

THE SOUTHERN PENNSYLVANIA AREA ASSOCIATION OF ROCKETRY

VOLUME 9, ISSUE 4

JULY/AUGUST 1996

"The highest Flying Production Model Rocket Kit Using "B" Engines or Less"

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PROPOSAL:

SPAARTREK

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Competition Plan:

B PARACHUTE DURATION

The Countdown

Volume 9, Issue 4

July/August 1996

The <u>Countdown</u> is the newsletter of SPAAR, the Southern Pennsylvania Area Association Of Rocketry, NAR Section #503, and Tripoli Susquehanna #71, PO Box 127, Reamstown, PA 17567. Material may be used with proper credit. [yea, right]

President: Dale Greene Section Advisor: Glenn Feveryear Tripoli Prefect: Ed Miller Editor: George Beever

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SCHEDULE

FRIDAY, OCTOBER 18, 7-9PM: SPAAR Meeting, Homedco Community Room, Lancaster.

SUNDAY, OCTOBER 20, 1-5PM: SPAAR Sport Launch, Cocalico High School, Denver, PA.

SUNDAY, NOVEMBER 3, 1-5PM: SPAARSPAM-VIII Club Tailgate Picnic and Sport Launch, Cocalico High School, Denver, PA.

FRIDAY, NOVEMBER 15, 7-9PM: SPAAR Meeting, Homedco Community Room, Lancaster.

FRIDAY, NOVEMBER 29, 9AM-1PM: Turkey Day +1 Sport Launch, Cocalico High School, Denver.

SPAAR SPORT LAUNCHES

May 26, 1996

The Memorial Day weekend Sport Launch was well attended, with 19 flyers attending, as well as a large number of spectators.

The weather was overcast and somewhat chilly - a preview of the summer weather we had in these parts.

Almost all flights were good ones, and a few were a bit more memorable than others. For example, George Fetter had an inspiration to put an Aerotech D21 in an Estes Alpha III. It made a rather unique whistling noise on the way up, but stayed together. Robin Shepard tried the same thing, but suffered a CATO, destroying the rocket. And then there was George's Flying Launch Lug, made out of 1/2" a length of diameter, well, launch lug. Didn't fly too well. Then he tried to lose or otherwise divest himself of his LOC IV. George doesn't like this model, but in spite of that it kept coming back.

Brian Royer flew a model he calls the Scorcher. It's a 29mm model, and flown with a G40 it leaves the building in a hurry. Jordan flew a nice 2.6" scratchbuilt, diameter Maxi-Mosquito. Those plans would look great here in the wouldn't newsletter, [hint, hint].

Bill Rhoat has a nice LOC Vulcanite that just keeps

having CATO problems. This time it was an F50. Rick Hackman got 212 seconds on a flight in D Parachute Duration, which could have been a national record had he been an NAR member. Oh well.

June 30, 1996

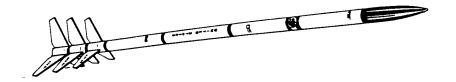
June 30 saw the new and old of SPAAR together. The new, in the form of many of our newest members, and the old literally] in the form of Mark Snyder. Mark was one of SPAAR's original 1988 members, and made it to a launch for the first time in a few years. He kept using that long drive Baltimore as an excuse. Yeesh. anyway, George Fetter Well, tried again to divest himself of his LOC IV... hey, wait, this sounds like last month! It's still there, George... Guy Destafano flew a bright orange THOY Peacock a few times on Aerotech F50's. Said Guy, rocket/motor like that combination!" Guy also flew the first PML kit ever seen at a SPAAR Sport launch, a Phobos on a G40 for a nice flight.

Brandon Gromis made it to his first club launch, flying a G40 in a LOC Onyx. Real nice flight. Roger Dwyer flew a vintage original edition Mercury Redstone on a C6-3. Put that one on the shelf, Roger, it's a collector's item!

FLIGHT LOG

May 26, 1996

#	FLYER	MODEL	MANUF	MOTOR[S]	RESULT
1	Courtney Sombers	SR-71	Estes	E C6-5	Separation
2		Big Bertha	Estes	E B6-2	Good Flight
3	Ben weaver	Phoenix	Estes	E D12-3	Good Flight
4	Ben Weaver	Phoenix	Estes	E D12-3	Good Flight
5	Ben Weaver	Intruder	Estes	E A10-3	Good Flight
6	Ben Weaver	Intruder	Estes	E A10-3	Good Flight
7	Ben Weaver	Big Bertha	Estes	E B6-2	Good Flight
8	Ben Weaver	Big Bertha	Estes	E B6-2	Good Flight
9	Ben Weaver	Big Bertha	Estes	E B6-2	Good Flight
10	Ben Weaver	Intruder	Estes	E A10-3	Good Flight
11		Nova Payloader	Estes	E B6-2	Good Flight
12		Broadsword	Estes	E D12-3	Good Flight
13		Skywinder	Estes	E B6-4	Good Flight
14		Intruder	Estes	E A10-3	Good Flight
15		Delta Clipper	Estes	E D12-0/D12-3	1/2 GF!
16		Skywinder	Estes	E B6-4	Good Flight
17	_	Spaceracer	Estes	E A8-3	Good Flight
18		Spaceracer	Estes	E A8-3	Good Flight
19	-	Spaceracer	Estes	E A8-3	Good Flight
20	- _	Spaceracer	Estes	E C6-5	Good Flight
21		Mosquito	Estes	E A10-3	Good Flight
22	-	Mosquito	Estes	E A10-3	Good Flight
23	<u>-</u>	Mosquito	Estes	E A10-3	Good Flight
24		Mosquito	Estes	E A10-3	Good Flight
25		Skywinder	Estes	E C6-5	Separation
26		Corkscrew	Estes	E B6-4	Good Flight
27		Corkscrew	Estes	E B6-4	Good Flight
28	-	Corkscrew	Estes	E B6-4	Good Flight
29		Corkscrew	Estes	E C6-5	Good Flight
30	_		Estes	E A8-3	Unknown
31	-		Estes	E B4-2	Good Flight
32			Unknown	E B4-2	Good Flight
33			Estes	E A8-3	Good Flight
34		SR-71	Estes	E C6-5	Good Flight
35		V-2	MTSH	AT E15-4WL	Good Flight
36			Scratch	E C6-3	Unknown
37			Scratch	AT F40-4RMS	Good Flight
3.8		USAF	Scratch	E C6-7	Good Flight
3 9			Estes	E C6-7	Good Flight
4(Astrocam	Estes	E C6-5_	Good Flight
4:	L John Yost	D Altitude	Scratch	E D12-7	Good Flight
42	2 John Yost	Yost-A-Roc HD	Scratch	E D12-5	Lawn Dart
43	Robin Shepard	V-2	MTSH	AT E18-7RMS	Good Flight



44	Robin Shepard	Sandhawk	MTSH	AT G64-4RMS	Good Flight
45	Robin Shepard	Sandhawk	MTSH	AT G64-4RMS	Good Flight
46	Robin Shepard	Sandhawk	MTSH	AT G64-4RMS	Good Flight
47	Robin Shepard	Firestreak	Estes	E C6-5	Good Flight
48	Robin Shepard	SR-71	Estes	E C6-5	Good Flight
49	Robin Shepard	Alpha III	Estes	AT D21-7T	CATO
50	Bill Jordan	Broadsword	Estes	AT E30-7T	Good Flight
51	Bill Jordan	Maxi-Mosquito	Scratch	AT E15-7WL	Good Flight
52	Bill Jordan	Maxi-Mosquito	Scratch	E D12-5	Good Flight
53	Bill Jordan	Lil' Nuke	LOC	AT F50-9T	Good Flight
					Good Flight
54	Bill Jordan	Bullpup 12B	TLP	E D12-5	
55	Bill Jordan	Phantom 4000	NCR	AT F40-4RMS	Good Flight
56	Brian Royer	Lil' Blaster	Scratch	E 1/2A3-4	1/2A SD 19.5s
57	Brian Royer	BAR-1	Scratch	AT G64-4RMS	Good Flight
58	Brian Royer	BAR-1	Scratch	AT G64-4RMS	Good Flight
59	Brian Royer	Scorcher	Scratch	AT E23-5RMS	Good Flight
60	Brian Royer	Scorcher	Scratch	AT G40-10W	Hmmm
61	Brian Royer	Sky Ripper	Scratch	AT G80-10T	Ditto
62	Brian Royer	Sky Ripper	Scratch	AT G64-4RMS	Good Flight
63	Brian Royer	Bailout	Estes	E B6-4	Good Flight
64	Brian Royer	Big Bertha	Estes	E B6-4	Good Flight
65	Brian Royer	Mosquito	Estes	E 1/2A3-4	Good Flight
66	Don Ewing	Ninja	Estes	E A3-4	Unstable
67	Don Ewing	Ninja	Estes	E A3-4	Good Flight
68	Don Ewing	IRIS	MTSH	AT E11-3RMS	Good Flight
69	Don Ewing	IRIS	MTSH	AT E11-3RMS	Good Flight
70	Don Ewing	IRIS	MTSH	AT F24-7RMS	Good Flight
71	Don Ewing	IRIS	MTSH	AT F24-7RMS	Good Flight
72	Don Ewing	Ninja	Estes	E A3-4	Good Flight
73	Don Ewing	Ninja	Estes	E A3-4	Good Flight
74	George Fetter	Astrobee-C	Scratch	AT F25-4W	Good Flight
75	George Fetter	Bullpup 12D	Estes	E B6-4	Good Flight
76	George Fetter	Aura	LOC	AT E15-4W	Good Flight
77	George Fetter	X-99	Scratch	AT G40-10W	Gone
7 <i>7</i>	_	Alpha III	Estes	AT D21-7T	Yikes!!
78 79	George Fetter				Good Flight
	George Fetter		ughn Bros.		_
80	George Fetter	Flying Launch		E A3-4	Ejected Motor
81	George Fetter	Sandhawk	MTSH	AT G40-4W	Good Flight
82	George Fetter	V-2 4.0	MTSH	AT G64-4RMS	Good Flight
83	George Fetter	V-2 4.0	MTSH	AT G64-4RMS	Good Flight
84	George Fetter	LOC IV	LOC	AT F50-4T	Good Flight
85	George Fetter	LOC IV	LOC	AT G40-4W	Separation
86	George Fetter	LOC IV	LOC	AT G40-7W	Good Flight
87	Rick Hackman	XR-76A [D PD]	Scratch	E D12-5	Separation
88	Rick Hackman	XR-76A [D PD]	Scratch	E D12-5	Wad-O-Chute
89	Rick Hackman	XR-76A [D PD]	Scratch	E D12-5	GF-212s !
90	Rick Hackman	XR-54	Scratch	E D12-7	. Good Flight
91	Rick Hackman	XR-77A	Scratch	E C6-5	No Chute

Launch Stats:

Number of flyers: 19

Weather: cloudy, temp high 60's

Models:	Motors:	<pre>Impulse:</pre>	
36Estes 7 Mountainside Hobbies 5 North Coast Rocketry 1 Aerotech 7 LOC/Precision 1 Vaughn Bros. 2 Quest 2 The Launch Pad	77 Estes 23 Aerotech SU 16 Aerotech RMS Failures: 2 F50 CATOS	E F G	3 22 16 17 19 13 12 15
16Scratchbuilt		Total	тт/

FLIGHT LOG

June 30, 1996

<u>#</u>	FLYER	MODEL	MANUF	MOTOR[S]	RESULT
1	Chris Snyder	Turbocopter	Estes	E A8-3	Good Flight
2	Justin Baylor	Ninja	Estes	E A10-3	Eject motor
3	Justin Baylor	Helicat	Estes	E C6-3	Good Flight
4	Matt Baylor	F-22	Estes	E B6-2	Good Flight
5	Matt Baylor	Helicat	Estes	E C6-3	Good Flight
6	Matt Baylor	F-22	Estes	E C6-3	Good Flight
7	Matt Baylor	Helicat	Estes	E C6-3	Good Flight
8	Michael Snader		Estes	E C6-5	Good Flight
9	Michael Sauder		Estes	E C6-5	Good Flight
10	Michael Sauder		Estes	E B6-4	Good Flight
11	Michael Sauder		Estes	E A3-4	Good Flight
12	Michael Sauder		Estes	E A10-3	Good Flight
13	Michael Sauder		Estes	E C6-5	Good Flight
	Courtney Sombe:		Estes	E C6-5	1st Flight
14 15	Gerard Hertzog	Mean Machine	Estes	E D12-5	Good Flight
16	Gerard Hertzog	Tittle Toe II	Estes	E A10-3	Good Flight
17	Gerard Hertzog		Estes	E B4-4	Good Flight
18	Gerard Hertzog		Quest	E C6-5	Good Flight
19	Gerard Hertzog		NCR	AT G80-7T	Good Flight
20	Steve Biers	Blue Bird	Unknown	E A3-4	Good Flight
21	Steve Biers	Space Shuttle	Estes	E C6-3	Good Flight
22	Steve Biers	Dagger	Estes	E C6-3	Good Flight
23	Roger Dwyer	Onyx	LOÇ	AT E15-4WL	Good Flight
	Roger Dwyer M	ercury Redstone		E C6-3	Good Flight
24	Roger Dwyer M	Patriot	Estes	E A3-4	Good Flight
25 26	Ricky Snader	Arreaux	Aerotech		CATO
27	Ricky Snader	Barracuda	Aerotech		1st Fl/GF
28	Ricky Snader	Arreaux	Aerotech	AT E15-4WL	CATO
29	Ricky Snader	Arreaux	Aerotech	AT E15-4WL	Good Flight
30	Ricky Snader	Astrobee-D	Aerotech	AT G40-7WL	Good Flight
31	Ricky Snader	Mirage	Aerotech	AT G40-7WL	1st Fl/GF
32	George Fetter	X-1	Scratch	E D12-3	Good Flight
33	George Fetter	• -	Aerotech	AT F25-4WL	Good flight
34	George Fetter		MTSH	AT F50-4T	Good Flight
35	George Fetter	Mirage	Aerotech	AT G64-4RMS	Good Flight
36	George Fetter	V-2	MTSH	AT G64-4RMS	Good Flight
37	George Fetter	LOC-IV	LOC	AT F25-4WL	Good Flight
38	George Fetter	LOC-IV	LOC	AT F25-4WL	No Chute
39	Brian Royer	Thunderbolt	Scratch	E C6-5	Good Flight
40	Brian Royer	Nice Machine	Estes	E D12-3	Good Flight
41	Brian Royer	Nice Machine	Estes	AT E15-4WL	Good Flight
42	Brian Royer	BAR-1	Scratch	AT G64-4RMS	Good Flight
43 .	Brian Royer	Sky Ripper	Scratch	AT F52-5RMS	Good Flight

44	Brandon Gromis	Onyx	LOC	AT G40-10WL	Good Flight
45	Mark Snyder	Patriot	Estes	E C6-5	Good Flight
46	Ed Miller	Monocopter 32-	8 Scratch	AT G12RCT	Good Flight
47	Ed Miller	Tekyon	Scratch	VS G200-7	Good Flight
48	Ed Miller	UFO 24-10	Scratch	AT E15-7WL	Good Flight
49	Ed Miller	UFO 29-10	Scratch	AT G64-4RMS	Good Flight
50		per Big Bertha	Estes	FSI F100-6	Good Flight
51	Ed Miller	Tarsis	Scratch	AT G75-6RMS	Good Flight
52	Ed Miller	Eliminator	NCR	AT F50-4T	Good Flight
53	Ed Miller	Trailblazer	MRC	D13-7RMS	Good Flight
54	Doug Gardei	Big Bertha	Estes	E C5-3	Good Flight
55	Doug Gardei	Broadsword	Estes	E D12-3	Good Flight
56	Doug Gardei	Shadow	Estes	E D12-3	Good Flight
57	Doug Gardei	Patriot	Estes	E C5-3	Good Flight
58	Doug Gardei	GEO SAT LV	Estes	E C5-3	Good Flight
59	Doug Gardei	Initiator	Aerotech	AT E18-4RMS	Good Flight
60	Doug Gardei	Initiator	Aerotech	AT F24-4RMS	Good Flight
61	Doug Gardei	Broadsword	Estes	AT E18-4RMS	Good Flight
62	Doug Gardei	Shadow	Estes	AT E15-4WL	Good Flight
63	Doug Gardei	Broadsword	Estes	AT F24-7RMS	Good Flight
64	Doug Gardei	Shadow	Estes	AT F24-4RMS	Good Flight
65	Doug Gardei	Broadsword	Estes	E D12-3	Good Flight
66	Guy Destafano	ADR 4.0	MTSH	AT G80-7T	Good Flight
67	Guy Destafano	Peacock	THOY	AT F50-6T	Good Flight
68	Guy Destafano	Peacock	THOY	AT F50-6T	Good Flight
69	Guy Destafano	Peacock	THOY	AT F50-6T	Good Flight
70	Guy Destafano	Phobos	PML	AT G40-7T	Good Flight
71	Guy Destafano	Legacy	LOC	AT F50-9T	Good Flight
72	Guy Destafano	Astrobee-D	Aerotech	AT G40-4WL	Prang
73	Guy Destafano	Lil' Nuke	LOC	AT E30-4T	Good Flight
74	John Yost	Rose-A-Roc	Scratch	E A8-3	No Rotation
75	Frank Sombers	V-2	MTSH	AT E15-7WL	Good Flight
76	Frank Sombers	V-2	MTSH	AT E30-7T	Good Flight
77	Frank Sombers	SR-71	Estes	E C6-5	Good Flight
78	Frank Sombers	Arrow	Scratch	E D12-5	1st Fl/GF
79	George Beever	Phantom 4000	NCR	AT G40-7WL	Good Flight
80	George Beever	Saturn V	Scratch	E D12-5	Good Flight
81	George Beever	Outlaw	Scratch	AT G64-7RMS	No Chute
82	George Beever	V-2	MTSH	E D12-5	1st Fl/GF
83	George Beever	Mercury-Atlas	Estes	AT E11-5RMS	Good Flight

MANUFACTURER NEWS

APOGEE COMPONENTS shocked the community at NARAM modeling when it announced that it will be awarding a prize of \$500 to the winner of a selected number of events at next year's NARAM. This contest-within-a-contest "The Apogee called is Challenge". This prize is part Apogee an effort by Components to increase rocketry participation in and will competitions, awarded to a single winner [teams are not eligible] just a few of the events at the national competition. The contest events will chosen by Apogee Components from those that are selected by the host NAR section. There are other rules that apply, those interested in competing for this prize should contact Apogee as early as possible.

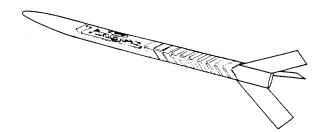
Apogee also announced that it is releasing a new rocket kit called the month "Centrix". Launched on the new micro-motors [1/4A through B], this minimum diameter model is capable of flying over 1/2 mile high. This is the "highest flying single stage production model rocket kit using B Other lower". orengines this 8.8" long features of model include: full die-cut balsa fins, a balsa wood nose cone, and complete step-by-step instructions. assembly price for the kit will be only \$3.99.

Apogee Components' new catalog is also nearing completion, and will contain many rocketry items. This catalog will feature some additional great news for modelers fees. This reduced shipping will help bring the overall cost of the products down, making them even affordable and enjoyable to use.

Printing of the new book "69 Simple Science Fair Projects for Model Rocketry" will take place within the next months, and orders for this 104 now being book are accepted. This book not only presents great ideas for the projects, but also shows how to gather the data, and where to looking for start background information. Most of the projects are simple scope, so that even younger children can take part perform great projects. same topics that make great Science Fair projects also make topics for R good competitions.

Those interested in the products from Apogee Components should request a catalog by sending a SASE to: Tim Van Milligan, Apogee Components, 708 Piedra Drive, Suite C, Canon City, CO 81212-2253.

[More Manufacturer's News on next page.....]



BOYCE AEROSPACE HOBBIES has entered the market with the introduction of a 4" diameter Mercury Redstone kit, priced at \$99.95. Follow-on kits are referred to as "Micro-kits": the Saturn V and Saturn 1B. The little Saturns are \$12.00 each, or both for \$20.00.

All kits feature molded plastic capsules and fins, decals and detailed instructions. The Mercury Redstone flies on F or G power, and the Micro-kits on 13mm mini-motors.

For more information, contact:

Boyce Aerospace Hobbies 3430 Old Meadow Rd. San Diego, CA 92111 619-277-6385, 9-5PM PST

MOUNTAINSIDE HOBBIES: Mark, Cindy, George & Sweitzer have had a busy summer, trying to keep up with the demand for all kinds of rocketry stuff.

A walk through the store will give you an idea how things have changed. Gone are most of the R/C car parts and related equipment. However, if you are an R/C aircraft or rocket flyer, you're in hog heaven.

Mountainside carries their own line of kits, as well as those from LOC/Precision, Estes, Rocket R&D, Public Missiles, Ltd., Aerotech, AAA Model Aviation, and The Launch Pad. Parts are available from LOC, PML, and Estes, as well as

Estes black powder motors, and Aerotech composite motors. In addition, they carry a full line of Aerotech reload kits in the 18mm through 29mm range. A full line of adhesives is also on the shelf.

In addition, if they don't have what you are looking for, let them know; they'll get it for you, such as kits from Boyce Aerospace Hobbies and Cosmodrome Rocketry.

At the time of this writing, a Black Brandt VB kit is being test flown. For more details, call Mountainside Hobbies at 717-733-4140.

ESTES is rumored to finally be ready to release composite rocket motors in the F and G range under their North Coast Rocketry label. These appear to be a different product than what NCR was "almost ready to ship" a few years However, the old North Coast that Estes kit line supposed to release this spring may still be Lost In Space.... Quest was bought out by Toy Biz, Inc., a few months back, and allegedly is ready to make it's presence felt in the model rocket market. Hope they get those dumb οf rid LOC/Precision parachutes.... bought itself back from the investment group it sold itself to earlier this year. Confused? Nah. new catalog A available; Mountainside Hobbies has some.

PROPOSAL : THE SPAARTREK PROGRAM

At a recent SPAAR meeting, Bill Rhoat submitted a proposal for program that dubbed he "SPAARTREK". Based on the NAR's "NARTREK" program, it is aimed at those modelers, young or old, who are new to the hobby. By building models that meet the requirements of each level, the modeler learns valuable just <u>how</u> model lessons on rockets work. In short, there more to it that simply building a kit and sticking a motor in one end. Here is the proposal in it's entirety:

"A proposal to enact a program similar to the old NARTREK only operated program, The rules would be SPAAR. similar to the NARTREK program, modifications some however The program would be made. would consist originally of a BASIC Level, an INTERMEDIATE Level, and an ADVANCED Level. above levels Additional ADVANCED would be added as interest dictates.

The BASIC Level would consist of a parachute flight of at least 60 seconds and a streamer flight of at least 30 seconds. The maximum motor class allowed would be B.

The INTERMEDIATE Level would consist of a payload flight, a D or higher powered flight, and a two-stage flight. The two-stage flight must use black powder motors. The BASIC Level must be achieved before flights

can be made in INTERMEDIATE.

Level ADVANCED consist of a 30-second glider flight, a cluster flight, and sport-scale flight. glider flight must use a class B motor or smaller, and may be boost/glider, for rocket/glider, oradventurous, a flex-wing. The cluster flight must be more than one motor and must single-staged. The sport-scale model would be judged by the sport-scale rules in the Pink Book [the NAR's contest rules book - editor] and must be accompanied by the required substantiation data before it can be judged. The BASIC and INTERMEDIATE Levels must be completed before any flights can be made for ADVANCED.

There are some general rules that must be stated that apply to all levels. The first is that any model can be used to make the flights required to achieve any level. There is no requirement to use kits. modeler must have built model themselves. A modeler must prep the model themselves, but may have someone watch them they sure make to everything right. There will be special flight cards prepared to be handed in to the LCO or the card collector to keep track of all flights. Only one timer is required for timed flights. All flights must be made at SPAAR launches,

contests, or Record Trials. A level is considered achieved when the program director is in possession of all required documentation and has acknowledged that the level has been achieved. This can be done at a launch, if the program director is present.

a fee to of charging register for SPAARTREK has not been decided upon. We would have to see how much it would cost to run such a program and if the club would be able to support it without charging a fee. Registration forms would be required of all participants to aid in data entry. Also, pamphlet οf sort some containing helpful hints would have to produced as an aid to participants and a book of developed. You are plans welcome to make comments and suggestions. No levels beyond ADVANCED were stated in this proposal, as I do not know where everyone's interests lie. Two that I have thought of are HIGH POWER and COMPETITION, but am sure that others for feasible. I thank you proposal and this reading welcome your comments."

<u>COMMENTS:</u> Being the newsletter editor has it's advantages once in a while. Like now. I can put my 2 cents in right here.

Personally, I think this is a great idea. But let's make sure the intent here is understood. For those out there that don't like "the C-word" [Competition - oh, what he said!], this proposal is not competition

oriented; it is GOAL oriented. achievement Levels of performance are set out as a goal to reach. They are a challenge to the individual. And what is possibly more an education important, While I agree received. times with the notion that putting the motor in the right end and making sure the pointy end is facing up, and making a flight successful satisfaction enough [after all, this <u>is</u> a hobby], it is nice to be secure in the knowledge that you know just how and why the things work. I have to wonder sometimes about folks across the country who are introduced to rocketry by means of an Aerotech kit and an F or G motor. Are they really aware of what's going on here? Do they understand how really motors work, much less which one is right for their model? Do they understand the various techniques construction materials used in the range of model rocketry, mid-range model rocketry, and high power? We can't influence what goes on elsewhere, but within SPAAR we can. I think Bill's idea is a great way for folks new to the hobby to learn about the things mentioned above, and for some old guys to have a refresher course. All of this, of course, would translate into a greater awareness of safety, too.

Dale Greene suggested we could incorporate SPAARTREK into our Winter Workshop Program. Another great idea. Come to the October 18 meeting, and voice your opinion.

SPAARSPAM

SPAAR'S ANNUAL TAILGATE PARTY

NOVEMBER 3rd 1:00 TO 5:00pm

BRING FOR EACH OF YOURS:

- -plates with eating utensils
- -cups
- -napkins

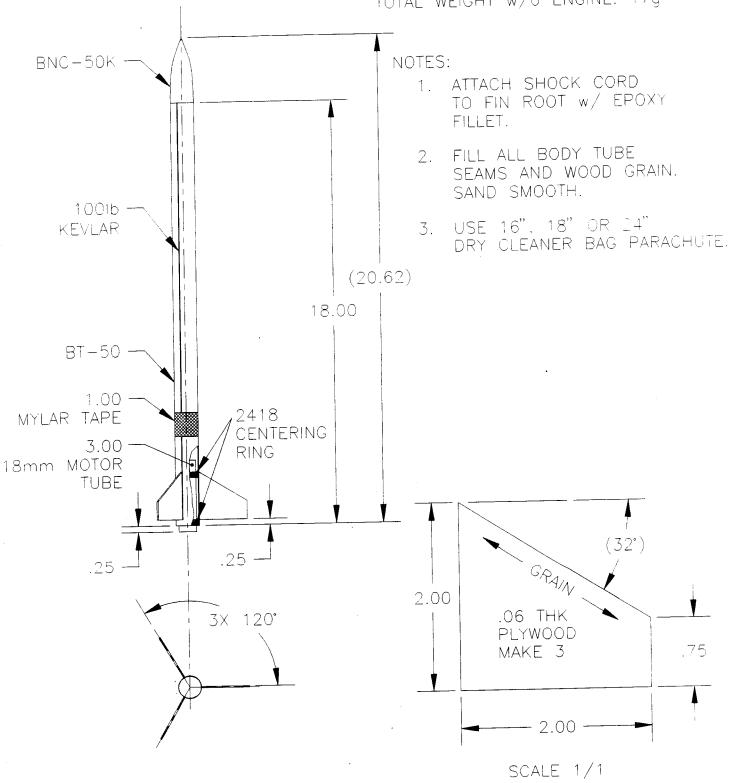
BRING TO SHARE:

- a main dish with serving utensil
- a dessert with serving utensil
- a drink{water, ice tea, soda, etc}

B PARACHUTE DURATION

BY: Glenn Feveryear, NAR 24931

TOTAL WEIGHT w/o ENGINE: 17g



RECOMMENDED MOTOR(S): 18mm - B6-6

96-8-13 24PD1.DWG

$^{\prime\prime}$ THE SOUTHERN PENNSYLVANIA AREA ASSOCIATION OF ROCKETRY

Membership Application

Name_			_ Address				
NAR #	:	Tripol	i #		<u>.</u>		
I hav	e been flying	rockets f	or	_years.	I have not y	ret fl	.own
a mod	lel rocket	•					
DUES:	18 years of a	ge or old	er: \$10 p	er year.			
	15,16,17 year	s of age:	\$7 per 3	ear.			
	16 and under:	\$5 per y	ear				
Famil membe	y Plan: Oldesters 1/2 price;	member j one issue	oins at of the (full pric	ce, all othe per family.	er fan	aily
Re	eturn this form	to: SPAA	R, PO Bos	c 127, Re	amstown, PA *******	17567	7.
TH	HE NATIONAL ASS	OCIATION	T	RIPOLI RO	CKETRY ASSO	CIATIO	N
	OF ROCKET	RY		[HIGH	POWER ROCKE	TRY]	
	more informat write:	ion on t	he Fo	or more RA, write	information:	on	the
	NAR Headquar PO Box 17 Altoona, WI 1-800-262-4	7 54720		-	i Rocketry A PO Box 339 , LA 70063-		

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