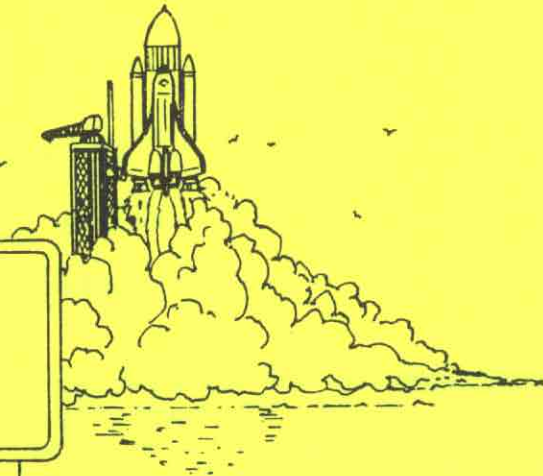


# COUNTDOWN



OFFICIAL NEWSLETTER OF  
THE SOUTHERN PENNSYLVANIA AREA ASSOCIATION OF ROCKETRY

VOLUME 7, ISSUE 5

SEPTEMBER/OCTOBER 1994

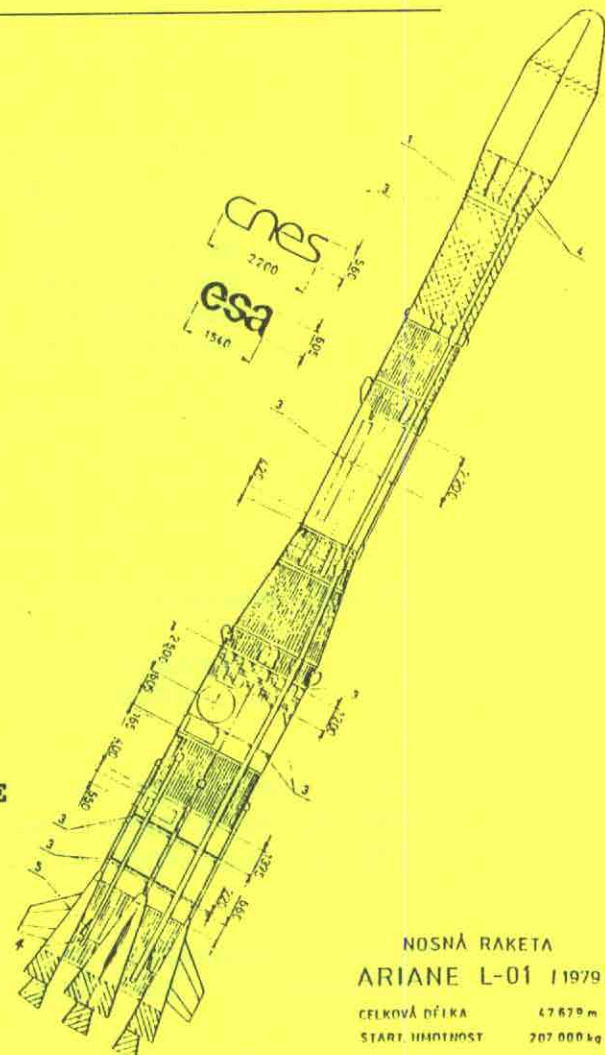
\* ROGER DWYER: CONFIRMED SIGHTINGS!

\* \* APOGEE COMPONENTS: SAY IT AIN'T SO, ED!

\* \* \* MEETINGS: A NEW LOCATION FOUND?

\* \* \* \* WHY WE NEED A SPACE PROGRAM

\* \* \* \* \* SPAAR SPORT LAUNCH & SPAARSEC-XI COVERAGE



NOSNÁ RAKETA  
ARIANE L-01 119791  
CELKOVÁ DÉLKA 47 679 m  
START. HMOTNOST 207 000 kg

**The Countdown**

Volume 7, Issue 5

September/October 1994

The **Countdown** is the newsletter of SPAAR, the Southern Pennsylvania Area Association Of Rocketry, NAR Section #503, PO Box 127, Reamstown, PA 17567, as well as of Tripoli Susquehanna/#71. Non-member subscription rate, \$6 per year, six issues. Please make all submissions to address above. Material may be used with proper credit. [as if anyone wants to]

Cover Logo: **Bob Stott** Jacket Design: **Bruce Canino** Editor: **George Beever**

Thanks This Time To:

Dan Weinhold & Glenn Feveryear

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**SCHEDULE**

**SUNDAY, NOVEMBER 13, 1994, 1PM-5PM, COCALICO HIGH SCHOOL:**

**SPAARSPAM-6 SPORT LAUNCH AND TAILGATE PICNIC  
EVENT: B CHILLOFT STREAMER SPOT LANDING**

**FRIDAY, NOVEMBER 18, 1994, 7PM - 9PM [TENTATIVE]: SECTION MEETING, HOMEDCO BUILDING, LANCASTER, PA. CONFIRMATION WILL BE SENT TO MEMBERS. SEE PAGE 14&15.**

**FRIDAY, NOVEMBER 25, 1994: SPORT LAUNCHES IN BELAIR, MD AND AT COCALICO HS. SEE PAGE 15 FOR DETAILS.**

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From the editor...

**SOME FACTS AND OPINIONS**

**He's baaaack...:** Sort of like The Creature From The Black Lagoon. I must admit that I have taken about a 4 month "sabbatical" from rocketry. Not by design, it just sort of happened that way. It started, I think, this past winter; I sort a' stumbled through RAMTEC, and it went downhill after that. In retrospect, I think that I needed to recharge my batteries. I rarely snuck down to the basement workshop, and when I did, everything just sort of stared back at me. I think that I did the last newsletter in my sleep [or maybe it just appeared that way]. I attended launches, but really didn't do much, except prang rockets. My interest hit an all-time low. But I'm back, like it or not. I'm not sure just what the wake-up call was; maybe it was a number of things, conversations, or whatever. So here goes:

**FACT:** It appears that SPAAR hasn't attracted too many new members lately.

**OPINION:** Actually, we've had two new members sign up within the past two months, and an old member has returned to the fold. **However,** I don't think that we've done enough to not only attract new members, but to keep them. I think that we've gotten away from some of things that helped us develop as a club in the late 80's. The good news is, at a recent

launch I did see one member [John Balmer] take a new member [Patrick Shinoda] under his wing and help him through some Saturn V flights. Thanks John.

**FACT:** It appears that we only have a small "core" group that can be relied upon to get things done.

**OPINION:** To a degree, true. It also appears that this is common with many clubs. But why is this? Maybe we've inadvertently excluded some members by giving off the impression that their help is not needed or wanted. Have we given off the impression that we feel that, if you aren't one of the oldtimers, your input isn't welcome? Maybe we have...

**FACT:** The NAR has problems.

**OPINION:** Oooh, a no-brainer here. The dues are too high, the organization appears to be unresponsive to it's member's needs and concerns, and the value of individual club's affiliation with it is being questioned.

I say that it is a good thing to question the status-quo. [I can't help it; I remember the 60's] But I do believe that we as a club should remain affiliated with a national organization, even if the benefits are sometimes hard to find. There's an old saying, that is so corny that I think

it was originally coined by a Lancaster County farmer, but it's still true: If you ain't part of the solution, you're part of the problem.

**FACT:** Estes doesn't need the NAR.

**OPINION:** Probably right. But...

This one goes back to a conversation that Mike Hellmund of Estes had with some members of the NARHAMS Section. The issue was this: Estes does about \$10 million in motor sales per year; according to them, the vast majority of these sales are to non-NAR affiliated organizations. So why should Estes have to produce motors which meet NAR standards? Why should they bother to submit them to NAR Standards and Testing? Bill Stine of Quest claims \$2 million in sales, with the same questions.

Personally, I think that one of the two most important things that the NAR does [insurance being one] is setting the standards for the model rocket motors that are made available to the consumer. Let me ask you: would you rather have the standards set by an outside agency made up of hobbyists, or by the guy who makes the product, who may be more concerned with profits and losses? Even if most of the motors sold in the US go to non-NAR affiliated clubs [and just how they came up with that one is anyone's guess], who do

you think set the standards over the years thereby ensuring a supply of safe, disposable consumer rocket motors?

**FACT:** Often heard whine: "Sport Rocketry isn't as good as the old Model Rocketry Magazine or even High Power Rocketry. There aren't any challenging technical or competition articles."

**OPINION:** So write one.

**FACT:** Ed LaCroix is "downsizing" Apogee Components. He is dropping his entire line of contest-oriented kits, parts, and related products, in order to concentrate on composite motors for the competition market.

**OPINION:** Say it ain't so, Ed! Let's face it - the vast majority of flyers do not fly competition anyway. The percentage of those who can afford to use composites is even smaller. Why make the market for your products even smaller, more exclusive? I don't get it. In fact, it was just a couple of years ago that Ed, along with QCR's Ken Brown and North Coast's Matt Steele were recognized by the NAR for making competition kits, parts, and motors available again to the general public. There are more than a few of us BARs who got into competition in the late 1980's because of the interest generated by QCR, NCR and Apogee. Well, thanks, Ed, a lot of us thought your stuff was great [and some didn't]. Well, we still have QCR....

**FACT:** Many people like to fly Flex-Wing Boost/Glider Duration.

**OPINION:** They are weird. Flex wings are evil. They first gained popularity in international competition in the 70's, when some eastern European teams [primarily Yugoslavia... gee, with their recent unpleasantness, need I say more?] started flying them in the S4 [boost/glider] events. There, they blew away the rigid, balsa winged gliders of the US and western European teams. They proved so controversial in NAR B/G events that a separate event [Flex-Wing B/G] was created for the wimpy little things. Generally, they are made of three sticks of wood, covered by a itty-bitty piece of dry-cleaner bag or mylar, and sent up with a booster rocket. Upon ejection, they spew forth, spread their wings, and soar off to glory. Don't you believe it! They are simply a left-over, Cold War inspired conspiracy to drive us otherwise well-adjusted rocket modelers to distraction. Mark my words! Real men fly balsa, which is wood, as in found in nature [where do you find mylar in nature?]. We fly things like **Rocket-gliders**, which even sounds like a man-thing. **ROCKET GLIDERS**. Keeps it's motor with it! Made of wood! As Dale Greene observed a while ago, Real Men fly Giant Sport Scale, Real Men don't fly "Flexies". Sounds so cute... "flexies". As you may have guessed, I've never gotten one of the stupid things to work. But it's not my

fault!

Tune in next issue when I rant and rave about the wickedness of SuperRocs!

**FACT:** The FAA recently revised it's regulations regarding rockets. You may now fly rockets up to 3.3 pounds without a waiver, providing that you notify your nearest Air Traffic Control Center [ATC] 24 to 72 hours prior to the launch.

**OPINION:** I give up. PLEASE, someone just tell me when, where, and how I can fly this stinkin' rocket! Let me see, over the past few years we've heard from the FAA, the BATF, the CPSC, the NTSB, the FCC and the DOT, not to mention the NAR and the TRA. We've dealt with the AMA, the FAI, and the SFA. What about the RAF? The CIA, the DIA, the NSA or the KGB? Surely the NFL or the CFL has to have a problem with rocketry somehow, somewhere! What about NASCAR and USAC? Do NCR, QCR, THOY, LOC, AAA, or FSI even talk to the FBI, IRS, or DOD?

**FACT:** There is a High Power launch scheduled in Culpeper, VA, over the weekend of November 19 & 20.

**OPINION:** If you've never gone to one of these launches, you really should consider the trip. Guaranteed, your chin will get scraped as your jaw keeps dropping.

**PROMISE:** Responses to this column will be printed!

SPAAR Sport Launches:

ALL OR NOTHING

August 7, 1994

**Seems Like Old Times**

Every year, it seems, we have at least one Sport Launch that is attended by a huge number of people. "Who is that?" is heard quite a bit. Such was August 7. A total of 26 different flyers flew that day, and many were accompanied by friends or family. By the time the launch was over, a total of 96 flights were made.

Our newest member, Patrick Shinoda, flew his Estes Phoenix twice on Estes E15 motors for great flights. Dave Bender flew his usual selection of oldies, including Ed Miller's old 1989-vintage "Air Mail", made out of mailing tubes. It would be interesting to see how many flights that this old bird has made. It flew great on an Aerotech F24 reload, one of the neater sounding motors on the market.

Dale Greene, making his return from NARAM-37, spent most of his afternoon serving as LCO. He only got to make one flight, but it was a good one. He flew his Das Now Blue Max on an Aerotech G64 reload. It was a beautiful flight, and John Balmer made a big-league catch on it to prevent some parking lot damage.

Bill Schafer of Designex Corp. flew some home-brews like the "Miami Spice", "M84", and "SST-

92", all for good flights.

The Gardei family flew the most, with over 20 flights between them and their friends. Doug flew an nice Estes Jayhawk twice, and his Aerotech Strong ARM flew well on an F24-7RMS motor. He did spend a bit of time looking for the pieces of his Estes Klingon Battlecruiser, after it shredded under the power of an Aerotech D13. A little too much horsepower for all of those doo-dads. Doug also experienced a weird CATO with a G64RMS in his North Coast Phantom 4000. The model just barely cleared the rod before the motor shut down. Believe it or not, the eagle-eyed guys out on the trackers actually managed to get a closed track, too!

Ed Miller got a very successful flight out of his Monocopter design, using an Aerotech E15. The culmination of a long project. The Tarsis, Tekyon, and Hyperon all roared off the pads as well. Ed's most ambitious flight was one called "Sonic Shock", a minimum diameter design powered by an F55-12 Blue Thunder motor. Unfortunately, no amount of epoxy, even by Ed's standard's, could hold the Sonic Shock together. It was neat while it lasted though!

The Rubright family and friends

flew a wide selection of models, mostly Estes kits or home brews using Estes parts. All made good flights, and it looked like the kids had fun. Oh, OK, so did their dads.

The Yost family was there in force, John, Deb, and both Dan and Derek. The guys all flew models. Nice to see ya, Deb!

The Fabulous Flying Feveryear Family was there in force, too. Dad Glenn tested a couple of contest birds, and then flew his LOC Onyx with an Aerotech E15 for a pretty flight. Uncle Gary made another impressive flight with his North Coast Big Brute with a G64 reload. That model and that particular reload were made for each other. Son Daniel "Say Cheese" Feveryear made some more Astrocam flights, and sister Renee glided around with her M2F2 Space Camel.

John Balmer also took some Astrocam photos, too. He then flew his AAA Pennsylvania Crude with an F25 that headed for the dreaded corn field. I honestly do not know if he got it back. Hope so!

Rick Hackman outdid even himself in the "Agrarian Rocketry" department, with his 2-stage version of "The Stalk". Yes, this is really made from corn stalks. What else could you expect from Lancaster County? He also got yet another neat flight out of his XR-49.

George Beever got nice flights out of his MRED Primero [F25-6WL], Estes Pathfinder [D12-7], and Cherokee-D clone [C6-

5]. He also got a spectacular twin-engine CATO when both Estes E15-8's blew in his Patriot. Too bad the video cameras weren't rolling!

It was John Balmer, however, who saved the best for last. Literally. The last flight of the day was his "AR-2B". John modified a US Rockets AeroRoc kit to fly with CB transmitter electronics payload. The model flew great, boosted by an F50-4 in the first stage and a E30-7 in the upper stage. Maybe we can talk John into giving us a presentation on his various electronic payload projects at one our Winter Workshops. [Yes, that is a hint.]

-----  
**September 4, 1994**

**Who says Estes E15s are a problem?**

After the SPAARSEC-11 Section Meet, there was still plenty of time for sport flying. Our newest member, Patrick Shinoda, took advantage. Patrick flew his Estes Saturn V three times on Estes E15-4s, without a problem. All were great flights. Congratulations, Patrick!

Bruce Canino snuck across the border from New Jersey, and had an absolutely great flight with his Aerotech IQSY Tomahawk on an F25-6 White Lightning.

Ed Miller had one of those Good Day/Bad Day things going. His FSI Hercules flew great on an F100, and his Monocopter was very impressive on a G12

reload, but then some bad luck set in. There were some frustrating ignition problem with some 18mm reloads. A Quest Nike-Smoke went unstable with a B6-4 RMS, and his Estes Patriot pranged after a great flight with a D13 reload. Apparently the ejection charged failed. The core engine on his NCR Mini-Katana [an Aerotech E30] failed to ignite, and the model was damaged upon landing. Ed's FSI Intrepid temporarily hung itself up on a power line before it freed itself. We all have those kinds of days, Ed, believe me!

John Yost flew his beautiful LOC Onyx on an Aerotech E15-4 White Lightning. Even though it weathercocked a little, it turned in a great flight. John also flew his Aerotech Mustang on an Estes D12 for a nice flight.

Rick Hackman resurrected his XR-61 [The Big Green Thing] from the ashes of last year's body tube burn-through. It flies OK on a D12, but is much more interesting on an FSI E5. Sort of just grunts into the air. Nice flight, Rick!

Bill Rhoat thought he'd lost his Custom Rockets "Sport" on a B4-6, but we got it back for him.

George Beever flew an MRC AGM-78 on an Aerotech D21-7. A rather interesting flight, which ended up on the roof of the school. It, along with two competition models from SPAARSEC-11 were recovered by the school janitor the next day and returned. Thanks!

Kathryn Shinoda, Patrick's sister, flew an Estes Bailout kit for a nice flight, and John Balmer flew his Estes Astrocam on some more recon flights. Hope the pictures turned out OK!

**October 9, 1994**

**Who says it's too windy?**

The Sport Launch that was scheduled for September 24 was a wash-out because of wind. The wind on October 9 was actually worse, because it was steady. Too bad! We were there to fly rockets, and fly we did! Only 11 flights, but all things considered, pretty good.

Roger Dwyer put up a QCR Helicopter Duration model with a B6-2, which had a very straight boost in spite of the wind. The model was lost from sight after more than 90 seconds, and was not recovered. Roger also flew a Little Joe II with an inside-out parachute, and despite predictions that it would fly backwards, did not.

John Yost flew a 15-year old Estes Big Bertha on a C5-3 for a good flight. Why a C5-3? Because that's the motor that was in the model for, oh, gee, who knows how long?

Mark Beever got a good flight out of his Quest Falcon and a B6-4, but then lost it in the dreaded corn field on a C6-5. Ok, so it was Dad's idea to tempt fate and the winds with the more powerful motor. Ooops.

Rick Hackman flew UFO's, both of the Estes and Ed Miller variety, for good flights.



FLIGHT LOG

August 7, 1994

<u>#</u>	<u>FLYER</u>	<u>MODEL</u>	<u>MANUF</u>	<u>MOTOR[S]</u>	<u>RESULT</u>
1	Joe Engle	Scout III	Estes	E A10-3	Good Flight
2	Joe Engle	Space Racer	Estes	E A10-3	No Chute
3	Renee F	Space Camel	M2F2	E C6-0	Good Flight
4	Daniel F	Astrocarn	Estes	E C6-7	Good Flight
5	Daniel F	Astrocarn	Estes	E C6-7	Good Flight
6	Daniel F	Astrocarn	Estes	AT D21-7T	Good Flight
7	Cris Spicer	NASP	Estes	E C6-5	Good Flight
8	Cris Spicer	Rascal	Estes	E C6-5	Good Flight
9	Nathan Minnich	Saturn 1B	Estes	E D12-3	Good Flight
10	Nathan Minnich	Ninja	Estes	E A3-4	Good Flight
11	Nathan Minnich	Saturn 1B	Estes	E D12-3	Good Flight
12	Nathan Minnich	Ninja	Estes	E A3-4	Good Flight
13	Nathan Minnich	Ninja	Estes	E 1/2A3-?	Good Flight
14	Nathan Minnich	Saturn 1B	Estes	E D12-3	Good Flight
15	Dave Tabbutt	Atmos. Research ?		E B6-2	Good Flight
16	Dave Tabutt	Atmos. Research ?		E B6-2	Good Flight
17	Brandon Tabutt	Dark Star	Estes	E C6-3	Good Flight
18	Brandon Tabutt	Big Bertha	Estes	E C6-3	Good Flight
19	Brandon Tabutt	Big Bertha	Estes	E C6-5	Good Flight
20	Kevin Tabutt	NASA/USA	SB	E C6-3	Good Flight
21	Kevin Tabutt	NASA/USA	SB	E B6-4	Good Flight
22	Josh Rubright	Rampage	Estes	E B6-4	Good Flight
23	Josh Rubright	NASP	Estes	E C6-5	Good Flight
24	Derek Yost	Sizzler	Estes	E B6-4	Good Flight
25	Derek Yost	UFO	Ed Miller	E D12-3	Good Flight
26	Patrick Shinoda	Phoenix	Estes	E E15-4	Good Flight
27	Patrick Shinoda	Phoenix	Estes	E E15-4	Good Flight
28	Patrick Shinoda	Nova Payloader	Estes	E C6-7	Good Flight
29	Patrick Shinoda	CATO	Estes	E B6-0	Good Flight
30	Dave Bender	Air Mail	SB	AT F24-?RMS	Good Flight
31	Dave Bender	Sky Demon	Estes	E C6-0/C6-7	Good Flight
32	Dave Bender	Wizard	Estes	E A8-5	Good Flight
33	Dave Bender	Wizard	Estes	E C6-7	Good Flight
34	Dave Bender	Wizard	Estes	E B4-6	Good Flight
35	George Gardei	Yellow Jacket	Estes	E B6-4	Good Flight
36	George Gardei	Sky Winder	Estes	E C6-5	Good Flight
37	George Gardei	HV ARCAS	Aerotech	AT F25-?	Good Flight
38	Bill Schafer	Scamp	Estes	E B4-6	Good Flight
39	Bill Schafer	Miami Spice	SB	E D12-5	Good Flight
40	Bill Schafer	M84	SB	E C6-5	Good Flight
41	Bill Schafer	Sentinel	Estes	E C6-5	Good Flight
42	Bill Schafer	SST-92	SB	E D12-0/C6-7	Good Flight
43	Bill Schafer	A-7	SB	E D12-5 X 2	Good Flight

44	Gary Rubright	Nova Payloader	Estes	E B6-4	Good Flight
45	Gary Rubright	Nova Payloader	Estes	E C6-5	Good Flight
46	Alan Rubright	Magnum	Estes	E D12-0/B6-6	Good Flight
47	Alan Rubright	Magnum	Estes	E D12-0/C6-7	2nd st. CATO
48	Alan Rubright	Tornado	Estes	E 1/2A6-2	Good Flight
49	Alan Rubright	Delta Clipper	Estes	E D12-0/D12-7	Good Flight
50	Alan Rubright	Tornado	Estes	E 1/2A6-2	Good Flight
51	Dale Greene	Das Blue Max	ORI	AT G64-7RMS	Good Flight
52	Ed Miller	Monocopter 24-12	SB	AT E15-4WL	Good Flight
53	Ed Miller	Hyperon	SB	FSI F100-8 X 3	Good Flight
54	Ed Miller	Sonic Shock	SB	AT F55-12	Shred
55	Ed Miller	Tarsis	SB	AT G119-6WL	Good Flight
56	Ed Miller	Tekyon	SB	AT G64-4RMS	Good Flight
57	Ed Miller Warp	Drive Pahse II	SB	AT F25-12WL	Good Flight
58	John Yost	Mustang	Aerotech	E D12-3	Good Flight
59	John Balmer	Astrocam	Estes	E C6-7	Good Flight
60	John Balmer	Astrocam	Estes	E C6-7	Good Flight
61	John Balmer	Astrocam	Estes	E C6-7	Good Flight
62	John Balmer	PA Crude	AAA	AT F25-6WL	Good Flight
63	John Balmer	Astrocam	Estes	E C6-5	Good Flight
64	John Balmer	AR-2B	USR [mod]	AT F50-4/E30-7	Good Flight
65	Doug Gardei	Mini Shuttle	Estes	E B6-4	Good Flight
66	Doug Gardei	D S Transport	Estes	AT D13-4RMS	Good Flight
67	Doug Gardei	Klingon B/C	Estes	E C6-5	Good Flight
68	Doug Gardei	Jayhawk	Estes	E D12-3	Good Flight
69	Doug Gardei	Hercules	Estes	E B6-0/A8-5	Ejected mtr
70	Doug Gardei	Klingon B/C	Estes	AT D13-4RMS	Shred
71	Doug Gardei	Strong ARM	Aerotech	AT F40-7RMS	Good Flight
72	Doug Gardei	Commanche-3	Estes E	D12-0/B6-0/A8-5	Good Flight
73	Doug Gardei	Jayhawk	Estes	AT E18-4RMS	Good Flight
74	Doug Gardei	Fun Saver 35A	SB	AT F25-4WL	Good Flight
75	Doug Gardei	Patriot	Estes	E C6-5	Good Flight
76	Doug Gardei	Pegasus	Estes	E A8-5	Good Flight
77	Doug Gardei	Phantom 4000	NCR	AT G64-7RMS	CATO
78	Doug Gardei	Mini Cobra	Estes	E A10-3	Good Flight
79	Doug Gardei	Mini Patriot	Estes	E A10-3	Good Flight
80	Doug Gardei	Mustang	Aerotech	E D12-3	Good Flight
81	Rick Hackman	Thor	SB	E A8-3	No Chute
82	Rick Hackman	Nitro Roc	SB	E B8-5	Shred
83	Rick Hackman	Stalk	SB	E A8-3	Prang
84	Rick Hackman	XR-49	SB	E C6-3	Good Flight
85	Rick Hackman	Stalk 2	SB	E A8-3	Good Flight
86	Rick Hackman	Stalk 2	SB	E B6-0/1/2A6-2	Sep
87	Glenn F	Onyx	LOC	AT E15-4WL	Good Flight
88	Glenn F	A Payload	SB	E A3-4	Good Flight
89	Glenn F	C Eggloft Alt	SB	E C6-5	Good Flight
90	George Beever	Magnum	Estes	E D12-0/B6-6	Good Flight
91	George Beever	Patriot	Estes	E E15-8 X 2	CATO X 2
92	George Beever	Primero	MRED	AT F25-6WL	Good Flight
93	George Beever	Pathfinder	Estes	E D12-7	Good Flight
94	George Beever	Cherokee-D	SB	E C6-5	Good Flight

95	Gary F	Mega-Sizz	Estes	E D12-5	Good Flight
96	Gary F	Big Brute	NCR	AT G64-7RMS	Good Flight

FLIGHT STATISTICSModels Flown:

Estes:	41
LOC:	1
NCR:	2
MRED:	1
USR:	1
EM:	1
M2F2:	1
AAA:	1
ORI:	1
Aerotech:	4
Scratchbuilt:	21

Motor Usage:

Estes:	87
FSI:	3
AT SU:	12
AT RMS:	9

Motor Failures:

2 Estes E15-8 CATOs
1 Estes C6-7 CATO
1 Aerotech G64 RMS CATO

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September 4, 1994SPAARSEC-11 Sport Flights

1	Kathryn Shinoda	Bailout	Estes	E C6-7	OUCH!
2	Patrick Shinoda	Mosquito	Estes	E 1/2A3-4	Lost
3	Patrick Shinoda	Nova Payloader	Estes	E C6-7	Good Flight
4	Patrick Shinoda	Optima	Estes	E E15-4	Good Flight
5	Patrick Shinoda	Saturn V	Estes	E E15-4	Good Flight
6	Patrick Shinoda	Saturn V	Estes	E E15-4	Good Flight
7	Patrick Shinoda	Saturn V	Estes	E E15-4	Good Flight
8	John Balmer	Astrocam	Estes	E C6-5	Good Flight
9	John Balmer	Astrocam	Estes	E C6-5	Good Flight
10	John Balmer	Astrocam	Estes	E C6-5	Good Flight
11	Bruce Canino	IQSY T-hawk	Aerotech	AT F25-6WL	<b>Good Flight</b>
12	Bruce Canino	Omloid	Estes	E B6-2	Good Flight
13	Bruce Canino	Omloid	Estes	E C6-3	Good Flight
14	Ed Miller	Intrepid	FSI FSI	F100-6/D20-0[2]	Good Flight
15	Ed Miller	Hercules	FSI	FSI F100-6	Good Flight
16	Ed Miller	Monocopter	SB	AT G12 RCT	Good Flight
17	Ed Miller	Nike Smoke	Quest	AT B6-4RMS	Unstable
18	Ed Miller	Patriot	Estes	AT D13-4RMS	Prang
19	Ed Miller	Mini-Katana	NCR AT	E30-4[1]/E C6[6]	1/2 GF
20	Ed Miller	UFO 24-10	SB	AT E30-4T	Good Flight
21	Rick Hackman	Thor	SB	E A8-3	Good Flight
22	Rick Hackman	Stalk	SB	E A8-3	Good Flight
23	Rick Hackman	Stalk	SB	E A8-3	Good Flight
24	Rick Hackman	XR-72	SB	E A8-3	Good Flight
25	Rick Hackman	Nitro Roc	SB	E B4-4	Good Flight
26	Rick Hackman	XR-49	SB	E C6-3	Good Flight

27	Rick Hackman	XR-55	SB	E C6-3	Good Flight
28	Rick Hackman	UFO-24	EM	E D12-3	Good Flight
29	Rick Hackman	XR-61	SB	E D12-3	Good Flight
30	Rick Hackman	XR-61	SB	FSI E5-4	Good Flight
31	John Yost	Mustang	Aerotech	E D12-3	Good Flight
32	John Yost	Onyx	LOC	AR E15-4WL	Good Flight
33	Bill Rhoat	Sport	Custom	E B4-6	Good Flight
34	George Beever	Lil' Nuke	LOC	AT F25-9WL	Good Flight
35	George Beever	AGM-78	MRC	AT D21-7T	Good Flight
36	George Beever	Falcon	Quest	E B6-4	Good Flight

### FLIGHT STATISTICS

#### Models flown:

Estes:	8
Aerotech:	2
NCR:	1
LOC:	2
Custom Rockets:	1
Quest:	2
FSI:	2
Ed Miller:	2
Scratchbuilt:	7

#### Motor Usage:

Estes:	30
FSI:	5
AT SU:	5
AT RMS:	3

Motor Failures: 0

### **October 9, 1994**

1	Rick Hackman	UFO-24	Ed Miller	E D12-3	Good Flight
2	Rick Hackman	Flying Saucer	Estes	E C6-0	Good Flight
3	Rick Hackman	Tornado	Estes	E 1/2A6-2	Good Flight
4	Rick Hackman	Flying Saucer	Estes	E B4-2	Good Flight
5	Rick Hackman	Birdie	Ed Miller	E 1/2A3-4	Good Flight
6	John Yost	Big Bertha	Estes	E C5-3	Good Flight
7	Mark Beever	Falcon	Quest	E B8-5	Good Flight
8	Mark Beever	Falcon	Quest	E C6-5	Lost
9	Mark Beever	Athena	Estes	E A8-5	Good Flight
10	Roger Dwyer	Little Joe II	Estes	E 1/2A3-2	Good Flight
11	Roger Dwyer	B Helicopter	QCR	E B6-2	90sec+/NR

### LAUNCH STATISTICS

#### Models Flown:

Estes:	5
QCR:	1
Ed Miller:	2
Quest:	1

#### Motor Usage:

Estes:	11
Motor Failures:	0

**SOUTHERN PENNSYLVANIA AREA ASSOCIATION OF ROCKETRY**  
SECTION 503  
**SPAARSEC-11 RESULTS**

1/2A HD Multi (sec)	FLHT1	FLHT2	FLHT3	FINAL	PLACE	POINTS
Gary Feveryear	27.72	ROT	22.49	50	2	138
Glenn Feveryear	25.16	37.02	ROT	62	1	230
Renee Feveryear	24.11	25.47	-	49	3	92
Flirtin' w/Disaster	EJ	15.58	19.77	36	4	46

B SR ALT (points)	LENGTH	FLHT1	FLHT2	FINAL	PLACE	POINTS
(1) Gary Feveryear	200	132.7m	-	865	1	150
Glenn Feveryear	200	99.5m	-	799	3	60
(8) Flirtin' w/Disaster	200	115.8m	-	832	2	90

A Payload ALT (meters)	FLHT1	FLHT2	FINAL	PLACE	POINTS
Gary Feveryear	85.11	-	85	2	96
(2) Glenn Feveryear	73.50	110.90	111	1	160
(4) Renee Feveryear	17.28	28.67	29	4	32
(3) Flirtin' w/Disaster	81.80	-	82	3	64

C Eggloft ALT (meters)	FLHT1	FLHT2	FINAL	PLACE	POINTS
(5) Gary Feveryear	EGG	172.6	173	1	180
Glenn Feveryear	119.8	157.4	157	2	108
(6) Renee Feveryear	144.5	134.4	145	3	72
(7) Flirtin' w/Disaster	140.9	-	141	4	36

**FINAL POINTS**

Gary Feveryear	564
Glenn Feveryear	558
Renee Feveryear	196
Flirtin'w/Disaster	236

**LEGEND:**

ROT - DQ, No Rotation  
EGG - DQ, Broken Egg  
EJ - DQ, Engine Eject

Total: 1554

**Tracking statistics**

20 Track Flights  
1 Track Lost  
5.35% Avg Closure using Vertical Midpoint  
3.75% Avg Closure using Geodesic

**SPAAR Records**

- |  |  |
|--|--|
| (1) B SrAlt, C Div @ 865 pts<br>No Previous Record<br>**Pending U.S. Record**<br>Surpassed, T. Whymark 834 pts | (5) C ELA C, Div @ 172.6 meters<br>Surpassed, Glenn Feveryear 118.2m                                 |
| (2) A PALT, C Div @ 110.9m<br>Surpassed, John Yost 61.0m   | (6) C ELA, A Div @ 144.5 meters<br>No Previous Record  |
| (3) A PALT, T Div @ 82m<br>** Pending U.S. Record**<br>No Previous Record                                      | (7) C ELA, T Div @ 141 meters<br>No Previous Record<br>**Pending U.S. Record**<br>No Previous Record |
| (4) A PALT, A Div @ 28.67m<br>No Previous Record   | (8) B SrAlt, T Div @ 832 pts<br>**Pending U.S. Record**<br>No Previous Record                        |

**SECTION NEWS NOTES**

**Welcome back!!**: Over the past couple of years, we've had numerous unconfirmed sightings over Roger Dwyer... Roger flying High Power at Culpeper; Roger flying competition with NOVAAR; Roger conducting workshop on helicopter duration; Roger giving a talk on his full-scale Loki-Dart. We even got a letter from Roger this past winter, telling us not to worry, all was fine.

Well, we're glad to say that Roger is back in the fold with SPAAR, having moved back to the Newtown Square area from Culpeper. Roger has made it out to the last two launches, despite the bad weather.

**Welcome back, Roger!!!**

-----

**New Members**: Along with Roger's return, we're glad to introduce our two newest members:

**Patrick Shinoda**  
**209 Oxford Rd.**  
**West Chester, PA 19380**  
**[610] 436-1827**  
**age 12**

**-and-**

**Darrell C. Asper Jr.**  
**11 North Camp St.**  
**Windsor, PA 17366**  
**[717] 246-9615**  
**age 25**

Patrick has already made it out to a couple of launches, and we

hope to see Darrell soon.  
**Welcome!!**

-----

**SPAARSPAM - 6**: Is scheduled for **Sunday, November 13**. See enclosed flyer for details on the eats.

As for the "event" that we fly every year, how about...

**B CHILI-LOFT STREAMER DURATION SPOT LANDING [?]**

**Rules**: You fill up an empty plastic 35mm film canister [provided] with chili [also provided]; fly it in a model with a B motor, streamer recovery; time the duration; measure in feet, the distance from the spot; subtract the distance in feet from the duration in seconds, and the highest score is the winner, **PROVIDING** that the chili is still warm enough to give off visible steam upon return. Then, in order to qualify, the flyer must eat the chili, or at least give it a decent attempt.

**THERE WILL BE PRIZES!!!**

-----

**Club Meetings**: Glenn and Rita Feveryear have graciously invited us to their house on **Saturday, December 10, at 6PM**. See page 18 for more information.

Also, Dan Weinhold is working on a possible meeting place in Lancaster. He tells us that the

HOMEDCO Building has a meeting room that they might make available to us.

**We have tentative plans to hold a club meeting there on FRIDAY, NOVEMBER 18, AT 7PM.** More information will be sent to our members as it becomes available.

Thanks, Dan, and let's hope that this works out.

-----  
**RAMTEC - 3:** Is scheduled for the weekend of June 10-11, 1995, in Center Valley. The events planned are:

**D Helicopter Duration**

**A Rocket/Glide [M]**

**A Helicopter Duration [M]**

**B Boost/Glide Duration [M]**

**1/2A Streamer Duration [M]**

As always, any and all help in the planning and operation of RAMTEC is welcome.

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**SPAAR FAMILY DINNER:** We hope to have our sixth annual SPAAR Family Dinner on Saturday, January 14 or Saturday, January 21, 1995. The location has yet to be determined.

-----  
**TAKE YOUR PICK:** Currently, there are plans to hold launches in two places on the

same day.

A launch is planned at the launch site in Belair, MD, on Friday, November 25, [the day after Thanksgiving] at 9AM. Call Glenn Feveryear at 717-456-5570.

On the same day, a waived launch will be held at Cocalico High School in Denver, time to be determined. Call Ed Miller at 717-865-6829.

-----  
**NARAM-37:** Will be held in Geneseo, NY, July 22-28, 1995.

Events

1/2A Altitude

1/2A Parachute Duration

A Boost/Glide Duration

A Flex/Wing Multi-Round

C Streamer Duration

C Eggloft Duration

D SuperRoc Duration

Giant Sport Scale  
[Div. B,C,T]

Peanut Sport Scale  
[Div. A]

Open Spot Landing

Research & Development

Sport Launch

# The Space Program Changed Life on Earth

By ANTHONY R. CURTIS

*Salisbury.*

Americans have been radiating pride for 25 years since Neil Armstrong walked on the moon, but the warm glow is cooling. If we want our children to know the same pride we feel, we need to start now on a return trip to the moon.

The Apollo astronaut took his "one small step for man" on July 20, 1969. For years after his "one giant leap for mankind," America was honored as the world's technology leader.

The Apollo achievements came at the right time to lift us from gloom. We were passing through a time of hot war and cold war, riots and political unrest, assassination and social change. Apollo let us turn away from trials and tribulations for a moment and look up triumphantly. We could see the moon and we could see men walking on the moon. What a boost for our spirits knowing we had sent men there, and it couldn't have come at a better time.

Unfortunately, millions of Americans born since we landed on the moon missed the thrill we savored as Apollo 11 touched down in the lunar dust. With economic growth slow and federal budgets tight, our space program is taking it on the chin. NASA has not been able to keep up with inflation.

Yet, without America's space program, we would not have the digital imaging processes widely used by doctors in CAT scans, ultrasound images, cardiac angiography and advanced X-rays. We wouldn't have the lasers used in everything from CD players to the treatment of millions suffering clogged arteries. We wouldn't have the ability to observe Earth from space, thus no weather satellites and no appreciation of ravaged rain forests.

Communication satellites are products of space research. With-

out them, no CNN, no HBO, no Nickelodeon, and no sinking ships rescued by satellite trackers.

Microminiaturization is a result of the Apollo program. That work led to small computers with enough memory to control a manned space flight. Now we all have them in our homes and cars.

The insulating cushion of Apollo boots is used in today's sneakers. Apollo's Saturn-V rocket contributed turbopumps used in high-speed crew boats and offshore drilling supply ships. Spacesuits led to the cool suits worn by race-car drivers in temperatures up to 130 degrees. People without sweat glands use the same cool suit to stay alive.

Premature babies are warmed in cradles developed from astronaut helmet face-plates. A NASA sun finder guides underwater gear locating black boxes after airplane crashes. Apollo research led to low-cost waste-water treatment for rural communities. A satellite wire braces kids' teeth. Another space spin-off, the bulletproof jacket, has saved thousands of policemen.



Paul Calle, "Astronaut Edward H. White, Gemini IV Pilot, Suiting Up" — National Aeronautics and Space Administration

You can't discount the force of competition which drove us to the moon. From the opening of the space age in 1957 there was one game, the Russian-American challenge. The Soviet Union scored points with numerous firsts — first man in space, first woman, first spacewalk, first rendezvous — but secrecy blocked world-wide respect. Our six manned landings on the moon, from 1969 to 1972, solidified America's image as the world's technology leader.

We don't have the Soviet Union to kick around any more, so global competition no longer drives our space program. And there is tough competition for every federal dollar. But the U.S. space program is worth fighting for. It serves our practical needs for defense conversion, science training and math education, new investment and global economic competition, even environmental protection.

Space also offers us hope and invites our dreams. Our work in space underscores our historic American identity as explorers, dis-

coverers and adventurers. "Not unlike earthbound explorers and adventurers before us, we search for yet-unknown treasures and try to unlock and understand the mysteries of nature," the second man on the Moon, Buzz Aldrin, has said. "It is inherent in our kind to strive for a better understanding of life and a richer source of understanding."

The last man on the moon, Gene Cernan, has said, "The spirit of Apollo [is] the legacy of this country. It's the spirit of Apollo that will take us back to the moon and to Mars."

If we abandon space we will become second-rate in our own eyes, in the eyes of the world, and in the eyes of our children.

We must not only keep up, but move ahead toward the triumphs of the future. We must set goals and build as our experience exploring the unknown. We must return to the moon and head on out to Mars.

Anthony R. Curtis is a science writer and journalism instructor at Salisbury State University.



# SPARRSPAM-VI

WHEN: NOV 13, 1994 1 TO 5PM

WHERE: COCALICO HIGH SCHOOL

WHAT IS IT? OUR ANNUAL TAILGATE  
POTLUCK

PLEASE BRING:

\*\*\* FOOD TO SHARE---

A MAIN DISH AND  
A DESSERT

\*\*\* DRINK TO SHARE--

SODA, ICE TEA, ETC

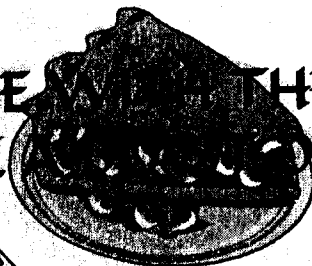
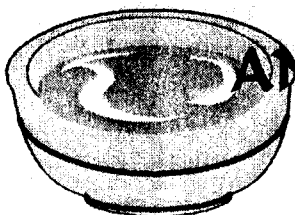
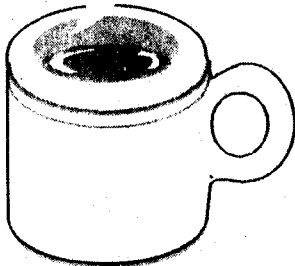
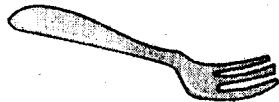
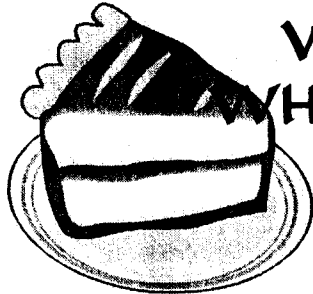
\*\*\*\* FOR YOU AND YOURS--

YOUR OWN EATING  
UTENSILS, PLATES,  
BOWLS [FOR THE  
BEEVER'S CHILI]

CUPS, NAPKINS

BLANKET OR CHAIRS

SPECIAL EVENT: TBA



SO COME WITH THE FAMILY  
AND HAVE A DAY!

# SPARR MEETING AT FEVEREAR'S

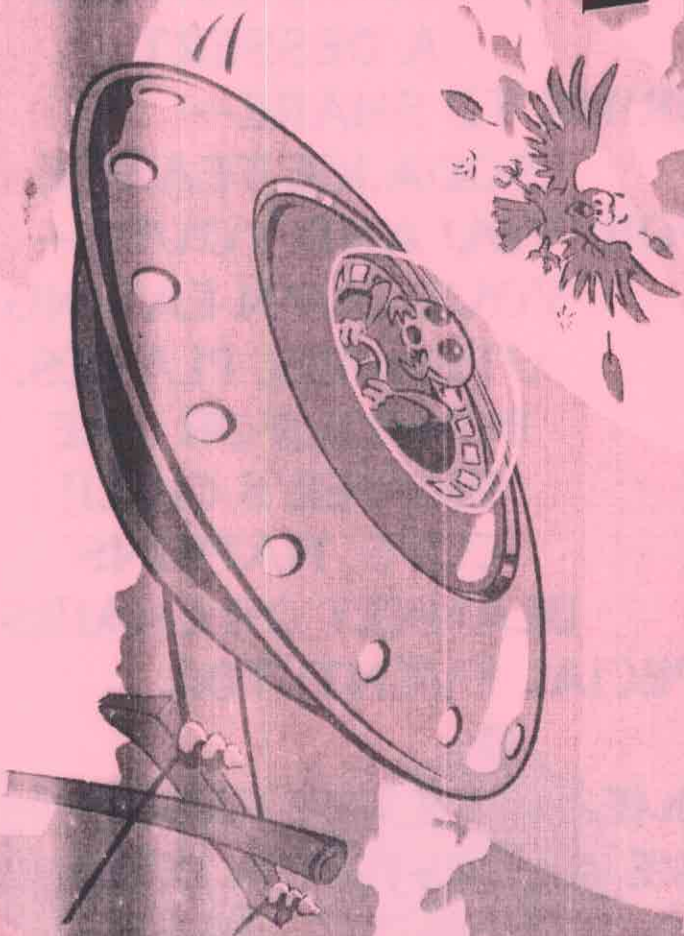
**WHERE: 701 MAIN ST. DELTA, PA**

**WHAT: MEETING & ELECTION**

**WHEN: SAT. DEC 10th 6:00pm**

**QUESTIONS? CALL GLENN**

**717-456-5570**



THE SOUTHERN PENNSYLVANIA AREA ASSOCIATION OF ROCKETRY

Membership Application

Name \_\_\_\_\_ Address \_\_\_\_\_

Phone \_\_\_\_\_ Age \_\_\_\_\_ Date of Birth \_\_\_\_\_

NAR # \_\_\_\_\_ Tripoli # \_\_\_\_\_

I have been flying rockets for \_\_\_\_\_ years. I have not yet flown a model rocket \_\_\_\_\_.

DUES: 18 years of age or older: \$10 per year.

15,16,17 years of age: \$7 per year.

16 and under: \$5 per year

Family Plan: Oldest member joins at full price, all other family members 1/2 price; one issue of the Countdown per family.

Return this form to: SPAAR, PO Box 127, Reamstown, PA 17567.

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THE NATIONAL ASSOCIATION OF ROCKETRY

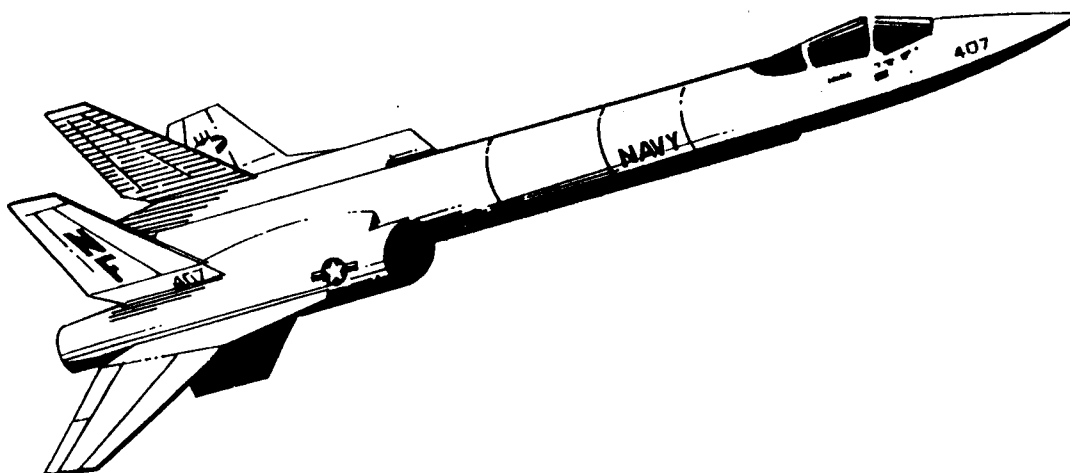
For more information on the NAR, write:

NAR Headquarters  
PO Box 177  
Altoona, WI 54720  
1-800-262-4872

TRIPOLI ROCKETRY ASSOCIATION [HIGH POWER ROCKETRY]

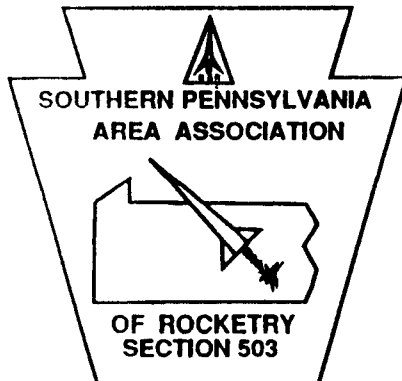
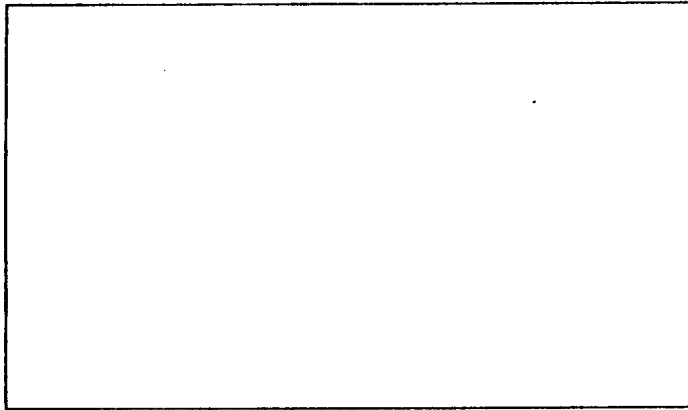
For more information on the TRA, write:

Tripoli Rocketry Assn.  
PO Box 339  
Kenner, LA 70063-0339



SPAAR  
P.O. Box 127  
Reamstown, PA. 17567

**TO:**



**SOUTHERN PENNSYLVANIA  
AREA ASSOCIATION  
OF ROCKETRY**

PROMOTING SAFE MODEL ROCKETRY  
IN SOUTHERN PENNSYLVANIA  
AND NORTHERN MARYLAND



*The Southern Pennsylvania Area  
Association of Rocketry*

**COUNTDOWN**