



Centuri

THE QUALITY LEADER IN HIGH-FLYING ROCKETS

ROCKETEER CATALOG NO. 771-R

NEWEST ADDITIONS TO

FIGHTER FLEET



NEW F-104 STARFIGHTER

NEW 5J ISRAELI MIRAGE

F-15 EAGLE

F-4 PHANTOM

F-16 FIGHTER

NEWEST "FIGHTER FLEET" KITS: SEE PAGE 16
NEWEST "SUPER KIT": SEE PAGE 18
NEWEST "KWIK-KIT": SEE PAGE 21
NEWEST ENGINES: SEE PAGE 27

SPRING/SUMMER 1977

Model Rocket Catalog

Why, what & how.

Flying Model Rockets.

Why?

Why should you know about model rocketry? Because it's one of the most action-packed hobbies in the world, that's why!

Model rocketry has been around a long time. In fact the hobby is as old as NASA, the National Aeronautics and Space Administration. There have been more than 50 million individual model rocket launches, and Centuri is proud to have been a pioneer in the hobby. Most rocketeers are young people 10 to 17 years of age... but lately we see more and more adults turning to this exciting sport too.

Imagine the thrill of seeing a rocket YOU made streak skyward a thousand feet (or more!), then return safely to earth by its colorful parachute! And that's just the start. You can move on to multi-staged "birds", B-G models that glide back like an airplane, cluster-jobs with two or three engines firing at once, challenging scale models loaded with detail, and much more.

And it's educational, too! Just the simple acts of building, launching, and tracking model rockets "drives home" a meaningful understanding of math, physics, and aerodynamics. For many young people, a model rocket project is their first experience in setting a goal, defining its solution, and combining their intellect and dexterity to accomplish that goal. And most important—discovering that it is actually fun to solve their own problems.

And, of course, it is very safe. Its safety is endorsed by countless organizations including the Boy Scouts of America, 4-H Clubs, NASA, the Air Force, and government safety agencies. Centuri adheres to guidelines and standards established by the Federal Aviation Administration, National Fire Protection Association, Hobby Industry Association of America, and the National Association of Rocketry. In short, model rocketry has a better safety record than almost any other outdoor youth activity!

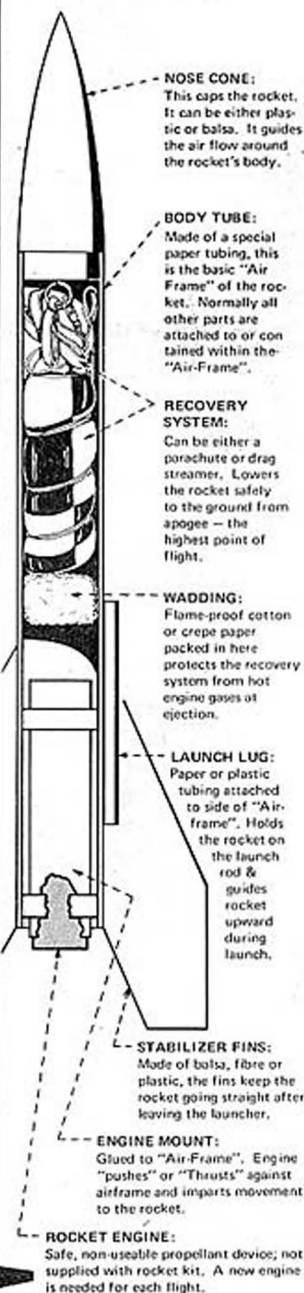
We are glad to have YOU join the worldwide fraternity of CENTURI ROCKETEERS!

Grant Boyd
Arant Boyd



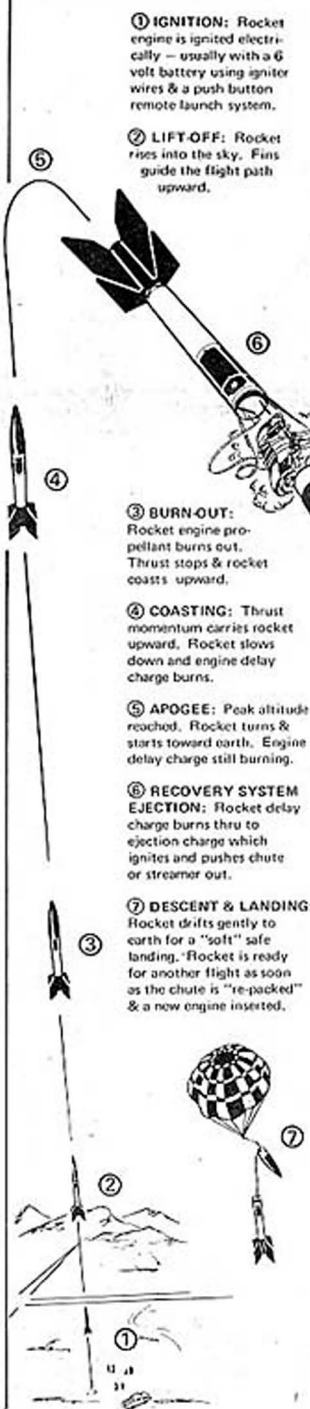
What?

SOME FLYING MODEL ROCKETS HAVE DIFFERENT SHAPES & FLIGHT CHARACTERISTICS, BUT MOST ARE LIKE THIS ONE...



How?

CENTURI MODEL ROCKETS PERFORM MUCH LIKE BIG ROCKETS AND MISSILES. HERE'S THE FLIGHT PATH OF A TYPICAL MODEL ROCKET.



Recovery systems.

THERE ARE 5 BASIC WAYS TO RECOVER A FLYING MODEL ROCKET!

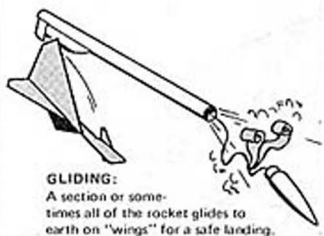
PARACHUTE:
Normally for medium to extra large rockets. Some rockets use two chutes together or separately to "Let Down" the component parts.



STREAMER:
Drag Streamers are for light & very high fliers — so they won't drift as far as parachutes. The fall is sufficiently "Braked" by the streamer for a soft landing.



GLIDING:
A section or sometimes all of the rocket glides to earth on "wings" for a safe landing.



HIGH DRAG:
These rockets "Tumble" slowly to earth due to high air resistance (drag). They are designed to land safely, and usually weigh less than 1/2 ounce.



GYRO ACTION:
Lightness, forward center of gravity and air flowing past the structure causes a slow-falling Gyro-Spin to a soft earth landing.



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*Indicates Pages With Newest Products

What it takes to build and fly.

ABOUT YOUR ROCKETS:

All Centuri Rockets come in kit form, most include colorful decal sheets. Engines are NOT included except with Kits in "Outfits". All kits contain complete instructions and all necessary parts—most are pre-formed, molded or pre-cut. Simplicity, quality parts, easy construction and clear instructions make Centuri model rockets hard to beat!

CHOOSING ROCKETS: SKILL-LEVEL

Each Centuri rocket has a Skill-Level number assigned in this catalog, indicating a level of building & flying complexity. If you are a newcomer to this hobby, we suggest building a Skill-Level 1 rocket. The Eagle Power Outfit gives you everything you need to build & fly including a launch system - all at a bargain price! Here's a Skill-Level number system found on many packages.

TYPICAL SYMBOL: "Lil' Herc" is Skill Level 1

1	2	3	4	5
Beginner	Intermediate			Advanced

- 1-For the beginner who has no previous modeling experience of any kind.
- 2-Build & Fly Skill Level 1 or have some experience in other modeling hobbies.
- 3-Experience in Skill Level 1 & 2 - Average modeling challenge.
- 4-Continued experience such as staging, boost gliders & scale model rockets.
- 5-Special configuration on high detail, multi-engine, or advanced gliding models requiring a solid background in model rocketry.

HERE'S WHAT YOU NEED:

Not all Kits require all types of tools. Generally, you need a good X-acto type modeling knife, a ruler, scissors, a pencil & a small paint brush. Some kits, like "Screaming Eagle" require no tools at all!

FINISHING MATERIALS:

The best glue is an "Aliphatic" (White) (1-2 bands) or common "White Glue" like Elmer's. Model airplane cement is NOT recommended as it dries too fast & does not hold well. Kits with balsa parts require "Sanding Sealer" and a fine (220-400) sandpaper. Use spray enamel for smooth painting.

LAUNCH SYSTEMS:

There are 2 systems. POWER-PAD is included in all Centuri basic starter outfits, and is complete except for battery. POWER TOWER requires the POWER-CONTROL launch controller.

POWER SUPPLY:

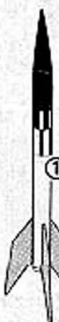
Any standard 6 volt lantern battery as shown here works with Power-Pad. Any 6 or 12 volt system (including an auto battery) works with Power Tower & Power-Control. Do not use house current or a lower voltage than recommended.

ROCKET ENGINES:

Centuri offers 27 engine types & sizes including Mini-Motors. Pick the power to fit your rocket for flights from 50 to over 2000 feet! Sure-Shot igniters & complete instructions are included in each 3-engine package.

Things to do and try.

CENTURI'S KIT VARIETY LETS YOU EXPERIENCE JUST ABOUT EVERYTHING FROM PAYLOAD EXPERIMENTS TO THE CLUSTERED ENGINE LIFT-OFF OF A GIANT ROCKET.



① SPORT MODELS: These are just plain "FUN" rockets - many shapes to choose from. Some are extra-high flyers!



② PAYLOAD ROCKETS: These have special compartments to carry insects and the like. Study acceleration effects and see who can go the highest!



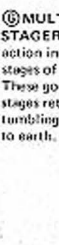
③ BOOST GLIDERS: They blast off & up like a rocket and glide-return like an airplane. Hold a contest on who's stays up the longest!



④ SUPERSCALE: Exact replicas of the real thing! Some are very easy to build - others are a real challenge to the experienced modeler - ALL are rewarding!



⑤ CLUSTER ENGINES: Realism at its best when 2 or 3 thundering engines ignite to lift a giant rocket slowly toward the heavens! Here's the ultimate in the fun & challenge of model rocketry!



⑥ MULTI-STAGER: Rear action in 2 & 3 stages of power. These go high & stages return by tumbling safely to earth.

Safety code.

- 1 CONSTRUCTION - My model rockets will be made of lightweight materials such as paper, wood, plastic, and rubber without any metal as structural parts.
- 2 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.
- 3 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.
- 4 WEIGHT LIMITS - My model rocket will weigh no more than 453 grams (16 ozs.) at lift-off, and the engines will contain no more than 133 grams (4 ozs.) of propellant.
- 5 STABILITY - I will check the stability of my model rocket before its first flight, except when launching models of already proven stability.
- 6 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 10 feet from any rocket that is being launched.
- 7 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 conditions 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 card 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.

How do I learn more?

LEARN BY DOING:

Many questions about this exciting hobby are answered in this catalog and product instruction sheets. As you grow in experience there are more places to learn from.

HOBBY STORES:

Your local hobby dealer is one of your best information sources. He has years of experience helping new rocketeers. If he doesn't have Centuri Rockets ask him to start and drop us a note so we can add him to our mailing list.

SCHOOLS & CLUBS:

There are hundreds of independent model rocket clubs in the U.S., Canada, & Europe. Others are sponsored by groups like the Boy Scouts, YMCA, 4-H or Civil Air Patrol. Some are organized by school teachers or groups like Kiwanis or city Recreation Departments Ask around!

BOOKS & PUBLICATIONS:

Your local library probably has books on model rocketry. Ask the librarian to show you how to use the library's resources. Some hobby magazines such as INTERNATIONAL MODELER frequently have rocketry articles. Centuri produces many Tech Reports and booklets. See the "ROCKET INFO" section in this catalog.

NATIONAL ASSOCIATION OF ROCKETRY (NAR)

The NAR is THE official non-profit organization working for the advancement of model rocketry nation-wide. Open to all serious rocketeers, membership includes competition sporting license, decals, insurance, and subscription to MODEL ROCKETEER magazine. For information, write: NAR Headquarters, Dept. C77 P.O. Box 725 New Providence, New Jersey 07974

AEROSPACE TEAM:

Centuri's Aerospace Team is one of the oldest model rocket clubs established by a manufacturer. For a real flying-start join "OUR TEAM" for a one-time fee of \$1.00. Here's what you get by return mail: *MEMBERSHIP CARD - Fits wallet & contains safety code. *I.D. STICKER for your field box. *WALL CERTIFICATE - your name inscribed. *ROCKET DESIGN MANUAL with photos, plans & many pages! *IRON ON EMBLEM for shirt or jacket. *TEAM DECAL SHEET - 16 insignia! *PLUS - A direct line on all the latest in Model Rocketry.

JOIN TODAY!

Send \$1.00 To:

CENTURI, Dept. C77
P.O. Box 1988
Phoenix, Arizona 85001

Educational Services.

Centuri's Educational Services Division has a series of aid materials to assist the educator in preparing a "motivating" model rocketry program in school. Educators are invited to write on their school's letterhead for free information. Send request to:

Director of Educational Programs
P. O. Box 1988
Phoenix, Arizona 85001

Centuri **Outfits.**

Everything you need to fly.



SCREAMING EAGLE rocket kit is also available separately. See page 21.

Battery not included. See below.

Build & launch in one day!

Centuri's Eagle Power Outfit* gets you off to a flying start in model rocketry! No painting, no sanding & no special tools. Look at what you get ● SCREAMING EAGLE rocket kit with pre-formed tail fin assembly, plastic nose cone, pre-colored body wrapper, decals & parachute. ● POWER-PAD LAUNCH SYSTEM Launch Sys-

tem with tilting rod, steel exhaust deflector, carrying handle, launch controller & safety key, (battery not included*).

● Plus 2 powerful rocket engines, glue, Mini-Manual on model rocketry, parachute wadding, igniters, and complete instructions – THE WORKS! GET GOING WITH "EAGLE POWER" today!

PROD. NO. 5404 (Formerly SK-110) SKILL LEVEL 1

Shipping Wt. 3 lbs.

Eagle Power


Flying Model Rocket Outfit \$11.00

RECOMMENDED BATTERY	
6 VOLT "LANTERN"	
Capacity: 100	Weight: 2.00
Depth: 7.00	Size: 4.50x1.50
Terminal: 12	Temp: 40°F
Material: W-111	Price: \$4.95
Manufacturer: B&K	Model: 228411

*This size substitutes other 6 volt types of the same physical size.

- Power-Pad uses standard 6-volt lantern battery
- Good for over 500 launches
- Available at most hobby and sporting goods stores

EAGLE POWER



SCREAMING EAGLE rocket kit is also available separately. See page 21.

Battery not included. See page 4.

EXCALIBUR rocket kit is also available separately. See page 11.

Two big rockets and everything else you need to fly!

Centuri's Big Shot is really loaded! Includes everything you get in the Eagle Power Outfit ... plus more! Includes ● SCREAMING EAGLE almost-ready-to-fly rocket kit for super-easy start, ● Long tall EXCALIBUR rocket kit to get you into regular rockets, ● POWER-PAD launch system ... universally praised as the best there is, ● Enough

engines, igniters and parachute wadding for FOUR thundering flights. Illustrated instructions, mini-manual, and glue for assembly. ● Plus our big 36 page ROCKETEER'S GUIDEBOOK loaded with tech info on multi-staging, altitude tracking and much more. For a flying rocket start — go with BIG SHOT!

PROD. NO. 5406
SKILL LEVEL 1

(Formerly SK-210)

Shipping Wt. 4 lbs

Big Shot

T.M.

BIG SHOT

Deluxe Rocket Outfit \$16.⁰⁰

Outfits.

Centuri

Everything you need to fly.

EAGLE TRANSPORTER rocket kit is also available separately. See page 9.



Battery not included. See page 4.

Commander Koenig (Martin Landau).

Dr. Helena Russell (Barbara Bain).

The only **SPACE: 1999 EAGLE TRANSPORTER** that flies!

Centuri proudly brings you the only true flying version of the fabulous "Eagle Transporter" as seen on television's number one science fiction show!

● EAGLE TRANSPORTER KIT with dual parachutes: scaled from official prints... Only minor changes have

been made, to allow atmospheric model rocket flight.

● POWER-PAD LAUNCH SYSTEM for dependable performance.
● Plus 4 powerful "C" ENGINES, Sure-Shot igniters, parachute wadding, Mini Manual and complete instructions. Every thing you need to get started except battery, plastic glue, white glue and standard model rocket tools. Once you have this outfit, you are in the rocket business!

SPACE: 1999

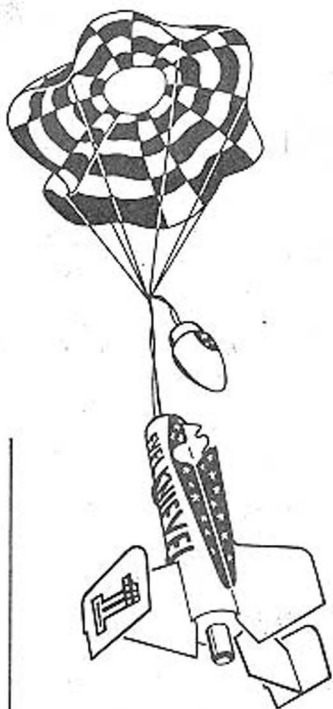
PROD. NO. 5314

Ship. Wt. 3 lbs.

SKILL LEVEL 2

Eagle Transporter Outfit

\$17.00



SKY CYCLE rocket kit is also available separately. See pg. 24.



A MESSAGE FROM EVEL ...

Safety first is my motto, and it should be yours. Follow all safety instructions to enjoy flying your "SKY CYCLE".

HAPPY LANDINGS!



Battery not included. See page 4.

Lantern Battery

Get started with

Get started in rocketry with the only FLYING model of Evel Knievel's famous Skycycle! Look at what you get in this one-of-a-kind outfit.

- SKY CYCLE ROCKET KIT with decals, parachute, and pre-colored parts.
- POWER-PAD LAUNCH SYSTEM for safe, reliable ignition and lift-off.

- ROCKET ENGINES & IGNITERS. 3 Centuri "Mini-Motors", includes instructions and dependable "Sure-Shot" igniters.
- PLUS YOU GET EVERYTHING ELSE. Assembly glue, chute wadding, Mini-Manual & complete instructions.

GET IN THE AIR FAST WITH THIS EXCITING STARTER OUTFIT ...

© 1975 Evel Knievel



SKILL LEVEL-1

Evel Knievel Sky Cycle Outfit \$13.00

PROD. NO. 5351

Shipping Wt. 2 lb.

Centuri

Kits.

Flying Model Rockets.

PLANETARY SPACE CRUISER — FUTURISTIC MARKINGS!

Almost 2 feet tall, TAURUS has the look of the future! This kit is so highly detailed, (one of our most detailed decal sheets), that you'll be proud to fly it or display it! Plastic body reducers, a large molded nose cone, simulated cluster boosters, chrome trim, pre-cut balsa fins & a large parachute make TAURUS a standout-anywhere! Build it — detail it & get ready for REALISTIC SPACE ACTION with TAURUS!

SPECIFICATIONS	RECOMMENDED ENGINES
Length 23.3"	AS-3 B44
Body Dia. 1.34"	B64 C65
Net Wt. 7.6 oz.	

PROD. NO. 5033 (Formerly KB-3)

Taurus

SKILL LEVEL-3

\$4.50

Shipping Wt. 15 oz.
Engines not included.

HI-PERFORMING BEGINNER'S ROCKET!

EASY FLIGHTS TO 800'!

Get perfect high altitude flights every time with a proven design. This swift rocket has super-stabilizing tail fins. And it goes as good as it looks! Pre-cut balsa fins, plastic nose cone, "quick-change" engine lock, large colorful chute and decals make ASTRO-1 THE CHOICE for the beginner.

SPECIFICATIONS	RECOMMENDED ENGINES
Length 15"	BAG-2 B64
Body Dia. 1.04"	AS-3 B14 G
Net Wt. 1.1 oz.	B4-4 C6-5

PROD. NO. 5047 (Formerly KB-17)

Astro 1

SKILL LEVEL-1

\$3.00

Shipping Wt. 13 oz.
Engines not included.

AMERICA'S FIRST SUPERSONIC ROCKET

1/37 SCALE!

Get in on history with MX-774! A Convair design, this sleek rocket was inspired by the famous German V-2 rockets. And the "MX" gets up there fast with flights as high as 1/4 mile! And it recovers so gently by parachute. Streamlined "Boat-Tail" fins, a molded nose section & a special 2-page scale data sheet makes MX-774 an interesting & exciting project!

PROD. NO. 5003 (Formerly KA-3)

MX-774

SKILL LEVEL-3

\$2.50

SPECIFICATIONS	RECOMMENDED ENGINES
Length 11"	BAG-2 B46 B66
Body Dia. 0.91"	B147 C6-7
Net Wt. 1.1 oz.	

Shipping Wt. 9 oz.
Engines not included.

FLY A ROCKET POWERED FIGHTER

ACTION GALORE!

How about a jet-style fighter that roars skyward to 500', ejects a streamer recovered target marker, then smoothly circles for a soft-landing. Talk about action—MACH-10 has it! Pre-cut balsa wings & tail plus a rugged plastic-coned belly tank & Centuri's lift-generating "T-TAIL" makes this easy-to-construct "BIRD" a show-stealer—every flight!

PROD. NO. 5004 (Formerly KA-4)

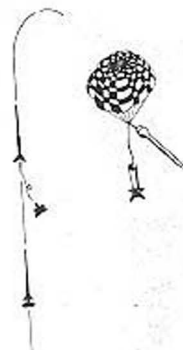
Mach 10

SKILL LEVEL-4

\$4.00

Shipping Wt. 14 oz.
Engines not included.

SPECIFICATIONS	RECOMMENDED ENGINES
Length 12"	B42 C63
Body Dia. 1.64"	
Wing Span 11"	
Glide Wt. 1.35 oz.	
Net Wt. 1.85 oz.	



TWO-STAGE GIANT — 3 FEET TALL!

Get ready for Action when this one lifts-off! Slim & trim, LONG TOM streaks up to 1/2 mile high & returns gently with its large parachute. Colored plastic body reducer & nose cone with decal emblems make this one really fun to build & fly. Add Centuri's exclusive "Passport" Staging* and Baffle/Chute Ejection* (no chute wadding necessary!) You've got "SURE-FIRE" PERFORMANCE every launch!

SPECIFICATIONS	RECOMMENDED ENGINES	
	1st Stage	2nd Stage
Length..... 35.5"	A80	B4-4
Body Dia..... 1.34"	B3-C	B5-C
Net Wt..... 3.6oz.	B14-C	C6-7
	C6-9	
	C5-05	

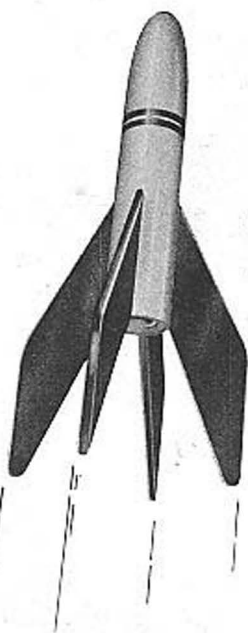
PROD. NO. 5054 (Formerly KC-41)

Long Tom

SKILL LEVEL 4

\$5.50

Shipping Wt. 18 oz.
Engines not included.
U.S. Pat. No. 3,721,193
3,710,145



BEGINNERS FEATHERWEIGHT A SNAP TO ASSEMBLE!

Watch this little "BIRD" move out to high altitudes! Super-simple to build, LIL' HERC has no parachute — at apogee the engine is "POPPED" free to let "HERC" tumble ever so gently to earth. Pre-cut balsa fins, a fibre body casing & plastic nose cone make this one an afternoon project of fun and action!

SPECIFICATIONS	RECOMMENDED ENGINES	
	1st Stage	2nd Stage
Length..... 6.5"	NA5-2	NA6-4
Body Dia..... 0.76"		
Net Wt..... 0.3 oz.		

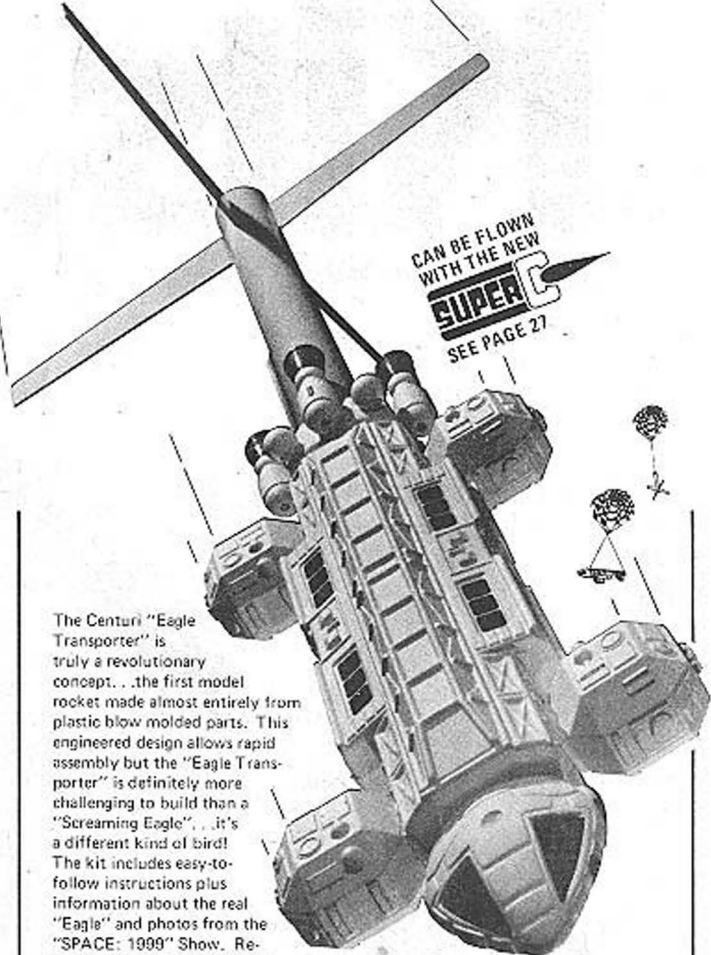
PROD. NO. 5001 (Formerly KA-1)

Lil' Herc

SKILL LEVEL-1

\$1.25

Shipping Wt. 5 oz.
Engines not included.



CAN BE FLOWN
WITH THE NEW
SUPER C
SEE PAGE 27

The Centuri "Eagle Transporter" is truly a revolutionary concept... the first model rocket made almost entirely from plastic blow molded parts. This engineered design allows rapid assembly but the "Eagle Transporter" is definitely more challenging to build than a "Screaming Eagle". It's a different kind of bird! The kit includes easy-to-follow instructions plus information about the real "Eagle" and photos from the "SPACE: 1999" Show. Requires white glue, plastic glue and standard model rocket tools (modeling knife, pencil, spray paint).

	Eagle	Flight Module	When Joined
Length	13.0"	11.0"	23.25"
Body Diam.	5.1"	1.0"	—
Net Wt.	2.85 oz.	1.40 oz.	4.25 oz.

PROD. NO. 5316

Recommended Engines C6-3 C6-35

SPACE: 1999 Eagle Transporter

SKILL LEVEL 2

\$8.00

Ship Wt. 11b. 6 oz.
Engines not included.

2 PARACHUTES

FLY A WINNER! TWO CHUTES AND MORE!

This slim speedster won the parachute duration event at the First International Model Rocket Championships! VERY sleek, VERY fast, STARFIRE goes VERY VERY HIGH-UP to 1,500'! Then floats VERY slowly down on its extra large chute. You get a small chute too! Pre-cut balsa fins, a streamlined plastic nose cone, boat-tail fin design & special "stars" decal make STARFIRE the real "PRO" at the launch pad!

SPECIFICATIONS	RECOMMENDED ENGINES	
	1st Stage	2nd Stage
Length..... 16"	NA5-2	NA6-6
Body Dia..... 0.91"		
Net Wt..... 7 oz.		

PROD. NO. 5072 (Formerly KC-12)

Starfire

SKILL LEVEL-2

\$3.50

Shipping Wt. 10 oz.
Engines not included.

Centuri

Kits.

Flying Model Rockets.

NASA'S SPECTACULAR DETAILS GALORE & IT FLIES!

So realistic, you'll thrill from the moment of its majestic lift-off to its breath-taking soft recovery to earth. Over 2 feet tall, Centuri's SKY LAB is probably the most exciting flying model rocket you'll ever build! And, we've made it easy with molded plastic parts, chromed solar panels, super-detail large decal sheet, a body wrapper & much, much more!
ALL SYSTEMS ARE "GO" WITH THIS ONE—DON'T MISS THE FUN!



CAN BE FLOWN WITH THE NEW **SUPER C** SEE PAGE 27

PROD. NO. 5034 (Formerly KB-4)

Sky-Lab

SKILL LEVEL-4 \$7.00 Shipping Wt. 16 oz. Engines not included.

HI-FLYING SINGLE STAGER! SEE-THRU PAYLOAD CAPSULE!

Watch this square-tailed performer go! See-thru payload capsule lets you send live insects aloft. And... the recovery is slow & safe by colored parachute. Plastic nose cone and body reducer plus colorful decals makes "HUNTER" EASY to build & FUN to fly!

SPECIFICATIONS

Length 12.5"
 Body Dia. 0.75"
 Capsule Dia. 0.91"
 Net Wt. 0.85 oz.

RECOMMENDED ENGINES

A62 A65
 B66 B14G C67

PROD. NO. 5043 (Formerly KB-13)

Snipe Hunter

SKILL LEVEL-2 \$3.00 Shipping Wt. 10 oz. Engines not included.



SPIN STABILIZED HI-FLYER

FLIGHTS TO ONE-QUARTER MILE!

Watch as the canted fins spin & stabilize TWISTER on its way up. At apogee the parachute "POPS" to let TWISTER down slow & easy. This one's easy to build with plastic molded nose cone, extra colorful decals and pre-cut balsa fins. Get in the spin—Fly TWISTER!

SPECIFICATIONS
 Length 11"
 Body Dia. 0.91"
 Net Wt. 0.8 oz.

RECOMMENDED ENGINES

A62 A65 B14-G
 A54 B66 C67

PROD. NO. 5002 (Formerly KA-2)

Twister

SKILL LEVEL-1 \$2.50 Shipping Wt. 3 oz. Engines not included.



SEMI-SCALE NAVAL MISSILE TARGET DRONE

FLIGHTS TO 1,400'!

JAYHAWK has realism PLUS! With some variations, it looks and flies like the U.S. Navy AQM-37A Missile Target. Details galore in this kit with 3-color decal, pre-cut fibre-fins, plastic nose cone and parachute. All you need is glue & spray paint and your JAYHAWK is ready for the sky!

SPECIFICATIONS
 Length 12.6"
 Body Diam. 0.91"
 Net Wt. 1.02

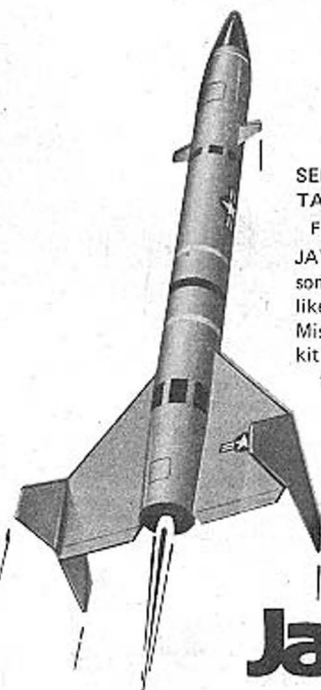
RECOMMENDED ENGINES

A62 A54 B46
 B66 C67

PROD. NO. 5171 (Formerly KF-1)

Jayhawk

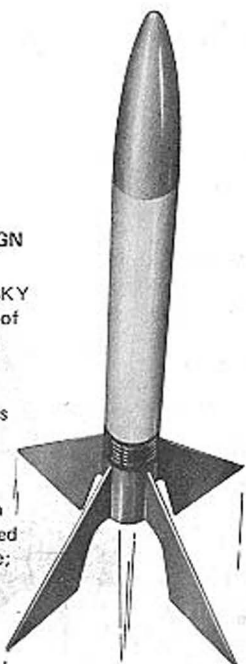
SKILL LEVEL-2 \$3.00 Shipping Wt. 2 oz. Engines not included.





CUSTOMIZED FIN DESIGN 8 TO CHOOSE FROM!

YOU DECIDE how your SKY DEVIL will look with one of 8 different tail fin designs! Then blast-off to altitudes as high as 1,800'! This foot-long performer comes with plastic nose cone, balsa fin sheet & colorful parachute and the price is right! How about these fin choices! Aero Bee-Hi; Raked Delta; Swept-Delta; Bastille; Swept-Subsonic; Cobra; Clipped-Delta & Elliptical. It's flyer's CHOICE with SKY DEVIL!



PROD. NO. 5040 (Formerly KB-10)

Sky Devil

SKILL LEVEL-2

\$1.75

SPECIFICATIONS
Length 12" to 14"
Body Diam. 0.79"
Net Wt. 0.8 oz.

RECOMMENDED ENGINES
A6.4 A8.5 B4.C
B5.C C6.7

Shipping Wt. 10 lbs.
Engine not included

BIG-BIG BIRD

OVER TWO FEET LONG!

Long, slim & fast, EXCALIBUR is a STANDOUT in any rocket fleet line up! Two body diameters, plastic body reducer, plastic nose cone, pre-cut fibre fins, reflective chrome trim, custom decal sheet, "Quick Change" engine lock and snappy parachute all go together extra fast for either the Beginner or Experienced rocketeer. JUST APPLY GLUE & SPRAY PAINT & get set for hi-flying excitement with EXCALIBUR!

SPECIFICATIONS **RECOMMENDED ENGINES**
Length 26.5"
Body Dia. 0.91"
Net Wt. 1.50 oz.

A2.3 A4.4 C0.5

PROD. NO. 5008 (Formerly KA-8)

Excalibur

SKILL LEVEL-1

\$3.50

Shipping Wt. 14 lbs.
Engine not included



IT GLIDES BACK TO EARTH TO EARTH

LIFTING BODY PRINCIPLE!

Yes, it actually flies! X-24 is our version of tomorrow's manned re-entry vehicle. The "BUG" climbs smoothly away from the launch pad trailing smoke and making a weird sound! Different! At apogee it quickly stabilizes in a long sweeping glide to a soft earth landing. Assembly is simple using PRE-PAINTED PAPER loaded with color & details. Get the "BUG" and start your own test program!

PROD. NO. 5012 (Formerly KA-12)

X-24 Bug

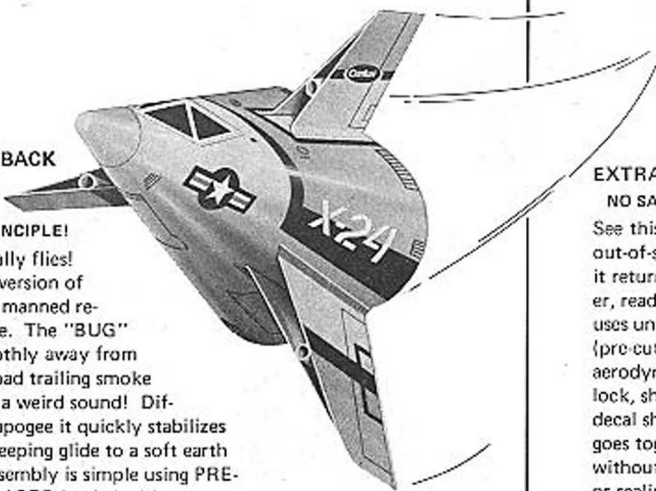
SKILL LEVEL-3

\$1.75

SPECIFICATIONS
Length 3"
Wingspan 3"
Net Wt. 1.0 oz.

RECOMMENDED ENGINES
B4.2 C5.3 C6.0

Shipping Wt. 10 lbs.
Engine not included



EXTRA-HI FLYER

NO SANDING OR SEALING!

See this slim one streak to almost-out-of-sight altitudes! Then watch it return on a colorful drogue streamer, ready to go again! BANDITO uses unique wedge shaped speed fins (pre-cut fibre) designed to enhance aerodynamics, "Quick Change" engine lock, shiny chrome trim & a colorful decal sheet. And it goes together fast without any sanding or sealing. FLY THE HOT ONE - the BANDITO!

PROD. NO. 5007 (Formerly KA-7)

Bandito

SKILL LEVEL-2

\$2.25

Shipping Wt. 11 lbs.
Engine not included

SPECIFICATIONS
Length 16.6"
Body Dia. 0.76"
Net Wt. 1.5 oz.

RECOMMENDED ENGINES
A6.4 A8.5
B4.6 C6.7



CENTURY

Kits.

Flying Model Rockets.



LAUNCH YOUR OWN!

Styled after the U.S. Naval missiles Tarter & Terrier, NOMAD has the look of the real thing. Slim and sleek. It really moves out with flights up to 1/6th mile! Recovery is by a colored parachute for launch after launch. AND WHAT DETAILS! Pre-cut fibre-fins & body vanes, chrome bands and a super-detailed 2-color decal sheet. Round out your rocket fleet with this fast flying performer—NOMAD!

SPECIFICATIONS
Length 18.0"
Body Diam. 1.0"
Net Wt. 1.75 oz.

RECOMMENDED ENGINES
A8-2 B4-4
D5-4 C6-3

PROD. NO. 5035 (Formerly KB-5)

Nomad

SKILL LEVEL-3

\$4.00

Shipping Wt. 12 oz.
Engines not included

SHAPE OF THE FUTURE

QUICK ASSEMBLY AND NO PAINTING!

This is one of our most exotic Rockets. With a unique shape of its own, VULCAN flies beautifully without conventional rocket fins! Goes together quick with pre-colored parts & a minimum of fuss. Watch VULCAN streak skyward & return gracefully by its colorful parachute. Definitely NOT ANOTHER "ME TOO" ROCKET, VULCAN is really something special.

PROD. NO. 5010 (Formerly KA-10)

Vulcan

SKILL LEVEL-3

\$2.50

Shipping Wt. 11 oz.
Engines not included

SPECIFICATIONS
Length 10.5"
Max. Span 5.5"
Net Wt. 1.2 oz.

RECOMMENDED ENGINES
B4-2 C6-3

PERFORMANCE PLUS! FLIGHTS TO 1,800'

This kit is a must for the beginner who wants BIG SINGLE-STAGE PERFORMANCE in a small, fast rocket. Die cut fins & a plastic nose cone gets you to the launch pad—fast! Recovery is by colorful streamer for safe & happy landings — everytime! Every fleet needs this high-flying tiger — MICRON!

SPECIFICATIONS
Length 8.5"
Body Dia. 0.75"
Net Wt. 0.4 oz.

RECOMMENDED ENGINES
A6B-4 A8-5 B4-C
D6-8 C6-3

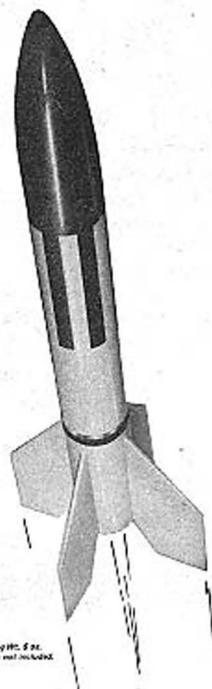
PROD. NO. 5005 (Formerly KA-5)

Micron

SKILL LEVEL-1

\$2.00

Shipping Wt. 8 oz.
Engines not included



SPACE PROBE REALISM!

ALMOST TWO FEET TALL! IMPRESSIVE just sitting on the launch pad—FANTASTIC in flight! This super-stable "bird" has realistic lift-offs and flies straight & true. Kit has pre-cut balsa fins, large parachute, body reducer and an extra-large customizing decal sheet. Build it & fly it-again & again!

SPECIFICATIONS
Length 21.5"
Body Dia. 1.34"
Net Wt. 1.75 oz.

RECOMMENDED ENGINES
A8-3 B14-5
D5-4 C5-5

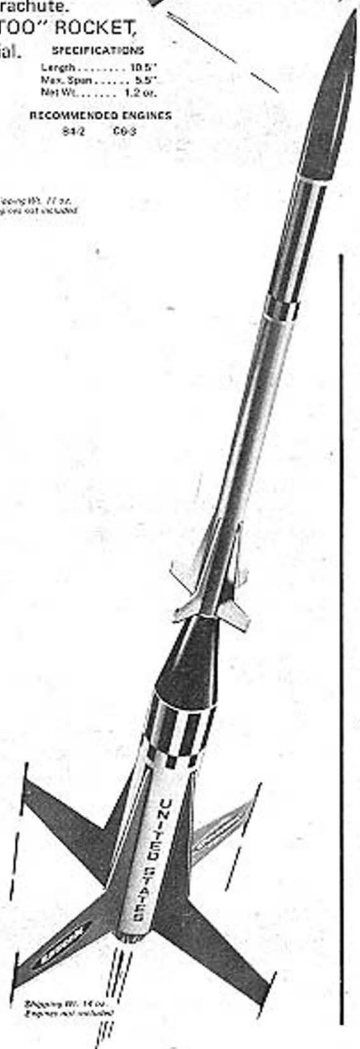
PROD. NO. 5110 (Formerly KC-50)

Laser X

SKILL LEVEL-3

\$4.50

Shipping Wt. 14 oz.
Engines not included



BUILDERS CHOICE

OVER 12 WAYS TO GO!

Here's one you customize to one of over a dozen different configurations. And it goes together fast too, with pre-cut fibre fins, plastic nose cone, a large decal sheet of exotic markings & super detailing & finishing ideas. Recover by parachute for a fast turn-around with Centuri's Quick Change Engine Lock. Get started in the Design-Your-Own game today with VECTOR-V!



PROD. NO. 5032 (Formerly KB-2)

Vector V

SKILL LEVEL-3

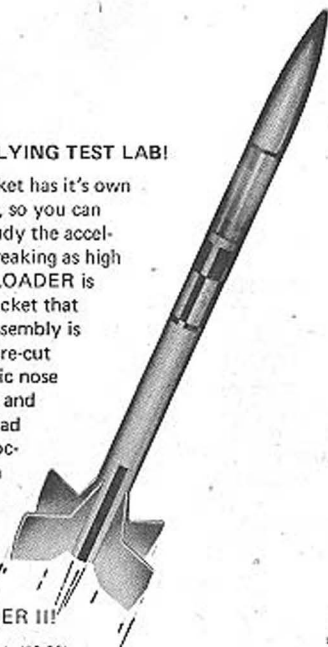
\$2.75 Shipping Wt. 10 oz.
Engines not included

SPECIFICATIONS
Length..... 12.5"
Max. Dia..... 1.34"
Net Wt..... 0.9 oz.

RECOMMENDED ENGINES
A8-2 A8-3 B4-4
B6-4 C6-5

BEGINNER'S HI-FLYING TEST LAB!

This high-flying rocket has its own clear plastic capsule, so you can launch insects to study the acceleration effects! Streaking as high as 1,000', the PAYLOADER is a great beginner's rocket that doubles the fun. Assembly is simple & fast with pre-cut balsa tail fins, plastic nose cone, custom decals and a clean plastic payload section. Both the rocket & capsule return safely to earth by sturdy parachute to FLY AGAIN & AGAIN. Fly with the Centuri "Carrier Rocket" PAYLOADER II!



PROD. NO. 5080 (Formerly KC-20)

Payloader II

SKILL LEVEL-2

\$3.50 Shipping Wt. 14 oz.
Engines not included

SPECIFICATIONS
Length..... 18.2"
Body Dia..... 1.0"
Net Wt..... 1.2 oz.

RECOMMENDED ENGINES
A8-3 B14-5
B6-4 C6-5

CAN BE FLOWN
WITH THE NEW
SUPERC
SEE PAGE 27

ONE OF CENTURI'S LONGER ROCKETS!

This lean one is almost 2½ feet long! And two stages of thrust puts EXCALIBUR 2 high above most other rockets with FLIGHT TO 1800'! Comes with molded plastic nose cone & body reducer, pass-port staging*, colorful decals, bright chrome trim & a large parachute. Get above the crowd with this one!

SPECIFICATIONS
Length..... 29.2"
Max. Dia..... 0.91"
Net Wt..... 2.1 oz.

RECOMMENDED ENGINES
1st Stage: A8-2 B6-4 B14-5 C6-5 C6-7
2nd Stage: A8-2 B6-4 B6-6 C6-7

PROD. NO. 5175 (Formerly KF-5)

Excalibur 2

SKILL LEVEL-3

\$4.00 Shipping Wt. 12 oz.
Engines not included

CAN BE FLOWN
WITH THE NEW
SUPERC
SEE PAGE 27

FLIGHTS TO 2,200 FEET

TWO-STAGE PERFORMANCE AT ITS BEST!

One of our highest flying rockets. This long thin 2-stager slices upward to almost OUT-OF-SIGHT ALTITUDES! It recovers on dual streamers while the booster tumbles safely to earth. Pre-cut balsa fins & passport staging* gets this sleek performer in the air-fast! Put real "GO" on your launch pad—STILETTO!

*U.S. Pat. No. 3,721,193



SPECIFICATIONS
Length..... 18.25"
Body Dia..... 0.76"
Net Wt..... 1.3 oz.

RECOMMENDED ENGINES
1st Stage: A8-2 A8-4
B6-4 B6-6
2nd Stage: B14-5 B6-6
C6-5 C6-7

PROD. NO. 5031 (Formerly KB-1)

Stiletto

SKILL LEVEL-3

\$3.50 Shipping Wt. 11 oz.
Engines not included

Kits.

Flying Model Rockets.

CAN BE FLOWN
WITH THE NEW

SUPER C

SEE PAGE 27



CENTURI'S SINGLE ENGINE GIANT SUPER DETAILING

Get into the **BIG TIME** with this one! **ORION'S** details are so realistic, it's great just to look at... And it flies beautifully too! Details galore including a special nose cone shape, corrugated body wrappers, pre-cut halsa fins, large decals, "baffle/chute" ejection* rocket exhaust nozzle. **ORION** thunders to over 400' & returns gently on it's large colored chute. **GO BIG WITH ORION!**

*U.S. Pat. No. 3,719,145

PROD. NO. 5068 (Formerly KC-81)

Orion

SKILL LEVEL-4

\$7.00

Shipping Wt. 16 oz.
Engine not included

SPECIFICATIONS
Length..... 22.5"
Body Dia..... 2.04"
Net Wt..... 4.5 oz.
RECOMMENDED ENGINES
B4-2 CB-3 CS-35

LOOK - NO FIN!

FOR BOTH THE BEGINNER & EXPERIENCED ROCKETEER!
An easy to build rocket with a "DIFFERENT" look. You'll be happy with its stable vertical flights especially in windy conditions. And, you can put it together in an evening. No fins to sand; a plastic nose cone, custom decals & shiny chrome trim make it a cinch with just glue & spray paint. Surprise your buddies with this unusual rocket.

SPECIFICATIONS
Length..... 18.25"
Body Dia..... 0.91"
Net Wt..... 1.75 oz.
RECOMMENDED ENGINES
A2-3 B4-4 CB-5

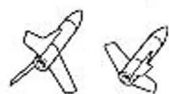
PROD. NO. 5011 (Formerly KA-111)

Groove Tube

SKILL LEVEL-1

\$3.50

Shipping Wt. 75 oz.
Engine not included



BEGINNER'S FUN! DUAL CONFIGURATION!

Here's a quick moving midget with lots of action! Launch your **MOONRAKER** and watch it separate into 2 sections at apogee! Both gyrotumble harmlessly to earth. You can also change the fin rake angles easily - it's two ships in one! Quick to assemble with plastic nose cone & durable pre-cut fibre fins, **MOONRAKER** is a must "FUN SHIP" for every beginner!

PROD. NO. 5041 (Formerly K8-111)

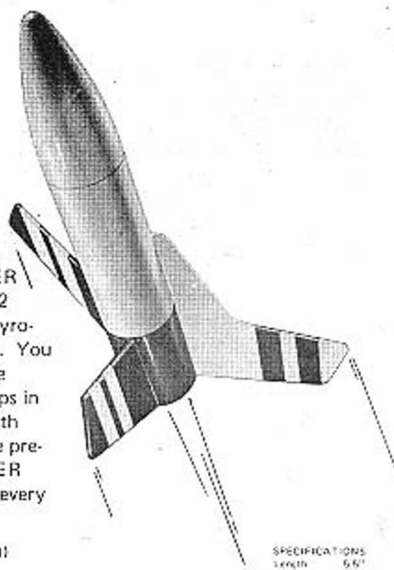
Moonraker

SKILL LEVEL-1

\$1.25

SPECIFICATIONS
Length..... 6.5"
Body Dia..... 0.76"
Net Wt..... 0.3 oz.
RECOMMENDED ENGINES
A4-4 A5-5

Shipping Wt. 2 oz.
Engine not included



BEGINNERS CHOICE FLIGHTS TO 1,800 FEET!

Get a flying start in model rocketry with **JAVELIN**. It's easy to assemble with plastic nose cone, colorful decals & pre-cut balsa fins. You'll see your "BIRD" streak hundreds of feet skyward. Then you'll hear the "POP" as the parachute deploys and the return to earth begins. Model Rocketry is fun and **JAVELIN** is where the fun begins!

SPECIFICATIONS
Length..... 12.9"
Body Dia..... 0.76"
Net Weight..... 0.6 oz.
RECOMMENDED ENGINES
A4-4 A5-5 B1-6 B1-7 CB-7

PROD. NO. 5091 (Formerly KC-311)

Javelin

SKILL LEVEL-1

\$2.50

Shipping Wt. 15 oz.
Engine not included



**EASY TO ASSEMBLE
BIG & BEAUTIFUL!**

Get to the launch pad quick with this IMPRESSIVE "BIRD"! Count down and watch CENTURION'S realistic "slow" lift-off! This is one of Centuri's easier-to-assemble rockets. It comes complete with colored plastic nose cone, special decal, "Baffle/Chute" ejection recovery and a large parachute. For single-stage "ACTION" at its best-it's CENTURION!

SPECIFICATIONS
Length 24"
Body Dia. 1.54"
Net Wt. 2.3 oz.

RECOMMENDED ENGINES
842 C65

PROD. NO. 5062 (Formerly KC-2)

Centurion

SKILL LEVEL-2

\$5.00

Shipping Wt. 16 oz.
Engine not included

*U.S. Pat. No. 3,719,145

CAN BE FLOWN
WITH THE NEW
SUPER C
SEE PAGE 27



**BIG 3 STAGER
OVER 3 FEET LONG!**

This one's a real High-Flyer — reaches up to 1/2 mile high! Or, you can launch with only one or two stages. Try advanced staging & watch as each stage "POPS" free to tumble safely to earth. You get 12 pre-cut fibre-fins, a payload section, an extra large decal, parachute & much more. ARROW 300 means "ACTION" for the experienced rocket flyer!

*U.S. Pat. No. 3,721,193

SPECIFICATIONS
Length 33.7"
Body Dia. 0.91"
Net Wt. 2.9 oz.

RECOMMENDED ENGINES

1st Stage	2nd Stage	3rd Stage
842	A8-0	1/8A-4
85-0	85-0	A8-5 or 24-8
CS-0	CS-0	CS-0
CS-0S	CS-0S	CS-0S or CS-7

PROD. NO. 5037
(Formerly KB-7)

Arrow-300

SKILL LEVEL-4

\$5.00

Shipping Wt. 14 oz.
Engine not included

CAN BE FLOWN
WITH THE NEW
SUPER C
SEE PAGE 27

**BIG 2-STAGE FUN with
A GLIDING BOOSTER!**

Here's a unique one! The extra large fins of the booster section cause a slow-sweeping glide return to earth. Meanwhile the "WIDOW's" upper section climbs away to over 2,000' to recover gently by chute. A plastic nose cone, custom decals, & reliable pass-port staging* makes this kit an excellent step up in 2-STAGE FUN!

*U.S. Pat. No. 3,721,193

PROD. NO. 5036 (Formerly KB-6)

Black Widow

SKILL LEVEL-5

\$3.75

Shipping Wt. 16 oz.
Engine not included

**SUPER DETAIL
MILITARY STYLED
HIGH PERFORMER**

Here's something really different from Centuri's Think-Tank! Unique off-center fins & dual stabilizing tubes make SCRAM-JET look like a fast-moving military target drone. And move it does to altitudes of 1/2 mile! Pre-cut balsa fins, plastic nose cone and a super decal sheet puts a beautifully detailed rocket on your launch pad and — parachute recovery keeps you flying again & again! Something "DIFFERENT" for your model rocket fleet — SCRAM-JET!

PROD. NO. 5174
(Formerly KF-1)

SPECIFICATIONS
Length 18.5"
Body Dia.75"
Net Wt. 1.3 oz.

RECOMMENDED ENGINES
1/8A-4, A8-5, B4-5
B5-5, C6-7

Scram-Jet

SKILL LEVEL-3

\$3.00

Shipping Wt. 11 oz.
Engine not included



FIGHTER FLEET™

Flying Rocket-Jets



THERE ARE LOTS OF REALISTIC LOOKING JET MODELS ON THE MARKET, BUT THESE ACTUALLY FLY! THESE MODIFIED-SCALE DESIGNS ARE FOR VERTICAL ROCKET FLIGHT ONLY.

EACH FIGHTER KIT INCLUDES:

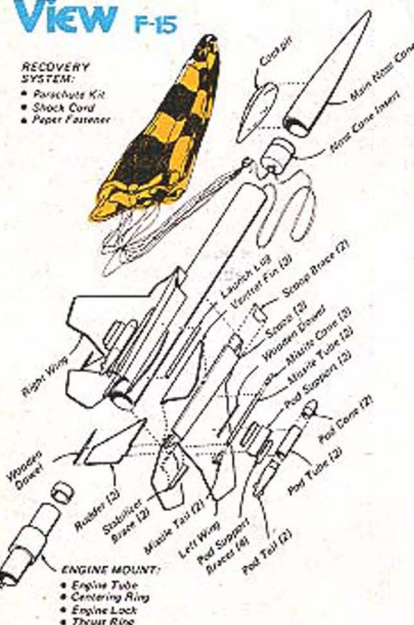
- Clear Plastic Cockpit
- Simulated Missiles
- Big 4-Color Decal
- Pre-Cut Fibre Parts
- Parachute Recovery
- Data Sheet



TYPICAL Exploded View F-15

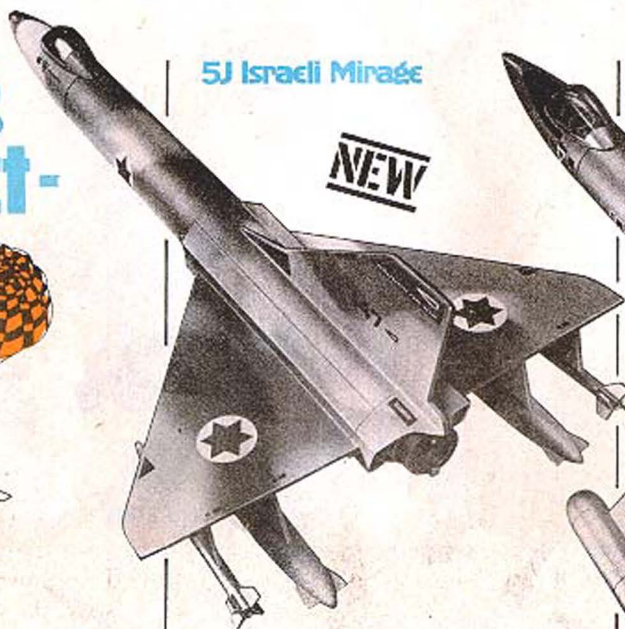
RECOVERY SYSTEM:

- Parachute Kit
- Shock Cord
- Paper Fastener



5J Israeli Mirage

NEW



THE REAL 5J

Manufacturer	Dassault (France)
Length	51"
Span	27"
Weight	29,760 lbs. (Loaded)
Max Speed	1,672 (Clean)
Range	805 (Loaded)
Engine	SNECMA

The 5J Israeli Mirage is from the French Dassault "Mirage" air combat family. It has a relatively low price due in part to its lack of sophisticated electronics. The 5J can be used as a fighter/interceptor when flown with a Sidewinder missile under each wing, or it can be made a "bargain basement bomber" with a great variety of bombs, rockets or fuel tanks as payload. The legend of this fighter arose during the "Six Days War", Perhaps the most successful campaign in Israeli military history.

KIT SPECIFICATIONS:

Length	14.1"
Body Diam.	1"
Span	6.9"
Net Wt.	2.3 oz.

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

PROD. NO. 5321

5J Israeli Mirage
\$4.50 SKILL LEVEL 3

Engines not included
Ship Wt. 16 oz.

F-104 Starfighter

NEW



THE REAL F-104

Manufacturer	Lockheed
Length	54.75"
Span	21.9"
Weight	23,590 lbs. (Loaded)
Max Speed	1,450 mph
Range	(Unavailable)
Engine	General Electric J79

Designed in 1952, the F-104 Starfighter broke tradition by using razor-thin straight wings instead of the usual sharply-raked wings. It was the first supersonic fighter developed by Lockheed and strongly resembled their early research missile, the "X-7". In 1955 it became the first operational combat plane that could sustain a speed of MACH-2. The F-104's exceptional performance was a major selling point in the international market and it became the basic fighter for the NATO allies; especially West Germany.

KIT SPECIFICATIONS:

Length	15.0"
Body Diam.	1"
Span	6.7"
Net Wt.	2.0 oz.

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

PROD. NO. 5320

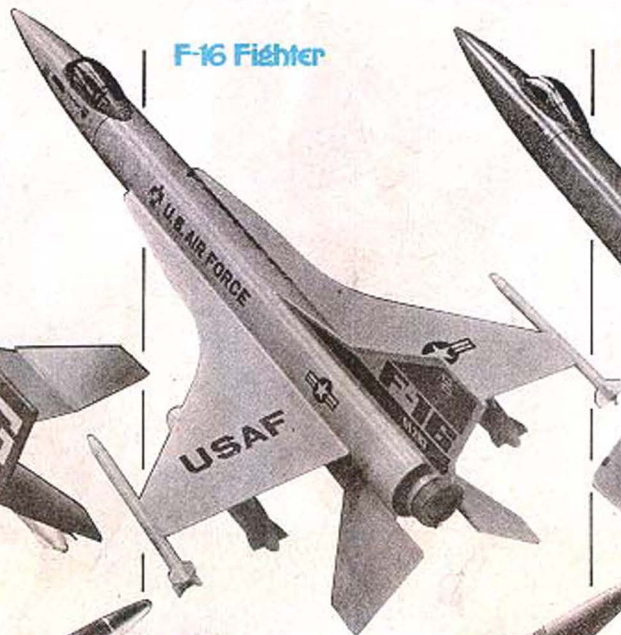
F-104 Starfighter
\$4.50 SKILL LEVEL 3

Engines not included
Ship Wt. 16 oz.

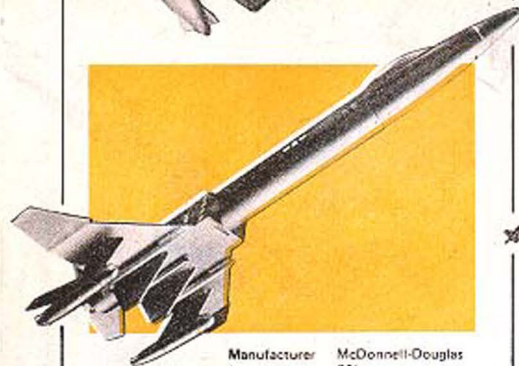
F-4 Phantom



F-16 Fighter



F-15 Eagle



THE REAL F-4

Manufacturer: McDonnell-Douglas
Length: 58'
Span: 38.5'
Weight: 46,000 lbs.
Max. Speed: 1,600 + mph.
Range: 2,000 + (ferry)
Engines: 2 General Electric J79

The F-4 Phantom has been built in many versions for the Air Force, Navy, and Marines. Since 1963 the Phantom in its various forms has seen action as a fighter, bomber, and reconnaissance plane. Also used by Canada and Great Britain, the F-4 has been the basic Free World fighter for over 10 years. The twin-engine, 2-place Phantom has foldable wing tips to allow easier storage inside Navy aircraft carriers. Over the years it has broken many speed and altitude records, and gave its pilots great service.

KIT SPECIFICATIONS: Length 14.5"
Body Diam. 1"
Span 8.5"
Net Wt. 2.3 oz.

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

PROD. NO. 5319

F-4 Phantom
\$4.50

Engines not included
Ship. Wt. 16 oz.

SKILL LEVEL 3



THE REAL F-16

Manufacturer: General Dynamics
Length: 48.2'
Span: 31.8'
Weight: 19,000 + lbs.
Max. Speed: 1,600 mph.
Range: 500 Miles (loaded)
Engines: Pratt & Whitney F-100

Over 650 of these planes are expected to enter the United States Air Force inventory, as the F-16 becomes the basic general-purpose fighter of the 1980's. NATO and certain European countries are also buying it. The F-16 has been especially designed for economy of purchase and ease of repair... the same idea as with a compact car! It's surprisingly low weight gives it great weight carrying capacity and efficient fuel usage. It's small size and very sleek styling make it the "sports car" jet of the future.

KIT SPECIFICATIONS: Length 15"
Body Diam. 1"
Span 7"
Net Wt. 2.0 oz.

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

PROD. NO. 5317

F-16 Fighter
\$4.50

Engines not included
Ship. Wt. 16 oz.

SKILL LEVEL 2



THE REAL F-15

Manufacturer: McDonnell-Douglas
Length: 63.8'
Span: 42.8'
Weight: 40,000 + lbs.
Max. Speed: 2,000 + mph.
Range: 350 (loaded)
Engines: 2 Pratt & Whitney F-100

The United States Air Force F-15 is the world's most maneuverable high-performance aircraft. Though larger than the F-4 Phantom, it is nearly 6,000 pounds lighter thanks to new space-age materials. During flight tests in 1974 the F-15 broke all existing fast-climb world records, previously held by the Soviet Union and U.S. Navy. It's remarkable speed and power are due to the new F-100 engine which has nearly twice the thrust-to-weight ratio of conventional jet engines.

KIT SPECIFICATIONS: Length 15.7"
Body Diam. 1"
Span 7.7"
Net Wt. 2.1 oz.

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

PROD. NO. 5318

F-15 Eagle
\$4.50

Engines not included
Ship. Wt. 16 oz.

SKILL LEVEL 3

Centuri

SUPER KITS™

A whole new direction in big kits!

Each Super Kit includes these deluxe features:

- Dual Chute Recovery ... 2 big parachutes.
- Patented Baffle/Chute Ejection system.*
- Long length and impressive size.
- Big 6" x 12" Four-color decal.
- Richly illustrated instructions.
- Rocket-Rack display stand.
- Sturdy molded nose cones.
- Quick-change engine lock.
- "Exploded View" plan.
- Pre-shaped fins.
- Decal Guide.

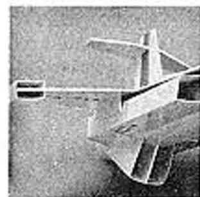


The E.S.S. Raven is the proud flagship of the Earth Science Service (E.S.S.). The Service was founded in 1981 when leading scientists united in a world federation that cuts across national boundaries and politics. The E.S.S. Raven has pushed the frontiers of science ever outward with the recently announced Faster-Than-Light Drive and the rumors of time travel. The Raven is part of the E.S.S. Ozone Research Project which tests the upper stratosphere. Based somewhere in the Sierra Mountains, the Raven can fly to the very limits of the atmosphere. The huge lower scoop gathers air samples to be analyzed by the vast shipboard computer buried within the huge vessel.

E.S.S. RAVEN

Length 30.5" Fin Span 10.5"
 Net Wt. 5.3 oz. Diam. 1.6"
 Recommended Engines
 C6-3 C5-3S

*U.S. Pat. No.
 3,719,145



Realistic Wing Pods



Quick-Change Engine Lock



Rocket-Rack Display Stand

PROD. NO. 5312

E.S.S. RAVEN™

\$9.00

SKILL LEVEL 3

Shipping Wt. 1 lb., 8 oz.
Engines not included

Up until 1988 most satellite repair and service was conducted with NASA Space Shuttles. This encouraged peaceful applications of space travel so that today Earth is surrounded by thousands of solar-energy collecting satellites. The Satellite Service Vehicle (S.S.V.) Scorpion maintains this complex network which conserves our dwindling natural fuels. Its name comes from the stinger-shaped rudder that magnetically launches and retrieves satellites from Earth orbit. These slide down the rudder into storage slots on the hull, and are later brought into the open hanger. Maintenance crews work in the vacuum of space to prevent atmospheric damage to these satellites so vital in the 21st century.

S.S.V. SCORPION

Length 29.7" Fin Span 8.6"
 Net Wt. 5.7 oz. Diam. 2.0"
 Recommended Engines
 C6-3 C5-3S

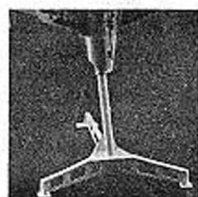
*U.S. Pat. No.
 3,719,145



Super Detail



Quick-Change Engine Lock



Rocket-Rack Display Stand

PROD. NO. 5307

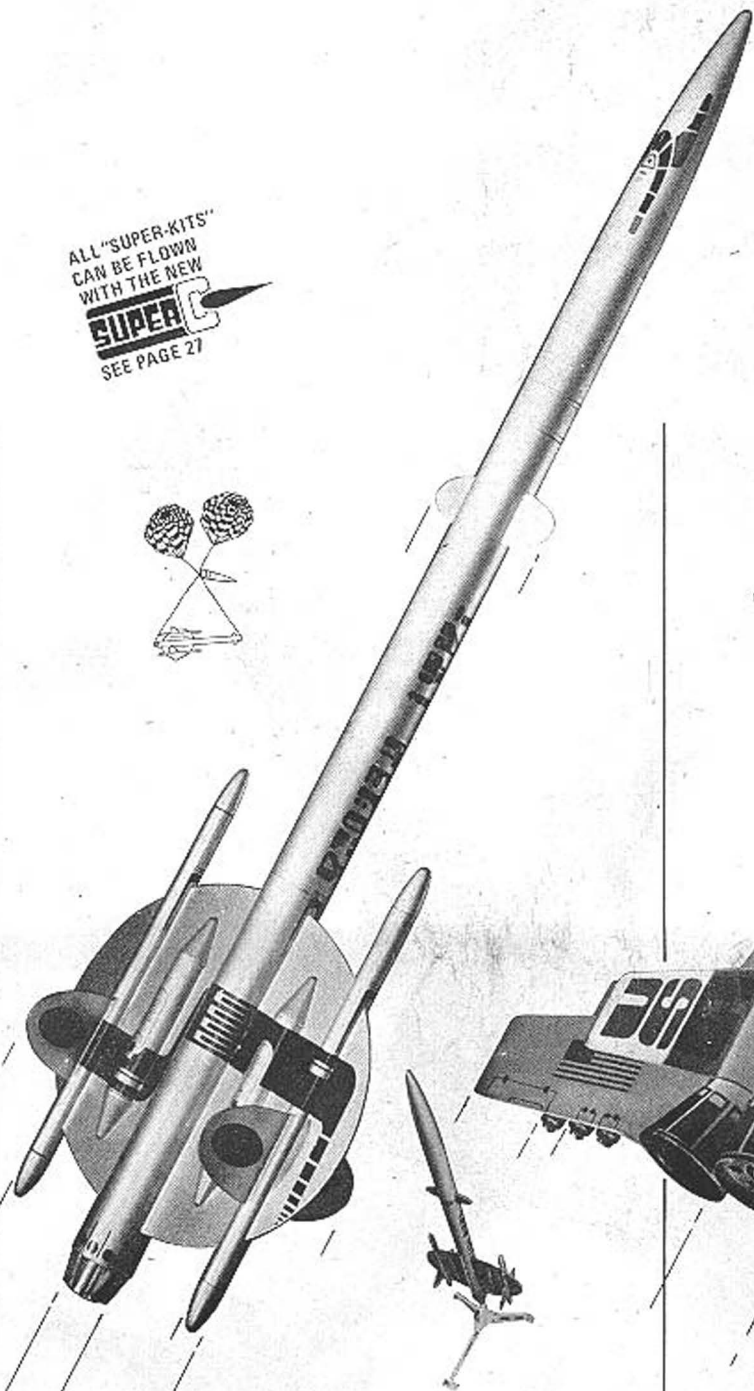
S.S.V. SCORPION™

\$9.00

SKILL LEVEL 3

Shipping Wt. 1 lb., 8 oz.
Engines not included

ALL "SUPER-KITS"
CAN BE FLOWN
WITH THE NEW
SUPER C
SEE PAGE 27



This year is 1980 and at last the existence of flying saucers is a proven fact. First sighted in the mysterious Bermuda Triangle, the U.F.O. Invader has been observed by countless eye witnesses. The Invader is a submarine as well as a deep-space ship... able to travel on the ocean surface, buoyed by its wing pods. It submerges to a hidden under-sea base where the aliens perhaps study Earth and its people. Little is known about the aliens, but we know this: we are not alone in the universe!

U.F.O. INVADER

Length 30" Fin Span 9.3"
Net Wt. 4.7 oz. Diam. 1.34"
Recommended Engines
C6-3 C5-3S

*U.S. Pat. No.
3,719,145



Realistic Wing Pods



Quick-Change Engine Lock



Rocket-Rack Display Stand

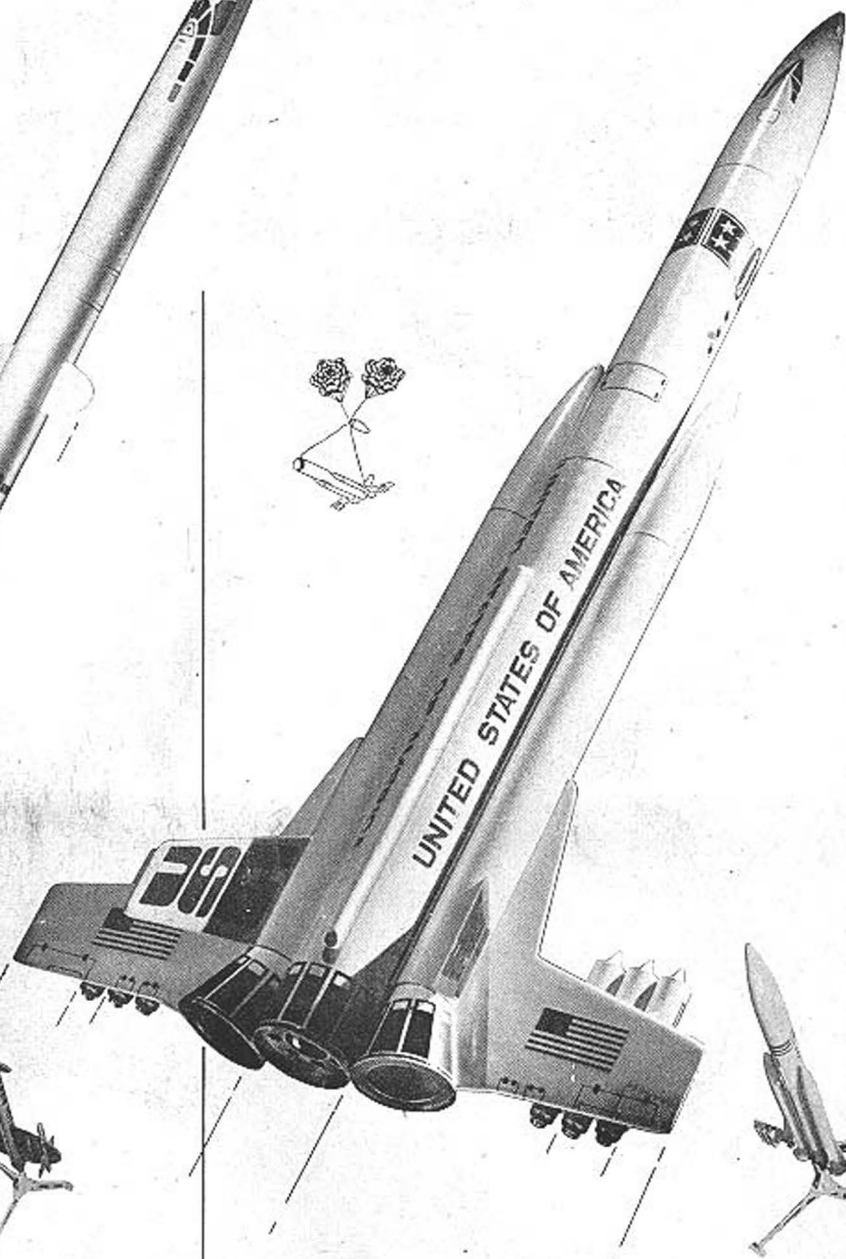
PROD. NO. 5308

U.F.O. INVADER™

SKILL LEVEL 3

Shipping Wt. 1 lb., 8 oz.
Engines not included

\$9.00



In the year 1983 the President approved the building of the U.S.S. America Command Post. The keel was laid at the San Diego Space Shipyards and the great bird first took to the skies in 1986. America now serves as a Presidential serial command post center and diplomatic courier. Able to land at large conventional airports, the America helps maintain peace on earth as well as in space. The ship's Orville/Stone nuclear rocket engines place the craft in earth orbit and augment the six ramjets used for atmospheric travel. These combined systems economically transport high government officials to global trouble spots.

U.S.S. AMERICA

Length 25" Fin Span 12"
Net Wt. 5.5 oz. Diam. 1.6"
Recommended Engines
C6-3 C5-3S

*U.S. Pat. No.
3,719,145



Realistic Wing Pods



Quick-Change Engine Lock



Rocket-Rack Display Stand

PROD. NO. 5310

U.S.S. AMERICA™

SKILL LEVEL 3

Shipping Wt. 1 lb., 8 oz.
Engines not included

\$9.00

Shuttle Craft.

Flying Model Rockets.

SPECIFICATIONS

	SST	GLIDER
Length	22.5"	3.5"
Body Dia.	1.04"	0.75"
Net Wt.	2.07	0.06

RECOMMENDED ENGINES

B4-7
C5-3
CS-35

DUAL-SHIP ACTION!

A swept wing glider rides the sleek SST rocket to high altitudes, detached & circles back to earth while the SST "carrier" deploys a large chute & drifts down in a horizontal position. Here's exciting dual-ship action that flies again & again! This kit is packed with colorful decals, pre-formed hi-detailed plastic parts, pre-cut balsa fins and wings - the works! Build it and fly it!

PROD. NO. 5077 (Formerly KC-17)

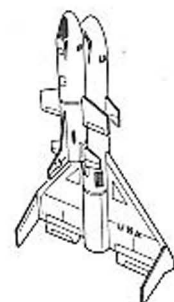
SST Shuttle

SKILL LEVEL-5

\$6.50

Shipping Wt. 15 oz.
Engine not included

CAN BE FLOWN
WITH THE NEW
SUPER C
SEE PAGE 27



NASA'S FIRST DESIGN

EXCITING 3-WAY PERFORMANCE!

Put on your own airshow with one of our most spectacular kits! Based on NASA'S early designs for the Space Shuttle, this dual-model performer is a preview of the future. Both Booster & Shuttle thunder skyward together. At apogee the big rocket engine pod ejects & returns to earth on a streamer. The separated Booster & Shuttle then begin individual glides to soft landings. Plastic cones, cockpits, pre-cut balsa wings & fins and a big highly detailed decal sheet makes SPACE SHUTTLE exciting!

PROD. NO. 5066 (Formerly KC-6)

Space Shuttle

SKILL LEVEL - 5

\$6.50

Shipping Wt. 15 oz.
Engine not included



KWIK KITS

Centuri

- SUPER FAST ASSEMBLY
- ALL PARTS PRE-COLORED
- NO SAND 'N SEAL REQUIRED
- NO PAINT REQUIRED
- READY TO FLY IN ONE HOUR

HERE'S WHAT MAKES THEM SO QUICK!

- MOLDED FIN UNIT
- WHITE BODY TUBES
- STICK-ON DECALS
- PLASTIC PARTS
- SIMPLE INSTRUCTIONS



BIG AND BEAUTIFUL

GREAT FOR DEMOS & DISPLAYS!

Impressive and colorful, the PHOENIX BIRD rises from your launch pad with all the speed and glory of its name! Stretching over two feet long, everything about this "bird" is big... from the long nose cone, hefty fin unit and big 20" chute, right down to the finishing touch: A 5"x13" sheet of red and shiny chrome stick-on "decals". As with each Centuri KWIK-KIT, all you need is white glue, scissors, and pencil. Add one hour of your time for assembly, and you're in the rocket business with PHOENIX BIRD!

PROD. NO. 5407

Phoenix Bird

SKILL LEVEL 1 **\$5.00**

Shipping Wt. 16 oz.
Engine not included.

SPECIFICATIONS
Length 26.3"
Body Dia. 1.34"
Net Wt. 3.4 oz.

RECOMMENDED ENGINES
A8-3 B4-4 B6-4 B14-5 C6-5

FLY IT IN ONE HOUR!

SPECIFICATIONS
Length 28.5"
Body Dia. 1.34"
Net Wt. 3.0 oz.

RECOMMENDED ENGINES
A8-3 B4-4 B6-4
B14-5 C6-5

This BIG "BIRD" is over 28 inches tall & goes together real fast with plastic molded tail section (& launch lug!) body reducers & nose cone! Colors are built-in. No tools or measuring — just glue together and go! Dual chutes make for an exciting recovery. Styled after the Air Force X-17 Research Rocket — ARGUS is a great Saturday afternoon project!

PROD. NO. 5039 (Formerly K8-01)

Argus

SKILL LEVEL 2 **\$5.50**

Shipping Wt. 16 oz.
Engine not included.

OUR EASIEST ROCKET!

Centuri's made it EXTRA-EASY FOR BEGINNERS & experienced rocketeers with this one. All parts are preformed, pre colored & ready to assemble — NOW! Includes a complete plastic tail & fin section, nose cone, shiny chrome multi-colored body wrapper, engine lock & parachute. As rugged as it is beautiful — SCREAMING EAGLE performs too, with flights to 1500 feet! GET GOING FAST with this big one!

PROD. NO. 5173 (Formerly KF-31)

Screaming Eagle

SKILL LEVEL 1 **\$3.00**

Shipping Wt. 15 oz.
Engine not included.

Centuri SUPER SCALE.

Flying Model Rockets.

Super Scale are loaded with far more exotic parts and detail than found in other kits. We recommend a heavy-duty launch stand and 3/16" diameter rod for the Saturns. See page 22 for "POWER-TOWER" and LR-188 rod.

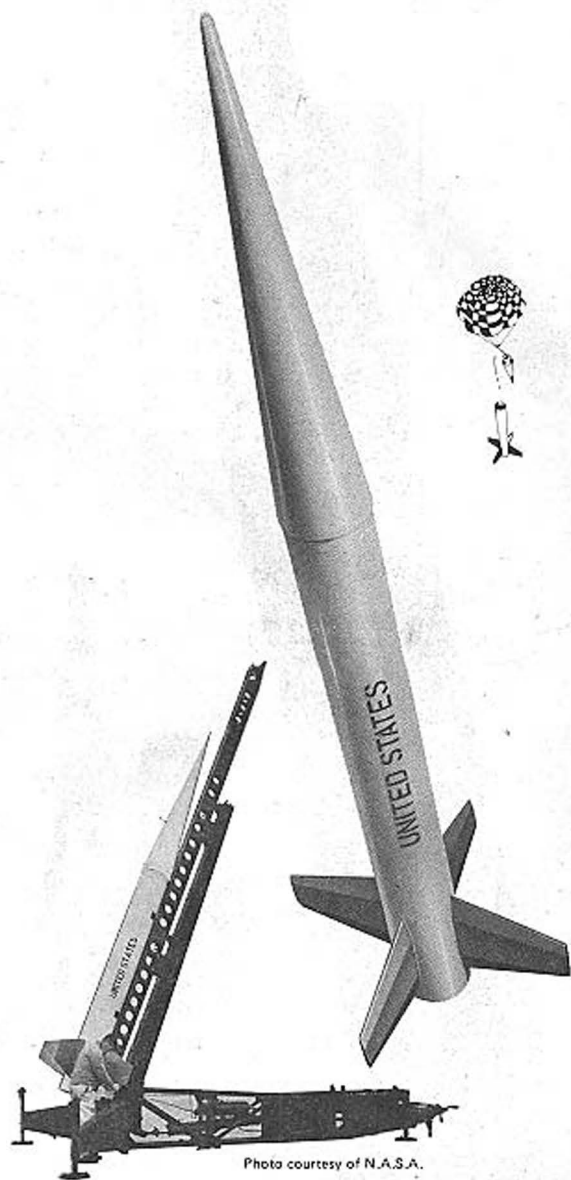


Photo courtesy of N.A.S.A.

MODEL OF ACTUAL NASA ROCKET

EASY TO BUILD

Here's an IMPRESSIVE BIRD 1/10 the size of NASA'S 75,000' altitude Research Rocket. It's big, almost two feet tall! Watch it swoosh almost out of sight to return softly with its large chute. Goes together fast with a high-

detail molded nose cone. Pre-cut balsa fins & special baffle/ejection* & authentic decal sheet. Beautiful in flight or as a scale display. A "MUST" for the scale rocketeer!

SPECIFICATIONS	RECOMMENDED ENGINES
Length..... 23 3/4"	B4-2 C6-5
Body Dia..... 1.64"	
Net Wt..... 2.3 oz.	

*U.S. Pat. No. 3,719,145

PROD. NO. 5145 (Formerly KS-15)

Nike Smoke

SKILL LEVEL-2

\$5.00 Shipping Wt. 75 oz. Engines not included.



MERCURY CAPSULE KIT
Plastic tower & capsule for replacement or "open-design". Fits #29 cube. Includes instructions.
IMR-361 \$1.50

CAN BE FLOWN WITH THE NEW **SUPERC** SEE PAGE 27

*U.S. Pat. No. 3,719,145

NUMBER ONE IN SPACE!

PRE-FORMED PLASTIC PARTS!

Accurate in scale to the **LAST DETAIL**, Centuri's Redstone is the best flying replica of Alan Shepard's "FREEDOM 7". Nearly 2 1/2 feet long the "Redstone" lifts-off beautifully with tower separation at apogee (500 feet!) - then the **TWO CHUTES "POP"** to let tower &

booster gently back to earth.

Hi-detail molded plastic tower, baffle-ejection,* balsa pre-cut fins plus and extra-large scale decal sheet make "REDSTONE" a reality on your launch pad!

SPECIFICATIONS
Length..... 29"
Body Dia..... 2.04"
Net Wt..... 3.7 oz.

RECOMMENDED ENGINES
B-2 C-8 C5-3S

PROD. NO. 5131 (Formerly KS-11)

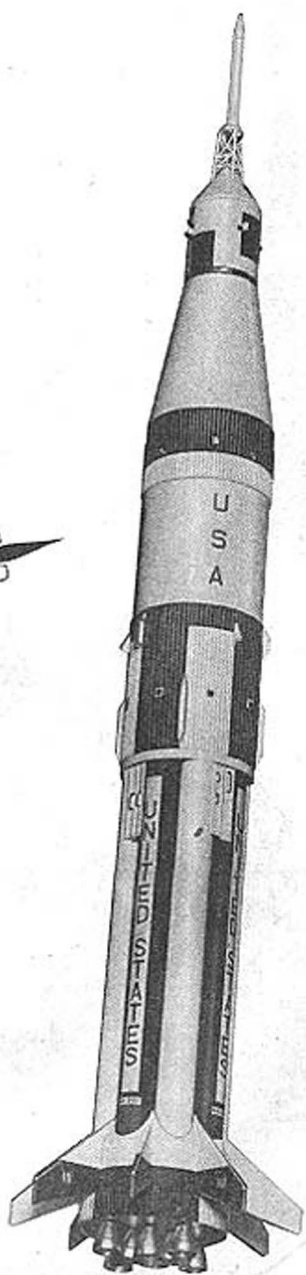
Mercury Redstone

1/36 SCALE

SKILL LEVEL-5

\$8.00 Shipping Wt. 75 oz. Engines not included.

CAN BE FLOWN
WITH THE NEW
SUPER C
SEE PAGE 27



SPECIFICATIONS
Length 20.8"
Body Dia. 2.62"
Net Wt. 4.4 oz.

RECOMMENDED ENGINES
2 - BS-4
2 - CS-5
2 - CS-3S

DUAL-ENGINE MOONSHOT FORERUNNER!

This is a true 1/100 flying scale model of the manned Apollo Mission warm-up! EVERY DETAIL IS CORRECT down to the original ship's markings! We designed it so the average modeler can create his own museum piece! This Big "Bird"

is OVER 2 FEET TALL, flies on a 2-engine cluster and recovers via two separate chutes. Many pre-molded plastic parts, Apollo Historical booklet, a Cluster Report and large decal sheet makes your "1B" a "STANDOUT" in flight or on display!

PROD. NO. 5140 (Formerly KS-10)

Saturn 1B

1/100 SCALE

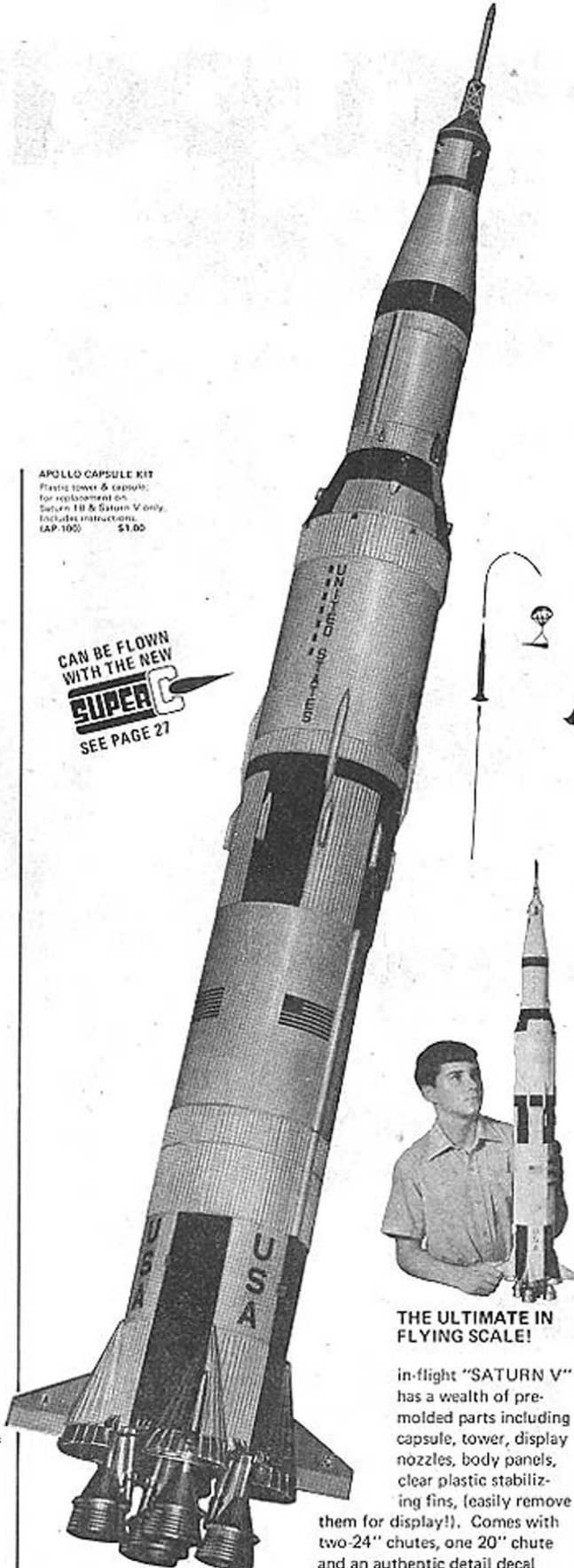
\$15.00

SKILL LEVEL-5

Shipping Wt. 2 lbs.
Explosion not included.

APOLLO CAPSULE KIT
Plastic tower & capsule:
For replacement on:
Saturn 1B & Saturn V only.
Includes instructions.
IAP-100 \$1.00

CAN BE FLOWN
WITH THE NEW
SUPER C
SEE PAGE 27



THE ULTIMATE IN FLYING SCALE!

in-flight "SATURN V" has a wealth of pre-molded parts including capsule, tower, display nozzles, body panels, clear plastic stabilizing fins, (easily remove them for display!). Comes with two-24" chutes, one 20" chute and an authentic detail decal sheet. From its thundering lift-off to a triple-chute return - SATURN V commands the scene!

SPECIFICATIONS **RECOMMENDED ENGINES**
Length 43.0"
Body Dia. 3.50"
Net Wt. 9.3 oz.

A 3-engine show stopper, this flying replica of the Man-On-the-Moon-Mission, is scaled from actual NASA blueprints! Absolutely authentic at rest, or

PROD. NO. 5142 (Formerly KS-12)

Saturn V

1/100 SCALE

\$25.00

SKILL LEVEL-5

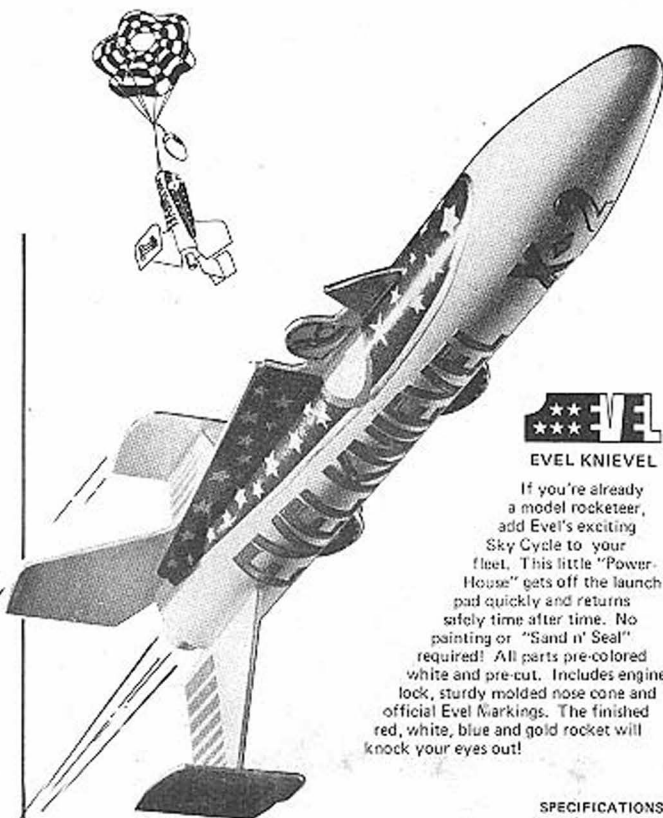
Shipping Wt. 7 lbs.
Explosion not included.

Centuri

Mini Line.

Flying Model Rockets.

These neat little rockets are powered by Centuri Mini Motors (not included; see page 27) which fit our small #5 tubes. Mini kits are generally thinner and lighter than standard rockets... so they really Get Up and Go!



EVEL

If you're already a model rocketeer, add Evel's exciting Sky Cycle to your fleet. This little "Power-House" gets off the launch pad quickly and returns safely time after time. No painting or "Sand n' Seal" required! All parts pre-colored white and pre-cut. Includes engine lock, sturdy molded nose cone and official Evel Markings. The finished red, white, blue and gold rocket will knock your eyes out!

SPECIFICATIONS:
Length 10.5"
Body Diam. 1.34"
Net Wt. 1.5 oz.

**RECOMMENDED
MINI-MOTORS**
#A4-3M #A4-4M

PROD. NO. 5350

Sky Cycle
SKILL LEVEL-1
\$3.50

Shipping Wt. 22 oz.
Engines not included

**SEMI-SCALE
MODEL OF
BRITISH MISSILE!**

Here's a challenge for any model rocketeer! Ducted injection gases push out the 12" chute from one of the "fuel" cells. Plastic nose cones, pre-cut fibre-fins & a big silver & black decal sheet makes **FIREFLASH** a rewarding project.

SPECIFICATIONS
Length 11.5"
Body Diam. 0.54"
Net Weight 1.2 oz.

**RECOMMENDED
MOTORS**
#A6-3M #A6-4M

PROD. NO. 5305 (Formerly KM-5)

Fireflash
SKILL LEVEL-5 **\$3.00**

Shipping Wt. 23 oz.
Engines not included

**BEAUTIFUL FLIGHTS
YOU CHOOSE THE
RECOVERY SYSTEM!**

NOVA gets up and away to 700'! Then according to your desires, returns to earth by a **NOSE-EJECTED** parachute or by a **TAIL-EJECTED** streamer. **UNIQUE!** Comes with pre-cut balsa tail fins, a parachute, drag streamer & a long balsa nose cone. For fun flying - try NOVA!

SPECIFICATIONS
Length 12.0"
Nose Diam. 0.76"
Net Weight 0.5 oz.

**RECOMMENDED
MOTORS**
#A6-2M #A4-4M
#A6-3M

PROD. NO. 5304
(Formerly KM-4)

Nova
SKILL LEVEL-3 **\$2.50**

Shipping Wt. 10 oz.
Engines not included

**YOU GET 2 ROCKETS
UNUSUAL CONSTRUCTION!**

Join the beginner's fun with these two ultra-light performers that go very, very high & fast. The return is a soft flutter to earth. Exciting? You bet! Pre-painted sheets make it quick and easy to get started in model rocketry today!



SPECIFICATIONS
Length 4.5"
Body Diam. 0.54"
Net Weight 0.2 oz.

**RECOMMENDED
MOTORS**
#A4-2M #A4-3M
#A4-3M

PROD. NO. 5301 (Formerly KM-1)

Two-Bitz
SKILL LEVEL-2 **\$1.00**

Shipping Wt. 5 oz.
Engines not included



**GYRO-SPIN RECOVERY
FEATHER WEIGHT**

Talk about go! This jewel moves fast so keep your eyes on it as it peaks out & begins a slow spin earthward. No chute, lots of chrome trim & a plastic nose cone. Fly it over & over.

SPECIFICATIONS
Length 8.0"
Body Diam. 0.54"
Net Weight 0.2 oz.

**RECOMMENDED
MOTORS**
#A4-3M #A4-4M
#A4-5M

PROD. NO. 5302 (Formerly KM-2)

**Satellite
62SL**
SKILL LEVEL-1 **\$1.25**

Shipping Wt. 6 oz.
Engines not included

**CONTEST BOOST GLIDER!
EXTREME TIME DURATION**

Put one or two - (both are included) gliders onto the thrust pod. This is a true **CONTEST KIT** that can put your glider above the competition. Pod recovers by streamer. All balsa parts pre-cut. Includes large decal sheet and balsa cone. **MINI-DACTYL** - the choice of champions!

SPECIFICATIONS
Length 15.0" Wing Span 4.0"
Body Diam. 0.94" Glider Wt. 0.15 oz.

**RECOMMENDED
MOTORS**
DOUBLE: #A4-3M #A4-2M
SINGLE: #A4-3M #A4-2M #A4-4M

PROD. NO. 5306
(Formerly KM-6)

Mini-Dactyl
SKILL LEVEL-4 **\$3.50**

Shipping Wt. 20 oz.
Engines not included

**TOPKICK!
FLIGHTS TO 600'
ON "A" POWER!**

Look up fast when this one moves! And move it does with a **REAR-EJECTED** streamer. Now that's different! And it lands soft too! Plastic nose cone, pre-cut balsa fins, special "Trooper" decals and an alternate "long" version makes **STAR TROOPER** a contest winner!

SPECIFICATIONS
Length 5.0"
Body Diam. 0.54"
Net Weight 0.3 oz.

**RECOMMENDED
MOTORS**
#A4-2M #A4-3M
#A4-3M

PROD. NO. 5303
(Formerly KM-3)

Star Trooper
SKILL LEVEL-2 **\$1.50**

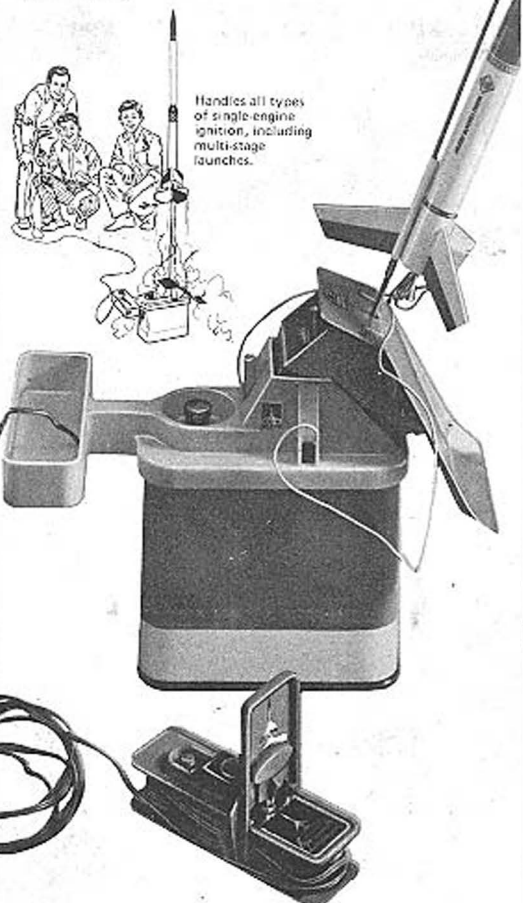
Shipping Wt. 6 oz.
Engines not included

Launch systems.

Power-Pad

WORLD'S MOST PRACTICAL MODEL ROCKET LAUNCH SYSTEM!

For all mini and standard rockets, POWER-PAD is the most compact & portable launcher — ever! Assemble & mount on top of any standard 6 volt lantern battery (not included) and you're ready to fire! You get everything, including TILTER for wind drift correction, large STEEL BLAST DEFLECTOR and a neat CARRYING HANDLE that transports the LAUNCH CONTROLLER. This controller is safety-engineered with 15' of wire, a safety-recessed firing button, check light & large "unlooseable" safety key. For reliable launches everytime its POWER-PAD!



Handles all types of single engine ignition, including multi-stage launches.

POWER PAD™

PROD. NO. 5609
(Formerly LIA-99)

\$9.00

SKILL LEVEL-1 Shipping Wt. 1lb. 8oz.

Power Tower

THE LAUNCH PAD OF THE FUTURE IS HERE TODAY!

This highly detailed heavy-duty plastic tripod launch stand is a real standout in the field! And, it's universal design fits all sizes of model rockets; mini-size thru clustered engines. Look at these features. COMPACT — remove the legs for storage or transport; TILT-ADJUSTMENT for flight angle direction & drift compensation; TWO-PIECE 1/8" DIAMETER LAUNCH ROD*; BLAST DEFLECTOR — made of steel to protect fins from hot gases; METALLIC "SPEC-PLATES" for useful launch site data. POWER TOWER is where the action starts!



Power Tower
Prod. No. 5601
(Formerly LIA-68)

\$5.00

SKILL LEVEL-1
Shipping Wt. 2 lb.

power tower

*We recommend the extra heavy-duty 3/16" rod for any rocket with engine power greater than "C" class or with clustered engines. Order separately factory-direct: Prod. No. LR-189 IS1.25 + 50¢ postpaid, or you can make your own from 3/16" x 36" piano wire.

Power-Control

THE HEAVY-DUTY ONE!

This general purpose launch system controller has 15' of firing line, micro-clips, 5 feet of jumper cable & extra-large battery clips. Use a car battery or any 6 or 12 volt heavy-duty battery. Launcher has a recessed firing button — continuity light & safety clip. Fly big cluster systems and super-scale with the versatile POWER-CONTROL. A perfect mate for the Power Tower!

PROD. NO. 5623 SKILL LEVEL-2
(Formerly EFC-3) Shipping Wt. 12oz.

POWER-CONTROL \$6.00

Launch Accessories

AND REPLACEMENT PARTS

LAUNCH ROD

2-piece 1/8" steel. Use for your own "home-built" launch system or as a replacement part for POWER-PAD or POWER TOWER. Also fits older Servo-Launcher & wooden tripod launcher.

LR-125 Launch Rod
Prod. No. 5800

\$1.00 each

DEFLECTOR

All-steel 4" x 6" designed to protect fins & tail assemblies from hot rocket gases. Use on all launch systems.

ID-65 Deflector
Prod. No. 5806

\$1.00 each

TILTER

Permits adjustment of launch rod angle to compensate for rocket wind drift. Fits the earlier Power-Pad launch system. Now standard in Power-Pad and Eagle Power starter outfit.

T-99 Tilter
Prod. No. 5824

\$1.50

MICRO-CLIPS

Great for replacement or "own design" launchers, spring grip all igniters. 1 1/8" long.

EMC-34 Clips 2 for 75¢
Prod. No. 5812

HEAVY DUTY BATTERY CLIPS

These copper clips will connect to a car battery. Jaws open to 1-1/8". Colored handles to identify polarity.

EMC-46 Clips 2 for \$1.75
Prod. No. 5818

Engines.

Flying Model Rockets.

Safe and reliable.

Our safe & reliable solid-propellant engine is at the heart of every Centuri Flying Model Rocket. These little power packages are safely ignited by remote electrical control. These "one-shots" cannot be re-loaded or re-used. We manufacture engines to precise tolerances on special automatic equipment. It is not practical or safe for individuals to attempt to make their own engines. Look for the National Association of Rocketry Emblem on Centuri rocket engines - it means they are regularly tested by NAR to meet exacting performance & safety standards.

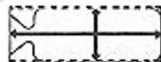


What makes a rocket fly.

Centuri's rocket engines power the rocket to peak altitudes (apogee) and after a delay time provide ejection thrust to push-out the rocket's recovery system.

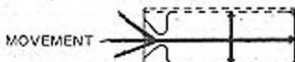
Here's why a rocket engine moves. It's called the action-reaction principle.

Engine at rest (no ignition). Equal pressure on all-sides - no movement.



AT REST

Engine Burning (Ignition). Burning gases escape only through nozzle. Pressure imbalance causes engine to move away from the open ended nozzle. The gases speed up due to nozzle restriction. Rocket engines do not need to "push against the air" ... or real rockets couldn't fly in outer space!



Basic types.

THE END BURNER

Most engines are end burners, for flying regular rockets.

NOT PORTED

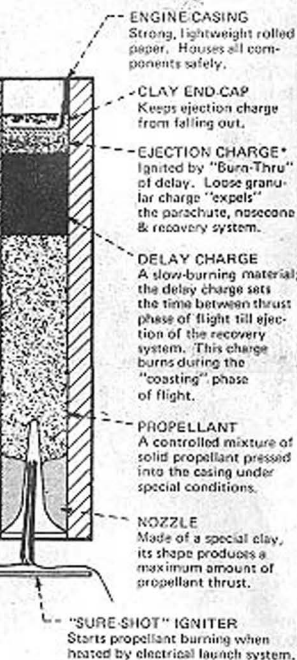
The "PORT BURNER" consumes propellant faster because the propellant "core" has a hole in it. This gives higher thrust and acceleration. B-14's and C5's are port burners ideal for lifting payloads or "heavy" rockets.

PORTED



How a model engine works.

Centuri rocket engines operate like many large atmospheric solid propellant rockets. The basic engine layout is shown below.



ENGINE CASING
Strong, lightweight rolled paper. Houses all components safely.

CLAY END CAP
Keeps ejection charge from falling out.

EJECTION CHARGE*
Ignited by "Burn-Thru" of delay. Loose granular charge "expels" the parachute, nosecone & recovery system.

DELAY CHARGE
A slow-burning material; the delay charge sets the time between thrust phase of flight till ejection of the recovery system. This charge burns during the "coasting" phase of flight.

PROPELLANT
A controlled mixture of solid propellant pressed into the casing under special conditions.

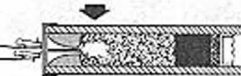
NOZZLE
Made of a special clay, its shape produces a maximum amount of propellant thrust.

"SURE SHOT" IGNITER
Starts propellant burning when heated by electrical launch system.

*Booster engines do not contain delay or ejection charges.

FROM IGNITION TO EJECTION IN 4 STEPS

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



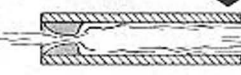
Propellant burns rapidly to maximum thrust level. Reaction principle causes lift-off & acceleration to burn-out.



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



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



How to select engines.

Always use the engines recommended for successful flights. See next column for tips on selecting engines for "own"-design rockets.

ALL CENTURI ENGINES ARE CODED BY COLOR AND LETTER NUMBERS

COLOR - always refers to delay time.
GREEN - A delay best suited to a single stage rocket.
PURPLE - A longer delay useful for multi-stage rockets or very high flying lightweight single stages.
RED - Always a "BOOSTER" engine for staged rockets with zero (0) delay. NEVER USE A BOOSTER IN A SINGLE STAGE ROCKET! When the propellant burns out, the ejection charge immediately ignites the next stage. This "blows-off" the expended stage which tumbles safely to earth.

LETTER-NUMBERS - coded to show thrust & delay times.

A LETTER - This is the TOTAL THRUST code. Each higher letter class has double the power of the previous letter. (5A has up to 1.25 newton-seconds of total impulse; A has 2.50; B has 5.00 and C has 10.00).

8 FIRST NUMBER - This is the AVERAGE THRUST coded to indicate how the thrust is delivered. (6-4 means long duration-low thrust and 6-6 means short duration-high thrust). The higher the number (Newton-Seconds) - the higher the average thrust. The reason for this is that various rockets require different kinds of thrust levels & duration due to weight, frontal area, etc. We've already done the math to recommend engines for best all-around performance & that all-important safe return to mother-earth!

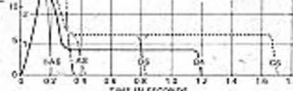
3 SECOND NUMBER - This is the delay code in seconds ... The actual delay between burn-out & ejection. It's important to use the correct delay time as you want the chute to eject at the peak of flight, not on the way up or down!



NOTE: Newtons (for pound) are a measure of force in the Metric System.

CODED TOTAL IMPULSE CHART	Engine Type	Total Impulse in Newton-Seconds	Total Impulse in Pound-Seconds
5A		0.626 to 1.25	0.15 to 0.28
A		1.25 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

This chart below shows the relative thrust/time curves of our engine types, as measured on a special electronic graphing machine. Note how all engines have a high initial thrust "spike" to get the rocket moving fast right after ignition.

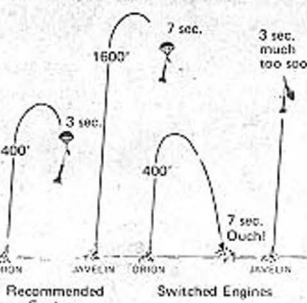


Rocket performance.

Various landing sites & conditions may limit how high you want your rocket to go. That's the reason we recommend different engines for each kit. Make your first test flight with the less powerful engine & then move up!

ALWAYS USE THE RECOMMENDED ENGINE!

Big & heavy rockets or boost gliders usually need high thrust to lift them off and they do not coast as high as smaller rockets. Look at the comparison below between the slim "Javelin" & the bulkier "Orion". The recommended C6-7 engine flies the Javelin to over 1,600 feet! The Orion goes only to 400 feet with the C6-3 engine. What happens if we switch? The heavy Orion has too much delay - goes only to 400 feet & returns to earth with no chute ejection - CRASH! The lighter Javelin is coasting merrily on its way when "POP" the chute is ejected 4 seconds too soon - perhaps ripping it away for a fast-fast return to earth - SMASH!



CHOOSING ENGINES FOR "OWN DESIGNS"

What engines should you use in rockets you design? Take the guesswork out of it by flipping thru this catalog until you find a Centuri kit of roughly similar size, diameter, weight, etc. Then just use the engines recommended! Generally you should use short delays for large rockets, long delays for small rockets, and medium delays for average sized "birds".

CHOOSE YOUR LAUNCH AREA CAREFULLY!

Launching in too small an area may cause you to lose your rocket. You'll be surprised at how far they drift, even in a slight breeze. Here's some valuable tips sometimes learned the "hard way":

1. Choose a site large enough for you to recover by walking to the rocket with out crossing roads, walls, rivers or fences. Don't launch in your back yard ... Unless you live on a farm!
2. Avoid launching in winds over 15 mph. Look at a flag, if it's standing out so you can see almost all of it - there's too much wind!
3. You can cut a 2" spill-hole in your canopy to keep the recovery more vertical.
4. Stay away from forest areas! Take a look down-wind, that's where it will end up. So keep tree-highlines, houses, streets & buildings away from your rocket by finding that ideal area. Be sure to check with local authorities if there's a possibility of trespassing. Keep it careful, courteous & you'll fly smart with Centuri rockets—Again & Again!



NEW

SUPER C

MODEL ROCKET ENGINES

"BUILT FOR THE BIG ONES!"

Use the single stage "Super-C" engine (C5-3S) in these large Centuri kits.

C5-3S

PROD. NO. 5592

- Eagle Transporter (5316)
- Saturn V (5142)
- Orion (5068)
- E.S.S. Raven (5312)
- Sky Lab (5034)
- U.F.O. Invader (5308)
- Mercury Redstone (5131)
- S.S.T. Shuttle (5077)
- U.S.S. America (5310)
- Saturn 1B (5140)
- S.S.V. Scorpion
- Little Joe II (5138)

C5-0S

PROD. NO. 5590

- Use the booster "Super-C" engine (C5-0S) in these staged Centuri kits.
- Arrow 300 (5037)
 - Excaltor 2 (5175)
 - Sciletto (5031)
 - Black Widow (5036)
 - Long Tom (5064)

The new "SUPER-C" engine is designed to boost big rockets and multi-stage rockets higher and straighter! In the same size casing as a standard "C", it fits regular engine mounts; requires no new equipment. "SUPER-C" yields greater performance and reliability for recommended rockets. It does not replace the standard "C" engine but adds a new dimension to rocket flying. Packed 3 to a box; includes SURE SHOT igniters. See catalog specifications for more information.



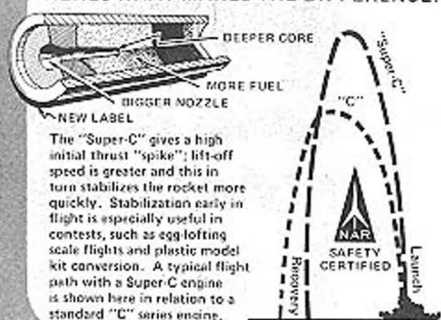
25%
GREATER ALTITUDE

67%
HIGHER THRUST

33%
MORE LIFTING ABILITY

24%
LONGER THRUST DURATION

HERE'S WHAT MAKES THE DIFFERENCE:



Specifications.

Rocket Engines listed on these charts are designed for use with Centuri kits and for your own rocket designs. Our standard engine line comes in 3-pack boxes; the Mini-Motors are sold in 4-packs. Both types contain Centuri's SURE-SHOT Igniters complete with illustrated instructions for rocket prepping and launching.

ACTUAL SIZE COMPARISONS



Standard engines.

Prod. Number	Type	PRICES 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 engines (Green Label)								
5550	1/2A6-2	\$1.40	1.25	6.23	.20	2	.53	2.5
5560	A8-3	\$1.50	2.50	7.81	.32	3	.57	4.5
5564	B4-2	\$1.60	5.00	4.15	1.20	2	.70	5.0
5566	B4-4	\$1.60	5.00	4.15	1.20	4	.74	4.5
5572	B6-4	\$1.60	5.00	6.00	.83	4	.78	5.5
5578	B14-5	\$1.80	5.00	14.23	.35	5	.80	6.5
5584	C6-3	\$1.80	10.00	5.86	1.70	3	.88	6.0
5586	C6-5	\$1.80	10.00	5.86	1.70	5	.91	5.0
Single-stage engines for lightweight rockets (Purple Label)								
5552	1/2A6-4	\$1.40	1.25	6.23	.20	4	.54	1.5
5562	A8-5	\$1.50	2.50	7.81	.32	5	.62	2.5
5568	B4-6	\$1.60	5.00	4.15	1.20	6	.78	2.5
5574	B6-6	\$1.60	5.00	6.00	.83	6	.71	3.5
5580	B14-7	\$1.80	5.00	14.23	.35	7	.73	4.0
5588	C6-7	\$1.80	10.00	5.86	1.70	7	.95	4.0
Booster engines (Red Label)								
5558	A8-0	\$1.50	2.50	7.81	.32	0	.51	4.5
5570	B6-0	\$1.60	5.00	6.00	.83	0	.58	5.5
5576	B14-0	\$1.80	5.00	14.23	.35	0	.61	6.5
5582	C6-0	\$1.80	10.00	5.86	1.70	0	.80	6.0

SUPER C Engines. NEW

Single-stage engines (Green Label)								
5592	C5-3S	\$1.90	10.00	4.76	2.10	3	.90	8.0
Booster engines (Red Label)								
5590	C5-0S	\$1.90	10.00	4.76	2.10	0	.82	8.0

Mini-motors.

Single-stage Mini-Motors (Green Label)								
5500	1/2A4-2M	\$1.50	.63	3.6	.16	2	.22	1.5
5504	1/2A4-3M	\$1.60	1.25	3.6	.31	3	.25	2.0
5508	A4-2M	\$1.70	2.50	3.6	.63	2	.29	3.0
5510	A4-4M	\$1.70	2.50	3.6	.63	4	.30	2.5
Single-stage Mini-Motors for lightweight Rockets (Purple Label)								
5502	1/2A4-4M	\$1.50	.63	3.6	.16	4	.23	1.0
5506	1/2A4-5M	\$1.60	1.25	3.6	.31	5	.26	1.5
5512	A4-6M	\$1.70	2.50	3.6	.63	6	.31	2.0

SURE-SHOT "DOT" IGNITERS



This igniter system is probably the world's most efficient — complete & accurate igniter — extremely perfect for standard engines, mini-motors, Super-C's & gliders! Keep plenty on hand. Comes in kit form with complete instructions. Ready in seconds!

© Reg. T.M. Centuri
U.S. Pat. No. 3,422,763

PROD. NO. 5836 (Formerly IG-12) Kit of 12 \$1.00

Estimated maximum altitude.

The chart below tells how high an expertly built standard-shape rocket can go depending on the tube diameter & the engine combination. Altitudes can vary according to rocket drag, length, weight, shape and other factors. Use this chart as a guide to tell you how large an area you should launch in. Blank spaces in the chart indicate that the specific engine/rocket diameter should generally not be used. Of course there are exceptions to every "rule". This chart is only a general guide.

Type	Largest tube diameter of model					
	#7	#8	#10	#13	#16	#20
1/2A6-2	250	200	100			
A8-3		375	275	150		
B4-2				300	275	200
B4-4	950	750	550	420	375	
B6-4	850	650	450	375	200	
B14-5	700	500	400	200	100	
C6-3				600	500	450
C6-5		1100	850	700	575	450
Blank spaces:						
1/2A6-4	300	250	125			
A8-5	550	425	350	350		
B4-6	1100	900	750	500		
B6-6	1000	800	650	450		
B14-7	900	700	550			
C6-7	1800	1500	1200	800		
A8-0						
B6-0						
B14-0						
C6-0						
Staged model flights may go as high as a half-mile, depending on engine configuration.						
C5-3S						
			750	625	560	
C5-0S						
Staged Flights: See Above						
Blank spaces:						
Type	Largest tube diameter of model					
	#5	#7	#8	#10	#13	#16
1/2A4-2M	225	175	125			
1/2A4-3M		300	200	150	100	
A4-2M				350	250	150
A4-4M	750	550	450	375	300	125
Blank spaces:						
1/2A4-4M	300	225	175			
1/2A4-5M	500	400	325	225		
A4-6M	900	700	600	400		

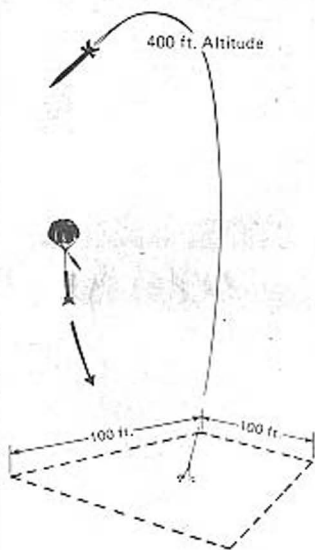
MINI-MOTOR ADAPTER



Now you can fly your Standard-Engine rockets with Mini-Motors, too! Instructions include recommended Mini-Motors for dozens of Centuri rockets.
PROD. NO. 6050 (Formerly EM-57) 70¢

Choosing a launch site.

The best launch site is one with side dimensions of at least one-quarter the estimated peak altitude of your rocket. Pace off the area to make sure! And don't forget to allow for wind-drift by locating up-wind a ways.



Follow these common sense rules and those found in "Rocket Performance" for many exciting flights!

1. Launch in areas where you're sure there is no hazard to persons or property. This includes crops or grass that could burn if exposed to hot exhaust gases.
2. Do not fly near power or telephone lines, motor highways, hi-rise buildings or other obstacles such as radio towers or air fields. Watch out for "Rocket Eating" trees!
3. Keep attention during your launches to people, aircraft, cars, or equipment moving into the launch/recovery area.
4. Make a short count-down prior to each launch, to alert spectators.
5. Do not fire your rocket at an angle of more than 30 degrees from the vertical.
6. Keep a clear circle at least 20 feet in diameter around your launch pad.
7. It is best to avoid standing directly up or down wind during launch.
8. Do not hook up or disconnect the ignition leads until you have removed the safety key. Always keep the key with you so that launching is totally under YOUR control!

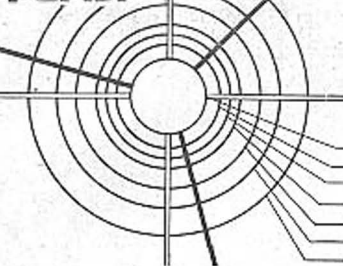
Design YOUR OWN.

Flying Model Rockets.

Fun and easy.

After launching & building several Centuri rocket kits, you'll no doubt have some ideas of your own on what YOUR "Bird" should look like. Check our Centuri's DESIGN MANUAL, it's loaded with construction techniques, design tips & theories, rocket plans and flight data! You'll be surprised at the good looking "birds" you can build. The DESIGNER'S MANUAL comes with your Aerospace Team Membership (see page 3).

Selecting parts.



All mating parts have the same Series Number for simplicity. That is, a #8 series body tube will fit a #8 series nose cone, #8 engine mount, or #8 connector. The pattern above is to scale and can be used to order parts by series number. It's also a fin-guide for neat alignment.

Don't forget.

Most model rockets use the same functional parts; launch lugs for lift-off; shock cord for chute ejection; fastener; chute/streamer; screw eye for balsa nose cone & engine locks.

Building.

The best advice is "Plan-Ahead"! Get everything you need by sketching your rocket "idea" in advance & making a list of parts. Keep the fin area toward the tail—too much forward fin area creates instability. The Design Manual explains this and many more technical points.

Before you test fly.

Swing-test your fully prepped "bird" on a string connected at the balance point. The rocket should point in the direction you swing. All Centuri kits are stable in flight, even if you can't get some of them to pass a swing-test. Always use a low power rocket engine for the first flight.

That first bird.

Look over these two typical one-of-a-kind rocket ideas. You may want to build one, so we've got the parts named & coded. (See the Parts Section of this catalog) Once you really get started in designing & flying your original rockets, you'll discover the reward of seeing your own ideas come to life in a hi-flying rocket!

JUST TAKE A LOOK AT THE DESIGN-YOUR-OWN ASSORTMENTS ON THE NEXT PAGE!

(SMALL ROCKET) RECOMMENDED ENGINES

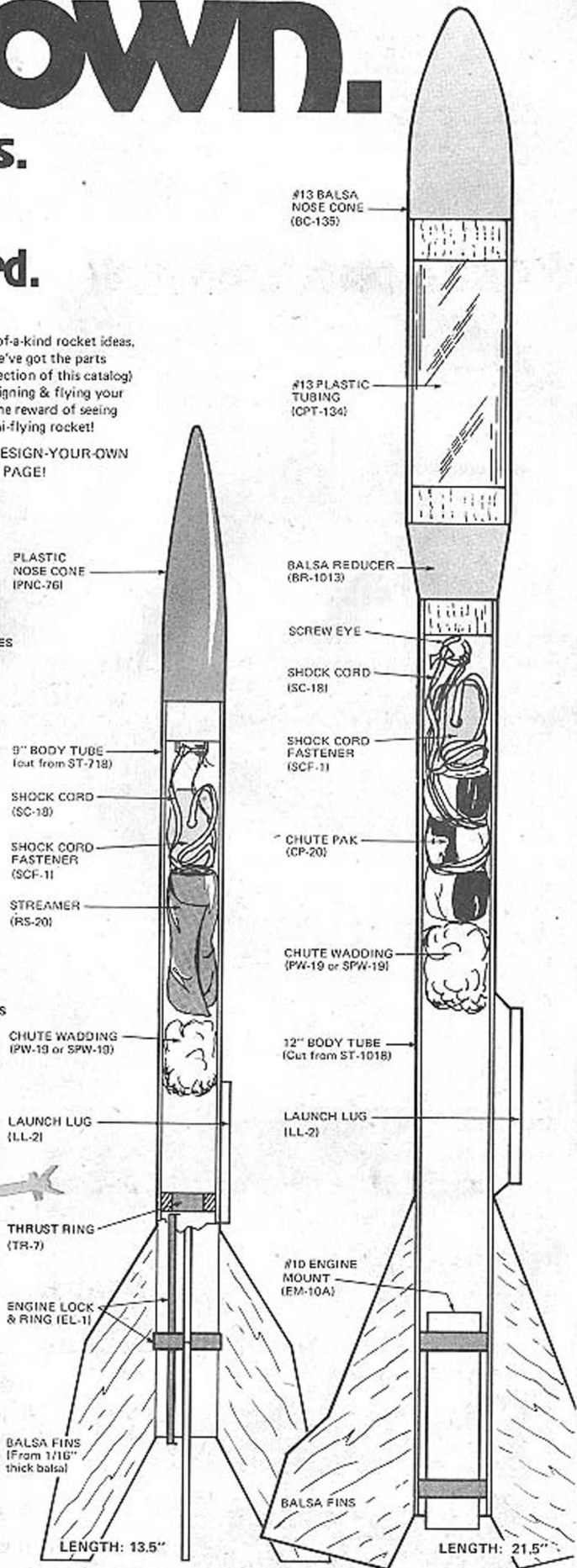
1/4A6-4 A8-5
B4-6 B6-6 C6-7

DIAMETERS

	Inside	Outside
#5 SERIES	.515"	.543"
#7 SERIES	.715"	.759"
#8 SERIES	.865"	.909"
#10 SERIES	1.000"	1.040"
#13 SERIES	1.300"	1.340"
#16 SERIES	1.600"	1.640"
#20 SERIES	2.000"	2.040"

(BIG ROCKET) RECOMMENDED ENGINES

A8-5 B4-4
B6-4 B14-5 C6-5



Custom parts assortments.

Each of these special Parts Assortments includes a complete set of all parts needed to build a fleet of rockets. The Design Manual included (see description at right) teaches basic principles for building own designs from these parts.

DESIGNER SPECIAL

How about over \$25.00 worth of supplies for only \$15.00? You can build up to 8 big rockets with this fantastic assortment of parts. Great for groups, clubs, or the rocketeer who really wants to "move-up" at bargain price. Check this list of parts.

NOSE CONES: (Balsa & Plastic)

- 3 - #7
- 3 - #8 Assorted balsa
- 2 - #10 Plastic

BODY TUBES:

- 3 - #7 Tubes
- 3 - #8 Tubes
- 2 - #10 Tube
- 1 - Plastic Capsule

FINS:

- 1 - Fin Pattern Sheet
- 6 - Balsa Fin Sheets

ENGINE SECTION:

- 3 - Thrust Rings
- 5 - Engine Mounts

PARACHUTES:

- 3 - 12" Chutes
- 3 - 16" Chutes
- 2 - 20" Chutes

MISC:

- 1 - #8 Connector
- 2 - Sheets Tape Discs
- 1 - Roll Shroud Line
- 8 - Elastic Shock Cords
- 8 - Shock Cord Fasteners
- 8 - Launch Lugs
- 1 - Flag Decal Sheet
- 3 - Screw Eyes
- PLUS
- 1 - Rocket Designer's Manual

BEGINNER SPECIAL

Here's the ideal kit for the new designer. With it you can build 6 medium size rockets. And it's made easy with instructions and plans included in the Designer's Manual. For a "perfect start" in model rocket design, you can't miss with this value-packed assortment. A BIG-BIG \$15.00 value for only \$10.00.

- 6 - Body Tubes (#7)
- 6 - Nose Cones (Balsa & Plastic)
- 4 - Fin Material Sheets
- 1 - Fin Pattern Sheet
- 4 - 12" Chutes
- 2 - 16" Chutes
- PLUS

- 3 - Screw Eyes
- 1 - Sheet Tape Discs
- 1 - Roll Shroud Line
- 6 - Elastic Shock Cords
- 6 - Thrust Rings
- 6 - Launch Lugs
- 6 - Shock Cord Fasteners
- 1 - Rocket Designer's Manual



Rocket Info.

MANUALS
GUIDE BOOKS
TECH REPORTS

This rocketeer, like thousands of others, learns advanced model rocketry knowledge from Centuri Technical Publications.

Design Manual

By Grant Boyd

Totally revised edition; for building "over-design" rockets. Loaded with tips on construction and design, and detailed info on high-altitude birds, payloaders, boost-gliders... and more! Includes over 200 illustrations.

32 Pages, Prod. No. 81899 \$1.00



Rocketeer's Guidebook

By Col. Larson & W. Matson

The good basic reference for all rocketeers. Info from "A to Z". Also includes chapters on altitude measurement, competitive events and launch ranges. Richly illustrated with charts & photos.

36 Pages, Prod. No. 81900 \$1.25



Educator's Guide

By Wayne Matson

A teacher's guide for rocketry in schools and classrooms. Includes tests for measuring knowledge. Normally \$2.00, it's free when requested by teachers on school stationery.

64 Pages, Prod. No. 81916 \$2.00



TIR-30 STABILITY OF A MODEL ROCKET IN FLIGHT

By Jim Barrowman

Complete explanation of aerodynamic stability in flight. Good theory background prepares the reader for properly engineered rocket design.

16 Pages, Prod. No. 81903 \$1.00



TIR-33 CALCULATING THE CENTER OF PRESSURE

By Jim Barrowman

Easy-to-use graphs for balancing rockets for efficiency. A practical application of the concepts learned in TIR-30. Simplified equations and sample problems.

36 Pages, Prod. No. 81904 \$1.00

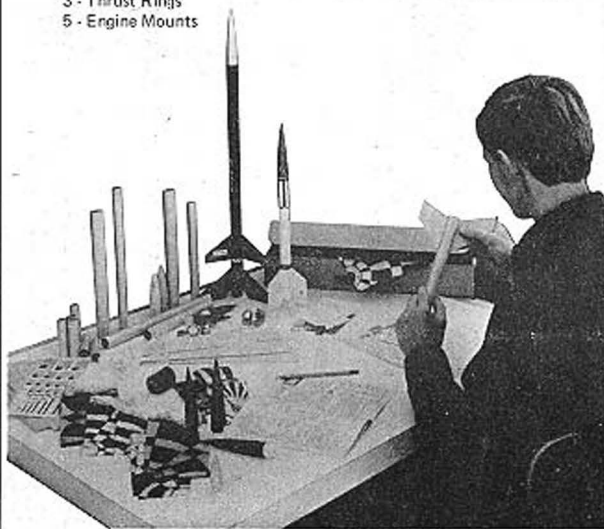


TIR-100 MODEL ROCKET ALTITUDE PERFORMANCE

By Douglas Molewicki

Easy-to-use graphs for predicting model rocket altitudes, for any engine power of 1/8A thru C. Includes charts for selecting best delay time.

40 Pages, Prod. No. 81906 \$1.00



PROD. NO. 5458 (Formerly SPA-8)

Designer Special

SKILL LEVEL-3

\$15.00



PROD. NO. 5454 (Formerly SPA-4)

Beginner Special

SKILL LEVEL-2

\$10.00

Parts.

Flying Model Rockets.

The parts shown here are the most popular. Additional parts (too specialized for most hobby stores) are available factory-direct. All parts sold in kit-form, such as Engine Mounts, include complete assembly instructions.

Air frame.

This is the "tubing" section of your rocket. Use the fin guide shown in the "Design Your Own" section for correct sizing. Remember the size-codes fit each other - A #5 body tube will fit a #5 connector, etc.

BODY TUBES

Heat-welded, strong, smooth, lightweight.

Prod. No.	Desc.	Size	Length	Price
6002	ST-518	#5	18"	50¢
6004	ST-718	#7	18"	50¢
6006	ST-818	#8	18"	75¢
6008	ST-1018	#10	18"	75¢
6010	ST-1318	#13	18"	1.00
6012	ST-1518	#16	18"	1.25
6014	ST-2018	#20	18"	1.75

CLEAR PLASTIC TUBES

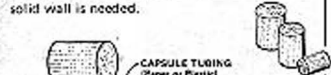
ENLARGED PAYLOAD COMPARTMENT



Prod. No.	Desc.	Size	Length	Price
6110	CPT-72	#7	2.75"	30¢
6112	CPT-83	#8	3.5"	35¢
6114	CPT-103	#10	3.5"	40¢
6116	CPT-134	#13	4.0"	50¢

BALSA TUBE CONNECTORS

Solid balsa plugs for connecting payload sections to body tubes when a solid wall is needed.



Prod. No.	Desc.	Size	Length	Price
6270	BTC-7	#7	1"	50¢
6272	BTC-8	#8	1"	50¢
6274	BTC-10	#10	1 1/2"	50¢
6276	BTC-13	#13	1 1/2"	75¢
6278	BTC-16	#16	1 1/2"	75¢

HOLLOW TUBE COUPLERS

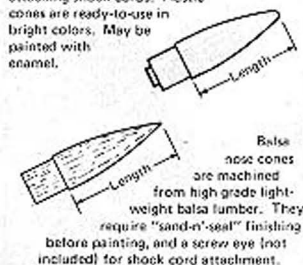
Great for multi-staging connections & cutting guides for body tubing. Joins equal diameter tubes. Extremely strong.



Prod. No.	Desc.	Size	Length	Price
6420	HTC-5	#5	3/4"	20¢
6422	HTC-7A	#7	1"	20¢
6426	*HTC-7CDH	#7	Staging Coupler	30¢
6428	HTC-8	#8	1"	25¢
6430	HTC-10	#10	1"	25¢
6434	HTC-13	#13	1.5"	25¢
6438	HTC-16	#16	1.75"	50¢
6440	HTC-20	#20	1.75"	50¢

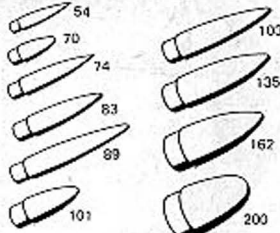
Nose cones.

Plastic nose cones are precision-molded in a wide variety of shapes and sizes. Most have bases with lugs for eyelets for attaching shock cords. Plastic cones are ready-to-use in bright colors. May be painted with enamel.



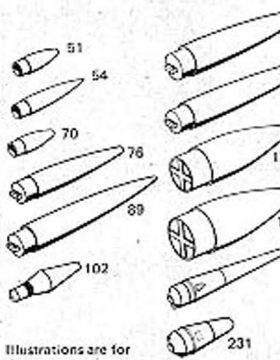
BALSA NOSE CONES

Prod. No.	Desc.	Size	Length	Price
6130	BC-54	#5	2.4"	60¢
6134	BC-70	#7	1.6"	50¢
6138	BC-74	#7	3.5"	70¢
6140	BC-83	#8	3.2"	80¢
6144	BC-89	#8	4.8"	1.50
6148	BC-101	#10	2.0"	80¢
6150	BC-103	#10	3.9"	1.00
6156	BC-135	#13	3.8"	1.35
6160	BC-162	#16	3.4"	1.35
6164	BC-200	#20	2.5"	1.75



PLASTIC NOSE CONES

Prod. No.	Desc.	Size	Length	Price
6202	PNC-51	#5	1.0"	40¢
6204	PNC-54	#5	2.2"	50¢
6210	PNC-70	#7	1.5"	40¢
6214	PNC-76	#7	3.0"	50¢
6220	PNC-89	#8	4.6"	90¢
6226	PNC-102	#10	4.3"	1.30
6227	PNC-103	#10	4.1"	90¢
6228	PNC-106	#10	4.5"	80¢
6232	PNC-132	#13	2.7"	85¢
6236	PNC-160	#16	2.5"	1.00
6240	PNC-167	#16	3.3"	1.30
6244	PNC-231	#20	3.2"	1.30



Illustrations are for shape comparison only. They are NOT in scale to each other.

Reducers.

Reducers connect body tubes of different diameters. They can be solid (balsa) or hollow (plastic - paper). You would want a solid reducer just above your recovery system and a hollow reducer where ejection gases must pass through to activate the recovery system.

PLASTIC REDUCERS

Prod. No.	Desc.	Fits	Price
6386	PSR-78	7 to 8	50¢
6388	PSR-813	8 to 13	65¢
6390	PSR-1620	16 to 20	85¢

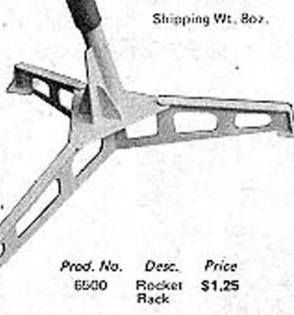
BALSA REDUCERS

Prod. No.	Desc.	Fits	Price
6352	BR-58	5 to 8	60¢
6354	BR-510	5 to 10	60¢
6358	BR-710	7 to 10	60¢
6360	BR-713	7 to 13	1.00
6362	BR-810	8 to 10	60¢
6364	BR-816	8 to 16	1.20
6366	BR-1013	10 to 13	1.00
6368	BR-1016	10 to 16	1.10
6370	BR-1316	13 to 16	1.10

Rocket Rack.

MODEL ROCKET DISPLAY STAND

Another innovation from Centuri! The ROCKET-RACK (included in every SUPER KIT) is available separately for use with almost ANY model rocket. Simple skill-level 2 assembly of pre-cut and pre-colored white fibre parts.



Prod. No.	Desc.	Price
6500	Rocket Rack	\$1.25

Miscellaneous.

These mounts hold and center the rocket engine in the "Airframe" body tube. They can be adapted to #8, 10, 13, 16 & 20 body tube sizes. You get everything you need including centering rings, engine mount tube, thrust ring & sleeve tube.

ENGINE MOUNTS

Prod. No.	Desc.	Fits	Price
6052	EM-8	#8	70¢
6060	EM-10A	#10	70¢
6064	EM-13	#13	80¢
6068	EM-16	#16	80¢
6072	EM-20	#20	1.00

LAUNCH LUGS

Slender tube glued to side of the rocket. The launch rod passes thru to guide the rocket during lift-off.

Prod. No.	Desc.	Price
5928	LL-3	6 for 50¢

THRUST RINGS

These feather-weight fibre rings are 3/8" long. Used as forward engine stop when glued into any #7 series body tube.

Prod. No.	Desc.	Price
5966	TR-7	6 for 50¢

CENTERING RINGS

These rings center the engine tube (#7) in #8 & #10 body tubes.

Prod. No.	Desc.	Fits	Price
5970	CR-8	#8	6 for 50¢
5974	CR-10	#10	6 for 50¢

ENGINE LOCKS

Includes mylar holding ring & steel lock strip. Keeps engine firmly in place in flight & during ejection thrust.

Prod. No.	Desc.	Price
5980	EL-1	3 for 75¢

DECALS

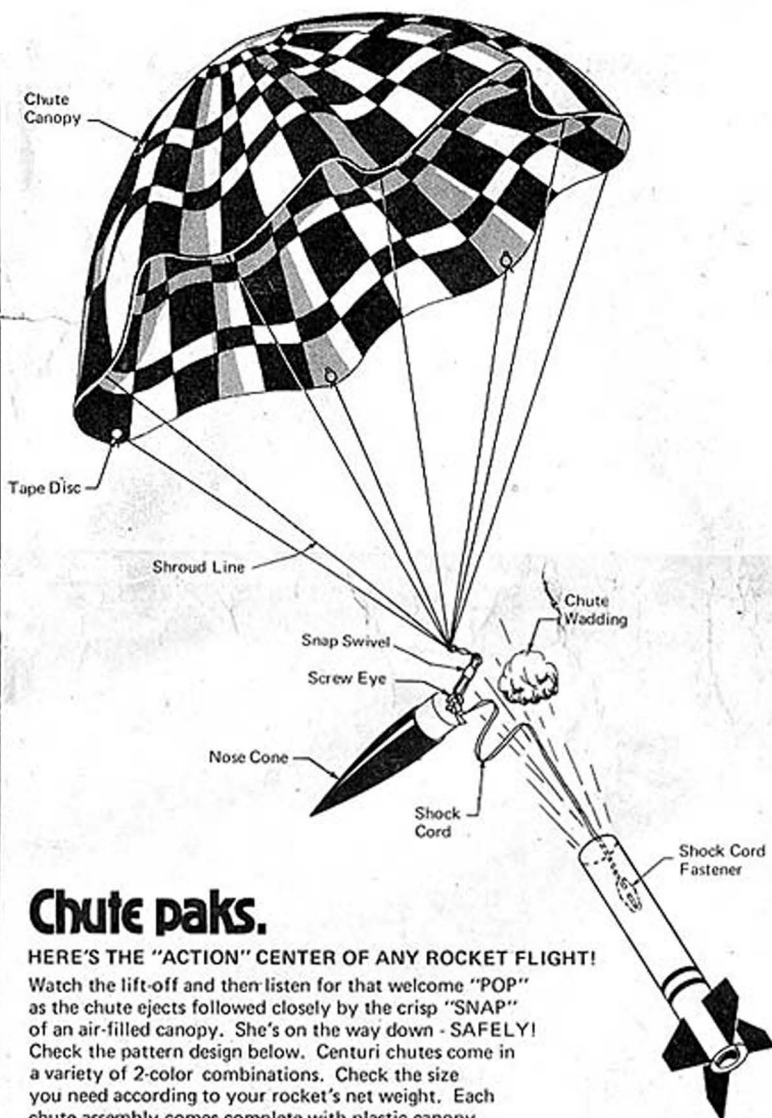
While nearly all Centuri rocket kits have their own decals, these below are ideal for taking your kit one step further. The sheets are large (approx. 4"x10") and made in two sizes and four rich colors.

Prod. No.	Desc.	Price
36603	M-314 Centuri Emblems	75¢
36607	DC-3 Military Insignias	80¢
36608	DC-4 Missile Markings	90¢
36630	DC-35 U.S. Flags	90¢



RECOVERY DEVICES.

Flying Model Rockets.



Chute paks.

HERE'S THE "ACTION" CENTER OF ANY ROCKET FLIGHT!

Watch the lift-off and then listen for that welcome "POP" as the chute ejects followed closely by the crisp "SNAP" of an air-filled canopy. She's on the way down - SAFELY! Check the pattern design below. Centuri chutes come in a variety of 2-color combinations. Check the size you need according to your rocket's net weight. Each chute assembly comes complete with plastic canopy, heavy-duty shroud lines, super-stick tape discs and complete instructions.

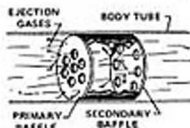


DESC.	PROD. NO.	DIA.	MAX WT	EACH
CP-12	(5854)	12"	3 oz.	60¢
CP-16	(5860)	16"	6 oz.	75¢
CP-20	(5866)	20"	9 oz.	90¢
CP-24	(5872)	24"	12 oz.	1.00

HEAVY DUTY SHROUD LINE
"SUPER-STICK" TAPE DISC

Ejection baffles.

U.S. Pat. No. 3,719,145



For use in long large diameter "own designs". Centuri's baffle/ejection system is permanently installed to protect the chute from heat. A great idea! Reduces launch turn-around time too!

"Own designs" require at least 4 inches of space between engine mount and baffle.

Desc. Prod. No.
EB-13 (6090) Fits #13 75¢
EB-16 (6094) Fits #16 75¢
EB-20 (6098) Fits #20 75¢

Shock cord fasteners.



Made of special foil-woven nylon, Centuri's shock cord fastener attaches permanently to any body tube without glue! It's simple, just pull the backing off the fastener, slip the shock cord thru & press into place for a heat-resistant installation. Check before each launch for permanent bond!

SCF-1 Fasteners 6 for 60¢
Prod. No. 5908

Plastic drag streamers.

For soft-recovery of rockets weighing up to one oz. A bright day-glo orange, these streamers are over 1" wide & 36" long! They eject the same as a chute and are highly visible for those almost-out-of-sight flights! Includes tape discs plus instructions. Net weight is .09 oz.

RS-20 Streamers 3 for 60¢
Prod. No. 5914

Shock cord.



This super strong elastic cord connects recovery chute or streamer to the rocket body. Use SC-18 cord with birds powered by 1/4A thru "C" engines.

SC-18 Shock Cord 3 For 60¢
Prod. No. 5894

Tape discs.



Attach streamer or parachute shroud lines permanently with these super-stick discs! 36 discs per sheet.

TD-35 Discs 50¢
Prod. No. 5890 Per Sheet

Chute wadding.

TWO KINDS!

CREPE-TYPE:

Most flame-resistant. All purpose, easy to use. Just count number of sheets. Enough for 25 #7 rockets.

SPW-19 Crepe Wadding 75¢
Prod. No. 5846

COTTON TYPE

Flame-resistant and soft! Also recommended for Rocket diameters above 2 inches, enough for 20 flights in #7 rockets.

PW-19 Cotton Wadding \$1.00
Prod. No. 5842

Parachute powder.

Keep that chute "POPPING" SMOOTHLY with Centuri's special chute powder lubricant. Sprinkle it on during folding and look for a small dust cloud at apogee. It really works!

PDR-17 Chute Powder 2 oz. shaker can \$1.00
Prod. No. 5880



Flying Model Rockets

Centuri

NEWEST ADDITION TO
**SUPER
KITS**
SEE PAGE 18

S.V. Scorpion



THE NEW CENTURI
SUPER
ENGINE CAN BE USED
WITH KITS MARKED
HERE: SEE PAGE 27

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