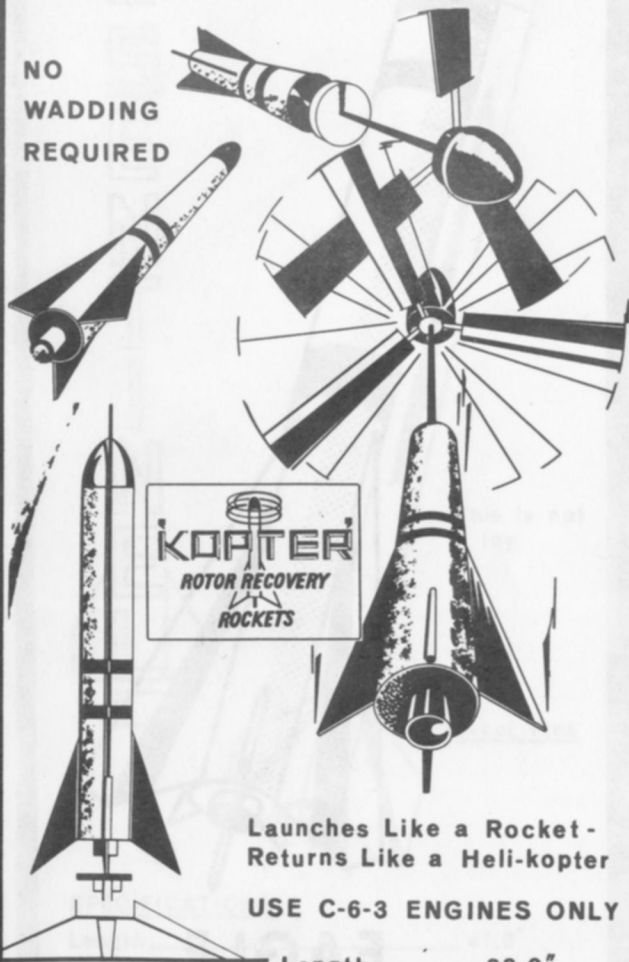


For Intermediate or Advanced Rocketeers

NO
WADDING
REQUIRED



Launches Like a Rocket -
Returns Like a Heli-kopter

USE C-6-3 ENGINES ONLY

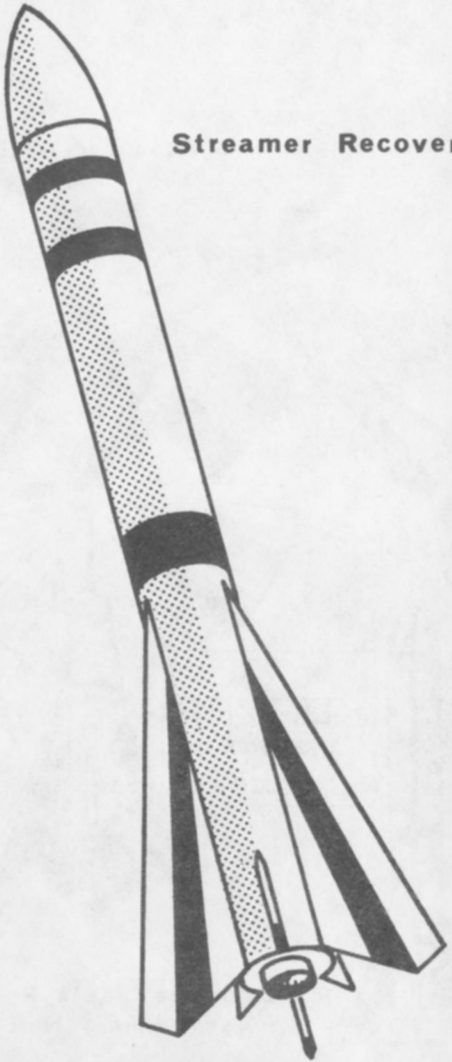
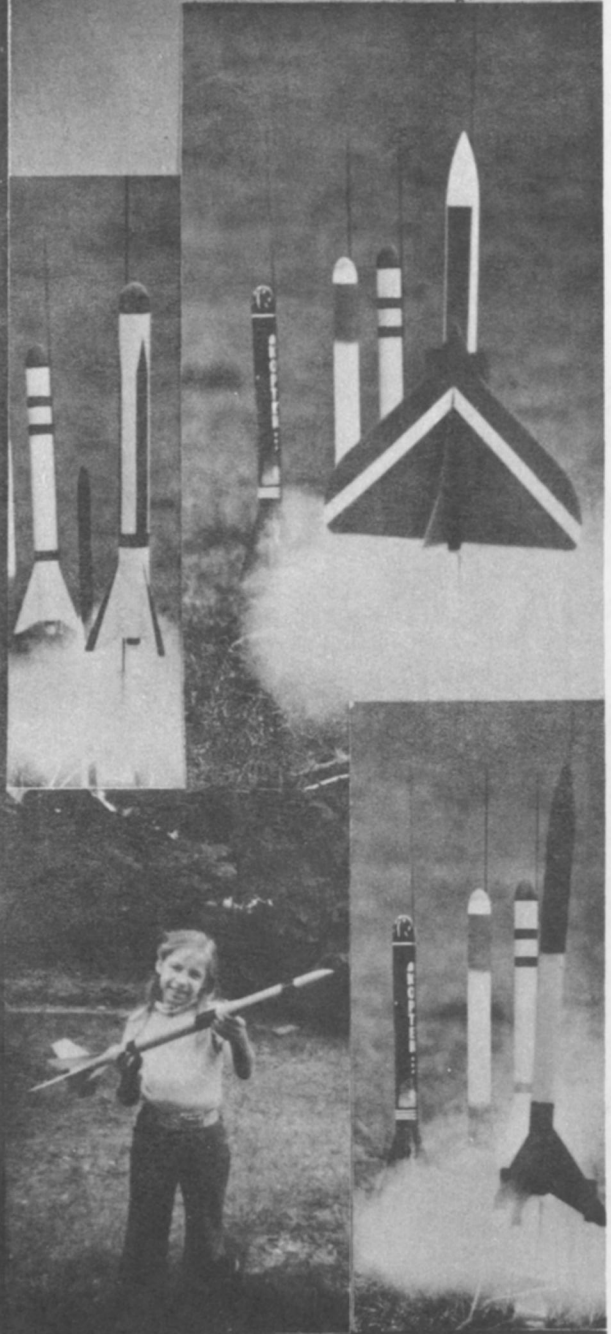
Length 22.0"
Body Dia. 1.59"

patent 3,903,801

'KOPTER'
ROTOR RECOVERY ROCKETS



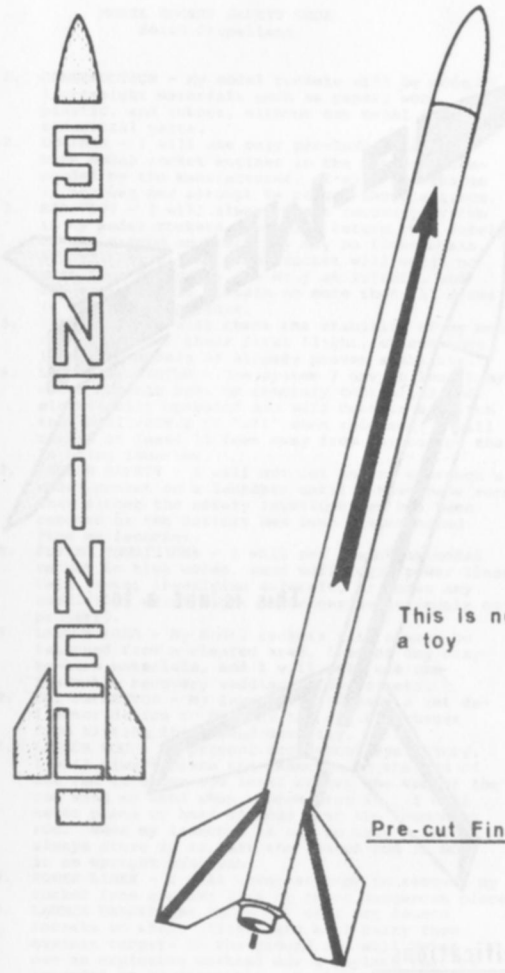
P.O. BOX 98226 PITTSBURGH, PA. 15227



Streamer Recovery

EAGLE

Specifications:
 Length ----- 12.50"
 Body Dia. ----- 0.95"
 Recommended Engines B-6-4, C-6-5
 (Beginner)



This is not a toy

Pre-cut Fins

SPECIFICATIONS:
 Length ----- 41.0"
 Body Diameter ----- 1.28"
 Recommended Engines D-12-5, E-11-8-6
 A Streamer Recovery Rocket - Can Be Adapted For Parachute.

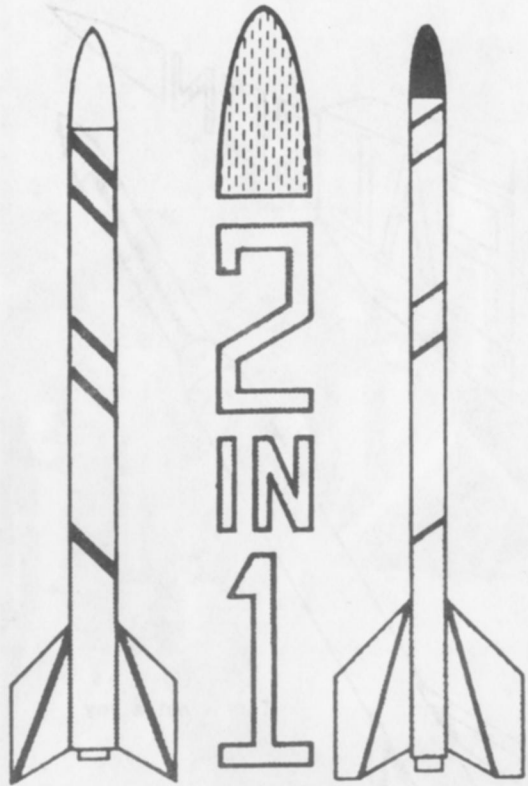
ADVANCED



This is not a toy

Intermediate

SPECIFICATIONS:
 Length ----- 26.0"
 Body Dia. ----- 0.95"
 Recommended Engines A-8-3, B-6-2, C-6-3, C-6-7
 A Streamer Recovery Rocket



2 IN
1 IN

DESIGNERS KIT

ALL THE PARTS YOU NEED TO BUILD TWO
MODEL ROCKETS

FOR USE WITH A, B, C OR D-ENGINES



This is not a toy

Specifications:

Length _____ 7.0"

Body Dia. _____ .71"

Recommended Engines, A-8-3, B-4-4, C-6-5

A Tumble Recovery Rocket

MODEL ROCKET SAFETY CODE Solid Propellant

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 oz.) at liftoff, and the engines will contain no more than 113 grams (4 oz.) of propellant.
5. STABILITY - I will check the stability of my model rockets before their 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 return to "off" when released. I will remain at least 15 feet away 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 device to prevent the engine exhaust from hitting the ground directly.
11. LAUNCH ROD - To prevent accidental eye injury, I will always place the launcher so the end of the rod is above eye level or cap the end of the rod with my hand when approaching it. I will never place my head or body over the launching rod. When my launcher is not in use, I will always store it so that the launch rod is NOT in an upright position.
12. POWER LINES - I will never attempt to recover my rocket from a power line or other dangerous place.
13. LAUNCH TARGET AND ANGLE - 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° 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.

'KOPTER'
ROTOR RECOVERY ROCKETS

P.O. BOX 98226 PITTSBURGH, PA. 15227

FROM:

QUICK DELIVERY ORDER FORM

QTY.	KIT NAME	PRICE	TOTAL
	BAT		
	DART		
	DISCOVERER		
	EAGLE		
	FALCON		
	HAWK		
	JETISON		
	KOPTER		
	MINI-SAUR		
	MOON-ROCK		
	MORAY GLIDER		
	PTEROSAUR		
	PEE-WEE		
	SENTINEL		
	SPIKE		
	TWO-IN-ONE		
	XK-1		
	ZOOKA		

TOTAL

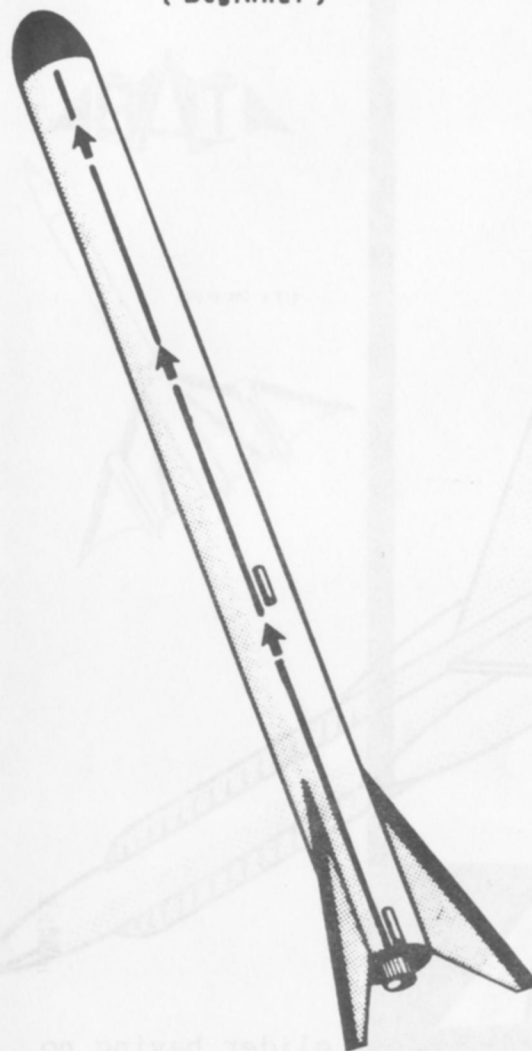
Pa. Residents add 6% Sales Tax.

PRICE LIST

KIT NAME	EACH
BAT	\$ 4.50
DART	4.75
DISCOVERER	4.50
EAGLE	3.50
FALCON	4.50
HAWK	2.25
JETISON GLIDER	12.95
KOPTER -- ROTOR RECOVERY ROCKET	7.50
MINI-SAUR	8.50
MOON-ROCK	4.75
MORAY GLIDER	7.75
PTEROSAUR GLIDER	12.95
PEE-WEE	1.75
SENTINEL	7.00
SPIKE	4.00
TWO-IN-ONE KIT	5.75
XK-1	4.00
ZOOKA	8.50
JETISON GLIDER ROTOR UNIT	4.75

Add \$1.20 for each order to cover postage & handling.

(Beginner)



XK-1

Specifications:

Length.....20.75"
 Body Dia.....1.60
 Recommended Engines
 C-6-3, B-4-2

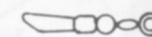
Streamer Recovery System



RE-USABLE STREAMER MATERIAL (DOUBLE STRAND)
 1-1/2" x 24" lg. \$.25 1-1/2" x 36" \$.30
 2" x 24" lg. .25 2" x 36" .30



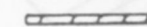
SCREW EYES
 3/4" 6 for \$.50



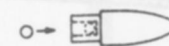
SNAP SWIVELS
 1" (\$.10 EA)



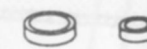
BALSA FIN SHEETS
 1/8" x 3" x 12"
 (3 for \$1.20)
 3/32" x 3" x 12"
 (3 for \$1.10)



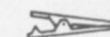
LAUNCH LUGS
 1" lg. 12 for \$.50



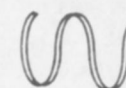
SPHERICAL LEAD WEIGHTS
 6 for \$.50



ENGINE BLOCKS
 "C" engine size \$.30 EA
 "D" engine size \$.35 EA



ALLIGATOR CLIPS
 2 for \$.65

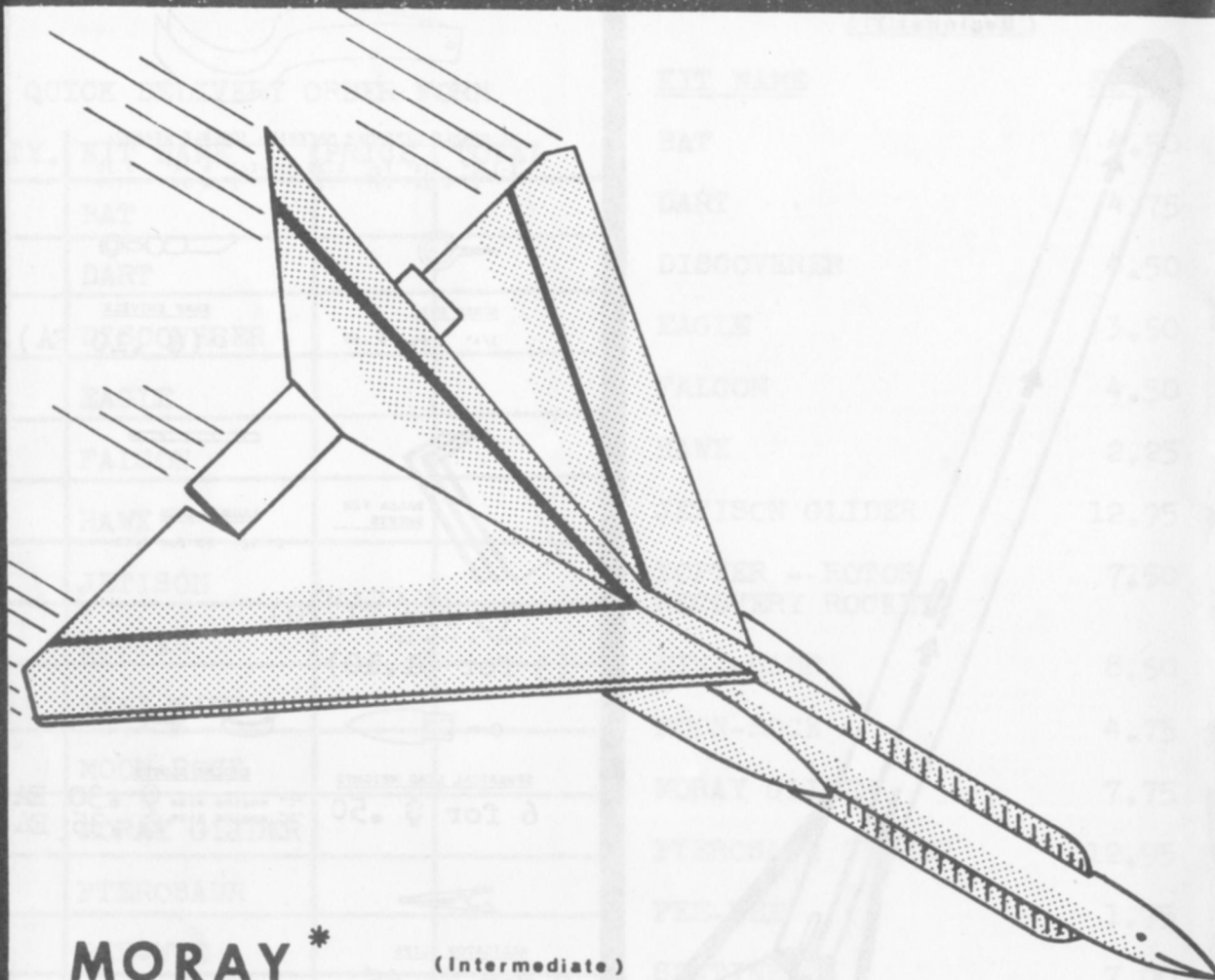


SHOCK CORD
 3/16" x 36" lg. \$.25



NOSE BLOCKS
 1.59" Dia. \$.55
 1.28" Dia. \$.50
 .95" Dia. \$.45
 .71" Dia. \$.40

Add 10¢ for each item ordered on this page to cover postage and handling.



MORAY * (Intermediate)

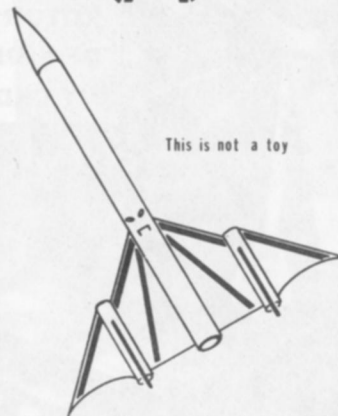
A high altitude delta wing rear engine boost glider having no ejecting parts. When this glider is launched, it does not require two separate recovery crews.

The Moray is launched vertically (using standard electrical ignition of engine) and at apogee the elevator is automatically raised by a sliding piston activated by the engine blow out charge giving a superb level flying circular glide pattern.

Length overall - 20.5"
Wing span - 15.5"
Body diameter - 0.71"

Recommended engines:
B-6-4; C-6-3

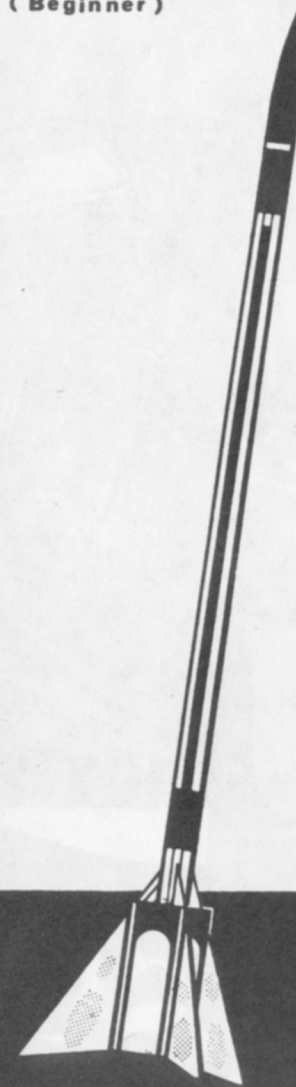
* Patent 3,888,178



Specifications:

Length 20.25"
Body Dia.71"
Recommended Engines. A83, B42, C63
A Streamer Recovery Rocket

(Beginner)

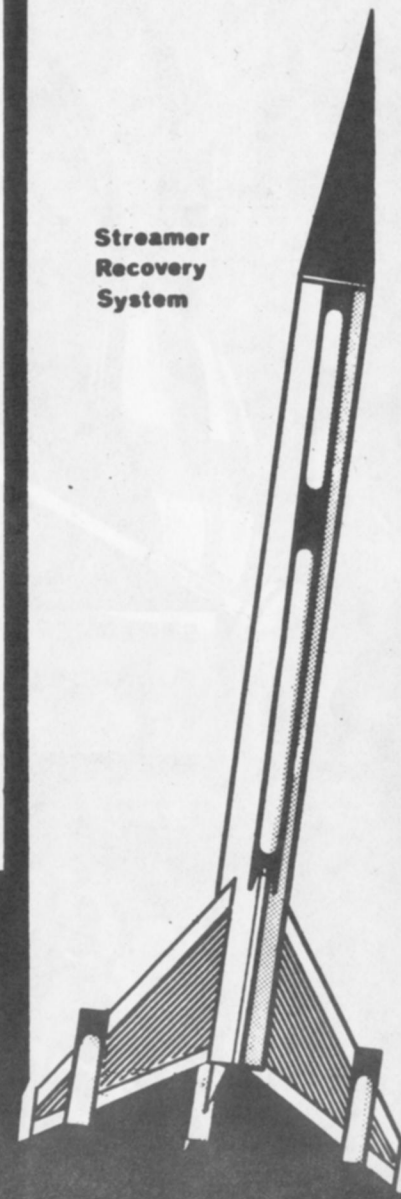


SPIKE

Specifications:

Length 21.5"
Body Dia.71"
Streamer Recovery System
Recommended Engines B-6-4

(Intermediate)



**Streamer
Recovery
System**

DISCOVERER

Specifications:

Length 25.25"
Body Dia. 1.28"
Recommended Engines

D 12 3. D 12 5



ROTOR POD
OPTIONAL
(BY ORDER)

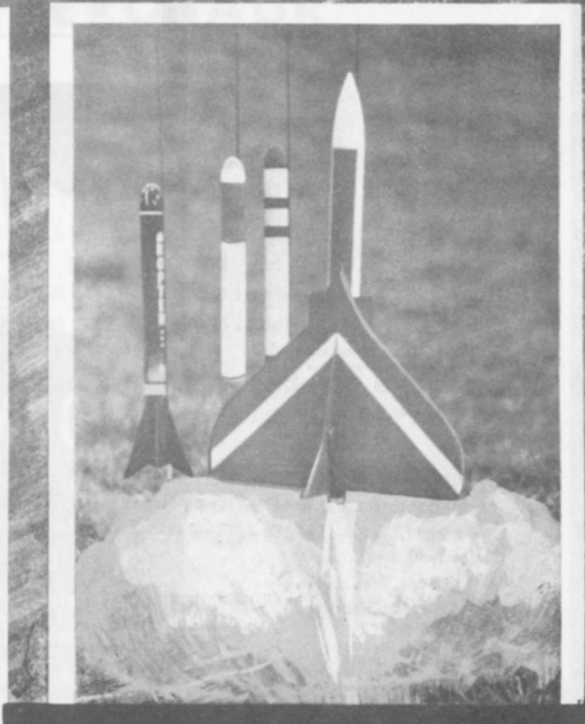
STREAMER POD
FURNISHED WITH
KIT

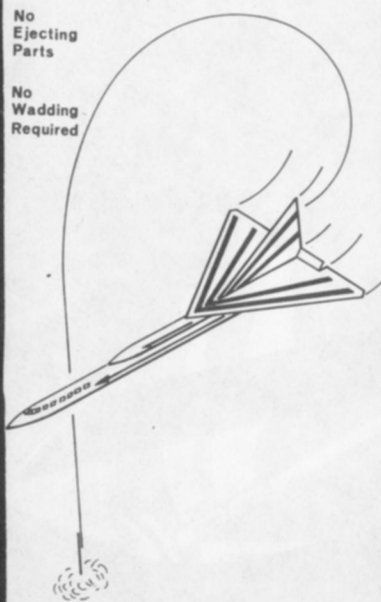
new JET-i-SON GLIDER

LENGTH OVERALL ----- 22"
 STREAMER POD LENGTH ----- 15.5
 BODY DIA. ----- 1.59
 USES C-6-3 ENGINES ONLY

NEW!! * * * * *
 "KOPTER" JET-i-SON GLIDER
 Here is the unique rear engine boost glider featuring a front JETTISONED STREAMER POD or the optional SPIN-OFF ROTOR UNIT. This glider utilizes a dual nose cone system. One nose cone on the streamer pod is used for initial lift-off and is ejected by the second nose cone that is activated by the rocket engine blow-out charge. This ejection system completely changes the glider balance immediately activating the wing elevator directing the glider body into a horizontal glide pattern thus avoiding contact with the descending streamer pod giving a magnificent display of that (Something Different) for the space-age ROCKETEER.

(Advanced) * Patent 3,942,441





MINI-SAUR*

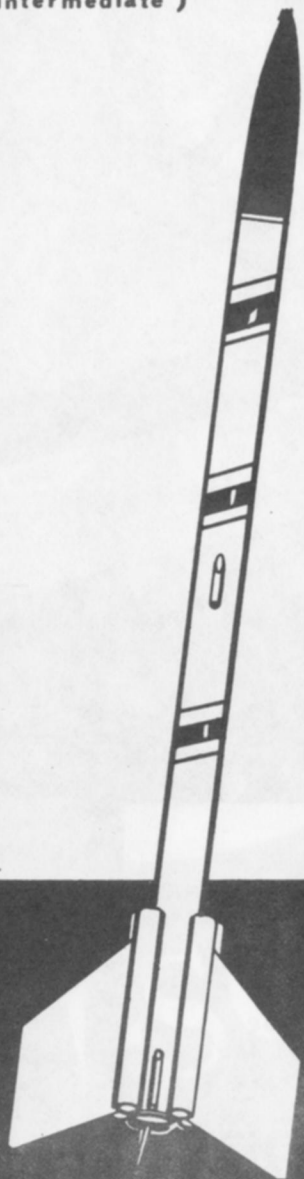
A Smaller Version of the Patented PTEROSAUR Model. This Glider Uses "B" and "C" Size Engines Only.

* Patent No. 3,888,178

Specifications:

Length.....21.5"
 Wing Span.....13.75"
 Large Body Dia.....0.97"
 Small Body Dia.....0.71"
 Recommended Engines
 B-6-2, C-6-3

(Intermediate)

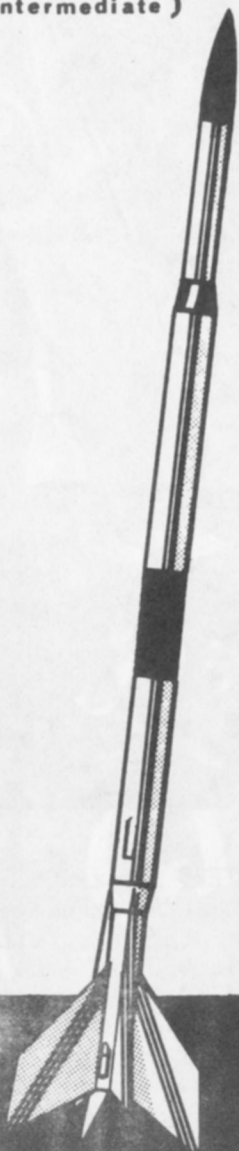


MOON ROCK

Specifications:

Length.....23.5"
 Body Dia. 0.95"
 Streamer Recovery
 Recommended Engines
 D-12-3, D-12-7

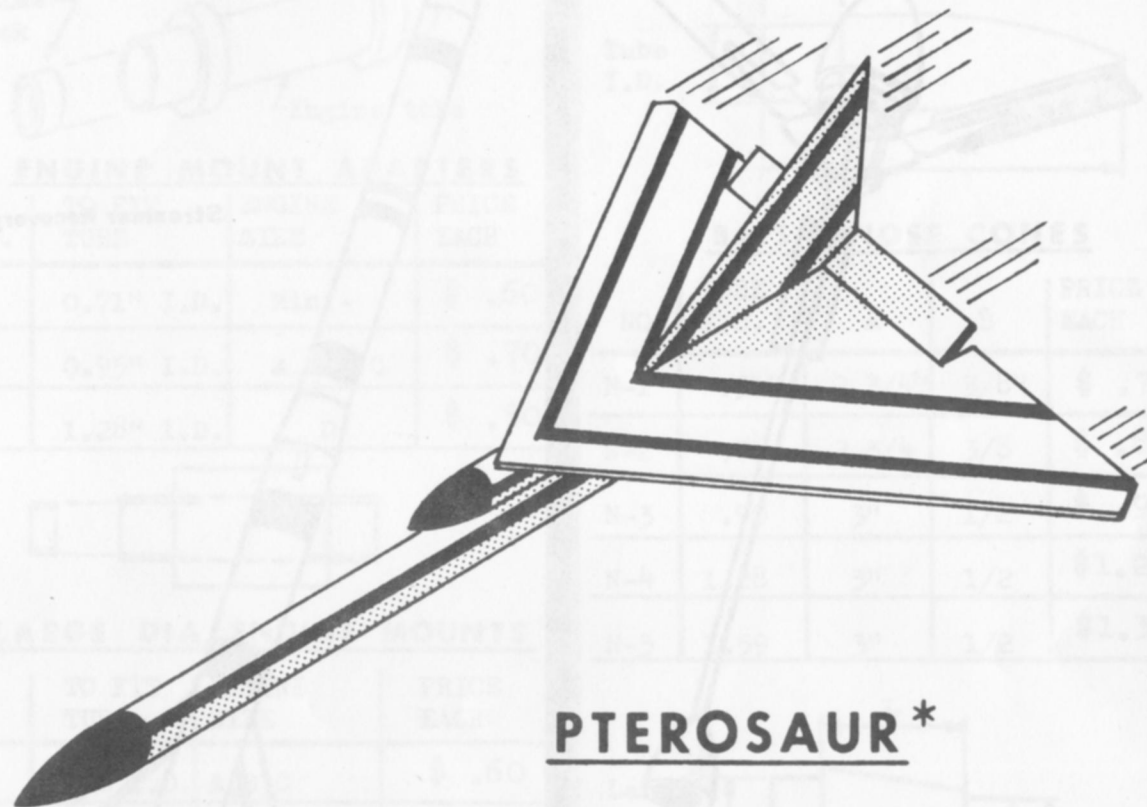
(Intermediate)



ZOOKA

Specifications:

Length.....40.0"
 Large Body Dia. 1.59"
 Small Body Dia. 1.28"
 Streamer Recovery System
 Recommended Engines D-12-7



PTEROSAUR*

Recommended for Advanced Model Builder

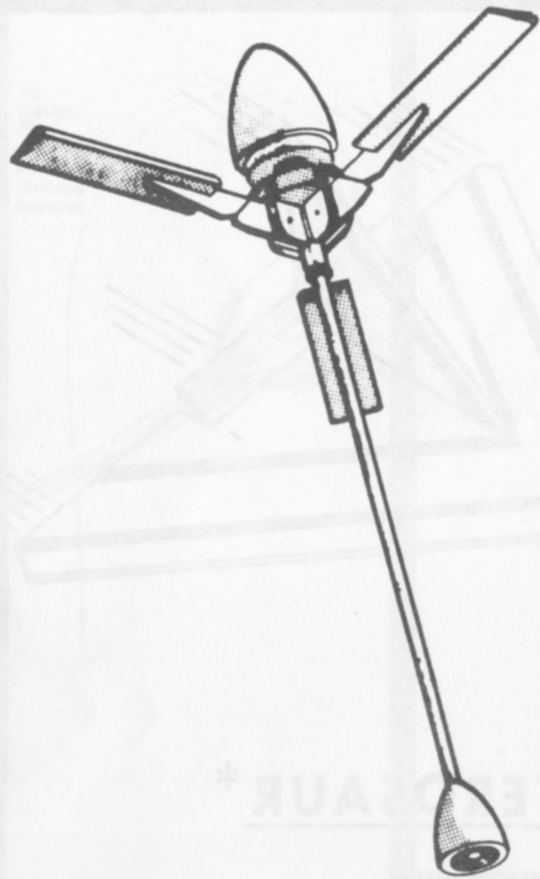
Introducing the newest and largest in delta wing glider kits! This model features rear engine "D" power and is similar to the smaller Moray glider. The elevator is raised automatically by a sliding piston activated by the engine blow-out charge.

The PTEROSAUR is launched vertically (using standard electric ignition of engine) and gives a high altitude level flying circular glide pattern.

Length overall - 28.5"
 Wing span - 20.0"
 Large body diameter - 1.32"
 Small body diameter - 0.97"

Recommended engines:
 D-12-5

* Patent 3,888,178



JET-i-SON GLIDER ROTOR UNIT

(Advanced)

Exclusively for use with the Jet-i-Son Glider. This rotor unit is jetisoned from the body tube during the engine blow-out charge and descends as a separate vehicle as the glider continues in its circular glide pattern.

Length of pod 16.5"
Rotor diameter (open) ... 15.5"



Streamer Recovery

DART

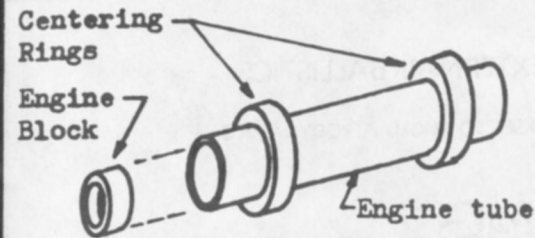
Specifications:

Length 20.75"
Large Body Dia 1.28"
Small Body Dia 0.95"

Recommended Engines

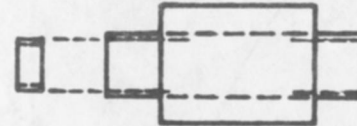
B-4-2, C-6-3

(Intermediate)



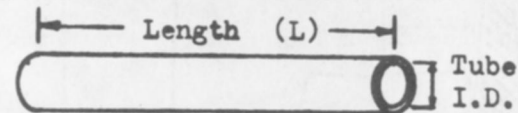
ENGINE MOUNT ADAPTERS

NO.	TO FIT TUBE	ENGINE SIZE	PRICE EACH
A-1	0.71" I.D.	Mini-	\$.60
A-2	0.95" I.D.	A, B, C	\$.70
A-3	1.28" I.D.	D	\$.80



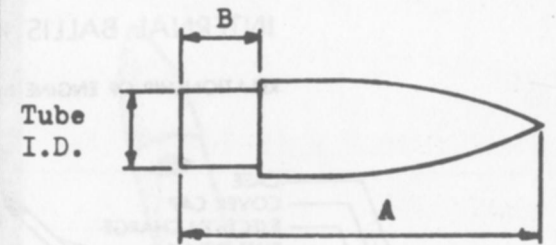
LARGE DIA. ENGINE MOUNTS

NO.	TO FIT TUBE	ENGINE SIZE	PRICE EACH
M-1	1.28 I.D.	A, B, C	\$.60
M-2	1.59 I.D.	A, B, C	\$.75



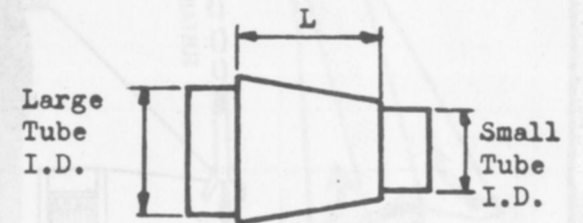
BODY TUBES

NO.	I.D.	L	SAME DIA. AS	PRICE EACH
T-1	.51"	18"	BT-5	\$.75
T-2	.71"	18"	BT-20	\$.85
T-3	.95"	18"	BT-50	\$.95
T-4	1.28"	18"	BT-55	\$1.10
T-5	1.59"	18"	BT-60	\$1.20



BALSA NOSE CONES

NO.	TUBE I.D.	A	B	PRICE EACH
N-1	.51"	2 3/4"	3/8"	\$.75
N-2	.71	2 3/4	3/8	\$.85
N-3	.95	3"	1/2	\$.95
N-4	1.28	3"	1/2	\$1.20
N-5	1.59	3"	1/2	\$1.30

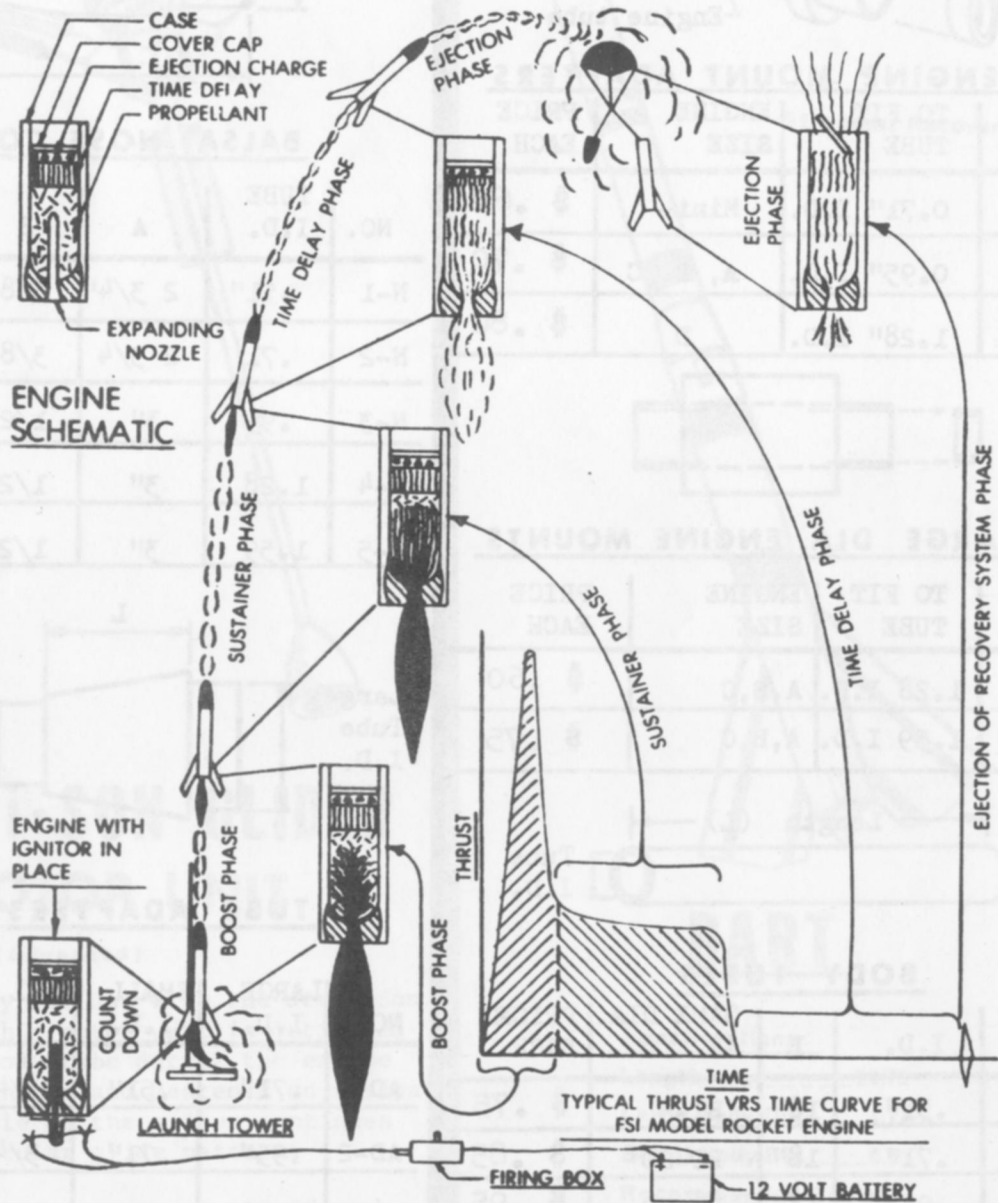


TUBE ADAPTERS

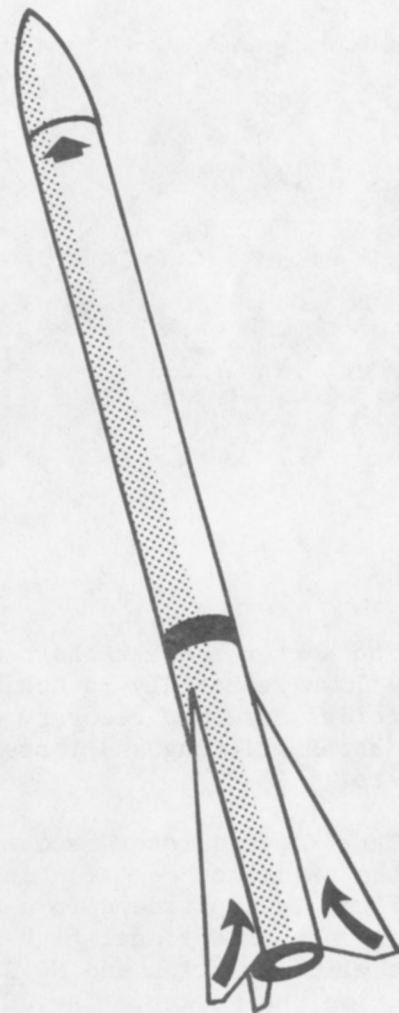
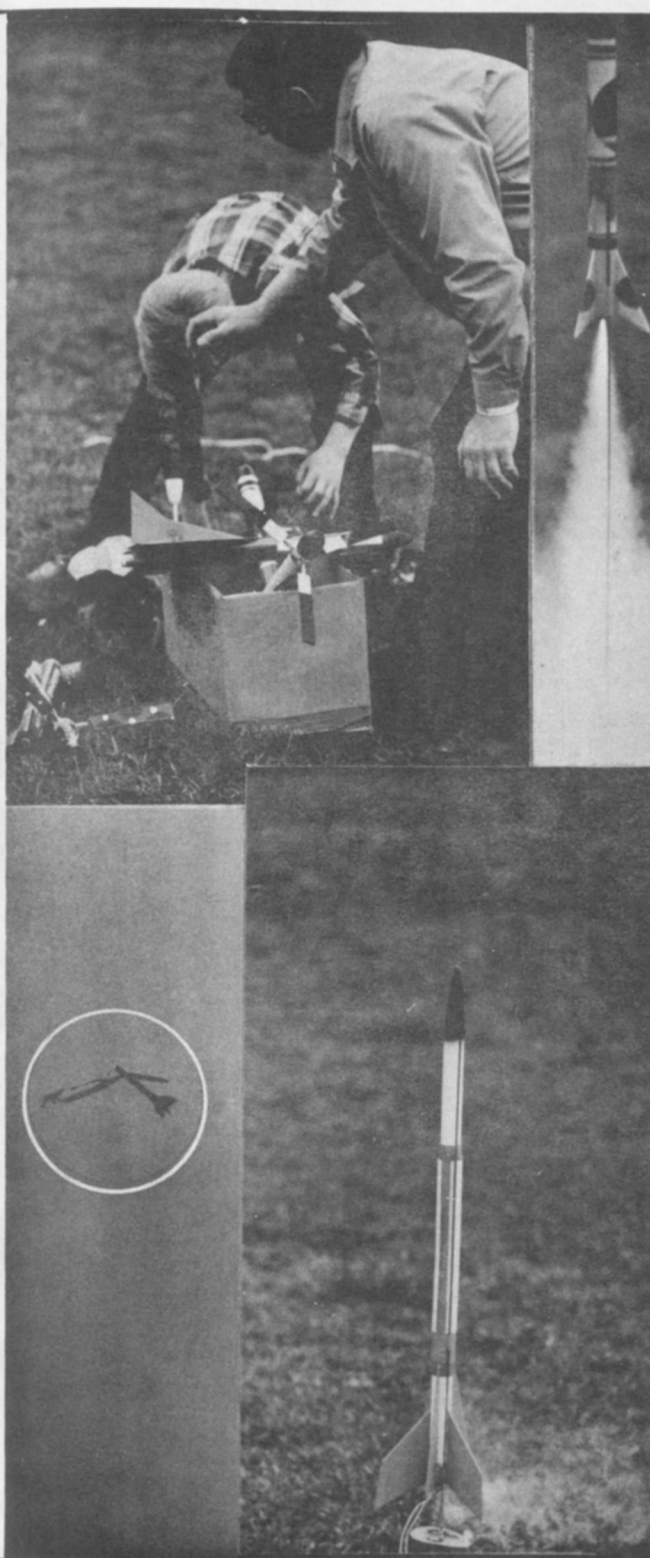
NO.	LARGE I.D.	SMALL I.D.	L	PRICE EACH
AD-1	.71"	.51"	3/4"	\$.80
AD-2	.95"	.71"	3/4"	\$.85
AD-3	1.28"	.95"	1"	\$.90
AD-4	1.59"	1.28"	1 1/4"	\$.95

INTERNAL BALLISTICS — EXTERNAL BALLISTICS

RELATIONSHIP OF ENGINE BURNING PHASES TO FLIGHT AERODYNAMICS



Reprinted with permission of Flight Systems Inc.



HAWK

Specifications:

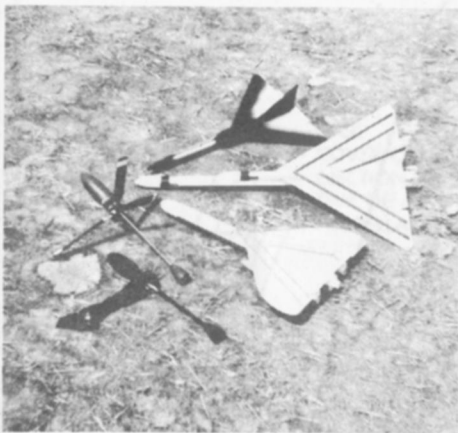
Length ----- 11.0"

Body Dia. ----- 0.71"

Recommended Engines, A-8-3,
B-4-2, B-6-2

Streamer Recovery

(Beginner)



The Kopter rockets shown above are models that have been designed and test flown repeatedly to achieve maximum performance and flight durability. The folded streamer recovery material used in these rockets virtually eliminates drifting and losses that are common with parachute recovery rockets.

The 'Kopter' rotor recovery rocket is a unique design that will give you the thrill of constructing and launching an exceptional model that can float to the ground in a near vertical descent. The 'Pterosaur' and 'Moray' are exceptional high flying rear engine boost gliders having great glide duration and NO EJECTING PARTS. We have the only "D" engine glider on the market. The JET-I-SON glider can be flown with the standard streamer pod or the optional rotor unit.

These patented models will provide many hours of enjoyment for the rocket enthusiast. Model rocketry is the greatest space age hobby, and Kopter wishes to extend to you models designed with repeated flights in mind.

Sincerely,

Walter E. Senoski

Walter E. Senoski
President