



SPAAR

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VOLUME 14 ISSUE 2

COUNTDOWN

What was *YOUR* first rocket?

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Let's face it- there's nothing like the first time. The first time that rocket that *you* built screamed off the pad, and headed towards the sky... hopefully. For some of us, it was just like yesterday—in fact, it might have been! Some of us go back to the 60's—the so-called "Golden Age" of model rocketry. For others. It was the 70's, 80's, 90's, or even yesterday. So we ask—what was *YOUR* first rocket?:

"My first was the Scout. I think that's the name. The little tumble recovery model with the engine hook sticking way out the back and a big 'ol hole in the tube near the nose. You know, Vern's first model. Or Carlisle's. I painted the darn thing silver. I mean all the rocket ships in the movies were silver right? Well, mine was a real rocket too.

The only problem was, it was real hard to see once it took off. Fortunately I did use the recommended engine for the first flight and it didn't go too far. But, it still took several anxious minutes of searching for it. I was

about 12 or 13." -*John Yost*

From Dale Jacobs:

"I believe my first rocket was a vintage 1982-84 Estes Space Shuttle. If memory serves me well (don't count on it), my mom (i.e. Santa) bought the Space Shuttle for me thinking it was just another model. I built a lot of plastic models at the time, and was just getting into airplanes. After I discovered the Space Shuttle kit required a launch pad, etc., I got the Sizzler starter kit, complete with Big Foot launch pad and controller. Uh, the Sizzler went pretty far on a C6-5.. but I still have the Shuttle.

Fortunately, I had this "structured" experience before straightening a coat hanger at college and using a fuse to launch one over the president's house from a dorm room window.. Where else except Millersville would they put the president's house right next to an all-boys dorm? That's my excuse, and I'm sticking to it :)" *Another example of "Higher Education" - Editor See Page 6*



COUNTDOWN

Volume 14, Issue 1
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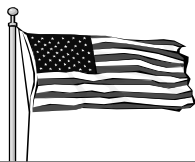
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SPAAR
PO Box 127
Reamstown, PA 17567

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"LET'S ROLL"**FROM THE PREZ.....**

It's been fun winter! The mild weather allowed us to get some flying in and at the March launch we introduced some scouts to our sport - thanks to Mick Spencer! Three well-attended workshops helped us learn some new techniques and got us started building for the spring.

And then there was the club trip to North Museum - what a great time! The North museum is a small museum but a good one with something for children of all ages. The planetarium hosts several shows and they had continuous films about the Hubble telescope and other space related themes. All the SPAAR members who attended were thrilled!(OK I was the only one who made it that Sunday but I was thrilled - the rest of you should check it out sometime!)

For those of you who aren't on the SPAAR e-group (why aren't you?) we will be having a "Dog Day Afternoon" this summer -many of us are building "Grumpy Dog" models - plans can be found on the SPAAR website.

Also this summer is the 3rd Gettysburg launch. We would like to make it the biggest yet - contact Steve Hutchinson if you would like to help.

And the grand event of the year is RAMTEC, the biggest and best Regional east of the Mississippi. This will be the 10th anniversary of RAMTEC and the 1st anniversary of my buzz cut! Contact Glen Feveryear for details on the contest; contact me if you would like to donate to a better haircut.

Keep 'em flying!

Dale

FROM THE EDITOR.....

First off, let me make good on an omission from the last issue. I flat out forgot to make everyone aware that the winner of the "farthest traveled" honors to the Family Dinner in January is none other than Ivan Barnsley & family. These folks drove all the way from Maryland in a nasty snow & ice storm just to be there. My hat is off to you!!

In the last *Countdown*, we stated that the "Grumpy Dog" plans would be in this issue, but I got to thinking [one of those rare occasions] that since it's on the SPAAR website, this might be overkill". So, you'll just have to make do with a "blast from the past" - the original Big Bertha plans from the early 60's. Have fun!! -George

Just remember, "If You Don't Know Where You're Going, Every Road Will Take You There"

SECTION MEETING MINUTES

February 16, 2002

Present: M. Kamide, Dr. Simon, G. Feveryear, D. Greene, G. Martell, D. Feveryear, T. Rossi, M. Brubaker, M. Beaver, G. Beever.

The prez called the meeting to order at 9:15AM and called for the committee reports:

1. Treasurer: T. Rossi for L. Gerlach, the club has a balance of \$1,201.21; there are 11 delinquent members. Well, they're not *delinquents*, but their dues are.
2. Section Advisor: Glenn reported that the Section Charter has been renewed.
3. Competition: Glenn previewed the contests that are being scheduled for Spring 2002 in the area.
4. Newsletter: George made the usual shameless plea for submissions.

Old Business: None

New Business:

1. Discussion was held regarding the idea of SPAAR, NOVAAR, NARHAMS & PSC holding Regional meets during the contest year. By doing so, each club could fly the full amount of contest factors. The support would take the form of each club attending each other's meet. By resolution, SPAAR will support these meets.
2. Dr. Simon asked for a discussion of the possibility of holding the SPAAR Family dinner a bit later in spring in order to miss the usual bad travel weather. This idea will be revisited this fall when the 2003 schedule is devised.
3. Dale provided an update on the NAR/TRA lawsuit with the BATF.

4. Discussion was held on RAMTEC-10; ya'll come, fly rockets till you drop, eat BBQ on Saturday night, and have a good time. See Glenn.
5. Discussion was held on the NAR's program called "TEAM AMERICA! Rocketry Challenge". It was decided to offer support by means of our regular launches.

George then led a discussion on cloning some of the old Estes and Centuri kits from the 60's and 70's. Some were disappointed because they thought the discussion was to be on cloning *sheep*. Maybe next year.

March 9, 2002

Present: Dr. Simon, L. Gerlach, J. Yost, D. Greene, E. Miller, G. Martell, T. Rossi, M. Brubaker, G. Feveryear, G. Beever.

The Prez called the meeting to order.....uh, whenever he felt like it.

Treasurer: Larry Gerlach reported a balance of \$1,196.68, with 61 active members.

Section Advisor: Glenn reported that our NAR Section charter renewal has been received; passed around a list of NAR members in our area of Pennsylvania.

Competition: Glenn advised that the SPAAR competition calendar has been posted on our website.

High Power: Ed Miller reported that there is a high power launch in Maryland this weekend [March 9/10]; also, an article that he wrote for *High Power Rocketry* magazine about a trip he and others took to the Kennedy Space Center last year has been published.

Continued on Page 8

SCIENCE FAIR PROJECT

By Mark Beever, NAR 78630

PURPOSE

The purpose of my project is to exhibit the similarities in preparing fragile organisms, such as human beings and a hen's egg for rocket flight.

Just as NASA prepares men and spacecraft for flight into space and returning them safely, I intend to show how to prepare a fragile hen's egg for rocket flight and to return it safely, and unbroken.

PROCEDURE

I will construct a model rocket capable of carrying a hen's egg. This model rocket is commercially available and was purchased at a local hobby shop.

In order to get the egg back intact, I will construct and use a recovery device, such as a parachute. The parachute is specially constructed so the weight of the egg will not damage the parachute, and thereby damaging the egg.

A goal of my project is to prevent the egg from damage during the powered portion of the flight, the deployment of the parachute, and the landing. I intend to use several methods of padding the inside of the egg's capsule. I plan to launch the egg four times, and on the fourth flight, I will use no padding at all and see how the egg is affected.

MATERIALS

The materials I used in conducting this experiment were:

1. One Grade A Large hen's egg.
4. Recovery devices - two parachutes, 24 inches in diameter.
5. Plastic sandwich bag.
6. Styrofoam packing "peanuts".



7. Styrofoam egg carton.
8. Paper egg carton.
9. Model rocket launch system.
10. Two foam rubber pads, approximately 1" X 2".

I conducted my experimental flights on Sunday, March 3, 2002. The flights were conducted at Co-calico High School, in Denver Pennsylvania. I conducted the flights as part of the monthly rocket launch of SPAAR, the Southern Pennsylvania area association of rocketry, a club that I am a member of. The temperatures that afternoon were in the low fifties. The winds were from the southeast and blowing at about 24mph. The gust was over 35mph. There was a threat of rain. Our club safety rules prohibit flying in winds over 25mph. On the first flight, the egg was placed inside a plastic sandwich bag just in case it broke. I used this on all flights. For cushioning, I used the two foam rubber pads and two pieces of the paper egg carton. The recovery device was a thin plastic parachute, which I got from a toy paratrooper. It was an eight-sided, 24-inch parachute. I modified this parachute for this project. The motor that I used for all flights was an Estes C6-3. This motor boosted the rocket and the egg payload to an altitude of about 250 feet. Deployment of the parachute was successful. The egg came back undamaged.

For the second flight, I used the same parachute. For padding, I used Styrofoam packing peanuts. Everything was the same as on the first flight, including the result.

For the third flight, I used an identical sized parachute that I made out of a plastic drycleaner bag. For padding, I used pieces of the Styrofoam egg carton. The result was the same as the two previous flights, the egg was undamaged.

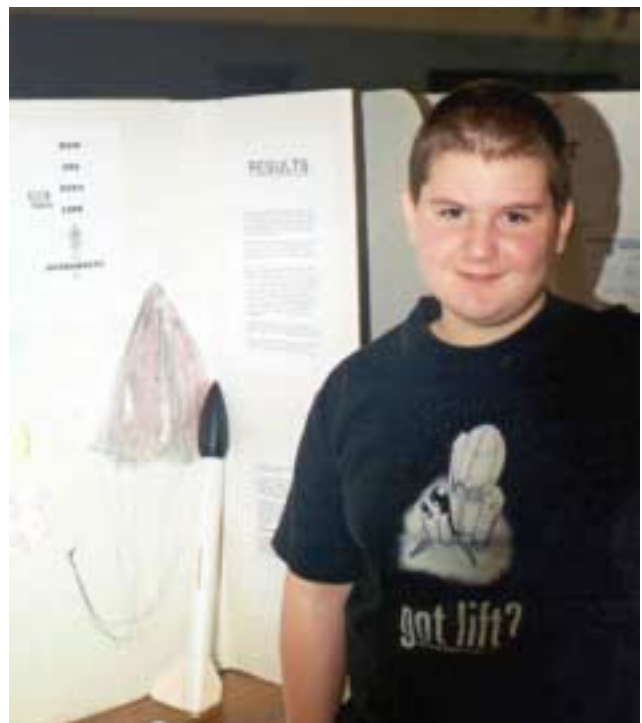
For the fourth and final flight, I used the same parachute as in flight #3. On this flight, I used no pad-

to see if the egg would still come down intact. In spite of the fact that I used no padding, the egg returned safely with no damage.

A note about the parachutes used in this project - for extra strength the shroud lines, or strings, were taped over the parachute canopy. This strength was needed because the weight of the egg in the capsule, upon ejection, might tear the parachute.

CONCLUSIONS

I concluded that it is possible to prepare an egg for rocket flight, just as NASA prepares its astronauts for space flight. Even though an egg is a fragile organism, like a human being, it is possible to prepare both for the rigors of rocket flight.



"Hey, my old man is the newsletter editor, so he can put me in here if he wants to." Mark Beever and his Science Fair display.

WHAT WAS YOUR FIRST ROCKET?

Continued from Page 1

Larry "Mr. Receipt" Gerlach writes:

"In response to your inquiry about our first rocket... back in 1968, my first rocket was, in fact, an Estes Alpha Surprise! The amazing thing is that I STILL HAVE IT. It's lacking 2 of the 3 fins and the balsa nose cone is rather dented. It has numerous layers of paint applied due to the fact that I changed my mind often as to its appearance. The body tube is in pretty good shape. I've been saying to myself regularly that I ought to refurbish it. Maybe I will???"

My second rocket (& most favorite) was the Big Bertha. I've flown it oodles of times...mostly with great success. It looks rather rugged with dents, dings, and pieced together fins. I'll fly it until I loose it! " *OK, guys, do we REALLY need to repeat the Big Bertha warning to Larry?*

"My first rocket was an Estes WAC Corporal from an add in Boys Life. \$2.00 got the kit and 2 motors, it is still flyable, many repairs though." — *Ivan Barnsley*

Ivan brings up a great point—how many hundreds and thousands of us can say we first heard about model rocketry in publications such as Boys Life? - Editor

Ed Miller reports that his first rocket was an Estes Astron Drifter. How about a 4X Up-Scale, Ed?..... Rick Hackman says the first rocket that he built was an Estes Aerobee 300, but the first one he flew was an Alpha. There's a story here somewhere, I'll bet....Mark Kamide says that he thinks his first rocket was an Alpha. [*Geez, I hope he was there- Editor*]

From Glenn Feveryear: "Actually, there were two first kits. They were the Centuri Excalibur and the Centuri Mercury Redstone, circa 1972. I guess it was the Excalibur that I flew first. Although, the Mercury

Redstone was the most memorable, as forgot to glue in the motor mount. It shot through the centering ring and lodged in the ejection baffle, burning a hole in the side of the body tube. But a box top from a Cheerios box and some Elmer's Glue fixed her right up." -*Gee, I thought I was the only one who did that kind of thing!*

As for me, believe it or not, my first rocket was the same as John Yost's, the Estes Astron Scout. I still remember my visit to the local hobby shop in the fall of 1968, when I plunked down my \$2.00, which got me the Scout kit [.70], a tube of 1/2A6-2 motors [.70], a launch rod [.25], and an Estes mail order catalog [.25], with change left over. The guy at the shop told us to use "model glue" - which to me was the glue for plastic models. I painted the body tube silver, the nose cone black, and the fin area red. By some strange coincidence, the buddy of mine who took the plunge into rocketry painted his Astron Scout in the exact same way, unbeknownst to each other.

We got together a few days later to fly these things, on a Thursday when we had off from school because of a teacher's meeting, whatever that was. We set up our home-made launcher [oh, OK, it was a hunk of wood with the launch rod stuck in it], slid one of the rockets on it, and.....and.....yes, we lit the fuse. THERE!!! I admit it! We used a fuse! Jetex wick, to be exact. Well, when that model took off, it took my breathe away—not just because of the rotten-egg smell, but the speed! I had no idea what to expect beforehand. It's an experience that we've all had and won't forget. And so I was hooked. Oh, and that "tumble recovery" system on that model? Right....let's call it what it was - CRASH recovery. Maybe that glue was the problem.....

SPAAR SPORT LAUNCH

March 7, 2002

We had a couple of special events going on during our March 7 Sport Launch. For starters, Mick Spencer brought with him a number of Cub Scouts from Den 1, Pack 190, out of Mechanicsburg, who were flying model rockets for the first time. We enjoyed being able to host the Scouts, and from what Mick reports, "Just wanted to say thanks again to everyone at today's launch. Both for hosting the Cubs and for all the help you gave them. Near as I can tell, the kids all had a great time." The good old Estes Alpha III appeared to be the model of choice, powered by an A8-3. The rather stiff breeze didn't dampen the Scout's enthusiasm!

Also, Mark Beever conducted four C-powered egglofter flights, as part of his school's Science Fair entry. Mark was comparing eggs to astronauts; his full report is elsewhere in this issue. As his father, I must admit I was somewhat amazed...even maybe a bit jealous. Mark made four perfect egglofting flights, with only damage to an egg was when he dropped one in the back of the old man's Jeep after his first flight [thank goodness for spare eggs]. With *my* track record with egglofting, there would have been eggs splattered all over the field.

Since Mick sponsored the Scout group, he of course had to show them a little bit of the, shall we say, higher end of model rocketry, by flying his scratchbuilt "*Whose Your Daddy?*" and Aerotech *Mirage* on G80 motors. Dale Greene's *Big Brute* got their attention too, on an F62 [not to mention everyone else's].

Mike Brubaker did not put a single model on the school roof this time around!!! He was tempted, however, to take Mark Kamide up on his suggestion that he simply walk over to the school and throw several of his nicest models up there—they'll get there anyway, so save the cost of the motors.

Larry Gerlach once again tempted fate by flying another one of his 1960's-vintage models—this time it was an old Estes *Constellation*. A lively debate ensued as to whether the model was of Estes or Centuri origin [it was Estes].

A lot of credit is due to guys like Mark Kamide, John Yost, Dale Greene, Mike Brubaker and Tony Rossi, who not only did all of the range work, but helped out with the Cub Scout group. Thanks guys!

BEST COMMENT OF THE DAY Award: To Larry Gerlach, who a nano-second before the motor ignited on a model, leaned over and said, "This one might be a wee bit tight on the rod" - and then hid behind the editor as the model in question left the pad with the launch rod in tow and got radar lock on the entire range crew.

BEST STORY OF THE DAY Award: Larry Gerlach, describing how he set his house on fire with an overloaded electrical outlet the evening of his return from a family trip to New York City. It was the funniest near-tragedy we heard about all day long.

BEST IMPERSONATION OF "THE ACCIDENTAL TOURIST": Once again it's Larry Gerlach in a clean sweep. To hear Larry's description of how he and his family ended up literally at "Ground Zero" in New York City while attempting to get to the Statue of Liberty, without being stopped once by anyone even resembling law enforcement was hysterical. With all due respect to those who lost their lives in the attacks of September 11, I am sure that they even got a chuckle out of this one.

You know, maybe we should just bag this rocket thing, and once a month just show up in the parking lot at Cocalico High School and tell stories!

FLIGHT LOG

March 7, 2002

Fl#	Name	Manu/Model	Motor/Motor	Result	
1	Mark Beever	Quest	Currier	Estes C6-3	Good Flight
2	Mark Beever	Quest	Currier	Estes C6-3	Good Flight
3	Mark Beever	Quest	Currier	Estes C6-3	Good Flight
4	Mark Beever	Quest	Currier	Estes C6-3	Good Flight
5	Mike Brubaker	Launch Pad	Phoenix	Estes D12-3	Good Flight
6	Mike Brubaker	Estes	Fat Boy	Estes D12-7	Good Flight
7	Mike Brubaker	Estes	Fat Boy	Estes C6-7	Good Flight
8	Larry Gerlach	Estes	Constellation	Estes B4-4	Good Flight
9	Larry Gerlach	Estes	Silver Comet	Estes D12-5	Good Flight
10	Dale Greene	Estes	Maxi-Alpha 3	Estes D12-5	Good Flight
11	Dale Greene	Estes/NCR	Big Brute	Estes F62-4	Good Flight
12	Rick Hackman	Scratch	Augie II	Estes A8-3	Good Flight
13	Rick Hackman	Scratch	Mars Snooper	Estes A8-3	Rocket Lok
14	Jon Spencer	Estes	Alpha III	Estes A8-3	Good Flight
15	Jon Spencer	Estes	Alpha III	Estes A8-3	Good Flight
16	Jon Spencer	Estes	Alpha III	Estes A8-3	Good Flight
17	Mick Spencer	Scratch	Who's Your Daddy?	AT G80-7	Good Flight
18	Mick Spencer	Scratch	Mirage	AT G80-7	Good Flight
19	Mick Spencer	Scratch	Code Orange	AT E15-7	Good Flight

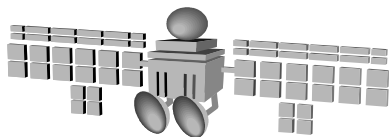
CUB SCOUTS

20	Alex Keefer	Estes	Alpha III	Estes A8-3	Good Flight
21	Town Mundorf	Estes	Banshee	Estes A8-3	Good Flight
22	Nicky White	Estes	Alpha III	Estes A8-3	Good Flight
23	Town Mundorf	Estes	Alpha III	Estes C6-5	Unknown
24	Town Mundorf	Estes	Banshee	Estes A8-3	Good Flight
25	Sawyer	Estes	Alpha III	Estes A8-3	Good Flight
26	Jordan Sweet	Estes	Alpha III	Estes A8-3	Good Flight
27	Nicky White	Estes	Alpha III	Estes A8-3	Good Flight
28	Alex Keefer	Estes	Alpha III	Estes A8-3	Good Flight
29	Town Mundorf	Estes	Banshee	Estes C6-5	Unstable
30	Jordan Sweet	Estes	Alpha III	Estes A8-3	Good Flight
31	Sawyer	Estes	Alpha III	Estes A8-3	Good Flight
32	Nick White	Estes	Alpha III	Estes A8-3	Good Flight
33	Alex Keefer	Estes	Alpha III	Estes A8-3	Good Flight
34	Jordan Sweet	Estes	Alpha III	Estes A8-3	Good Flight

SPAAR TO LAUNCH SATELLITE

WILL PROVIDE WEATHER FORECASTS FOR SPORT LAUNCHES

By John Yost



At the March SPAAR meeting a motion was made and passed that SPAAR members construct a bargain-basement, do-it-yourself satellite. The idea sprang from an Associated Press story last month of the PCSat or Prototype Communications Satellite built by students at the Navel Academy in Annapolis Md. For only \$50,000. The project was put together with the help of a Boeing Co. grant.

The SPAARSAT project will be underwritten by Nextlynk Communication and Thiokol, along with the entire SPAAR treasury, proceeds from various club fundraisers, and "voluntary donations" from each club member, according to SPAAR treasurer Larry Gerlach.

Donations of parts has already begun for the project by club member John Yost, who needed to clean out his basement and garage. The framework for the satellite is to be made from a discarded aluminum table graciously given by Dr. Simon at the February launch who stated, "It was broken anyway." Other components will be borrowed by club computer guru Tony Rossi from his employer or bought off-the-shelf, similar to the PCSat.

All SPAAR members are encouraged to do their part to help build what we hope will be the 45th amateur satellite to orbit the earth.

Section Meeting Minutes, from Page 3

to the Kennedy Space Center last year has been published. **Newsletter.** George asked for plans and articles. How innovative.

Old Business:

- John Yost updated everyone on his work on the second launch system.

- John then presented some information that he had obtained from Red Rose Signs on a club banner. After discussion, those present generally felt that purchasing a banner would be a good idea. John was asked to obtain additional information, and advise the club via the e-group.
- Larry Gerlach re-initiated discussion on the club information brochures. He made a motion, second by John Yost, to reimburse Gregg for copying/printing expenses. Motion carried.
- Gregg Martell inquired as to the status of the launch rail that was recently purchased. He volunteered to contact Mark Kamide, The Grand Keeper Of The Equipment, about it.
- Dale Greene reported on the club trip to the North Museum. Oh, OK, Dale was the only one who showed up, but he sure had a good time.

New Business:

- Larry Gerlach displayed a letter and a certificate from the American Red Cross recognizing SPAAR's donation in response to the 9/11 attacks.
- Larry will purchase nametags for the club identification cards.
- Tony Rossi advised that he will not be able to continue picking up the key for the meeting room from Apria. Larry Gerlach volunteered, with back-up from John Yost.

Note: At this point, your editor had to leave; Larry Gerlach provided the rest of the minutes. Thanks Larry!

- -Glenn reported his dilemma regarding obtaining prizes/awards for winners at RAMTEC. The cost of plaques, trophies, metals, etc...has increased dramatically. Funds are limited. Entrance fees to RAMTEC are already higher than other regional events (although RAMTEC is managed far superior

Section Meeting Minutes, from Page 9

- than other similar events). Perhaps SPAAR funds could be used to supplement the awards budget? Glenn will report at a subsequent meeting how he's making out and if he'll actually request a subsidy.
- Glenn reported that the SPAAR charter renewal fee is due at NAR. The necessary paperwork was submitted to the treasurer with the charge of paying it immediately... which he did later that same day.
- A question arose whether our May launch should be considered a "Section Meet" or just a "Sport Launch"? After much lively discussion regarding the club's schedule before and after this date...it was decided that the (all day) May launch will be considered a Sport Launch.
- The president (Dale Greene) encouraged anyone/ everyone to go along to NARCON in Texas in April. It's a high quality event that he wouldn't miss for the world. "Come on along!"
- Ed Miller then conducted a presentation all about monocothers. He had with him several mono's that he's made and flown over the years. They ranged in size from very small to very LARGE. Ed holds the world's record for successfully flying the largest monocoother ever. It that's not enough, he's working on plans for an even larger model...a wing length of 15 feet! Transportation seemed to be the biggest hurdle to overcome. The crowd was very impressed with Ed's knowledge and presentation. Ed assured us that monocoothering was a "black art" and that you learn by experience. Ed submitted handouts showing various methods of constructing and flying mono's...including safety procedures. Thanks Ed for all your time and effort put into this fine presentation.
- -Meeting adjourned around 11:00 a.m. with most of the members remaining in the room informally chatting about model rocket stuff.

BIG BERTHA SPORT PLAN

So, ya think the Estes Big Bertha is new, huh? That it always had a plastic nose cone, an engine hook, and a parachute kit—in fact, you think it always was a kit? Nope, the Bertha began life as a plan published by Estes around 1962. Check out the parts list—you had to make your own 'chute, and the only motor recommended was a B.8-2, today's B6-2!

“AAARRRGGGHHH Matey, let this be a lesson to ye—just when ye thinks its safe to go back inna the water, er, I mean, back out to the range, I’ll be awaitin’ fer ya!”



THE SOUTHERN PENNSYLVANIA AREA
ASSOCIATION OF ROCKETRY

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COUNTDOWN

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Taras N. Tataryn
CAR-S-0-3
NAR 10853
TRA 711
arg@look.ca