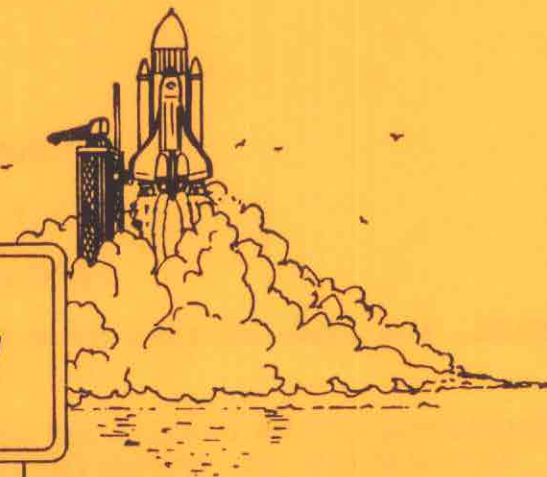


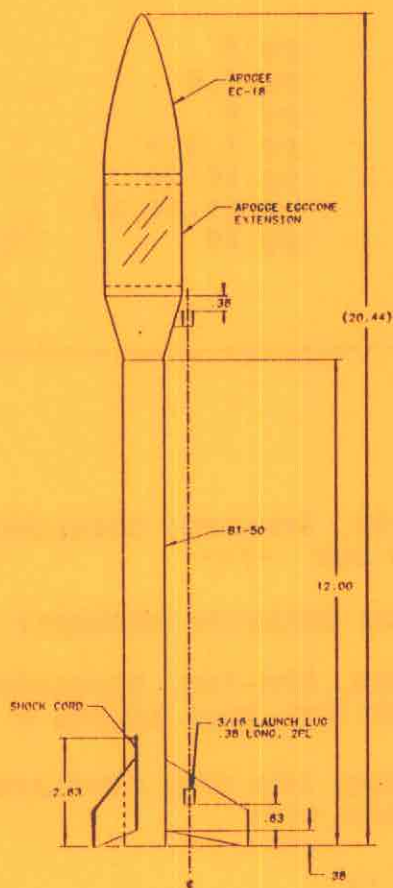
COUNTDOWN



OFFICIAL NEWSLETTER OF
THE SOUTHERN PENNSYLVANIA AREA ASSOCIATION OF ROCKETRY

VOLUME 7, ISSUE 3

MAY/JUNE 1994



RAWTEC-2

COVERAGE & RESULTS

PLUS:

RECORD SETTING E EGGLOFT DESIGN

HIGH POWER IN VIRGINIA: CULPEPER

SPAARSEC-X RESULTS

SECTION NEWS NOTES

The Countdown

Volume 7, Issue 3

May/June 1994

SPAAR, the home of 1992-93 C Division champ Glenn Feveryear

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

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

Thanks This Time To:
Glenn Feveryear & Ed Miller

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SCHEDULE

**SUNDAY, JUNE 26, 1994: MEETING/SPORT LAUNCH, 3PM-7PM, COCALICO HS.
**** CLUB DURATION RECORD DAY ******

COME ON OUT AND TRY TO SET A NEW CLUB DURATION RECORD!!

**SUNDAY, JULY 10, 1994: MEETING/SPORT LAUNCH, 3PM-7PM, COCALICO HS.
**** APOLLO 11 COMMEMORATION DAY - BRING OUT YOUR SATURN V ******

**SUNDAY, AUGUST 7, 1994: MEETING/SPORT LAUNCH, 3PM-7PM, COCALICO HS.
**** CLUB ALTITUDE RECORD DAY ******

++ WAIVER APPLIED FOR ++

SECTION NEWS NOTES

SPAAR Summer Time: Don't forget, during the summer months our Sport Launches start at 3PM instead of 1PM. Originally the idea of Rick Hackman, by doing this we avoid the worst of the day's heat, not to mention the softball players!

Apollo 11 Anniversary: SPAAR will mark the 25th anniversary of the Apollo 11 moon landing with our July 10 Sport Launch. On that day, we encourage you to bring out not only a Saturn V if you have one, but also any models of space program related rockets [US or otherwise]. You may also want to bring your camera, as there should be a lot of "photo ops".

August 7 Waiver: Ed Miller is working on obtaining an FAA Waiver for the August 7 Sport Launch. This is also Club Altitude Record Day, so be prepared to fly high!

Photos wanted: Your editor is always on the prowl for anything to put in this newsletter, so how about some photographs? Ed Miller is a regular contributor in this area, but I know many of our members take pictures of their rocketry activities. If you do not have an extra print to give away, I will be more than happy to return whatever you send me. Please also include a caption

for the photo. Thanks.

Ooops: In a recent issue of this newsletter, a list of SPAAR members and their addresses appeared. However, there were no phone numbers listed. This wasn't exactly an oversight. I simply do not have everyone's phone number. I'd like to correct that in an upcoming issue. We are preparing a survey to be sent out to all club members. Look for it soon, and please send it back.

Thanks John: John Yost recently constructed a PA system for club use. You'll see it at contests and special events. John put a lot of time and effort into the system, and we thank him for allowing the club to have access to it.

Wedding Bells: Our best wishes go out to NOVAAR's Jonathan Rains, who is to be married on June 18. Jonathan and his bride will be married in New Jersey, and reside in Silver Spring, Maryland. Congratulations!!

SPAAR: The Next Generation: It's been great seeing some of our younger members at launches recently. Dan Yost, Matt Musselman, Renee Feveryear and Doug Gardei have made a lot of flights. Keep it up!

CLUB LAUNCHES**May 15**

Our May 15 Sport Launch was designated Sounding Rocket Day, and 6 of the 42 flights made were just that. They included Dave Bender's Estes IRIS, Ed Miller's Quest Nike-Smoke and FSI Javelin, and George Beever's scratchbuilt D-Region Tomahawk and Aerobee-Hi and Estes IRIS. Ed's two flights were particularly noteworthy. He flew the Nike-Smoke on an Aerotech D13-7WL RMS, which sent the model on quite a ride. Ed heavily modified the Flight Systems Javelin kit, and it turned a great flight on an Aerotech F52-5 Blue Thunder reload.

Our two newest members, Matt Musselman and his step-dad Jeff Aughey, arrived just after a rain shower had shut down the range. However the skies cleared up, and we all flew again. Jeff flew a nice Estes Space Shuttle and a Strike Fighter, both successful flights. Matt flew an Estes Comanche in a two-stage configuration with a D12/B6 set-up. With very little breeze after the shower, the model landed pretty close to the launcher.

Doug Gardei made the most flights, 14. His Aerotech Mirage flew well on an F40 reload, and his Estes Hercules made a beautifully straight flight on a B6/A8 combination.

Probably the most interesting flight of the day was Ed's

MonoCopter 1. If you've never seen one of these, you are missing one of the downright strangest designs in rocketry. The "flight" was rather entertaining, to say the least. Ed reports that the appropriate modifications have been made, with successful results. Ed also flew his home-brew Tarsis with a G64 reload for a nice flight.

May 29

The SPAARSEC-X Section Meet was held on the 29th, and there was plenty of sport flying afterward.

Young Josh Rubright flew his Estes Rampage successfully three times, and Uncle Alan flew an assortment of Estes models, too. Gary Rubright flew a Rascal and Nova Payloader, as well as a nice Estes National Aerospace Plane.

Matt Musselman, Bill Rhoat, John Yost, Dan Yost, Rick Hackman, Dale Greene, Glenn Feveryear and George Beever all made sport flights.

The most notable, however, was the last flight of the day, which by tradition is usually Glenn's "Grumpy Dog" 2-stager. Sadly, this will be no more. Thanks to the CATO of the second-stage D12-3, Glenn has a lot of work to do to try to resurrect The Grumpy Dog. As the interior still smoldered, John Balmer commented, "Well,

that gets my vote for "Worst Stink". Nylon 'chutes are nasty when they smolder!

SPAARSEC - X

At the Section Meet, 37 flights were made in the four egglofting events that were flown. A and B Divisions were combined, as well as C and Team Divisions.

In A/B, Dan Yost and Matt Musselman dueled it out, both flying the Aero-Owl kits that were offered.

B Eggloft Duration: In this event, Dan took First Place with a 10 second flight. In C/T Division, Glenn Feveryear's 27 seconds just beat out Flirtin' With Disaster's 26 seconds. This was just barely ahead of Dale Greene's Third Place 24 seconds! Rick Hackman, in his first contest in quite some time, took fourth with 13 seconds.

C Eggloft Duration: The combined A/B guys had problems here, with no qualified flights between Dan or Matt.

Glenn took first with a great flight of over 302 seconds [5 minutes +]. FWD's 72 second flight took Second Place. Dale and Rick had egg splatter problems.

B Eggloft Altitude: We flew the altitude events in the morning, and in B ELA the marks achieved were remarkably close.

In the combined A/B Division,

Matt Musselman, who was flying in his first contest, took First Place with a lob of 40 meters, just ahead of Dan Yost's 39 meters! [cutting it a wee bit close, Matt?]

In C/T, Glenn took first again with a flight of 60 meters. FWD and Glenn's brother Gary both had flights tracked to 49 meters for a Second Place tie. Dale's flight was only 2 meters less, at 47 meters.

C Eggloft Altitude: Dan Yost wound up with First Place here, with a flight of 123 meters. It was originally thought that this track did not close, however when the figures were re-checked using the geodesic method, it did close. Matt had a good flight tracked to 100 meters for second.

Glenn completed his four event sweep with a flight of 164 meters. This was followed by FWD's 145 meters.

Except for Matt and Dan, who flew similar models, all types of designs and motor combinations were flown. Dale flew Apogee-type tapered designs, similar to the old "Two-Minute Egg". Glenn appeared to prefer designs using Apogee Components parts; Rick Hackman flew the good old "Here's Hopin'", as well as a QCR "No Break" kit. FWD used whatever they could get into the air. But hey, it was fun.

SPAARSEC - X SECTION MEET RESULTS**B Eggloft Duration**

Name	Division	F1 #1	F1 #2	Place/Points
Dan Yost	A	10s	8s	1st/170
Matt Musselman	B	DQ/SEP	DQ/EGG	
Glenn F	C	23s	27s	1st/170
FWD Tm	T	DQ/EJ	26s	2nd/102
Dale G	C	24s		3rd/68
Rick H	C	6s	13s	4th/34

C Eggloft Duration

Dan Yost	A	DQ/SEP		-----
Matt Musselman	B	DQ/SEP	DQ/EGG	-----
Glenn F	C	302.6s		1st/160
FWD Tm	T	72s		2nd/96
Dale G	C	DQ/EGG		
Rick H	C	DQ/EGG	DQ/EGG	

B Eggloft Altitude

Matt Musselman	B	DQ/EGG	40m	1st/190
Dan Yost	A	39m		2nd/114
Glenn F	C	60m		1st/190
FWD Tm	T	DQ/EGG	49m	2nd/114
Gary F	C	49m		2nd/114
Dale G	C	47m		3rd/76

C Eggloft Altitude

Dan Yost	A	DQ/EGG	123m	1st/180
Matt Musselman	B	100m		2nd/108
Glenn F	C	164m	167m	1st/180
FWD Tm	T	145m		2nd/108
Gary F	C	DQ/EGG		
Dale G	C	DQ/CHU	DQ/EGG	

Point Totals:

Dan Yost	464	Glenn F	700	Dale G	144
Matt Musselman	298	FWD Tm	420	Gary F	114
Rick H	34				

TOTAL TO SECTION: 2174

FLIGHT LOG

May 15, 1994

<u>#</u>	<u>FLYER</u>	<u>MODEL</u>	<u>MANUF</u>	<u>MOTOR[S]</u>	<u>RESULT</u>
1	Dave B	IRIS	Estes	E B4-6	SRD-GF*
2	Dave B	Saucer	EM	E D12-0	Good Flight
3	Dave B	Mega Sizz	Estes	E D12-5	Good Flight
4	Dave B	Sky Demon	SB	E C6-0/B8-5	Good Flight
5	Dave B	NASP	Estes	E B6-2	Good Flight
6	Matt M	Patriot	Estes	E C6-7	Good Flight
7	Matt M	Comanche	Estes	E D12-0/B6-4	Good Flight
8	Matt M	Sentinel	Estes	E C6-5	Good Flight
9	Matt M	Nova Payloader	Estes	E B6-4	Good Flight
10	Joe E	Space Racer	Estes	E A8-5	Good Flight
11	Joe E	Scout III	Estes	E A3-4	Good Flight
12	Doug G	Arreaux	Aerotech	AT E11-5J RMS	Good Flight
13	Doug G	Klingon B/C	Estes	E B6-4	SEP
14	Doug G	Dp Sp Trans	Estes	E C6-3	Good Flight
15	Doug G	Trident II	Estes	E B6-4	Good Flight
16	Doug G	Strong Arm	Aerotech	AT F24-4W RMS	Good Flight
17	Doug G	Skywinder	Estes	E B6-4	Flap, Flap
18	Doug G	Mirage	Aerotech	AT F40-4W RMS	Good Flight
19	Doug G	Hercules	Estes	E B6-0/A8-5	Good Flight
20	Doug G	Mustang	Aerotech	AT E11-5J RMS	Good Flight
21	Doug G	Super Big Bertha	Estes	E D12-3	SEP
22	Doug G	Phoenix	Estes	E D12-5	SEP
23	Doug G	Pegasus	Estes	E A8-5	Good Flight
24	Doug G	Marauder	Estes	E C6-5	Good Flight
25	Doug G	Mustang	Aerotech	AT E11-5J RMS	Good Flight
26	Jeff A	Space Shuttle	Estes	E C5-3	Good Flight
27	Jeff A	Strike Fighter	Estes	E C6-5	Good Flight
28	Glenn F	Serval	CRC	E B6-4	Good Flight
29	Glenn F	Onyx	LOC	E D12-3	Good Flight
30	Glenn F	Mustang	Aerotech	AT E15-7WL	Good Flight
31	Ed M	Monocopter 1	SB	AT G13 RCT RMS	Hmmmmmm....
32	Ed M	UFO 8-32	SB	AT G13 RCT RMS	Good Flight
33	Ed M	Super Big Bertha	Estes	FSI F100-6	Good Flight
34	Ed M	Nike Smoke	Quest	AT D13-7W RMS	SRD-GF
35	Ed M	Azinon	SB	AT F40-4W RMS	Good Flight
36	Ed M	Javelin	FSI	AT F52-5T RMS	SRD-GF
37	Ed M	Tarsis	SB	AT G64-4W RMS	Good Flight
38	George B	IRIS	Estes	E A3-4	SRD-GF
39	George B	Aerobee-Hi	SB	E A8-5	SRD-GF
40	George B	Lamprey	CRC	E B6-4	Good Flight
41	George B	D-Region Thawk	SB	E B4-6	SRD-GF
42	George B	Patriot	Estes	E C6-5	Good Flight

LAUNCH STATISTICS

Models Flown:		Motor Usage:			
Estes	23	FSI	1	Estes	32
CRC [Custom]	2	Quest	1	AT RMS	11
LOC	1	Scratch	7	AT SU	1
Aerotech	5	Ed Miller	1	FSI	1

May 29, 1994

SPAARSEC-X Sport Flights

1	Josh R	Rampage	Estes	E B4-4	Good Flight
2	Josh R	Rampage	Estes	E B4-4	Good Flight
3	Josh R	Rampage	Estes	E B4-4	Good Flight
4	Dan Y	UFO	EM	E D12-3	Good Flight
5	Matt M	Space Racer	Estes	E A8-3	Good Flight
6	Matt M	Space Racer	Estes	E B6-4	Good Flight
7	Matt M	Nova Payloader	Estes	E C6-5	Good Flight
8	Matt M	Patriot	Estes	E C6-5	Good Flight
9	Matt M	Sentinel	Estes	E C6-5	Good Flight
10	Matt M	Zinger	Estes	E A8-3	Good Flight
11	Matt M	No Name	Estes	E C6-7	Good Flight
12	Bill R	Sport	CRC	E B6-4	Good Flight
13	Bill R	NASP	Estes	E C6-5	Good Flight
14	John Y	UFO	EM	E D12-0	Good Flight
15	John Y	Mustang	Aerotech	E D12-3	Good Flight
16	Gary R	Rascal	Estes	E C6-5	Good Flight
17	Gary R	NASP	Estes	E B4-4	Good Flight
18	Gary R	Nova Payloader	Estes	E B4-4	Good Flight
19	Gary R	NASP	Estes	E C6-5	Good Flight
20	Gary R	NASP	Estes	E C6-5	Good Flight
21	Rick H	Thor 2	SB	E A8-3	Good Flight
22	Rick H	Corn Stalk	SB	E A8-3	Good Flight
23	Rick H	UFO	EM	E D12-3	Good Flight
24	Rick H	XR-57	SB	E B4-4	Good Flight
25	Rick H	Ramjet Int.	SB	E D12-3	Good Flight
26	Alan R	Tornado	Estes	E 1/2A6-2	Good Flight
27	Alan R	Rascal	Estes	E C6-5	Good Flight
28	Alan R	Alpha	Estes	E B6-4	Good Flight
29	Alan R	Mega Sizz	Estes	E D12-5	Good Flight
30	Dale G	Magnum	Estes	E D12-0/B6-6	Good Flight
31	Dale G	Maxi V-2	Estes	E D12-3	Good Flight
32	Glenn F	Grumpy Dog	SB	E D12-0/D12-3	CATO/PeeYew
33	George B	Yost-A-Roc	SB	E D12-3	112s D HD
34	George B	Aero-Roc 3	USR	E D12-7[3]	Good Flight
35	George B	Initiator	Aerotech	AT F40-7w RMS	Good Flight
36	George B	Titan IIIIE	Estes	E D12-5	Good Flight

LAUNCH STATISTICS

Models Flown:
 Estes 19
 Aerotech: 2
 Custom: 1
 US Rockets: 1
 Scratchbuilt: 6

Motor Usage:
 Estes Black Powder: 37
 Aerotech RMS: 1

SPAARSEC-X FLIGHTS:

37	Dan Y	C ELD	C6-3	13s	DQ/SEP
38	Matt M	C ELD	C6-5	23s	DQ/SEP
39	Matt M	C ELD	C6-5	15s	DQ/EGG
40	Glenn F	C ELD	C6-5	302.57s	1st Place
41	FWD Tm	C ELD	C6-5	72s	2nd Place
42	Dale G	C ELD	C5-3	CATO	DQ/EGG
43	Rick H	C ELD	C6-5	13.1s	DQ/EGG
44	Rick H	C ELD	C6-3	13.5s	DQ/EGG
45	Dan Y	B ELD	B6-2	10s	1st Place
46	Dan Y	B ELD	B6-4	8s	GF
47	Matt M	B ELD	B6-4	6.8s	DQ/SEP
48	Matt M	B ELD	B6-4	5.9s	DQ/EGG
49	Glenn F	B ELD	B6-4	23s	GF
50	Glenn F	B ELD	B4-2	27s	1st Place
51	FWD Tm	B ELD	B6-2	27s	DQ/EJ
52	FWD Tm	B ELD	B4-2	26s	2nd Place
53	Dale G	B ELD	B6-2	24s	3rd Place
54	Rick H	B ELD	B6-4	6s	GF
55	Rick H	B ELD	B6-4	13s	4th Place
56	Matt M	C ELA	C6-5	100m	2nd Place
57	Dan Y	C ELA	C6-3	121m	1st Place
58	Dan Y	C ELA	C6-3	129m	DQ/EGG
59	Dan Y	C ELA	C6-3	90m	DQ/EGG
60	Glenn F	C ELA	C6-5	164m	GF
61	Glenn F	C ELA	C6-5	167m	1st Place
62	FWD Tm	C ELA	C6-5	145m	2nd Place
63	Gary F	C ELA	C6-3		DQ/EGG
64	Dale G	C ELA	C6-5	146m	DQ/CHU
65	Dale G	C ELA	C6-5	97m	DQ/EGG
66	Matt M	B ELA	B6-4	61m	DQ/EGG
67	Matt M	B ELA	B6-4	40m	1st Place
68	Dan Y	B ELA	B6-4	39m	2nd Place
69	Glenn F	B ELA	B6-4	60m	1st Place
70	Gary F	B ELA	B6-2	49m	2nd Place
71	FWD Tm	B ELA	B4-2	49m	2nd Place
72	FWD Tm	B ELA	B6-4	61m	DQ/EGG
73	FWD Tm	B ELA	B6-4	44m	NC
74	Dale G	B ELA	B6-4	47m	3rd Place

RAMTEC-2 REGIONAL:**SO WHAT'S A LITTLE RAIN?**

This year's RAMTEC-2 Regional was held over the weekend of June 11 & 12 at Allentown College in Center Valley, and for the first time in years, the weather didn't exactly cooperate.

The weather during the week preceding RAMTEC was perfect, but the weatherman forecasted an overcast, rainy weekend. For once, he was right. However, it didn't stop over twenty-five competitors, observers and sport flyers from attending.

Twice on Saturday morning the range had to shut down for short periods due to showers moving through the area, before a constant rain stopped the flying for good around 3PM. There was only one brief, light shower on Sunday, allowing everyone to get in all of their contest flights.

C SuperRoc Duration: In combined A/B Division, Bobby Gormley survived a separation on his second flight to beat out his brother Kevin, 533 points to 500 points.

C Division was taken by PARA's Bill Nolthenius with a record breaking 1145 points. This eclipsed Bob Zabriskie [Garden State], who had an excellent mark of 1110 points. Warren Sisco and Dan Winings took Third and Fourth, respectively.

The Los Cohetedores Team of Andrew Miller, Paul Miller, and

Vince Sempronio [NARHAMS] easily took first place in Team Division with 1195 points.

A Rocket Glide [M]: The breeze that went along with the showers didn't help the gliders. Despite that, Bobby Gormley took first in A/B with a single flight of 66 seconds.

Bobby's dad Kevin E. took First in C Division with three strong flights using a QCR kit totaling 189 seconds. Ken Brown, Mr. QCR himself, flew to 158 seconds and Second Place, while Scott Tyrell of PARA took Third at 129 seconds, followed closely by Bob Zabriskie at 126 seconds.

Los Cohetedores took this event convincingly with 210 seconds total, followed by Flirtin' With Disaster at 92 and JPK Team at 51 seconds.

E Helicopter Duration: Los Cohetedores took First Place in this event, too [do you sense a pattern developing here?] with one qualified flight of 202 seconds. JPK [aka Charlie Sykos and Ken Mizoi] came in second with 143. This was the product of a 101-second flight on Saturday with a high-performance model that could not be recovered, and a 42 second flight on Sunday with a model that was built from hurriedly procured parts on Saturday night! [figures] The Flirtin' With Disaster Team took third with a disappointing

56 second effort.

C Division was relatively close, with Ken Brown beating out Kevin E. Gormley, 165 to 148.

SPAAR's Renee Feveryear used a record-setting 133 second flight to take first in A/B Division.

B Eggloft Duration: With little in the way of thermal activity, long duration flights were at a premium. Despite that, Dale Greene took C Division with a flight of 50 seconds, 10 seconds better than Ken Brown's 40 seconds. Dale used a tapered model with a black powder B, while Ken used a similar model and an Apogee composite B7.

A/B Division was close, with Renee Feveryear taking a second First Place at 30 seconds. Kevin J. Gormley was right behind at 26 seconds.

Team Division was won by Flirtin' With Disaster at 56 seconds, using an Apogee B-Liner and a B7-4. JPK took second at 36 seconds, and Los Cohetedores at 25.

Plastic Model Conversion: This was the first time a craftsmanship event has been flown at a RAMTEC. Despite the horror stories usually associated with PMC, the quality of the entries was very good, without any stability problems.

There were a large number of OCR F-104 Starfighters entered,

including the two entered by the Gormley brothers. Bobby's was judged better in the static judging, but didn't fly as well as Kevin's. Bobby took the event, 802 points.

Ken Brown's well-detailed F-16 Falcon took first in C Division with 830 points, followed by Dan Winings and his Juno-1 at 708. Team Division First Place was easily captured by the JPK entry of an F-16N, built by Charlie Sykos. The model boosted perfectly on an 18mm composite E, and landed in a tree. Incredibly, the model was recovered undamaged. JPK's point tally was 895, easily outdistancing Los Cohetedores' 755 and Flirtin' With Disaster's 745. Both flew Juno-1s.

When the points were all totaled up, NOVAAR came out as the big winner, with 9867. The host Section, SPAAR, followed with 3579. In Third Place was NARHAMS at 2562, PARA at 1725, and GSSS with 1161.

As with any successful meet, there were many people who contributed to the success of RAMTEC-2. Bill Middleton seemed to be timing every flight; Ducky Klouser from PARA helped out Saturday afternoon; Jonathan Rains of NOVAAR was able to make it on Sunday to help out with RSO duties; SPAAR's Ed Miller and Rick Hackman did a ton of range duty on Saturday, and Andrew Miller's mom [sorry, I didn't get your name!] handled a stopwatch. We thank you all. 12

One thing that made this year's RAMTEC a bit different from last year was the gracious support of many manufacturers and dealers from across the country. They donated items for door prizes, as well as materials to be included in the packet that each RAMTEC participant received. Our thanks go out to: **The Launch Pad, Countdown Hobbies, Estes Industries, M2F2, Belleville Wholesale Hobby, Public Missiles, LTD., NARTS, LOC/Precision, Designex Corp., Qualified Competition Rockets, Flight Systems, Inc., and Kevin Funk.**

In each Participant's Packet was a ticket for the door prize drawing; A and B Divisioners had two tickets in theirs, giving them a better chance of winning. During those periods on Saturday when a shower held up the flying, the prizes were awarded on the field. When the rains shut things down for good that afternoon, we all gathered in the lounge area of the dorm to award the rest of the prizes. The winners were: Ken Mizoi, an Estes Tomcat; Dale Greene, an Estes Skywinder; Charlie Sykos and Dan Winings, each a \$10 certificate from Countdown Hobbies; Andrew Miller, a certificate for an MGM-52 kit from The Launch Pad; Renee Feveryear and Bob Zabriskie, both a nylon parachute from LOC/Precision; Jules Distel and Warren Sisco, Hornet kits from Flight Systems; Renee Feveryear, an M2F2 Space Camel; Bobby Gormley, a QCR 18mm RotaRoc kit; Kevin E. Gormley, an

Edmunds Canard glider kit from QCR; and David Bross, a North Coast Rocketry launch controller, donated by Kevin Funk. In addition, almost everyone who attended went away with a plastic NAR mug, donated by NARTS.

Sport flying was also a part of RAMTEC-2, although the weather undoubtedly kept the number down from last year. On Saturday, SPAAR's Ed Miller flew his modified Estes Super Big Bertha Plus on a Flight Systems F100. That got everyone's attention. Bill Middleton flew an Aerotech Cheetah on an F25, and a Custom Rockets Redliner on a C6-5. Probably the lowest sum of Newton Seconds that Bill has flown in a while! The weather was better on Sunday, so after the contest flying was finished, out came the sport birds. Paul and Andrew Miller flew a beautiful, upgraded Estes Mean Machine on an E15-8 [look Ma, no CATO!]. Jon Rains flew some oldies, and Charlie Sykos flew "Sparky the Flying Asparagus" twice. Finally, Charlie got hold of one of Warren Sisco's RocketFlight F50 Silver Streak motors, and flew it in his Aerotech ARCAS. To quote Charlie, "Hey Warren, got any more of them?!?". Nice flight!

Despite an uncooperative Mother Nature, we had a good time. RAMTEC-3 is in the planning stages for June, 1995. Please keep it in your plans for next year.

RESULTS

RAMTEC-2 JUNE 11 & 12, 1994

CONTESTANT	NAR NO.	SEC	A RG (m)			SUM	E HD		SUM	B ELD		BEST	STATIC	FLIGHT	TOTAL	LGTH	C SRD		TOTAL	PTS	
			1	2	3		1	2		1	2						1	2			
A/B DIVISION																					
RENEE FEVERYEAR	60263	503	-	-	-	95	133	228	EGG	30	30	-	-	-	-	-	-	-	-	1230	
BOBBY GORMLEY	40847	205	NG	66	-	66	ROT	FP	SEP	EGG	DQ	705	97	802	250	33	250	SEP	533	2022	
KEVIN J. GORMLEY	54797	205	11	-	-	11	ROT	-	SEP	26	26	640	130	770	250	NR	-	-	500	1476	
C DIVISION																					
KEN BROWN	29354	205	43	50	65	158	100	65	165	40	-	40	675	155	830	245	NR	230	US	490	2283
JULES DISTEL	52977	439	12	23	-	35	-	-	-	EGG	-	DQ	575	165	740	-	-	-	-	-	540
KEVIN E. GORMLEY	55663	205	54	57	78	189	72	76	148	34	SEP	34	225	163	388	250	SEP	-	DQ	1332	
DALE GREENE	12464	503	NG	NG	37	37	ROT	-	DQ	27	50	50	-	-	-	250	CAT0	-	-	FP	627
BILL NOLTHENIUS	53555	520	-	-	-	-	83	CAT0	83	19	17	19	-	-	-	250	43	250	102	1145	645
WARREN SISCO	12282	520	34	10	15	59	84	ROT	84	7	12	12	440	138	578	191	45	191	30	839	669
SCOTT TYRELL	53529	520	42	47	40	129	NR	NR	FP	10	32	32	-	-	-	-	-	-	-	-	411
DANIEL WININGS	2085	205	CAT0	NG	91	91	ROT	-	DQ	SEP	CAT0	37	555	153	708	250	NR	250	SEP	500	678
ROBERT ZABRISKIE	36036	439	NG	50	76	126	-	-	-	22	27	27	485	158	643	250	57	250	53	1110	621
TEAM DIVISION																					
LOS COHETEDORES	255	139	60	35	115	210	202	ROT	202	14	25	25	575	180	755	250	95	248	104	1195	2562
FLIRITIN' WITH DISASTER	503	503	60	17	15	92	EJ	56	56	56	25	56	575	170	745	250	SEP	244	6	494	1722
JPK	200	205	51	-	-	51	101	42	143	EGG	36	36	735	160	895	250	LOP	250	38	538	2076

SECTION POINTS:

- NOVAAR 9867
- SPAAR 3579
- NARHAMS 2562
- PARA 1725
- GSSS 1161

LEGEND: ROT - NO ROTATION

- CAT0 - CATOSTROPHIC FAILURE
- EGG - BROKEN EGG
- SEP - SEPARATION
- EJ - EJECTED ENGINE
- US - UNSAFE
- NG - NO GLIDE
- NR - NO RETURN
- FP - FLIGHT POINTS
- DQ - DISQUALIFIED

FLIGHT LOG

RAMTEC - 2 SPORT FLIGHTS

#	FLYER	MODEL	MANUF	MOTOR[S]	RESULT
1	Ed Miller	Armacron III	SB	E B8-5[3]	Good Flight
2	Ed Miller	UFO	SB	AT F40-4W RMS	Good Flight
3	Ed Miller	Delta Clipper	Quest	AT D13-4W RMS	Good Flight
4	Ed Miller	Super Big Bertha +	Estes	FSI F100-6	Good Flight
5	Bill Middleton	Cheetah	Aerotech	AT F25-9W	Good Flight
6	Bill Middleton	Redliner	Custom	E C6-5	Good Flight
7	Scott Tyrell	Lil' Nuke	LOC	AT E28-4 RMS	Good Flight
8	Scott Tyrell	HL 20	SB	E B6-2	Good Flight
9	Charlie Sykos	Maxi Alpha	Estes	E D12-3	Good Flight
10	Charlie Sykos	Unknown		E D12-3	Good Flight
11	Charlie Sykos	Sparky	SB	E D12-3	Good Flight
12	Charlie Sykos	Sparky	SB	E D12-3	Good Flight
13	Charlie Sykos	ARCAS	Aerotech	RF F50-SS5	Good Flight
14	Charlie Sykos	Mustang	Aerotech	AT F25-9W	Good Flight
15	Charlie Sykos	Tomahawk	Aerotech	AT E15-4W	Good Flight
16	David Bross	SW Booster	SB	AT E30-4W	Good Flight
17	David Bross	SW Booster	SB	AT E30-4	Good Flight
18	David Bross	HelioCopter	Estes	E C6-3	unknown
19	Dan Winings	Initiator	Aerotech	AT E16-4W RMS	Good Flight
20	Dan Winings	Big Bertha	Estes	AT C12-4T RMS	Good Flight
21	Paul & Andrew Miller	Mean Machine	Estes	E E15-8	Good Flight
22	Jon Rains	Astro Sprint	SB	Q B6-4	Hmmm
23	Jon Rains	Astro Sprint	SB	E B6-4	Good Flight
24	Jon Rains	NAR Bertha	Estes	Q B6-4	Fssst
25	Jon Rains	Titan IIIIE	Estes	E D12-3	Good Flight
26	Jon Rains	Mercury-Redstone	Centuri	E C6-3	Good Flight
27	Rick Hackman	Stalk	SB	E A8-3	Good Flight
28	Rick Hackman	UFO-24	EM	E D12-3	Good Flight
29	Rick Hackman	Thor	SB	E B4-4	Good Flight
30	Rick Hackman	XR-49	SB	E C6-5	Good Flight

Number of flyers: 9

Type of models flown:

Scratchbuilt: 9

Estes: 7
 Aerotech: 5
 Custom: 1
 LOC/Precision:1
 Centuri: 1
 Quest: 1
 Ed Miller: 1

Motor Usage:

Estes: 18
 Quest: 2
 FSI: 1
 Aerotech SU: 6
 Aerotech RMS: 3
 RocketFlight: 1

TRIPOLI REGIONAL HPR LAUNCH
CULPEPER, VA MAY 21-22, 1994

by Ed Miller

After a long hard winter, Spring is finally here. Central Virginia Tripoli #25 and Connecticut Tripoli joined forces to meet the challenge. The launch in Culpeper was planned well and promised to be one of the largest launches ever. Flyers from the entire East Coast area, and as far away as Utah came to fly their rockets.

Many well known flyers came to Culpeper. Bruce Kelly, the High Power Rocketry Magazine editor; Peter Alway, from Saturn Press; Chris Pearson, Trip Barber, Paul Miller, Henry Holzgreffe, Jim Scarpine, Ed Holland, Lovett Reddick, and Doug Pratt, to name a few. SPAAR members present were Ed Miller, Rick Hackman, and Bill Schaffer.

Many dealers were also present. Ross Dunton of Magnum, Ron and Deb Shultz of LOC/Precision, Bill Schaffer of Designex, Thrust Aerospace, Pratt Hobbies, Golden Propellant, and Robby's Rockets. Peter Alway was promoting his new book, and autographing any of his three books that scale buffs brought to his table.

Saturday's weather was good. The temperature was in the 80's and the sky was clear. Winds varied between 5 and 15 MPH. The following is a brief rundown of the day's events:

One of the first rockets off the pad was an 8" diameter upscale Estes Sprint flown with a K550. Jim Scarpine launched his 8" diameter Standard ARM with a cluster of 1 K1100, 2 I357s and 2 H238s for a great Hi-G flight. Frank Philipppo was NAR confirmed and his card was signed by SPAAR members Rick Hackman and Ed Miller. The BATF showed up for a question and answer session. Word has it that they were very impressed with our safety precautions. I hope they reflect their impressions in the enforcement of regulations. Paul Krause launched his Triton Concept with a cluster of 1 J800, 2 I357s and 2 H238s for a great flight. Curtis F. launched his scratchbuilt K-ROC with a K550. Larry Z. launched his MX3 on a K550. Bob Bair launched his 1/2-scale Sandhawk on a J415 for a great flight. Ed Miller launched his Hyperon on a cluster of 3 F100s, and his Silver Streak on an H220SS for two great flights. Don Katz launched his 1/2-scale Patriot out of a 1/2-scale box with a J415 for an interesting flight. Justin Gleiter launched his THOY Falcon with a booster stage and a camera payload on an I357 and an H180 for a great flight.

On Sunday the weather was even better. The sky was clear and the winds were calmer. Ken

Hodges launched his double Estes sized Terrier-Sandhawk with an H260 and H100 combination for a good flight. Ray Brant launched his PML Nike-Apache on an I161 and an F40 for a good flight. Dave Wald launched his J-ROC on an I500 and two H100s. Lovett Reddick launched his Electronic Bruiser on a K500 for a good flight. Chris Pearson "CHAD" staged his NCR Magna with H220 Silver Streaks and D12s for a great flight. Paul Kramer flew his scratchbuilt rocket with an H238 and 6 F100 motors [a man after Ed's heart!-ed] Jim Scarpine flew his upscale SWAT with an I211. Henry Holzgrefe flew his PML Triton Concept with an L750 and eight air-started H100 motors for an outrageous flight. Doug Pratt launched his NCR Tomahawk with a J230 and R/C deployment for a good flight. Robert M. launched a 1/2-scale Phoenix with three I238 motors. A. Swakhammer launched his LOC King Viper III with three H142s. Steve Pitton launched his "High Speed" Falcon with a J700 and discovered the shred barrier.

Kevin Mitchell launched his Bruiser with an I500 two times. The author, Ed Miller, launched his I-ROC and THOY Falcon, both on I357s, as well as his Armacron with an H180 for three good flights. Ed Holland launched his new two-stage rocket on an J800/J275 combo for a high-G liftoff. Don Katz launched his Patriot-in-a-box for a second time on a J340.

Craig Smith launched his 1/4-scale Aerobee on an H180 and an H142 for a good flight.

Joe Egan launched his Falcon on an I160 for a good flight. Dave Wald launched his two-stage ARCAS with an H180/H128 motor combination for a good flight. Doug Pratt launched his Terminator form Dangerous Dave's with a K500 to an altitude of 2338 feet. The team of Ken Mizoi [that Ken Mizoi?-ed] and Ross Dunton launched a rocket with a 98mm reload for a great flight.

Well, folks, this Tripoli meet may be over, but it did set new records. There were 215 registered flyers in attendance. Of these, 41 were making high power certification flights [Tripoli and NAR]. There were 489 total flights, witnessed by approximately 1500 spectators during the course of the weekend. Who says you have to go to Lucerne or Black Rock to fly High Power?

IN THE NEXT ISSUE:

** Plans for a rather familiar sport model; Rick Hackman's XR-55, the rocket-powered WWII fighter plane.

** A preview of the SPAARSEC-XI Section Meet.

** Coverage of our Apollo 11 sport launch

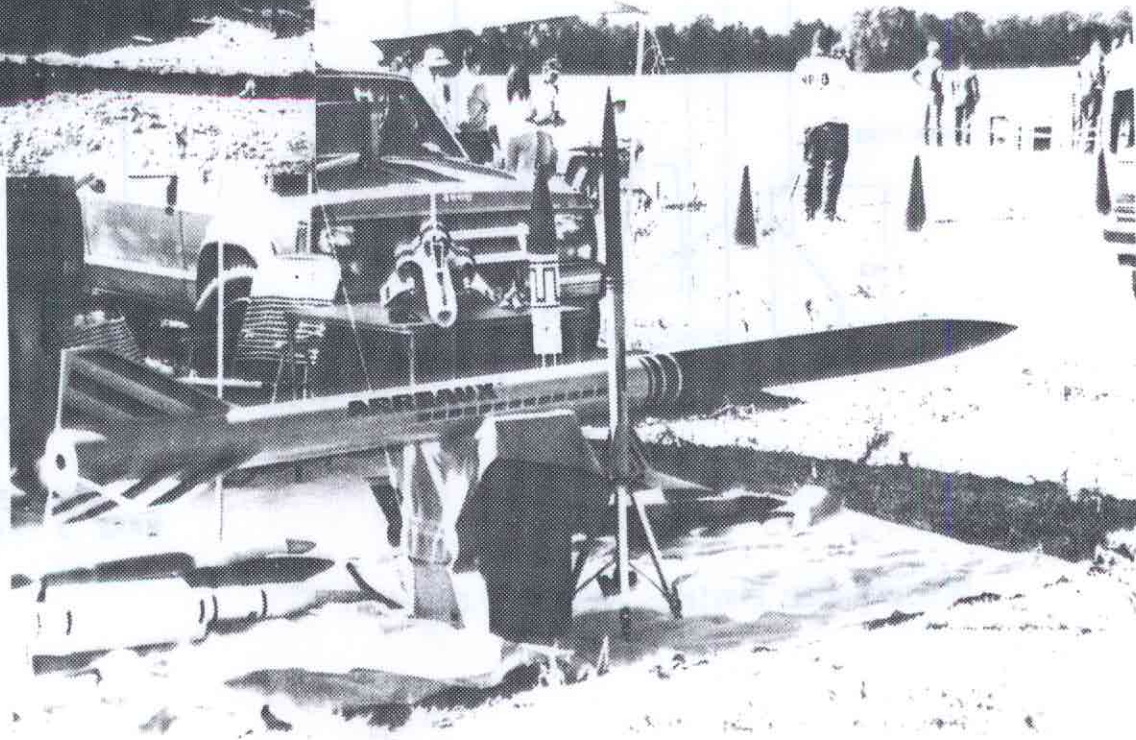
** and whatever you send in...

CULPEPER PHOTOS

LEFT: RON SHULTZ OF
LOC/PRECISION WITH
HIS NEWEST KIT, THE
V-2.

BELOW: AN UP-SCALE
ARREAUX, WITH THE
STANDARD SIZE VERSION
NEARBY.

PHOTOS BY ED MILLER.



E EGGLOFT ALTITUDE

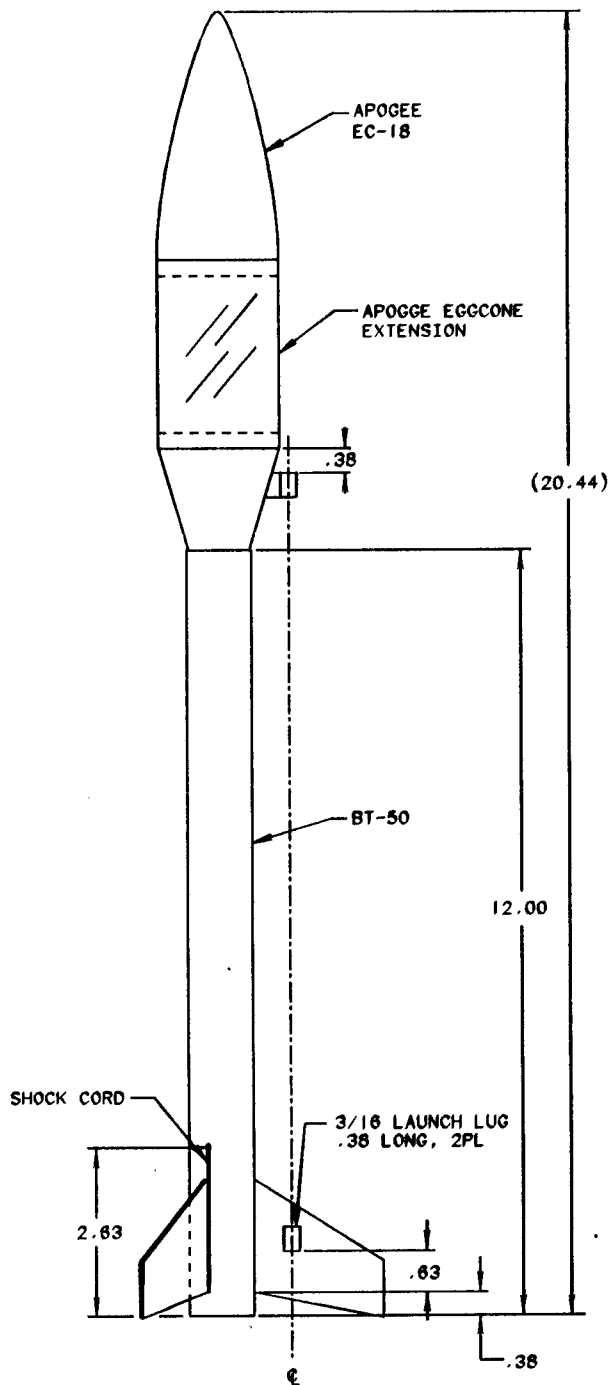
DESIGNED BY: GLENN FEVEYEAR

NAR 24931

U.S. RECORD HOLDER @ 590m

GROSS WEIGHT: 153.2g

WEIGHT W/O ENGINE: 105.2g

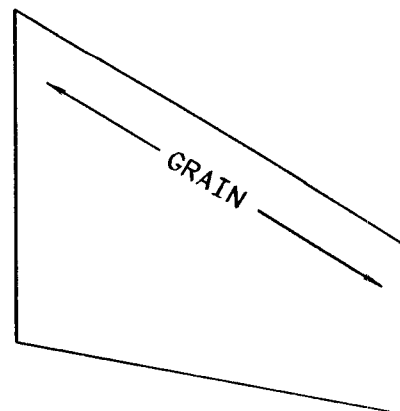


NOTES:

1. FILL AND SAND ALL BODY TUBE SEAMS.
2. SHOCK CORD: 1001b KEVLAR 48" LONG. WRAP AROUND FIN AND FILLET W/EPOXY.
3. RECOVERY DEVICE: 18" DRY CLEANER BAG WITH SHROUD LINES SECURED OVER TOP OF CANOPY.
4. THIS DESIGN DOES NOT SPECIFY AN ENGINE BLOCK. WRAP 1/4" WIDE MASKING TAPE AROUND NOZZLE END OF THE ENGINE TO ACT AS A STOP.



FULL SIZE
LAUNCH LUG STANDOFF
PATTERN
1/16" THK PLYWOOD



FULL SIZE FIN PATTERN
MAKE 3 FROM 1/16" THK PLYWOOD
AIRFOILED

RECOMMENDED ENGINE: AEROTECH E15-7

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.

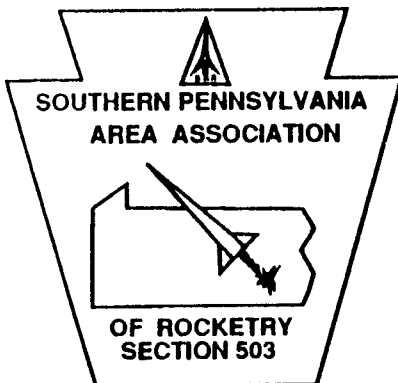
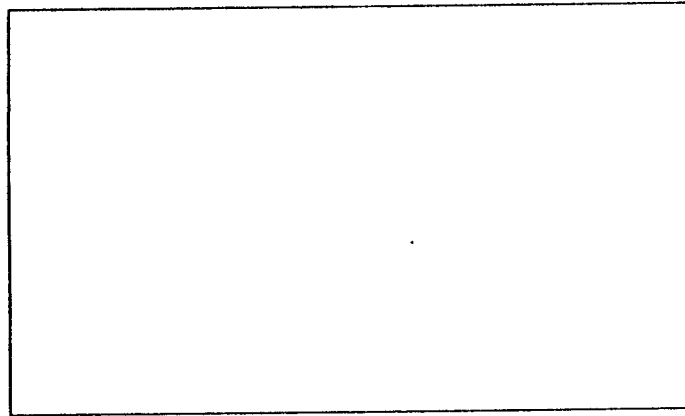
"BUY THIS BOOK!"

Peter Alway at Culpeper HPR Launch photo by Ed Miller



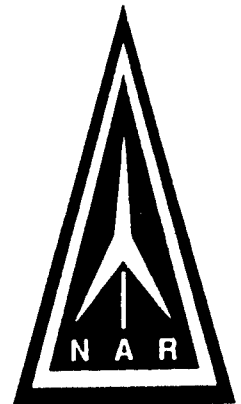
SPAAR
P.O. Box 127
Reamstown, PA. 17567

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