



Giant Leap rocketry

HIGH POWER ROCKETRY MATERIALS

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Original Web Site Design by Darrell Mobley

Hosting, Development and Maintenance by [The Blast Zone](#)

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Contact the [Webmaster](#)

welcome

Welcome to
the Giant
Leap
Rocketry
website!

Giant Leap Rocketry, Inc.

Welcome to High Power Rocketry!!

Dear Customer,

Have you noticed what's happened in high power rocketry? Prices have fallen, quality has improved, and the meaning of "customer service" had been redefined. GIANT LEAP ROCKETRY has arrived.

GIANT LEAP ROCKETRY became known for its reasonable prices on high quality rocketry components. For instance, our non-brittle phenolic airframes are low priced and resist cracking and shattering. Why pay more and settle for less?

But there's more to GIANT LEAP ROCKETRY than great prices. We constantly develop new and innovative products. Our Slimline Motor Retainers, Adapters, Tailcones and Avionics Bay are the talk of the town. We are also the exclusive distributor of Acme fincans and railguides and launch rods. Our kits are made for high performance and ease of construction. You can be ready to set records in a matter of hours. And when you're not flying, sit back and watch our ONBOARD VIDEO. See and hear what it's like to rip into the sky aboard high power rockets. You won't be disappointed.

A large part of our business is custom work. Need tubes cut? Want a cluster motor mount configuration, or some custom fins? We have a superb machine shop at your disposal.

Order from our secure site, or call us. Your project is why we're here.

Ed Shihadeh
Director
Giant Leap Rocketry, Inc.

www.giantleaprocketry.com
ed@giantleaprocketry.com
ph. (225) 229-5327



welcome



Ed and son, Marcel, age 6

"Just wanted to drop you a little note to say that I'm one satisfied customer. With the service I received, I will be ordering materials from you again in the future."

Dan Stuetgen

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product catalog

Giant Leap spends a lot of time searching out or developing new items to bring to you, offering the highest quality at the lowest prices.

Click on the categories at the left and explore our entire catalog. Can't find it? Call or email -- we can help.

Quicksearch:

Visit Star Rocketry!
<http://www.starrocketry.com>

LDRS 20 Wedge Oldham



Nike Hercules

Wedge Oldham's Nike Hercules project built with Giant Leap Rocketry components. Poster designed by [Henk Siewert](#)



Gene Nowaczyk's
L-Powered Violent Thunder

"I just got my first order from Giant Leap Rocketry and all I can say is 'WOW'. Giant Leap cut all my tubes to length, and slotted both the fin cans. For less than an identical kit would cost I got exactly what I wanted. I'll never buy rocket stuff the same way again. Not only did these guys custom make me a kit but they were totally nice and helpful on the phone."

John Horton

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This site uses frames, but your browser doesnt support them

what's new?

Check here often for the latest additions to our product line!

the latest

[ADJUSTABLE Launch Towers! Fits on any pad that accepts a 1/2" rod! Up to 4" diameter rockets!](#)

[10 foot long HEAVY Extreme Rail!](#)

[Prices reduced on B2 Skyangle Chutes!](#)

[Prices reduced on ACME rail guides and lugs by up to 60%!](#)

[Thunderbolt 38 glass airframe upgrade available!](#)

[LONG version of Slimline Avionics Bay!](#)

[54 and 38mm tubes now available in long 48" lengths!](#)

[New EASYGLAS sock! Laminating for the rest of us!](#)

[THREADED Slimline Motor Retainers!](#)

[Tubular Kevlar now available in 1/8" width!](#)

[The ULTIMATE Avionics Bay from Slimline](#)

[New composite fin material! Lighter than wood, stronger than G-10!](#)

I just wanted to let you know that my Level 3 6" IRIS built from GLR components was a success.

Scott A. McCluskey

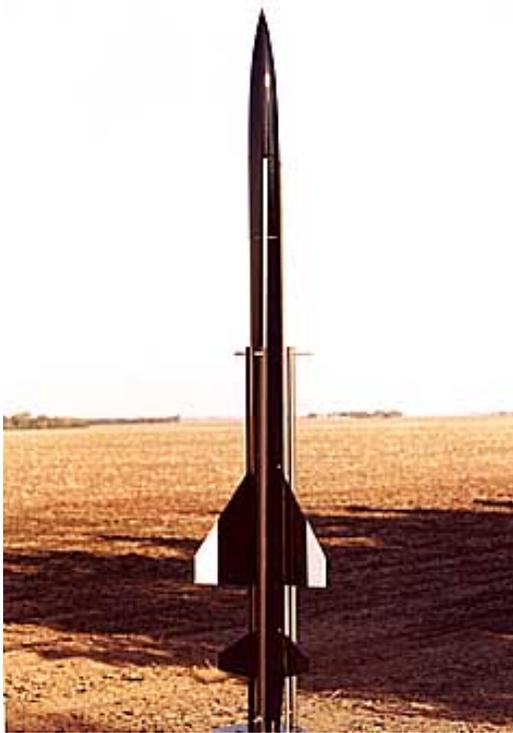
Either way, you can count on my business in the future!

Timothy Jones

"NOMEX is a registered trademark of E.I. du Pont De Nemours and Company."
"KEVLAR is a registered trademark of E.I. du Pont De Nemours and Company."

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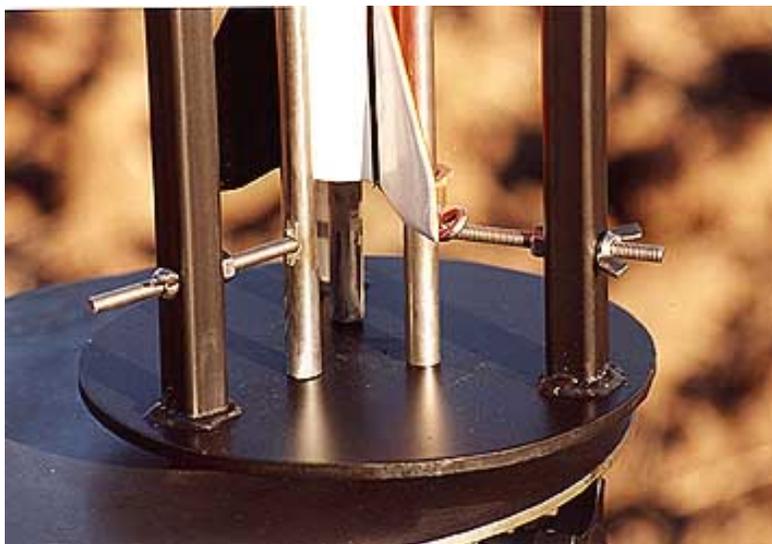
launch
systems
new!
adjustable
tower launchers



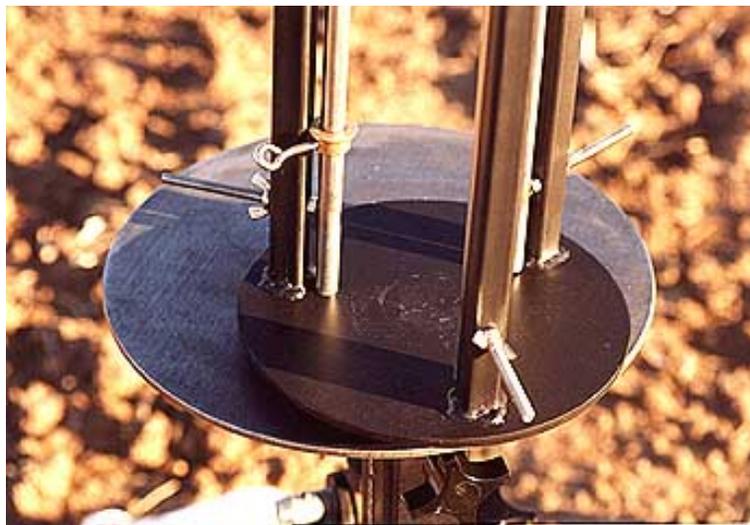
Tower Launcher on launch pad.
A fine addition to any launch range.



Low drag rocket, ready to tear a hole in the sky.



The Adjustable Launch Tower can launch rockets as small as ESTES and



...all the way to 4" diameter high power screamers.

Fits any existing pad that accepts a 1/2" rod!!

The secret weapon for high altitude flights!!

Put aside those drag-inducing launch lugs and rail guides and preserve the laminar flow of your rocket. Just slide your rocket inside the towers and let 'er rip!

Stainless-steel construction!

Fits on ANY launch pad that accepts a 1/2" rod. Ideal for club use.

Standard Tower - stainless steel - 4 feet long - \$149.99 [▶Add To Cart!◀](#)

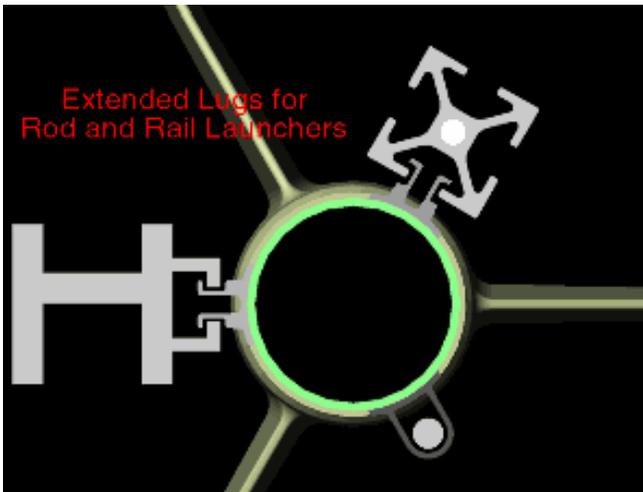
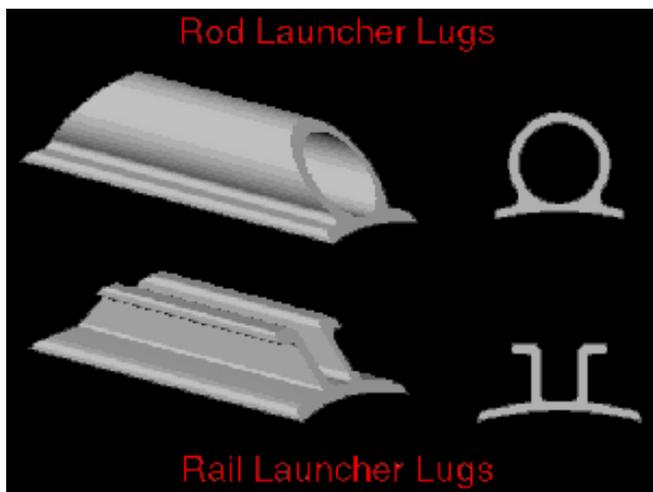
Recommended for model rockets all the way to 3" diameter high power (and some light and medium length 4" rockets)

Long Tower - stainless steel - 7 feet long - \$199.99 [▶Add To Cart!◀](#)

Recommended for model rockets all the way to heavy and long 4" diameter rockets.

conformal rail guides

Lower frontal drag than rail buttons!!



Rail launch systems are great. In our view, they beat the old launch rods hands down. But frankly it can be a pain to attach those

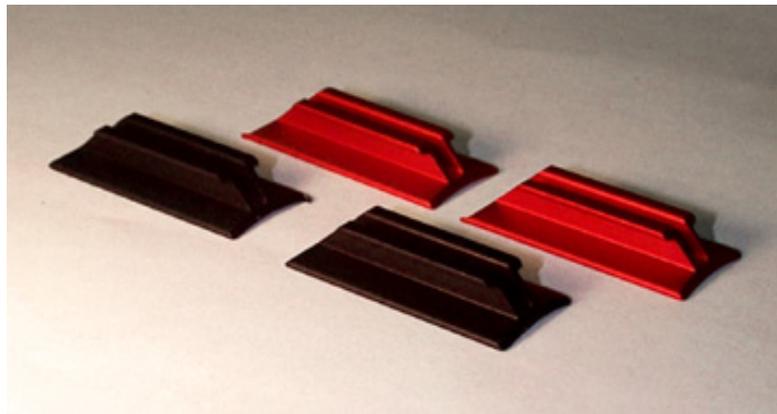
little guides onto your rocket. Just screwing them into the bodytube won't work . You usually have to contrive some backing plate or try to screw into a centering ring - - and that can be a very thin target to hit! NOT ANY MORE. Now attaching guide rails is a snap with Acme's new conformal rail guide. They just glue onto the tube. That's it, just like the conformal lugs. What's more, these conformal guides have less frontal area than standard buttons, and that means less drag for your rocket.

[Click here](#) for detailed specifications [\(in Adobe .pdf format\)](#)

ACME Conformal® Rail Guides

Airframe Size	Price
38mm	\$2.75/pair ▶ Add To Cart! ◀
38mm - Anodized Red	\$2.75/pair ▶ Add To Cart! ◀
38mm - Anodized Black	\$2.75/pair ▶ Add To Cart! ◀
54mm	\$2.75/pair ▶ Add To Cart! ◀
54mm - Anodized Red	\$2.75/pair ▶ Add To Cart! ◀
54mm - Anodized Black	\$2.75/pair ▶ Add To Cart! ◀
38mm w/ fin can	\$2.75/pair ▶ Add To Cart! ◀
38mm w/ fin can - Anodized Red	\$2.75/pair ▶ Add To Cart! ◀
38mm w/ fin can - Anodized Black	\$2.75/pair ▶ Add To Cart! ◀
54mm w/ fin can	\$2.75/pair ▶ Add To Cart! ◀
54mm w/ fin can - Anodized Red	\$2.75/pair ▶ Add To Cart! ◀
54mm w/ fin can - Anodized Black	\$2.75/pair ▶ Add To Cart! ◀
3.00"	\$2.75/pair ▶ Add To Cart! ◀
3.00" - Anodized Red	\$2.75/pair ▶ Add To Cart! ◀
3.00" - Anodized Black	\$2.75/pair ▶ Add To Cart! ◀
3.90"	\$2.75/pair ▶ Add To Cart! ◀

Acme lugs and rail guides are now available in ANODIZED COLORS!!

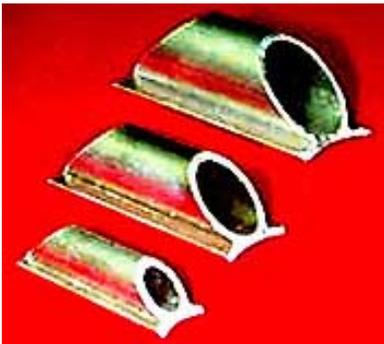


3.90" - Anodized Red	\$2.75/pair ▶ Add To Cart! ◀
3.90" - Anodized Black	\$2.75/pair ▶ Add To Cart! ◀
6.00"	\$2.75/pair ▶ Add To Cart! ◀
6.00" - Anodized Red	\$2.75/pair ▶ Add To Cart! ◀
6.00" - Anodized Black	\$2.75/pair ▶ Add To Cart! ◀
7.50"	\$2.75/pair ▶ Add To Cart! ◀
7.50" - Anodized Red	\$2.75/pair ▶ Add To Cart! ◀
7.50" - Anodized Black	\$2.75/pair ▶ Add To Cart! ◀



Compatible with Extreme rail, sold below

ACME Conformal© Launch Lugs



- Made of high strength aluminum
- Conforms to the shape of the airframe tube
- Available in different several sizes

Airframe Size	Launch Rod Size	Price
38mm	1/4"	\$2.50/pair ▶ Add To Cart! ◀
38mm - Anodized Red	1/4"	\$2.50/pair ▶ Add To Cart! ◀
38mm - Anodized Black	1/4"	\$2.50/pair ▶ Add To Cart! ◀
54mm	1/4"	\$2.50/pair ▶ Add To Cart! ◀
54mm - Anodized Red	1/4"	\$2.50/pair ▶ Add To Cart! ◀
54mm - Anodized Black	1/4"	\$2.50/pair ▶ Add To Cart! ◀
3.0"	3/8"	\$2.50/pair ▶ Add To Cart! ◀
3.0" - Anodized Red	3/8"	\$2.50/pair ▶ Add To Cart! ◀
3.0" - Anodized Black	3/8"	\$2.50/pair ▶ Add To Cart! ◀
3.0"	1/2"	\$2.50/pair ▶ Add To Cart! ◀
3.0" - Anodized Red	1/2"	\$2.50/pair ▶ Add To Cart! ◀
3.0" - Anodized Black	1/2"	\$2.50/pair ▶ Add To Cart! ◀
3.9"	1/2"	\$2.50/pair ▶ Add To Cart! ◀
3.9" - Anodized Red	1/2"	\$2.50/pair ▶ Add To Cart! ◀
3.9" - Anodized Black	1/2"	\$2.50/pair ▶ Add To Cart! ◀
3.9"	3/4"	\$2.50/pair ▶ Add To Cart! ◀

3.9" - Anodized Red	3/4"	\$2.50/pair	▶ Add To Cart! ◀
3.9" - Anodized Black	3/4"	\$2.50/pair	▶ Add To Cart! ◀
6.0"	3/4"	\$2.50/pair	▶ Add To Cart! ◀
6.0" - Anodized Red	3/4"	\$2.50/pair	▶ Add To Cart! ◀
6.0" - Anodized Black	3/4"	\$2.50/pair	▶ Add To Cart! ◀
7.51"	3/4"	\$2.50/pair	▶ Add To Cart! ◀
7.51" - Anodized Red	3/4"	\$2.50/pair	▶ Add To Cart! ◀
7.51" - Anodized Black	3/4"	\$2.50/pair	▶ Add To Cart! ◀
38mmFC (Offset for Fin Can)	1/4"	\$2.50/pair	▶ Add To Cart! ◀
38mmFC (Offset for Fin Can) - Anodized Red	1/4"	\$2.50/pair	▶ Add To Cart! ◀
38mmFC (Offset for Fin Can) - Anodized Black	1/4"	\$2.50/pair	▶ Add To Cart! ◀
54mmFC (Offset for Fin Can)	1/4"	\$2.50/pair	▶ Add To Cart! ◀
54mmFC (Offset for Fin Can) - Anodized Red	1/4"	\$2.50/pair	▶ Add To Cart! ◀
54mmFC (Offset for Fin Can) - Anodized Black	1/4"	\$2.50/pair	▶ Add To Cart! ◀

Nylon rail guides

100% compatible with Extreme (below) and Black Sky rail systems - 4 for \$5 [▶ Add To Cart! ◀](#)

Standard Extreme Launch Rail

Only \$52.95 per 6' section! [▶ Add To Cart! ◀](#)

100% compatible with Black Sky rail guides, but...

- **STRONGER:** The Extreme Rail is 1" by 1" thick (compared to 1/2" by 1/2").
- **EASIER TO USE:** The extreme Rail is a single piece 6 feet long - not a series of 2 foot sections.
- **STURDIER:** It has a 1/2" rod mount (compared to 3/8") and a heavy channel to mount to any pad that accepts a 1/2" rod.
- **SAFER:** Because of its smooth single-piece design, there's no chance of snagging a rocket like there is on rails that are sectioned together.
- **MORE CONVENIENT:** The Extreme Rail has one channel on each of its four sides! So, if one channel is plugged with reidue, you don't have to stop and clean out the rail in the middle of launch day. Just use another channel (or another, or another...) until its convenient to clean the whole rail. (HINT: **TEFLON**[®] spray prior to use makes post-launch cleanup a breeze.)
- **COMPATIBLE:** It is compatible with Black Sky rail guides,. So, if you've installed the Black Sky



guides on your rocket, you're good to go!

- **COOL:** We know, looks dont matter to you. But just in case...this is one bad-ass lookin' rail!!
- **LESS MONEY:** It's just \$52.95 for a six foot section (compared to \$60.00).



EXTEND YOUR RAIL BY 4 FEET! Extension and 3 joiner plates \$51.99 [▶Add To Cart!◀](#)

Pad Adapter \$19.99 [▶Add To Cart!◀](#)

The extreme rail for \$52.95 comes included with the pad adapter. But if you already have an extreme rail, you can purchase the pad adapter separately (this allows the rail to be attached to any standard high power launch pad that accepts a 1/2" Rod.)

HEAVY Extreme Launch Rail **Standard size rail slots, but for heavier rockets!**

Tested to 70 LBS. This accepts the same rail guides as the standard extreme above (and the blacksky rail), but is 10 feet long, and comes with a strong reinforcing spine for extra strength. Fits on any pad that takes a 1/2" rod. I used this rail on my 55 lbs hybrid level-3 project. Note: this is not the larger rail previously known as the "Senior Extreme" which required large rail guides of a nonstandard size. We no longer carry the senior. The HEAVY EXTREME uses the same rail guides as on the standard extreme but it is meant for heavy rockets. The BIG EXTREME rails were all over the range at LDRS 2002 in Amarillo. They performed flawlessly.

139.95 for a 10' section! [▶Add To Cart!◀](#)

P.S. I flew on one of your rails in Ocotillo, California last weekend. Great rail.

John Nistico

This [Rail] is one nice puppy. After looking at the hardware for about two seconds I figured out why this arrived without instructions: if you NEED instructions for this, then you will also need an IQ above 30... Duh! It was worth the wait and I am pleased beyond words. The Extreme Rail is a superb product and an extraordinary value. The rail guides were installed on a booster to check for any tendency to bind when traversing the slot. I am happy to report that the rail guide travel was buttery smooth. Excellent...excellent... excellent. I've only ordered from you a few times but I've never been disappointed. But this rail was seriously understated. Wow!

Respectfully (and a very satisfied customer),

Tom Farrand

"I am impressed with the quality of the components and your service. As soon as I get approval of my Level 3 design I will be ordering additional components."

Dennis McNally

Received tube in GREAT condition. Thanks,

Neil Tarasoff

Thanks for the excellent service and quick turn-around on getting me my merchandise. I'll be shopping with you folks again!

Take care!

Bryan Chuck

Keep up the good work!

Steve Ruane

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"NOMEX is a registered trademark of E.I. du Pont De Nemours and Company."
"KEVLAR is a registered trademark of E.I. du Pont De Nemours and Company."

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Acme Conformal Launch Lugs

Acme brings launch lug design into the 21st century with its extensive line of Conformal Launch Lugs. These lugs feature an integral, rounded base that fits your airframe tube precisely. The close fit of the conformal base maximizes the shear strength inherent in adhesive bonds, and the 6061-T6 extruded aluminum construction guarantees structural integrity.

Acme currently has 19 Conformal launch lug designs available to suit your airframe and launcher requirements, including:

Eleven sizes to fit a wide variety of HPR industry standard airframe tube sizes, accommodating standard HPR launch rod diameters, and

Eight sizes to fit a wide variety of HPR industry standard airframe tube sizes, accommodating popular HPR rail launchers.

Each Acme Conformal Launch Lug kit comes with 2 lugs of the specified size, 2 sheets of 3M sheet adhesive, and installation instructions.

Acme Conformal Launch Lug Installation Instructions

Acme Conformal Launch Lugs are designed and precision extruded with a rounded base that closely fits the most popular industry standard airframe tubes. To verify closeness of fit, place the lug axially on the airframe tube and view the lug-to-tube fit from the end of the airframe tube. For airframe tubes of off-nominal diameters, it may be necessary to sand the lug base slightly to optimize the fit. This is easily done by holding or taping a piece of fine-grit sandpaper onto the airframe tube, and sanding the lug base by rubbing the lug on the sandpaper in a direction parallel to the length of the airframe tube. The better the lug-to-tube fit, the stronger the adhesive bond; always check the fit before adhesive bonding, and sand to fit if necessary.

Remove any burrs and sharp edges on the launch lug(s) with fine-grit sandpaper, and clean all surfaces to be bonded (except paper) with isopropyl alcohol.

Locate the lug(s) on the airframe tube at the desired location, and verify that they are aligned (coaxial) if more than one lug is being installed. Mark the lug installation location on the airframe tube by tracing around the lug using a permanent ink pen (Sharpie or similar).

For lug bonding using cyanoacrylate (CA) adhesives, follow the adhesive manufacturer's application instructions. Note that CA adhesives generally work best on relatively smooth, non-porous surfaces, such as metal, plastics, fiberglass, etc.

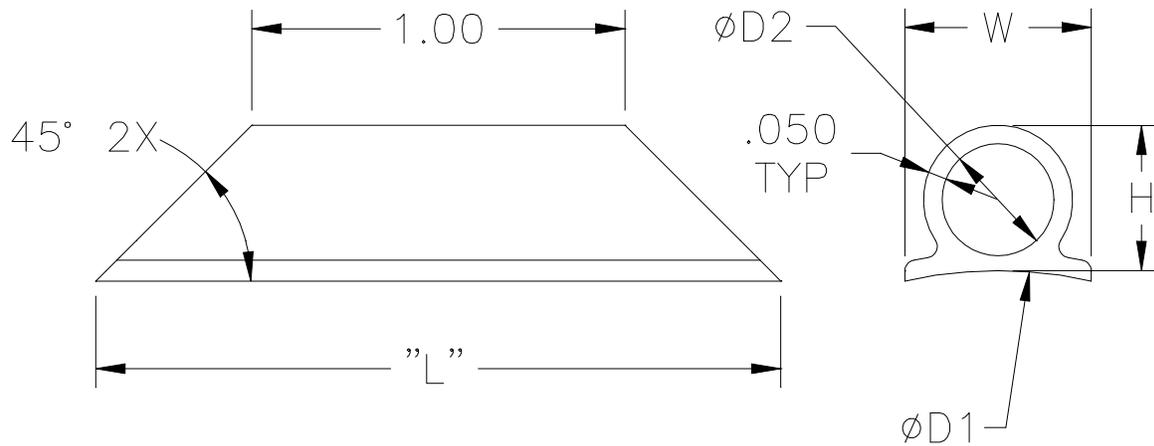
For lug bonding using the 3M sheet adhesive supplied with Acme Conformal Launch Lugs, peel the liner from one side of the sheet adhesive, and apply the adhesive to the lug base. Trim any excess (overlapping) adhesive from around the edges of the lug using an Exacto or similar knife. Peel the liner from the adhesive now on the lug, and install the lug onto the airframe tube at the predetermined location. It is very important to firmly clamp the lug onto the airframe tube, and to leave the clamp in place for 24 hours (minimum); the longer the clamping time, the stronger the adhesive bond.

After the adhesive (CA or sheet adhesive) has fully cured, filleting material may be applied around the periphery of the installed launch lugs, to smoothly fair the lugs to the airframe. Lightly scuff sand the launch lug(s) with extra fine sandpaper in preparation for painting, and clean with isopropyl alcohol. Epoxy or enamel finishes are recommended.



Acme Conformal Launch Lugs

Dimensions: Rod Launcher Lugs



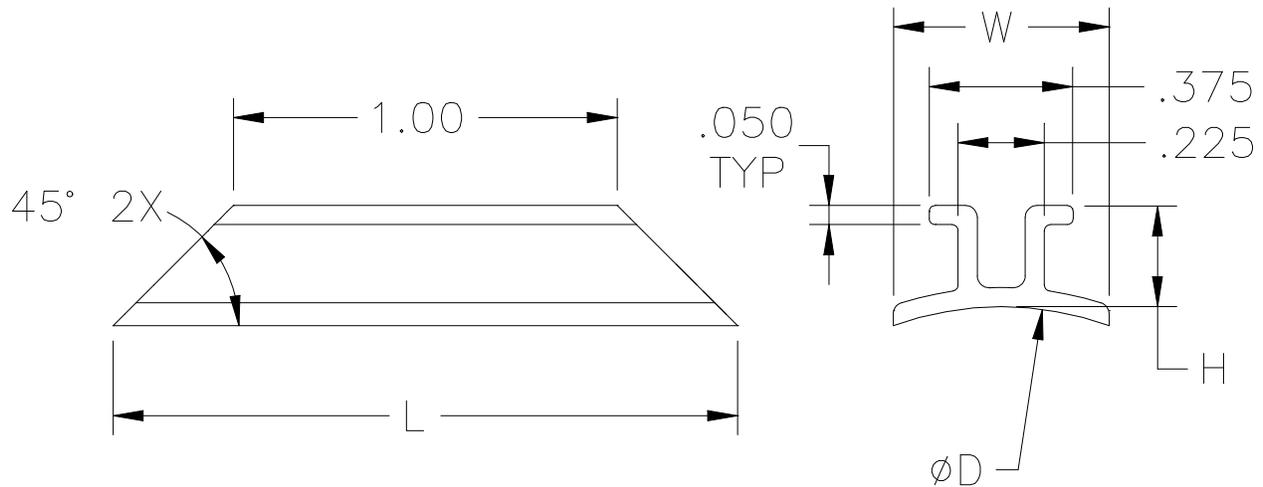
Part No.	D1 (in)	D2 (in)	H (in)	W (in)	L (in)	Weight (lbs)
1.64/.25	1.64	0.30	0.42	0.50	1.86	0.01
1.64/.25X	1.64	0.30	0.52	0.62	2.16	0.02
2.26/.25	2.26	0.30	0.42	0.50	1.84	0.01
2.26/.38	2.26	0.42	0.52	0.62	2.12	0.02
2.26/.38X	2.26	0.42	0.68	0.80	2.50	0.02
3.10/.38	3.10	0.42	0.52	0.62	2.10	0.02
3.10/.50	3.10	0.55	0.65	0.75	2.38	0.02
4.00/.50	4.00	0.55	0.65	0.75	2.38	0.02
4.00/.75	4.00	0.80	0.90	1.00	2.92	0.04
6.15/.75	6.15	0.80	0.90	1.00	2.95	0.04
7.67/.75	7.67	0.80	0.90	1.00	2.98	0.04

1.64/.25X and 2.26/.38X feature extended lugs to clear fin canisters, motor retainers, etc.



Acme Conformal Launch Lugs

Dimensions: Rail Launcher Lugs



Part No.	D (in)	H (in)	W (in)	L (in)	Weight (lbs)
1.64/R	1.64	0.26	0.56	1.62	0.01
1.64/RX	1.64	0.38	0.62	1.90	0.02
2.26/R	2.26	0.26	0.62	1.62	0.01
2.26/RX	2.26	0.44	0.75	2.00	0.02
3.10/R	3.10	0.26	0.68	1.60	0.01
4.00/R	4.00	0.26	0.75	1.60	0.01
6.15/R	6.15	0.26	0.82	1.58	0.01
7.67/R	7.67	0.26	0.88	1.58	0.01

1.64/RX and 2.26/RX feature extended lugs to clear fin canisters, motor retainers, etc.

recovery systems

Spherachute plus+

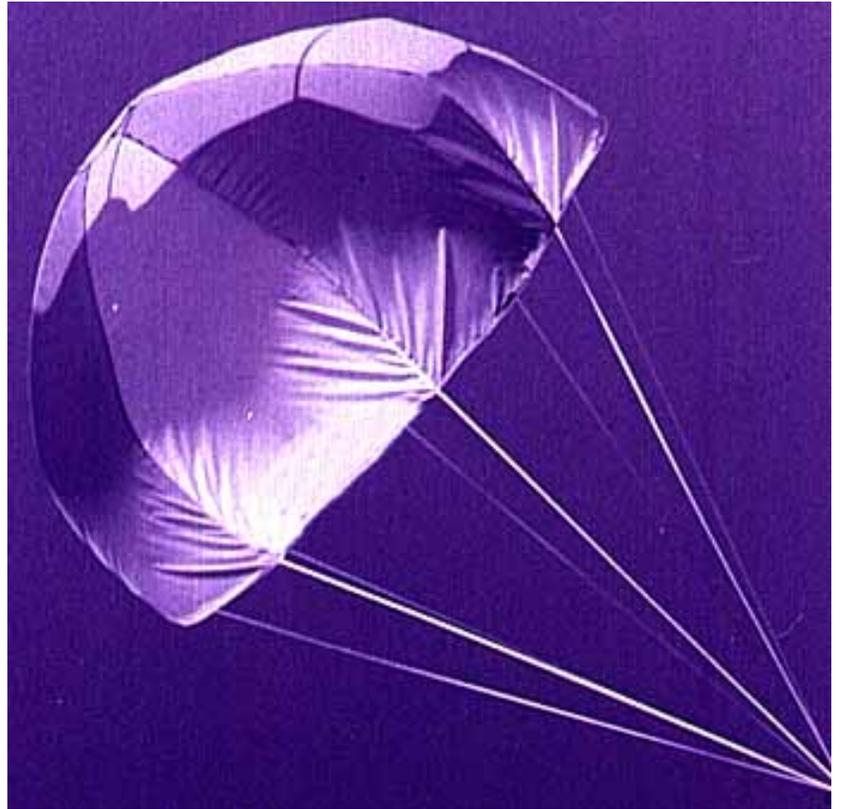
Giant Leap Rocketry and Spherachute team up to create a winner based on the standard Spherachute.

Introducing...the Spherachute PLUS+
Exclusive to Giant Leap Rocketry

A true hemispherical panel chute.
ULTRA HIGH QUALITY high drag design

- Tight, high density stitch, made to last!!!
- 400 LBS-TEST SHROUDS!
- SPILL HOLE to reduce sway and drift
- STRONG Ripstop Nylon
- Sharp contrasting 2-color design
- Tried and proven!
- With 1000 LBS SWIVEL already attached!
- Each with its own carrying case.

Remember, if it's not in the white carrying case,
it's not a PLUS+



SIZE	Price
------	-------

SPHERACHUTE PLUS+ A top-of-the-line panel 'chute at a great price.

36"	\$21.00	▶ Add To Cart! ◀
48"	\$34.00	▶ Add To Cart! ◀
60"	\$44.00	▶ Add To Cart! ◀

Single Piece 'Chutes

12"	\$5.79	▶ Add To Cart! ◀
18"	\$5.99	▶ Add To Cart! ◀
24"	\$7.99	▶ Add To Cart! ◀
30"	\$12.99	▶ Add To Cart! ◀
36"	\$13.99	▶ Add To Cart! ◀
48"	\$19.99	▶ Add To Cart! ◀
60"	\$24.99	▶ Add To Cart! ◀

SkyAngle™ Chutes

The awesome chute you've heard about!

- Ultra-thin Ripstop
- Strong - 950 LBS Test Tubular
- Nylon Lines all the way around the canopy, with a 1000 LBS Test Swivel!
- Easy-to-Use Three Shroud Design
- ADJUSTABLE SHROUD LINE STOPPER LOCK for customizing descent rate



SIZE	Price
20"	\$18.99 ▶ Add To Cart! ◀
24"	\$23.74 ▶ Add To Cart! ◀
28"	\$28.49 ▶ Add To Cart! ◀
32" NEW	\$35.49 ▶ Add To Cart! ◀
36"	\$42.74 ▶ Add To Cart! ◀
44"	\$56.99 ▶ Add To Cart! ◀
52"	\$71.24 ▶ Add To Cart! ◀
60"	\$85.49 ▶ Add To Cart! ◀
24" Drouge	\$25.99 ▶ Add To Cart! ◀
NEW! Cert-3 chutes from SkyAngle	
L (16-35 lbs)	\$131.99 ▶ Add To Cart! ◀
XL (32-60 lbs)	\$179.49 ▶ Add To Cart! ◀
XXL (60-129 lbs)	\$226.99 ▶ Add To Cart! ◀

(lower and high weight ratings produce a descent of 16 to 25 feet per second respectively)

[Click here for SkyAngle Frequently Asked Questions](#)

SkyAngle Descent Rate Chart

[SkyAngle Descent Rate Chart PDF file \(42K\)](#)

SkyAngle	<i>Cd*</i>	17 fps	20 fps	25 fps
Classic/Classic II 20	<i>0.80</i>	0.7	1.0	1.5
Classic/Classic II 24 (NEW!)	<i>1.16</i>	1.0	1.4	2.2
Classic/Classic II 28	<i>0.93</i>	1.5	2.0	3.2
Classic/Classic II 32 (NEW!)	<i>1.14</i>	2.1	2.8	4.4
Classic/Classic II 36	<i>1.34</i>	2.7	3.7	5.7
Classic/Classic II 44	<i>1.87</i>	4.4	6.1	9.5
Classic/Classic II 52	<i>1.46</i>	6.8	9.5	14.8
Classic/Classic II 60	<i>1.89</i>	10.2	14.2	22.1
CERT-3 Drogue	<i>1.16</i>	1.0	1.4	2.2
CERT-3 Large	<i>1.26</i>	16.2	22.4	35.0
CERT-3 XLarge	<i>2.59</i>	32.6	45.2	70.6
CERT-3 XXLarge	<i>2.92</i>	60.0	83.1	129.8
<i>weight load (lbs.) for given descent rate (@sea level)</i>				

SkyAngle Packing Volume Table for a given body tube diameter

[SkyAngle Packed Length PDF file \(99K\)](#)

SkyAngle Minimum Tube Compartment Length#										
# (Nominal measurement in inches when folded and packed according to instructions. Does not include shroud lines, D-bag, Nomex, wadding, etc.)										
Tube Size	29mm	38mm	54mm	2.56in	3.0in	3.90in	5.50in	6.00in	7.51in	11.41in
SkyAngle Size										
Classic 20	*	8*	6	6	6	<6	-	-	-	-
Classic II 20	*	10*	7*	7	7	<6	-	-	-	-
Classic 24	*	12	11	8	<7	-	-	-	-	-
Classic II 24 (NEW!)	see CERT-3 drouge									
Classic 28	*	*	7	7	7	<7	-	-	-	-
Classic II 28	*	*	10	10	10	<10	-	-	-	-

Classic 32 (NEW!)	*	*	11	10	8	<8	-	-	-	-
Classic II 32 (NEW!)	*	*	12	11	10	<9	-	-	-	-
Classic 36	*	*	10*	10	8.5	<9	-	-	-	-
Classic II 36	*	*	*	11	10	<10	-	-	-	-
Classic 44	*	*	*	9	8	9	-	-	-	-
Classic II 44	*	*	*	12*	11	10	<10	-	-	-
Classic 52	*	*	*	*	11	9	<9	-	-	-
Classic II 52	*	*	*	*	13	10	<10	-	-	-
Classic 60	*	*	*	*	14	11	<11	-	-	-
Classic II 60	*	*	*	*	*	12	<12	-	-	-
CERT-3 drogue	*	*	7	7	7	<7	-	-	-	-
CERT-3 L	*	*	*	*	*	17	12	10	8	5
CERT-3 XL	*	*	*	*	*	25	15	14	11	5
CERT-3 XXL	*	*	*	*	*	33	25	16	12	6
* Does not fit or very tight fit. - Easy fit, minimum space required.										

SkyAngle Deployment FreeBag™

Based on a tried and true military/sport "free bag" design, the *SkyAngle* Deployment FreeBag™ attaches directly to the nose cone with a 1" tubular nylon (4,000 psi) tether. All stress points are reinforced with Kevlar® thread. Ingenious in its simplicity and ease-of use, this deployment sleeve completely envelops the parachute in fireproof Aramid® fabric while insuring a reliable, orderly deployment! Complete illustrated instructions are included.

SkyAngle Deployment FreeBags™ are engineered with high quality materials, impeccable craftsmanship, and are very affordable. They are available in four sizes, three of which are tailored to fit our *SkyAngle* CERT-3 main chutes. (They work great with other brands as well.)

	Size	Pouch Dimensions	Fits Airframe Diam.	MSRP***
	Medium	8" W x 10"H	= 3"	\$17.99 ▶ Add To Cart! ◀
Large	9" W x 11"H	= 4"	\$22.49 ▶ Add To Cart! ◀	

Color may vary from photo.	XLarge	9" W x 14"H	= 5"	\$26.99 ►Add To Cart!◀
	XXLarge	10" W x 17"H	= 6"	\$31.49 ►Add To Cart!◀

*** Manufacturers Suggested Retail Price - prices are set by your dealer. Measurements are nominal. Large, XLarge and XXLarge sizes will fit SkyAngle CERT-3 chutes of the same size designation.

The FreeBag is designed to be attached directly to your nose cone and deployed separately. A separate chute in addition to the main (and a drogue, if used) will be necessary for the safe recovery of your nose and bag assembly independently of your main airframe. Deployment in this manner will virtually insure main chute inflation without entanglement. It also reduces main airframe recovery weight, allowing use of a smaller chute that normal. **[NOTE:** While the nose/bag combo can be secured to the airframe via shock cord, doing so may increase the likelihood of entanglement and/or possible failure to deploy the main chute. We do include a loop sewn inside the bag, however, for custom applications of this nature.]



Pam Barton shows how to pack **SkyAngle** chute into a FreeBag™

[Click here to view detailed SkyAngle Deployment FreeBag Instructions \(104K PDF\)](#)

Ed informed me that it might be a couple of weeks at best to get the new Cert 3 chutes from B2. Well, he was wrong, they arrived today, less than one week service at this time of year, GREAT. Thanks Ed, I will be getting more from you. You have me spoiled.

Rick VanVoorhis

2000 Degree Chute Protectors of Kevlar®

Chute Pads of Kevlar® to protect your chutes!

KEVLAR® has a higher heat rating than NOMEX® and is more resistant to tearing & blow-through.. Protect your rocket with KEVLAR®

AIRFRAME SIZE	Price
To 2.6" airframe	\$5.98 ▶Add To Cart!◀
To 3.9" airframe	\$7.98 ▶Add To Cart!◀
To 7.5" airframe	\$8.98 ▶Add To Cart!◀
Xtra Large - 20" Diameter Pad	\$9.99 ▶Add To Cart!◀



TECH NOTE: To protect against hot ejection gases, rocketeers use a variety of methods. Some use cellulose. It's cheap, but it's not reliable - - gases can bleed through and burn recovery systems. It's also messy and very inconvenient - - you have to drag a bag of cellulose around. After all that money and time spent on your rocket, don't you want more protection than a handful of shredded paper? Some have also used fiberglass insulation. NEVER DO THIS!!! Fiberglass is non-biodegradable and it's fatal when ingested by cattle. Harming the property of landowners or their neighbors can deprive prefectures of their launch sites. It's bad for the hobby's image.

Instead, rocketeers have discovered KEVLAR®, a flameproof material used by firefighters and others. CHUTE PADS of KEVLAR® have a buttonhole (over 1" wide) to allow the shock cord to pass through, so it forms a permanent part of your recovery system. Just fold your chute normally, slide the pad up the shockcord and cradle it around the chute. Insert chute into rocket with the KEVLAR® facing the ejection charge. That's it! The pads are inexpensive, and they last virtually forever. And they'll take a direct blast of ejection charge with no harm done. Compared to a piston, CHUTE PADS of KEVLAR® are much lighter, less expensive, don't take up space, and are maintenance-free. They are our most popular product. The SLEEVE of KEVLAR® is an install-and-forget item. It protects nylon shockcords from ejection gases. A burned or brittle nylon cord will eventually snap. Why are GIANT LEAP'S products of KEVLAR® great?

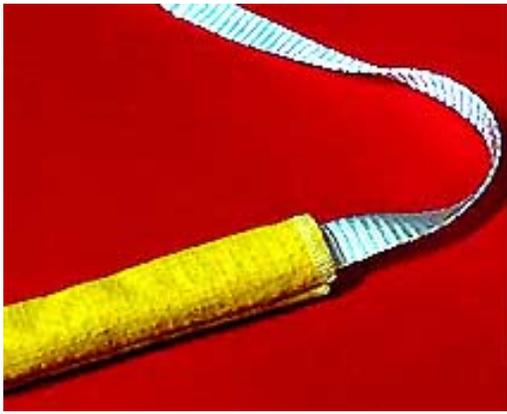
1. Ours are made with KEVLAR®, which has a higher heat rating than NOMEX®. KEVLAR® prevents tearing and blow-through which can damage a chute.
2. Ours pads are rounded, not square. Square pads don't fold well in round tubes and increase the chances of blow-by.
3. Our pads have the button hole offset to the side. There are no holes or rings in the center, so you get maximum protection where you need it most.
4. Ours are inexpensive.

GIANT LEAP PRODUCTS of KEVLAR®...THE PERFECT SOLUTION.

BTW, your 'chute heat shield/protectors are the best I've seen. Thanks for your prompt service. I'll be back.

Len Fehskens

Shockcord Protector Sleeves of KEVLAR®



WARNING: Nylon shockcords repeatedly exposed to hot ejection blasts will degrade and eventually fail. **PROTECT THEM** with **SLEEVES** of **KEVLAR®!**

- Made of high temperature **KEVLAR®!**
- Surrounds your shock cord with protection!
- 30" in length

Only \$6.07! [▶Add To Cart!◀](#)

Giant Leap Shockcord



You know that little white elastic band that's used for a shock cord...?

...It belongs in your underpants.

OUR shockcords...?

...they belong in your rocket!!

Tubular shockcord of KEVLAR® (1/2")

- For 5.5" and larger rockets - Our Best!
- \$ 3.29/yd [▶Add To Cart!◀](#)

Tubular shockcord of KEVLAR® (1/4")

- For 3" and 4" rockets
- \$ 1.99/yd [▶Add To Cart!◀](#)

Tubular shockcord of KEVLAR® (1/8")

- For 3" and 4" rockets
- \$ 1.59/yd [▶Add To Cart!◀](#)

Tubular Nylon (9/16")

- For up to 4" rockets
- 2000 LBS TEST! MIL(C)SPEC 5625
- \$ 0.99 /yd [▶Add To Cart!◀](#)

Tubular Nylon (1")

- For 3" and larger rockets
- 4000 LBS TEST! MIL(C)SPEC 5625
- \$ 1.49 /yd [▶Add To Cart!◀](#)

Strap Nylon (1/2")

- 1000 LBS TEST
- For 2.15" and smaller rockets
- \$.79 /yd [▶Add To Cart!◀](#)

TECH NOTE: Our suggestions may not fit your application. NEVER use “elastic” cords. Elastic cords store the energy of separation and release it by slamming the rocket parts back together, damaging your rocket. Also, elastic-type cords have low breaking strengths. Elastic is for underpants, not for high power rockets. Instead, use a generous amount of nonstretch cord and let air resistance absorb the energy of release. We recommend 15+ feet of cord for up to 4” diameter rockets, and 20+ feet for larger rockets.

shockcords with pre-sewn loops

Laboratory tested. The loops are stronger than the cords!

NEW!!! SUPERLOOPS!

Pre-sewn Shock Cords made from 2" Wide seatbelt webbing (RED). For the super heavy duty projects.

25 foot long pre-sewn cord 2" wide introductory price\$14.99 [▶ Add To Cart! ◀](#)

Tubular KEVLAR® 1/2"

- 15 feet...\$18.49 [▶ Add To Cart! ◀](#)
- 20 feet...\$23.49 [▶ Add To Cart! ◀](#)
- 25 feet...\$28.49 [▶ Add To Cart! ◀](#)

Tubular KEVLAR® 1/4"

- 12 feet...\$10.69 [▶ Add To Cart! ◀](#)
- 15 feet...\$12.49 [▶ Add To Cart! ◀](#)

Tubular NYLON 1"

- 15 feet...\$10.49 [▶ Add To Cart! ◀](#)
- 20 feet...\$12.49 [▶ Add To Cart! ◀](#)
- 25 feet...\$14.99 [▶ Add To Cart! ◀](#)

Tubular NYLON 9/16"

- 12 feet...\$7.09 [▶ Add To Cart! ◀](#)
- 15 feet...\$7.99 [▶ Add To Cart! ◀](#)

Kevlar® cord loops are sewn with heat-resistant NOMEX®



**KEVLAR® Thread 1/16" DIAMETER
only \$0.10 per foot! [▶ Add To Cart! ◀](#)**

Hundreds of Uses!

- Sewing / securing shockcords
- Fin reinforcement
- Attaching beepers or transmitters
- Shrouds for super-drogues
- Estes rocket shockcord
- and MORE!

The tubular kevlar is just awesome! I will be send more orders in the future for other items, especiaally for the slim line motor retainers. Thanks for your help.

John Thompson

D-Rings

2" wide D-Ring \$1.00 [▶Add To Cart!◀](#)

1" wide D-Ring \$0.75 [▶Add To Cart!◀](#)

U-bolts

Ordinary 1/4" eyebolts can fail at 150lbs. Don't take chances!

Use Stainless U-Bolts instead.

1/4"
Diameter
Shaft with 2
nuts &
washers
(Stainless) \$2.99 [▶Add To Cart!◀](#)

3/8"
Diameter
Shaft with 2
nuts &
washers
(Stainless) \$3.99 [▶Add To Cart!◀](#)



Allows quick connect and disconnect of chutes / shockcords etc.

1/8" Diameter Shaft (130lb Test) \$1.19 [▶Add To Cart!◀](#)

1/4" Diameter Shaft (660lb Test) \$1.49 [▶Add To Cart!◀](#)

5/16" Diameter Shaft (1540lb Test) \$2.49 [▶Add To Cart!◀](#)

Giant Leap Swivels

- Stops your chute lines from tangling!

WEIGHT CAPACITY	EYELET SIZE	Price
-----------------	-------------	-------

600 lb. Test	1/4" Eyelet	\$2.49	▶ Add To Cart! ◀
1000 lb. Test	1/2" Eyelet	\$3.49	▶ Add To Cart! ◀
1500 lb. Test	1/2" Eyelet	\$4.49	▶ Add To Cart! ◀

TECH NOTE: Tangled shroud lines reduce the effectiveness of chutes. Rockets twist and turn during descent, even in the slightest wind, which makes the shroud lines tangle around each other. This causes the chute to narrow, reducing its drag, and increasing the overall rate of descent rate. The result is a hard landing which cracks fins and airframes, and can jam motors up into motor tubes. Your solution is a swivel. This allows the rocket to rotate during descent without twisting the shrouds lines together. Here's another tip: when packing the chute for flight, most people hold the chute in one hand and wrap the lines around the chute with other hand. That's incorrect and will cause the shrouds to twist together. Instead lay the chute on a flat surface and extend the shroud lines out. Then roll the chute onto the shroud lines. HAPPY LANDINGS!!

The rocket just showed up. Man that is service! Wish more companies worked like yours.... Thanks again for doing such a great job.

Mark Weaver

I ordered several products from you a few months ago. It came very quickly and was of the best quality I have ever bought. Keep up the good work!

David Roy

WOW! You are the fastest at getting the orders off! I will surly order more stuff from your company!

Luke Barrett

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Original Web Site Design by Darrell Mobley
Hosting, Development and Maintenance by [The Blast Zone](#)
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How do I chose the proper SkyAngle size for my rocket?

Our sizing may be a little different from what you are used to. The enhanced drag characteristics achieved by the unique SkyAngle design tends to defy the old guidelines with respect to recovery. You need to know three things in order to make choosing the right SkyAngle a breeze:

1. Recovery weight of the rocket. For safety margin we consider this to be equal to the pad weight.

2. Target descent rate. This is the speed (usually expressed in feet per second, or fps) at which the rocket will fall to the ground. The old rule of thumb was to shoot for a 15 fps rate. This may be a good guideline for low power cardboard and balsa rockets, but we feel it's too conservative for modern high power rockets. With today's building materials and techniques, rates between 17 - 25 fps can be acceptable. However, specific factors (rocket design, ground conditions, etc.) have to be taken into consideration upon deciding what rate your particular rocket can handle. **No parachute maker or seller can or should make this determination for you. It's strictly the builder's call!**

3. Capacity of the Chute. Every parachute has a given capacity to decelerate a fall to some

extent. What a rocket flyer needs to know is what that capability is. Determining load capacity is the responsibility of the parachute manufacturer. (We've found that many rocket recovery companies either have not performed adequate testing on their products or over-rate the results of what little testing they have done. We had each of the SkyAngle models extensively tested by an impartial authority on aerodynamic decelerators so you can make an informed choice with confidence.) The following table organizes the results of this testing in an easy to use format:

SkyAngle	Cd*	17 fps	20 fps	25 fps
Classic/Classic II 20	<i>0.80</i>	0.7	1.0	1.5
Classic/Classic II 24 (NEW!)	<i>1.16</i>	1.0	1.4	2.2
Classic/Classic II 28	<i>0.93</i>	1.5	2.0	3.2
Classic/Classic II 32 (NEW!)	<i>1.14</i>	2.1	2.8	4.4
Classic/Classic II 36	<i>1.34</i>	2.7	3.7	5.7
Classic/Classic II 44	<i>1.87</i>	4.4	6.1	9.5
Classic/Classic II 52	<i>1.46</i>	6.8	9.5	14.8
Classic/Classic II 60	<i>1.89</i>	10.2	14.2	22.1
CERT-3 Drogue	<i>1.16</i>	1.0	1.4	2.2
CERT-3 Large	<i>1.26</i>	16.2	22.4	35.0
CERT-3 XLarge	<i>2.59</i>	32.6	45.2	70.6
CERT-3 XXLarge	<i>2.92</i>	60.0	83.1	129.8
weight load (lbs.) for given descent rate (@sea level)				
*Cd's are calculated based on the reference surface area of circular cap only, not the total surface area. Actual capacities may vary depending upon conditions and from product to product.				

Depending on the weight of the rocket in question, a flyer can easily tell what kind of descent he is likely to get with any given **SkyAngle** using this table. For example, if you have a rocket with a pad weight (fully loaded, with motor) of 6 pounds, you can use a Classic 36 and expect a descent rate of a little more than 25 fps. If you select a Classic 44, the descent rate will decrease to right at 20 fps. Choose a Classic 52 and the fall will be below 17 fps. The idea is to pick the chute that has the load capacity that yields the target descent rate the rocket can safely handle. (Please note these rates were normalized for sea level altitudes and will increase at higher elevations.) Our advice is always to err on the conservative side and deploy a size larger when conditions dictate or when uncertainty exists. For more info, check out **Jordan Hiller's excellent online calculator** for determining the exact descent rate of any **SkyAngle** model

with a user-specified recovery weight.

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How does the cord lock work on the SkyAngle?

Our suspension line lock is standard on the Classic and Classic II **SkyAngle** parachutes. It allows you to adjust the inflated diameter and panel flare of the chute, thus altering its drag profile. By raising the lock toward the canopy, the payload will fall faster than it would with the lock toward the swivel. This feature can be used to adjust a larger size **SkyAngle** to work with a lighter payload than specified. It can also help minimize excessive drift during high winds.

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How much space does a SkyAngle take up in a tube?

[SkyAngle Packed Length PDF file](#)

SkyAngle Minimum Tube Compartment Length# (in inches)										
# (when folded and packed according to instructions. Does not include shroud lines, D-bag, Nomex, wadding, etc.										
Tube Size	29mm	38mm	54mm	2.56in	3.00in	3.90in	5.50in	6.00in	7.51in	11.41in
Size SkyAngle										
Classic 20	*	8*	6	6	6	<6	-	-	-	-
Classic II 20	*	10*	7*	7	7	<6	-	-	-	-
Classic 24 (NEW!)	*	12	11	8	<7	-	-	-	-	-
Classic II 24	See CERT-3 Drogue									
Classic 28	*	*	7	7	7	<7	-	-	-	-
Classic II 28	*	*	10	10	10	<10	-	-	-	-
Classic 32 (NEW!)	*	*	11	10	8	<8	-	-	-	-
Classic II 32 (NEW!)	*	*	12	11	10	<9	-	-	-	-
Classic 36	*	*	10*	10	8.5	<9	-	-	-	-
Classic II 36	*	*	*	11	10	<10	-	-	-	-
Classic 44	*	*	*	9	8	9	-	-	-	-
Classic II 44	*	*	*	12*	11	10	<10	-	-	-
Classic 52	*	*	*	*	11	9	<9	-	-	-
Classic II 52	*	*	*	*	13	10	<10	-	-	-
Classic 60	*	*	*	*	14	11	<11	-	-	-
Classic II 60	*	*	*	*	*	12	<12	-	-	-
CERT-3 drogue	*	*	7	7	7	<7	-	-	-	-

CERT-3 L	*	*	*	*	*	17	12	10	8	5
CERT-3 XL	*	*	*	*	*	25	14	15	11	5
CERT-3 XXL	*	*	*	*	*	33	25	16	12	6
* Does not fit or very tight fit. - Easy fit, minimum space required.										

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Why is your balloon cloth preferred as the material of choice in the SkyAngle CERT-3 & Classic II series?

We purchase our 1.9 oz silicone coated fabric from the mill as "balloon cloth", which is a generic designation for a specific class of nylon fabric. We find it has particularly desirable rocket parachute properties. It is a zero-porosity, extremely strong ripstop material that's perfect for the more rugged demands of big or complex projects that may experience high speed deployments. It's slightly heavier and doesn't pack as tight as our 1.3 oz. material used in the Classic models, but it is considerably tougher. Initial studies indicate that our balloon cloth actually expands slightly during canopy inflation which somewhat increases the parachute drag profile.

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I've heard your warranty service is second to none. Is it?

We believe so, and our customers seem to agree. We warrant all our products for life against specific defects in materials or construction. We've even repaired a number of chutes over the years for tears due to snags at no charge! We want every **SkyAngle** product out there to be in top condition. All we ask is that the consumer pay the freight to and from our facility.

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How does the swivel aid in the recovery process?

All rocketry parachutes may tend to spin. Without a swivel the recovery lines are subject to excessive rotation and entanglement as a result. Inclusion of a swivel will keep your rocket as stable as possible and minimize the chance of reduced chute performance and fin damage. Our swivel assembly is fabricated from heavy duty nickel-plated brass and is incredibly strong. In fact, the 1,000 psi test swivel on the Classic series is actually rated stronger than the 3/8" tubular nylon suspension lines it attaches to! We supply a 1,500 psi version of this swivel on the CERT-3 and Classic II series. This is stronger than many quicklinks currently in use in our hobby. With thousands of deployments out there we have never had a swivel assembly fail.

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Do you sell direct to the consumer?

No. We sell exclusively through a limited number of authorized dealerships in the USA,

Canada and the UK. We think they are the best of the best in our hobby. They are an important reason for the success of the **SkyAngle** and it would be dishonorable for us to compete against them. We at b2 Rocketry are always available to work with you, but we ask you to support one of our dealers when it comes time to purchase a **SkyAngle** product.

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Why are your Drag Coefficient (Cd) numbers the highest of any chute on the market?

Because **SkyAngles** perform unlike any other chute on the market. Our extended panels "flare" under load which increases the drag substantially over a standard chute. Our calculations derive from independent testing and quantify this. Coefficient of Drag (Cd) calculations require a reference surface area to compute. In the case of the **SkyAngle** numbers, only the circular "cap" surface area is used as a reference. If the entire surface area (including the extended panels) was used instead, the resulting Cd would be somewhat smaller. We do it this way so you can compare our drag fairly against that of typical circular chutes. Don't get too hung-up on Cd's though. What really matters is the actual descent rates, which in our case are well documented.

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Do you run tubular nylon around the SkyAngle canopy?

Absolutely. In fact, **SkyAngle** was the first commercially available hobby rocketry parachute with mil-spec, woven flat tubular nylon suspension lines. Every model made since it's introduction in 1996 has featured a single piece running in a continuous, uninterrupted path outside the canopy. The result is unparalleled strength and support not found in any other brand.

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Why do SkyAngles spin? How is that an advantage?

The spinning property of the **SkyAngle** is an extremely beneficial characteristic. Basically, the rotation of the **SkyAngle** results from an "trim asymmetry" that is sewn into the chute which amplifies the natural tendency of the chute to spin. Spinning is load-sensitive with **SkyAngle** parachutes, which means the heavier the weight deployed the greater the revolutions. Furthermore, **SkyAngle** spinning is more acute in the smaller sizes than the larger ones.

The main benefit of spinning is that it dramatically decreases the unstable oscillation, pulsation and sway often seen in other chutes. There is also evidence that the rotation helps to regulate air pressure under the canopy, which prevents canopy collapse (and eliminates the need for a spill-hole). Spinning plays a small part in the flaring of the extended panels which contributes to drag. Spinning certainly aids in tracking of the chute at altitude, especially when coupled with our contrasting multicolored panels. By integrating our heavy-duty swivel assembly, tangling of the lines and rocket damage is virtually eliminated, as the chute spins but the rocket

does not.

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What's the advantage of the SkyAngle deployment bag? Is it really designed to bring the nose cone down separately?

Precisely. We didn't invent the free bag concept, but we were first to commercially market it as a system for deployment in the rocketry hobby. It's a smart, reliable way to ensure an uncomplicated deployment at a low cost. Our bag design envelopes the main chute in a flame-resistant Aramid® fabric while containing the suspension lines for an orderly, untangled exit. The main chute is attached to the airframe shock cord as always. But the bag is tethered to the nose which is equipped with its own chute. The benefit is that, upon ejection, the nose goes its separate way pulling the bag with it. The main is allowed to inflate without interference from the nose, the bag or the shock cord. It's just about as foolproof as you can get. We recover this way almost every flight now and after hundreds of flights we have never had or heard of a single failure using this approach. This sure isn't the case with other style bags. They tend to be pulled on both ends simultaneously which traps the main inside like a Chinese finger puzzle, often causing a failure to fully deploy the parachute.

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rocket kits

Giant Leap Introduces:

The ALMOST-READY-TO-FLY (ARF) High-Performance Kit Series

Thunderbolt 38



Firestorm 54



- 54mm Minimum Diameter
- Weighs only 46 ounces!
- 57.5" Long

Price: \$69.99

► Add To Cart! ◀

- 38mm Minimum Diameter
- Weighs only 26 ounces!
- 56" Long

Price: \$59.99

▶ Add To Cart! ◀

Upgrades for Thunderbolt38

Filament-wound fiberglass tube and coupler. (36" long bodytube and an 18" payload section) \$53.75

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Slimline 38mm Circle Ring Motor Retainer (10% OFF REGULAR PRICE) \$17.05

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Slimline 38-29mm Motor Adapter (10% OFF REGULAR PRICE) \$19.00

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Heat Pad for Chutes (15% OFF REGULAR PRICE) \$4.23

▶ Add To Cart! ◀

Kevlar Shock Cord, 1/4" x 15' (10% OFF REGULAR PRICE) \$8.05

▶ Add To Cart! ◀

Upgrades for Firestorm54

Filament-wound fiberglass tube (rocket becomes 12" longer) \$56.75

▶ Add To Cart! ◀

Slimline 54mm Circle Ring Motor Retainer (10% OFF REGULAR PRICE) \$17.90

▶ Add To Cart! ◀

Slimline 54-38mm Motor Adapter (10% OFF REGULAR PRICE) \$22.50

▶ Add To Cart! ◀

Heat Pad for Chutes (15% OFF REGULAR PRICE) \$4.23

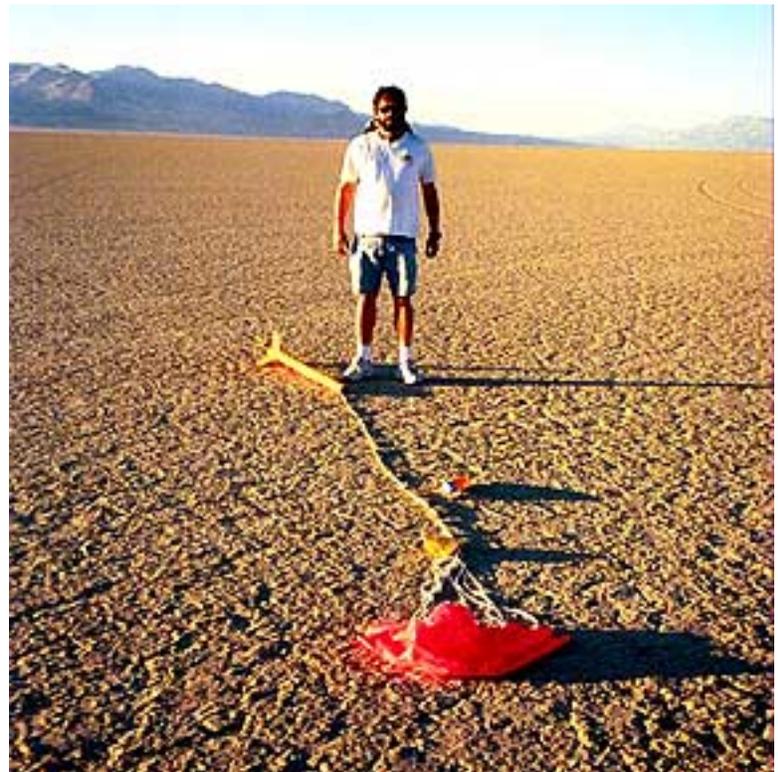
▶ Add To Cart! ◀

Kevlar Shock Cord, 1/4" x 15' (10% OFF REGULAR PRICE) \$8.05

▶ Add To Cart! ◀

Features:

- Includes swivel, LONG shockcord, plastic nosecone, Acme extended conformal lugs, rip-stop parachute (24"-Thunderbolt, 30" Firestorm), decal, easy-to-follow instructions.
- Includes the Acme fin canister, a strong Zytac fincan that has a built in airfoil!
- You get a super-high performance kit, built to take serious punishment.
- Builds in 1 or 2 hours (finishing time not included). Great when you need super high performance, but don't have the time.
- Level 1 or 2 capable.
- Mach-busting has never been so easy.
- Altitude records are now just a few hours away.
- Built to withstand a hard landing, so rapid descents are possible.
- Elegant silver metallic decal goes with virtually any color paint.
- Non-brittle phenolic tubing, keeps it light and resists shattering.
- Affordable price!
- Upgradable: fiberglass tubing, SLIMLINE retainers, SLIMLINE motor adapters, and chute/cord heat protectors



Ian Kluft proves that with a Firestorm 54, it is possible to get level 1 and 2 in the same day. Here is Ian's Firestorm resting after a spectacular desert flight.

Performance Characteristics:**Thunderbolt 38**

Motor	Altitude (ft.)	Max G	Velocity MPH	Time to Max Alt. (seconds)
F50	1,100	6.44	176	8.82
G80	2,114	12.2	273	11.4
H123	3,890	12.75	385	15.1
I161	6,112	19.69	592	17.6
I300	7,563	40.1	779	18.6
J350	10,279	47.6	1033	20.5

Firestorm 54

Motor	Altitude (ft.)	Max G	Velocity MPH	Time to Max Alt. (seconds)
G80	866	6.9	151	7.8
H123	1,934	7.9	231	11.4
I161	4,361	12.7	394	16.3
J350	6,808	35.7	713	17.7
J90	7,286	7.1	526	20.5
J415	10,051	21.6	894	21.1
K185	11,935	11.0	847	24.0
K550	11,848	30.3	1081	22.1

(Based on Rocket Altitude Simulation Program [RASP], actual performance may vary - - especially with mach+ flights, Cd of 0.6 assumed, caution: do not exceed FAA waiver. Some motors require the use of a motor adapter).

This is Erick McDaniel and Ryan Kelly in Battle Creek, Michigan. We recieved our order yesterday, and I want to thank you for the great work!

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slimline avionics bay



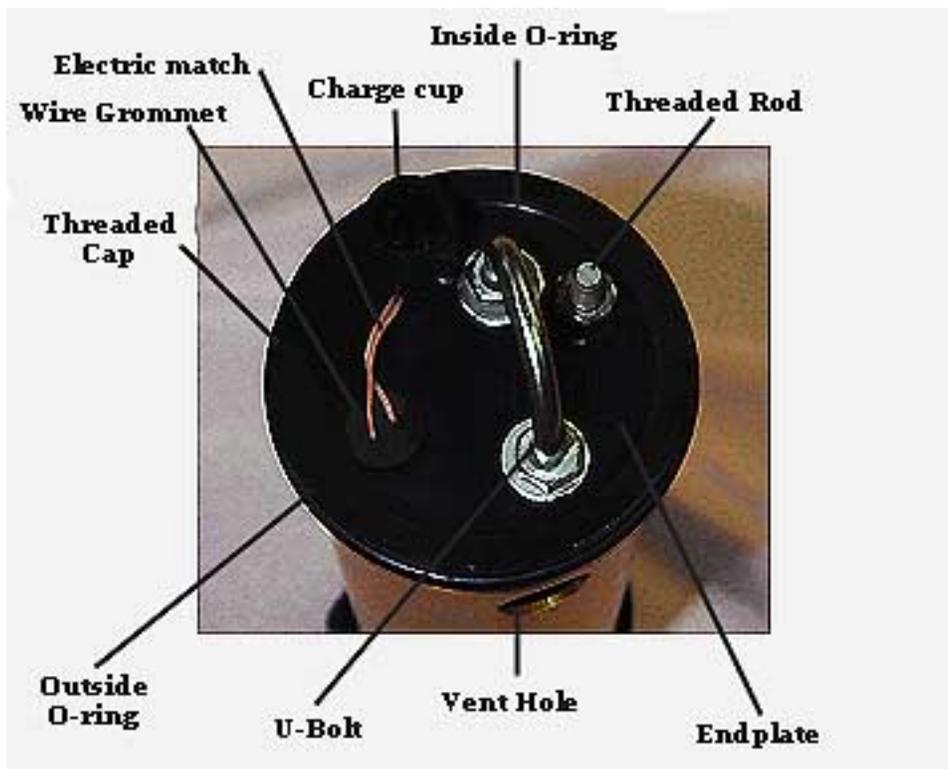
Introducing the new Slimline Avionic Bay, the ultimate compartment for your electronics. The bay is a high strength, sealed compartment that holds a variety of flight electronics such as altimeters, deployment timers, staging timers, video and photographic units, as well as transmitters and telemetry devices.

The bay will fit into a 3" coupler (included with the kit). So with appropriate adapters, it will fit into rockets 3" and larger. It comes in two lengths 8" and 12". The shorter version is suitable for up to 4" rockets, or other applications where one altimeter is needed. The longer version (12") is meant for rockets 6" diameter and larger, or other rockets in which two altimeters for redundancy is required. The interior I.D. is about 2.85"

If you can fit a 3" coupler into your rocket, you can fit this bay. We can supply you with appropriate rings that will allow you to adapt from your rocket's tubing down to a 3" coupler. These rings can be offset so that the bay is shifted to one side in your rocket. That makes accessing on/off switches easier, and also makes for better venting.

It is machined of 6061 T6 aircraft-grade aluminum, and is anodized in contrasting colors for both beauty and protection. The endplates and the body openings are precision laser cut. The U-bolts and other hardware are hardened stainless steel. The Slimline Avionics Bay also includes a mounting plate for your electronics. This mounting plate is an advanced aerospace composite, comprised of a honeycomb nomex that is sandwiched between layers of hard fiberglass. Absolutely no expense has been spared in the construction of this bay...even down to the detailed and illustrated 8-page instruction manual. This unit is easy-to-use will be the envy of your rocketry club.

As the complexity of flight avionics increases, so does the demand for an easy-to-use system to securely house the electronics. The Slimline Avionics Bay meets this need.



The Slimline Avionics Bay is great insurance too. In the event of a crash, sensitive and costly electronics have a vastly greater chance of survival in this ultra-strong compartment than in avionics bays made of phenolic paper.



Act Now....

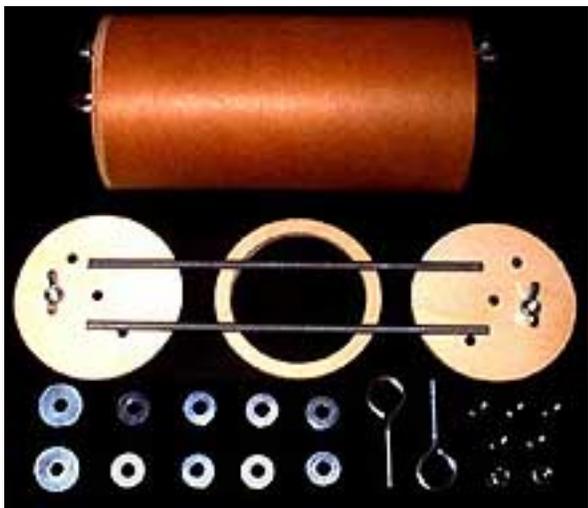
A small price to protect your electronics....and your rocket

8" long version \$99.99 [▶ Add To Cart! ◀](#)

12" long version \$119.99 [▶ Add To Cart! ◀](#)

(because this unit is light weight, reduced shipping charges will apply)

Paper Phenolic Avionics bay



Giant Leap's avionics bays are the best! Large open area stores lots of onboard electronics.

- Holds 1 or 2 computers, altimeter or timers
- AIRTIGHT, O-ring, tested to 30 LBS vacuum
- Isolates electronics from corrosive gases
- PROTECTS against mechanical shock
- Fits inside 3.90" or 3.00" diameter tubing
- 7.0" LONG, fits short or long circuit boards
- Ideal for dual - deployment, RC recovery, video transmitters, GPS, tracking beacons
- 27 parts & easy-to-read instructions

►Add To Cart!◄ Electronics bay for 3.00" Airframe

►Add To Cart!◄ Electronics bay for 3.90" Airframe

- Both sizes, 7" Long: \$21.79

"I am impressed with the quality of the components and your service. As soon as I get approval of my Level 3 design I will be ordering additional components."

Dennis McNally

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Hosting, Development and Maintenance by [The Blast Zone](#)
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Contact the [Webmaster](#)

non-brittle phenolic tubing

Non-brittle phenolic airframe tubes

6" AND 7.5" NOW ARE NOW IN MICROSEAM PHENOLIC

- We'll CUT your tubes!
- Compatible with PML and LOC nosecones.

Why is NONBRITTLE PHENOLIC better?

Nonbrittle phenolic is strong, like the old standard phenolic But nonbrittle phenolic is much less prone to crack or shatter. Unlike paper tubes, it won't easily crimp or buckle. Unlike plastics, will readily absorb CA's and epoxies.

The solution....

4 foot long tubes for 3" & 3.9 " diameter! Like all our bodytubes, these long tubes are nonbrittle phenolic -- like the old standard phenolic -- but less prone to crack, chip or shatter, and unlike paper, don't easily crimp or buckle. Check 'em out below!

TUBE SIZE (ID")	Length	Wall	Price
B-1.145 (29mm)	36"	0.062"	\$5.99 ▶ Add To Cart! ◀
B-1.525 (38mm)	36"	0.062"	\$7.19 ▶ Add To Cart! ◀
B-1.525 (38mm) LONG!	48"	0.062"	\$11.19 ▶ Add To Cart! ◀
B-2.152 (54mm)	36"	0.062"	\$7.99 ▶ Add To Cart! ◀
B-2.152 (54mm) LONG!	48"	0.062"	\$13.99 ▶ Add To Cart! ◀
B-2.560	36"	0.062"	\$8.99 ▶ Add To Cart! ◀
B-3.002 (76mm)	36"	0.062"	\$9.99 ▶ Add To Cart! ◀
B-3.002 (76mm) LONG!	48"	0.062"	\$15.49 ▶ Add To Cart! ◀
B-3.900 (98mm)	36"	0.062"	\$11.99 ▶ Add To Cart! ◀
B-3.900 (98mm) LONG!	48"	0.062"	\$16.69 ▶ Add To Cart! ◀
B-6.007 Microseam	48"	0.074"	\$29.49 ▶ Add To Cart! ◀
B-7.512 Microseam	48"	0.080"	\$34.49 ▶ Add To Cart! ◀

WHAT IS MICROSEAM?

Microseam Phenolic, or "**Microseam**" for short, is a new type of airframe in which the spiral grooves are nearly eliminated. Tubes with **Microseam** have an entirely new outer layer that eliminates the tedium of filling grooves with putty.

How do I finish Microseam tubes? That's the great news. Because the grooves are nearly eliminated, two or three heavy coats of "Spot Putty Primer" are usually all that is required. This is an extra thick primer available from Walmart and most auto supply stores. Sand in-between coats and then paint as desired.

MICROSEAM.....NO MORE GROOVES TO FILL!!!!

Motor mount tubes

- Just like our airframe tubes...but in money-saving lengths!

TUBE SIZE (ID")	Length	Wall	Price
MMT-1.145 (29mm)	12"	0.062"	\$2.83 ▶ Add To Cart! ◀
MMT-1.525 (38mm)	12"	0.062"	\$3.34 ▶ Add To Cart! ◀
MMT-1.525 (38mm)	18"	0.062"	\$4.37 ▶ Add To Cart! ◀
MMT-2.152 (54mm)	18"	0.062"	\$4.98 ▶ Add To Cart! ◀
MMT-3.00 (76mm)	36"	0.062"	\$9.99 ▶ Add To Cart! ◀
MMT-3.00 (76mm)	48"	0.062"	\$13.74 ▶ Add To Cart! ◀
MMT-3.90 (98mm)	36"	0.062"	\$11.99 ▶ Add To Cart! ◀
MMT-3.90 (98mm)	48"	0.062"	\$16.69 ▶ Add To Cart! ◀



Phenolic Coupler tubes

- Connect sections of airframe tubing
- Make internal compartments
- Beef up airframe walls
- Comes in short & full length!

Size	Length	Wall	Price
for 2.15" tube	4"	0.062"	\$1.59 ▶ Add To Cart! ◀
for 2.15" tube	36.5"	0.062"	\$7.49 ▶ Add To Cart! ◀
for 2.56" tube	5"	0.062"	\$1.89 ▶ Add To Cart! ◀
for 2.56" tube	36.5"	0.062"	\$8.79 ▶ Add To Cart! ◀
for 3.00" tube	5"	0.062"	\$2.12 ▶ Add To Cart! ◀
for 3.00" tube	36"	0.062"	\$9.95 ▶ Add To Cart! ◀
for 3.90" tube	7"	0.062"	\$3.59 ▶ Add To Cart! ◀
for 3.90" tube	36.5"	0.062"	\$11.99 ▶ Add To Cart! ◀
for 6.00" tube	12"	0.074"	\$10.99 ▶ Add To Cart! ◀
for 7.51" tube	12"	0.125"	\$17.49 ▶ Add To Cart! ◀

I ordered from y'all not long ago, and let me say that your products are just as beefy as they get! Thanks for the custom cutting too. You don't run into many rocket companies that do this good of a job at such a low price. I'll defiantly be ordering in the future!

Nick Cochran

Pure Filament-Wound Fiberglass Airframes

100% compatible with Hawk Mountain Tubing



Size	Length	Price
38mm Airframe	36" Long	\$31.50 ▶ Add To Cart! ◀
54mm Airframe	30" Long	\$27.50 ▶ Add To Cart! ◀
54mm Airframe	60" Long	\$54.50 ▶ Add To Cart! ◀
3.00" (76mm Airframe)	48" Long	\$70.40 ▶ Add To Cart! ◀
3.90" (98mm Airframe)	48" Long	\$79.00 ▶ Add To Cart! ◀
6" Tubing	48" Long	\$156.00 ▶ Add To Cart! ◀
6" Coupler	16" Long	\$52.00 ▶ Add To Cart! ◀

For other filament-wound couplers...Call!

Introducing...

The EASYGLAS SOCK!

Finally, an easy way to fiberglass your bodytube! The EASYGLAS SOCK is a stretchy sleeve that fits over your airframe to make fiberglassing a breeze. Traditional fiberglassing methods are tricky, and involve wrapping cloth around a tube. The downside of this old approach is that it's time consuming, really messy, frustrating and, worst of all, leaves an overlap ridge that has to be sanded down. In short, it's a royal pain!

Finally there's an easy way to glass your tube - - with the EASYGLAS SOCK.

The EASYGLAS SOCK is not fiberglass, but is made of a material that readily absorbs resin and adds structural strength. We've tried it and it works beautifully. Best of all, it finishes easily. The EASYGLAS SOCK is about as thick as 3 or 4 oz fiberglass cloth. Here's the simple procedure:

1. Slide EASYGLAS SOCK over dry airframe and tie the loose ends with twist-ties.
2. Mix your resin, and apply thoroughly over the EASYGLAS SOCK. Squeegee excess material and rotate tube occasionally while resin cures.
3. Once cured, lightly cut down high spots with sandpaper, then prime with several coats of extra thick filler primer (available at department stores). Be sure to sand between coats of primer.



That's it!! Trim the ends and you're ready to paint!

Finally...lamination for the rest of us!!

For additional strength **KEVLAR**® sock (below) can be used underneath the EASYGLAS SOCK.

[▶ Add To Cart! ◀](#) \$0.99 per foot EASYGLAS small diameter for 4" airframes only. (order 1.5 times length of airframe)

►Add To Cart!◄ \$1.29 per foot EASYGLAS large diameter for 5.5" to 7.5" airframes. (order twice length of airframe).



The EASYGLAS SOCK is easy to slide on.



The EASYGLAS SOCK has no overlap ridges to sand, and tightly hugs the tube so there's no need for vacuum bagging.

It doesn't get any easier.

Gabriel Balik uses easyglas. It's easy!!
[Click here for a video demonstration!](#)

The AIRFRAME SOCK of KEVLAR®!



A new stretchable **KEVLAR®** sleeve made of 100% pure Aramid **KEVLAR®** that slides onto your airframe.

Laminating your tube is rewarding. But while fiberglass is easy to work with, **KEVLAR®** cloth is costly and tricky. NOT ANY MORE! Now reinforcing your tube in **KEVLAR®** is like putting on your socks. Just slide the AIRFRAME SOCK of **KEVLAR®** on the tube. Because it's stretchable - - like your socks - - it conforms to the tube and compresses down to hold in place (vacuum bagging optional but not necessary). And since there's no seam overlap, there's no bump to sand. Because **KEVLAR®** can't be finish sanded, you'll still need to cover the AIRFRAME SOCK of **KEVLAR®** in a thin layer of glass. The AIRFRAME SOCK of **KEVLAR®** stretches to fit tubes from 3" to 6" diameter. It adds between 1/64" and 1/32" to wall thickness.

AIRFRAME SOCK of KEVLAR® **►Add To Cart!◄** **\$3.29 / FT.** (order 1.5 times the length of the tube for up to 4" in diameter, and 2.0 times the length for 6". E.g., for a 3" diameter tube four feet long, allow six feet of sock. For a 6" tube that is 4 feet long, allow eight feet of sock).

Dave Rose puts the Kevlar Sock onto a 6" and 7.5" diameter airframe. He used a nosecone to taper on the sock. He then wet it out with fiberglass.

Just received the fiberglass cloth. Thanks again. It's very nice stuff. I also liked the looks of that kevlar sock ...Keep up the good work,

Kurt Gugisburg

Custom Airframe Cutting

Diameter	Phenolic	Glass
Up to 3.9"	\$1.50/cut ▶Add To Cart!◀	\$2.75/cut ▶Add To Cart!◀
6.0" and Larger	\$4.50/cut ▶Add To Cart!◀	\$6.75/cut ▶Add To Cart!◀

Allow +/- 1/8" for kerf

Custom Fin Slots - Cleanest slots in the industry!

Length	Phenolic
Up to 12"	\$4.50/slot ▶Add To Cart!◀
Up to 18"	\$6.00/slot ▶Add To Cart!◀

Longer slots...call for pricing. Give length & width, and distance slot starts from bottom of tube.

I will be sending you pictures and construction directions on my 7.5" saturn v project. What a pleasure it is to scratch build with your products and fantastic customer service, I am sold. Never again will I buy components from anyone else, thanks for the excellent craftsmanship.

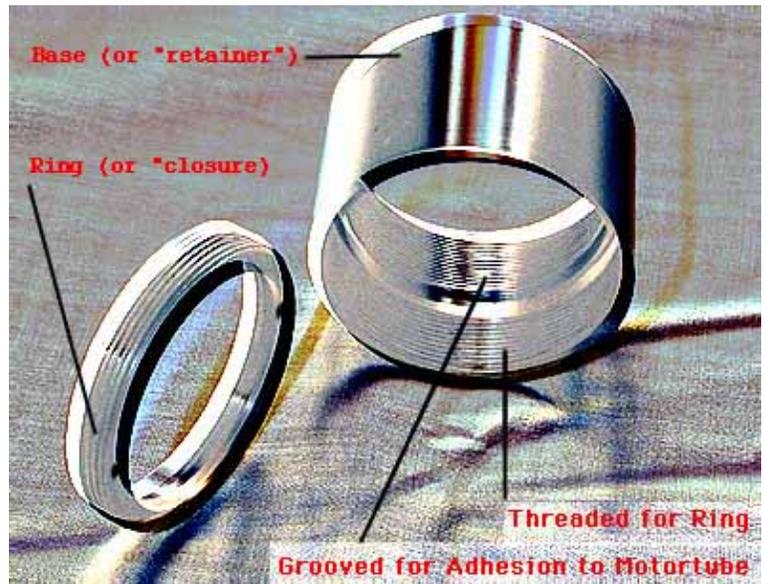
happy camper Gary L. Whitney

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"KEVLAR is a registered trademark of E.I. du Pont De Nemours and Company."

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motor retention

The THREADED SLIMLINE Motor retention System (patent pending)



The Threaded Slimline Motor Retainer. On the right is the base unit or "retainer". On the left is the threaded ring or "closure". The closure has notches for use with the extraction tool (optional) to ease installation and removal.

There's plenty of thread to hold your motor. Since the internal ring (closure) takes more than one turn to remove, there's less chance that the closure (the ring) will vibrate itself off the closure.

The Best of Both Worlds

...and then some.

Slimline is the new standard in motor retention. The name SLIMLINE can be found at almost every launch site around the world. The classic Slimline uses the well-known snap-in ring to prevent the motor from falling out. It's an overwhelming success and will remain an important part of our line. But some flyers prefer a threaded-type motor retainer. To answer their call, Slimline Motor Retainers now come in a threaded version

but with an important improvement...

This avoids the extra drag and added bulk of motor retainers with external rings. The THREADED RING is on the inside! With the ring threading on the inside, the retainer keeps it's sleek, simple design, and it's low cost. It lives up to the name.....SLIMLINE!!!

How does it work?

The Threaded Slimline is comprised of three things;

1. A base (or retainer),
2. A threaded ring (or closure), and
3. An extraction tool (not completely necessary, but makes life simpler).

The base (retainer) glues to your motortube (you'll need about 1/2" of motortube sticking out). We recommend JB Weld. Then insert your motor and secure with the ring (or closure). That's it.

Once you get an extraction tool and a threaded ring (closure) in a given size, all you need for additional rockets are bases (retainers).

Starter Packs:

.....includes one base, threaded ring, and a tool. After that all you need for the rest of you rockets (in any motor size) is another base.

29mm \$29.99 [▶Add To Cart!◀](#)

38mm \$32.99 [▶Add To Cart!◀](#)

Motor Retainers

54mm \$34.99 [▶Add To Cart!◀](#)

Individual systems:

29mm System	Base \$18.95 ▶Add To Cart!◀	Threaded ring \$10.95 ▶Add To Cart!◀	Extraction tool (also fits 38mm) \$3.95 ▶Add To Cart!◀
38mm System	Base \$19.95 ▶Add To Cart!◀	Threaded ring \$11.95 ▶Add To Cart!◀	Extraction tool (also fits 29mm) \$3.95 ▶Add To Cart!◀
54mm System	Base \$20.95 ▶Add To Cart!◀	Threaded ring \$12.95 ▶Add To Cart!◀	Extraction tool (fits 54mm only) \$3.95 ▶Add To Cart!◀

Remember, you don't need to purchase a threaded ring and extraction tool for every rocket you own of a given motor size. If you have four rockets with 38mm motor tubes, you need four 38mm bases, but only one or two rings and a single extraction tool.

Threaded Slimlines are compatible with all existing snapping [Slimline Adapters](#). Soon to follow: Threaded Slimlines in larger diameters, tailcones, and adapters.

Slimline Motor Retainers (circle ring style)



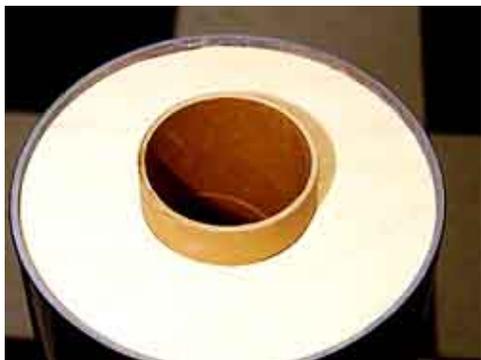
The SLIMLINE motor retainer:

It works on a similar principle to the Aero Pack retainer, but features an easy-to-use circle ring that snaps into a groove on the inside of the base (or sleeve). It creates several advantages. It reduces the machining costs, thereby drastically lowering the price. The SLIMLINE also has less aerodynamic drag compared to other retainers. SLIMLINES are designed and priced great for everyday rockets. For minimum diameter and boat tails, they are unmatched!

All SLIMLINES have a spacer ring to accommodate KOSDON, Ellis Mountain, and Hybrid motors too!

The matching SLIMLINE adapters are now available. Like the retainers, these are black anodized aircraft-grade aluminum (6061-T6). The adapters nest inside existing SLIMLINES, and have their own retainers built-in. Finally, a fully integrated system.

HOW TO INSTALL AND USE THE SLIMLINE:



When assembling your rocket, be sure to leave 1/2" of



Glue on the SLIMLINE with a strong heat resistant

How strong is the retaining ring in the Slimline?

At LDRS 2002 in Amarillo, a motor CATOED (blowed up real good). As a result of the explosion, the motor casing was laid flat....torn absolutely wide open. But the Slimline on the rocket remained intact, and the retainer ring never let go. That's how strong a Slimline is!!

Motor Retainers

motor tube sticking out the aft ring.



Insert motor

adhesive



*Snap the retaining ring into the groove by hand.
PRESTO, YOU'RE READY TO FLY!!*

You can remove the retaining ring by lifting one end out of the groove with a screw driver or pen knife. Then simply remove the ring by hand. It's that simple!

Check out these unbeatable prices:

54mm...\$20.95 [▶ Add To Cart! ◀](#)

38mm...\$19.95 [▶ Add To Cart! ◀](#)

29mm...\$18.95 [▶ Add To Cart! ◀](#)

CHECK OUT THE SLIMLINE MOTOR ADAPTERS

THE 76MM AND 98MM SLIMLINES ARE IN!

No flanges to screw down. Requires approximately 1.1" of tube for adhesion.

76MM...\$31.99 [▶ Add To Cart! ◀](#)

98MM...\$34.99 [▶ Add To Cart! ◀](#)

LARGE SLIMLINE MOTOR ADAPTERS ARE NOW IN!

"I got my Slimline motor retainer last week and this looks to be a nifty little deal. Nice and light.....These little things look to be the best thing since sliced bread! "

Geoff Stanford

Congratulations on your article on Rocketry Online for your new Slimline motor retention system. Great article, Great product. Keep up the good work!

Steve Kennedy

...the Slimline system looks very nice. I may be in the market for one or two of those before our fall season starts up. I'll let you know.

Ted Proseus

Slimline Tailcone Retainers So Beautiful, So Simple



Slimline Tailcone Retainers give you a sleek, low drag look. As with all Slimline Retainers, the motor is inserted into the motor tube and then secured with a circle ring.



A greate way to finish the aft end of a rocket.



Your motor tube is glued to the machined grooves inside the tailcone. Use JB Weld or other heat-resistant epoxy. Will accept Slimline Motor Adapters, too!



The inside is machined hollow to reduce weight.

Tailcone Retainer Prices

54-38mm...\$24.99

▶Add To Cart!◀

76-54mm...\$26.99

▶Add To Cart!◀

76-38mm...\$28.99

▶Add To Cart!◀

98-76mm...\$32.99

▶Add To Cart!◀

98-54mm...\$34.99

▶Add To Cart!◀



Giant Leap's Motorholder



Giant Leap's Motorholder uses stainless steel construction! Add Motorholders to your existing rocket fleet with the retrofit kit.

- A **STRONG** double-clamp system to stop your motor from blowing out.
- Don't waste money with other systems.
- Don't waste time "rigging" your own.
- Now with easy-to-cut spacers!

Two stainless steel clamps, bolts, washers, spacers and tee-nuts:

\$7.79 [▶ Add To Cart! ◀](#)

Retrofit kit - for use in pre-built rockets!: add \$2.00

[▶ Add To Cart! ◀](#)

"Thanks for getting my order out so fast! I'll definitely be doing more business with you!"

Mike Chrystof

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"NOMEX is a registered trademark of E.I. du Pont De Nemours and Company."
"KEVLAR is a registered trademark of E.I. du Pont De Nemours and Company."

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motor adapters

Motor Adapters for SLIMLINE Retainers!

Giant Leap Rocketry is now shipping motor adapters specifically designed for the SLIMLINE retainers. Like the retainers, the new SLIMLINE Motor Adapters are machined from T-6061 aluminum. The SLIMLINE Motor Adapters, when used with the SLIMLINE Retainers, produce a completely integrated motor retention system. The motor adapters work as follows: Suppose you're using a 38mm motor in a rocket with a 54mm motortube. Insert the 54-38mm SLIMLINE Motor Adapter into your motortube and lock it in place (as you would a 54mm motor) using the 54mm SLIMLINE Retainer already on your rocket. Then insert the 38mm motor into the SLIMLINE Motor Adapter and lock it into place using the retainer built into the adapter. It's that simple!!



**SLIMLINE adapters come with clear instructions.
Can be used with Aero Pack retainers too!**



**SLIMLINE adapters are LONG! Can easily handle
J570 easy access motors. Assemble with heat resistant
adhesive.**

HERE'S HOW:



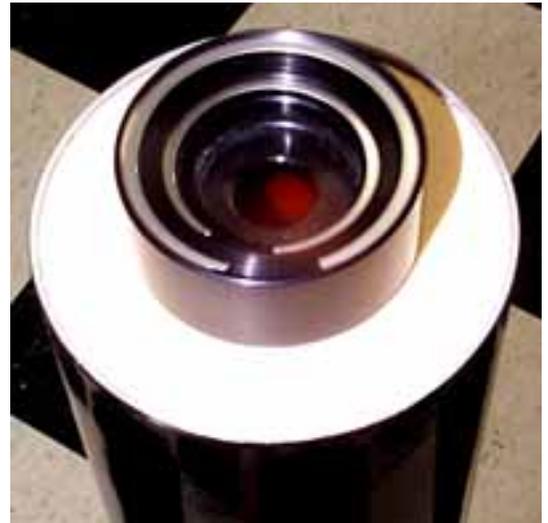
2) Lock it in place with retaining ring



1) Insert adapter into rocket that is pre-equipped with a SLIMLINE motor retainer.



3) Insert motor into adapter



4) Lock motor in place with retainer built into adapter.

DOES IT GET ANY EASIER?

Adapters for 54-38mm...\$25.00

[▶Add To Cart!◀](#)

Adapters for 38-29mm...\$21.00

[▶Add To Cart!◀](#)

76 and 98mm adapters NOW
AVAILABLE!

Adapters for 76-54mm...\$39.99

[▶Add To Cart!◀](#)

Adapters for 98-76mm...\$46.99

[▶Add To Cart!◀](#)

*SLIMLINE motor adapters are fully
compatible with Aero Pack retainers!*

Giant Leap Basic Motor Adapters



Giant Leap's motor adapters use all phenolic construction! No plywood rings to pull through!

- All phenolic construction!
- No plywood rings!
- No thrust misalignment!
- Used by hundreds of rocketeers!
- Adaptable for minimum diameter!

Use 29mm motor in 38mm tube:

\$7.19 [▶Add To Cart!◀](#)

Use 38mm motor in 54mm tube:

\$7.99 [▶Add To Cart!◀](#)

Ed: In case you didn't see this, I posted it to RMR after I got your order last week. Your speed and accuracy in filling orders is the standard to be met by the rest of the rocketry community. Best regards

Terry McCreary

"TEFLON is a registered trademark of E.I. du Pont De Nemours and Company."

"NOMEX is a registered trademark of E.I. du Pont De Nemours and Company."

"KEVLAR is a registered trademark of E.I. du Pont De Nemours and Company."

Original Web Site Design by Darrell Mobley

Hosting, Development and Maintenance by [The Blast Zone](#)

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Contact the [Webmaster](#)



SLIMLINE Minor Adapter

1. To use the adapter... (text describing the purpose and use of the adapter)

Assemblies

1. To use the adapter... (text describing the first step of assembly)



2. To secure the adapter... (text describing the second step of assembly)



3. To use the ring... (text describing the third step of assembly)



4. Hold the ring in place... (text describing the final step of assembly)

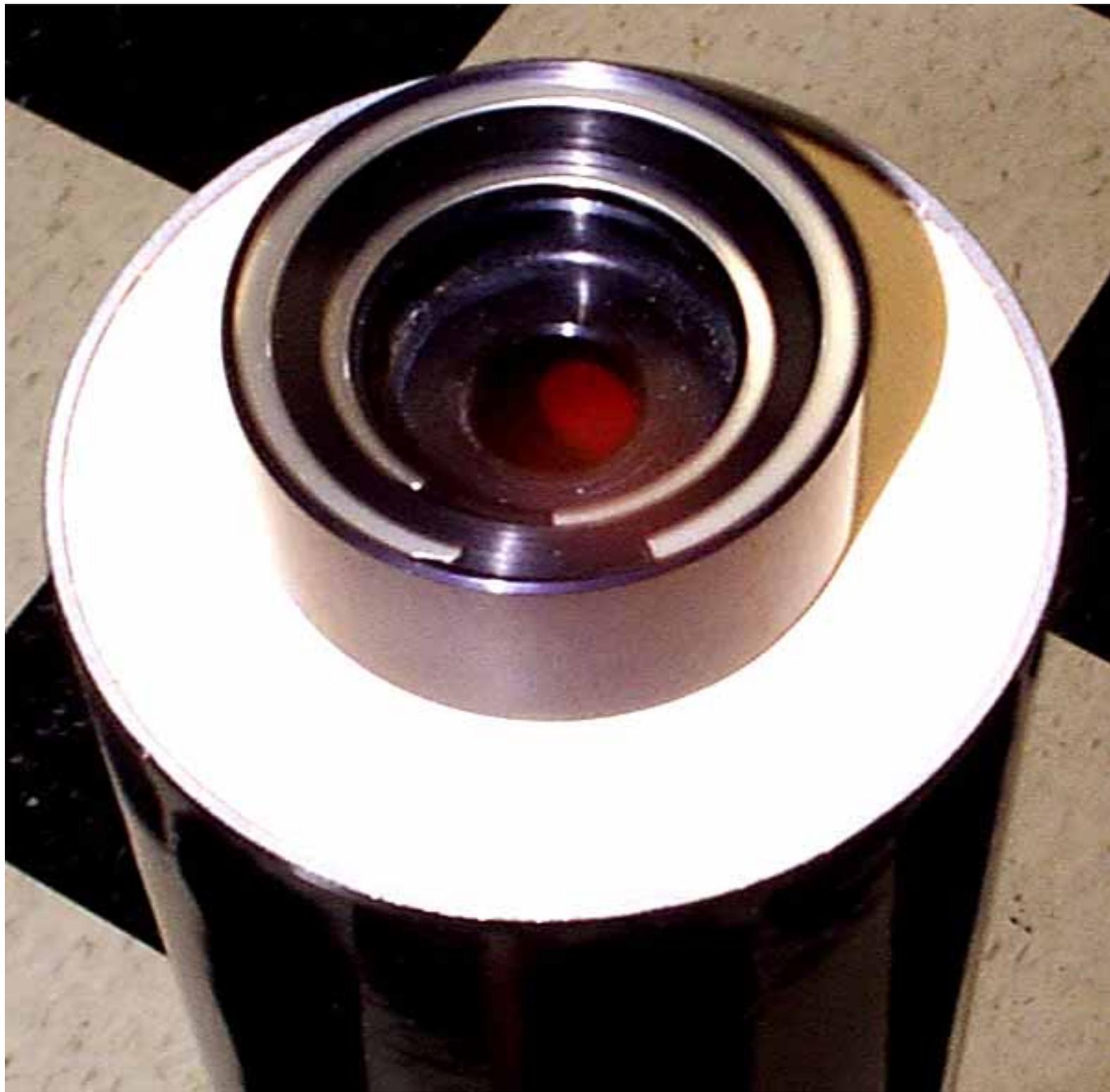












G-10 & composite fins

G-10 Fiberglass Fins

SEE OUR NEW COMPOSITE FINS BELOW!!

Fin	"A"	"B"	"C"	Thick	Price
1	5.5"	5.5"	2.6"	.062"	\$7.19 ▶ Add To Cart! ◀
1	5.5"	5.5"	2.6"	.093"	\$8.19 ▶ Add To Cart! ◀
2	4.0"	2.9"	1.0"	.062"	\$8.87 ▶ Add To Cart! ◀
2	4.0"	2.9"	1.0"	.093"	\$9.87 ▶ Add To Cart! ◀
3	7.6"	3.6"	-	.062"	\$8.19 ▶ Add To Cart! ◀
3	7.6"	3.6"	-	.093"	\$8.19 ▶ Add To Cart! ◀
4	8.7"	4.0"	1.9"	.062"	\$7.19 ▶ Add To Cart! ◀
4	8.7"	4.0"	1.9"	.093"	\$8.19 ▶ Add To Cart! ◀
5	6.5"	5.0"	2.6"	.062"	\$7.19 ▶ Add To Cart! ◀
5	6.5"	5.0"	2.6"	.093"	\$8.19 ▶ Add To Cart! ◀
6	9.6"	9.1"	6.6"	.062"	\$9.50 ▶ Add To Cart! ◀
6	9.6"	9.1"	6.6"	.093"	\$10.50 ▶ Add To Cart! ◀
6	9.6"	9.1"	6.6"	.125"	\$14.45 ▶ Add To Cart! ◀
7	11.6"	5.9"	3.1"	.062"	\$8.95 ▶ Add To Cart! ◀
7	11.6"	5.9"	3.1"	.093"	\$9.95 ▶ Add To Cart! ◀
8	7.4"	4.8"	3.3"	.062"	\$7.95 ▶ Add To Cart! ◀
8	7.4"	4.8"	3.3"	.093"	\$8.95 ▶ Add To Cart! ◀
9	7.3"	5.9"	4.6"	.062	\$7.19 ▶ Add To Cart! ◀
9	7.3"	5.9"	4.6"	.093"	\$8.19 ▶ Add To Cart! ◀
10	6.5"	6.5"	3.1"	.062	\$7.19 ▶ Add To Cart! ◀
10	6.5"	6.5"	3.1"	.093"	\$8.19 ▶ Add To Cart! ◀
11	5.9"	5.6"	2.6"	.062	\$7.19 ▶ Add To Cart! ◀
11	5.9"	5.6"	2.6"	.093"	\$8.19 ▶ Add To Cart! ◀
12	8.5"	8.5"	4.0"	.062"	\$9.82 ▶ Add To Cart! ◀
12	8.5"	8.5"	4.0"	.093"	\$10.82 ▶ Add To Cart! ◀
12	8.5"	8.5"	4.0"	.125"	\$14.89 ▶ Add To Cart! ◀
13	11.5"	7.5"	5.8"	.062"	\$9.82 ▶ Add To Cart! ◀
13	11.5"	7.5"	5.8"	.093"	\$10.82 ▶ Add To Cart! ◀
13	11.5"	7.5"	5.8"	.125"	\$14.89 ▶ Add To Cart! ◀

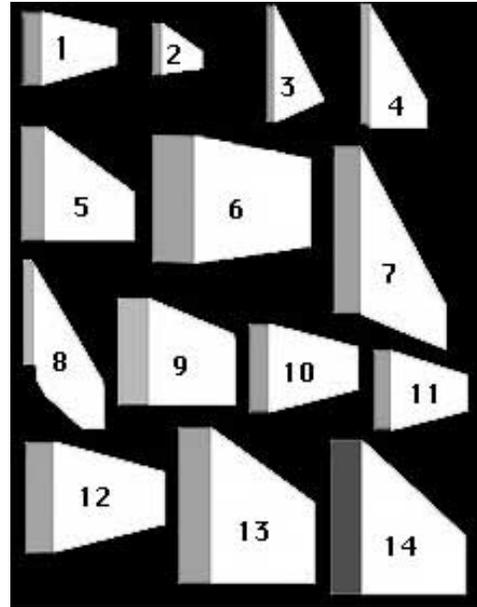
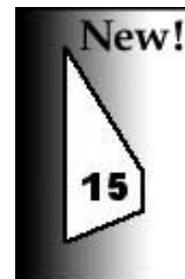


Chart of available fin styles.



Using the diagram to the left, compare the dimensions of the "A" "B" and "C" linear measurements for picking your fins. The shaded area to the left of the fin in the diagram is the through-the-wall fin tab.

Specify fin tab width, or indicate airframe size and motor tube, and we'll determine the tab dimensions. When ordering online, use the comments area on the checkout page to specify fin tab information.

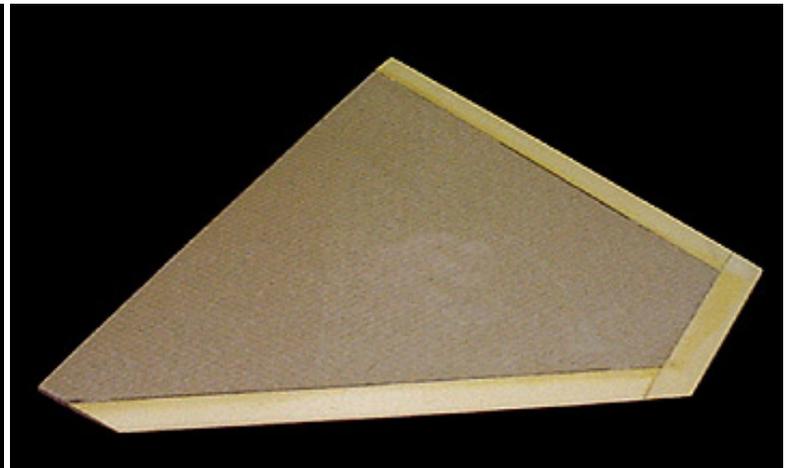
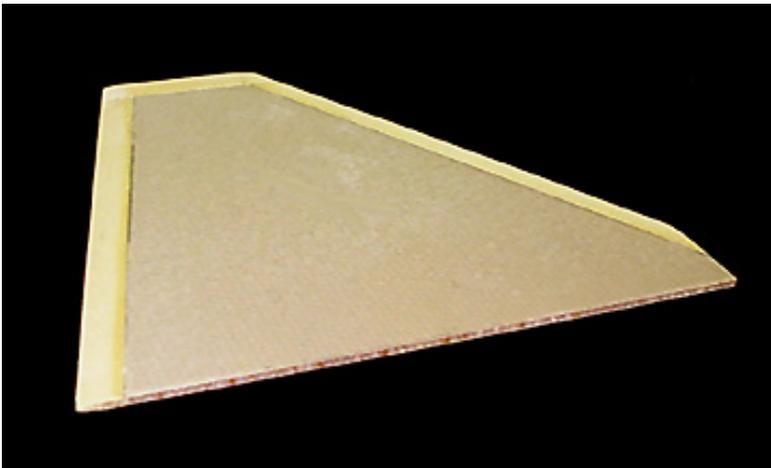


Fins

14	11.5"	7.5"	4.3"	.062"	\$9.82	▶ Add To Cart! ◀
14	11.5"	7.5"	4.3"	.093"	\$10.82	▶ Add To Cart! ◀
14	11.5"	7.5"	4.3"	.125"	\$14.89	▶ Add To Cart! ◀
15	13.8"	5.3"	2.8"	.093"	\$9.99	▶ Add To Cart! ◀
15	13.8"	5.3"	2.8"	.125"	\$14.69	▶ Add To Cart! ◀

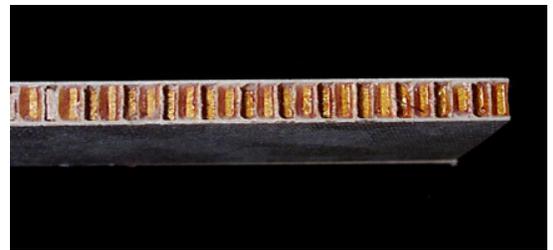
TECH NOTE:G-10 can be cut using a jig saw with a fine-tooth metal blade. Sand edges smooth by hand or, better yet, with a bench disk sander or similar tool. Careful, G-10 is very dense material and can destroy cutting bits / blades. G-10 can cut you! Always wear hand and eye protection.

aerospace composite fins



THE FUTURE OF ROCKETRY HAS ARRIVED... Aerospace Composite Fins!

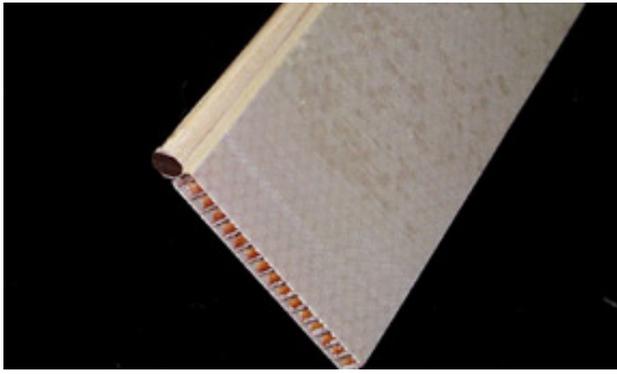
Giant Leap Rocketry now offers the ultimate in fin material. This aerospace composite material is used in advanced aircraft. It is much stronger than wood, more rigid than G-10 (for equivalent thickness). Lighter than wood, 1/3 the weight of G-10.



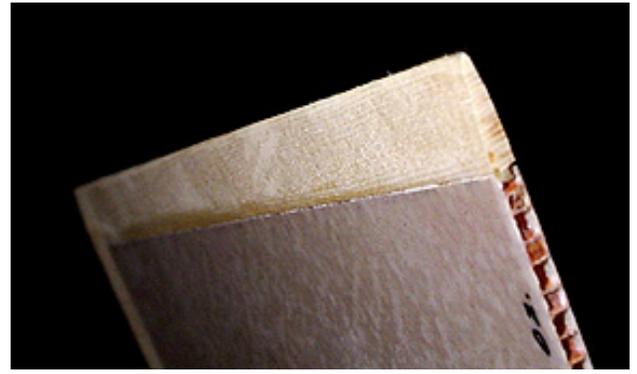
An inner layer of NOMEX(TM) honeycomb, sandwiched between either thin G-10 Fiberglass or Carbon Fiber!

TECH NOTE: One of the many advantages of high strength composite fins is their low weight. Indeed, you can actually realize a double-weight savings. Here's how: suppose that by using composite fins, your entire rocket comes in at, say, 2 lbs lighter. Because removing weight at the AFT end of the rocket makes it more stable, that's an extra 2 lbs or so that you don't have to add as compensating nose weight. So you've saved as much as 4 lbs or more in this example. Not only is that a huge performance advantage, it opens up a wider range of possible motors.

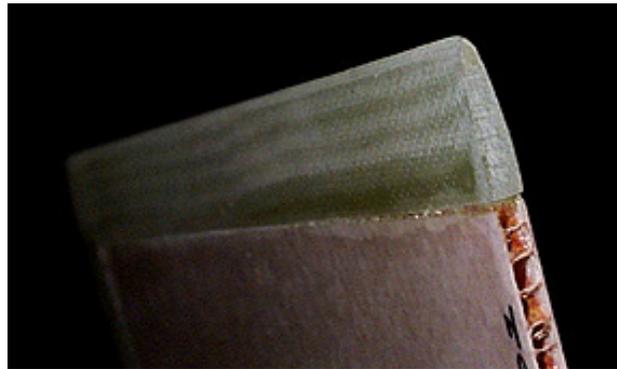
EDGING YOUR COMPOSITE FINS IS EASY! TO HIDE EXPOSED EDGE YOU HAVE SEVERAL OPTIONS:



Edge the fin with a dowel of matching thickness. Simply epoxy dowel to fin, and apply epoxy fillet to fill seam. Miter corners as needed.



Or...edge the fin with hardwood strips of matching thickness. Epoxy strip to edge of fin, and miter corners as needed. Then bevel wood strip to a sharp edge.



Or...edge the fin with G-10 of matching thickness. Similar process to hardwood strips, but cutting/beveling G-10 involves a little more skill.

SAME FIN SIZES AND DIMENSIONS AS G-10 FINES ABOVE

Thickness =>	Fiberglass & Honeycomb	Fiberglass & Honeycomb	Fiberglass & Honeycomb	Carbon Fiber & Honeycomb
	1/8"	1/4"	1/2"	3/8"
Fin #1	\$8.19 ▶ Add To Cart! ◀	\$11.47 ▶ Add To Cart! ◀	\$13.75 ▶ Add To Cart! ◀	\$16.91 ▶ Add To Cart! ◀
Fin #2	\$8.19 ▶ Add To Cart! ◀	\$11.47 ▶ Add To Cart! ◀	\$13.75 ▶ Add To Cart! ◀	\$16.91 ▶ Add To Cart! ◀
Fin #3	\$8.19 ▶ Add To Cart! ◀	\$11.47 ▶ Add To Cart! ◀	\$13.75 ▶ Add To Cart! ◀	\$16.91 ▶ Add To Cart! ◀
Fin #4	\$8.19 ▶ Add To Cart! ◀	\$11.47 ▶ Add To Cart! ◀	\$13.75 ▶ Add To Cart! ◀	\$16.91 ▶ Add To Cart! ◀
Fin #5	\$8.19 ▶ Add To Cart! ◀	\$11.47 ▶ Add To Cart! ◀	\$13.75 ▶ Add To Cart! ◀	\$16.91 ▶ Add To Cart! ◀
Fin #6	\$10.50 ▶ Add To Cart! ◀	\$14.70 ▶ Add To Cart! ◀	\$14.45 ▶ Add To Cart! ◀	\$17.77 ▶ Add To Cart! ◀
Fin #7	\$9.95 ▶ Add To Cart! ◀	\$13.93 ▶ Add To Cart! ◀	\$14.45 ▶ Add To Cart! ◀	\$17.77 ▶ Add To Cart! ◀
Fin #8	\$8.95 ▶ Add To Cart! ◀	\$12.53 ▶ Add To Cart! ◀	\$14.45 ▶ Add To Cart! ◀	\$17.77 ▶ Add To Cart! ◀
Fin #9	\$8.19 ▶ Add To Cart! ◀	\$11.47 ▶ Add To Cart! ◀	\$14.45 ▶ Add To Cart! ◀	\$17.77 ▶ Add To Cart! ◀
Fin #10	\$8.19 ▶ Add To Cart! ◀	\$11.47 ▶ Add To Cart! ◀	\$14.45 ▶ Add To Cart! ◀	\$17.77 ▶ Add To Cart! ◀
Fin #11	\$8.19 ▶ Add To Cart! ◀	\$11.47 ▶ Add To Cart! ◀	\$14.45 ▶ Add To Cart! ◀	\$17.77 ▶ Add To Cart! ◀
Fin #12	\$10.82 ▶ Add To Cart! ◀	\$15.15 ▶ Add To Cart! ◀	\$14.89 ▶ Add To Cart! ◀	\$18.31 ▶ Add To Cart! ◀
Fin #13	\$10.82 ▶ Add To Cart! ◀	\$15.15 ▶ Add To Cart! ◀	\$14.89 ▶ Add To Cart! ◀	\$18.31 ▶ Add To Cart! ◀
Fin #14	\$10.82 ▶ Add To Cart! ◀	\$15.15 ▶ Add To Cart! ◀	\$14.89 ▶ Add To Cart! ◀	\$18.31 ▶ Add To Cart! ◀

Fin #15	\$9.99 ▶Add To Cart!◀	\$13.99 ▶Add To Cart!◀	\$14.89 ▶Add To Cart!◀	\$18.31 ▶Add To Cart!◀
---------	---------------------------------------	--	--	--

Now you can get RAW composite board so that you can cut your own material!

1/8" thick nomex honeycomb with fiberglass sandwich \$10 sq foot. (a good lightweight replacement for .062 G-10 fins, or for mounting boards)

[▶Add To Cart!◀](#)

3/8" thick nomex honeycomb with fiberglass sandwich \$9 sq foot. (great for scale projects)

[▶Add To Cart!◀](#)

1/2" thick nomex honeycomb with fiberglass sandwich \$9 sq foot. (great for lightweight bulkheads like my L3 project and for light, strong but authentically thick scale fins).

[▶Add To Cart!◀](#)

3/8" thick nomex honeycomb with CARBON FIBER sandwich \$18 sq foot. (great for L3 fins or other serious projects. It's the ultimate material, super light, super strong. Used on my 55 pound - - successful- - level 3 project.

[▶Add To Cart!◀](#)

NOTE ON PRICING: Raw board comes in various width. Your price will be adjusted slightly due to different sizes of the board. Normally, these come in 12" widths and up to 36" or sometimes 48" long.

NOTE ON AVAILABILITY: COMPOSITE BOARD IS REALLY GETTING POPULAR AND THE SUPPLY FLUCTUATES. THEREFORE, IT IS SUBJECT TO AVAILABILITY.

DOWEL FOR FIN EDGING:

1/8" DOWEL ...19 CENTS PER FOOT [▶Add To Cart!◀](#)

1/4" DOWEL....29 CENTS PER FOOT [▶Add To Cart!◀](#)

1/2" DOWEL.... 39 CENTS PER FOOT [▶Add To Cart!◀](#)

3/8" DOWEL (MATCHES CARBON FIBER FIN)...34 CENTS PER FOOT [▶Add To Cart!◀](#)

G-10 Fin Beveling!

Fin beveling is necessary for low drag and high performance. But it's tedious and time consuming, and difficult to do properly. We'll do it for you...

Leading & trailing edge on 0.093" fin \$6.50 / fin [▶Add To Cart!◀](#)

Leading edge only on 0.093" fin \$4.50 / fin [▶Add To Cart!◀](#)

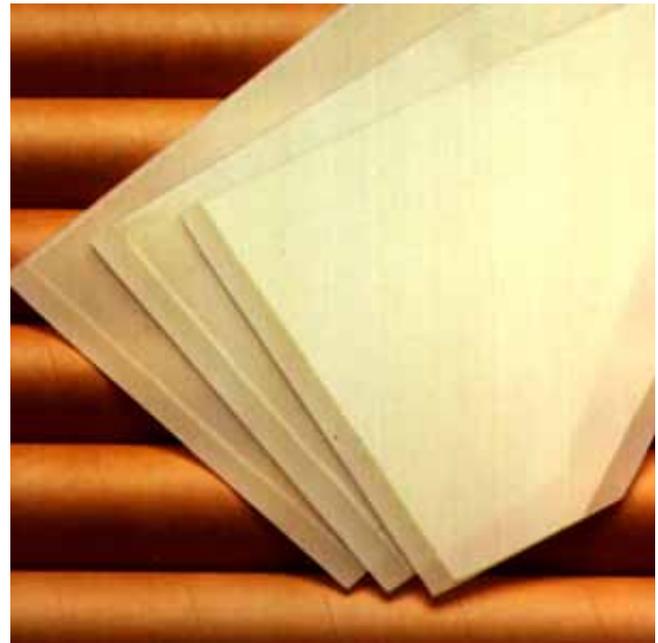
Leading & trailing edge on 0.125" fin \$7.50 / fin [▶Add To Cart!◀](#)

Leading edge only on 0.125" fin \$5.50 / fin [▶Add To Cart!◀](#)

NOTE: bevel travels about 7/16" from edge.

NOTE: Fins #2 and #3 cannot be beveled.

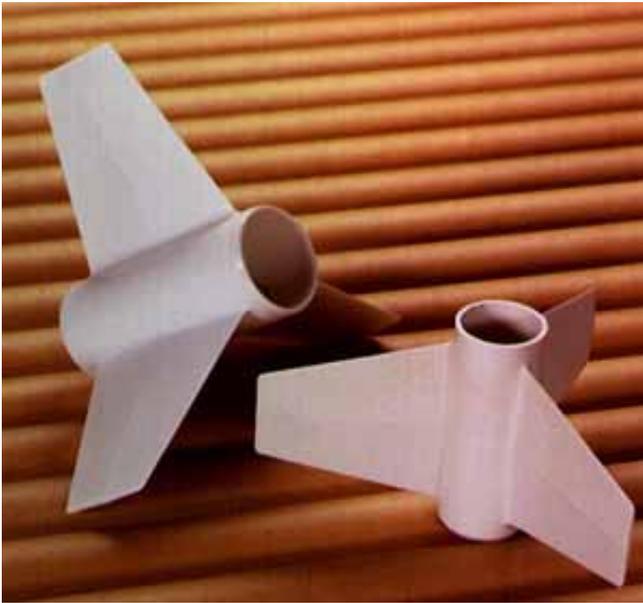
NOTE: Leading edge bevel only on #7 and #8 fin. Trailing edge CANNOT be beveled on #7 and #8 fin.



Ed, I got the fins today. Looks like a perfect fit. THANKS.

Judy McShannon

ACME™ injection molded fin canisters



- STRONG, Practically indestructible! This allows the use of small, rapid descent chutes to bring it home from extreme altitudes.
 - SAVES TIME! Just slide it on, epoxy it, and your almost ready to fly!
 - Ideal for 54mm and 38mm MINIMUM DIAMETER rockets!!
 - No more messy, time-consuming and frustrating fin lay-ups
 - Nike-style diamond AIRFOIL to reduce drag.
 - Can be adapted for use with 2.56" and 3.00" bodytubes...call!
- [Click here for detailed specifications \(in Adobe .pdf format\)](#)**

38mm fin canister: \$22.99 **▶Add To Cart!◀**

54mm fin canister: \$22.99 **▶Add To Cart!◀**

"Got the fins today and they look great. Thanks for your help and stay in touch."

Mike Scicchitano

"By the way, I got the fins yesterday. Very nice work."

John Coker

"Thanks, I received my order today. Excellent job on those custom fins. Each one identical to each other and to the pattern."

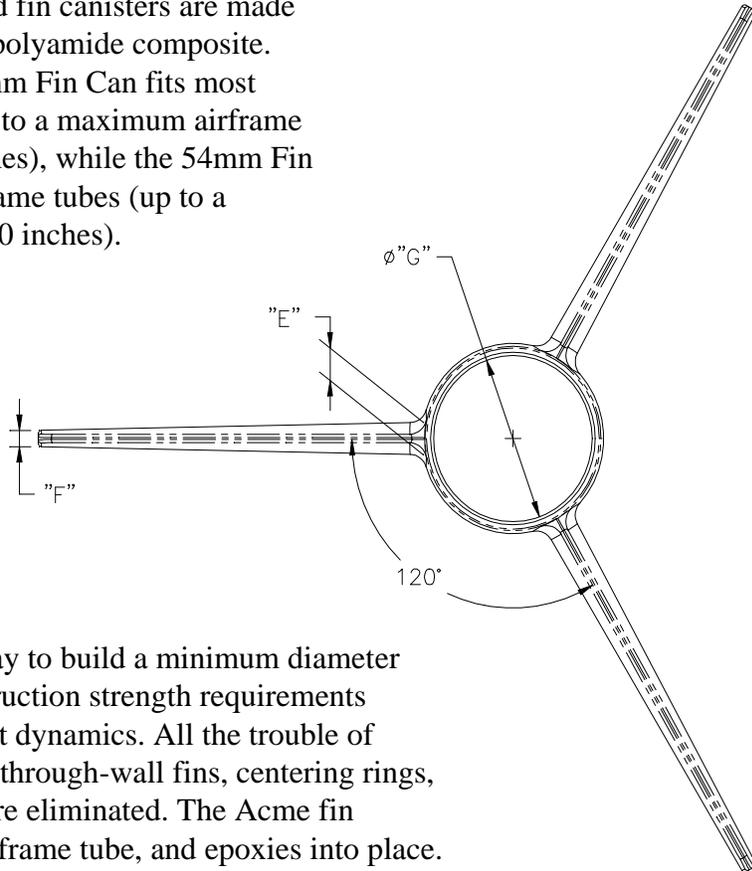
Steve Naquin

Original Web Site Design by Darrell Mobley
Hosting, Development and Maintenance by [The Blast Zone](#)
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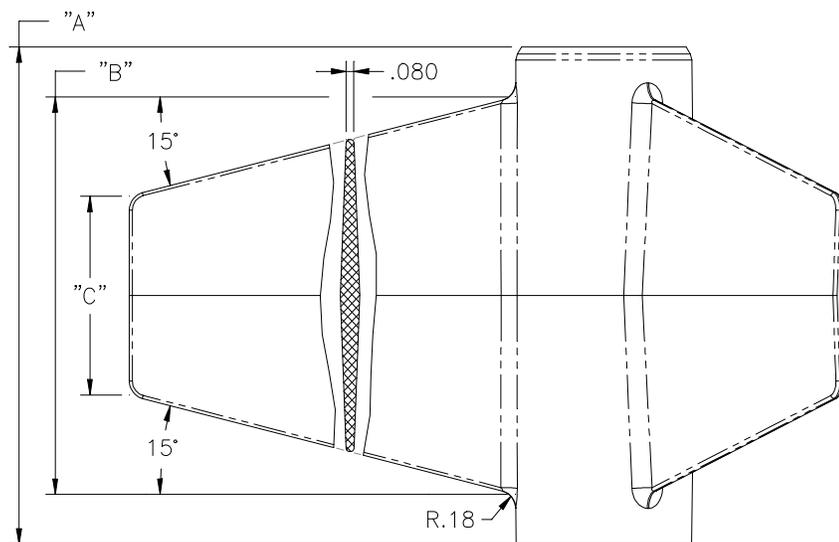


Acme Fin Canisters

Acme's one-piece injection-molded fin canisters are made from super-tough BASF Ultramid polyamide composite. Two designs are available: the 38mm Fin Can fits most common 38mm airframe tubes (up to a maximum airframe tube outside diameter of 1.670 inches), while the 54mm Fin Can fits most common 54mm airframe tubes (up to a maximum outside diameter of 2.280 inches).



There's really no easier or faster way to build a minimum diameter rocket, and still maintain the construction strength requirements dictated by high power rocket flight dynamics. All the trouble of oversize airframe tubes, individual through-wall fins, centering rings, slotting, fin filleting, and the like are eliminated. The Acme fin canister simply slides onto your airframe tube, and epoxies into place.





Acme Fin Canisters

FEATURE	38mm FIN CAN	54mm FIN CAN
"A" SLEEVE LENGTH	5.00 in	6.00 in
"B" FIN ROOT CHORD	4.00 in	5.00 in
"C" FIN TIP CHORD	2.00 in	2.50 in
"D" FIN LENGTH (SPAN)	5.00 in	6.00 in
"E" FIN ROOT THICKNESS (AT CENTERLINE)	0.325 in	0.400 in
"F" FIN TIP THICKNESS (AT CENTERLINE)	0.162 in	0.200 in
"G" INSIDE DIAMETER	1.670 in	2.290 in
WEIGHT	0.40 lb	0.75 lb

Acme Fin Canister Installation Instructions

Before installation, sand all surfaces of the fin canister as required to remove molding flash, parting lines, etc, using fine grit sandpaper.

Place the fin canister onto the airframe tube, and slide the canister to its installation location. Mark the canister's forward and aft end locations onto the airframe tubing with a Sharpie marker. It is suggested that you leave about an inch of airframe tube protruding aft of the end of the canister trailing edge, to allow for motor taping, motor retainers, staging couplers, etc.

To promote epoxy adhesion, scuff sand fiberglass and composite tubing between the marks in a circumferential direction; for paper tubing, remove the glassine layer between the marks. Scuff sand the inside diameter of the fin canister in a circumferential direction (not longitudinally) with 120 grit sandpaper, also to promote epoxy adhesion. Clean all surfaces to be bonded (except paper) with isopropyl alcohol.

As this fin canister was designed to fit several brands of airframe tubing, it may be necessary to build up the outside diameter of the airframe tube to match the inside diameter of the canister. Using 1/2-inch wide masking tape or paper packing tape (do not use plastic tape, epoxy will not adhere), wrap the airframe tubing in 2 or 3 places along the length of the airframe tube between the previously marked lines. Build up the tape in EVEN layers so that the canister seats firmly and concentrically on the tube and tape, in line with the previously marked lines. It is very important, for proper flight, that the fin canister is concentric to the airframe tube.

Remove the fin canister. Prepare approximately 1/2-fluid ounce epoxy with 30 minute cure time. Apply epoxy evenly on all exposed airframe tubing and tape between the marked lines. Slide the canister (chamfered end forward!) onto the airframe tube to the final position. Seat the canister firmly on the tape, between the lines, and remove any excess epoxy. Position the assembly with the forward end down, but ensure that the canister cannot slide out of place, while the epoxy cures.

After the epoxy has fully cured, filleting material may be applied at the forward and aft ends of the fin canister, to smoothly fair the airframe to the canister. Lightly scuff sand the fin canister with extra fine sandpaper in preparation for painting, and clean with isopropyl alcohol. Epoxy or enamel finishes are recommended.

component parts

Centering rings and bulkhead plates

Phenolic Centering Rings

38mm to 29mm	\$1.74	▶ Add To Cart! ◀
54mm to 38mm	\$1.94	▶ Add To Cart! ◀

3/16" Birch Centering Rings

2.56" to 29mm	\$1.94	▶ Add To Cart! ◀
2.56" to 38mm	\$1.94	▶ Add To Cart! ◀
2.56" to 54mm	\$1.94	▶ Add To Cart! ◀
3.00" to 29mm	\$2.39	▶ Add To Cart! ◀
3.00" to 38mm	\$2.39	▶ Add To Cart! ◀
3.00" to 54mm	\$2.39	▶ Add To Cart! ◀
3.90" to 38mm	\$2.69	▶ Add To Cart! ◀
3.90" to 54mm	\$2.69	▶ Add To Cart! ◀
3.90" to 76mm (3")	\$2.69	▶ Add To Cart! ◀

1/2" 9-Ply Birch Centering Rings

6.00 to 38mm	\$5.49	▶ Add To Cart! ◀
6.00 to 54mm	\$5.49	▶ Add To Cart! ◀
6.00 to 76mm	\$5.49	▶ Add To Cart! ◀
6.00 to 98mm	\$5.49	▶ Add To Cart! ◀
7.51 to 38mm	\$6.49	▶ Add To Cart! ◀
7.51 to 54mm	\$6.49	▶ Add To Cart! ◀
7.51 to 76mm	\$6.49	▶ Add To Cart! ◀
7.51 to 98mm	\$6.49	▶ Add To Cart! ◀
Other sizes?		Call!



For cluster mount, use bulkhead price and add \$1.20 per standard hole. Call for custom work.

NOTE: Please call for rings that fit inside couplers, price is double.

3/16" Birch Bulkhead Plates

2.15" body tube	\$1.39	▶ Add To Cart! ◀
2.15" coupler	\$1.39	▶ Add To Cart! ◀
2.56" body tube	\$1.39	▶ Add To Cart! ◀
2.56" coupler	\$1.39	▶ Add To Cart! ◀
3.00" body tube	\$1.49	▶ Add To Cart! ◀
3.00" coupler	\$1.49	▶ Add To Cart! ◀
3.90" body tube	\$1.49	▶ Add To Cart! ◀
3.90" coupler	\$1.49	▶ Add To Cart! ◀

1/2" 9-Ply Birch Bulkhead Plates

6.00" body tube	\$4.99	▶ Add To Cart! ◀
6.00" coupler	\$4.99	▶ Add To Cart! ◀
7.51" body tube	\$5.59	▶ Add To Cart! ◀
7.51" coupler	\$5.59	▶ Add To Cart! ◀

Bulkheads are sized for bodytubes or couplers, specify when ordering

I am quite impressed with the quality of the parts from Giant Leap Rocketry. I will be back with more orders in the future.

Dave Sollberger

G-10 Fiberglass Raw Sheet Stock

- Fiberglass sheets for fins
- Practically indestructible!

SIZE	Price	
.062" (1/16") 12" x 12"	\$7.74	▶ Add To Cart! ◀
.062" (1/16") 12" x 24"	\$15.28	▶ Add To Cart! ◀
.062" (1/16") 12" x 48"	\$30.56	▶ Add To Cart! ◀
.093" (3/32") 12" x 12"	\$9.99	▶ Add To Cart! ◀
.093" (3/32") 12" x 24"	\$19.98	▶ Add To Cart! ◀
.093" (3/32") 12" x 48"	\$39.96	▶ Add To Cart! ◀
.125" (1/8") 12" x 12"	\$16.89	▶ Add To Cart! ◀
.125" (1/8") 12" x 24"	\$33.78	▶ Add To Cart! ◀
.125" (1/8") 12" x 48"	\$67.56	▶ Add To Cart! ◀

**Expandable Foam - HIGH HEAT FORMULA!**

...Locks fins into place!

We discovered this great product from a group of level-2 and -3 flyers in California. It's a two-part urethane, closed-cell expandable foam that fills in the fin tab / motor tube area. Easy to use. After you epoxy your fins, just mix the two-part foam and pour into the fin cavity. It's high-density structure helps hold the fins into place. The foam does not require oxygen to cure. Special heat-resistant formulation. Expands approximately 20 to 30 times it's size. Recently tested on an M-1939 certification flight. We were impressed.

Two parts 24 oz total.....\$13.99 [▶ Add To Cart! ◀](#)

"I received my order yesterday and I just wanted to let you know how pleased I am with the products. The centering rings and bulkheads are really amazing!!

Thanks for everything!"

Rich Pitzeruse

Original Web Site Design by Darrell Mobley
 Hosting, Development and Maintenance by [The Blast Zone](#)
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 Contact the [Webmaster](#)

nosecones & transitions

Nosecones from LOC/Precision

...molded in high-impact plastic!

Type	Size	Price
Plastic ogive nosecone	1.52"	\$9.75 ▶Add To Cart!◀
Plastic ogive nosecone	2.15"	\$10.75 ▶Add To Cart!◀
Plastic ogive nosecone	2.56"	\$11.00 ▶Add To Cart!◀
Plastic ogive nosecone	3.00"	\$15.50 ▶Add To Cart!◀
Plastic ogive nosecone	3.90"	\$17.50 ▶Add To Cart!◀
Plastic ogive nosecone	7.51"	\$72.75 ▶Add To Cart!◀

Thank you for great service...on time & on budget; a rare commodity today!

Dennis Winningstad

"Thanks again for your great products and incredible prices. I'll send you some pictures of the rockets I've been building, all scale models."

Terence McKiernan

All the components, airframe (non brittle phenolic), Custom fins, Altimeter bay, parachute, and Slimline motor retention were purchased from Giant Leap Rocketry. Thanks, Ed

Jim West (Jim West, Peter Fox pictured)





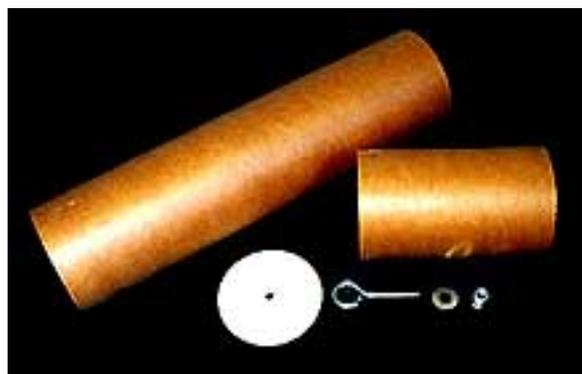
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payload assemblies

Phenolic payload sections

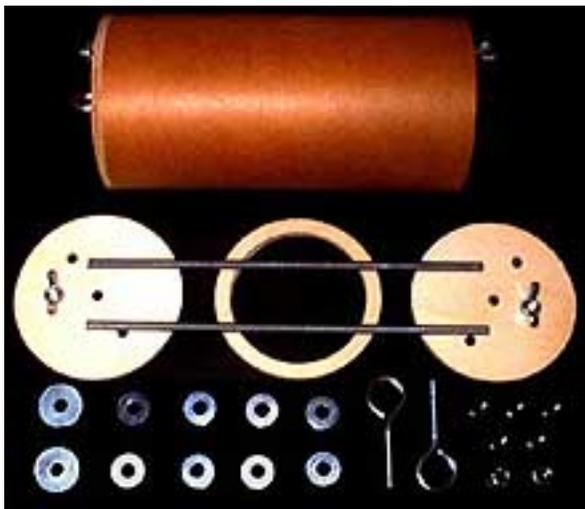
- Carry special payloads
- Lengthen your rocket
- Move center of gravity forward

TUBE SIZE	Length	Wall	Price
PL-2.152	12"	0.062"	\$5.76 ▶ Add To Cart! ◀
PL-2.152	18"	0.062"	\$7.79 ▶ Add To Cart! ◀
PL-2.560	12"	0.062"	\$7.46 ▶ Add To Cart! ◀
PL-2.560	18"	0.062"	\$8.99 ▶ Add To Cart! ◀
PL-3.002	12"	0.062"	\$8.99 ▶ Add To Cart! ◀
PL-3.002	18"	0.062"	\$11.19 ▶ Add To Cart! ◀
PL-3.900	12"	0.062"	\$10.79 ▶ Add To Cart! ◀
PL-3.900	18"	0.062"	\$13.35 ▶ Add To Cart! ◀
PL-6.007	24"	0.074"	\$27.67 ▶ Add To Cart! ◀
PL-7.510	24"	0.074"	\$36.99 ▶ Add To Cart! ◀



Includes tube, coupler, bulkhead, eyebolt and hardware.

Avionics bay



Giant Leap's avionics bays are the best! Large open area stores lots of onboard electronics.

- Holds 1 or 2 computers, altimeter or timers
- AIRTIGHT, O-ring, tested to 30 LBS vacuum
- Isolates electronics from corrosive gases
- PROTECTS against mechanical shock
- Fits inside 3.90" or 3.00" diameter tubing
- 7.0" LONG, fits short or long circuit boards
- Ideal for dual - deployment, RC recovery, video transmitters, GPS, tracking beacons
- 27 parts & easy-to-read instructions

▶Add To Cart!◀ Electronics bay for 3.00" Airframe

▶Add To Cart!◀ Electronics bay for 3.90" Airframe

- Both sizes, 7" Long: \$21.79

"I am impressed with the quality of the components and your service. As soon as I get approval of my Level 3 design I will be ordering additional components."

Dennis McNally

The chutes just came in the mail - and they are most excellent - a real step up from other products.

Mark Schwobel

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rocket
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Giant Leap Introduces:

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Only \$19.95 - FREE SHIPPING

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J-MOTORS!

K-MOTORS!

L-MOTORS!

M-MOTORS!

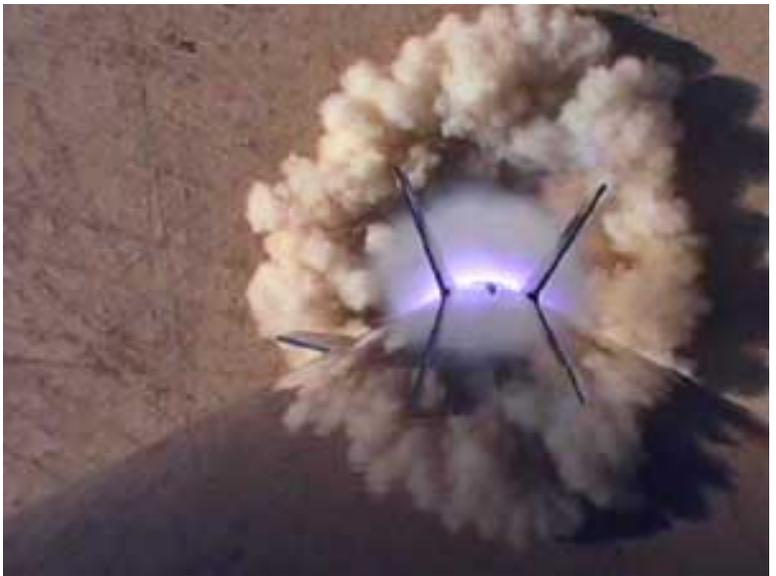
M TO M STAGING!

AIRSEARCH!
CLUSTERING!



Crashes!
Dual Deploys!

How-to Interviews





**Non-Stop
ACTION!**

**Professionally
Edited**



See the view from on-board a high-power rocket! This is a stunning collection of on-board videos from all over the country. Includes, Gates digital video, NASA video and how-to interviews. Airstarts from on-board 200 lbs rockets, M-staging to almost 20,000 ft!! This is a must-have for any video library.

A portion of the proceeds from this tape are donated to the Tripoli Legal Fund. Please support this project.

Wow, what fast service! I emailed an order to you late Wednesday night last week. It arrived today (Monday) on my door step. Well done!

Thanks!

Vern Knowles

Thank you for the last shipment! I like the quality of your products... good stuff!!!!

Graf Christoph

Just wanted to thank you for your great service.

Rick and Candice Waters

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customer projects

We have thousands of customers! Here are some of their projects:



Randall Ejma's giant scale AMRAAM with Giant Leap components. "You guys are the best!!" he writes. That's his dad in the picture.

Dennis Winningstad's awesome Farside project



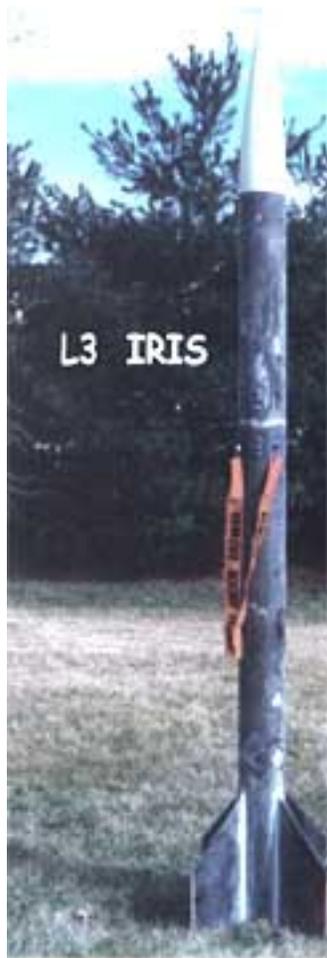
Doug Gerrard and his impressive Cineroc upscale. Yes, it takes great pictures in flight.



Jim West (left) with his NoradX2 built exclusively from Giant Leap components. It reached 3000 feet on a



Scott McCluskey and
his level-3 Iris.
Congratulations Scott!



Gary Whitney and his stunning 7.5" diameter scale Saturn V



Check out the motortube assemblies on Richard Benavides's Giant Leap project.



Larry Bell's fleet belongs in a museum.



Frank Mooney, with skilled craftsmanship, nests a Slimline inside a turned tailcone. Nice work!!

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LDRS 20 Wedge Oldham



Nike Hercules

ordering

At Giant Leap,
we turn your
order around
very quickly!

ordering information

Three ways to order:

1. Use the Webstore. Simply click the **►Add To Cart!◀** button next to the item you wish to purchase, and checkout through the secure webstore when you're ready!
2. Call **(225) 769-6040** or FAX **(225) 769-0710**
(Our area code only recently changed to 225. Should you have problems calling, try our old area code, 504)
3. Mail your order to:

**Giant Leap Rocketry
6061 Hibiscus Dr.
Baton Rouge, LA 70808**

Payments:

VISA/MASTERCARD/DISCOVER/AMEX

or

Money Order

Shipping and Handling:	
to \$20	\$ 5.50
to \$50	\$ 8.75
to \$100	\$ 9.75
to \$150	\$11.75
over\$150.00	9% of order

For pricing on items not mentioned in this ad, please call, FAX, or write or send email to the addresses listed above. Prices subject to change without notice. Users assume all risks and liabilities.

"You're quick... and work late, too. I'm new to HPR and I'm just getting a feel for vendor responses. So far you are the time to beat. Definitely send a catalog."

Tim Barkowski

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**Please feel
free to
contact us
if there is
anything you
need!**

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Orders are now accepted online through our secure ordering system.

Contact us by email at Ed@giantleaprocketry.com if you have questions regarding products or existing orders. Giant Leap Rocketry phone number is (225) 769-6040 or Cell (225) 229-5327. If no one answers, please leave a message and we will call you back -- promise!

Thanks for your excellent quick response on my recent order...It came on Monday, a couple of days earlier than I anticipated.

Tom Kindel

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