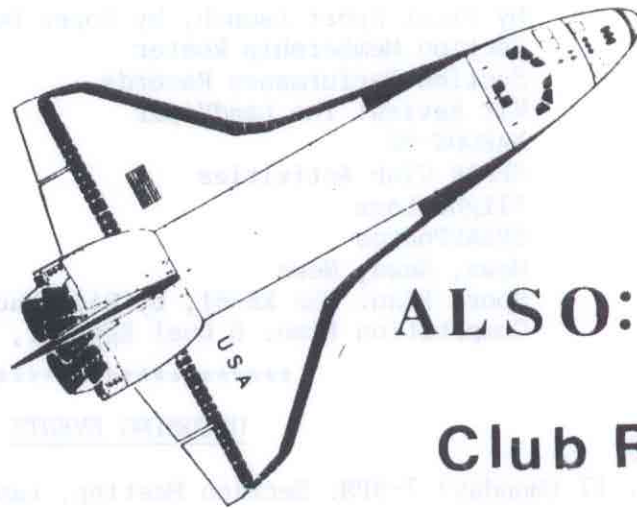


**OFFICIAL NEWSLETTER OF  
THE SOUTHERN PENNSYLVANIA AREA ASSOCIATION OF ROCKETRY**

**Siberian  
Sport Launch  
Coverage**

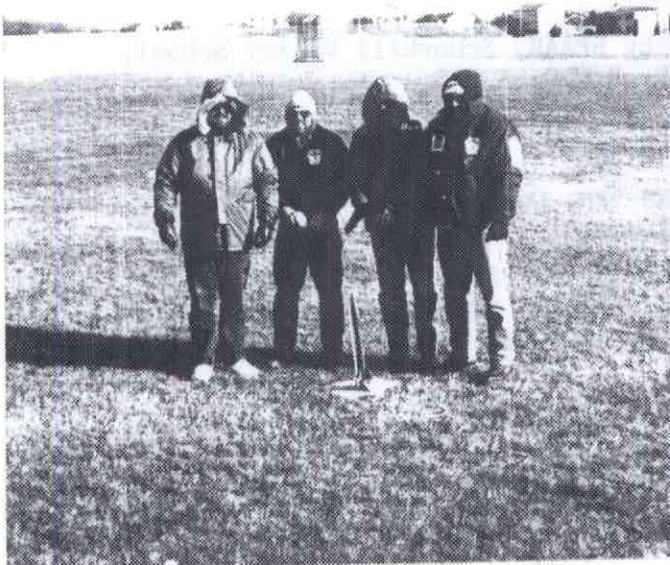


**ALSO:**

**Club Records**

**Dual Egglofter Plans**

**The Big Green Thing**



**Vol. 5 No. 1 Jan/Feb 92**

The COUNTDOWN

Volume 5, Issue 1

January/February 1992

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, 6 issues. Use of material permitted with proper credit. Submissions accepted in any format, preferably CRAYOLA.

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

Thanks this time to: Dale Greene, Glenn Feveryear, Rick Hackman, Roger Dwyer Sr., and Trip Barber (through NOVAAR).

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UPCOMING EVENTS

- Feb. 17 (Monday) 7-9PM: Section Meeting, Lancaster County Library, Lanc.
- Feb. 29 (Saturday) 10AM - ? Winter Workshop, Delta Fire Co., Delta, PA.
- Mar. 1 (Sunday) 1-5PM: Sport Launch, Cocalico Sr. High School, Denver, PA.
- Mar. 16 (Monday) 7-9PM: Section Meeting, Lancaster County Library, Lanc.
- Mar. 21 (Saturday) 10AM - ? Winter Workshop, Delta Fire Co., Delta, PA.
- Mar. 29 (Sunday) 1-5PM: Sport Launch, Cocalico Sr. High School, Denver, PA.

UPCOMING CONTESTS

- April 26, (Sunday) SPAMO-1 Open Meet, hosted by SPAAR, Schuylkill Valley School, 9AM-5PM Events:  $\frac{1}{4}$ A RG,  $\frac{1}{4}$ A BG,  $\frac{1}{4}$ A SD (M), C HD, B ELD, A SRD.
- May 16, (Saturday) FLY HIGH Open Meet, hosted by GSSS, Dorbrook Park, NJ. Events:  $\frac{1}{4}$ A RG (M),  $\frac{1}{4}$ A BG (M), C HD (M), OSL, E SRA.
- May 24, (Sunday) SPAARSEC-VI Section Meet, 9AM-5PM, Cocalico Sr. High, Denver. Events: C HD, OSL,  $\frac{1}{4}$ A RG, D Dual Eggloft Altitude.
- NARAM-34 AND NSL-3, August 1-7, hosted by SPECTRE, NAR Section 777, El Dorado Dry Lake, Las Vegas, NV. Events:  $\frac{1}{4}$ A RG,  $\frac{1}{2}$ A BG, A PD, B SD, C ELA, D FW, E SRA, PMC, R & D. For A & B Division only: C RG, D HD, SC; for C Division only: F HD, G RG (R/C OK), SUSC. Contact:

Bob Sanford  
(702) 452-1796

After 10:30PM Eastern Standard Time

SECTION    MEETINGS

DECEMBER 16, 1991

Present: Glenn & Rita Feveryear, Gary Feveryear, J. Yost, E. Miller, R. Dwyer, W. Rhoat, R. Rhoat, D. Greene, G. Beever

I. Treasurer: Ed Miller reported that there are 44 members; the balance at the end of the last meeting was \$367.64. Disbursements: \$26 for postage, \$50 for banquet deposit, and \$322.49 for 5 workshop kits. Incomes: \$173.28 for kits, \$44.66 in parts, \$18.50 in dues, & \$2.63 in interest. Current balance: \$208.28.

II. Newsletter: No Report

III. Education: G. Beever reported that the Winter Workshop program for 1992 is set.

IV. Competition: Glenn Feveryear reported that he has received the sanctions for SPAMO-1 and SPAARSEC-VI; WUBBA-15 will be held over the weekend of June 20/21, 1992; and he has spoken with Dr. Bob! Kruetz of GSSS in regards to contest plans.

V. Section Advisor: John Yost received a letter from Chris Tavares in regards to a proposed NAR Regional Sport Launch plan. In regards to this, Ed Miller suggested exploring the possibility of using Ft. Indiantown Gap for either a Regional Sport Launch or a High Power launch. He was asked to follow up on this.

Old Business

Dick Rhoat discussed the plans for the upcoming SPAAR Family Dinner, Jan. 11.

Glenn discussed the club SOP manual that he is working on, specifically additions, deletions and suggestions from members present. It is planned that all members will receive a copy of this.

New Business

G. Beever mentioned that NARHAMS, according to their newsletter, is looking into hosting NARAM-35 in 1993.

Those present discussed the new launch system that Art Babiarz is constructing.

Members were reminded of the Sport Launch scheduled for Dec. 29.

G. Beever discussed the 1/4A motor problem. The meeting adjourned at 9PM.

January 20, 1992

Present: Glenn & Rita Feveryear, Gary Feveryear, A. Babiarz, R. Dwyer, D. Greene, R. Hackman, E. Miller, R. Rhoat, G. Beever

I. Treasurer: Ed Miller reported that there are 31 paid members, with 11 memberships due for renewal. The balance at the end of the last meeting was \$208.28. Incomes for the month included \$32.50 in dues and \$5 in donations. Outlays were: \$83.82 for two walkie-talkie type 2-way radios for range use, and \$11.07 for materials for the workshops. Current balance is \$150.89.

II. Newsletter: G. Beever stated that he would like to make 1992 his last as editor.

III. Education: the upcoming workshops were discussed.

IV. Competition: Glenn reported that he had sent a letter to the Schuykill Valley Schools in regards to permission to fly our Open Meet there on 26 April.

V. Section Advisor: G. Beever reported that the information needed to process the section charter application has been forwarded to NAR HQ.

Old Business

G. Beever advised that he sent the club's order in to Apogee, for 1/4A motors for upcoming contests.

New Business

G. Beever reported on a conversation with Mike Hellmund of Estes Industries.

The various Committee chairmen for 1992 were selected, appointed, or volunteered: Competition, Glenn Feveryear; Education, Art Babiarz; High Power, Ed Miller; Newsletter, George Beever; Range Operations, Dale Greene.

General discussion followed; meeting adjourned at 8:30PM.

MY FIRST SPORT LAUNCH

by

Roger Lee Dwyer Sr.  
NAR 54772

I am a newcomer to model rockets. I started around July, 1991. I had just gone out and bought myself a few model rockets, and started putting them together. I couldn't wait to fly them, to see how high they would go. When I did launch them, I couldn't believe how high they went. So, I stuck with it, building more rockets.

I then joined the NAR, and found out all kinds of thing about model rocketry, and about clubs that you can join. I did just that, and joined SPAAR. From American Space-modeling, I saw that there were sport launches and other events planned. I wrote the club a letter to find out the time of the launch, and how to get there. George Beever answered my letter with tons of directions. I followed them the best I could, and had no problem. This launch was on November 3, 1991. It was cold, but I didn't let that stop me! When my wife Jill and I got there, there were a few people already there, setting up the launch equipment. This was the first time I had seen this kind of set-up. I introduced my wife and myself, and was told how to go

about launching my rockets.

Everybody was very helpful and friendly, and there was lots to eat. The event that day was one where a streamer recovered rocket carried a separate streamer; the object was to have both timed, closest two times wins. I found out at the end of the day that I had the best time, and had won first place. I won a blue ribbon. I can tell you that my wife and I both had fun, and we didn't let the cold bother us.

Finally, I hope as many members can attend these events as possible, because they are fun and you can learn a lot. So will your kids! This is for the whole family; get you and your kids involved - it's worth it!

[Editor's note - Roger and his son Roger, Jr., are SPAAR's two newest members. Roger has even made the trip from his home in Newtown Square to attend meetings. His enthusiasm and interest are refreshing, and we're glad he joined. Thanks, Roger!]

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NEWS FROM ESTES

Estes Industries, of Penrose Co., has released some news of great interest to both sport flyers and competitors alike. First, the recent decision to discontinue a number of short delay motors popular with competition flyers was reportedly rescinded. If this is true, the  $\frac{1}{2}$ A3-2, B4-2, and C6-3 motors will remain available. In addition, the  $\frac{1}{4}$ A motors made for Apogee Components last year will be made available to NAR competitors. An announcement is reportedly forthcoming from Estes by way of an upcoming issue of Model Rocket News. No word yet on the A3-2 and -6 motors, also made for Apogee.

Estes is also reportedly ready to introduce a 24mm black powder E motor, designed for use in their yet-to-be seen upscale series of kits, such as the 1/6-scale Patriot.

Again, no word yet on a release date or price.

Finally, check your local hobby shops for the Estes rebate program for motors and kits. This program, described at the December club meeting by Glenn and Rita Feveryear, involves two separate and distinct forms, which are supposed to be available at your local hobby shop. In regards to motors, the consumer is to save the store receipts and the UPC symbols from any three packs of Estes motors, and send them along with the form to an address provided; the consumer then is sent an Estes merchandise coupon worth the amount of the least expensive motors. In regards to kits, the UPC symbol and receipt for any one Estes kit is submitted, and a coupon worth 33% of the price of the kit is sent out. This offer expires May 31, 1992.

SOUTHERN PENNSYLVANIA AREA ASSOCIATION OF ROCKETRY  
MEMBERSHIP ROSTER

FIRST NAME	LAST NAME	ADDRESS	CITY	STATE	ZIP	PHONE	NAR NUMBER
<b>** DIVISION A</b>							
MARK	BEEVER	129 ASHLEY DRIVE	EPHRATA	PA	17522		
DAVE	BENDER	1819 QUARRY ROAD	LEBANON	PA	17042	717-865-2998	
ROGER	DWYER JR.	120 JUDD LANE	CULPEPER	VA	22701	703-825-0830	
DAVID T.	KEARNS	275 DOGWOOD DRIVE	HERSHEY	PA	17033	717-533-3629	
KEVIN	KRALL	730 TAMARACK TRIAL	SHILLINGTON	PA	19607	215-775-4999	
AMANDA	LATZ	315 WEST MAPLE STREET	PALMYRA	PA	17078		
ERIC	MARCELLA	RD#2 BOX 47	PARKESBURG	PA	19365	215-857-5226	
CARL	SNYDER	4610 BALLYGAR ROAD	BALTIMORE	MD	21236	410-256-7499	
CHRIS	SNYDER	4610 BALLYGAR ROAD	BALTIMORE	MD	21236	410-256-7499	
JASON	WINGENROTH	PO BOX 217 67 E. MAIN ST	REINHOLDS	PA	17569	215-267-3535	
DANIEL	YOST	4112 MILLBROOK ROAD	MT. JOY	PA	17552	717-684-9519	45997
DEREK	YOST	4112 MILLBROOK ROAD	MT. JOY	PA	17552	717-684-9519	
<b>** DIVISION B</b>							
ERIK	FEHRENBACH	170 SOUTH SPRING MILL RD	VILLANOVA	PA	19085	215-525-6923	45151
AARON	NEWMAN	6 RUSSETT LANE	MILLERSVILLE	PA	17551		
<b>** DIVISION C</b>							
MICHAEL	ANGELL	102 COVENTRY CT.	PALMYRA	PA	17078		
ART	BABIARZ	148 SLEEPY HOLLOW DRIVE	MOHRSVILLE	PA	19541		
JOHN	BALMER	109 5th ST PO BOX 151	MT. GRETNA	PA	17064		
ROBERT	BALOGH JR.	1200 ASH LANE	LEBANON	PA	17042		
TERESA	BEEVER	129 ASHLEY DRIVE	EPHRATA	PA	17522	717-733-4170	
GEORGE	BEEVER	129 ASHLEY DRIVE	EPHRATA	PA	17522	717-733-4170	44391
ROGER	DWYER SR.	6099 GOSHEN ROAD	NEWTOWN SQ.	PA	19073	215-359-9789	54772
KARL W.	FEHRENBACH	170 SOUTH SPRING MILL RD	VILLANOVA	PA	19085	215-525-6923	49644
GLENN	FEVEYEAR	RD#1 BOX 1-C	DELTA	PA	17314	717-456-5570	24931
GARY	FEVEYEAR	RD#3 BOX 176B	DELTA	PA	17314	717-456-5386	
RITA	FEVEYEAR	RD#1 BOX 1-C	DELTA	PA	17314	717-456-5570	
ROBERT	FULD	359 OAKLYN ROAD	LEBANON	PA	17042		
DALE	GREENE	244 CONOY AVENUE	ELIZABETHTWN	PA	17022	717-367-8646	12464
RICK	HACKMAN	1500 FURNACE HILLS PIKE	LITITZ	PA	17543	717-627-1598	47559
FRED	HANAWALT	3230 NORTH 4th STREET	HARRISBURG	PA	17110		
FREDRICK	HOKE	968 JAY STREET	LEBANON	PA	17042		
DAVID	HOLMES	APT E 223 17525 NE 40th	REDMOND	WA	98052		
TIM	KRALL	730 TAMARACK TRAIL	SHILLINGTON	PA	19607	215-775-4999	
WADE	LATZ	315 WEST MAPLE STREET	PALMYRA	PA	17078	717-838-5819	
JAMES	LYTLE, JR	5051 WEST HEAPS ROAD	PYLESVILLE	MD	21132	410-836-1568	48748
ED	MILLER	1809 QUARRY ROAD	LEBANON	PA	17042	717-865-6829	45776
WILLIAM	RHOAT	LEHIGH UNIV. UC#29, DO77	BETHLEHEM	PA	18015	717-733-6915	43355
DICK	RHOAT	1509 ROTHSVILLE RD	LITITZ	PA	17543	717-627-2208	48684
TREVOR	SMEDLEY	1747 BEECH STREET	HALIFAX	*	B3H 4B7		51174
MARK	SNYDER	4610 BALLYGAR ROAD	BALTIMORE	MD	21236	410-256-7499	46209
DENNIS R.	STAUFFER	RD 1 BOX 242	BIRDSBORO	PA	19508		19795
ROBERT	STOTT	PO BOX 206	RICHBORO	PA	18954-0206	215-355-1119	36510
DANIEL	WEINHOLD	328 EAST CLAY STREET	LANCASTER	PA	17602	717-392-8231	43116
ALLEN	WINGENROTH	PO BOX 217 67 E. MAIN ST	REINHOLDS	PA	17569		
JOHN	YOST	4112 MILLBROOK ROAD	MT. JOY	PA	17552	717-684-9519	31472

<u>SPAAR CLUB PERFORMANCE RECORDS</u>					
<u>A DIVISION</u>					
<u>Event</u>	<u>Name</u>	<u>Model</u>	<u>Motor</u>	<u>Date</u>	<u>Performance</u>
½A PD	Dave Bender		½A3-4	11/3/91	44.50s
A PD	Dave Bender	X-3	A3-4	5/5/91	50.89s
B PD	Aaron Newman	Sizzler	B6-4	5/27/90	157.6s
C PD	Eric Marcella			9/3/89	66.44s
D PD	Dave Bender	Gone	D12-7	10/14/90	94.60s
½A SD	Dave Bender	X-1	½A3-2	5/5/91	22.09s
A SD	Dave Bender			10/9/88	42.60s
B SD	Jason Wingenroth	Viking	B6-4	10/14/90	40.00s
C SD	Dave Bender	Excalibur	C6-7	12/18/88	39.50s
½A RG	Dan Yost			5/26/91	26.41s
B ELD	Derek Yost			5/26/91	17.22s
C ELD	Dan Yost			10/9/88	34.10s
C BG	Aaron Newman		C6-3	10/14/90	93.26s
B HD	Dan Yost	RotaRoc		5/26/91	56.65s
<u>B DIVISION</u>					
½A PD	Bill Rhoat			7/23/89	36.50s
A PD	Bill Rhoat			8/14/88	27.60s
B PD	Bill Rhoat			4/16/89	79.00s
C PD	Dave Wenrich			8/14/88	33.90s
D PD	Bill Rhoat			4/16/89	31.10s
E PD	Bill Rhoat	LOC Onyx	E60-6	11/5/89	22.10s
½A SD	Bill Rhoat			7/23/89	38.90s
A SD	Bill Rhoat		A3-4	7/22/90	85.70s
B SD	Bill Rhoat			7/23/89	50.90s
B ELD	Bill Rhoat		B6-2	5/27/90	10.73s
C ELD	Bill Rhoat			7/2/89	67.20s
C HD	Bill Rhoat	RotaRoc	C6-3	5/27/90	61.30s
B SRD	Bill Rhoat			7/23/89	832.5pts
A Alt.	Aaron Newman		A8-3	6/30/91	83.2m
B Alt.	Aaron Newman		B6-4	6/30/91	110.9m
<u>C DIVISION</u>					
½A PD	Glenn Feveryear	Perihelion	½A3-4	7/2/89	258.00s
A PD	George Beaver		A3-4	9/2/90	125.00s
B PD	Dale Greene		B4-6	7/2/89	184.90s
C PD	Dale Greene		C6-7	8/13/89	125.25s
D PD	Ed Miller		D12-5	7/2/89	120.07s
E PD	Robert Balogh	V-2	E6-4	9/3/89	104.75s
F PD	George Beaver	Aerobee-Hi	F26-6WL	8/12/90	83.40s
G PD	Robert Balogh		G40-7	8/13/89	138.42s
½A SD	Glenn Feveryear		½A3-4	9/24/89	94.80s
A SD	George Beaver	Perihelion	A3-6	9/15/91	132.34s
B SD	Glenn Feveryear		B4-6	8/12/90	168.53s
C SD	Robert Balogh		C6-7	7/22/90	208.00s
D SD	Dale Greene		D12-7	8/13/89	52.35s
E SD	Ed Miller		E25-10	7/22/90	106.00s
F SD	Ed Miller		F25-12	7/22/90	138.42s
G SD	Ed Miller		G25-10	7/22/90	181.60s

½A BG	Glenn Feveryear		½A3-2	7/23/89	71.50s
A BG	Glenn Feveryear	Vulture	A3-2	7/22/90	84.30s
B BG	Glenn Feveryear	Fly Baby	B4-2	9/2/90	112.30s
C BG	Fred Hoke	HXP-1	C6-3	5/27/90	83.70s
D BG	John Yost	D-Light	D12-3	9/2/90	67.38s
½A RG	George Beever	Easy Slide I	½A3-2	10/14/90	36.40s
A RG	Glenn Feveryear	Vulture	A3-2	9/1/91	109.80s
B RG	Glenn Feveryear	Gull	B4-2	10/30/88	154.00s
½A HD	John Yost	Mini RotaRoc	½A3-2	12/4/88	42.70s
A HD	John Yost	Mini RotaRoc	A3-2	7/22/90	74.00s
B HD	Glenn Feveryear	RotaRoc	B4-2	7/2/89	184.90s
C HD	Glenn Feveryear	RotaRoc	C6-3	4/22/90	138.00s
D HD	Glenn Feveryear		D12-5	9/2/90	66.66s
E HD	John Yost	YostaRoc	E15-4	8/12/90	115.00s
½A SRD	Glenn Feveryear		½A3-2	7/22/90	233.00pts
A SRD	George Beever		A10-3	5/27/90	415.00pts
B SRD	Glenn Feveryear		B4-4	7/23/89	486.00pts
C SRD	Dick Rhoat		C6-3	9/3/89	533.42pts
A PayAlt	George Beever		A8-3	7/21/91	61.0m
B ELA	Dale Greene			7/21/91	37.0m
F Alt	Dale Greene		F25-6WL	6/30/91	292.3m

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WANT TO FILE FOR A CLUB RECORD?

It's Easy!!

Some of our members may have wondered from time to time about how they can qualify for a club performance record. It's much easier than you might think!

Any time that you fly a model at a SPAAR Sport Launch or sanctioned NAR contest, you automatically stand a chance of setting a record. All you have to do is fill out the required Flight Card, complete with your name, the model's name, the motor, and the event that you are attempting a record in. Please be sure to make that notation somewhere on the flight card, so that it can be picked up later. If the event is a duration event, advise the Launch Control Officer that you want your flight to be timed. As for altitude events, there will be certain dates throughout 1992 that the club's altitude tracking equipment will be set up for use; consult your 1992 Schedule for those dates. You do not have to be an NAR member to qualify for club records. At most Sport Launches, a copy of the current standing club records is available.

For more information, contact Competition Committee chairman Glenn Feveryear at (717) 456-5570, or ask at the next Sport Launch. Those who set new records are awarded a handsome certificate highlighting their achievement. Good Luck!

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CLASSIFIED SECTION

WANTED: NEWSLETTER EDITOR FOR ROCKET CLUB'S NEWSLETTER. No experience necessary; will train. You say you always wanted to get into the media biz? This is the job for you! Duties include collecting material for bi-monthly newsletter; making arrangements for copying, sorting, and mailing. Soon-to-be former editor (me) will help as much as possible, including writing. Position to become open in January, 1993. Call George Beever, (717) 733-4170 evenings. EOP.

KIT REVIEW:

# LANDVIPER

One of the many nifty goodies that Dale Greene brought back from NARAM-33 this past August was a kit called the "LandViper", from the Custom Rocket Company. As I had never heard of Custom Rocket, and the fact that I'm always fascinated by "the little guy", I was immediately interested.

After a check with Directory Assistance, I placed a call to Custom Rockets, located in Alna, Maine. I spoke with the man behind the name, Andy Gnidziejko. Andy advised me that he has been selling kits as Custom Rockets since April, 1988. The designs of the kits are his own, with components that are, for the most part, made to Estes specifications. Custom Rockets currently offers about 8 different kits, with the flagship being the LandViper.

The LandViper is a 34.6" tall, 1.637" diameter, 3-engine cluster sport model, designed to fly with 3 18mm black-powder motors; B4-2's and C6-5's are recommended. The kit consists of the following parts: 1 MT-60 main airframe tube; 3 MT-20 engine tubes; 3 EB-20 engine blocks; 1 PC-60 nose cone; 1 18" parachute kit; 1 "tube ring"; 2 1/8" launch lugs; 3 pieces of 1/8" balsa fin stock; 1 fin template; and 1 rubber shock cord. All of the components except for the parachute and balsa appear to be of standard Estes types.

Construction was relatively easy, around Skill Level 3. The instruction sheet, however, could use a bit more detail. The three 18" engine tubes form the lower portion of the model, while the MT-60 (BT-60) forms the upper portion of the airframe. The six fins are attached to a length of MT-60 which surrounds the lower portion of the engine tubes. The fins - and are you ready for this - are cut, yes cut, from a template onto 1/8" balsa! Shades of the neat kind of stuff you used to do with the first kits you ever built. The balsa fin stock was of a good quality C-Grain. It was nice to see a kit that requires you to exercise

some modeling skills, even if it is just to cut out the fins.

The decals that were supplied with the kit were surprisingly good. At first glance, they looked like trouble. This was due to the fact that all of the images were on one single piece of film, requiring you to cut very close to each individual edge. Despite my misgivings, they were easy to work with and turned out very nice on the finished product.

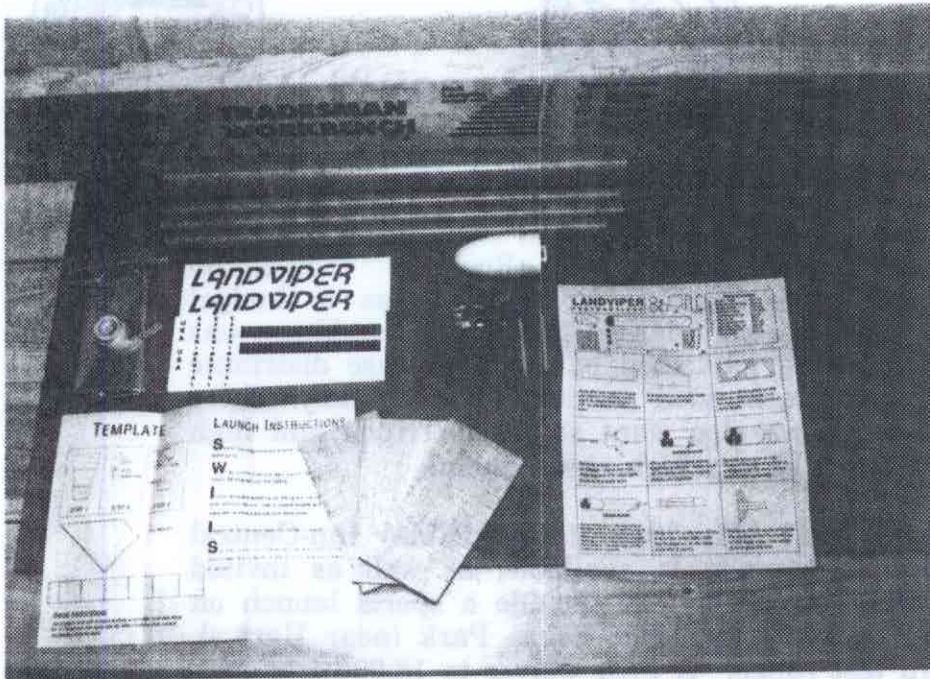
I did make a few minor changes as I built the LandViper. The kit comes with 1/8" launch lugs; I substituted 3/16" Estes lugs, as I felt that the size of the model plus the 3-engine cluster configuration required at least that. I also modified the recovery system somewhat. I discarded the rubber shock cord, installing a 3/16" wide X 24" long elastic cord in it's place. I did use the 'chute canopy, but I used carpet thread for the shroud lines instead of the string-like shroud lines supplied with the kit.

I used cyano and epoxy throughout in the construction of the LandViper, with good results. I finished the model in the suggested white, yellow, and black color scheme, and the result was a sharp looking model. Total construction and painting time was approx. 10 hours.

I flew the LandViper on the day after this past Thanksgiving. I installed 3 Estes C6-5's, with North Coast squibs for ignition. Only two of the three motors ignited, but this was not discovered until after the model was recovered; the flight was so stable, and reached such an altitude, that those on the ground thought that all 3 motors had fired.

The LandViper was an interesting project that produced a nice model that appears to perform very well. I imagine that the rest of Andy Gnidziejko's designs are at least as good. The price was nice, too; I paid \$9.79 plus shipping for the LandViper. For more information, write: CUSTOM ROCKET CO., PO Box 115, Alna, ME 04535.

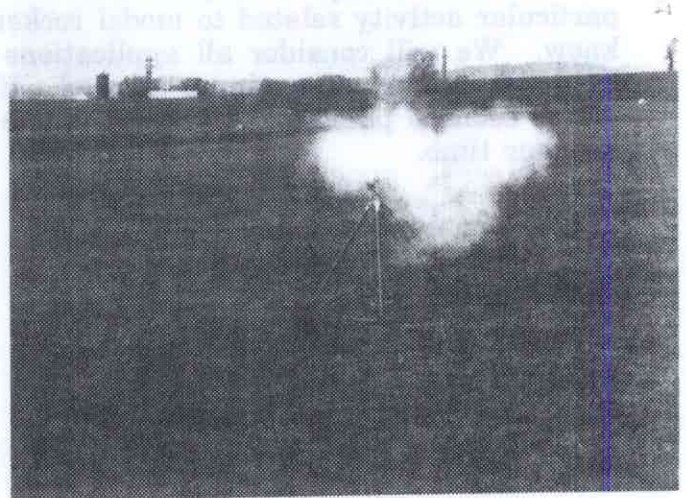
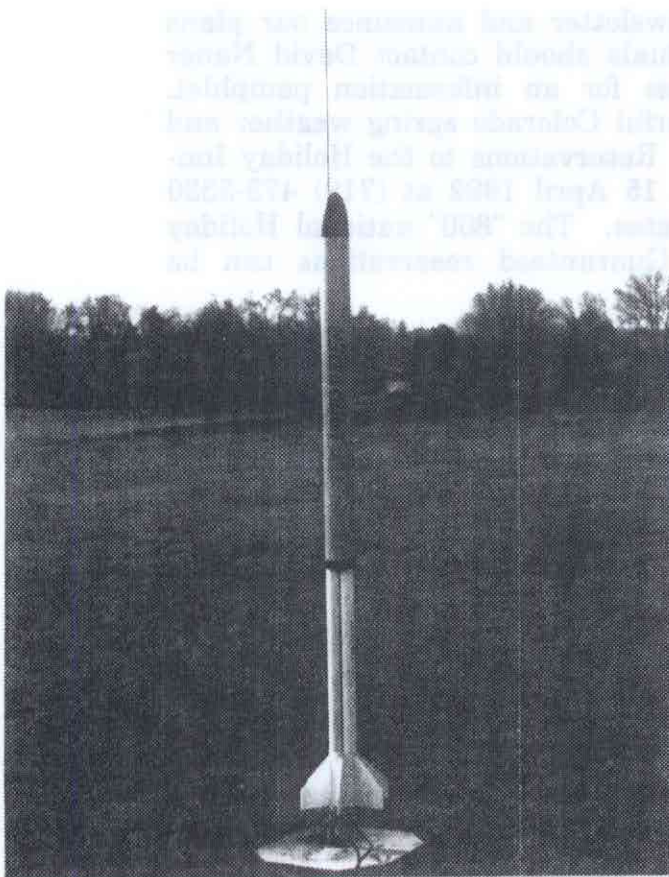




LEFT: The LandViper kit components prior to assembly.

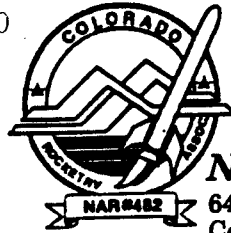
BELOW LEFT: The completed model.

BELOW RIGHT: The LandViper in flight.



Please publish a notice in your next newsletter and announce our plans at your next meeting. Interested individuals should contact David Meyer (corresponding secretary) at the above address for an information pamphlet. The first group selected should provide weather forecasts, Colorado spring weather and an opportunity to run the nearby stations. Reservations to the Holiday Inn Control should be made and confirmed before 15 April 1982 at (714) 473-7330 using the three letter code "MAY" for proper rates. The "800" area Holiday Inn reservation line should not be used. (Unconfirmed reservations can be cancelled up to 6:00 PM on 15 May 1982.

If you or anyone in your club is interested in particular activity related to model rocketry or space, we will consider all applications for membership.



**NARCON-92**

6485 Ashton Park Place  
Colorado Springs, CO 80919  
(719) 599-9148



6 January 1992

Dear NAR Senior Advisor or Section Leader:

The second annual National Association of Rocketry Convention (NARCON-92) will be held in Colorado Springs, Colorado. Due to budget constraints, this is the **only** letter sent to your NAR Section. Your address was obtained from the current section listing published by NAR. Please distribute this letter to any interested individuals in your section, including any others interested in rocketry. In particular, we also want to reach Tripoli and high power rocketeers as this NARCON will have a high power theme.

NARCON-92 will be held on 15-17 May 1992 at the Holiday Inn-Central in Colorado Springs. A preliminary agenda is available, as well as invited speakers and seminar guests. The convention will include a sports launch on 16 May for low and high power rocketry in either South Park (near Hartsel, Colorado) or at a National Guard test range. A FAA waiver to 18,000 feet ASL (about 9,500 feet AGL) is expected to be granted. This sports launch will also be an ISY sponsored high powered payload event for those active in the ISY calendar for 1992. An Estes/Centuri historical kit scale-up contest will be held during the convention (rules will be sent with the information packet). A tour of Estes will be conducted on 15 May in the afternoon accompanied by a sports launch at the Estes facility up to "G" impulses.

Please publish a notice in your next newsletter and announce our plans at your next club meeting. Interested individuals should contact David Nauer (corresponding secretary) at the above address for an information pamphlet. The time period selected should provide wonderful Colorado spring weather and an opportunity to tour the nearby attractions. Reservations to the Holiday Inn-Central should be made and confirmed before 15 April 1992 at (719) 473-5530 using the three letter code "NAR" for proper rates. The "800" national Holiday Inn reservation line should not be used. Guaranteed reservations can be cancelled up to 6:00 PM on 15 May 1992.

If you or anyone in your club is interested in presenting a seminar on a particular activity related to model rocketry or high power rocketry please let us know. We will consider all applications for seminars, but space and time will limit the number of seminars allowed. If you have any questions, please contact me as soon as possible. My home phone number is (719) 599-9148. Thank you for your time.

Sincerely,

David J. Nauer  
NARCON-92 Corresponding Secretary

SPAAR    WINTER    ACTIVITIES

January 11:

THE SPAAR FAMILY DINNER

On the 11th of January, over 25 members of the SPAAR "family" got together at the Country Table Restaurant in Mt. Joy, Pa., for the 3rd annual Family Dinner. The dinner was put together this year by Dick Rhoat, and everyone agreed that he did an excellent job.

As in previous years, the night of the family dinner was the setting for a number of award presentations. First, Dan Weinhold was the recipient of the first SPAAR "Member Of The Year" award. Dan was cited for his caring and helpful attitude toward his fellow members. The award itself took the form of an MRC Thermal Hawk kit.

Retiring Section Advisor John Yost was presented with a built-up Estes Patriot, complete with an Ed Miller paint job, in recognition for his sterling service as Section Advisor from the club's inception in 1988, through the end of 1991. John wanted to make it known that he is retiring as Section Advisor, but not from the club.

The coveted SPAAR Rocket-Lok Award went to Aaron Newman, for the flight of his RAF Vulcan bomber this past summer. The Vulcan landsharked towards the LCO, causing that person to move faster than anytime in recent memory [me].

January 18:

SPORT LAUNCH

The first SPAAR Sport Launch to be held in winter since December, 1988, was held on the 18th. Rain had cancelled a scheduled Sport Launch in late December, so many were anxious to fly. Sorry to say, but the

weather did not exactly cooperate. How about 18° temperatures, with a wind chill at -5°? Not very good weather for flying rockets, much less just being outside. Predictably, only four less-than-normal souls showed up to fly, not counting wives and children. Only 9 flights were made, but hey, we had fun, right?

February 2:

GROUND HOG DAY SPORT LAUNCH

Last year's Ground Hog Day launch featured one of the nicest days of the winter. Like I said, that was last year. The temperatures this year really weren't bad, but the wind, at times gusting over 20mph, made things a bit uncomfortable.

It would not be a Ground Hog Day launch without Ed Miller's little furry friend stuffed into his E15 powered Super Big Bertha, now would it? Another year, another perfect flight. The ground crew did notice, however, that 'ol Phil has a few more grey hairs than he did last year. Could this be attributed to age or the sheer thrill of a high speed rocket flight? Check him out next year, maybe he will be an albino by then.

Glenn "Hey these composites are neat" Fever-year flew his Aerotech Mustang on an E15-7WL. The Mustang, like the Aerreux flown on Jan. 18, was a Christmas present, just waiting to be flown. The Mustang had a great flight, but did show signs a a phenomenon also seen on the 18th: in extremely cold temperatures, the bright exhaust plume given off by the Aerotech White Lightning motors actually freezes into a solid mass and can be recovered at a later time. It will be interesting to see if this is also characteristic of the RMS motors. Also unknown is what happens when the flame thaws. Sounds like some R & D work needs to be done.....

FLIGHT LOGS

January 18, 1992

<u>Fl#</u>	<u>Name</u>	<u>Model</u>	<u>Motor(s)</u>	<u>Misc.</u>
1	Daniel Feveryear	America	A8-3	GF
2	Glenn Feveryear	Arreaux	E15-4WL	GF
3	George Beever	Tazmanian Devil	A6-0	SHRED
4	George Beever	Viking	B8-5	GF
5	George Beever	Voyager II	A8-3	GF
6	Dale Greene	Nike-Smoke	A8-3	GF
7	Dale Greene	Gemini-Titan	A8-3	GF
8	Dale Greene	Honest John	B6-4	GF
9	Dale Greene	Honest John	C6-7	GF

Models flown

Scratchbuilt - 0  
 Estes - 4  
 MPC - 1  
 FSI - 1  
 QCR - 1  
 AT - 1

GF = Good Flight

By Member

Dan F - 1  
 Glenn F - 1  
 George B - 3  
 Dale G - 4

Motors Flown

Estes - 7  
 FSI - 1  
 AT - 1  
 Motor Failures - 0

MPC = Model Products, Corp. FSI = Flight Systems, Inc.  
 QCR = Qualified Comp. Rockets AT = Aerotech

February 2, 1992

	<u>Name</u>	<u>Model</u>	<u>Motor(s)</u>	<u>Misc.</u>
1	Dave Bender	Space Plane	C5-3	GF
2	Dave Bender	Thunderhawk	B6-4	GF
3	Rick Hackman	XR-57	B4-4	UNS
4	Rene Feaveryear	Athena	A8-3	GF
5	John Yost	Delta Force	B8-5	NR
6	Dale Greene	Saturn IB	D12-5	½NR
7	Ed Miller	Super Big Bertha +1	E15-4WL	GF
8	George Beever	X-15	A10-3	GF
9	George Beever	Honest John	A8-3	GF
10	Glenn Feveryear	Mustang	E15-7WL	GF

Models flown

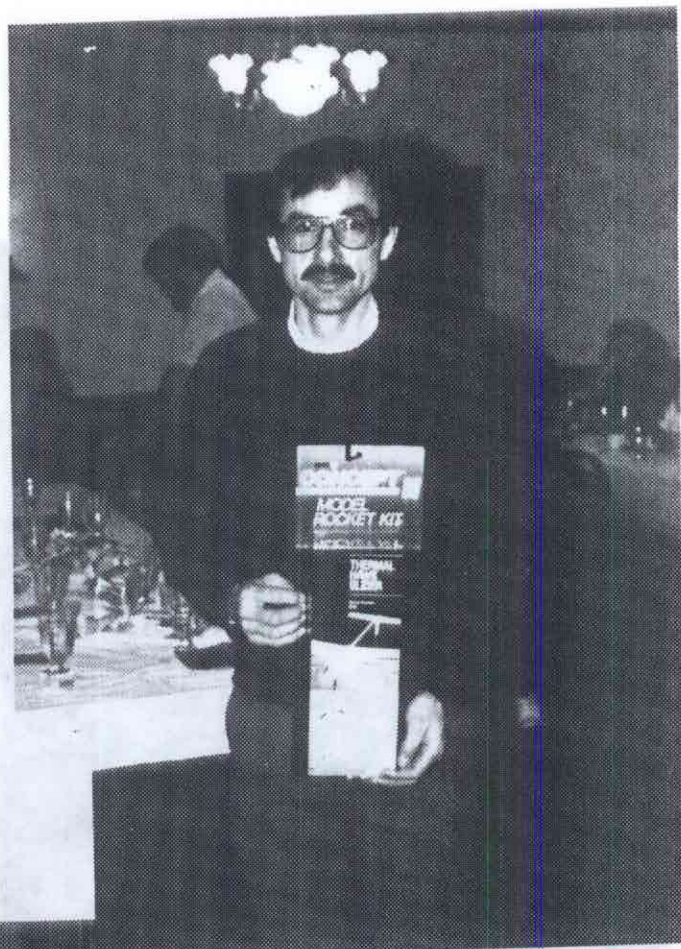
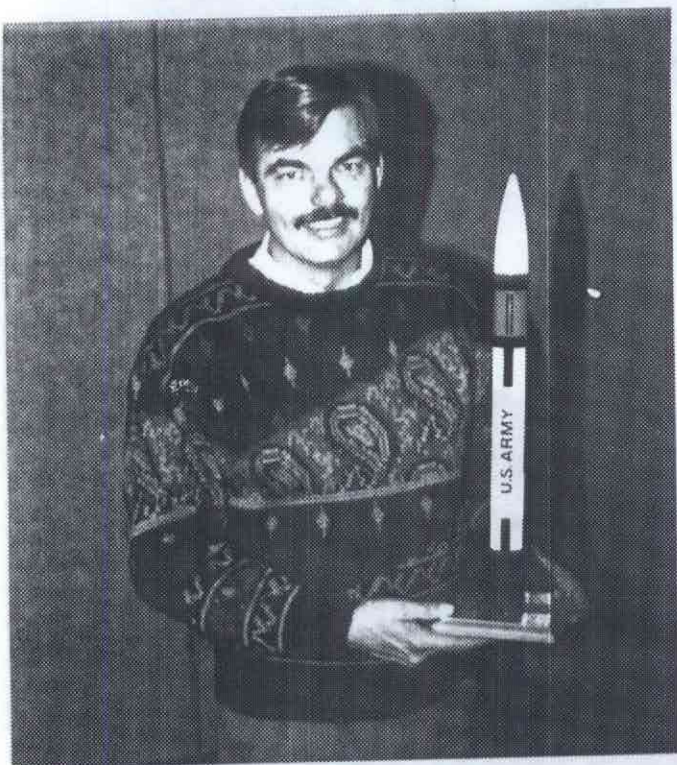
Scratchbuilt - 2  
 Estes - 5  
 Cox - 2  
 AT - 1

By Member

Dave B - 2  
 Ed M - 1  
 Dale G - 1  
 John Y - 1  
 George - 2  
 Rick H - 1  
 Rene F - 1  
 Glenn - 1

Motors Flown

Estes - 8  
 AT - 2  
 Motor Failures - 0

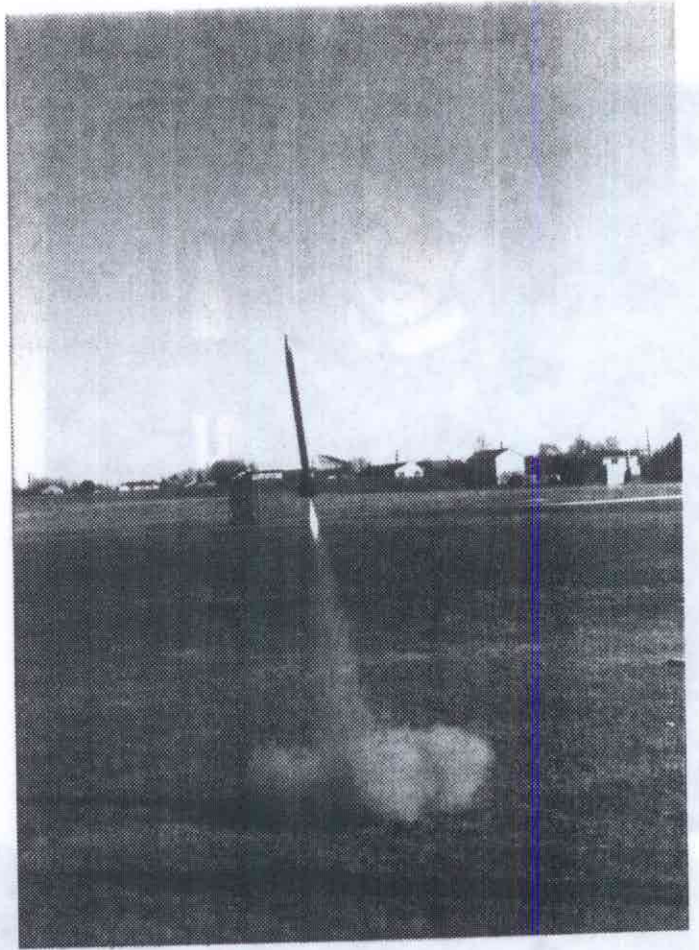


PHOTOS (CLOCKWISE FROM TOP)

John Yost and Dan Weinhold display their awards from the Family Dinner;

Dale Greene models the latest in cold weather range wear, Jan. 18;

Some of the crowd at the dinner.



CLOCKWISE FROM UPPER LEFT:

Dale Greene launches his vintage MPC Nike-Smoke; Glenn Feveryear's Arreux under E15 power. Notice the bright exhaust plume, which was later recovered, frozen solid.  
 Right: Two cool dudes (make that cold!). Daniel and Glenn Feveryear prepare to launch.

line of model rocketry products. Originally scheduled for shipment in January, 1992, orders will not be leaving Phoenix until March at the earliest. The retail line of products has been shipped since the first of the year, and may already be showing up in local hobby stores.

I did inquire with the person that I spoke with if both lines of products can be mail ordered directly from Quest; the answer was no. Only the educational line can be mail or phone ordered from Phoenix.

\*\*\*\*\*

A NEW LOOK FOR QCR: Qualified Competition Rockets has begun mailing out their new catalogs. There appears to be no new items, however the catalog itself has a new format. The kits and other items available from QCR are listed by the NAR events to which they apply.

\*\*\*\*\*

NORTH COAST ROCKETRY: should be releasing a 1992 catalog soon. Take a close look at some of the models shown in the catalog; SPAAR's Ed Miller has been doing some kit build-ups for NCR's Matt Steele, but it is unknown if any will be featured in the catalog. Some have already made their way to hobby shows, with rave reviews.

PLANS

The Sport Plan on Page 17 is the XR-61, by Rick Hackman. It is also known as "The Big Green Thing", and does fly well on a wide variety of motors.

The model gets it's name from it's original paint scheme; a green body with blue fins and nose cone. It appears to fly the best on the Estes D12-5, but the FSI E5-4 provides a slow lift-off.

The Competition Plan on page 18 is a D Dual Egglofter, which is timely considering the fact that SPAAR is flying D Dual Eggloft Altitude at SPAARSEC-VI this coming May. This plan originally appeared in the Dec., 1990 issue of the NOVAAR Free Press. Thanks to both NOVAAR and to Trip Barber for it's use here.

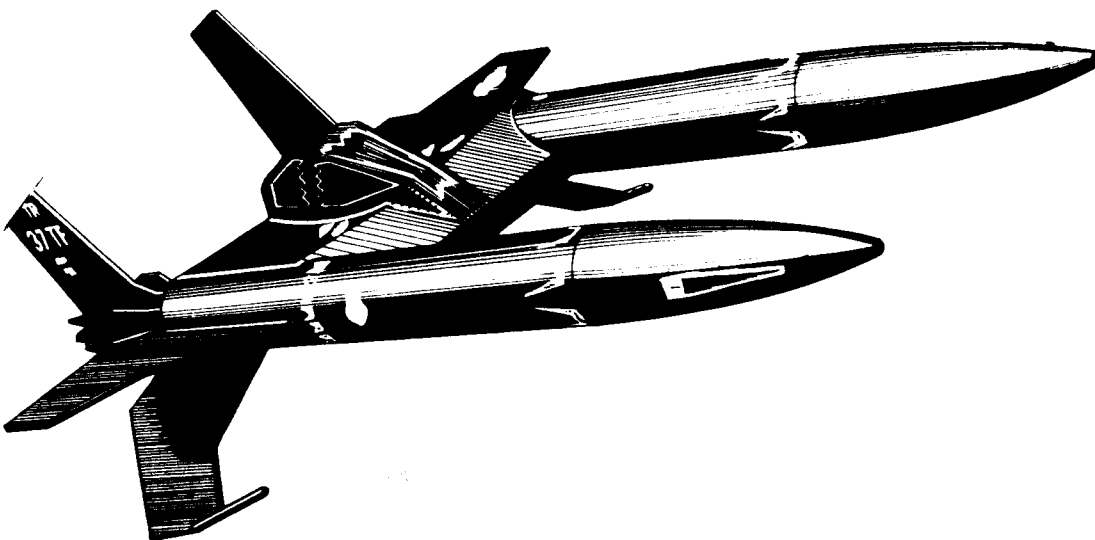
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NEWSLETTER SUBMISSIONS: Once again, the call goes out for submissions to this newsletter. We know that many of you are working on that special winter project. How about a story or a plan about it? Many received kits or other products as Christmas presents. How about a review? Anything will help! Thanks.

\*\*\*\*\*

OOOPS - ALMOST FORGOT DEPT: The officers for 1992, as elected, are: President, Glenn Feveryear; Vice-President, Dale Greene; Secretary/Treasurer, Ed Miller; Member-At-Large, Gary Feveryear; Section Advisor, George Beever.

\*\*\*\*\*



NEWS.....NEWS.....NEWS

SECTION NEWS NOTES

MEMBERSHIP MANUALS: Section Pres Glenn Feveryear has compiled an 18 page Membership Manual for all club members. This manual covers a wide variety of topics, from an overview of the club's launching procedures to an explanation of the new NAR insurance coverage. These booklets are designed to allow the member to update them as new information becomes available. Every membership household will receive a copy, free of charge. In order to keep costs down, however, Glenn hopes to hand deliver them to the members at club functions (as opposed to mailing them out).

A lot of work went into these manuals. Please see that you get one.

\*\*\*\*\*

ED'S AEROTECH ORDER: Ed Miller is preparing an order to be sent to Aerotech in early March. See Ed prior to March 1 for details.

\*\*\*\*\*

FLYING AT COCALICO: Section Pres Glenn Feveryear has renewed our agreement with the Cocalico School District on our use of the High School. However, Robert Artz, Director of Buildings and Grounds, has advised us that construction will begin this spring on a vehicle maintenance building on the south side of the High School, near the newly installed fuel pumps. We are being asked not to fly there during the construction period, which means vying for space on the north side of the school with soccer and softball players. Mr. Artz suggested that we use the area that encompasses the practice football field. This field is acutually rather large, and would be suited for flying. The only drawback is that we would not be able to work out of our cars, and all equipment would have to be carried to the launch area. This may be a small price

to pay for our continued use of Cocalico.

\*\*\*\*\*

NEWS AROUND THE HOBBY

A NEW FUTURE FOR ESTES?: A recent phone conversation with Mike Hellmund of Estes was both interesting and informative.

Part of Mike's duties with Estes is to foster contact with model rocket clubs like SPAAR and the other NAR Sections. According to Mike, the new ownership at Estes is committed to keeping Estes in the forefront in both products and customer satisfaction. To that end, the recently announced motor discontinuations (B4-2, C6-3, etc) were rescinded. The 1/4A and A3 motors that were made for Apogee will be made available through a mail order set-up, and details will be forthcoming.

Mike is also excited with the new high power kits and products that Estes will be releasing shortly, in particular the new high power launch pad. He did state that the 24mm black powder "E" motor (referred to earlier in this issue) will not be made; instead, Estes will concentrate on testing and production of a line of composite motors. These may be available by the end of this year.

I asked Mike about the rumored release of a large Saturn IB model. He replied that what I was refering to is a planned 1/45 scale Saturn IB, which is the same scale as the old Centuri 3-engine cluster Little Joe II kit from the 60's and 70's. This project might be ready for a 1993 release.

Mike also spoke of some changes planned for the catalog, long in need of a facelift. All in all, it was a positive conversation. Hey, maybe someone at Estes really does read those questionnaires on the back of the envelopes after all!

\*\*\*\*\*

DELAYS AT QUEST: Quest Aerospace Education, the new company in Phoenix, AZ, is facing a delay in shipping items from their educational



THE XR-61

-or-

THE BIG GREEN THING

PARTS LIST (all from Estes)

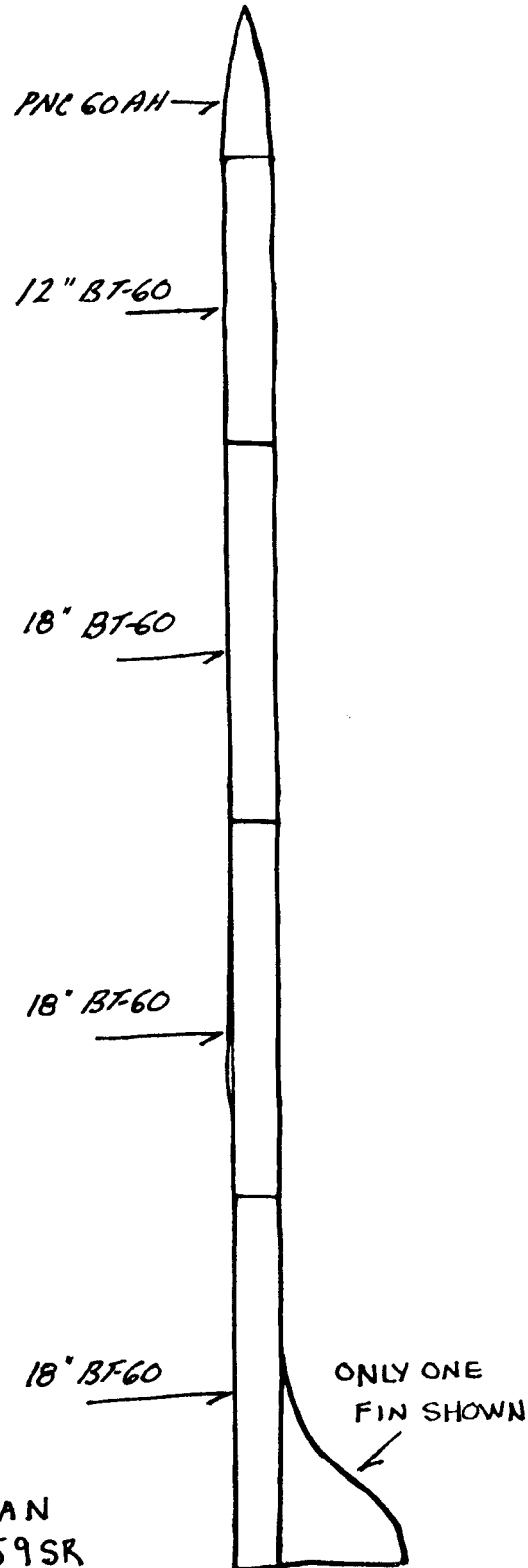
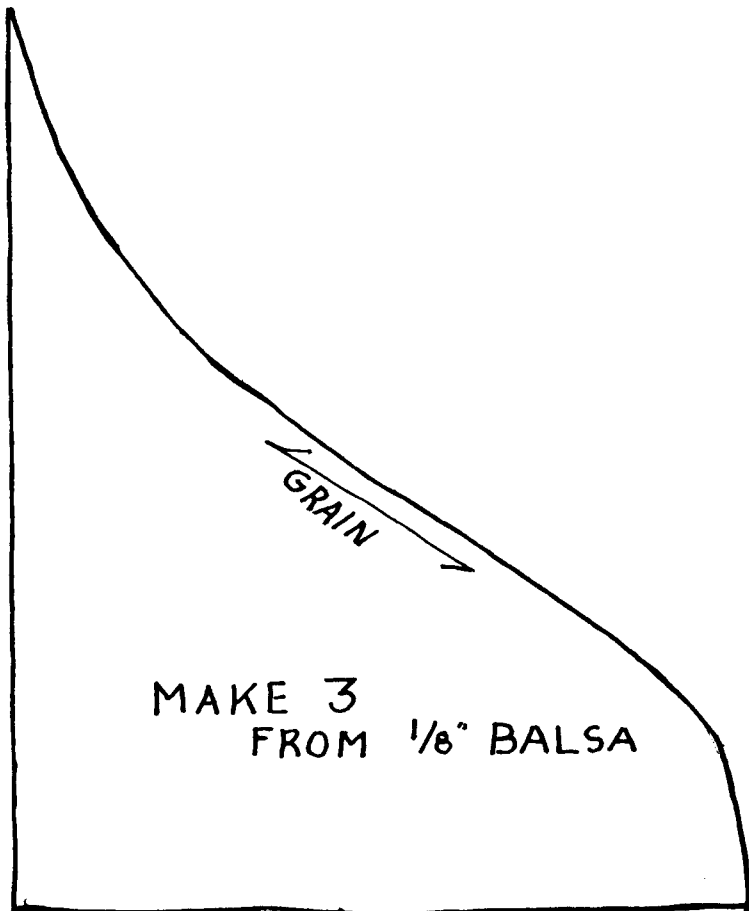
- 3 BT-60 tubes
- 1 BT-60 tube, 12" long
- 1 PNC-60AH Nose Cone
- 1 24" chute
- 3 JT-60C couplers
- 1 section of BT-50, at least 4½" long

NON-Estes Parts

- 1 20" long piece of ¼" wide elastic for shock cord
- 2 ¼" launch lugs
- 1/8" balsa fin stock
- motor adapters of your choice\*

\* the original model has a 24mm motor mount for Estes "D" motors; adapters can be fashioned so that 18mm "C" motors or 21mm FSI "D" and "E" motors can be flown in this model.

Recommended Motors: C5-3, D12-5, E5-6



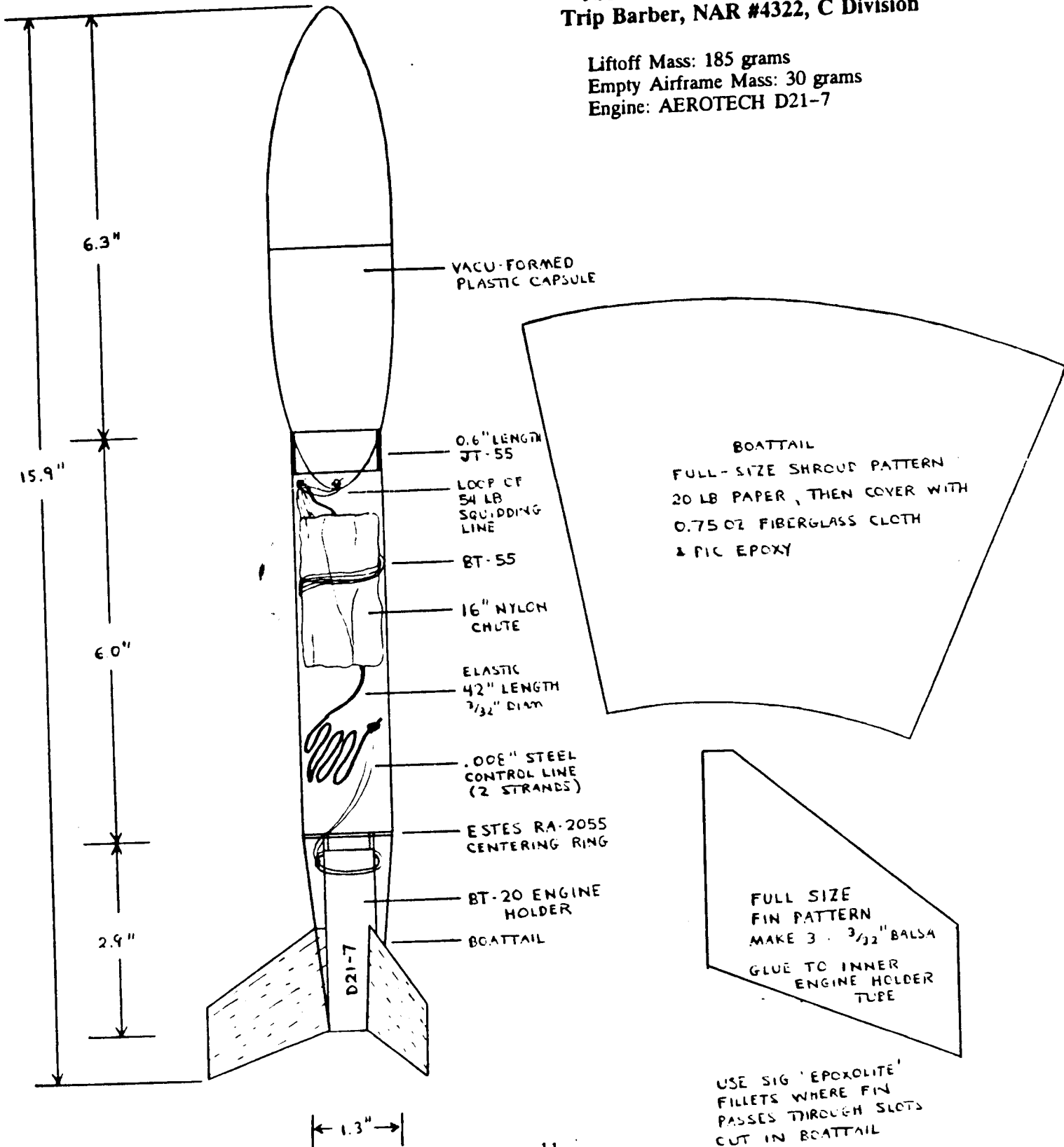
DESIGNED BY:  
RICK HACKMAN  
NAR 47559SR

# D DUAL EGGLOFT

**U.S. RECORD ATTEMPT: 369 METERS**  
**NARAM-32 1st Place, 8 Aug 90**  
**Trip Barber, NAR #4322, C Division**

Liftoff Mass: 185 grams  
 Empty Airframe Mass: 30 grams  
 Engine: AEROTECH D21-7

DRAWING  $\frac{1}{2}$  FULL SIZE



**SOUTHERN PENNSYLVANIA AREA  
ASSOCIATION OF ROCKETRY**  
NATIONAL ASSOCIATION OF ROCKETRY, SECTION 503  
PO BOX 127, REAMSTOWN, PENNSYLVANIA 17567

\_\_\_\_\_ YES, I WANT TO JOIN SPAAR! HERE ARE MY DUES

\_\_\_\_\_ PLEASE CONTACT ME WITH MORE INFORMATION

NAME \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PHONE: AREA CODE ( ) \_\_\_\_\_ AGE \_\_\_\_\_

DATE OF BIRTH \_\_\_\_\_

\_\_\_\_\_ I HAVE NEVER FLOWN ROCKETS. \_\_\_\_\_ I HAVE BEEN FLYING  
MODEL ROCKETS FOR \_\_\_\_\_ MONTHS/YEARS.

\_\_\_\_\_ I AM A MEMBER OF THE NAR. MY NAR NUMBER IS \_\_\_\_\_  
\_\_\_\_\_ I AM NOT YET AN NAR MEMBER.

DUES: \_\_\_\_\_ 14 YEARS OF AGE OR YOUNGER, \$5.00  
 \_\_\_\_\_ 15, 16 OR 17 YEARS OF AGE, \$7.00  
 \_\_\_\_\_ 18 YEARS OF AGE OR OLDER, \$10.00  
 \_\_\_\_\_ FAMILY PLAN: OLDER MEMBER JOINS AT THE FULL RATE  
 THEN ALL YOUNGER MEMBERS JOIN AT HALF PRICE.  
 (FAMILY PLAN PROVIDES ONLY ONE COPY OF THE  
 NEWSLETTER PER FAMILY.)

DUES ARE PAYABLE FOR 12 MONTHS. RETURN THIS FORM TO:  
 SPAAR, PO BOX 127, REAMSTOWN, PENNSYLVANIA 17567

# Membership Application

NATIONAL ASSOCIATION OF ROCKETRY  
 1311 EDGEWOOD DRIVE, DEPT M  
 ALTOONA, WI 54720

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

DATE OF BIRTH: Month \_\_\_\_ Day \_\_\_\_ Year \_\_\_\_

I pledge to conduct all my model rocket activities in compliance with the NAR/HIA  
 Safety Code. I will never fly model rockets at the same time or in the same vicinity  
 as other types of rockets.

SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

MEMBERSHIP CATEGORY (Check one only):  
 JUNIOR MEMBERSHIP (Under 18 as of January 1) ..... \$15.00  
 LEADER MEMBERSHIP (Under 21 as of January 1) ..... \$15.00  
 SENIOR MEMBERSHIP (21 or over as of January 1) ..... \$25.00

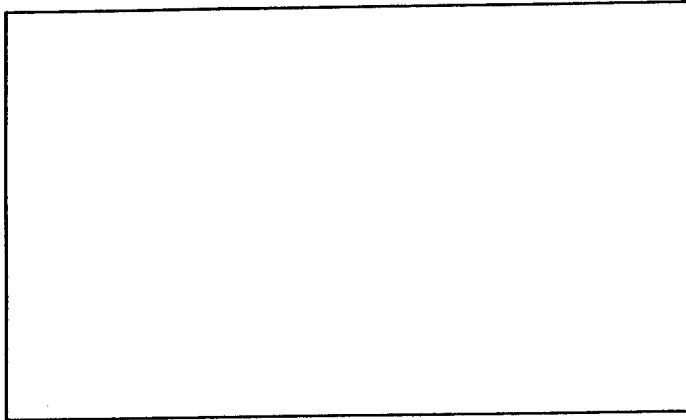
FOR OVERSEAS MEMBERS ONLY  
 SURFACE POSTAGE (Required) ..... \$ 6.75  
 OPTIONAL AIRMAIL POSTAGE (Replaces surface) ..... \$33.00

OPTIONAL MEMBERSHIP SERVICES  
 FAI STAMP for US Team eligibility and world records \$10.00  
 FIRST-CLASS POSTAGE (U.S. & Canada only) .. \$10.50

DISCOUNTS (Select only one)  
 RENEWAL (NAR # \_\_\_\_\_ Section # \_\_\_\_\_); Deduct \$1. \_\_\_\_\_  
 FAMILY PLAN (Details below); Deduct \$8. \_\_\_\_\_  
 Amount Enclosed ..... \$ \_\_\_\_\_

Family Plan: Full rate for one family member, others at \$8 discount — one American Spacemodelling per family.  
 NAR Membership dues include \$8.88 for a subscription to American Spacemodelling.

Canadian Modelers: Write to the Canadian Association of Rocketry, P.O. Box 1031, Postal Station B, Mississauga, Ontario, Canada L4Y 3W3.  
 Rights, privileges, and responsibilities of membership begin upon acceptance of this application by the NAR. All memberships are for twelve months  
 from the date of acceptance. Rates and services subject to change without notice. Please allow 6-8 weeks for delivery of of American Spacemodelling.



**TO:**

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



**SOUTHERN PENNSYLVANIA  
AREA ASSOCIATION  
OF ROCKETRY**

PROMOTING SAFE MODEL ROCKETRY  
IN SOUTHERN PENNSYLVANIA  
AND NORTHERN MARYLAND



*The Southern Pennsylvania Area  
Association of Rocketry*

# COUNTDOWN

**Volume 5 No. 1**

JANUARY/FEBRUARY 1992