The NOVAAR Free Press

March - April 2006

Inside this Issue

Calendar 2

Club News
- NOVAAR email Addresses Available 3
- Scout Launch set for May 6th at Boy Scout Camp Snyder 3

March Sport Launch
- Finally Clear Skys and TARC Teams 6

April Sport Launch
- Two weekends become on when April Showers come calling 10

General Rocketry
- Now There are Four 13
- An Explanation for January and February's Launch Day's Weather !?! 13

Competition Rocketry
- NARAM-48 set for July 29th to August 4th 3
- Imagination Celebration at NARAM 48! 3
- Cargo Boost Glie Duration Competition Set for September Sport Launch 4
- April Fools 2006 Open Competition Results 5

NAR

Section 205
Flying Since 1970

NOVAAR *Free Press*

March – April 2006

This is the official newsletter of the *Northern Virginia Association of Rocketry* (NOVAAR), Section 205 of the *National Association of Rocketry* (NAR). This newsletter is a benefit of being a member – ***You are a member, aren't you?***

Section Officers

President:.....John Hochheimer
john.hochheimer@verizon.net

Secretary:.....Trip Barber
ahbarber@alum.mit.edu

Treasurer: .....Keith Wancowicz
keith@thaicustomcrafts.com

Senior Advisor: .....Ken Brown
brown007@bellatlantic.net

Membership and Dues

To maintain the clubs launch equipment and pay for our website we collect dues. Dues are collected annually and are; $5 for members age 13 and younger, $8 for members age 14 to 18 and $10 for everyone else. A membership application can be found at many local hobby shops and on our website.

Meetings

NOVAAR holds meetings on the first and third Tuesday of the month, from 7:00 pm to 8:30 pm, at the King's Park Community Center in Springfield, VA. The most current topics to be discussed and directions to our meeting room can be found on our website.

Build Sessions

Once a month, on the third Sunday of the month from 1:00 pm to 5:00 pm, at the King's Park Community Center, the club gets together to build rockets and share construction techniques. The schedule and directions to our meeting room are on our website.

Launches

NOVAAR conducts monthly launches at *Great Meadow* which is located in The Plains, VA – approximately 50 minutes south of Washington DC on Route 66. Launches start at 9 am and run until 5 pm (10 am to 4 pm during the winter). The most current schedule and directions to *Great Meadow* can be found on our website.

There is no charge to fly at club launches (*motor sizes A to F*). However, there is a $5 charge to launch high-powered rockets (motor sizes *G to I -- the field is not large enough for bigger motors*). **AND,** you don't have to be a member to fly with us. Though, after you meet us and, realize that we don't bite – *as long as we take our medication* – ***we know you will want to join***.

If weather threatens the launch day, our website will report the status of the launch by 8:00 pm the day before.

Website

The club's website (**www.novaar.org**) is where the most current information about future club activities can be found. The site is maintained by...

Webmaster:..... Dan Winings
dwinings@adelphia.net

Newsletter

The club's newsletter is published 6 times a year or, as close to that schedule that is humanly possible for the editor to achieve. The newsletter reports on the club's activities and features articles written by club members about their endeavors within the Model Rocketry Hobby. The articles include, *but are not limited to*, topics on sport rocketry, competitive rocketry and high-powered rocketry. Send submissions to ...

Editor: ..... Frank Prekel
fjprekel@aol.com

Calendar

June 2006

SUN	MON	TUE	WED	THU	FRI	SAT
				1 D-Day Landing, 1944	2	3 NOVAAR Launch
4 Launch Backup	5	6 NOVAAR Meeting	7	8	9	10
11	12 Father's Day	13	14 Flag Day	15 US Army Founded, 1775	16	17
18 NOVAAR Build	19	20 NOVAAR Meeting	21 Summer Begins	22	23	24
25	26	27 Army Air Force created, 1941	28	29	30	

July 2006

SUN	MON	TUE	WED	THU	FRI	SAT
				Independence Day		1
2	3	4 Demo Launch	5	6	7	8 NOVAAR Launch
9 NOVAAR Launch	10	11	12	13	14	15
16 NOVAAR Build	17	18 NOVAAR Meeting	19	20	21	22
23	24	25	26	27	28	29
30	31					

August 2006

SUN	MON	TUE	WED	THU	FRI	SAT
		1 NOVAAR Meeting	2	3	4 U.S. Coast Guard's Birthday, 1790	5
6	7	8	9	10	11	12
13 V-J Day, 1945	14	15 NOVAAR Meeting	16	17 National Aviation Day	18	19 NOVAAR Launch
20 NOVAAR Build	21	22	23	24	25	26
27	28	29 Marine Corp Reserve Birthday, 1916	30	31		

Did you know that the NOVAAR Hatpin can also be a Lapel Pin?

It's True!!!

And, it is available from Frank Prekel -- fjprekel@aol.com.

The NAR pin is available from NARTS (www.nar.org/narts)
The Flag Ribbon is out-of-print and no longer available.

Competition Rocketry

R/C Fly-in Scheduled for the July 8th Launch

The July 8th Sport Launch will feature a fun-fly session for Radio-Controlled Rocket/Boost Gliders.

Don't have a R/C Rocket/Boost Glider? Bring your non-R/C boost and rocket gliders. And, help fill the air with free-flying objects. *Lets fly to Impress!!*

☆☆☆

NARAM-48 set for July 29th to August 4th

The dates and location for NARAM-48 have been set. It will be July 29th to August 4th in Phoenix (Rainbow Valley) AZ. This year's event is sponsored by Superstition Spacemodeling Society, (NAR Section 506). *The events scheduled are:*

- 1/2A Streamer Duration,
- 1/4A Parachute Duration (Multi Round),
- B Boost Glide (Multi Round),
- B Egg-loft Duration,
- B Helicopter Duration,
- F Altitude,
- Random Duration,
- R & D,
- Scale, and
- Science Fiction & Future Scale.

Also planned RC Rocket Glider Championships, Imagination Celebration, Banquet at the Challenger Space Center, and more!

Point-of-Contact is Matt Steele (at 480-540-7456 or manofsteele@rocketryonline.com). More Information at: http://www.naram.org or http://www.sssrocketry.org/.

☆☆☆

Imagination Celebration at NARAM-48!

The Imagination Celebration will be held on Friday from 8:00 am to 10:00 am. Set your alarm clocks so you don't miss it!

Entry

To enter, fill out a flight card along with some information about your rocket for the MC to read and give it to Doug Hillson by Thursday night. Then show up at approximately 7:45am on Friday with your rocket.

Procedure

Voting ballots will be handed out to everyone registered at NARAM who attends the Imagination Celebration. Spectators will select their top three choices and determine three overall winners.

In addition judges will award winners in the categories of:

Autorotation - Any entry that includes the use of autorotation will be eligible for this award.

Multi-Glide - Any entry that includes multiple gliding portions is eligible

3-Stage - Any entry that involves three components staged in series is eligible.

Remember, these categories aren't meant to constrain you, they're meant to inspire you. In particular, there's nothing stopping you from creating entries that are eligible for two or more of the categories, and doubling, tripling or quadrupling your chance of receiving an award! Also, this year's show will include a mass participation finale, open to as many NARAM fliers as are willing:

Drag Race Finale

The last flight of the Imagination Celebration will be a drag race of as many rockets as possible. Models flown for this won't be eligible for judging and must not be a cluster.

Rules and Judging Criteria

The traditional Imagination Celebration rules apply in all award categories:

The Imagination Celebration is for; entries that include at least one flying model, which shall be subject to all safety rules imposed by the range safety officer at the NARAM sport range, and must be legal to be flown during periods with no HPR waiver.

The object is to use all the technologies of model rocketry to produce motion, shapes, light, sound and color in the sky in a manner pleasing or otherwise emotionally moving to human observers on the ground. You might say you are trying to create a sky show, or perhaps sky art. You will be judged in three criteria:

Size/Visual Impact - How visible is it? Does it jump out at the viewer or do you have to squint to see it?

Showmanship/Artfullness - Is it exciting? Is it beautiful? Does it elicit emotion, sensation, entertainment or humor?

Originality - Was it obvious?

A Message from Rob:

You all know how much I want the Imagination Celebration to remain a tradition as long as there's a NARAM. Toward that end, I'm pleased to announce that Mr. Doug Hillson will be organizing this year's event. He has been an enthusiastic supporter and participant since the first Celebration, and has great ideas for new judging categories and show elements that will help maintain the vitality of the event. Infusing youthful energy such as his is the best way to ensure the Celebration's longevity, and I know he'll give you all a great time out there in Phoenix!

☆☆☆

Cargo Boost Glide Duration Competition Set for September Sport Launch

During the Sport Launch on September 23rd, the proposed provisional "Cargo Boost Glide Duration" competition rules are going to taken out for a test drive. There are no prizes or points to be won but you do bet the bragging rights. The provisional rules are …

XX Cargo Boost Glider Duration Competition

XX.1 Scope

Cargo Boost Glider Duration Competition comprises eight events open to any model rocket, one portion of which carries a payload, as defined below, in stable, gliding flight supported by aerodynamic lifting surfaces which sustain that portion aloft. The entry may separate into multiple pieces; only the load-carrying, gliding portion is timed. This event is open both to models with rigid lifting surfaces and those with flexible lifting surfaces. The object in this competition is to achieve the largest product of payload carried and flight duration.

XX.2 Payload Specifications and Scoring

The gliding portion of an entry must carry at least one standard NAR payload. The contest director shall select between two methods of scoring:

a. One flight load: The score for each flight of an entry shall be the duration in seconds multiplied by the total number of standard payloads carried on that flight. Each flight by a competitor may be made with a different model and may carry a different amount of payload (except in the case of multi-round, where only two models may be used for three flights).

b. Two flight load: The score for each flight of an entry shall be the duration in seconds multiplied by the total number of standard payloads carried over two flights. The two flights must be made by the same model, but different amounts of payload may be carried on each flight. There is no multi-round version of this scoring system.

The standard NAR model rocket payload is a non-metallic cylinder containing fine sand, with a mass of no less than 28.0 grams. This cylinder shall be 19.1 millimeters (+/-0.5 millimeter) in diameter, and 70 millimeters (+/- 10.0 millimeters) in length. The payload may be permanently sealed to prevent the loss of the sand. No holes may be drilled into it, no changes made in its shape, and no other material may be affixed to it.

XX.3 Payload Carriage

The standard NAR model rocket payload or payloads carried in a model shall not separate from the model in flight, and shall be removable from the model.

XX.4 Disqualifications

Any entry whose total weight at liftoff exceeds the manufacturer's recommended maximum lift weight for the motor or motor combination used shall be disqualified.

An entry that descends with parachute and/or streamer recovery device(s) permanently attached to the gliding portion of the model shall be disqualified. However, other portions of an entry may deploy parachutes and/or streamers for recovery purposes.

If the gliding portion accidentally rips a streamer being used to recover another portion of the entry and the streamer becomes attached to the gliding portion, the entry may be qualified depending on the RSO ruling that the entry still glided and was not disqualified for other reasons.

XX.5 Classes

This competition is divided into classes based on the permissible total impulse of the motor(s). The following classes of Cargo Boost Glider Duration Competition are established:

Motor Class Weighting Factor Multi-Round Maximums							
1/2A	A	B	C	D	E	F	G
90	120	180	240	270	300	300	300

★★★

April Fools 2006 Open Completion Results

A Altitude

Division C

Place	Name	meters
1	Frank Prekel	159
2	Mitch Guess	84
--	Dan Winings	NC
--	Andrew Dobos	TL
--	Taylor McMullin	TL
--	Russell Streets	TL
--	Robert Edmonds	--

Division T

Place	Name	meters
1	Ho-Ho Team	224
2	Old Grandads Team	184
3	Calvin & Hobbs Team	NC

1/2A Streamer Duration

Division C

Place	Name	seconds
1	Frank Prekel	46
2	Dan Winings	19
3	Andrew Dobos	18
4	Taylor McMullin	16
--	Robert Edmonds	--
--	Mitch Guess	--
--	Russell Streets	--

Division T

Place	Name	seconds
1	Calvin & Hobbs Team	111
2	Ho-Ho Team	64
3	Old Grandads Team	12

1/2A Boost Glide

Division C

Place	Name	seconds
1	Frank Prekel	51
2	Andrew Dobos	16
3	Taylor McMullin	15
4	Robert Edmonds	NR
--	Mitch Guess	--
--	Russell Streets	--
--	Dan Winings	--

Division T

Place	Name	seconds
1	Old Grandads Team	50
2	Calvin & Hobbs Team	41
3	Ho-Ho Team	12

B Helicopter

Division C

Place	Name	seconds
--	Andrew Dobos	DQ
--	Robert Edmonds	--
--	Mitch Guess	--
--	Taylor McMullin	--
--	Frank Prekel	--
--	Russell Streets	--
--	Dan Winings	--

Division T

Place	Name	seconds
1	Ho-Ho Team	88
2	Calvin & Hobbs Team	63
--	Old Grandads Team	--

Meet Results

Division C

Place	Name	points
1	Frank Prekel	780
2	Andrew Dobos	320
3	Taylor McMullin	204
4	Dan Winings	164
5	Mitch Guess	120
6	Robert Edmonds	34
7	Russell Streets	20

Division T

Place	Name	points
1	Ho-Ho Team	900
2	Calvin & Hobbs Team	716
3	Old Grandads Team	556

★★★

QCR

Qualified Competition Rockets

Complete Line of NAR Competition Kits and Parts

Sport Model Rocket Kits and **Micro Maxx Kits**

QCR kits have placed in

NARAM's 31 – 46

For catalog, send Self-Addresses Envelope to …

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

www.cybertravelog.com/qcr

March Sport Launch

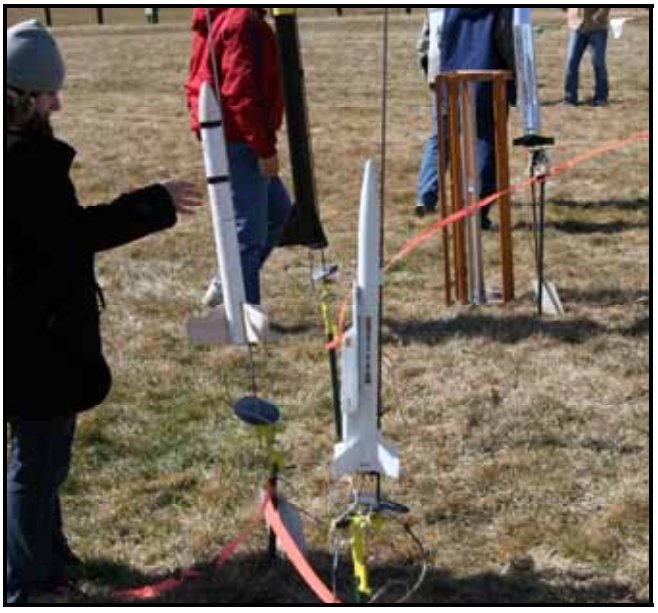
The March launch arrived cold and clear. Not only did the sky cooperate so did the wind. In addition to the good weather, several family groups and several TARC teams joined us on the field.

March 2006 Launch Day Totals – 154 flights

⅛A	¼A	½A	A	B	C	D	E	F	G	H	I	J	CLU	STA
0	0	2	4	16	14	20	38	7	17	3	0	1	29	3

CLU cluster, motors used not reported.
STA staged, motors used not reported.

INTRUDER



April Sport Launch

Originally planned as two weekends of flying became one when the weather gods smitted our plans for the second weekend. With the TARC deadline looming, we were joined by several teams looking to qualify. And, the *April Fools Open*, too.

April 2006 Launch Day Totals – 145 flights

⅛A	¼A	½A	A	B	C	D	E	F	G	H	I	J	CLU	STA
0	0	0	8	7	4	13	18	12	7	1	0	0	31	2
contest		24	15	3										

CLU cluster, motors used not reported.
STA staged, motors used not reported.

4

more photos on back cover

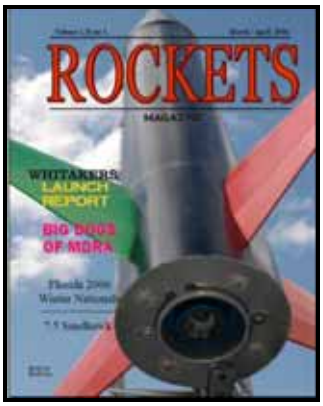
General Rocketry

Now There are Four

Everyone is aware of the National Association of Rocketry's "*Sport Rocketry*", it is included as part of a NAR membership – you are a member aren't you? Another relatively well known rocketry magazine is "*Extreme Rocketry*", an independent magazine not associated with either of the national associations.

In the last few months, two new rocketry magazines have appeared. The first is a replacement for Tripolli's "*High Powered Rocketry*". The new magazine is "*Rockets Magazines*" and while affiliated with Tripolli it is not part of the club's membership package.

The newest magazine is "*Launch Magazine*". This is an independent magazine dedicated to all forms of the rocketry hobby



Both "*Rockets Magazine*" and "*Launch Magazine*" are in their inaugural years and have three and two issues on the street respectively.

All four magazines are worth cheching out.

"*Sport Rocketry*"
http://www.nar.org/SPR/index.html

"*Extreme Rocketry*"
http://www.extremerocketry.com/

"*Rockets Magazines*"
http://www.libertylaunchsystems.com/

"*Launch Magazine*"
http://www.launchmagonline.com/

☆☆☆

Are you a member of the National Association of Rocketry?

If not, Why Not ??

Visit the association's website

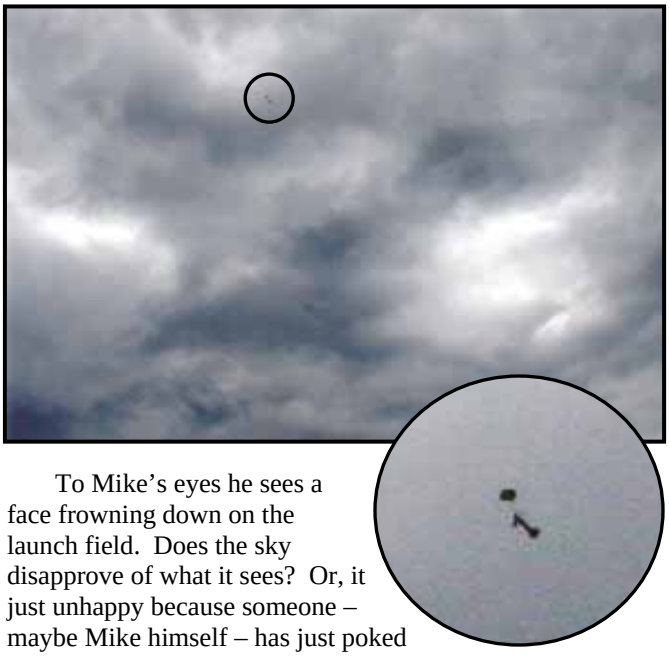
www.NAR.org

To learn the benefits of membership

An Explanation for January and February's Launch Day's Weather !?!

To say that the February's Launch weather was a little inclement would be considered, by some, as being, well, a little inclement.

Mike Knouse has offered this photograph to help explain what was happening.



To Mike's eyes he sees a face frowning down on the launch field. Does the sky disapprove of what it sees? Or, it just unhappy because someone – maybe Mike himself – has just poked the sky in the eye with a rocket.

Only time and the future will tell, is this a sign of bad times to come or just the newsletter's editor way of trying to fill space?

☆☆☆

VERTICAL FORCE ROCKETRY

Vertical Force Rocketry is a Woodbridge based dealer that sells model rockets from FlisKits, Semroc, Rockethead Rockets, Estes, Quest, Custom, Loc Precision, Edmonds Aerospace, and Aerotech. And, model rocket motors from Estes, Quest, and Aerotech.

Check-out our website and sign-up for our newsletter to get the latest information about our products and services.

Look for us on the field on NOVAAR launch days.

www.vforcerocketry.com/

more photos from the April Launch