

Centuri

**1982 Flying
Model Rocket
Catalog**



SPACE SHUTTLE
COLUMBIA
(PAGE 9)

**Catalog
No. 821**

NASA PHOTO

\$1.00

VIKING EXPLORER Starter Kit

Skill Level One

Recommended for Beginners

Model Rocketry's Lowest Priced Starter Kit

Here's a low-cost way to get started in model rocketry with our popular Viking model rocket and Lightning Bolt launcher!



NEW!

Requires 6 or 12
volt lantern battery and
glue—not included.

Viking Model Rocket features parachute recovery, die-cut fibre fins, plastic nose cone, kit decal and spectacular flights over 600 feet. No painting required.

Lightning Bolt Launcher fits any standard 6 or 12 volt lantern battery (not included) and includes launch pad with blast deflector plate and 1/8" x 36" two-piece launch rod. Futuristic hand-held launch controller features arming light, safety key and ignition button, plus launch cable with micro-clips.

Includes two powerful Enerjet model rocket engines plus igniters and parachute recovery wadding for your first flights.

Engines: 1/2A6-2, A8-5 (First Flight), B4-6, B6-6, C6-7



Prod. No. 5204

ONLY \$9.95

Centuri

Welcome to Centuri Model Rocketry!

In 1982 the Space Shuttle becomes fully operational, and you can join in the excitement of the new Space Age with Centuri Flying Model Rockets.

The pages of this catalog are filled with the most exciting model rockets we've ever offered—all models you can build and fly yourself. Once you've experienced the thrill of seeing a model you've built rocket into the sky, streak to altitudes over 1,000 feet and return gently to Earth on a brightly colored parachute, you'll know this is the hobby for you.

This year we have four exciting new kits as well as the Viking Explorer Starter Set—the lowest priced starter set in the industry. Also, we're introducing the new Power-Pulse™ Launch Controller (see page 27) which uses the new Polaroid® Pola-Pulse™ 6 volt battery for low cost launchings. This is the launch system of the future!

Start your own space program today, and join NASA in exploring the universe—right from your own neighborhood!

IMPORTANT

Most model rocket kits are constructed of light-weight hobby materials such as balsa wood, paper tubing and plastic. Unless otherwise stated, all the model rocketry kits in this catalog are hobby kits requiring assembly. Launch system, engines, launch supplies, glue, batteries, paint, tools and finishing materials are not included. Recommended for ages 10 to adult. Adult supervision is suggested for those under 12 years of age when flying model rockets.

SKILL LEVELS

Skill Level One—Very Simple—Recommended for beginners

Skill Level Two—Fairly Easy—Recommended for individuals with model building experience.

Skill Level Three—Average Challenge—Recommended for the experienced model builder.

Skill Level Four—Very Challenging—Recommended for the advanced model builder.

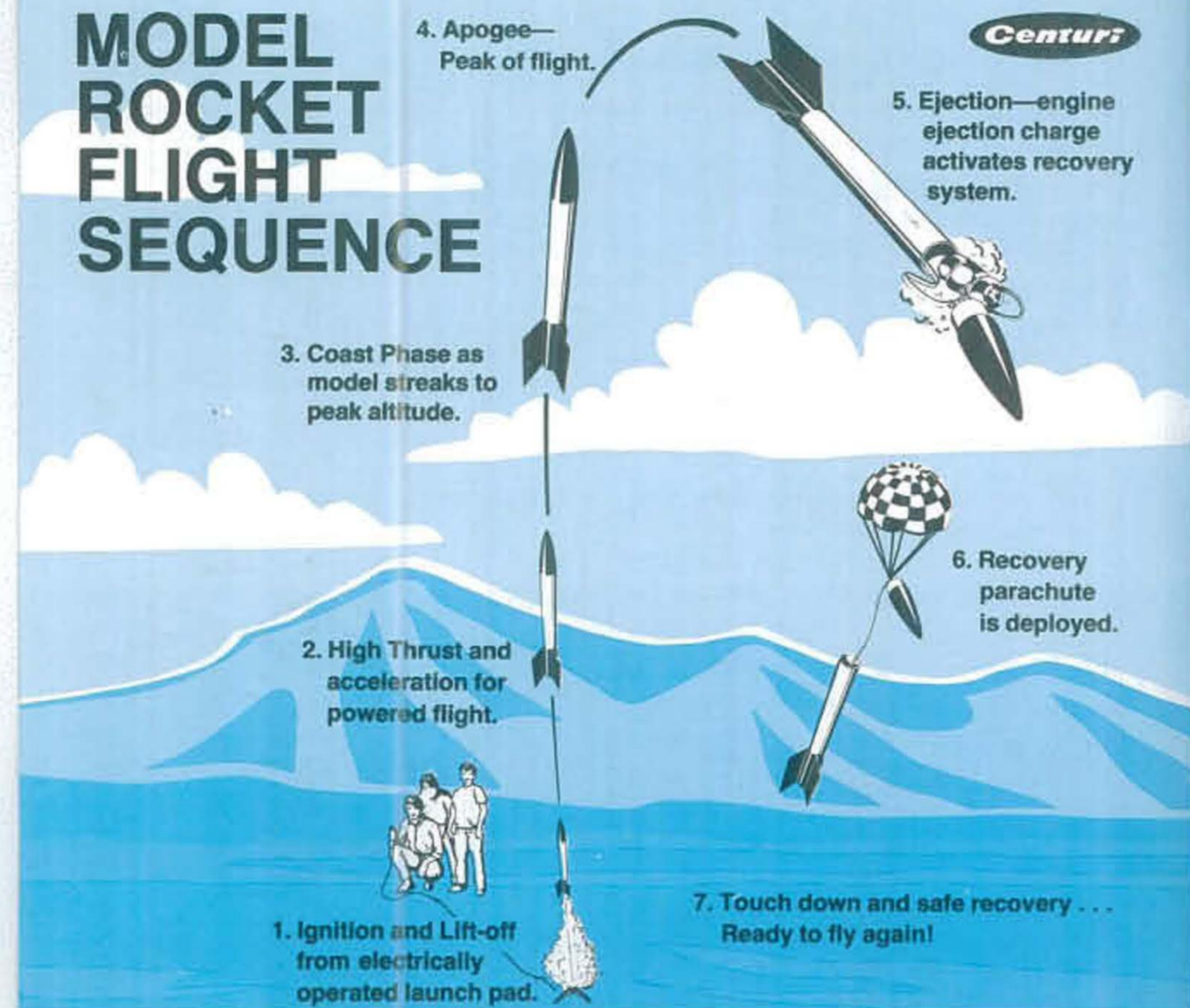
Skill Level Five—Extremely Challenging—Recommended for the expert model builder.

The model rocket kits in this catalog require assembly unless otherwise stated. The degree of construction and operation challenge varies from kit to kit, so all Centuri model rockets are rated by Skill Level to make it easy to choose the right project. In most cases, it is recommended that rocketeers not skip skill levels. Unless you are an extremely experienced modeler, you should complete a Skill Level One kit before building a Skill Level Two . . . and you should build a Skill Level Two before attempting a Skill Level Three . . . and so on.

All prices in this catalog are subject to change without notice.



MODEL ROCKET FLIGHT SEQUENCE



USING YOUR CENTURI CATALOG

Each kit or item listed in the catalog has certain information with it that will be helpful to you in using the item. Each kit listing contains the following information.

1. Kit name
2. Skill Level—All kits in this catalog are grouped by Skill Level.
3. Special features of the kit.
4. Specifications on length, diameter, weight and wing span where indicated.
5. Engine types recommended for use in the kit.
6. Product number which should always be used when ordering.
7. Price of kit (or see price list).
8. Kit Feature Symbols indicate the following kit features:
 - Parachute & size
 - Quick-Release Engine Mount
 - Plastic Nose Cone
 - Kit Decal
 - D/C Parts
 - Balsa Nose Cone
 - Streamer Recovery
 - Plastic Fin Unit

Join Us On The Centuri Aerospace Team

Here's why you should join the Centuri Aerospace Team:

1. Free Catalog
2. Special CAT Membership Card
3. Iron-on shirt insignia
4. Membership includes a copy of our Club Guide
5. C.A.T. Decal Sheet
6. C.A.T. Wall Certificate
7. C.A.T. Field Box Sticker



Join the fastest growing group of model rocketeers in the U.S.!

C.A.T Membership Packet

Product No. 5460 \$2.00

PUBLICATIONS

E.T.V. MODEL BOOK

by Robert Schleicher
Now you can build exciting extraterrestrial vehicles. Learn all the latest techniques for constructing space and special effects models. 181 pages filled with photographs.
Prod. No. 5479 \$8.95



Basics of Model Rocketry

by Doug Pratt
A very complete introduction to the hobby of model rocketry. Pratt explains the fundamentals in clear, concise form. Filled with photos.
Prod. No. 5478 \$6.00



TECH INFO REPORTS

Everything you need to know about Rocket Stability (TIR-30), Center of Pressure (TIR-33), and Altitude Performance (TIR-100).
TIR-30 (16 pages) Prod. No. 81903 \$1.25
TIR-33 (36 pages) Prod. No. 81904 \$1.25
TIR-100 (40 pages) Prod. No. 81906 \$1.25

Centuri

EDUCATOR'S GUIDE

Teacher's guide for rocketry in the classroom. Includes knowledge tests and suggested curriculum. 64 pages.
Prod. No. 81916 \$2.00

ROCKETEER'S GUIDEBOOK

The good basic reference for all rocketeers. Info from "A to Z." Richly illustrated with charts & photos. 36 pages.
Prod. No. 81900 \$1.25

FREE WITH C.A.T. MEMBERSHIP!



CLUB GUIDE

The Centuri Club Guide is filled with useful information about rocket clubs. Topics covered include: how to organize, running a club range, publicity and growth, club activities, publishing a newsletter, funding and working with authorities. Rocketeers starting their own rocket club, as well as established clubs, will find solid help in this manual. Indispensable for teachers and youth leaders and all club libraries. 28 pages, 53 illustrations.
Prod. No. 81896 \$1.00

EAGLE POWER

Model Rocketry Outfit



Battery not included.

EAGLE POWER will start you off right in the exciting hobby of model rocketry!

Engines: A8-3 (First Flight), B4-6, B6-6, B8-5, C6-7



Prod. No. 5404 ONLY \$16.95

Skill Level One—Recommended for Beginners

EAGLE POWER is our most popular outfit and contains everything you'll need to get off to a flying start in model rocketry! Includes the Screaming Eagle model rocket kit, deluxe Powr-Pad launcher, 2 powerful Enerjet model rocket engines, igniters, wadding, glue and special Mini-Manual of Model Rocketry.

Screaming Eagle model rocket requires no painting! All parts are pre-colored for fast assembly. The Screaming Eagle features a molded plastic fin unit and nose cone, parachute recovery and special stick-on kit decals! Capable of flights over 1,000 feet, the Screaming Eagle is the ideal beginner's rocket and a reliable model for the experienced rocketeer.

The deluxe Powr-Pad is designed to provide lasting service over many years. Using a standard 6 volt lantern battery for power the Powr-Pad includes a special tilter assembly to allow you to compensate for slight winds, steel blast deflector, handy carrying handle, 1/8" x 36" two-piece launch rod plus launch controller, launch cable and micro-clips.

BIG SHOT

Skill Level One—Recommended for Beginners

Model Rocketry Outfit



Our biggest and best starter kit, the **BIG SHOT** features both the Screaming Eagle and Excalibur model rocket kits, along with the deluxe Powr-Pad launcher.

Battery and finishing supplies not included.

The **Screaming Eagle** is easy to build yet impressive in the air. All parts are pre-colored so no painting is necessary. Plastic nose cone and fin unit make construction and flying easy. The **Excalibur** is the next step for the beginning rocketeer. The **Excalibur** features plastic nose cone and adapter unit, die-cut fibre fins, kit decal and 12 inch parachute recovery.

The deluxe **Powr-Pad** launcher fits on top of any standard 6 volt lantern battery. Special features include special tilter assembly to compensate for wind, steel blast deflector, handy carrying handle, 1/8" x 36" two-piece launch rod plus hand-held launch controller featuring safety key, arming light and launch button.

Big Shot gets you into the air in a big way!

Engines:

Screaming Eagle: A8-3 (First Flight), B4-6, B6-6, B8-5, C6-7

Excalibur: A8-3 (First Flight), B4-4, B6-4, B8-5, C6-5

Screaming Eagle:

Excalibur:

Prod. No. 5406 Only \$24.95

Thunder Hawk Outfit

Skill Level 1—Recommended for Beginners

Get going in model rocketry with this starter set featuring one of Centuri's most popular rockets—the Thunderhawk. This easy-to-build kit features a plastic nose cone and die-cut balsa fins. Parachute is included for recovery.

The launch system fits over a standard 6 or 12 volt lantern battery and features round blast deflector plate, and 1/8" x 36" long 2 piece launch rod. Futuristic handheld controller features arming light, safety key and ignition button plus launch cable with micro-clips.

BONUS!
Includes 2
Extra Engines
FREE!
Total of 5 engines.

Also included are three Enerjet model rocket engines, Sure-Shot II igniters, recovery wadding and complete instructions. Everything you need to get started today.

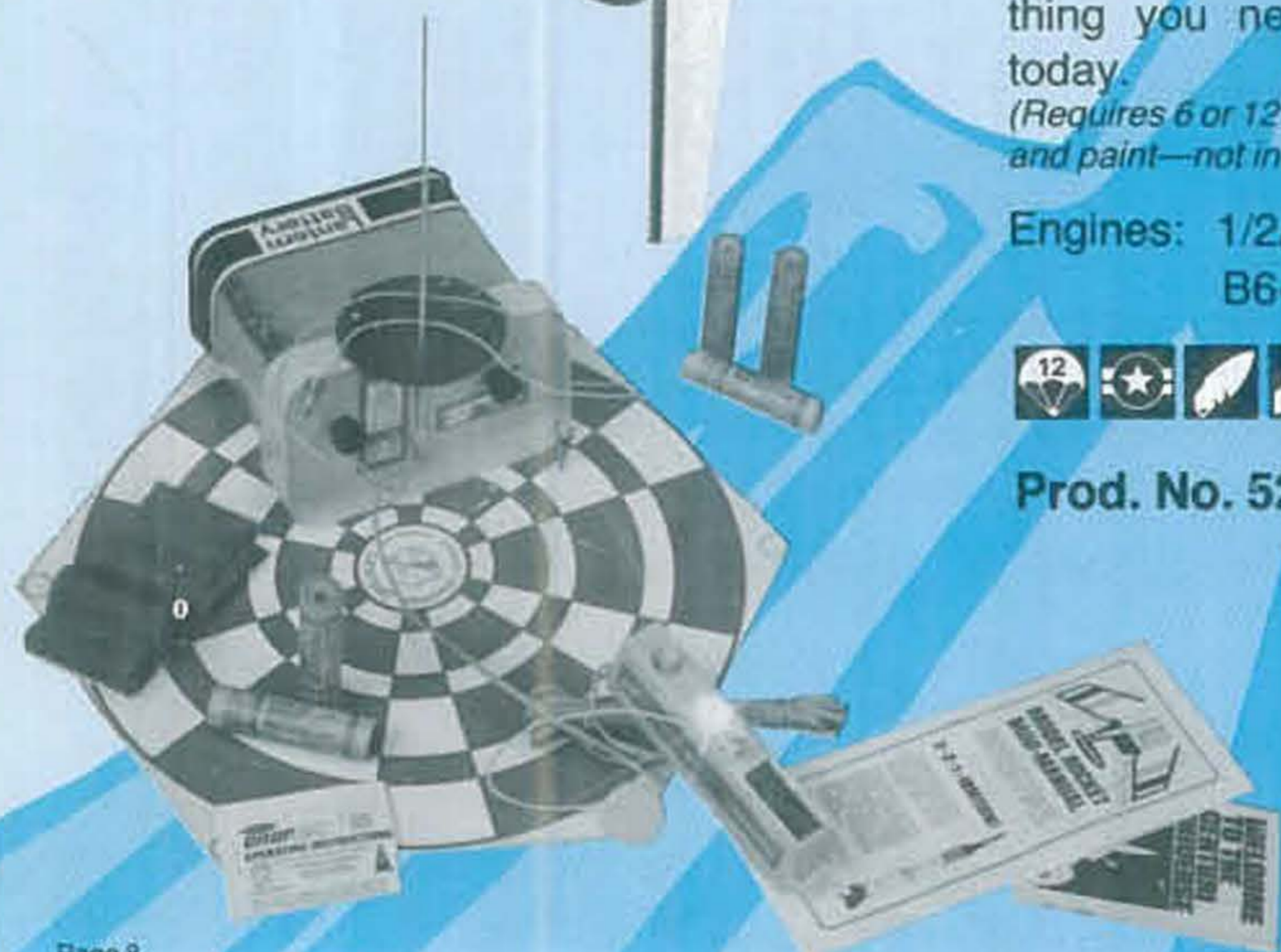
(Requires 6 or 12 volt lantern battery, glue and paint—not included.)

Engines: 1/2A6-2, A8-3, B4-4, B6-4, B8-5, C6-7



Prod. No. 5208

\$12.95



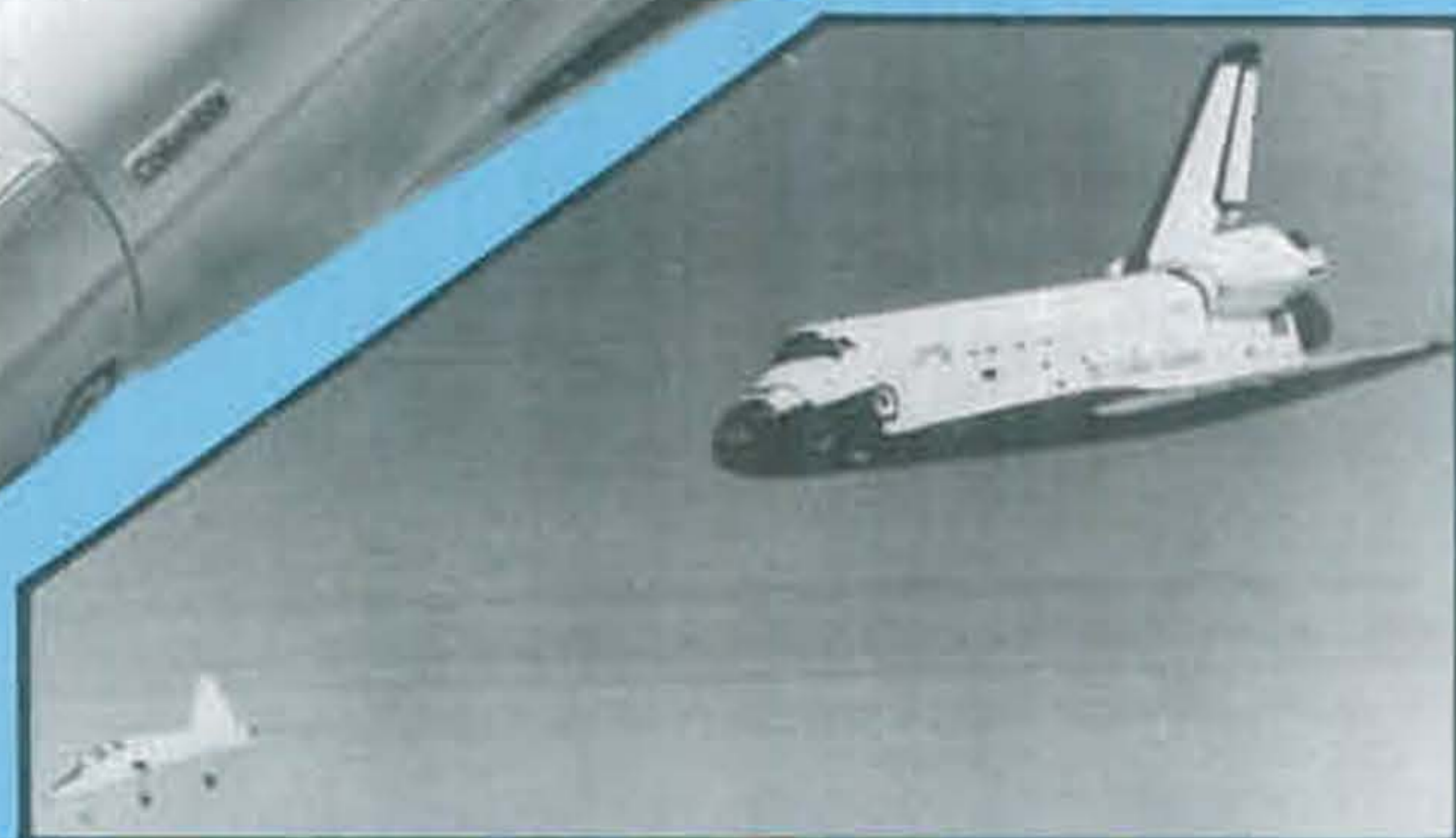
NASA Space Shuttle Columbia

Fly The Space Ship of the '80s!

Engines, launch system, glue and finishing supplies not included.



NASA PHOTOS



Skill Level 1

On April 12, 1981 the Columbia became the first Space Shuttle to fly in space. Throughout the 1980s the Columbia, and her sister ships, will become the workhorses for America's space exploration.

You can fly Centuri's model of this famous space vehicle today. This fun Centuri kit is engineered with the real shuttle's shapes simplified for fast assembly and reliable flights.

Build the Columbia quickly and easily with white glue and plastic cement, then spray paint it white. Apply the red, blue, black and gray decals from the huge stick-on sheet supplied. Very little finishing is required, and the result is a beautiful model you'll be proud to display and fly.

Includes a tech data sheet on the real Columbia. Engine nozzle unit removes for flight. Engines: B4-4 (First Flight), B6-4, B8-5, C6-5

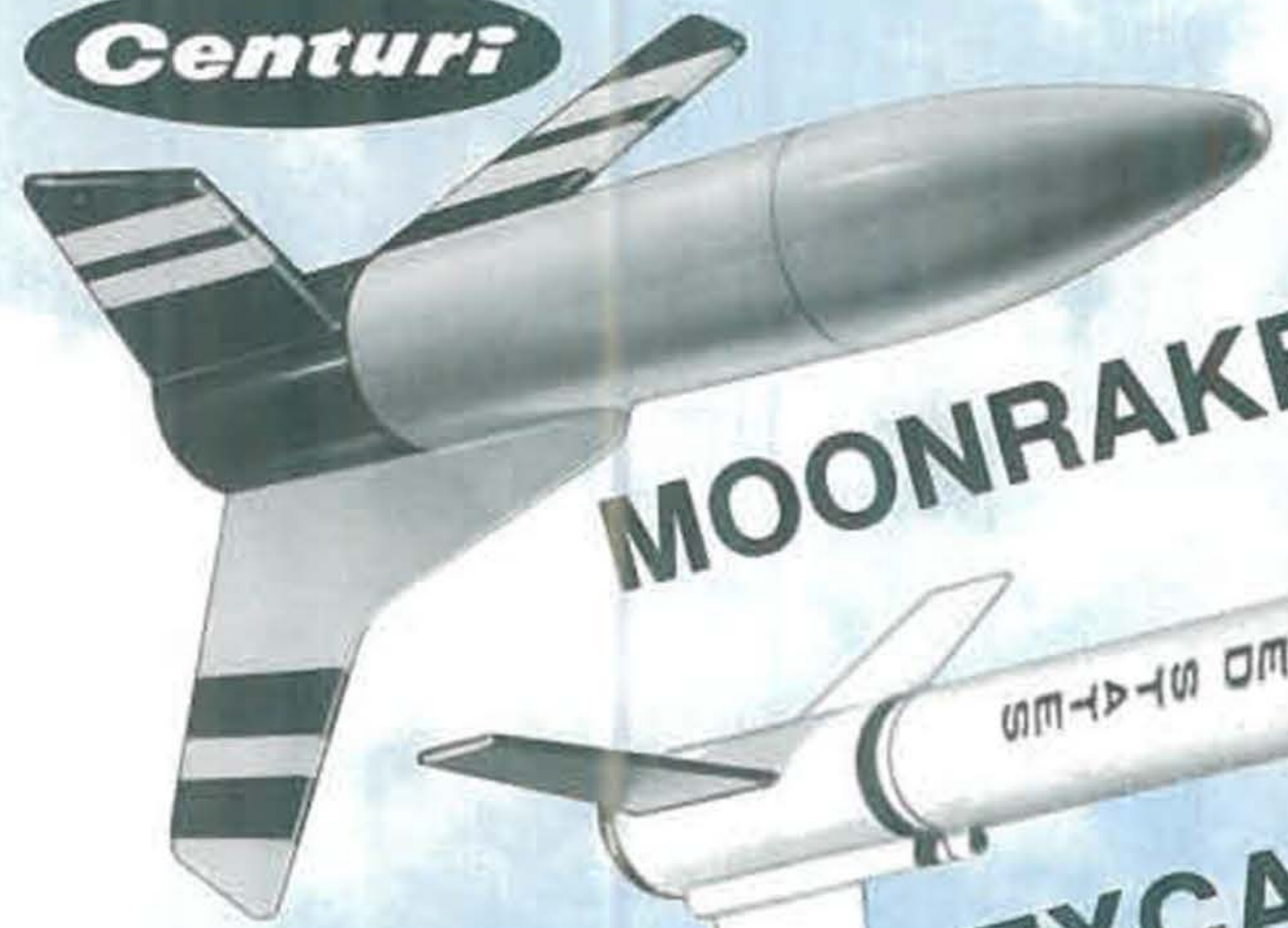
Specs: Length: 11.3 in. (28.7 cm) Dia.: 1.64 in. (4.2 cm)
Net. Wt.: 2.45 oz. (68.6 g)



Prod. No. 5343

\$7.00

Centuri



MOONRAKER



EXCALIBUR



THUNDERHAWK



VIKING



LIL' IVAN

NEW!



LIL' HERC

Engines, launch system, glue and finishing supplies not included.

SKILL LEVEL 1

MOONRAKER

Low cost rocket that moves off the launch pad fast! You can make it in either of two configurations.

Specs:
Length: 5.5" (14 cm)
Dia.: .76" (1.9 cm)
Net Wt.: .3 oz (8.5 g)
Rec. Engines:
1/2A6-4, A8-5



Prod. No. 5041
\$2.50

EXCALIBUR

Excellent big rocket for beginners. This bird is over 2 feet long! Has sleek lines of a real research rocket yet goes together fast and easy.

Specs:
Length: 26.5" (67.3 cm)
Dia.: .91" (2.3 cm)
Net Wt.: 1.6 oz (45.4 g)
Rec. Engines:
A8-3, B4-4, B6-4, B8-5, C6-5



Prod. No. 5008
\$6.00

THUNDERHAWK

Over 20 inches long, this great performer turns in flights over 1,000 feet.

Specs:
Length: 21.5" (54.6 cm)
Dia.: .76 in. (1.9 cm)
Net Wt.: 1 oz (28 g)

Rec. Engines:
1/2A6-2, A8-3, B4-4, B6-4, B8-5, C6-7



Prod. No. 5338
\$3.75

VIKING

Easy to build and fun to fly. A great beginner model that requires no painting.

Specs:
Length: 12" (30.5 cm)
Dia.: .76" (1.9 cm)
Net Wt.: .8 oz (22.7 g)

Rec. Engines:
1/2A6-2, A8-5, B4-6, B6-6, C6-7



Prod. No. 5440
\$2.25

LIL' IVAN

Beginner kit with a Russian decor. Flights over 600 feet with a C engine.

Specs:
Length: 8.75 in. (22.2 cm)
Dia.: 1.63 in. (6.52 cm)
Net. Wt.: 1.35 oz (38.3 g)

Rec. Engines:
A8-5, B4-6, B6-6, C6-7



Prod. No. 5353
\$3.95

LIL' HERC

Learn about basic rocket flying principles with this easy-to-build rocket that ejects its engine after apogee and tumbles back for another flight.

Specs:
Length: 5.5 in. (14 cm)
Dia.: .76 in. (1.9 cm)
Net Wt.: .3 oz (8.5 g)
Rec. Engines:
1/2A6-2, 1/2A6-4



Prod. No. 5001
\$2.50

Centuri



RED-EYE

ASTRO-1

SCREAMING EAGLE

JAVELIN

PHOENIX BIRD

SPIRIT OF AMERICA

Engines, launch system, glue and finishing supplies not included.

SKILL LEVEL 1

RED-EYE

The Red-Eye photo reconnaissance satellite keeps watch over military build-up. Easy-to-build kit. Unique recovery system.

Specs:
Body Length: 4.0 in. (10.2 cm)
Full Length: 8.75 in. (22.2 cm)
Body Dia.: .76 in. (1.9 cm)
Net Wt.: .3 oz (8.5 g)
Rec. Engines:
1/2A6-2



Prod. No. 5346
\$2.75

ASTRO-1

This clean design is an excellent beginner rocket. Quick to assemble and fly.

Specs:
Length: 16 in. (40.6 cm)
Dia.: 1.04 in. (2.6 cm)
Net Wt.: 1.1 oz (31.2 g)

Rec. Engines:
1/2A6-2, A8-3, B4-4, B6-4, B8-5, C6-5



Prod. No. 5047
\$6.00

SCREAMING EAGLE

Our easiest-to-build and most popular rocket, the Screaming Eagle requires no painting!

Specs:
Length: 16.4 in. (41.7 cm)
Dia.: .91 in. (2.3 cm)
Net Wt.: 1.6 oz (45.4 g)

Rec. Engines:
A8-3, B4-4, B6-4, B8-5, C6-7



Prod. No. 5173
\$4.50

JAVELIN

Easy-to-assemble, the Javelin is a high-flying beginner's rocket. Flights over 800 feet.

Specs:
Length: 12.5 in. (31.8 cm)
Dia.: .76 in. (1.9 cm)
Net Wt.: .6 oz (17 g)

Rec. Engines:
1/2A6-4, A8-5, B4-6, B6-6, C6-7



Prod. No. 5091
\$4.75

PHOENIX BIRD

Big and spectacular on the launch pad and in the air, the Phoenix Bird is easy-to-assemble. Everything about the Phoenix Bird is BIG!

Specs:
Length: 26.3 in. (66.8 cm)
Dia.: 1.34 in. (3.4 cm)
Net Wt.: 3.4 oz (96.4 g)

Rec. Engines:
B4-4, B6-4, B8-5, C6-5



Prod. No. 5407
\$9.00

SPIRIT OF AMERICA

This long bird is easy-to-build and fun to fly. A great first rocketry project or one to add to your fleet.

Specs:
Length: 22.7 in. (57.7 cm)
Dia.: .98 in. (2.5 cm)
Net Wt.: 1.4 oz (39.7 g)

Rec. Engines:
1/2A6-2, A8-3, B4-4, B6-4, B8-5, C6-5



Prod. No. 5344
\$4.25

Centuri



MAGNUM HORNET
CONVERTIBLE



SKY DEVIL



THUNDERBIRD

SKILL LEVEL 2



F-16 FIGHTER



STARFIRE



JAYHAWK

Engines, launch system, glue and finishing supplies not included.

MAGNUM HORNET

Watch this sleek bird race off the pad under Magnum D power! Capable of flights over 1200 feet! Includes convertible mount to fly with regular engines.

Specs:
Length: 19.8 in. (50.3 cm)
Dia.: 1.325 in. (3.4 cm)
Net Wt.: 1.76 oz (49.28 g)
Rec. Engines:
D12-7 With convertible mount:
B4-4, B6-4, B8-5, C6-5



Prod. No. 5341
\$5.00

SKY DEVIL

Select from 8 different fin patterns to customize this high-performer. Flights over 1,800 feet!

Specs:
Length: 12 to 14 in. (30.5 to 35.6 cm)
Dia.: .76 in. (1.9 cm)
Net Wt.: .8 oz (22.7 g)

Rec. Engines:
1/2A6-4, A8-5, B4-6, B6-6, C6-7



Prod. No. 5040
\$3.25

THUNDERBIRD

A great demo bird the Thunderbird stands over 41 inches tall. Flights over 500 feet.

Specs:
Length: 41.75 in. (106 cm)
Dia.: 1.0 in. (2.5 cm)
Net Wt.: 2.7 oz (77 g)

Rec. Engines:
A8-3, B4-4, B6-4, B8-5, C6-5



Prod. No. 5339
\$7.00

F-16 FIGHTER

This model rocket powered jet really flies. USAF's combat fighter of the 1980s. Kit is complete with plastic detailing parts.

Specs:
Length: 15 in. (38.1 cm)
Dia.: 1.04 in. (2.5 cm)
Span: 7 in. (17.8 cm)
Net. Wt.: 2.0 oz (56.7 g)

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



Prod. No. 5317
\$7.95

STARFIRE

This sleek performer set a chute duration record at the First International Model Rocket Championships in Czechoslovakia. Low-drag tail shroud gives great performance.

Specs:
Length: 16 in. (40.6 cm)
Dia.: .91 in. (2.3 cm)
Net Wt.: 1 oz (28.4 g)

Rec. Engines:
1/2A6-2, A8-3, B4-6, B6-6, C6-7



Prod. No. 5072
\$6.00

JAYHAWK

Regular engine size version of the U.S. Navy's AQM-37A target drone. Great on display and in the air.

Specs:
Length: 12.6 in (32 cm)
Dia.: .91 in. (2.3 cm)
Net Wt.: 1 oz (28.4 g)

Rec. Engines:
1/2A6-2, A8-5, B4-6, B6-6, C6-7



Prod. No. 5171
\$5.00

Centuri

FLYING SAUCER



NEW!

MAGNUM SPRINT



SPACEMASTER



BONUS!
Includes one C6-5
Engine and Igniter
FREE!

THUNDER ROC CONVERTIBLE



RUSSIAN SAM-3



Engines, launch system, glue and finishing supplies not included.

SKILL LEVEL 2

SKILL LEVEL 3

FLYING SAUCER

Our most unusual design based on reported sightings. Rises smoothly off the pad, rolls over and lands on three landing gear!

Specs:
Dia.: 9.125 in. (23.2 cm)
Height: 3.5 in. (8.9 cm)
Net Wt.: 2.4 oz (68 g)
Rec. Engines:
C6-0, C5-0S



Prod. No. 5325
\$7.00

MAGNUM SPRINT

Designed for high performance with Magnum D engines. Sprint is a great display model too.

Specs:
Length: 23.25 in. (59.0 cm)
Dia.: 1.325 in. (33.6 cm)
Net Wt.: 1.95 oz (42 g)

Rec. Engines
D12-7



Prod. No. 5356
\$4.50



SPACEMASTER

The workhorse of space transports of the near future. Transports up to 100 men and equipment in excess of 4 million miles without refueling.

Specs:
Length: 22.25 in. (56.5 cm)
Dia.: .976 in. (2.5 cm)
Net. Wt.: 1.4 oz (40 g)

Rec. Engines:
1/2A6-2, A8-3, B4-4, B6-4,
B8-5, C6-5, C6-7



Prod. No. 5348
\$6.00

THUNDER ROC

Longest kit in the Centuri line, the Thunder-Roc lumbers off the pad under either Super-C or Magnum D power. Convertible engine mount included.

Specs:
Length: 61.5 in. (156.2 cm)
Dia.: 1.64 in. (4.2 cm)
Net. Wt.: 6.6 oz (187 g)

Rec. Engines:
C5-3S, D12-5



Prod. No. 5340
\$9.95

RUSSIAN SAM-3

A modified scale version of the famous Russian surface-to-surface missile normally used against aircraft.

Specs:
Length: 13.5 in. (34.3 cm)
Dia.: 1.04 in. (2.6 cm)
Net Wt.: 1.2 oz (34 g)

Rec. Engines:
1/2A6-2, A8-3, B4-6, B6-6,
C6-7



Prod. No. 5332
\$6.00

Centuri



BONUS!
Includes one D12-5
Engine and Igniter
FREE!

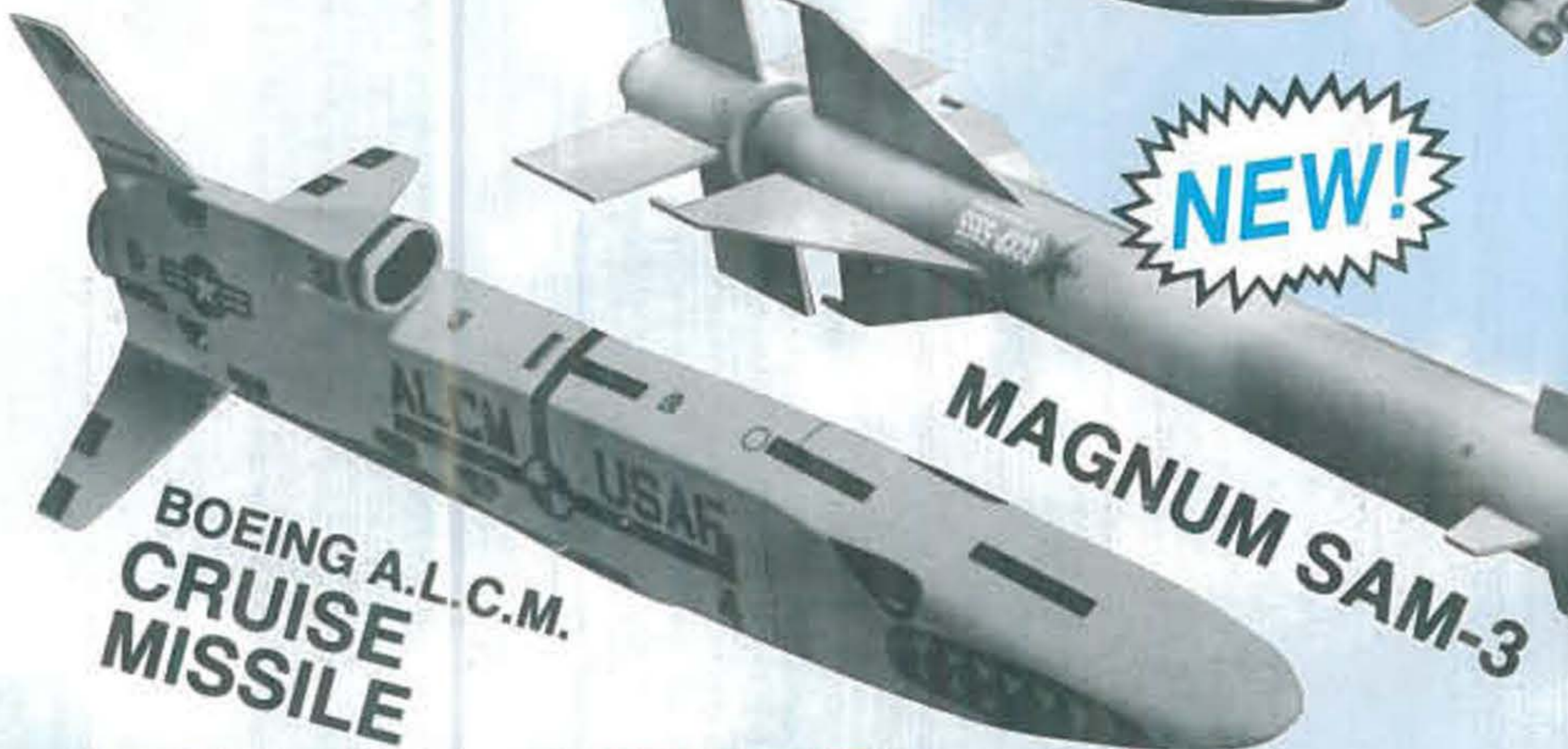
CONVERTIBLE

**SR-71
BLACKBIRD**



SAVE \$1.51
5347 BONUS PACK
Includes #5345 Satellite Killer
and #5346 Red Eye
Only \$8.99

**SATELLITE
KILLER**



**BOEING A.L.C.M.
CRUISE
MISSILE**

NEW!

MAGNUM SAM-3



USS AMERICA

NEW!

BULL DOG

SKILL LEVEL 3

Engines, launch system, glue and finishing supplies not included.

SR-71 BLACKBIRD

The SR-71 is the U.S. Air Force's long-range advanced strategic reconnaissance aircraft, capable of flying above 80,000 feet at three times the speed of sound. Includes D-convertible engine mount.

Specs:
Length: 27.5 in. (69.8 cm)
Dia.: 1.64 in. (4.2 cm)
Net Wt.: 6.6 oz (187 g)

Rec. Engines:
C6-3, C5-3S, D12-5



**Prod. No. 5349
\$12.95**

MAGNUM SAM-3

Magnum-D powered version of the Russian SAM-3 surface-to-surface missile. Two-stage performance with a Magnum D engine in the first stage and a regular Enerjet engine in the upper stage.

Specs:
Length: 26.875 in. (68.3 cm)
Dia.: 1.637 in. (41.6 mm)
Net Wt.: 2.78 oz (78.8 g)

Rec. Engines:
Single Stage: A8-3, B4-4, B8-5, C6-5, C5-3S
Upper Stage: A8-5, B4-4, B4-6, B8-5, C6-7
Booster: D12-0



**Prod. No. 5355
\$6.50**

**BOEING A.L.C.M.
CRUISE MISSILE**

Boeing's weapon of the 1980s, already entering into disarmament talks involving Western Europe.

Model features molded plastic parts and wings that fold for flight. Includes colorful fibre display stand.

Specs:
Length: 12.3 in. (31.2 cm)
Net Wt.: 2.6 oz (73.7 g)

Rec. Engines:
A8-3, B4-4, B6-4, B8-5, C6-5



**Prod. No. 5330
\$9.95**

USS AMERICA

Futuristic Presidential Command Post and operational center. Three large nuclear engines plus six ramjets power this advanced technology giant.

Specs:
Length: 25 in. (63.5 cm)
Dia.: 1.6 in. (4.1 cm)
Net. Wt.: 5.5 oz (155.9 g)

Rec. Engines:
C6-3, C5-3S



**Prod. No. 5310
\$14.95**

**SATELLITE
KILLER**

This futuristic defense satellite is designed to identify and destroy enemy satellites, using special electronic and laser equipment. Kit features unique rear-ejection recovery system.

Specs:
Height: 6.5 in. (16.5 cm)
Full Dia.: 12.25 in. (31.1 cm)
Net Wt.: 3.5 oz (99.2 g)

Rec. Engines:
C6-3, C5-3S



**Prod. No. 5345
\$8.00**

BULL DOG

Near-scale version of the Marine Corps AGM-83 A missile. Beautifully detailed and spectacular in the air. Great display model.

Specs:
Length: 20.75 in. (52.7 cm)
Dia.: 2.217 in. (56.4 cm)
Net Wt.: 3.78 oz (107 g)

Rec. Engines:
B6-4, B8-5, C6-5, C5-3S



**Prod. No. 5354
\$7.95**

Centuri

MERCURY REDSTONE

MAGNUM JAYHAWK

SST SHUTTLE

ARROW 300

Engines, launch system, glue and finishing supplies not included.

SKILL LEVEL 5

SKILL LEVEL 3

MERCURY REDSTONE

This beautiful model of Freedom 7, America's first manned spaceflight, will make a fine addition to your rocket collection. This 1/36th scale model features a molded plastic Mercury capsule and escape tower. The Mercury Redstone lifts slowly off the pad—just like the real rocket.

Specs:
Length: 29 in. (73.7 cm)
Dia.: 2.04 in. (5.2 cm)
Net Wt.: 3.7 oz (104.9 g)

Rec. Engines:
B4-2, C6-3, C5-3S



Prod. No. 5131
\$12.50

MAGNUM JAYHAWK

Spectacular 1/5 scale model of the Navy's AQM-37A target drone. This massive model rocket is over 30 inches long. Fantastically detailed, it is a challenge for all modelers. Includes special tech data booklet on the AQM-37A. Designed for the advanced modeler, this is a kit you'll be proud to display and fly.

Specs:
Length: 30.4 in. (77.22 cm)
Dia.: 2.6 in. (6.6 cm)
Net Wt.: 9.21 oz (261 g)

Rec. Engines:
D12-3



Prod. No. 5342
\$15.95

SST SHUTTLE

This long bird features a piggy-back glider that recovers separately from the SST booster. Designed as an early concept of a supersonic space transport, the SST Shuttle is an exciting kit on display and in the air.

Specs:
Length: SST: 22.5 in. (57.2 cm)
Glider: 8.5 in. (21.6 cm)
Dia.: SST: 1.04 in. (2.6 cm)
Glider: .76 in. (1.9 cm)
Net Wt.: SST: 2 oz (56.7 g)
Glider: .6 oz (17 g)

Rec. Engines:
B4-2, C6-3, C5-3S



Prod. No. 5077
\$11.95

ARROW 300

Over three feet long, this multi-stager features three stage power and a large payload section. Ideal for scientific experiments. Capable of flights over 1/2 mile! Can be flown in single, dual or three-stage configuration.

Specs:
Length: 37.7 in. (95.8 cm)
Dia.: .91 in. (2.3 cm)
Net Wt.: 2.5 oz (70.9 g)

Rec. Engines:
Single Stage: A8-3, B4-4, B6-4, B8-5, C6-5
Upper Stages: 1/2A6-4, A8-5, B4-6, B6-6, C6-7
Booster: A8-0, B6-0, C6-0, C5-0S



Prod. No. 5037
\$9.95



Centuri

SATURN 1B



SATURN V



Engines, launch system, glue and finishing supplies not included.

SKILL LEVEL 3

SATURN 1B

Over two feet tall, this fantastically detailed model of Apollo 7 is a scale model you'll be proud of. Dual engine power provides flights over 500 feet. Molded plastic Apollo capsule and escape tower make assembly easy. Don't miss the excitement of your own Apollo program. Fly the Saturn 1B today!

Specs:

Length: 26.8 in. (68.1 cm)

Dia.: 2.62 in. (6.65 cm)

Net Wt.: 4.4 oz (124.7 g)

Rec. Engines:

(Two required per flight) B6-4, C6-5



Prod. No. 5140

\$23.95

SATURN V

Over the past 12 years, the Centuri Saturn V has been acknowledged as model rocketry's finest scale Saturn. This huge model stands over 43 inches tall. It is beautifully detailed right down to the vacuum-formed plastic body wrappers. Includes removable F-1 engine bell unit, molded plastic Apollo capsule and tower and three engine cluster power. Also included is a 12 page historical brochure on the Saturn rockets, including the Saturn V that took America to the Moon.

Specs:

Length: 43.6 in. (110.7 cm)

Dia.: 3.96 in. (10.1 cm)

Net. Wt.: 9.2 oz (260.8 g)

Rec. Engines:

(Requires three per flight)

C6-3, C5-3S



Prod. No. 5142

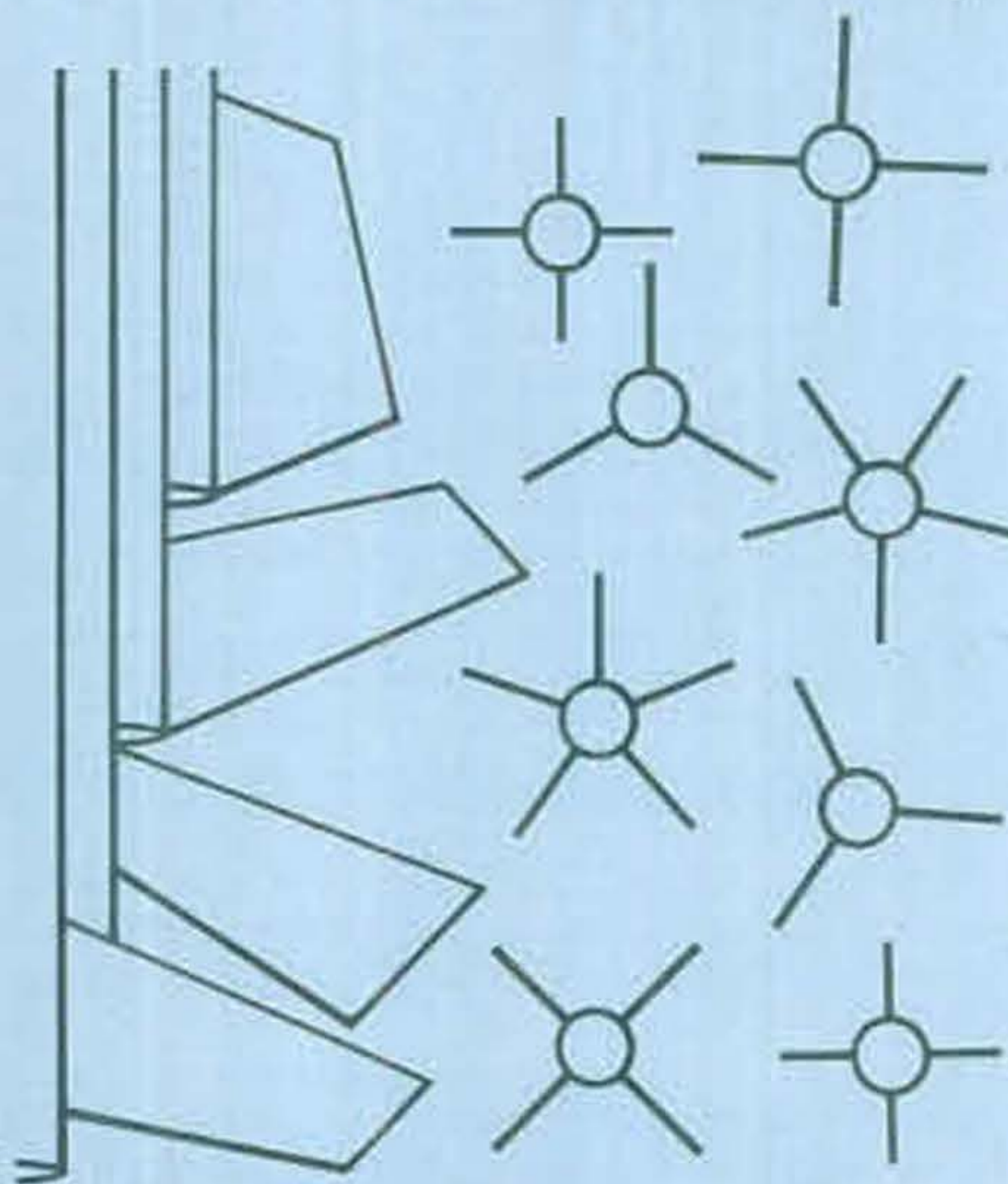
\$36.95

Viking 12 Pack

Centuri



The Model Rocket Project Designed For Youth Groups and Schools



The Viking 12 Pack is a low-cost rocketry project designed for groups and schools. The Viking rocket is easy-to-build and can be assembled in a single session. The Viking 12 Pack contains parts for Viking 12 rockets, assembly instructions and the Viking Leader's Guide. The Guide is a brief but comprehensive explanation of model rocketry; it explains how to run building and flying sessions, 3 fun-flying contests and how to cut costs in obtaining a launch system. Buying the Viking 12 Pack costs even less than buying 12 individual kits. Engines are not included. See A8-5 Flight Pack below.

Prod. No. 5441

\$19.95

Flight Packs



Bargain-priced packs of all supplies needed for 12 exciting flights. Each includes 12 Enerjet engines, 12 Sure-Shot II igniters and instructions at about a 15% savings. Includes a package of SPW-19 crepe wadding at no extra cost!

A8-5 Flight Pack:

For use with the Viking 12 Pack (No. 5441), 12 A8-5 engines plus igniters, wadding and instructions.

Prod. No. 5445 \$8.50

Sport Flight Pack:

An assortment of 12 engines including the most popular types. Includes (3) A8-3, (3) B6-4, (3) C6-5, (2) B6-6 and (1) C6-7 plus igniters, wadding and instructions.

Prod. No. 5446 \$9.00

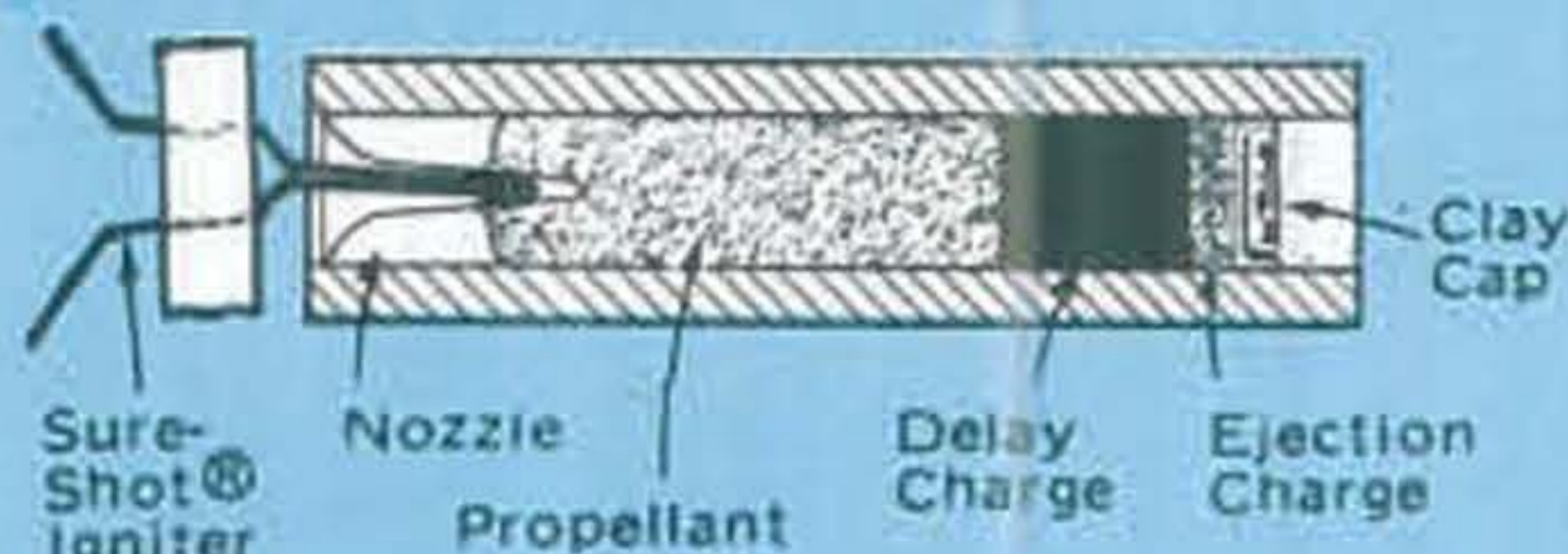
C Flight Pack:

Assortment of 12 C type engines. Includes (2) C6-3, (4) C6-5, (3) C6-7 and (3) C5-3S plus igniters, wadding and instructions.

Prod. No. 5447 \$9.50

Centuri Model Rocket Engines

All Centuri Enerjet and Magnum D engines are manufactured by automatic equipment to exacting standards. Designed for one-time use; not reloadable or reusable. The NAR emblem on every engine means they are regularly tested and meet all safety standards. We test 3 out of every 100 engines. We strive to provide the highest quality engines available.



IGNITION TO EJECTION

Battery-operated launch system heats igniter in engine nozzle—propellant starts almost instantly.



Propellant consumed to develop maximum thrust. Reaction principle causes lift-off & acceleration to coast phase.



Rocket coasts upward after propellant expended. Delay charge continues until rocket reaches peak altitude.



At end of delay, the ejection charge is ignited and gases activate the recovery system. Normally the expended engine returns with the rocket.



ENGINE CODE EXPLANATION

The letter is total impulse.* A higher class letter means more power; B is double the power of A and C is double the power of B, etc.

The first number is average thrust. This indicates how the average power is delivered. The higher the number, the higher the average thrust.

The last number is the delay code in seconds. This is the time duration from the end of thrust to the activation of the ejection charge.

1/2A6-4

LABEL COLOR

GREEN: Best delay for most single-stage rockets.

PURPLE: A longer delay usually for multi-stage or high flying lightweight single-stage rockets.

RED: Has no delay (0). For lower stages of multi-stage rockets. Never use a booster engine in single-stage rocket except in kits where specified.

*TOTAL IMPULSE CHART

Engine Type	Total Impulse in Newton-Seconds	Total Impulse in Pound-Seconds
1/2A	0.626 to 1.25	0.15 to 0.28
A	1.26 to 2.50	0.29 to 0.56
B	2.51 to 5.00	0.57 to 1.12
C	5.01 to 10.00	1.13 to 2.24
D	10.01 to 20.00	2.25 to 5.00

Safety Code NAR/HIAA

- CONSTRUCTION** — My model rockets will be made of lightweight materials such as paper, wood, plastic, and rubber without any metal as structural parts.
- ENGINES** — I will use only pre-loaded factory made model rocket engines in the manner recommended by the manufacturer. I will not change in any way nor attempt to reload these engines.
- RECOVERY** — I will always use a recovery system in my model rockets that will return them safely to the ground so that they may be flown again.
- WEIGHT LIMITS** — My model rocket will weigh no more than 453 grams (16 oz.) at lift-off, and the engines will contain no more than 133 grams (4 oz.) of propellant.
- STABILITY** — I will check the stability of my model rocket before its first flight, except when launching models of already proven stability.
- LAUNCHING SYSTEM** — The system I use to launch my model rockets must be remotely-controlled and electrically operated and will contain a switch that will turn "off" when released. I will remain at least 15 feet from any rocket that is being launched.
- LAUNCH SAFETY** — I will not let anyone approach a model rocket on a launcher until I have made sure that either the safety interlock key has been removed or the battery has been disconnected from my launcher.

8. **FLYING CONDITIONS** — I will not launch my model rocket in high winds, near buildings, power lines, tall trees, low flying aircraft or under any condition which might be dangerous to people or property.

9. **LAUNCH AREA** — My model rockets will always be launched from a cleared area free of any easy to burn materials, and I will only use non-flammable recovery wadding in my rockets.

10. **JET DEFLECTOR** — My launcher will have a jet deflector device to prevent the engine exhaust from hitting the ground directly.

11. **LAUNCH ROD** — To prevent accidental eye injury I will always place the launcher so the end of the rod is above eye level or cap the end of the rod with my hand when approaching it. I will never place my head or body over the launching rod. When my launcher is not in use I will always store it so that the launch rod is not in an upright position.

12. **POWER LINES** — I will never attempt to recover my rocket from a power line or other dangerous places.

13. **LAUNCH TARGETS & ANGLES** — I will not launch rockets so their flight path will carry them against targets on the ground, and will never use an explosive warhead, nor a payload that is intended to be flammable. My launching device will always be pointed within 30 degrees of vertical.

14. **PRE-LAUNCH TEST** — When conducting research activities with unproven designs or methods, I will when possible determine their reliability through pre-launch tests. I will conduct launchings of unproven designs in complete isolation from persons not participating in the actual launching.

Centuri ENGINE SPECS



Typical Enerjet shown actual size

Centuri Enerjet and Magnum-D engines are sold in boxes with three engines of one type. Sure-Shot II igniters and complete operating instructions are included.



STANDARD SIZE ENGINES—Centuri's reliable engine designed to fit all standard model rockets. Size is 2.75" long (6.99cm) and 0.690" diam. (1.75cm).

Prod. Number	Type	Price 3 For	Total Impulse N-sec.	Average Thrust Newtons	Thrust Duration Seconds	Delay Time 15% Seconds	Engine Weight Ounces	Recom. Max. Lift-Off Wt. (with engine) Ounces	Single Stage	Booster	Label Color
5550	1/2A6-2	\$2.55	1.25	6.23	.20	2	.53	2.5	X		Green
5552	1/2A6-4	\$2.55	1.25	6.23	.20	4	.54	1.5	X		Purple
5558	A8-0	\$2.65	2.50	7.81	.32	0	.51	4.5		X	Red
5560	A8-3	\$2.65	2.50	7.81	.32	3	.57	5.0	X		Green
5562	A8-5	\$2.65	2.50	7.81	.32	5	.62	2.5	X		Purple
5564	B4-2	\$2.75	5.00	4.15	1.20	2	.70	5.0	X		Green
5566	B4-4	\$2.75	5.00	4.15	1.20	4	.74	4.5	X		Green
5568	B4-6	\$2.75	5.00	4.15	1.20	6	.78	3.5	X		Purple
5570	B6-0	\$2.75	5.00	6.00	.83	0	.58	5.0		X	Red
5572	B6-4	\$2.75	5.00	6.00	.83	4	.78	5.0	X		Green
5574	B6-6	\$2.75	5.00	6.00	.83	6	.71	3.0	X		Purple
5548	B8-5	\$2.85	5.00	8.33	.60	5	.68	5.0	X		Green
5582	C6-0	\$2.95	10.00	5.86	1.70	0	.80	6.0		X	Red
5584	C6-3	\$2.95	10.00	5.86	1.70	3	.88	6.0	X		Green
5586	C6-5	\$2.95	10.00	5.86	1.70	5	.91	5.0	X		Green
5588	C6-7	\$2.95	10.00	5.86	1.70	7	.95	3.5	X		Purple
5590	C5-0S	\$2.95	10.00	4.76	2.10	0	.82	8.0	X	X	Red
5592	C5-3S	\$2.95	10.00	4.76	2.10	3	.90	8.0	X		Green

MAGNUM-D

Powerful engines recommended for experienced rocketeers. Size is 2.75" long (6.99cm) and 0.945" diam. (2.4cm).

5596	D12-0	\$4.95	20.00	11.76	1.70	0	1.44	14.0		X	Red
5597	D12-3	\$4.95	20.00	11.76	1.70	3	1.49	14.0	X		Green
5598	D12-5	\$4.95	20.00	11.76	1.70	5	1.52	10.0	X		Green
5599	D12-7	\$4.95	20.00	11.76	1.70	7	1.55	8.0	X		Purple

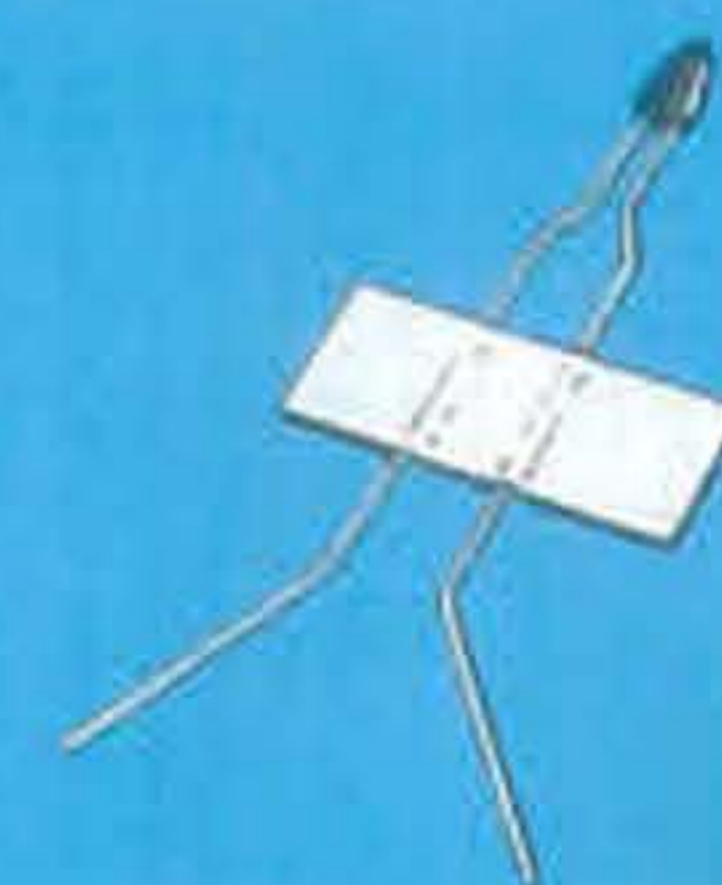
Enerjet and Sure-Shot are registered trademarks of Centuri Engineering Co., Inc.

Igniters Sure-Shot® II

These high-performance igniters will give reliable ignition every time. Features easy installation and four element construction. Available in 6 or 12 pack.

6 Pack:
Prod. No. 5690 \$1.25

12 Pack:
Prod. No. 5692 \$2.00



Launch Equipment



Powr-Pad

Powr-Pad gives you everything you need for launching almost any rocket. Designed to attach firmly to any standard 6 volt lantern battery (not included). It includes tilter, steel blast deflector, handy carrying handle, 1/8" x 36" 2 piece launch rod, plus launch controller and associated wiring. Launch support platform is made of tough heat-resistant plastic. Pre-assembled and soldered wiring harness makes for fast assembly and reliability you can count on.

Prod. No. 5609 \$14.95

A heavy duty plastic tripod launcher with authentic detailing. Newly re-designed for lower Center of Gravity and more stability. Universal design lets you launch all sizes and types of rockets from minis to large cluster rockets and Magnum D engines. Features removable legs, tiltable launch rod, big blast deflector, 2 piece 1/8" x 36" launch rod and adjustable pivot to accept 3/16" rod. Assembles in minutes.

Prod. No. 5601 \$9.00



Power Tower

Launch Rods

2 piece 1/8" x 36" rod. Use for your own home-built launch stand or as a replacement for Powr-Pad or Power Tower.

Prod. No. 5800 \$1.25

Extra-strong 2-piece launch rod 3/16" in diameter. Compatible with Power Tower. Designed for heavy duty launchings such as Saturn V and Magnum D kits.

Prod. No. 5803 \$2.50

Power-Pulse™ Launch Controller

This revolutionary new launch controller utilizes the new 6 volt Polaroid® Pola-Pulse™ battery. This super-thin battery eliminates the need for expensive and hard to find lantern batteries and gives consistent ignition for more than 150 launchings. The Power-Pulse controller is molded out of rugged styrene plastic and features safety key, continuity check light and ignition button, 15 feet of launch cable and pre-soldered micro-clips. Use with Centuri Sure-Shot II igniters. The launch controller of the future—be sure it's in your range box today!

(Battery not included)

Prod. No. 5602 \$9.95



Length: 4-7/8"
Width: 3-7/8"
Depth: 15/16" to 1-3/16"



Polaroid® Pola-Pulse™ Battery

Revolutionary battery is only 3.7" high by 3" wide by 0.18" thick, yet packs the power for more than 150 launchings. Use with No. 5602 Power-Pulse Controller and Sure-Shot II igniters. 6 volt power.

Prod. No. 5630 Only \$3.25

Powr-Control



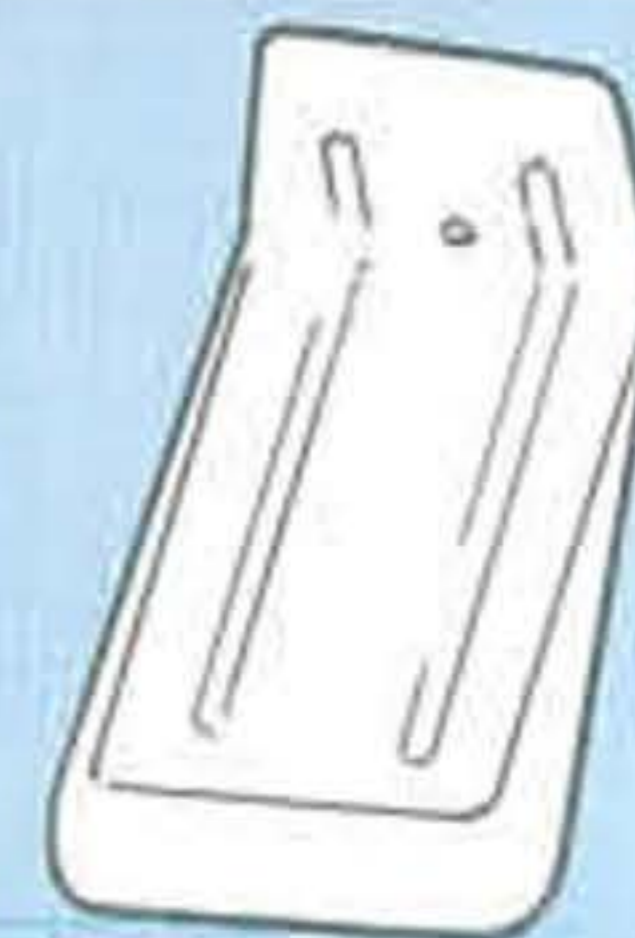
Powr-Control is the perfect controller for the Power Tower launcher or can be used with any launch stand. Contains 16 feet of igniter line and 5 feet of heavy duty jumper cable with large color-coded battery clips. Controller contains recessed launch button, continuity check light and safety key. Fly cluster powered rockets with this one!

Prod. No. 5623 \$9.95

Deflector

All steel 4" x 6" deflector designed to protect fins and nearby foliage from rocket exhaust.

Prod. No. 5806 \$1.50



Micro-Clips

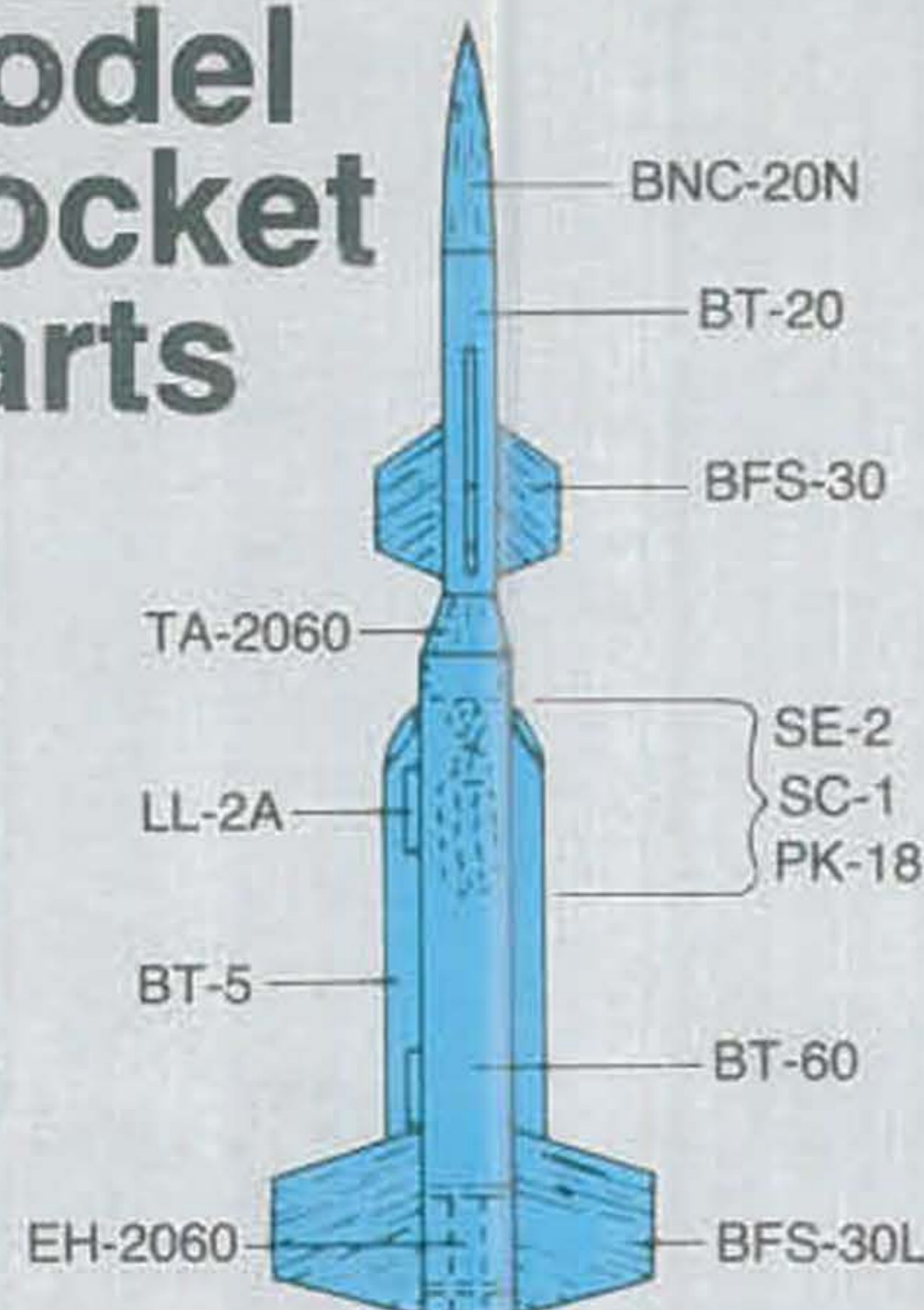
Replacement for Centuri systems or use on your own system.

Prod. No. 5812 \$1.25



Centuri

Model Rocket Parts



ORIGINAL DESIGN (Shows how a variety of matching parts can be used together.)

Once you have built and flown several Centuri model rocket kits and have learned the basics of model rocket design, you'll want to design your own rockets, using custom model rocket parts. Centuri offers a full line of industry-standard sized parts, manufactured by Estes Industries. These parts are compatible with all Centuri Enerjet and Magnum D model rocket engines and with each other. In some cases, they may not be compatible with parts in some Centuri kits.

Nearly all the parts listed here that match have the same series description number. Those that do not feature an additional description as to where they can be used. Normally, parts listing the same series number will be interchangeable with each other. For instance, a No. 20 body tube (BT-20) would mate with a No. 20A balsa nose cone (BNC-20A), a No. 20B engine block (EB-20B) and so on. Further, a No. 2060 tube adapter (TA-2060) will adapt a BT-20 to a BT-60, and a No. 5055 centering ring (AR-5055) will center a BT-50 in a BT-55. By using balsa or paper adapters almost any combination of parts can be joined together. For ordering, be sure to use both the product number and the series description number (name).

Fin Stock



Prod. No.	Description	Price	Dimensions (in inches)	Weight in Oz.	Major Use
3164	BFS-20	3 for \$1.15	1/16x3x9	.130	High Performance
3166	BFS-20L	3 for \$1.35	1/16x3x12	.173	High Performance
3168	BFS-30	3 for \$1.20	3/32x3x9	.150	Sport Models
3170	BFS-30L	3 for \$1.40	3/32x3x12	.200	Sport Models
3172	BFS-40	3 for \$1.35	1/8x3x9	.200	Cluster Rockets
3174	BFS-40L	3 for \$1.40	1/8x3x12	.265	Glider Wings

Body Tubes



Prod. No.	Description	Price Each	Length	Inside Diameter	Outside Diameter	Wall Thickness	Weight in Oz.
Spiral-Wound Paper Tube, for nose sections and strap-on payloads.							
3070	BT-5	\$1.10	18"	0.515"	0.541"	0.013"	.219
Spiral-Wound Paper Tube, for competition and sport models.							
3072	BT-20	\$1.20	18"	0.710"	0.736"	0.013"	.288
Spiral-Wound Paper Tube, for sport and high performance payload models.							
3073	BT-50	\$1.30	18"	0.950"	0.976"	0.013"	.378
Spiral-Wound Paper Tube, for sport and demonstration models.							
3074	BT-55	\$1.55	18"	1.283"	1.325"	0.021"	.672
Spiral-Wound Paper Tube, for sport and demonstration models.							
3075	BT-60	\$1.65	18"	1.595"	1.637"	0.021"	.960
Spiral-Wound Paper Tube, for monster models and tail rings.							
3076	BT-70	\$2.15	17.5"	2.175"	2.217"	0.021"	1.300
Spiral-Wound Paper Tube, for giant-scale models.							
30438	BT-101	\$2.65	16.5"	3.896"	3.938"	0.021"	1.974

Engine Blocks

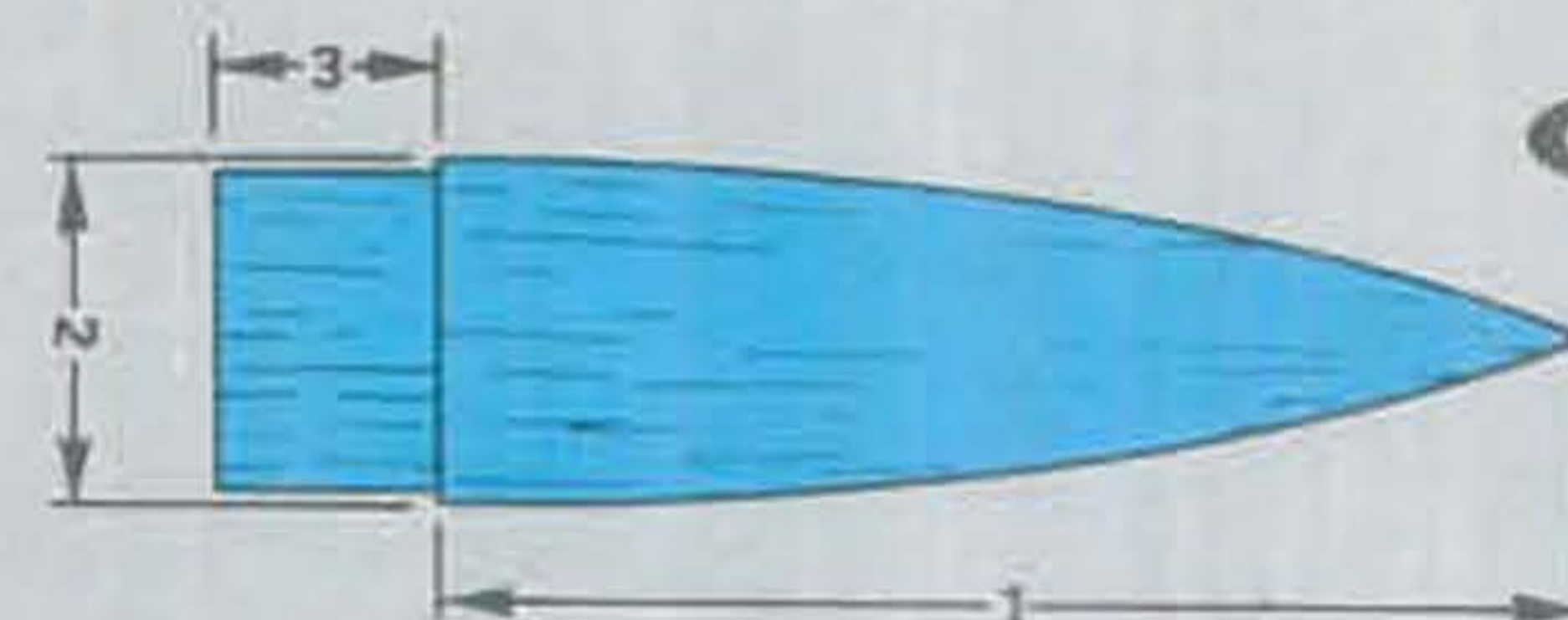


Prod. No.	Description	Price 3 for	Outside Dia.	Inside Dia.	Length	Fits	Weight in Oz.
3131	EB-20A	\$.95	.708"	.65"	1/4"	BT-20	.009

Nose Cones

Nose cone dimensions listed in columns 1, 2, and 3.

In "Description" column BNC stand for balsa nose cone and PNC for plastic nose cone.



Shape	No.	Prod. No.	Description	Price Each	Dimensions			Average Weight
					1	2	3	
	1	8002	BNC-5V	\$1.10	3/4"	0.541"	1/4"	0.013 oz.
	2	8000	BNC-5E	\$1.10	1-3/8"	0.541"	1/4"	0.020 oz.
	3	8001	BNC-5S	\$1.10	1-1/2"	0.541"	1/4"	0.016 oz.
	4	8003	BNC-5W	\$1.30	2-7/8"	0.541"	1/4"	0.039 oz.
	5	8004	BNC-20A	\$1.00	13/16"	0.736"	1/4"	0.03 oz.
	6	8005	BNC-20B	\$1.20	1-11/16"	0.736"	5/16"	0.05 oz.
	7	8007	BNC-20R	\$1.30	2-3/4"	0.736"	3/8"	0.07 oz.
	8	8022	PNC-20N	\$1.40	2-3/4"	0.736"	1/2"	0.08 oz.
	9	8008	BNC-50J	\$1.30	1-3/8"	0.976"	1/2"	0.08 oz.
	10	8009	BNC-50K	\$1.45	2-3/4"	0.976"	1/2"	0.13 oz.
	10	71028	PNC-50KA	\$1.20	2-3/4"	0.976"	1/2"	0.13 oz.
	11	8010	BNC-50X	\$1.50	3-1/4"	0.976"	1/2"	0.15 oz.
	12	8011	BNC-50Y	\$1.80	4-3/8"	0.976"	3/8"	0.16 oz.
	12	71009	PNC-50Y	\$1.60	4-3/8"	0.976"	3/8"	0.16 oz.
	13	8012	BNC-55AA	\$1.70	3-1/8"	1.325"	1/2"	0.15 oz.
	14	8014	BNC-55F	\$2.00	3-7/8"	1.325"	1/2"	0.19 oz.
	15	8023	PNC-55AC	\$2.10	5-3/8"	1.325"	3/8"	0.32 oz.
	16	71075	PNC-55AO	\$2.05	5"	1.325"	3/4"	0.43 oz.
	17	8024	PNC-60MS	\$1.80	3-1/8"	1.637"	5/8"	0.85 oz.
	18	8021	PNC-60AH	\$3.00	6-5/8"	1.637"	7/8"	1.0 oz.
	19	8019	BNC-70AJ	\$3.30	4-1/4"	2.217"	1"	0.85 oz.
	20	71050	PNC-101	\$2.75	12-1/2"	3.938"	3/4"	3.60 oz.

Engine Mounts



Engine Type	Prod. No.	Description	Price	Fits	Net Wt. (Oz.)
For regular Enerjet Engines	3150	EH-2050	\$1.25	BT-50	0.1
	3151	EH-2055	\$1.25	BT-55	0.14
	3152	EH-2060	\$1.25	BT-60	0.17
Special Purpose D-Convertible Mount	3154	EM-2050	\$1.20	BT-50	0.19

Stage Couplers



Prod. No.	Description	Price Each	Outside Diameter	Inside Diameter	Length	Fits	Average Weight
3050	JT-5C	\$.75	0.513"	0.455"	3/4"	BT-5	.020 oz.
3051	JT-20C	\$.75	0.708"	0.650"	3/4"	BT-20	.027 oz.
3052	JT-50C	\$.80	0.949"	0.920"	1"	BT-50	.051 oz.
3053	JT-55C	\$.80	1.28"	1.25"	1.3"	BT-55	.088 oz.
3054	JT-60C	\$.80	1.59"	1.55"	1-1/2"	BT-60	.124 oz.
3055	JT-70A	\$1.15	2.175"	2.115"	1-1/4"	BT-70	.140 oz.

NASA Space Shuttle Columbia Outfit

Centuri

Skill Level One –
Recommended
for Beginners

Fly
America's
Newest
Spaceship!



*Battery, paint and glue
are not included.*

Start your own Space Program with Centuri's Space Shuttle Columbia Outfit. This easy-to-build model is a near-scale version of NASA's Columbia Orbiter, which was the first space shuttle to fly in space on April 12, 1981.

Picture yourself ready to launch your fully prepped COLUMBIA: count-down . . . ignition . . . lift-off . . . roaring skyward . . . ejection! The big 16" chute brings her back safely in realistic glide position, ready to be launched again.

Complete starter set includes everything for your first three thrilling flights (except battery and finishing supplies). The COLUMBIA, at nearly one foot long, is a great display model between missions! Also included is the deluxe Powr-Pad launcher and three powerful Enerjet model rocket engines with igniters and recovery wadding.

Engines: B4-4 (First Flight), B6-4, B8-5, C6-5

Centuri Flying
Model Rockets
P.O. Box 1988



Prod. No. 5206

ONLY \$17.95