot attend on the specified date, the prize will be forfeited and an alternate winner may be selected. Prize does not include taxes or any other expenses not specifically listed herein
5. All entries become the property of *TheRocketman / SciCon Services* and will not be acknowledged or returned.
6. *TheRocketman / SciCon Services* and affiliates reserve the right to substitute prizes of equal or comparable value.
7. *TheRocketman / SciCon Services* and affiliates assume no responsibility for any losses, injuries, or damages resulting from participation in the contest or the Winner's Celebration.
8. All prizes and awards are guaranteed by the individual company involved, not by *TheRocketman* or *SciCon Services*.
9. *TheRocketman / SciCon Services* and affiliates may use each winner's name, photograph, likeness, and/or voice in any publicity or advertising relating to the contest or future promotions without compensation or approval.
10. By participating, entrants agree to be bound by the official rules and the decisions of the judges.
11. All federal, state, and local taxes are the sole responsibility of the winners.
12. All other expenses associated with this trip are the responsibility of the winner. The prize is subject to availability, advance reservations and other restrictions.
13. Winner and his/her parent or guardian are required to complete and sign an affidavit of eligibility and liability release within 7 days of receipt of prize notification. Noncompliance or return of prize notification as undeliverable will result in disqualification and selection of an alternate winner.
14. We are not responsible for late, lost, stolen, incomplete, illegible, misdirected, or postage due mail or fax.
15. By entering the contest - contestants agree to release and hold harmless the sponsor, distributor and affiliates from any and all liability, loss, damage or injuries to any person or property of any kind sustained in connection with their participation in the contest and/or use of any prize awarded.

L. Additional Information

1. Check our website www.TheRocketman.net for contest updates and further information.
2. Use of our *Pause-for-Science Rocket Construction* video disc is optional. It is provided as an aide to making rocket building easy for both the instructor and the participant.
3. In the event of a tie the winner will be chosen by the closest single landing among the tying entries. If a tie still exists nationally, the winner will be chosen by the earliest postmark or fax date.
4. For local contests no questions or protests will be considered later than 15 minutes after the winner is announced.
5. Questions and protests must reach contest headquarters by the contest deadline.
6. Decision of the judges, both local and national, shall be final.

M. Winners' Announcement

For names of winners (available 72 hours after Contest Deadline) check our website www.TheRocketman.net or send a self-addressed, stamped envelope to:

Reach for the Stars Rocket Contest - Winners

1683 Siesta Dr.

Sarasota, FL 34239

This contest is void where prohibited and subject to federal, state, and local laws, taxes and regulations. Certain restrictions may apply.

Reference:

National Association of Rocketry - *Model Rocketry Safety Code*, *United States Model Rocketry Sporting Code* (Pink Book) - Spot Landing Competition

Estes - *Model Rocket Contest Guide*, *Laws Pertaining to Rocketry*, *Rocketry 101*, *Model Rocketry Technical Manual*