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THE SOUTHERN PENNSYLVANIA AREA ASSOCIATION OF ROCKETRY

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THE ANNUAL



ALMANAC ISSUE

The **Countdown**

Volume 8, Issue 1

January/February 1995

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:

Mr. Unisys

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SCHEDULE

FRIDAY, MARCH 17, 7:00 PM - 9:00 PM: SPAAR SECTION BUSINESS MEETING, HOMEDCO COMMUNITY ROOM, HARRISBURG AVE., LANCASTER. CALL GEORGE BEEVER AT 717-733-4170 FOR DIRECTIONS.

SUNDAY, MARCH 19, 1PM - 5PM: SPAAR SPORT LAUNCH, COCALICO HIGH SCHOOL, DENVER, PA. *** LUCKY ROCKET DAY ***

SATURDAY, MARCH 25, 9AM - 1PM: SPAAR WINTER WORKSHOP, DELTA FIRE COMPANY, DELTA, PA. *** WORK ON WATCHA' BRUNG ***

SUNDAY, APRIL 9, 1PM - 5PM: SPAAR SPORT LAUNCH, COCALICO HIGH SCHOOL, DENVER, PA.

*** **CLUB LAUNCH SYSTEM AVAILABLE** ***

FROM THE EDITOR....

First of all, sorry once again that this is late.

Second, I'd like to use this issue to try to kill two birds with one stone.

The January/February issue is usually "the almanac issue", in which we list all of the launch statistics from the previous year, club records, a membership roster, and the like.

We've also received numerous requests lately for more information about SPAAR from prospective members. So, instead of coming up with two separate documents, I'll try to combine both.

For our existing members, some of this is old news. For the prospective members, here we go...

SPAAR was formed in May of 1988 by seven rocket nuts, of which six are still active members. We received our first Section Charter from the NAR in October of that year, as Section #503.

We've since grown to over 30 members, and there is always room for more!

We hold meetings once a month [the third Friday] at the HOMEDCO Community Room, 240 Harrisburg Ave., Lancaster, from 7PM to 9PM. Club business is attended to, followed by

general discussion. Members are encouraged to bring their latest project along to "show off". For directions to the HOMEDCO building, call me at [717] 733-4170, evenings before 9PM.

SPAAR's Sport Launches are held roughly once a month at Cocalico Senior High School in Denver. It is located near Exit 21 of the Pennsylvania Turnpike, and about halfway between Lancaster and Reading. A map is included elsewhere.

SPAAR also hosts three NAR sanctioned contests per year. On the Sunday of Memorial Day weekend, and again on Labor Day weekend, we hold Section Meets. These contests are for our club members only. In mid-June, we host the Regional Aerospace Meet To Encourage Competition, or RAMTEC. This year's RAMTEC-3 will be held over the weekend of June 10-11. This NAR Regional Meet draws competitors from all over the East Coast, and is held at Allentown College, Center Valley, PA., between Allentown and Quakertown. Sport flying is welcome. If you are new to the hobby, and want to know more about competition, contact our Competition Chairman Glenn Feveryear at [717] 456-5570.

Over the past few years, High Power rocketry has gained in popularity. SPAAR has two well-known members who have vast

experience in this field, Ed Miller and John Balmer [TRA #00047].

One of our goals has been to create a family atmosphere in our activities. To that end, SPAAR holds a Family Dinner in January, as well as a tailgate picnic and Sport Launch combined, called SPAARSPAM. This is held in early November.

Another goal is to maintain a club that has room for rocket modelers who enjoy all aspects of the hobby, whether it is competition, high power, or general sport flying. So far, the record speaks for itself.

Above all, our goal is safety. Models are checked by the Range Safety Officer prior to flight. Please don't take offense; we have a perfect safety record, and we want to keep it that way. If for some reason your model needs to be modified to make it safe, we'll help make it so.

So, if you are a prospective member, maybe just getting into the hobby, please check out the club's schedule and come on out. If you like what you see, please feel free to join up. Our dues are cheap, and they go mostly towards the newsletter and maintaining the club launch equipment. If you are a current member but haven't yet made it out to a launch, please make time to do so.

The good flying weather is just around the corner; come on out!

SECTION NEWS NOTES

SPAARSEC-XII: Our 12th Section Meet will be held on Sunday, May 28, from 9AM to 5PM. The events will be:

A Helicopter Duration, Multi

1/2A Super Roc Altitude

B Eggloft Altitude

D Streamer Duration

Open Spot Landing

CLUB OFFICERS: The election for club officers was held at the December meeting. The results:

President: Glenn Feveryear

Vice President: Dale Greene

Sec/Treasurer: Gary Feveryear

Member-at-Large: Rick Hackman

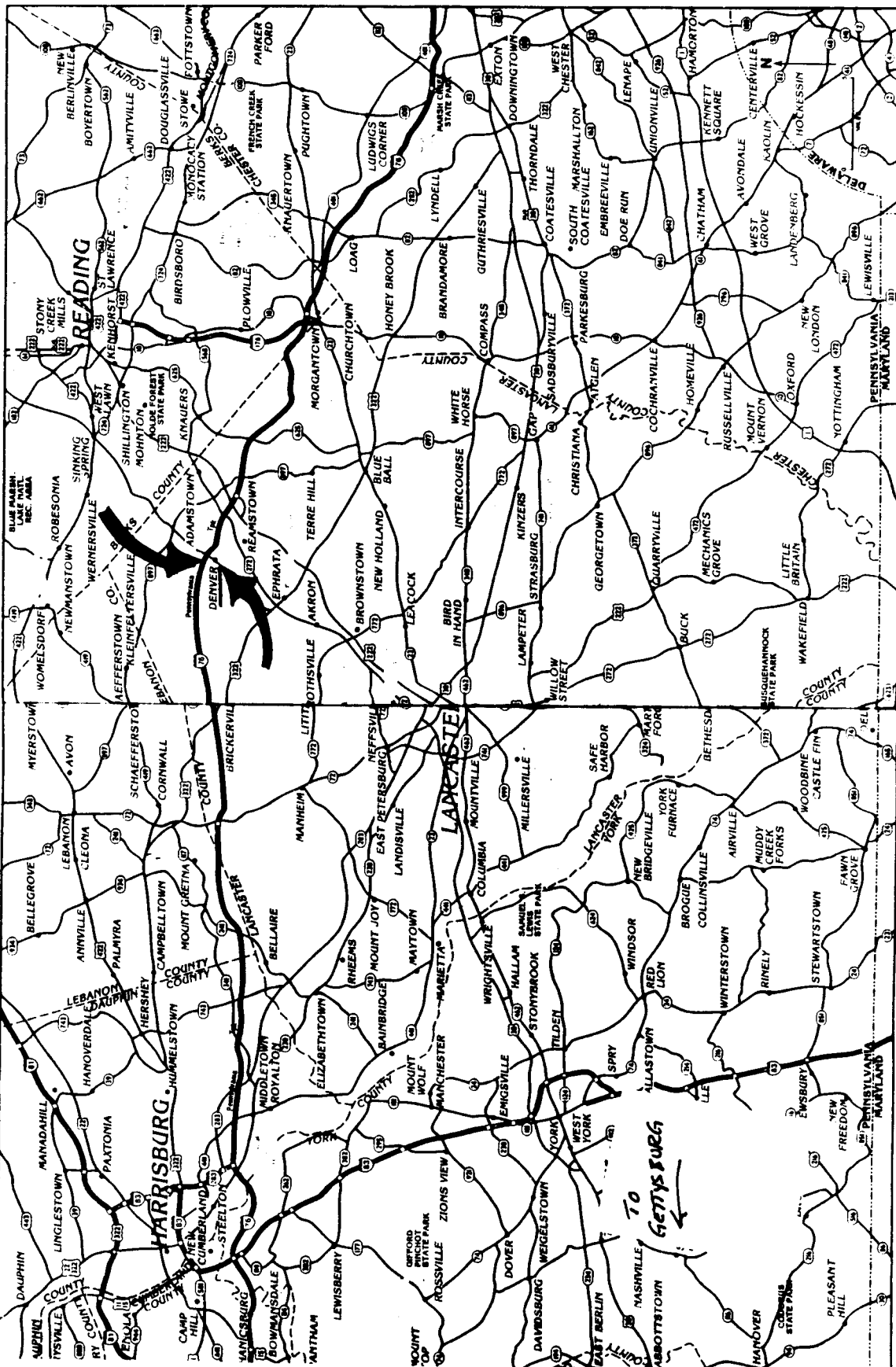
Section Advisor: George Beever

Lucky Rocket Day: The March 19 Sport launch will be "Lucky Rocket Day". Help celebrate St. Patrick's Day! Bring your favorite "lucky" rockets to fly, the ones that you've had the most luck with!

Submissions: I need them!! Send whatever you can, plans, articles, reviews, whatever.

MAP TO COCALICO HIGH SCHOOL

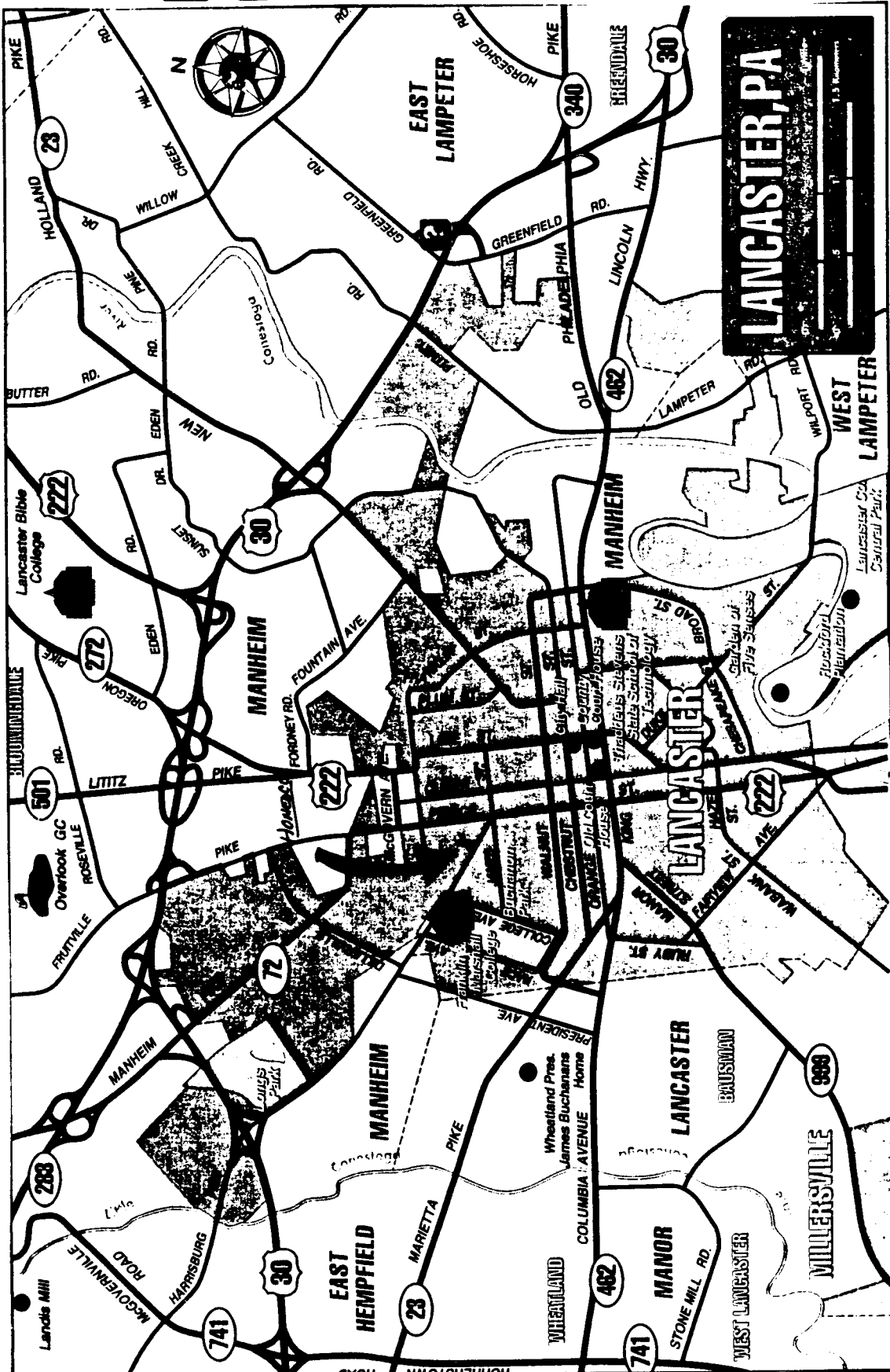
HARRISBURG/LANCASTER/READING/HARRISBURG/LANCASTER/READING



BALTIMORE
↓

TO
GETTYSBURG
↓

MAP TO HOMEDCO BUILDING, LANCASTER



SPAAR SPORT LAUNCHES**December 18, 1994**

SPAAR's last Sport Launch of '94 attracted 5 flyers who made a total of 29 flights. Too bad that the turnout wasn't better, as the weather was great for late December.

Patrick Shinoda, one of our newest members had some nice flights with his Estes Bailout and Optima, but had CATO problems an Estes C5 [no surprise] and both D12s that powered his Delta Clipper.

Ed Miller had a short delay problem on both FSI D20s that were in the strap-ons of his Intrepid, but the F100 worked fine for a good flight.

John Yost got a nice 59-second flight in B Helicopter with a QCR Rota-Roc.

Rick Hackman flew a number of his "XR" models, including powering-up the XR-49 from a C6 to a D12 for a nice flight.

George Beever flew an Astrocram twice [too bad the photos did not come out]. He also lost the top stage of a CRC "Lightnin'" after a straight up flight.

January 22, 1995

We ushered in the New Year and new flying season on the 22nd of January, in spite of some rather windy conditions.

Despite the cold temperatures, there was only one CATO: Matt Musselman lost a nice Quest HL-20 lifting body when the Estes [all together now] C5-3 CATO'ed. Then, the wind took away his Estes Space Racer after a B4-4 flight. Better luck next time, Matt!

The Gardei gang was out if force, flying the Recruiter, Pegasus, Comanche-3, Trident 2, and Ovation-35 among other things. The only problem was a core sample taken by an Estes Hercules. Either the upper stage A8 didn't ignite, or the ejection charge didn't do it's thing.

New member Mark Kamide, of Mountainside Hobbies in Ephrata [free advertising] flew his Quest HL-20 three times before he retreated to the warmth of his truck. I think he's convinced that we're all nuts for flying in that kind of weather. Who can argue that point?

Towards the end of the launch, when everyone was **really** getting cold, Rick Hackman flew his XR-72, just to say that he made an official flight at the launch.

Mark Beever flew an Estes Turbo Copter, a recent gift from Santa Claus... or was that Dad? When will spring get here????

SPAAR SPORT LAUNCHES

[cont]

February 19, 1995

Holy Groundhog, Batman, great weather in February!? Yes, Robin, the weather for our annual Groundhog Day type launch was fantastic.

Doug Gardei took advantage of it to fly his Aerotech fleet, all for good flights. The only problems he encountered were with a Quest X-30 that shredded on an Aerotech D13 reload [tried to blame that one brother George], and an Estes Jayhawk was sustained some nasty damage when it's Estes E15 CATO'd.

Bill Rhoat and Gary Feveryear each made one flight, a Custom Rockets "Sport" and an Estes Bullpup, respectively.

Mark Kamide of Mountainside Hobbies in Ephrata [more free advertising] flew his HL-20 again, and commented that it seems to fly better on windy days. He also got two very nice flights from his Cox Saturn 1B, on Estes D12's.

Glenn Feveryear flew some of his contest models, including a D Helicopter that turned in a 54-second flight.

Ed Miller was able to make it to the launch, and brought his usual assortment of goodies. Among them was his oversize oddroc, the "Hershey Kiss". It is just that, and it flies on

a 29mm reload. A "crowd pleaser", as they say. Ed also flew his latest version of an Upscale Estes Wizard. The original "big Wiz" was powered by three 24mm motors. Unfortunately, a CATO of an Estes D12 a few years back did that model in. Ed built a new version, this time equipped by a single 29mm mount. He flew it for a perfect flight on an F40-4RMS.

Dale Greene stunned everyone by flying his Das Blue Max on an F40, also. Not a bad flight, even if it looked like the model was clawing it's way for every inch of altitude. OK, it really wasn't that bad...

Every time George Beever crashes a model, his sin Mark gains a new toy. Mark now has a brand new Estes Tomcat, or more appropriately, a "Splatcat". The maiden flight nose dived right into the asphalt parking lot. This, just after George mentioned to Mark Kamide, "These things have a way of going into Death Dives". How prophetic. However, a full power Comanche-3 flight made up for it. Not too many times can you claim to have landed the top stage within 75 feet of the launcher. But then there was the Anubis, which lifted off straight up for about 50", then hung a very sharp right under power and.....

FLIGHT LOG

December 18, 1994

#	<u>FLYER</u>	<u>MODEL</u>	<u>MANUF</u>	<u>MOTOR[S]</u>	<u>RESULT</u>
1	George Beever	Matra	CRC	E D12-7	Good Flight
2	George Beever	Bull Pup 12B	TLP	E D12-7	Good Flight
3	George Beever	Lightnin'	CRC	E D12-0/D12-7	GF/Lost
4	George Beever	Tempest	NCR	AT E15-4WL	Good Flight
5	George Beever	Maxi-Force	Estes	E D12-7[3]	Good Flight
6	George Beever	Astrocam 110	Estes	E C6-7	Good Flight
7	George Beever	Astrocam 110	Estes	E C6-7	Good Flight
8	John Yost	Helicopter	Estes	E B4-2	Good Flight
9	John Yost	RotaRoc	QCR	E B4-2	GF/59s
10	Ed Miller	Magnum	Estes	E D12-0/B8-5	Good Flight
11	Ed Miller	Monocopter	SB	AT G12-RCT	Good Flight
12	Ed Miller	Intrepid	FSI FSI	F100-6 & D20-0[2]	Good Flight
13	Ed Miller	Hyperon	SB	FSI F100-8[3]	Good Flight
14	Ed Miller	Tarsis	SB	ISP G75-6J RMS	Good Flight
15	Ed Miller	Tekyon	SB	AT G64-4WL RMS	Good Flight
16	Rick Hackman	XR-49	SB	E C6-3	Good Flight
17	Rick Hackman	XR-54	SB	E C6-3	Good Flight
18	Rick Hackman	XR-55	SB	E C6-3	Good Flight
19	Rick Hackman	UFO-24	EM	E D12-3	Good Flight
20	Rick Hackman	XR-61	SB	E D12-3	Core Sample
21	Rick Hackman	XR-54	SB	E D12-3	Good Flight
22	Rick Hackman	Saucer	Estes	E C6-0	Good Flight
23	Rick Hackman	XR-72	SB	E 1/2A6-2	Good Flight
24	Patrick Shinoda	Optima	Estes	E D12-3	Good Flight
25	Patrick Shinoda	Delta Clipper	Estes	E D12-0/D12-3	CATO X 2
26	Patrick Shinoda	Patriot	Estes	E C6-7	Good Flight
27	Patrick Shinoda	Patriot	Estes	E C5-3	CATO
28	Patrick Shinoda	Bailout	Estes	E C6-7	Good Flight
29	Patrick Shinoda	Bailout	Estes	E C6-7	Good Flight

Launch Statistics

Models Flown:

9 Scratchbuilt
 9 Estes
 1 QCR
 2 Custom Rocket Co.
 1 The Launch Pad
 1 Ed Miller
 1 Flight Systems
 1 North Coast Rocketry

Motor Usage:

28 Estes
 6 FSI
 1 Aerotech Single Use
 1 ISP RMS
 2 Aerotech RMS

Failures:

1 FSI CATO
 3 Estes CATO [2 D12, 1 C5]

January 22, 1995

1	Mark Beever	Turbo Copter	Estes	E 1/2A6-2	Good Flight
2	Matt Musselman	HL-20	Quest	E C5-3	CATO
3	Matt Musselman	Space Racer	Estes	E B4-4	Lost
4	Doug Gardei	Recruiter	Estes	E B6-4	Good Flight
5	Doug Gardei	Pegasus	Estes	E B6-4	Good Flight
6	Doug Gardei	Comanche-3	Estes	E D12/B6/A8-5	Good Flight
7	Doug Gardei	Trident 2	Estes	E B6-4	Good Flight
8	Doug Gardei	Hercules	Estes	E B6-0/A8-5	Core Sample
9	Doug Gardei	Patriot	Estes	E C6-5	Good Flight
10	Doug Gardei	Maniac	Estes	E D12-7	Good Flight
11	Doug Gardei	Jammin' 4-Pack	SB	E A10-3[4]	Good Flight
12	Doug Gardei	Ovation-35	CRC	E A8-5	Good Flight
13	Doug Gardei	UFO	Estes	E B6-0	Good Flight
14	Doug Gardei	Jayhawk	Estes	E D12-5	Good Flight
15	Mark Kamide	HL-20	Quest	E C6-3	Good Flight
16	Mark Kamide	HL-20	Quest	E C6-3	Good Flight
17	Mark Kamide	HL-20	Quest	E C6-3	Good Flight
18	Rick Hackman	XR-72	SB	E 1/2A6-2	Good Flight

Launch Statistics

Models Flown:

2 Scratchbuilt
 1 Custom Rocket Co.
 11 Estes
 2 Quest

Motor Usage:

24 Estes

Failures:

1 CATO, Estes C5-3

February 19, 1995

1	Doug Gardei	IQSY Tomahawk	Aerotech	AT E28-7RMS	Good Flight
2	Doug Gardei	Strong ARM	Aerotech	AT F40-7RMS	Good Flight
3	Doug Gardei	Initiator	Aerotech	ISP F62-6RMS	Good Flight
4	Doug Gardei	Phantom 4000	NCR	AT F40-4RMS	Good Flight
5	Doug Gardei	Maniac	Estes	E D12-7	Good Flight
6	Doug Gardei	Jayhawk	Estes	E E15-4	CATO
7	Doug Gardei	UFO	Estes	E B6-0	Good Flight
8	Doug Gardei	Mustang	Aerotech	E D12-3	Good Flight
9	Doug Gardei	X-30	Quest	AT D13-4RMS	Shred
10	Doug Gardei	Arreaux	Aerotech	AT E28-7RMS	Good Flight
11	Doug Gardei	Mirage	Aerotech	ISP G54-6RMS	Good Flight
12	Bill Rhoat	Sport	CRC	E B6-4	Good Flight
13	Gary Feveryear	Bullpup 12D	Estes	E B6-4	Good Flight
14	Mark Kamide	HL-20	Quest	E C6-3	Good Flight
15	Mark Kamide	HL-20	Quest	E C6-3	Good Flight

16	Mark Kamide	Sentinel	Estes	E C6-3	Good Flight
17	Mark Kamide	Saturn 1B	Cox	E D12-3	Good Flight
18	Mark Kamide	Saturn 1B	Cox	E D12-3	Good Flight
19	Rita Feveryear	Big Bertha	Estes	E B6-4	Good Flight
20	Glenn Feveryear	D HD	SB	E D12-5	GF/54.5s
21	Glenn Feveryear	B ELA	SB	E B6-4	Good Flight
22	Glenn Feveryear	C ELA	SB	E C6-5	Good Flight
23	Glenn Feveryear	Yellow Thing	SB	E B6-4	Good Flight
24	Glenn Feveryear	1/2A SD	SB	E 1/2A3-4	GF/43.5s
25	Ed Miller	Trailblazer	MRC	AT D13-4RMS	Good Flight
26	Ed Miller	Warp II	Estes	E C6-0/B8-5	Good Flight
27	Ed Miller	Nike Smoke	Quest	E C6-5	Good Flight
28	Ed Miller	Wizard+	SB	AT F40-4RMS	Good Flight
29	Ed Miller	Eliminator	NCR	AT F25-4WL	Good Flight
30	Ed Miller	Javelin	FSI	AT F52-5RMS	Good Flight
31	Ed Miller	Hershey Kiss	SB	AT F40-4RMS	Good Flight
32	Ed Miller	UFO 10-24	SB	AT F24-4RMS	Good Flight
33	Dale Greene	Nike-Smoke	MPC	E B4-4	Good Flight
34	Dale Greene	Mini Mean Machine	Estes	E A3-4	Good Flight
35	Dale Greene	Iron Man	MRC	E C6-3	Good Flight
36	Dale Greene	Das Blue Max	ORI	AT F40-4RMS	Good Flight
37	Dale Greene	Skinny Pink Thing	SB	AT E15-7WL	Chu
38	George Beever	Tomcat	Estes	E C6-3	Splat
39	George Beever	Easy Slide	QCR	E C6-3	GF/70.4s
40	George Beever	Comanche-3	Estes	E D12/C6/C6-7	Good Flight
41	George Beever	GEO SAT LV	Estes	E C6-3	Good Flight
42	George Beever	Der V-3	Estes	E D12-5	Good Flight
43	George Beever	Anubis	TLP	E D12-7	Good Flight
44	George Beever	Lil' Nuke	LOC	AT F25-9WL	Good Flight

Launch Statistics

Models Flown:

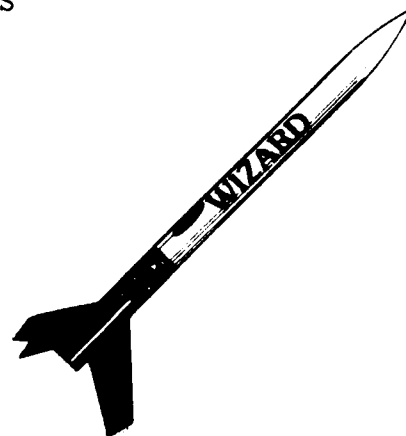
8 Scratchbuilt
 12 Estes
 6 Aerotech
 3 Quest
 1 LOC
 1 QCR
 2 NCR
 1 Cox
 1 The Launch Pad
 1 MRC
 1 MPC
 1 Original Rockets, Inc.
 1 Custom Rocket Co.
 1 Flight Systems, Inc.

Motor Usage:

31 Estes
 3 Aerotech Single Use
 11 Aerotech RMS
 2 ISP RMS

Failures:

1 Estes E15 CATO



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TO SET A CLUB RECORD:

A club performance record may be set or broken at any SPAAR Sport Launch or contest. Simply make a notation on your Flight Card that you wish the flight to be considered for a club record. If it is a duration event, it is the flyer's responsibility to see that the flight is timed. Altitude events are obviously restricted to those launches that the club altitude tracking equipment is available.

Please keep in mind that your model doesn't have to be a super high-tech competition model in order for you to set a club record. For that matter, some of the events that we keep performance records for are not recognized NAR events. Some examples are E, F and G Parachute Duration. We do it "just for fun"....which, the last time I checked, was the whole reason for flying rockets anyway! Some of these records are getting pretty old, and are screaming to be broken. Let's take a shot at them in '95!

THE SPAAR RECORD BOOK

As Of February 1995

<u>Event</u>	<u>Name</u>	<u>Model</u>	<u>Motor</u>	<u>Date</u>	<u>T/A/P</u>
A Division					
1/2A PD	Dave Bender		1/2A3-4	11/03/91	44.5s
A PD	Dave Bender	X-3	A3-4	05/05/91	50.9s
B PD	Aaron Newman	Sizzler	B4-6	05/27/90	157.6s
C PD	Eric Marcella			09/03/89	66.4s
D PD	Dave Bender	Gone	D12-7	10/14/90	94.6s
1/2A SD	Dave Bender	X-1	1/2A3-2	05/05/91	22.9s
A SD	Dave Bender			10/09/88	42.6s
B SD	Jas. Wingenroth	Viking	B6-4	10/14/90	40.0s
C SD	Dave Bender	Excalibur	C6-7	12/18/88	39.5s
1/2A RG	Daniel Yost		1/2A3-2	05/26/91	26.4s
B ELD	Derek Yost	2-Minute Egg	B6-2	05/26/91	17.2s
C ELD	Daniel Yost		C5-3	10/09/88	34.1s
1/2A HD	Daniel Yost	Mini RotaRoc	1/2A3-2	09/05/93	26.0s
A HD	Daniel Yost	Mini RotaRoc	A3-2	09/05/93	33.0s
B HD	Daniel Yost	RotaRoc	B4-2	09/05/93	71.0s
C BG	Aaron Newman		C6-3	10/14/90	93.2s
A ALT	Doug Gardei		A8-5	08/07/94	78.8m
D ALT	Lee Dwyer	Mean Machine	D12-5	07/19/92	166.5m
E ALT	Patrick Boyle	Cheetah	E15-7	07/19/92	276.6m
A PAY	Renee Feveryear		A8-3	09/05/94	28.67m
B ELA	Daniel Yost		B6-4	05/29/94	39.1m
C ELA	Renee Feveryear		C6-3	09/04/94	144m
B Division					
1/2A PD	Bill Rhoat			07/23/89	36.5s
A PD	Bill Rhoat			08/14/88	27.6s
B PD	Bill Rhoat			04/16/89	79.0s
C PD	Dave Wenrich			08/14/88	33.9s
D PD	Bill Rhoat			04/16/89	31.1s
E PD	Bill Rhoat	Onyx	E60-6	11/05/89	22.2s
1/2A SD	Bill Rhoat			07/23/89	36.5s
A SD	Bill Rhoat		A3-4	07/22/90	85.7s
B SD	Bill Rhoat			07/23/89	50.9s

A ALT	Aaron Newman		A8-3	06/30/91	83.2m
B ALT	Dave Bender		B4-6	08/07/94	265m
C ALT	Dave Bender		C6-7	08/07/94	426m

B ELD	Bill Rhoat		B6-2	05/27/90	10.7s
C ELD	Bill Rhoat		C6-3	07/02/89	67.2s

B SRD	Bill Rhoat			07/23/89	832.5p
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C HD	Bill Rhoat	Rotaroc	C6-3	05/27/90	61.3s
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B ELA	Matt Musselman	Aero-Owl	B6-4	05/29/94	39.6m
C ELA	Matt Musselman	Aero-Owl	C6-5	05/29/94	100m

C Division

1/4A BG	Glenn F		1/4A3-4	05/23/92	25.8s
1/2A BG	Glenn F		1/2A3-2	07/23/89	71.5s
A BG	Glenn F	Vulture	A3-2	07/02/89	84.3s
B BG	Glenn F	Fly Baby	B4-2	09/02/90	112.3s
C BG	Fred Hoke	HXP-1	C6-3	05/27/90	83.7s
D BG	John Yost	D-Light	D12-3	09/02/90	67.3s

1/2A HD	Glenn F		1/2A3-4	09/05/93	61.0s
A HD	Glenn F		A3-4	09/05/93	166.0s
B HD	Glenn F	Rose-A-Roc	B4-4	09/05/93	139.0s
C HD	Ed Miller	AeroCopter	C6-3	05/24/92	197.7s
D HD	George Beever	Yost-A-Roc	D12-3	05/29/94	112s
E HD	John Yost	Yost-A-Roc	E15-4	08/12/90	115.0s

1/4A PD	Glenn F		1/4A3-4	05/03/92	41.9s
1/2A PD	Glenn F	Perihelion	1/2A3-4	07/02/89	258s
A PD	George Beever		A3-4	09/02/90	125s
B PD	Dale Greene		B4-6	07/02/89	184.9s
C PD	Dale Greene		C6-7	08/13/89	125.2s
D PD	Ed Miller		D12-5	07/02/89	120s
E PD	Bob Balogh	V-2	E6-4	09/03/89	104.7s
F PD	George Beever	Aerobee-Hi	F25-6	08/12/90	83.4s
G PD	Bob Balogh		G40-7	08/13/89	138.4s

1/4A RG	George Beever		1/4A3-2	05/24/92	16.1s
1/2A RG	Glenn F		1/2A3-2	05/30/93	55.0s
A RG	Glenn F	Vulture	A3-2	09/01/90	109.8s
B RG	Glenn F	Gull	B4-2	10/30/88	154s

1/4A SD	Glenn F		1/4A3-4	05/03/92	41.9s
1/2A SD	Glenn F		1/2A3-4	09/24/89	94.8s

A SD	George Beever	Perihelion	A3-6	09/15/91	132.3s
B SD	Glenn F		B4-6	08/12/90	168.5s
C SD	Bob Balogh		C6-7	07/22/90	208s
D SD	Dale Greene		D12-7	08/13/89	52.3s
E SD	Ed Miller		E25-10	07/22/90	106s
F SD	Ed Miller		F25-12	07/22/90	138.5s
G SD	Ed Miller		G25-10	07/22/90	181.6s
1/2A SRA	Glenn F		1/2A3-4	05/30/93	426pts
B SRA	Gary Feveryear		B6-4	09/04/94	865pts
1/2A SRD	Glenn F		1/2A3-2	07/22/90	233pts
A SRD	George Beever		A3-4	05/27/90	415pts@
B SRD	Glenn F		B4-4	07/23/89	486pts
C SRD	Dick Rhoat		C6-3	09/03/89	533pts
APA	Glenn Feveryear		A3-4	09/04/94	110.9m
A ALT	Rick Hackman		A8-3	08/07/94	81.2m
B Alt	Alan Rubright		B4-4	09/13/92	184.6m
C ALT	John Balmer		C6-5	08/07/94	147.4m
D Alt	Ed Miller		D13-4	05/10/92	173m
E Alt	George Beever	Maxi-Alpha	E18-7	07/19/92	269.9m
F ALT	George Beever	Primero	F25-6	08/07/94	355.7m
G ALT	Gary Feveryear	Big Brute	G64-7	08/07/94	465.5m
B ELA	Flirtin' W/Disaster		B6-4	05/30/93	68m
C ELA	Gary Feveryear	B-Liner	C6-5	09/04/94	172.6m
B ELD	Ed Miller	Streamliner		05/26/91	83.8s
C ELD	Glenn F	Aero-Owl	C6-3	10/09/88	156s
D DELA	Glenn F		D21-7	05/24/92	294m

NOTES ON CLUB RECORDS:

NEW RECORDS IN BOLD

Longest Standing Club Performance Records:

A Division: 1/2A SD, Derek Yost, & D PD, Daniel Yost, 07/03/88;
B Division: A PD, Bill Rhoat, & C PD, Dave Wenrich, 08/14/88;
C Division: C ELD, Glenn Feveryear, 10/03/88.

1994 LAUNCH STATISTICS

Yes, once again friends, it's time to traipse down that path of trivia, that lane of the inane, otherwise known as the Department of Useless Information.....

Launches by Date

02/16/94	27
03/13/94	24
04/09/94	26
05/15/94	42
05/29/94	74
06/26/94	27
07/10/94	52
08/07/94	96
09/04/94	36*
10/11/94	11
11/13/94	52
11/25/94	36
12/18/94	29

Total 532

* = sport flights only

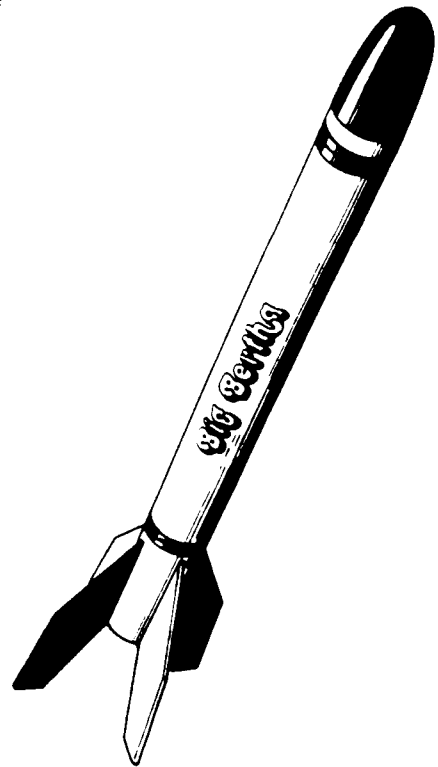
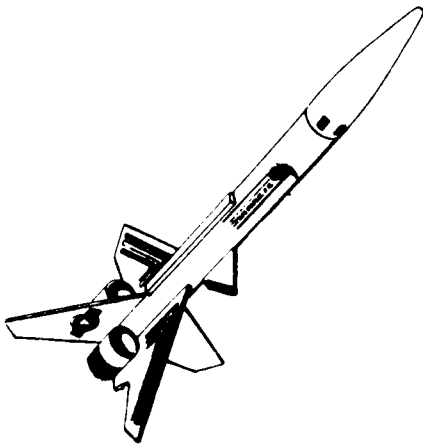
Motor Usage

Over the course of 13 launch dates, a total of 608 motors were fired.

Of these, 511 were black powder, and 97 were composite. Of these, 51 were reloadable motors, and 46 were single use types.

The following is a breakdown by manufacturer:

Estes:	484
FSI:	24
Quest:	3
Aerotech SU:	45
Aerotech RMS/ ISP RMS:	51
Vulcan SU:	1



SOUTHERN PENNSYLVANIA AREA ASSOCIATION OF ROCKETRY

NATIONAL ASSOCIATION OF ROCKETRY SECTION 503

JANUARY

Saturday 21 Spaar Family Dinner - 6 pm
Sunday 22 Sport Launch - 1 pm - 5 pm
Saturday 28 Workshop - Delta-Cardiff Vol Fire Co., Delta, PA. - 9 am - 1 pm

FEBRUARY

Friday 17 Business Meeting - Homedco, Lancaster - 7 pm - 9 pm
Sunday 19 Sport Launch - Ground Hog Day - 1 pm - 5 pm
Saturday 25 Workshop - Delta-Cardiff Vol Fire Co., Delta - 9am - 1 pm

MARCH

Friday 17 Business Meeting - Homedco, Lancaster - 7 pm - 9 pm
Sunday 19 Sport Launch - Lucky Rocket Day - 1 pm - 5 pm
Saturday 25 Workshop - Delta-Cardiff Vol Fire Co., Delta - 9am - 1 pm

APRIL

Sunday 9 Sport Launch - Multi-stage Day - 1 pm - 5 pm
Friday 21 Business Meeting - Homedco, Lancaster - 7 pm - 9 pm
Saturday 29 - Sunday 30 East Coast Regional Meet (ECRM), Hosted by NARHAMS - Middletown, MD.

MAY

Sunday 14 Sport Launch - Sounding Rocket Day - 1 pm - 5 pm
Friday 19 Business Meeting - Homedco, Lancaster - 7 pm - 9 pm
Saturday 20 - Sunday 21 NYSACE, Hosted by MARS - Geneseo, NY (site of NARAM)
Sunday 28 SPAARSEC-12 - 9 am - 5 pm

JUNE

Saturday 10 - Sunday 11 RAMTEC - 3, Hosted by SPAAR - Center Valley, PA.
Friday 16 Business Meeting - Homedco, Lancaster - 7 pm - 9 pm
Sunday 25 Sport Launch - Club Duration Record Day - 3 pm - 7 pm

JULY

Sunday 9 Sport Launch - Old Rocket Day - 3 pm - 7 pm
Friday 21 Business Meeting - Homedco, Lancaster - 7 pm - 9 pm
Saturday 22 - Friday 28 NARAM, Hosted by MARS - Geneseo, NY.

AUGUST

Sunday 6 Sport Launch - Club Altitude Record Day - 3 pm - 7 pm
Friday 18 Business Meeting - Homedco, Lancaster - 7 pm - 9 pm

SEPTEMBER

Sunday 3 SPAARSEC-13 - 9 am - 5 pm
Friday 15 Business Meeting - Homedco, Lancaster - 7 pm - 9 pm

OCTOBER

Sunday 1 Sport Launch - Scratch Built Day - 1 pm - 5 pm
Friday 20 Business Meeting - Homedco, Lancaster - 7 pm - 9 pm
Sunday 29 Sport Launch - 1 pm - 5 pm

NOVEMBER

Sunday 12 SPAARSPAM - 1 pm - 5 pm
Friday 17 Business Meeting - Homedco, Lancaster - 7 pm - 9 pm
Friday 24 Sport Launch - Thanksgiving Day - 1 pm - 5 pm

DECEMBER

Friday 15 Business Meeting - Homedco, Lancaster - 7 pm - 9 pm
Sunday 17 Sport Launch - Christmas - 1 pm - 5 pm

All sport launches will be held at East Cocalico High School, Denver, PA.

P.O. Box 127, Reamstown, PA 17567

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.

14 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.

THE NATIONAL ASSOCIATION OF ROCKETRY

TRIPOLI ROCKETRY ASSOCIATION [HIGH POWER ROCKETRY]

For more information on the NAR, write:

For more information on the TRA, write:

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

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

