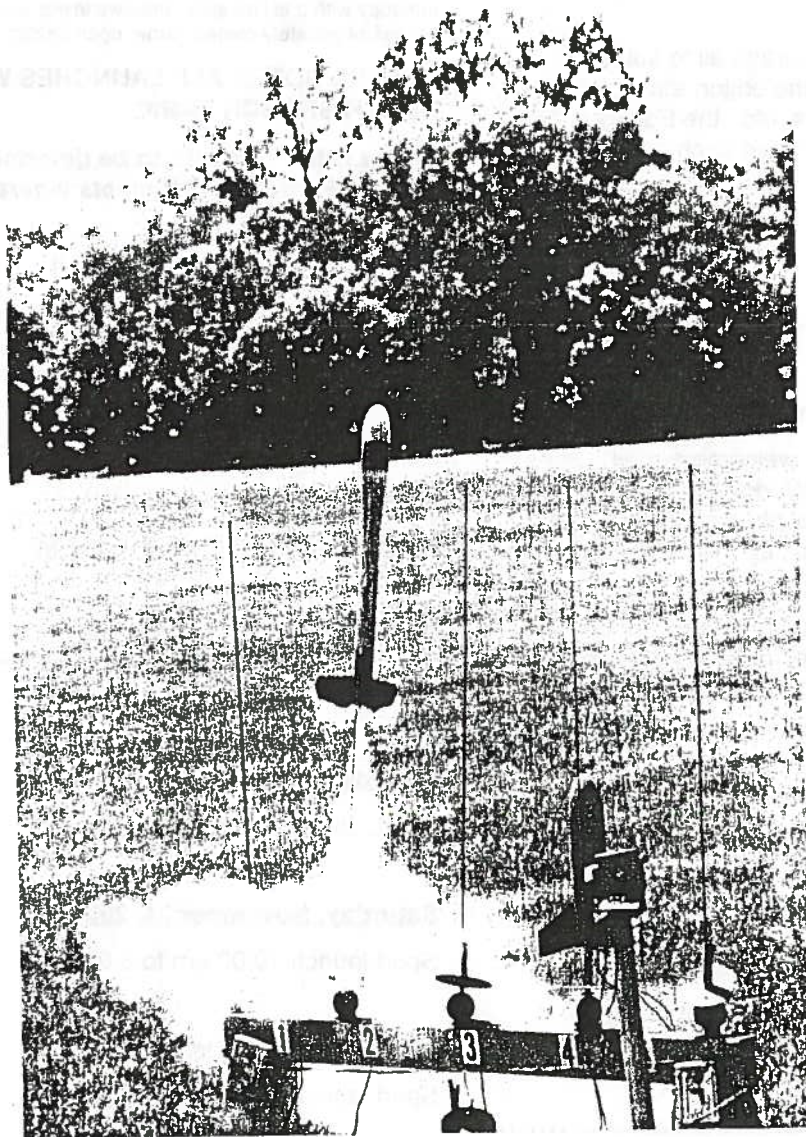
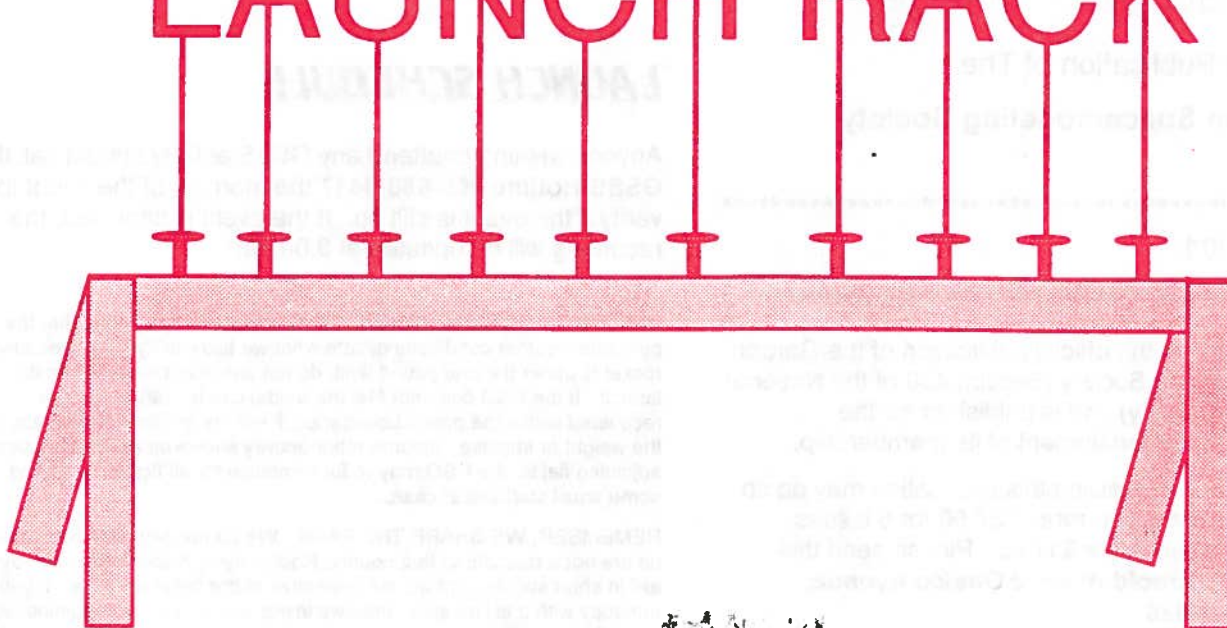


LAUNCH RACK



The Launch Rack

The Official Publication of The
Garden State Spacemodeling Society

MAY/JUN 2001

The Launch Rack is the official publication of the Garden State Spacemodeling Society (Section 439 of the National Association of Rocketry) and is published for the enlightenment and entertainment of its membership.

Others interested in receiving this publication may do so for the annual subscription rate of \$7.50 for 6 issues. Overseas subscriptions are \$17.50. Please send this money in USD to Arnold Klein, 2 Oneida Avenue, Rockaway, NJ 07866.

The new Editors invite and encourage all to submit articles, photos, plans letters to the editor, etc. for future publication. In addition to articles, etc., the Editors welcome and encourage feedback on each and every issue. Please send material to:

Stephen and Theresa Flynn

1 Ridgeway Ave.

Bfairstown, NJ 07825

e-mail: teri@eclipse.net

Visit the GSSS web site at www.robnee.com/gsss/

As an added note, we especially welcome e-mail attachments in ASCII (.txt), MS Works, or Adobe format as well as digital graphics and digital photos. Photos that work well when converted to black and white would be the best.

Non-copyrighted material published in The Launch Rack may be used by other publications provided proper credit is given to the original author and this newsletter.

Your Club Officers

President Jack Sarhage

Vice President Bob Gill

Vice President Steve Pantuck

Treasurer/Secretary Arnold Klein

Section Advisor Bob Zabriskie

LAUNCH SCHEDULE

Anyone wishing to attend any GSSS activity should call the GSSS Hotline 908-658-9417 the morning of the event to verify if the event is still on. If the event is canceled, the recording will be updated at 9:00 am.

A NOTE ON NORTH BRANCH PARK. Please keep in mind that the park and weather conditions dictate what we allow to fly. Just because a rocket is under the one pound limit, do not assume it is an automatic launch. If the RSO does not feel the model can be safely flown or recovered within the park's boundaries, it will not be flown regardless of the weight or impulse. If some other activity shows up and starts using adjoining fields, the RSO may reduce impulse for all flights. So bring some small stuff just in case.

REMEMBER, WE SHARE THE PARK. We do not pay a fee and most of us are not a resident of that county. Rocket flying fields in New Jersey are in short supply, and we are protective of the fields we have. If you're unhappy with this limitation, then we invite you to help us in gaining legal access of privately owned, large, open fields.

UNLESS NOTED ALL LAUNCHES WILL BE HELD AT NORTH BRANCH PARK.

Those with **, Events to be determined. Should we go back to Funtests/NAR meets where everyone can and compete?

Happy New NAR Contest Year!

Saturday, July 28, 2001 **

Sport launch 10:00 am to 3:00 PM

Saturday, August 25, 2001 **

Sport launch 10:00 am to 3:00 PM

Saturday, September 29, 2001 **

Sport launch 10:00 am to 3:00 PM

Saturday, October 27, 2001 **

Sport launch 10:00 am to 3:00 PM

Saturday, November 24, 2001

Sport launch 10:00 am to 3:00 PM

Saturday, December 29, 2001

Sport launch 10:00 am to 3:00 PM

The Launch Rack

IN THIS ISSUE:

Letter from the President and Editorial Reply

Our Meet Winners!

Other Contests To Attend

Detail Meet Results

ANYONE GOT ANY COMPAQ IJ700 COLOR INK CARTRIDGES? Let the Editors know. We hope to go back to color after NARAM.

ON THE COVER:

An egglofter boosts at Spring Challenge 2.

photo by Steve Pantuck

Letter from the President

I am prompted to write for several reasons.

First, to apologize for my lack of participation in GSSS activities and to offer as an explanation, excuse, the following.

As you know, I was married on September 30 of last year. Naturally, after not having to "answer" to anyone for many years, there has been some adjustments to be made. Add a 16-year old stepdaughter to the equation and you have a picture of why certain priorities have been re-arranged.

That is changing once again and I'll be attending the launches on a more regular basis. In addition, I'll be more active in the administration of GSSS.

Secondly, to thank Steve Flynn for picking up the ball as editor of "The Launch Rack". He is doing a very good job thus far.

Having been editor for many years, I know the effort it takes and the thanklessness of the job.

Lastly, an article in the March/April 2001 issue of the "Launch Rack" has troubled me since first reading it, "NAR CONTROVERSY-DONATE TO THE 'WARCHEST'."

Warchest? Does Mark Bundick and the NAR propose to go to "War" with our government? Maybe it is the choice of words that "has promulgated explosives regulations."

In the "editor's note" it is stated that the "BATF regulations now hinder you..." I have never felt hindered by any regulation or rule governing my activities, whether in rocketry, playing chess, or driving my car.

We have regulations and rules because people do not use their common sense. If we don't want regulations and rules we must police ourselves and do what is right.

Rules and regulations even the playing field and make it possible for everyone to safely enjoy their "pursuits".

In the Bible, we are told that Adam and Eve were given paradise to live in with but one rule, or regulation, if you prefer, and they(we) couldn't handle that.

We do not need high-powered rockets in order to pursue a "safe, educational, and enjoyable hobby." Maybe it is time for Mark Bundick and the NAR to remember their roots.

As GSSS President I trust the club will not donate to the "Warchest" and I urge its' members not join in the "cause".

Jack Sarhage

President - GSSS

Editorial Reply- It Takes Two

Theresa and I are happy that our first two issues of the Launch-Rack have inspired submissions from our readers of a letter and photos as well as a decent turnout for the Spring Challenge 2 and FunTest Open 2001.

The letter from the president almost demands that I write an editorial reply to clarify the situation.

First of all, I must congratulate he, his wife and stepdaughter on the Sept. 30 wedding. May they experience many years of happiness.

Second, I should remind everyone that you have two editors. It takes the efforts of both Theresa and I to put each bulletin together.

Finally, I must explain more about the background of the article in the March/April issue of the "Launch Rack".

In an attempt to clarify what appeared to be a militant message on the NAR's website, www.nar.org, we the two editors, decided to bring the issue to the fore in the newsletter. At first blush, the notions of a warchest and taking up a case against the Bureau of Alcohol, Tobacco and Firearms (BATF) are reminiscent of some kind of right-wing rhetorical garbage. It misled visitors to the NAR

The Launch Rack

website and embarrasses the peace-loving, fun-loving rocketeers.

The language used in the NAR President's message almost draws us away from the issues. To be able to understand the problem at hand one must understand how public rocketry has changed since the invention of the model rocket in the 1950's.

Model rockets first developed with black powder as the main fuel from the 1950's into the 1960's. As the 60's progressed, larger engines were produced. There were black powder engines from 1/4A to F all in the usual wound paper casings and ceramic, clay nozzles. As you might imagine, as the engine got larger, D size through F, reliability decreased. An Estes D13-5 of the early 1970's would certify a triscadecaphobic's fear of the number 13 as engines propellant would occasionally separate from it's casing- one of a few types of catastrophic failures. Many E and F engines would suffer even more exciting fates as larger propellants would overcome the strength of the casings on ignition.

While black powder D engines got much more reliable through the years, manufacturers decided to use a much more reliable propellant- Ammonium Perchlorate. To house the propellant, they made wound fiberglass casings with either ceramic or graphite nozzles. Ammonium Perchlorate or AP for short would not ignite at the low temperature and pressure that black powder burned at. It needs both a high pressure and a high energy igniter to light. It may be considered safer than black powder. The 1970's saw the rise of the Enerjets among smaller companies developing AP model rocket engines.

At the same time that model rocket manufacturers were selling E and F engines, they began to show off their professional G, H and J engines (a J engine was static fired at NARAM in 1973!). By the end of the 1970's small manufacturers were selling G and H engines to select model rocketeers. (Ed.- My first G120-16 (a full 160 ns) flew like a bolt of lightning! It was on a minimum diameter rocket coated with fiberglass.) Experienced rocketeers who had flown E and F engines were freed to try engines that could lift heavier experiments to higher altitudes. Of course, as with many new technologies, these engines were not accepted by the model rocketry authorities right away. Some NAR members were punished by their organization for flying rockets outside of the "normal" model rocket classifications. By the 1980's, those innovators who were expelled from the NAR and other interested fellows had formed their own national organization- the Tripoli Rocketry Association (TRA). This organization did not hinder its members from flying rockets larger than F engines. The new form of public rocketry became known as High Power Rocketry. By the mid 1990's the TRA became very popular with many of the old model rocketeers becoming "Born Again Rocketeers", coming back to the hobby to fly the larger engines that "weren't around in their day". Soon the NAR decided that

HPR was so bad after all and now it is also an integral part of the NAR's activities. It takes two kinds of rocketry to make up public rocketry in the 2000's.

That brings us to the current situation. One of the main hitches to owning and launching HPR rockets over G power is that fully built (loaded) reloadable engines and pre-made engines have more than the Bureau of Alcohol Tobacco and Firearms (BATF) limit of 62.5 grams of propellant in one engine. The public may possess chunks of commercially made propellant up to 62.5 grams but someone with a BATF permit must possess the engines after the chunks are assembled into a loaded engine. It is easy to get a one-time permit at an HPR launch, to possess and launch ready made or large reloadable engines for that launch but once the launch is done, one can't possess the engines without a regular BATF permit to possess the engines. These safe, hard to ignite ammonium perchlorate (AP) propellants over 62.5 grams are on a BATF list of explosives! This means that one who stores the AP single use H power or 54-mm+ diameter J power motor reload pellets (or larger) would have to have a special storage location 500+ feet from any other structure, keep a log book of engines and be ready for BATF inspections. Could you imagine the BATF showing up at your house periodically just for an inspection? Besides, how many rocketeers own enough land in NJ to put a storage shed 500 feet from any other building?

The GSSS is not hindered by the current regulations regarding AP engines because the club does not have a field big enough to support such flying. The hindrance comes out when members go to advance to larger rockets and face the regulations. Another fear is that the BATF's regulation of AP propellant is arbitrary at 62.5 grams and the agency will decide to regulate all AP engines. Then GSSS would be affected because the highest power engine would then be the Estes D engine and the hobby would be set back to the 1960's.

So... In the light of this situation, the NAR and the TRA are just trying to allow the dual Model Rocket / HPR hobby to exist within all the other laws and regulations of the organizations, the FAA, other regulatory bodies and a less arbitrary and needlessly restrictive BATF.

For a far reaching conclusion- It takes two to make a marriage, two to put out a bulletin, two parts of public rocketry to sustain itself and two organizations who understand the hobby and are trying to help people handle their safe advanced pursuits without a lot of needless hindrances.

The Launch Rack

Our Meet Winners - The complete pre-NARAM results.

Top Individual Competitors

Chris Taylor Jr.,

Peter Manard,

Micheal Humphrey

win SPRING CHALLENGE 2

See results page for details. Peter Manard, please contact the CD for your prize.

FunTest Open 2001 Winners

James Menoutis,

Stephen W. Flynn,

Micheal Humphrey

Hyperspace Team gets most NAR points. Sport Scale brings in most points for competitors. See results page for details.

Flynn Family flies for GSSS at RAMTECH. Stephen W. Flynn Gets 3rd in B Division. NJ Independents Steve and Micheal Humphrey score first places.

Un-official GSSS results- Daniel Flynn flew the most qualified flights of the family with a 4th in 1/2 A B/G and flight points in C Eggloft Altitude and A Streamer Duration. Stephen W. scored a 3rd in A Streamer Duration with the Hyperspace Team getting 3rd in D Helicopter Duration.

The Humphrey family (flying as independents) scored two first places with a possible National Record in C Eggloft Altitude!

St. Paul's Abbey

Summer Challenge 1

**Changed to a Section Meet
Daniel Flynn Ties Hyperspace Team**

June 23 was rained out at Bridgewater so we had to change the location of the meet to St. Paul's Abbey in Andover, NJ. While fun fliers enjoyed an awesome field for C through G size engines, few competitors could make it for the minimum number to hold a NAR Open Meet. The meet was changed to a Section Meet.

You can see all NAR individual, team and club points standings on the Internet at www.nar.org

Other Contests To Attend

NARAM 43

National Association of Rocketry Annual Meet

In Geneseo, NY

August 3 - 10

Competition flying starts August 6.

1/2A Boost Glider

1/2A FlexWing Glider

A Streamer Duration

D Helicopter Duration

A Altitude

B Super Roc Altitude

Research and Development (R&D)

C Eggloft Altitude

Sport Scale

For the latest info updates on NARAM go to <http://www.naram43.com>. Any GSSS NAR members can compete and/or sport fly at this national meet. You can attend for a few days or stay the entire week.

What do you want to do next?

The Launch Rack

Happy New Contest Year!

Here is a list of upcoming contests in our area for the Contest Year starting 7/1/01, ending 6/30/02. This was taken from the website of the Northeast Contest Board of the NAR. Contact Stephen E. Flynn for more info.

September 08, 2001 --- CATO 50 Open Meet
Durham, CT
Sanction # 1002-020
C Boost/Glider Duration Multi-Round
A Boost/Glider Duration
1/4A Boost/Glider Duration
Contact: Jay Calvert

December 02, 2001 --- CATO 54 Open Meet
Sterling, CT
Sanction # 1003-020
G Streamer Duration Multi-Round
E Helicopter Duration Multi-Round
Contact: Jay Calvert

Your editor was wondering about the Flynn family (and any other interested GSSS members) flying two CATO meets for the GSSS. Please let me know if this is reasonable.

September 09, 2001 --- Red Baron 34 Open Meet
Plain City, OH
Sanction # 1005-020
Predicted Duration
A Superroc Duration
C Eggloft Duration
D Boost/Glider Duration
Contact: Larry Rice

September 29, 2001 --- AWFUL-2001 Local Meet
Amesbury, MA
Sanction # 1006-02L
B Streamer Duration
C Eggloft Duration
1/4A Parachute Duration
Contact: John Buscaglia

October 20-21, 2001 --- Steel City Smoke Trail 1 Regional Meet
Prospect, PA
Sanction # 1004-02R
1/2A Parachute Duration
1/2A Streamer Duration Multi-Round
A Payload
C Rocket/Glider Duration
E Flexwing Duration
Contact: Rod Schafer

Spring Challenge 2

Official first place prize results:

C Division: Chris Taylor Jr.

B Division: Peter Manard

A Division: Micheal Humphrey

Places determined by NAR points below.

Official Results

These results have been approved by the NAR Contest Board. Two changes were made. The Hyperspace Team B HD flight was ruled a DQ. Francis DeFranco was put in the wrong division by the CD. The CD owes Peter Manard an award (The CD will cover the expense).

Overall Place	Contestant	Spot Landing Meters	Landing Place	Events								NAR Points
				1/4A Streamer Sec.	3rd Place	A Streamer Sec.	1st Place	1/2 B/G Sec.	2nd Place	B Helicopter Sec.	1st Place	
C + Team Division:												
1st	Chris Taylor	15.031	2nd CT	14	3rd CT	86	1st CT	5	4th All	85	1st All	760
2nd	Steve Humphrey	39.217	4th CT	49	1st CT	76	2nd CT	9	3rd All			408
3rd	Hyperspace Team		DQ CT	12	4th CT		DQ CT	30	1st All		DQ All	372
4th	Robert Nee	9.233	1st CT	48	2nd CT							176
5th	Theresa Flynn	23.546	3rd CT			8	3rd CT					96
B Division												
1st	Peter Manard		DQ AB		DQ AB	27	1st					160
A Division												
1st	Michael Humphrey	17.069	1st AB		DQ AB						13 2nd All	332
2nd	Frances DeFranco	59.483	FP AB	3	1st AB	15	2nd					264
3rd	Danny Flynn		DQ AB					10	2nd All			204

Section Points

GSSS: 1768

Independents: 1004

Some Events were flown in combined divisions: CT = C division + T division

AB = A division + B division

All = All divisions combined

FunTest Open 2001 Results

Official first place prize results:

	NAR Points
C Division: James Menoutis	400
B Division: Stephen W. Flynn	160
A Division: Micheal Humphrey	416

Places determined by NAR points. The Team entry is excluded from prizes.

Overall Place	Contestant	Events						
		A Streamer Sec.	Dur. Place	C Eggloft Sec.	Dur. Place	Sport Points	Scale Place	NAR Points
C + Team Division:								
1st	Hyperspace Team	41	2nd CT	14	3rd CT	750	2nd All	464
2nd	James Menoutis					878	1st All	400
3rd	Steve Humphrey		3rd CT	85	1st CT			384
4th	Kenneth Goddard		DQ CT	35	2nd CT			192
5th	Robert Nee	106	1st CT					160
B Division								
1st	Stephen W Flynn	100	1st AB					160
A Division								
1st	Michael Humphrey	12	2nd AB	21	1st AB	13		416
	Danny Flynn				DQ AB		DQ All	0

Section Standings

GSSS: 1376
Independents: 800

Some Events were flown in combined divisions: CT = C division + T division
AB = A division + B division
All = All divisions combined

B Super Roc Duration was also held but there was only one entry and so the event was not flown.

Summer Challenge 1 Results

Due to the bridge problem on Rt 80 and the change of field to the St. Paul's Abbey field in Andover, the Summer Challenge 1 had low attendance and had to be downgraded to an NAR section meet. In spite of the attendance, the weather was great and the flying even greater. Three entries made the Section meet plus three observers and two sport flyers. Image having a large field all to yourself to fly whatever rockets you want including G engines flights. No rockets were lost to the Christmas trees near the main sports fields (We certainly could recover anything from the tree tops). Many sport rockets were flown so many times they wore out.

The last FSI F100-0, F7-4 two stage flight was made on the last day of their NAR certification. The engines were made in 1973 and 1975 and they still worked without a CATO. The only problem was that the stages did not separate until well into the F7 burn (a 9 second burn time) so the F7 fired through the F100 with the casing still intact. The interstage coupler finally burned through before the end of the boost and the upper stage coasted passed apogee and deployed a 10 ft gold mylar streamer (what a show!). A beautiful end of an era.

Contest Results:

		Events					
Overall		Spot Landing	1/2A Streamer	1/4A B/G		NAR	
Place	Contestant	Meters	Place	Sec.	Place	Points	

	(tie)						
1st	Daniel Flynn	39.929	1st	20	1st	228	
1st	Hyperspace Team		DQ	9	2nd		
2nd	Stephen W Flynn	50.266	FP			4	



03 07304365B 03

NEWSLETTER OF NEW JERSEY'S SPACE MODELING SOCIETY **THE LAUNCH RACK**

Robert Nee
222 Willow Avenue - #2A
Hoboken NJ 07030

TO:

GARDEN STATE SPACE MODELING
SOCIETY -- NAR SECTION #439
Robert Zabrskie
3 Peachtree Road
Basking Ridge, NJ 07920



GSSS MEMBERSHIP APPLICATION

Name _____
Address _____
City _____ State _____
Zip _____ Birthdate _____
Phone Number _____
NAR number _____ GSSS number _____

Membership Category (Check One)

- Junior (Under 16) \$5.00
- Leader (16 through 20) \$7.00
- Senior (21 or over) \$10.00
- Family Plan (Deduct \$2.00 for each additional family member, only one Launch Rack will be sent.)

I pledge to abide by the NAR/HIA Safety Code and GSSS Constitution and Bylaws in all my non-professional rocketry activities.

Signed _____ Date _____

Send this application along with check for dues payable to: **Arnold Klein,**
2 Oneida ave Rockaway N.J. 07866

DIRECTIONS TO NORTH BRANCH PARK LAUNCH SITE

North Branch Park is very near the traffic circle junction of NJ Routes 22, 28, 202, and 206, near Somerville. Follow 202 South from the circle for 2 miles, past Ortho Pharmaceutical and Harris Corp, under railroad trestle marked "4H is Tops", to right turn onto Milltown Road. Make first left after firehouse and 4H Center on right; follow path to open field. Monthly launches from 10-4.

FROM NORTH

NJ Turnpike South to Exit 10, 287 North to Exit 13, 202/206 South to Circle

FROM SOUTH

202 North to Milltown Rd.; or 206 North to Circle

FROM EAST

287 North to Exit 13, 202/206 South to Circle

FROM WEST

Rt. 78 or Rt. 80 East to 287 South to Exit 13, 202/206 South to Circle