

4-H Rocketry Project

ONE ORDER PER CLUB, PLEASE!



Protected Under
18 U.S.C. 707

**2009 - 2010
"Special" Kit
Order**

**10 Kits
Available for a
Limited Time!**
Orders Due 11/15/09

Dear 4-H Leaders,

For a limited time we've added 10 rocket kits for members to choose from, including a starter test that has a launcher. Plus the quoted price includes a 10% discount off the catalogue price. We do this because some leaders have expressed interest in building different rockets from the Wizards, Alphas, Space Lofts and Firestreaks we offer. **Each of these kits also includes an engine, igniter and wadding for your first flight.** Please note that we still offer Wizards, Alphas, Firestreaks and Space Lofts – see our most recent *Clover Leaves*.

If this continues to draw enough interest I would expect we could offer this annually as a "special". PLEASE NOTE: WE WILL NOT KEEP INVENTORY OF THESE KITS - THIS IS A ONCE A YEAR OPPORTUNITY! ORDER BEFORE 11/15/09!

Sincerely,

H. Thomas Davis
Extension Resource Educator
4-H Issue Leader



**Note: this
was sent only
to Coordinating
Leaders –**

**Please organize orders so
that we get
ONLY ONE PER CLUB.
Thank you!**



**Cornell University
Cooperative Extension
Orange County**

**ADULT SUPERVISION IN THE BUILDING
AND LAUNCHING OF ROCKETS IS
VERY IMPORTANT TO THE SAFETY OF
YOUTH INVOLVED.
FOLLOW ALL INSTRUCTIONS.**

**ALSO NOTE: THESE ROCKETS ARE
NOT SUITABLE FOR CLOVERBUDS**

Community Campus, 18 Seward Ave., Suite 300, Middletown, NY 10940-1919 845-344-1234 www.cce.cornell.edu/orange

Cornell University Cooperative Extension provides equal program and employment opportunities. Please contact our office if you have any special needs.

Flash Starter Set *(Includes Launcher and Rocket)*

- ◆ Almost ready to fly rocket
- ◆ Assembled parachute
- ◆ Self adhesive decals
- ◆ Colored parts
- ◆ Complete launch system with engines



This is the Flash Model Rocket Launch set by Estes Rockets. Skill level E2X. For Ages 10 and up

Specs: Length: 16 in. (85.3 cm)

Dia.: 1.09 in. (27.7 mm);

Wt.: 1.8 oz. (52 g);

Recovery: 12 in. Parachute

Fins: Plastic Molded

Max. Altitude: 925 ft.

Engines: A8-3, B4-4, B6-4, C6-3, C6-5, C6-7

E2X Kit



Sky Writer

Product ID: 1260

This fun rocket looks like a wooden pencil. It "sky writes" up to 1100 ft. in the air. The Sky Writer comes with colored body tubes, fins and nose cone, so its assembly is quick and easy.

Specs: Length: 26 in. (66 cm)

Dia.: .98 in. (24.8 mm);

Wt.: 1.5 oz. (41.3 g);

Recovery: 12 in. (30 cm) Parachute

Fins: Plastic Molded

Max. Altitude: 1,100 ft. (335 m)

Engines: A8-3, B4-4, B6-4, C6-5

Skill Level One ♦ Kits with cutting, sanding & painting required



Big Betty

Product ID: Q1014

Quest Big Betty is a classic model rocket kit featuring balsa wood fins and the largest diameter body tube in the Level I product line. If you're looking for a nice big rocket that flies like a dream... look no further!

Specs: Length: 23 in. (58.4 cm)

Dia.: 1.576 in. (40 mm);

Wt.: 1.8 oz. (52 g);

Recovery: 12 in. (30 cm) Parachute

Fins: Balsa

Engines: B6-4, C6-3, C6-5



Baby Bertha

Product ID: 1261

A miniature version of one of the most popular kits of all time, the Big Bertha®. The Baby Bertha soars to 575 ft. (175 m). It has die cut balsa fins and can be launched on A, B and C Estes® engines.

Length: 12.75 in. (32.4 cm)

Diameter: 1.64 in. (41.7 mm)

Weight: 2.1 oz. (58.2 g)

Recovery:
12 in. (30 cm) Parachute

Fins: Die cut balsa

Maximum Altitude:
575 ft. (175 m)

Engines: A8-3, B4-4, B6-4, C6-5



U.S. Army Patriot M-104

Product ID: 2056

A classic 1:10 scale model rocket of the desert hero and mother of all air defense missiles. Based on the U.S. Army's M-104 surface-air missile. Blasts 600 feet high!

Specs: Length: 21.3 in. (54.1 cm)

Dia.: 1.637 in. (41.6 mm);

Wt.: 1.95 oz. (55 g);

Recovery: 12 in. (30 cm) Parachute

Fins: Laser cut balsa

Max. Altitude: 600 ft. (183 m)

Engines: A8-3, B4-4, B6-4, C6-5



Payloader One

Product ID: Q1018

Launch small payloads into space!

Specs: Length 16.25 in. (41.3 cm)

Dia.: 1.637 in. (41.6 mm)

Recovery: Parachute

Fins: balsa

Engines: A8-3, B6-4, C6-5

Skill Level Two ♦ Requires more skill in building and painting, longer assembly time

Super Bird

The Quest Super Bird Model Rocket is the perfect vehicle for long, slow and impressive flights. With an 800 ft. maximum altitude and dual parachutes the Super Bird model rocket is as interesting to watch coming down as going up!

Product ID: Q2010

Specs: Length: 31.3 in. (79.4 cm)

Dia.: 1.38 in. (35 mm);

Recovery: Dual Parachute

Fins: Balsa

Max. Altitude: 800 ft. (243 m)

Engines: A6-4, B6-4, C6-5



Guardian™

Product ID: 2179

The Guardian™ rocket simulates a ground-to-air missile. This multi-finned guardian of the sky soars over 700 ft. (213 m).

Specs: Length: 19.13 in. (48.6 cm)

Dia.: 1.33 in. (33.8 mm);

Wt.: 2.4 oz. (68.6 g);

Recovery: 12 in. (30 cm) Parachute

Fins: Die cut balsa;

Max. Altitude: 723 ft. (220 m)

Engines: A8-3, B4-4, B6-4, B6-6, C6-5



Skill Level Three ♦ Requires more skill in building and painting, longer assembly time

Navaho

The Quest Navaho AGM model rocket is an incredible two stage model rocket that can soar higher than any other Quest model rocket with flights up to 2100 feet! This two stage model rocket not only has an impressive performance but comes with an extensive set of decals to give it the look to match.

Both stages include an engine clip which makes flight prepping easy and upper stage recovery deployment very reliable.

Product ID: Q3003

Specs: Length: 20.3 in. (51.4 cm)

Dia.: .98 in. (25 mm);

Recovery: Stage one - Tumble,

Stage two - Parachute

Fins: Balsa

Max. Altitude: 2,100 ft. (640 m)

Engines: A8-3, B6-4, C6-5

Boost Engines: B6-0, C6-0



Harpoon

The Quest Harpoon model rocket kit is accurately detailed to match the US Navy and Air Force SLAM AGM-84 Harpoon anti-ship missile. The Harpoon model rocket can reach an altitude of 800 feet.

Product ID: Q3008

Specs: Length: 20.5 in. (52.1 cm)

Dia.: 1.58 in. (40 mm);

Recovery: Parachute

Fins: Balsa

Max. Altitude: 800 ft. (243 m)

Engines: B6-4, C6-3, C6-5



4-H ROCKET ORDER FORM

ORDERS DUE NO LATER THAN 11/15/09

CLUB NAME _____

CONTACT PERSON _____ PHONE _____

MAILING ADDRESS _____

ROCKET <i>(includes engine, igniter, wadding)</i>	QTY.	PRICE PER	SUBTOTAL
Flash Starter Set	_____	\$20.50	_____
Sky Writer	_____	\$11.00	_____
Big Betty	_____	\$12.50	_____
Baby Bertha	_____	\$10.00	_____
Patriot	_____	\$14.50	_____
Payloader One	_____	\$10.75	_____
Superbird	_____	\$14.00	_____
Guardian	_____	\$14.00	_____
Navaho	_____	\$15.50	_____
Harpoon	_____	\$14.00	_____
		TOTAL	_____

*Please make checks payable to "CCE, Orange County"
In memo section note "4-H Rockets"*

BY NOVEMBER 15, 2009
MAIL TO:

Orange County 4-H
Attn: Tom Davis
18 Seward Ave., Suite 300
Middletown NY 10940-1919