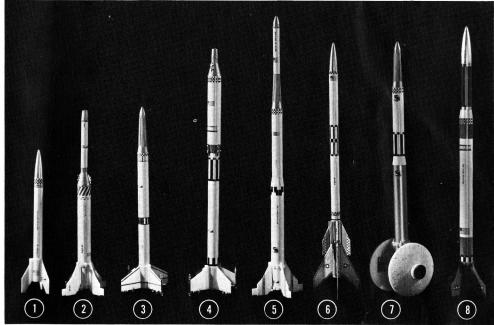


ASTRO LINE SERIES Plastic fins and nose cones for

easy assembly - true-flight performance and durability.



PIONEER 1 ①

· Length: 12 inches · Swept-back, plastic fins · Plastic fins molded in brilliant color . Plastic "Chrome" Plated Nose Cone . Heavy-duty fiber body • Bright 18-inch recovery streamer • Full color decal

R-810

REDSTONE MAVERICK (2)

 More than 16" long
Silver plastic nose cone Snap on plastic fin assembly . Two fiber body tube sizes · Parachute recovery system · Full color decal

R-822 VIPER (3)

• Length 16 inches • Strong, light, stable, one-piece plastic fins . Molded in easy-to-track color . Snapon plastic nose cone and couplings molded in silver . Strong fiber-tube body . "Chrome" accessory parts • Pressure-sensitive, Mylar silver band • Full-color decal • 10-inch parachute

R-823

MOONGO (4)

• More than 21" long • Authentic plastic space capsule . One-piece clipped Delta plastic fin assembly . Plastic launching lugs . "Chrome" accessories • Two fiber body tube sizes • Dual parachute recovery system . Full color decals

R-841 \$2.00

LAUNCH PAD Adjustable launch lug support Functional cantry • 15-inch pad height • Metal exhaust deflector plate • Sturdy tripod design • 3' steel launch rod . Non-shorting ceramic exhaust deflector . Wind direction indicator . Tilt-leg adjustment . Easy to assemble kit R-150 \$5.00



• Length: 241/4 inches • Strong — light — stable plastic fins, molded in brilliant color • Snap-on plastic nose cones and couplers molded in silver Strong fiber-tube body
Chrome accessory parts

· Full color decals · Big 14-inch parachute

PEGASUS II (6)

• Four building versions • Build two rockets w/ single kit . Length: options vary from 11 to 223/4 inches . Two plastic nose cones . One-piece plastic fin assembly . Balsa fins . Two recovery streamers

 Three fiber body tubes
Balsa coupler
Full color decal . 2 stage or single stage

MARTIAN PATROL (1) • Length: 20 inches • Two-piece plastic nose cone

· New snap-in fins with plastic motor mount · Easy to build - quick . Plastic step-down coupler . Two UFO's with 5-inch diameter hover down • Full color decal . Parachute recovery on rocket

AQUARIUS (8)

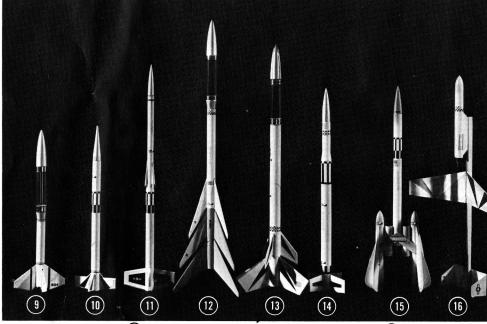
 Length 23½ inches • MPC's super giant bird • New snap-in fins with plastic motor mount • Plastic nose cone . Clear plastic payload section . Huge 14" parachute • Realistic flight • Full color decal R-845



· Easy to assemble kit · Safety key Continuity light
Car lighter adapter • 8 ft. power cord • Recessed push button . Advanced design safety-grip handle • 10 ft. firing line . For best flying results use the MPC launch pad R-151

MACH 10 SERIES Light weight balsa fins and pre-shaped nose

cones for high soaring flight patterns and individual styling.



LAMBDA PAYLOADER (9)

• More than 15" long • Pre-shaped balsa nose cone Pre-printed balsa fins
Four inch clear plastic payload section . Parachute recovery . Decals

ICARUS C (10)

• 15" long needle style pre-shaped balsa nose cone • Pre-printed balsa fins • 23/4" payload section • Dual streamer recovery system . Decals R-205

THETA-CAJUN (11)

• 21" long pre-shaped balsa nose cone • Preprinted balsa fins . Two fiber body tube sizes . Balsa coupler . Large parachute for extended descent • Decals R-207 \$2.00

MICROSONDE III (12)

. Exciting three stage rocket . Length: 243/4 inches · Three sets of swept-back balsa fins · Strong fiber-tube body . Plastic nose cone . 4" clear, plastic payload section . Parachute recovery of third stage . Tumble recovery of first two stages . Decals \$3.00

ZENITH II PAYLOADER 13

· Length 22% inches! · Real two-stage action! · 4-inch clear "C-thru" payload section! • Pre-shaped balsa nose cone! • Two sets of lightweight preprinted balsa fins! . Full color decals! . Big! bright 14-inch recovery parachute!

FLARE PATRIOT (4)

R-211

· More than 18" long · Pre-shaped balsa nose cones • Pre-printed balsa fins • 23/4" payload section • 2 fiber body tube sizes • Balsa coupler • Streamer recovery for rocket . Parachute recovery for payload . Decals R-212 \$2.00

LUNAR PATROL (15)

· 15-inch single stage rocket · Two 7-inch delta gliders • With pre-shaped balsa nose cone • Strong fiber-tube rocket body with plastic nose cone Pre-shaped glider bodies . Lightweight, pre-printed balsa fins and wings . Big 14-inch parachute on rocket • Decals R-215 \$3.00

FLAT CAT (16)

· Length: 19 inches · One-piece balsa body · Preprinted balsa sheets . Pre-shaped balsa nose cone · Strong, fiber tube rocket body · Colorful 18-inch recovery streamer

R-216

If you are unable to find the MPC model rocketry product of your choice at your favorite store, you may order direct. Add 50¢ to cover postage and handling for purchases under \$3.00. For purchases over \$3.00 add

LAUNCH CONTROLLER

\$5.00

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B3-3														\$1	.00
B6-4														\$1	.00
C6-4														\$1	.20
C6-6														\$1	.20
C9-3														\$1	.30
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C6-0														\$1	.20
C9-0														\$1	.30
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1. WHAT IS MODEL ROCKETRY?

Model Rocketry is an international aerospace sport, a space age educational tool, a technological recreation, a hobby. It is recognized as such by many organizations: NASA, U.S. Air Force, the National Fire Protection Association, National Science Teacher's Association, American Institute of Aeronautics and Astronautics, National Aeronautic Association, the 51-Nation Federation Aeronautique Internationale, and various U.S. Government agencies.

2. WHAT IS NEEDED TO PARTICIPATE IN MODEL ROCKETRY?

A complete rocketry outfit includes flying model rocket, launch pad, hand controller, igniters, engines, a battery and an authorized location for operation. (Comply fully with all appropriate state and local regulations. Your launching area should be large enough so that the shortest ground area dimension is no less than one-fourth the anticipated maximum altitude of the rocket to be flown. The area must be free of overhead wires, trees and other obstructions and away from major highways, multi-story buildings and similar obstacles.)

3. WHAT IS A MODEL ROCKET?

Model Rockets are made of paper, balsa wood, plastic and other materials having high strength and low weight. Most model rockets weigh only a very few ounces. They use a factory-loaded, pre-packaged solid propellant rocket engine of high reliability. There is no handling or mixing of chemicals or explosives.

Model Rockets are launched electrically and soar to altitudes ranging from one hundred to over a thousand feet. After the rocket has reached it highest altitude, a recovery device is deployed which will lower it gently and safely to the ground so it can be used over and over again by installing a new rocket engine.

4. DO ALL ROCKETS OPERATE IN THE SAME MANNER?

While most model rockets operate in the same general manner, there is a considerable difference in their performance. This is caused by differences in the sizes, weights and shapes of the rockets and the type of rocket engines used.

Most rockets, regardless of their construction and performance differences, do have the following components:

(1) nose cone, (2) body tube, (3) launching lug — the tube on the side of the rocket that slides over the launching rod and guides the rocket as it lifts off, (4) recovery device — parachute, streamer, etc., (5) wadding — to protect the recovery materials and also help eject them, (6) rocket engine, (7) engine retainer — to hold the engine in position, and (8) igniter.

5. HOW DOES THE ROCKET ENGINE OPERATE?

The rocket engine is started with an igniter that is operated electrically. When electric current is passed through the igniter, it gets hot. This heat passes to the solid propellant which in turn ignites and creates hot gas under high pressure inside the engine casing. This hot gas rushes out the specially designed nozzle. This creates a thrust force that lifts the model off the launch pad and accelerates it skyward in an upward flight path. After the propellant has been expended, a delay charge of slower-burning propellant in the engine takes over, producing no thrust but permitting the model to coast upward, exchanging its speed for altitude. At a given number of seconds after liftoff — pre-determined by the modeler who chooses the type of engine with the pre-loaded time delay before launching — an ejection charge in the rocket motor produces a puff of gas that pressurizes the inside of the model, forcing the nose cone off and ejecting the recovery device from the model.

6. HOW ARE MODEL ROCKETS RECOVERED?

The means by which a rocket is recovered depends upon the design and construction of the rocket. The basic idea is to bring down all parts of the rocket gently and safely so they can be used over again. Parachutes and streamers are used most frequently. However, tumble, drag and glider devices can also be employed. If the rocket parts separate completely, two recovery devices can be used within the rocket.

DEPT. M ROCKETRY DIVISION, MODEL PRODUCTS CORP. 126 GROESBECK HWY., MT. CLEMENS, MICH. 48043



