

QUEST™

Flying Model Rocket

2010

CATALOG



Read this catalog carefully...it's designed to give you all of the information you'll need to get started flying model rockets the right way...with Quest.

If you've never launched a model rocket before, choose one of Quest's Ready-to-fly (RTF) or Skill Level One starter sets (Page 4). The starter sets include a rocket, recovery system, reusable launch pad, electric launch controller, three rocket motors with Q2G2 Igniters, and recovery wadding. You will need to purchase batteries for the launch system and glue for some rocket kits.

Skill Level

What does it mean?

Skill Level One/RTF

For anyone new to model rocketry and with little or no modeling experience. Rockets require either no assembly or simple construction.

Skill Level Two

For experienced modelers, assembly affects rocket performance.

Skill Level Three

An exciting test for advanced rocket flyers. Master Level Two before moving up.

Skill Level Four

Recommended only for EXPERT rocketeers. A true test of modeling skills.



Stages of Flight

- | | | |
|---|----------|---|
| 1 | Ignition | By safe, electric igniter |
| 2 | Lift Off | From Launch Pad, powered flight starts |
| 3 | Coasting | Powered flight ends delay charge. Allows for altitude gain. |
| 4 | Apogee | Peak of flight. Rocket arcs over. |
| 5 | Ejection | Charge pressurizes inside of rocket and pushes recovery system out. |
| 6 | Recovery | Gentle descent. Ready to fly again. |

Anatomy of a Rocket

Stages of Motor Burn

1



IGNITION: Electric Launch Controller heats igniter placed in motor nozzle. Motor starts thrusting.

2



LIFT-OFF: Rocket Motor develops enough thrust for powered flight.

3



COASTING: Propellant has been consumed. Tracking Smoke is ignited while rocket coasts to peak altitude.

4



APOGEE: Rocket reaches peak altitude, loses momentum, arcs over and points down as Tracking Smoke is consumed.

5



EJECTION: The Final Charge activates, creating expanding gases to deploy recovery system.

Rocket motors, igniters and recovery wadding can be used only once, but each rocket can be flown over and over again. You'll need a new rocket motor, igniter and recovery wadding for each additional flight. Each Quest rocket includes a list of recommended motors to use. See page 23 for more information.

Model Rockets are all reusable. Most require assembly and come in different shapes.

Nose Cone

Guides airflow around the Rocket (streamlines).

Body Tube

Main structure (airframe), usually a strong paper tube.

Recovery System

Device to allow for safe descent of rocket intact.

Recovery Wadding

Protects recovery system from hot ejection charge gases.

Launch Lug

Guides Rocket straight off launcher.

Motor Mount

Holds motor in place

Rocket Motor

Safe Non-reusable device. A new motor is needed for each rocket flight.

Fins

Keep rocket traveling straight.

All the rocket kits featured in the catalog have plastic nose cones, Kevlar shock cord systems, color-coded parts, and utilize laser-cut balsawood fins unless specified otherwise.

ASTRA III STARTER SET

No. 1406



REUSABLE
RANGEBOX!

FLIGHTS TO
1200
FEET
365 METERS



PARACHUTE
RECOVERY
ROCKET
READY TO ASSEMBLE

SETS
INCLUDE
ROCKET, MOTORS
AND LAUNCH
SYSTEM

COMPLETE
**LAUNCH
PAD**
AND CONTROLLER
INCLUDED!



3
MOTORS
AND IGNITERS
INCLUDED

Skill Level	One (Quick Kit)
Recovery	Parachute
Length	15in 38cm
Diameter	1.18in 30mm
Motors	A6-4 B6-4 C6-3 C6-5

Plastic Model Glue
(not included)
required for
Rocket Assembly.

VORTEX STARTER SET

No. 5738



REUSABLE
RANGEBOX!



Skill Level	One (Quick Kit)
Recovery	Parachute
Length	18.13in 46cm
Diameter	1.38in 35mm
Motors	A6-4 B6-4 C6-3 C6-5

White Glue
(not included)
required for
Rocket Assembly.

* Starter Sets require 1 fresh 9 volt Alkaline battery for Launch Controller (not included).

Flying Model Rockets

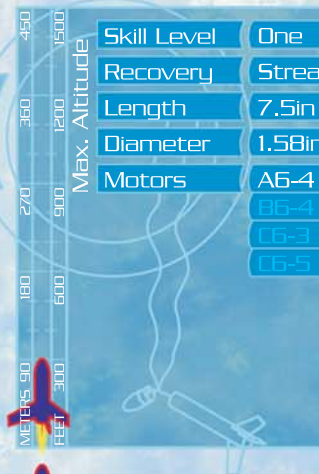
QUESTIONS? Contact us: 800-858-7302 **QUEST™**

COBALT

No. 1021

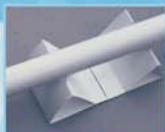


Skill Level	One
Recovery	Streamer
Length	7.5in 19cm
Diameter	1.58in 40mm
Motors	A6-4 ONLY
	B6-4
	C6-3
	C6-5



NOVIA

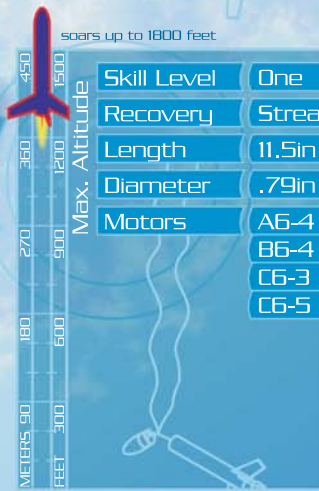
No. 1006



Paper Cradle
included to hold
rocket while
fins dry!



Skill Level	One
Recovery	Streamer
Length	11.5in 29.2cm
Diameter	.79in 20mm
Motors	A6-4
	B6-4
	C6-3
	C6-5



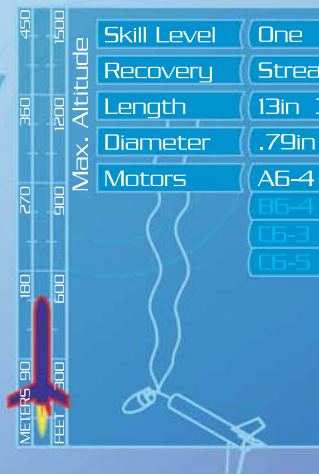
STARHAWK

No. 1005



One-Piece Fin Unit

Skill Level	One
Recovery	Streamer
Length	13in 33cm
Diameter	.79in 20mm
Motors	A6-4
	B6-4
	C6-3
	C6-5



ASTRA

No. 1004



Utilizes TTW
(Through The Wall)
technology for easy
fit and perfect
alignment.



Max. Altitude

Skill Level	One
Recovery	Parachute
Length	13in 33cm
Diameter	.98in 25mm
Motors	A6-4
	B6-4
	C6-3
	C6-5



QUEST AMERICA

No. 1020



Max. Altitude

Skill Level	One
Recovery	Parachute
Length	14in 35.6cm
Diameter	1.18in 30mm
Motors	A6-4
	B6-4
	C6-3
	C6-5



VIPER

No. 1008



One-Piece Fin Unit



Max. Altitude

Skill Level	One
Recovery	Parachute
Length	17.3in 43.8cm
Diameter	.98in 25mm
Motors	A6-4
	B6-4
	C6-3
	C6-5



TOTALLY TUBULAR

No. 1012



Max. Altitude

Skill Level	One
Recovery	Streamer
Length	16in 38cm
Diameter	1.58in 40mm
Motors	A6-4 B6-4 C6-3 C6-5



BIG BETTY

No. 1014



Max. Altitude

Skill Level	One
Recovery	Parachute
Length	23in 58.4cm
Diameter	1.58in 40mm
Motors	A6-4 B6-4 C6-3 C6-5



PLANET PROBE

No. 1022



Max. Altitude

Skill Level	One
Recovery	Tumble
Length	4.12in 10.8cm
Diameter	6.75in 17.1mm
Motors	A6-4 B6-4 C6-3 C6-5 B6-0 C6-0



BRIGHT HAWK

No. 1017



Skill Level	One
Recovery	Parachute
Length	21.5in 54.6cm
Diameter	1.38in 35mm
Motors	A6-4 B6-4 C6-3 C6-5



PAYLOADER ONE

No. 1018

Utilizes TTW (Through The Wall) technology for easy fit and perfect alignment.



Skill Level	One
Recovery	Parachute
Length	16.25in 41.3cm
Diameter	.98in 25mm
Motors	A6-4 B6-4 C6-3 C6-5



TWO STAGE FULL BETTY

No. 1018



Skill Level	Two
Recovery	Tumble/Streamer
Length	12.25in 31.2cm
Diameter	1.57in 40mm
Motors	A6-4 B6-4 C6-3 C6-5
Booster	B6-0 C6-0



GAMMA RAY

PAYLOADER No. 2004



Max. Altitude

Skill Level	Two
Recovery	Parachute
Length	17.4in 44cm
Diameter	.79in 20mm
Motors	A6-4
	B6-4
	C6-3
	C6-5



STRIKER AGM

No. 2020



Max. Altitude

Skill Level	Two
Recovery	Parachute
Length	27.7in 70.5cm
Diameter	1.38in 35mm
Motors	A6-4
	B6-4
	C6-3
	C6-5



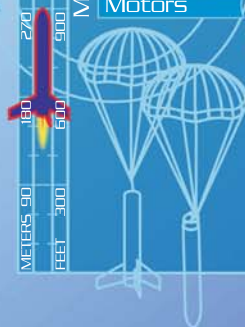
SUPER BIRD

No. 2010



Max. Altitude

Skill Level	Two
Recovery	Dual Parachute
Length	31.3in 79.4cm
Diameter	1.375in 35mm
Motors	A6-4
	B6-4
	C6-3
	C6-5





EGGLOFTER COURIER

No. 2011



Send an egg 400 feet
into the air and return it
safely to earth!



Skill Level	Two
Recovery	Dual Parachute
Length	19.87in 50cm
Diameter	1.38in 35mm
Motors	A6-4 B6-4 C6-3 C6-5



SHX STILLETTO

No. 2019



Skill Level	Two
Recovery	Parachute
Length	26.5in 67.3cm
Diameter	1.38in 35mm
Motors	A6-4 B6-4 C6-3 C6-5



TERRIER ORION

No. 2015



Skill Level	Two
Recovery	Parachute
Length	30.1in 76.5cm
Diameter	1.38in 35mm
Motors	A6-4 B6-4 C6-3 C6-5



RAPTOR

No. 3011



METERS 90 180 270 360 450
FEET 300 600 900 1200 1500

Max. Altitude



Skill Level	Three
Recovery	Parachute
Length	22.4in 56.9cm
Diameter	1.38in 35mm
Motors	A6-4 B6-4 C6-3 C6-5



MAGNUM

SPORT LOADER No. 3012



METERS 90 180 270 360 450
FEET 300 600 900 1200 1500

Max. Altitude



Skill Level	Three
Recovery	Parachute
Length	24in 61cm
Diameter	1.58in 40mm
Motors	A6-4 B6-4 x 2 C6-3 x 2 C6-5 x 2



NAVAHO AGM

TWO STAGE

No. 3003



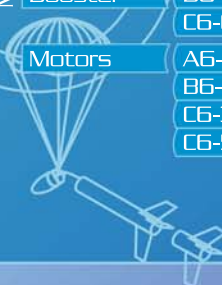
METERS 90 180 270 360 450
FEET 300 600 900 1200 1500

Max. Altitude



soars up to an incredible 2100 feet

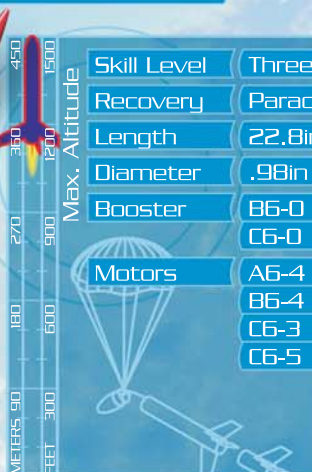
Skill Level	Three
Recovery	Parachute
Length	20.3in 51.4cm
Diameter	.98in 25mm
Booster	B6-0 C6-0
Motors	A6-4 B6-4 C6-3 C6-5



TWO STAGE WITH PAYLOAD

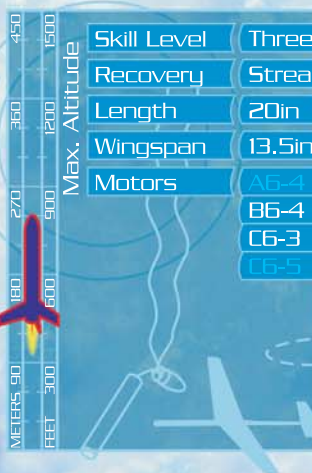
ZENITH II

No. 3005



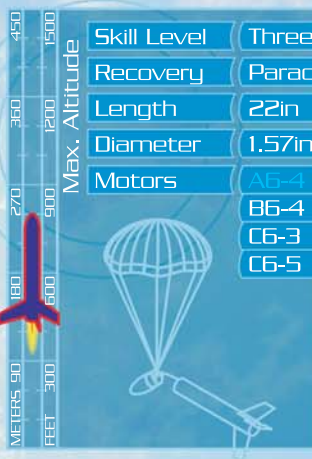
FLAT CAT

BOOST GLIDER No. 3006



TOMAHAWK

SLCM CRUISE MISSILE No. 3007



AEROSPACE ONE

No. 3015



Skill Level	Three
Recovery	Parachute
Length	23in 58.4cm
Diameter	1.38in 35mm
Motors	A6-4 B6-4 C6-3 C6-5

Max. Altitude



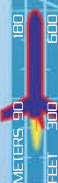
AEROSPACE ONE

FIGHTER ESCORT

No. 2017

Skill Level	Two
Recovery	Parachute
Length	17.3in 43.8cm
Diameter	.98in 25mm
Motors	A6-4 B6-4 C6-3 C6-5

Max. Altitude



Featured on
our cover,
build your own
fleet of
Aerospace One
ships and
escorts!



MLAS

No. 3014



Skill Level	Three
Recovery	Parachute x 3
Length	9in 22.9cm
Diameter	3.46in 8.8mm
Motors	A6-4 B6-4 (B6-2) C6-3 C6-5



> The real MLAS flight test vehicle weighs over 45,000 lbs and is 33 feet tall.



The moon rockets of the 21st century have the MLAS (Max Launch Abort System) integrated into the Orion spacecraft. The MLAS will quickly and safely propel the astronauts away from danger and set them down in a manner reminiscent of the Apollo capsules during the glory days of the Space Race.

FUTURE LAUNCH VEHICLE

No. 3013



Skill Level	Three
Recovery	Parachute
Length	21.6in 54.9cm
Diameter	1.58in 40mm
Motors	A6-4 B6-4 C6-3 C6-5

HARPOON

No. 3008



Max. Altitude

Skill Level	Three
Recovery	Parachute
Length	20.5in 52.1cm
Diameter	1.58in 40mm
Motors	A6-4 B6-4 C6-3 C6-5



FORCE 5

No. 3010



Max. Altitude

Skill Level	Three
Recovery	Parachute
Length	23.5in 58cm
Diameter	1.38in 35mm
Motors	A6-4 B6-4 C6-3 C6-5



SPACE SHUTTLE INTREPID

No. 4002



Max. Altitude

Skill Level	Four
Recovery	Parachute/Glider
Length	15.4in 39.1cm
Diameter	1.58in 40mm
Motors	A6-4 B6-4 C6-3 C6-5



QUEST QUICK KITTM 15 MIN.



- Designed to be "goof-proof."
- The molded fins slide right into the base for perfect alignment.
- No painting or finishing is required before these rockets are ready to launch!
- Plastic Model Glue required for assembly.

TRITON-X

No. 1617



Skill Level	One (Quick Kit)
Recovery	Parachute
Length	33in 83.8cm
Diameter	1.38in 35mm
Motors	A6-4 B6-4 C6-3 C6-5



PENETRATOR

No. 1618



Skill Level	One (Quick Kit)
Recovery	Dual Parachute
Length	38.7in 98.4cm
Diameter	1.38in 35mm
Motors	A6-4 B6-4 C6-3 C6-5





ASTRA III

No. 1610



Skill Level	One (Quick Kit)
Recovery	Parachute
Length	15in 38.1cm
Diameter	1.18in 30mm
Motors	A6-4
	B6-4
	C6-3
	C6-5



SEEKER

No. 1611



Skill Level	One (Quick Kit)
Recovery	Parachute
Length	26in 66cm
Diameter	1.18in 30mm
Motors	A6-4
	B6-4
	C6-3
	C6-5



QUICK-Q

No. 1623



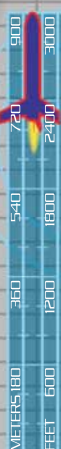
Skill Level	One (Quick Kit)
Recovery	Parachute
Length	19.5in 49.5cm
Diameter	1.18in 30mm
Motors	A6-4
	B6-4
	C6-3
	C6-5



Uses powerful
D, E and F motors!

HIGH-Q

No. 5012



Max. Altitude

Skill Level	Three
Recovery	18" Fabric Chute
Length	30.5in 77.5cm
Diameter	1.92in 50mm
Motors	D12-3 D12-5 E9-4 E9-6



Aerotech:

E20-4W
E20-7W
F32-6W
F20-7W

MEAN GREEN

No. 5013



Max. Altitude

Skill Level	Three
Recovery	18" Fabric Chute
Length	24.5in 62.2cm
Diameter	1.92in 50mm
Motors	D12-3 D12-5



GRUNT

No. 5014



Max. Altitude

Skill Level	Three
Recovery	36" Fabric Streamer
Length	17.0in 43.2cm
Diameter	1.92in 50mm
Motors	D12-3 D12-5



QUESTIONS? Contact us: 800-858-7302

QUEST™

BIG DOG

No. 5010



900
720
540
360
180
0
METERS
3000
2400
1800
1200
600
0
FEET

Max. Altitude

Skill Level	Three
Recovery	18" Fabric Chute
Length	32.5in 82.6cm
Diameter	1.92in 50mm
Motors	D12-3 D12-5 E9-4 E9-6
Aerotech:	E20-4W E20-7W F32-6W F20-7W

900
720
540
360
180
0
METERS
3000
2400
1800
1200
600
0
FEET

Max. Altitude

Skill Level	Three
Recovery	18" Fabric Chute
Length	28.75in 73cm
Diameter	1.92in 50mm
Motors	D12-3
Aerotech:	E20-4W F32-6W

900
720
540
360
180
0
METERS
3000
2400
1800
1200
600
0
FEET

Max. Altitude

Skill Level	Three
Recovery	18" Fabric Chute
Length	27.5in 69.9cm
Diameter	1.92in 50mm
Motors	D12-3 D12-5 E9-4 E9-6
Aerotech:	E20-4W E20-7W F32-6W F20-7W

MINOTAUR

No. 5015



QUAD RUNNER

No. 5016



QUEST™

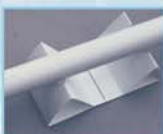
Specialists in Aerospace Education



**Value Packs
perfect for:
classrooms
school clubs
youth groups
scout
programs**

NOVIA

No. 5582 - 25 Pack
No. 5482 - 12 Pack



**Paper Cradle
included to hold
rocket while
fins dry!**



soars up to 1800 feet

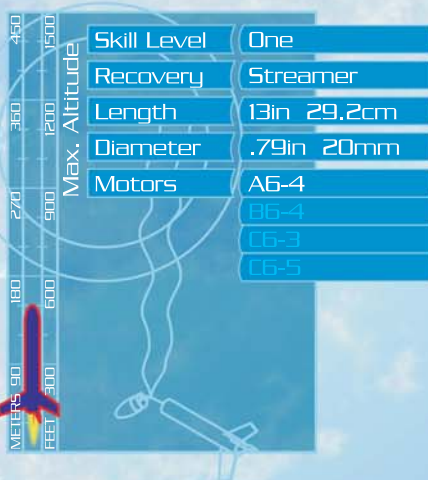


STARHAWK

No. 5583 - 25 Pack
No. 5483 - 12 Pack



One-Piece Fin Unit





ASTRA

No. 5584 - 25 Pack
No. 5484 - 12 Pack



Utilizes TTW
(Through The Wall)
technology for easy
fit and perfect
alignment.



Skill Level	One
Recovery	Parachute
Length	13in 33cm
Diameter	.94in 25mm
Motors	A6-4
	B6-4
	C6-3
	C6-5



VIPER

No. 5594 - 25 Pack
No. 5494 - 12 Pack



One-Piece Fin Unit



Skill Level	One
Recovery	Parachute
Length	17.3in 43.8cm
Diameter	.98in 25mm
Motors	A6-4
	B6-4
	C6-3
	C6-5



ASTRA III

No. 5595 - 25 Pack
No. 5495 - 12 Pack



Molded Fins



Skill Level	One (Quick Kit)
Recovery	Parachute
Length	15in 38.1cm
Diameter	1.18in 30mm
Motors	A6-4
	B6-4
	C6-3
	C6-5



QUEST™

Specialists in Aerospace Education



**Educational
kits for
classroom
programs**

PAYLOADER ONE

No. 5585

Set of 25 Rockets



Max. Altitude

Skill Level	One
Recovery	Parachute
Length	16.25in 41.3cm
Diameter	.98in 25mm
Motors	A6-4 B6-4 C6-3 C6-5



EGGLOFTER COURIER

No. 5596

Set of 25 Rockets



Great way to practice
for the Team America
Rocketry Challenge,
the "worlds greatest
rocketry contest."



Max. Altitude

Skill Level	Two
Recovery	Dual Parachute
Length	19.87in 50.5cm
Diameter	1.38in 35mm
Motors	A6-4 B6-4 C6-3 C6-5



MODEL ROCKET MOTORS



What does the Rocket number mean?

A6-4

Letter is total impulse or total power produced by the motor. Each succeeding "letter" has double the power of the previous: for example, a "B" type motor is double the power of an "A" type motor.

Indicates how fast the motor enables your rocket to travel. The higher the number, the greater the speed. The number itself stands for the average thrust in Newton-seconds, or the average force exerted.

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

Motor	A6-4	B6-4	B6-0	C6-0	C6-3	C6-5
Product No.	5740	5741	5745	5742	5743	5744
Stage Type	Single	Single	Booster	Booster	Single	Single
Total Impulse Newton/LB-sec	2.50/.56	5.00/1.12	5.00/1.12	10.00/2.25	10.00/2.25	10.00/2.25
Time Delay	4 sec.	4 sec.	none	none	3 sec.	5 sec.
Max Lift weight (oz./g)	2.5/74	4.0/113	4.0/113	4.0/113	4.0/113	4.0/113
Propellant weight (oz./g)	.12/3.5	.23/6.5	.23/6.5	.44/12.5	.44/12.5	4/12.5

Technical Notes:

All figures shown are optimum performance.

Actual Thrust Time curves are included with each motor.

A Newton(N) is the measurement of force required to move one kilogram of mass one meter per second. (4.45 N=1.0 lbs of thrust)

Quest rocket motors have met the standards set by:

- The National Association of Rocketry
- The National Fire Protection Association
- California State Fire Marshal



Safety:

Model rocketry is recommended for ages 10 to adult. Adult supervision is suggested for those under 12 years of age when flying model rockets. You must be 14 years of age to purchase "A" through "C" type rocket motors in CA and NJ.

MODEL ROCKET MOTOR PACKS



A6-4	25 Motors	No. 5597	
	12 Motors	No. 5697	
	3 Motors	No. 5740	
	1 Motor	No. 5765	

B6-4	25 Motors	No. 5598	
	12 Motors	No. 5698	
	3 Motors	No. 5741	
	1 Motor	No. 5766	

C6-3	25 Motors	No. 5593	
	12 Motors	No. 5693	
	3 Motors	No. 5743	

C6-5	25 Motors	No. 5599	
	12 Motors	No. 5699	
	3 Motors	No. 5744	
	1 Motor	No. 5767	

B6-0	3 Motors	No. 5745	
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C6-0	3 Motors	No. 5742	
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FIRST TIME FLIGHT PACK

3 PACK

1 x A6-4	No. 5748	
1 x B6-4		
1 x C6-5		

PACKS INCLUDE:

Q2G2 IGNITERS
WADDING

ALL MOTOR PACKS
INCLUDE Q2G2 IGNITERS.

Recovery Wadding is also included with
12 and 25 Motor Packs.

Accessories



IGNITERS

No. 7024

Each package contains
6 quality Q2G2 Igniters.

RECOVERY WADDING

No. 7021

Each package contains
100 biodegradable fire
resistant tissue paper.



14" PARACHUTE

No. 7810

Each package contains
one die cut 14"
Parachute, 6 Gripper
Tabs and three pre-cut
Shroud Lines.

LAUNCH ROD SET

No. 45206

1/8" diameter, 32" long plated 2-piece set
fits into Quest Launch Pad.

BLAST DEFLECTOR PLATE

No. 45100

4" diameter metal Blast Deflector
Plate protects the Launch Pad.
Plated to prevent rust.

External Battery Connector

EBC

No. 7814

Connects to Launch Controller
(Prod. No. 7510) and external 6V
Lantern Battery. Great for big
group launches.



COMPLETE LAUNCH SYSTEM

No. 7700

The complete Launch System package contains a Launch Controller and Launch Pad.

LAUNCH CONTROLLER

No. 7510

The Launch Controller features a blinking arming safety light, beeping alarm and deluxe safety key in a "sure grip" design. Requires a 9V alkaline battery (not included).

LAUNCH PAD

No. 7610

The Quest Launch Pad features a 32in (81cm) two-piece launch rod, blast deflector plate, tilt adjustment, rod safety cap and wind streamer.



SKYSCOPE ALTITUDE MEASURER

No. 7812

"How high did my rocket go?"

Technically an inclinometer, our Skyscope is the easiest and least expensive method for determining the height of a model rocket's flight.





Great Youth Group Activity!

- **Safe and FUN!**
- Electric Ignition
- Micro solid propellant rocket engine has a 3/4 second burn time.
- **Indoors or Out**
- Dual line race track safely guides Rocket Racerz from start to stop. Use 2 sets for exciting side-by-side Drag Races!
- **Each Racer is "customizable"**
Hundreds of possibilities!
- Flip over the preprinted body for a plain white surface that can be painted and decorated.
- Use scissors to customize body shapes

Build
Your
Rocket
Racerz



Set up
Your
Rocket
Rails
Track



Load a
Micro
Motor



Race it
Down
the
Rocket
Rails
Track!



Rocket Racerz Starter Set

Prod. No. 1200 Includes:

- 75' of Track w/ end mounts
- 1 Chassis - 2 Bodies
- 1 Electric Race Controller
- 6 Micro engines and igniters

Yellow Jacket Rocket Racer

Prod. No 1220
Includes one chassis
and one Yellow
Jacket body



Indy-G Rocket Racer

Prod. No 1221
Includes one
chassis and one
Indy-G body



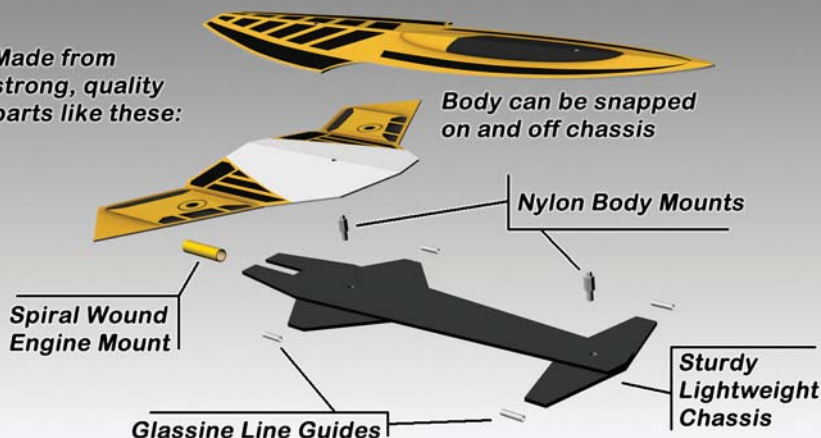
Group Six-Pack



Prod. No 1250
Includes two chassis, three
Yellow Jacket bodies and
three Indy-G bodies

What are Quest ROCKET RACERZ?

Made from strong, quality parts like these:



Recommended for ages 10 and up with direct adult supervision.

SAFE!

A special light-weight chassis stays attached to the race track. Each end of the track is held tightly by 5 gallon water bottles.*

FUN!

Just insert one new Micro rocket engine and an electric igniter for each race! Handheld electric race controller allows you to stand safely to the side during race.

* 5 gallon water bottles not included.



Rocket Racerz Micro Engines Prod. No 1260
Includes Six Rocket Engines and Six Igniters



Rocket Racerz Igniters Prod. No 1261
Includes Six Igniters



This sport scale model is of the MLAS prototype which was demonstrated in a perfect test flight on July 8, 2009, at 6:26 a.m. at NASA's Wallops Flight Facility, Wallops Island, Virginia. This model is a great way to celebrate man's return to the Moon and beyond.

After streaking aloft on a pillar of smoke and fire, your personal lunar bound model gently floats to Earth under a total of three parachutes, the capsule under two, the booster under it's own.

Build it, fly it,
and be proud.
We are going
back to the
Moon!

MLAS

MAX LAUNCH ABORT SYSTEM

FLYING MODEL ROCKET KIT
SKILL
LEVEL 3



QUEST 

Quest Aerospace, Inc.
PO Box 2409
Pagosa Springs, CO 81147
800-858-7302
www.questaerospace.com

