



The Model Rocketeer



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Get your 2002-flying season into full swing!!

Attend NOVAAR meetings this summer. Some wonderful topics are planned. Participate in the many launches and contests.

Check out the events calendar on page 10

They're Back!!!!!! 10.5 mm rocket motors – see page 4.

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The spectacular pictures of all the rockets in this issue of the newsletter are courtesy of Jason Vick. NOVAAR sincerely thanks Jason for his time, film development and the web space to host pictures of NOVAAR's two launches this year. The pictures are available at <http://www.blueplanetmedia.com/rocket/index.h>



The Model Rocketeer

April Fools 2002

Editor: Greg Bock

Contributors: Trip Barber, Ken Brown, Greg Bock, Ted Phipps, Eric Robinson, and pictures by Jason Vick

*The **Model Rocketeer*** is the unofficial April Fools edition of the newsletter of the Northern Virginia Association of Rocketry, NAR Section 205. **Separating truth from half-truths and foolishness is left as an exercise to the reader.** The club takes no responsibility for actions taken by readers who believe the contents.

Send all submissions to:

Ken Brown
7021 Forest View Drive
Springfield, VA 22150-3120

Submissions can also be sent electronically to:
gbock@erols.com

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Ken Brown
7021 Forest View Drive
Springfield, VA 22150-3120

Visit NOVAAR's Web site at:

<http://www.geocities.com/CapeCanaveral/8561>

Or better yet....

ATTEND NOVAAR MEETINGS!

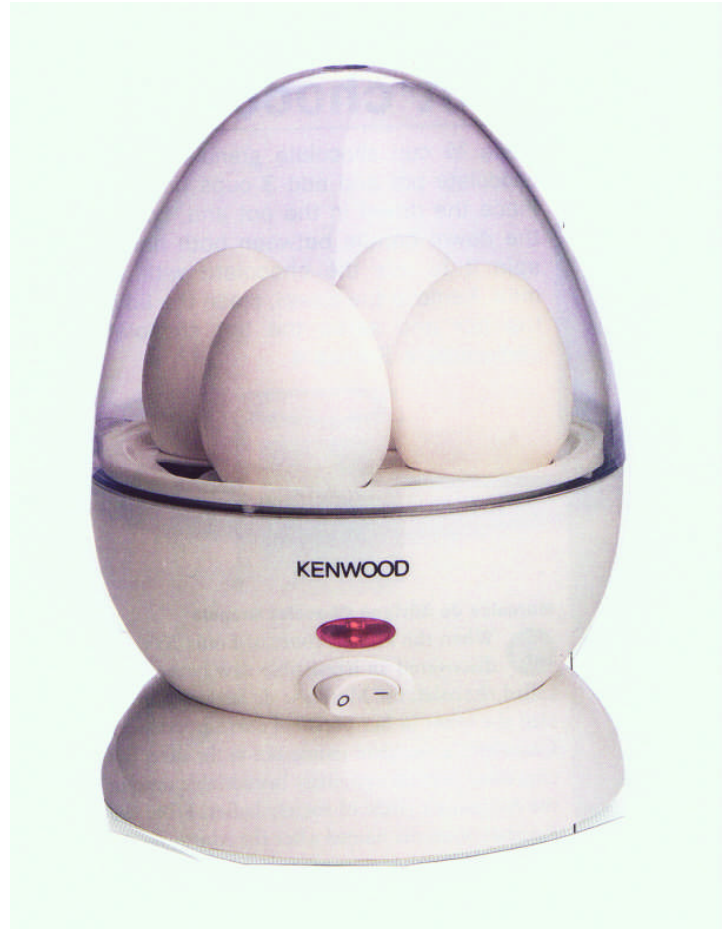
NOVAAR holds meetings twice a month. We meet the first and third Tuesday from 7:00 PM to 8:30 at the Kings Park Community Center--behind the Chinese restaurant in the Kings Park Shopping Center. The shopping center is in North Springfield, two miles outside the Beltway (I495) at the intersection of Braddock and Burke Lake Road.

Dues are \$5.00 per year for members age 13 or younger, \$8.00 per year for ages 14-18, and \$10.00 per year for age 19 or older. The maximum yearly membership fee for a family is \$20. Make checks payable to "NOVAAR" and send to the Treasurer at:

Roger Hillson
4317 Selkirk Drive
Fairfax, VA 22032
ATTN: NOVAAR RENEWAL

ATTENTION RACKETEERS!!!!

"MIRVED" EGG CAPSULE

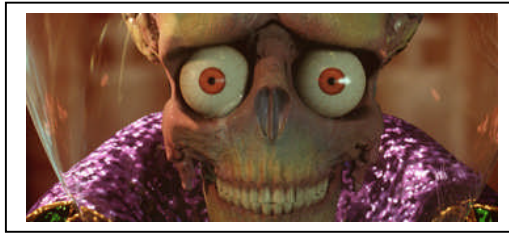


- **Launch and recover 4 eggs at once using this specially designed capsule.**
- **Optional "ON-OFF" switch allows eggs to cook during launch for increased survivability!**
- **Nose Cone made of clear high impact plastic permits real time damage assessment at recovery !!**
- **No surprising mess at the RETURNS station.**

The editor apologizes for the lateness of this April Fools issue of the *Free Press*. Our editorial policy requires us to build and test fly every submitted model rocket plan prior to its publication in the newsletter. The construction plan on page 9 is the reason for the delay for this particular issue. - Editor

Congratulations to NOVAAR's Most Recent LEVEL – II Confirmations

Jeff Perry



Keith Wancowicz



Jeff successfully made his Level II certification flight at NOVAAR's first Sport Launch of the season on March 23. Jeff's rocket ripped off the pad on a J350. Due to the high wind it drifted quite a ways though, and just missed a high strand of oak trees by about 15 yards.



Keith made his successful Level II confirmation at the 20 April Sport & Contest launch using a LOC Precision V-2 with a Pro J-38, J-300 motor. The launch was great, but - unfortunately the V2 landed in a tree in the middle of a cow pasture. Keith recovered the rocket a few days later unscathed and with motor intact.

LET US KNOW WHEN YOU SUCCESSFULLY COMPLETE YOUR LEVEL 1, 2 OR 3 CERTIFICATION, AND WE'LL INCLUDE IT IN THE NEWSLETTER. SEND US A PICTURE (IF AVAILABLE) AND SOME PARTICULARS ON THE MODEL AND MOTOR USED. IN FACT, LET US KNOW IF YOU UNSUCCESSFULLY ATTEMPT A CERTIFICATION -WE'D LOVE A PICTURE OF THE ROCKET FOR THE NEWSLETTER - EDITOR

Hobby Shop On The Eastern Shore

By Ted Phipps

Whenever I'm out of town, I look up local hobby shops. Last summer, our family spent a week at Ocean City, and while there we found a goodie. Dennisons Trackside Hobbies had an ad in the phone book that specifically mentioned model rockets, so we stopped in for a visit.

Located in Berlin, Maryland, it's about a fifteen-minute drive from Ocean City, right off of Route 50. I recommend parking at the municipal lot as you enter town - it's free - and gives you the chance to stroll down main street. This is true small town America, although residents there are jokingly calling themselves 'Hollywood East'. The town was the location for filming the movie 'Runaway Bride' with Julia Roberts, and many of the main street businesses and buildings figured prominently in the film. Another film was just finishing up location shooting, and is due out sometime this year. Despite all that, the place keeps it's small-town charm, with little shops, café's and antique stores to browse. While your wife is busy with Main Street, walk on through and you'll find the hobby shop on the right, just outside of downtown proper.

Prominently displayed in the front window were several Estes boxes, including a Saturn V (marked down to \$39.95!) and the recently reissued Honest John. Inside, the first row of the shop is devoted primarily to rockets. I saw kits from Estes, Custom, Quest, and LOC, with a good mix of newer kits and older out-of-production models like the Mean Machine. Another Saturn V was sitting there (I bought this one). There was a small selection of parts, body tubes, and nose cones. I did see one Quest Micro-Maxx starter set.

Mr. Dennison is a nice guy and proved to be knowledgeable about rocketry. He was looking forward to the new Estes 'E' motors. He also told me that he'd originally gotten a bunch of the Micro-Maxx stuff for the local kids, but a lot was returned because the motors were hard to ignite. To see it for himself, he went out to the parking lot adjacent to his store and launched a few of the little Quest rockets. He wanted to know if I'd flown any of the Micro-Maxx, and if I had any tips for more reliable ignition.

On the wall behind the counter was his motor display. Pretty complete, although he is now out of D12-5's (sorry about that). I also saw a bulk pack of Quest Micro-Maxx

motors, and a couple of Aerotech single use composites – the biggest was a G80. I was surprised to see some RMS reloads, and Mr. Dennison talked about a local guy who got into rocketry for a while. When the guy lost interest, the reloads just sat there in the store inventory. I bought 3 packs of E11 blackjack reloads at a discount.

The rest of the shop was mostly dedicated to model railroading and RC models of all types, although there was a good selection of dollhouse miniatures and other hobbies. As a comparison, I'd guess that the shop is about twice the size of Granddad's in Springfield.

This is a nice hobby shop, and well worth the stop if you're in the Ocean City area. The owner and customers we met were friendly and liked to talk hobbies. All in all, we spent a very pleasant afternoon in Berlin.

That last Saturn V was still there too.

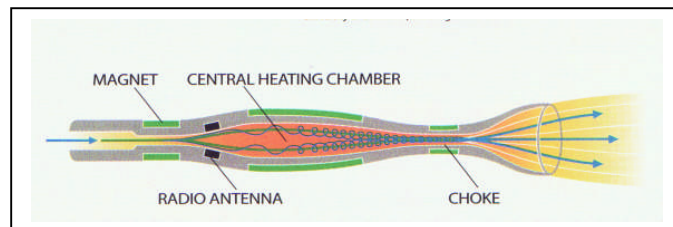
Dennisons Trackside Hobbies
14 South Main Street
Berlin, MD 21811

Phone: 1-800-972-6898

Hours: 11 – 8 Tuesday thru Friday
10 – 5 Saturday
12 – 4 Sunday

NAR Certifies New 10.5 mm Micro Motors For Contest Use

The new motor, a Variable Specific Impulse Magnetoplasma Rocket, fits into the same size motor casing as the recently decertified micromotors the were marketed by Apogee Components. It uses hydrogen rather than black powder as a propellant. With a total impulse of about 40 newtons for 55 days the motor promises to completely revolutionize model rocket competition duration events.



Copies of the detailed test reports are available from NOVAAR's treasurer at \$10 each.

NOVAAR HIGH POWER RANGE PROCEDURES AND GUIDELINES

By Eric Robinson

Registration and Fees. All individuals wishing to fly high power rockets at a NOVAAR launch shall register on the day of the launch. A range fee of \$5.00 shall be charged to each flyer. All flyers must be certified by NAR or TRA for the power level that they plan to fly, shall provide evidence of their certification level and current membership in one of these organizations at the time of registration, and shall receive a flight badge indicating such certification.

Safety. All launches shall be conducted in accordance with the NAR High Power Safety Code and NFPA Code 1127 for High Power Rockets. In addition, NOVAAR imposes the following more stringent requirements:

- Smoking is prohibited inside the flight line or within 25 feet of any high-power rocket motor.
- Launch rods/guides will be angled away from the spectator/parking area.
- Igniters will not be installed until after models have been checked in and have moved past the flight line, and will not be connected to launch leads until the flier has touched ignition leads together at the pad to verify no power is applied.
- A flight line will be established beyond which only authorized flyers and NOVAAR personnel shall be permitted. The range shall be configured so that the minimum safe distance of 100 feet (200 feet for rockets with multiple motors) is satisfied by the flight line.

Certification. Only individuals NAR or TRA-certified to the appropriate level will be permitted to fly high power rockets and/or have possession of high-power motors. The only exception will be those members attempting a certification flight under the guidance of at least one other NAR member certified to the appropriate level.

Waiver, Rules and Regulations. All flights shall comply with applicable FAA regulations and all other federal, state, and local laws, rules, and regulations. NOVAAR will obtain the FAA waiver if possible, and will publicize such waiver to club members before the launch.

Motors. Only certified motors may be flown, sold, or possessed on the launch site. "Certified" includes those certified by NAR, or those certified by TRA and

recognized by NAR. NOVAAR has an impulse limit of J (1280 N-sec or less of installed total impulse) for all launches conducted at Great Meadow.

Range Safety Officer (RSO). An RSO shall be designated prior to any high-power launch and shall have authority over all high power launch activities. The RSO's decision with respect to any matter on launch and flight safety, and/or approval for flight, shall be final. The RSO or NOVAAR may require a few hours of assistance from any qualified high-power flier for duty as safety check-in inspector, launch control officer, pad managers, or other duties, as a condition of being allowed to use the range for their own flights.

Safety Inspection. All rockets shall be presented (with a completed flight card) for a safety inspection prior to flight. Blank cards shall be available at the launch. The specific inspection procedures shall be established by the RSO designated for that launch, but flyers should be prepared as a minimum to justify the motor selection and safety, and prove the stability and compliance with the waiver altitude, for all high-power models.



NOVAAR hosted its first HP launch of season on 23 March. See many more of Jason Vick's spectacular pictures at

<http://www.blueplanetmedia.com/rocket/index.htm>

March Building Session

By Greg Bock

Robert Edmonds of *Edmonds Aerospace* hosted the March building session. The session encompassed building models for two major competition events—B motor Rocket Glide and B motor Boost Glide. Rob generously provided two of his company's kits—a prototype ARGEE rocket glider and an IVEE boost glider.



← Rob Edmonds with a completed ARGEE B rocket glider.

The club hosts buildings sessions on the third Sunday of each month at the Kings Park Community Center. Stop by and learn the secrets from the experts!

But, this particular building session was not only devoted to building models. Kurt Beckman and Mike Debey used the session to work on the club's new high power launch controller.



Mike (l.) and Kurt (r.) pause briefly to pose for a picture, while one of NOVAAR's younger members supervises the high power launch controller building effort.

Galaxy Scouts

By Trip Barber

NOVAAR has the opportunity to help out with a newly formed youth program on space science, and needs volunteers to help. This program, called the "Galaxy Scouts", has been put together by a senior government employee, Nick Eftimiades (works at the National Security Space Architect office) who wants to provide a means of inspiring kids in grades 4 through 11 to become interested in space technology. This is its first year of operation, this coming school year it will be in a number of districts in this area and elsewhere.

Nick has attracted substantial support for his new group from government agencies, the aerospace industry, and members of Congress. There is a significant potential here for the NAR to partner with this group and become their resource for finding experienced rocketeers who want to become volunteers in the program, if the effort takes hold.

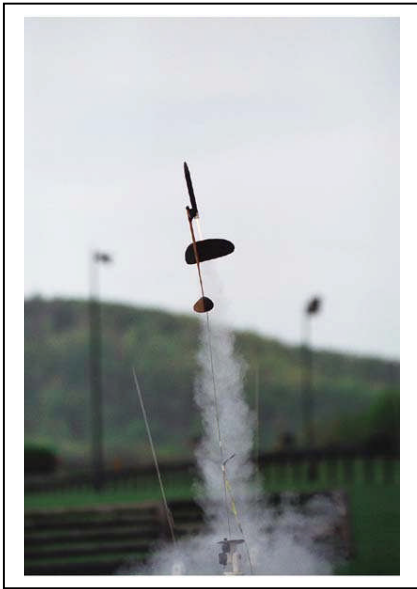
Nick is doing a "beta test" of the overall curriculum for the program prior to its September rollout. The test is a two-week summer camp for 100 rising 5th-11th graders at Saunders Middle School, near Manassas. It runs 9 - 19 July, mostly just in the mornings. Wednesday, July 17 is the day for doing the "rocketry module" in the program. They are looking for a half-dozen adults who can spend the day helping the large group of teachers and the 100 kids first build (in the AM) and learn about safety, then fly (in the PM) using simple rockets from Pratt Hobbies. The camp is fully subscribed already. This seems like a fun experience, worth doing as both a service to a good group and a potential boost for the NAR's overall program to develop linkages to national organizations that can get us into schools and get us at potential junior members. It will take 5-6 experienced adult rocketeers (heavily augmented by teachers from the Galaxy Scouts group) to do this, plus the NOVAAR launch system. Contact me if you want to help.

Members who wish to receive important announcements of launches, meetings and other club activities should send their E-mail address to Roger Hillson (hillson@erols.com)

Northern Virginia Association of Rocketry

2002060.2368142900 – 2002120.999999

VACUUM 27 - 20 April 2002														
Name	NAR#	AGE DIV	SECTION	BHELOMR (seconds)	points	BRG (seconds)	points	BBG (seconds)	points	BALT (meters)	points	OSL (meters)	points	TOTAL
Trip Barber	4322		205	90.8	300	DQ	0	108.3	228	367	198		0	726
Robert Edmonds	37700	C	205		0	54.8	378	122.3	342		0		0	720
Glenn Feveryear	24931	C	SPARR	186.7	750	85.6	630	92.1	114	432	330	DQ	0	1824
Kevin Johnson	77083	C	Independent		0		0	242.5	570	219	66	12.9	120	756
Steve Tselides	pending	C	205		0		0	16.7	57		0		0	57
Greg Bock	44161	C	205	181.2	450		0	89.2	57	241	132	DQ	0	639
J Woodford	pending	C	Independent		0		0		0		0	26.7	72	72
Eric Robinson	76096	C	Independent		0		0		0		0	DQ	0	0
Kurt Beckman	77217	C	Independent		0		0		0		0	DQ	0	0
Bart Merkey	63975	C	Independent		0		0		0		0	DQ	0	0
Calvin & Hobb	T721	T	205	267.6	750	91.5	378	388.7	570	213	198	12.3	120	2016
Trash Always Wins	T007	T	205	158.7	450	339.5	630	64.5	342	221	330	16	72	1824
NR=No Return													Total	8634
NF=No Flight														
DQ=Disqualified														



A boost glider, a downed helicopter and a classic Sci-Fi rocket ship model – all from the 20 April contest and sport launch!!

2002 4th of July Demonstration Launch

By Trip Barber

NOVAAR is signed up once again to put on a demonstration launch for the 15-20,000 spectators at the annual 4th of July air show and party at our flying site, Great Meadow Outdoor Center in The Plains, VA. We are on for 15-20 minutes at 5 pm, and need to put on a great show with about 20 large-size rockets, preferably with G motors and larger (up to J). Rockets

must be very reliable (flown previously), the crowd is large and densely packed, and they must be big and noisy because the crowd is at least 500 feet away from the launch spot and cannot see little models. Those who have rockets (and motors) are needed at the field by noon -- and need to contact me to let me know you are coming. We have 12 free passes for vehicles; each pass is about a \$20 value. We also have the opportunity to run a booth all day at the event, to publicize NOVAAR and our hobby. I promise there will be no thunderstorms this time!



Attention Racketeers !!!
Be the first to get this special
Egg-Loft Duration Event Timer.
Simply set the pointer to the
duration time you want, and the
egg-loft duration event timer
does the rest.

Here's a good website with some fantastic video footage of some of the Gates brothers' rocket projects. The files are pretty big, but worth the wait. Recommend Porthos II 1st flight and Athos 2nd flight.

http://www.gbrocketry.com/movie_theater.htm - Jeff Perry

There's an article on the NAR NSL and high-power rocketry in the May 26th issue of the Washington Post Style section (cover page).

<http://www.washingtonpost.com/wp-dyn/articles/A14751-2002May26.html> -- Trip Barber

New Area Hobby Shop – Although specializing in Control line Model Airplanes, Virginia Hobbysport carries some of the best contest grade (4-6 lb density) balsa wood I've seen in the area. The shop is collocated with a Safe and Lock business at 5528 Port Royal Road in Springfield, VA. (just down the road from Granddad's hobby shop)

<http://www.virginiahobbysport.com> -- Trip Barber

R & D Project

Suggestion:

Electromagnetism - Use the engine as the core.

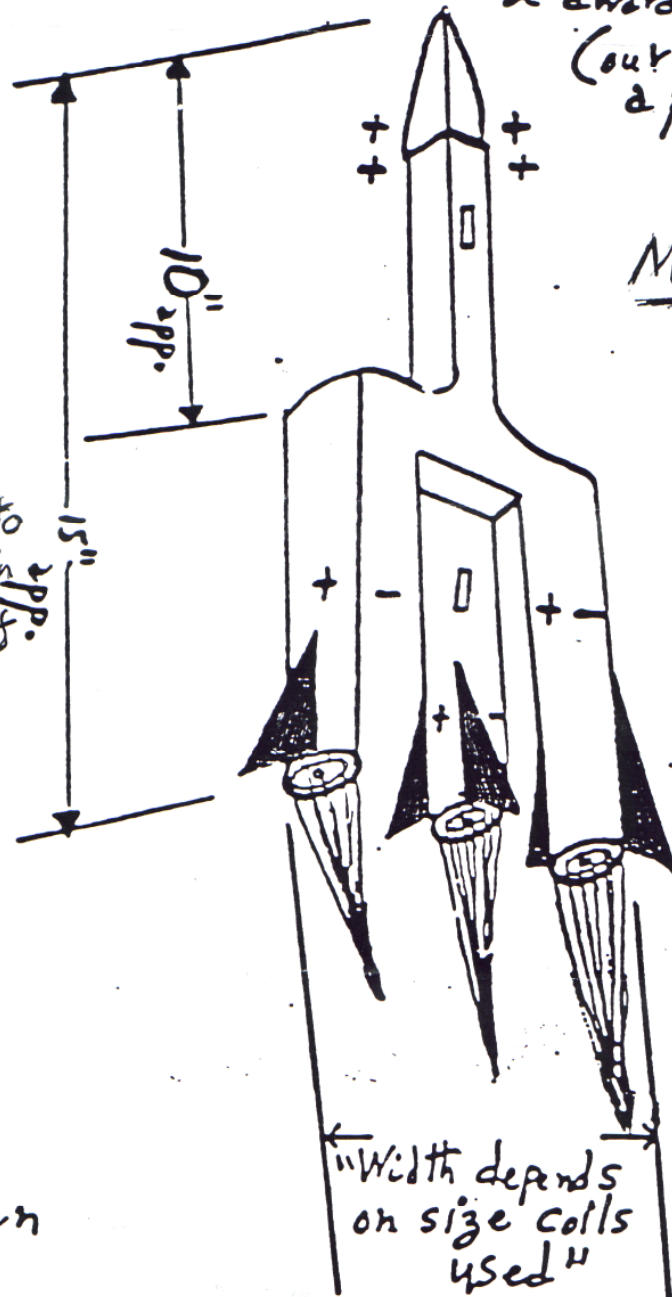
The first person sending in a completed model & picture of the magnetic flier will be awarded with \$ 2.05 (our section number with a period in it).

Engines:

(3) A8-3
first flight.

MAGNETIC FLIER

Launch system to be discussed in future issues of the Free Press.



Kenneth Brown
AR 29354

NOVAAR's EVENTS

NOVAAR meets the 1st and 3rd Tuesday of each month at the Kings Park Community Center. Meetings begin promptly at 7 pm and usually last 1-½ hours. The Community Center is located in the King's Park Shopping Center, Braddock Rd. and Burke Lake Rd. — two miles outside the Beltway in Springfield. NOVAAR flies at Great Meadow - Travel on I-66 to The Plains Exit #31; proceed south on Old Tavern Rd. (Rt. 245) to enter the gate

The following applies to all NOVAAR sport and high power events:

- Waiver – J Motor maximum, maximum altitude of less than 4500 feet (pending final approval from FAA)
- NOVAAR will require proof of ability of rocket to remain within ceiling limits and appropriate flyer certification.
- All NOVAAR Sport/High Power events are currently scheduled for Great Meadow

June 8, 2002 - Section Contest & Sport/High Power Launch

Great Meadow 9 AM – 5 PM

Contest Events are:

A R/G,
1/2A Streamer (multi-round),
Set Altitude (175 meters)

June 18 2002 – Club Meeting and Discussion 7 PM. Trip Barber discusses Streamer Duration.

June 31, 2002 – NOVAAR Demo Launch

Great Meadow 10-12 PM

See new NAR/Tripoli certified 10.5 mm micro motors demonstrated in Ken Brown's *Magnetic Flyer*. Free refreshments.

July 2, 2002 - Club Meeting and Discussion 7 PM. This will be a planning meeting for the 4 July demonstration at Great Meadow.

July 4, 2002 - 2nd Annual NOVAAR Demo at Great Meadows July 4th Show (See Trip Barber's item in this newsletter.)

July 16, 2002 - Club Meeting and Discussion 7 PM – Annual pre-NARAM meeting. Bring your NARAM Models!!

July 20, 2002 - Sport Launch at Great Meadow 9 – 5 PM.

NOTE! – No meeting on August 6 due to NARAM.

August 20, 2002 - Club Meeting and Discussion 7 PM. Greg Bock will discuss scale model rocket motor staging and techniques to avoid placing last at NARAM 42 scale model competition.

August 31, 2002 - Sport Launch at Great Meadow 9 – 5 PM.

September 3, 2002 - Club Meeting and Discussion 7 PM. Club Officer Nominations. Trip Barber discusses solid rocket motors.

September 17, 2002 - Club Meeting and Discussion 7 PM. Bart Merkley discusses the "Ratworks" Hybrid Motor.

September 21, 2002 - Great Meadow 9 AM – 5 PM
Contest Events to be announced.

OTHER EVENTS

June 15-16, 2002 - RAMTEC-10

SPAAR, Allentown College in Center Valley, PA. Events are:

1/2A Parachute Duration
A Rocket-Glider Duration
B Helicopter Duration Multi-round
Set Altitude (175 m) – **SEE IMPORTANT NOTE BELOW**
Sport Scale

Contact Information

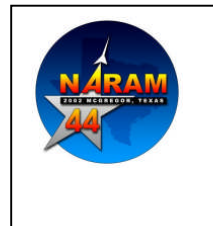
<mailto:gfeveryear@earthlink.net> - 717-456-5570

August 4-9, 2002 - NARAM-44

McGregor, TX.

Events are:

B Altitude
E Eggloft Altitude
1/2A Parachute Duration
C Helicopter Duration
B Eggloft Duration
B Boost Glider Duration
C Rocket Glider Duration
Sport Scale
Research & Development



NOVAAR MEMBERSHIP APPLICATION

Dues are \$5.00 per year for members age 13 or younger, \$8.00 per year for ages 14-18, and \$10.00 per year for age 19 or older. The maximum yearly membership fee for a family is \$20.00. Make checks payable to "NOVAAR" and send to the Treasurer at:

Roger Hillson
4317 Selkirk Drive
Fairfax, VA 22032
ATTN: NOVAAR RENEWAL

Roger can also be reached by email (hillson@erols.com) and telephone (703-978-6957 evenings). Be sure and put "NOVAAR RENEWAL" somewhere on the outside of the envelope, and enclose a copy of the renewal application.

Date _____ **Please check one:** ___ **New Member** ___ **Renewal**

NAME: _____

DATE OF BIRTH: _____

STREET: _____

CITY: _____

STATE: _____ **ZIP:** _____

HOME PHONE: _____

NAR membership number, if a member: _____

EMAIL ADDRESS
(Optional) _____

I heard about NOVAAR from:

Dues are for one year of NOVAAR membership and do not include optional NAR Membership.

Please check one category based on your age as of the previous July 1st:

One: ___ **Age 13 or younger (\$5)** ___ **Ages 14-18 (\$8)** ___ **Age 19 or older (\$10)**

NOVAAR FREE PRESS
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7021 Forest View Drive
Springfield, VA 22150-3120

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&

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New!!! Magnetic Flyer Kits

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Kits (43) and Parts

www.cybertravelog.com/qcr/

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Kenneth Brown
7021 Forest View Drive
Springfield, VA 22150
Phone: 703-451-2808



***SPECIAL ~~APRIL~~ FOOLS EDITION
JUNE***