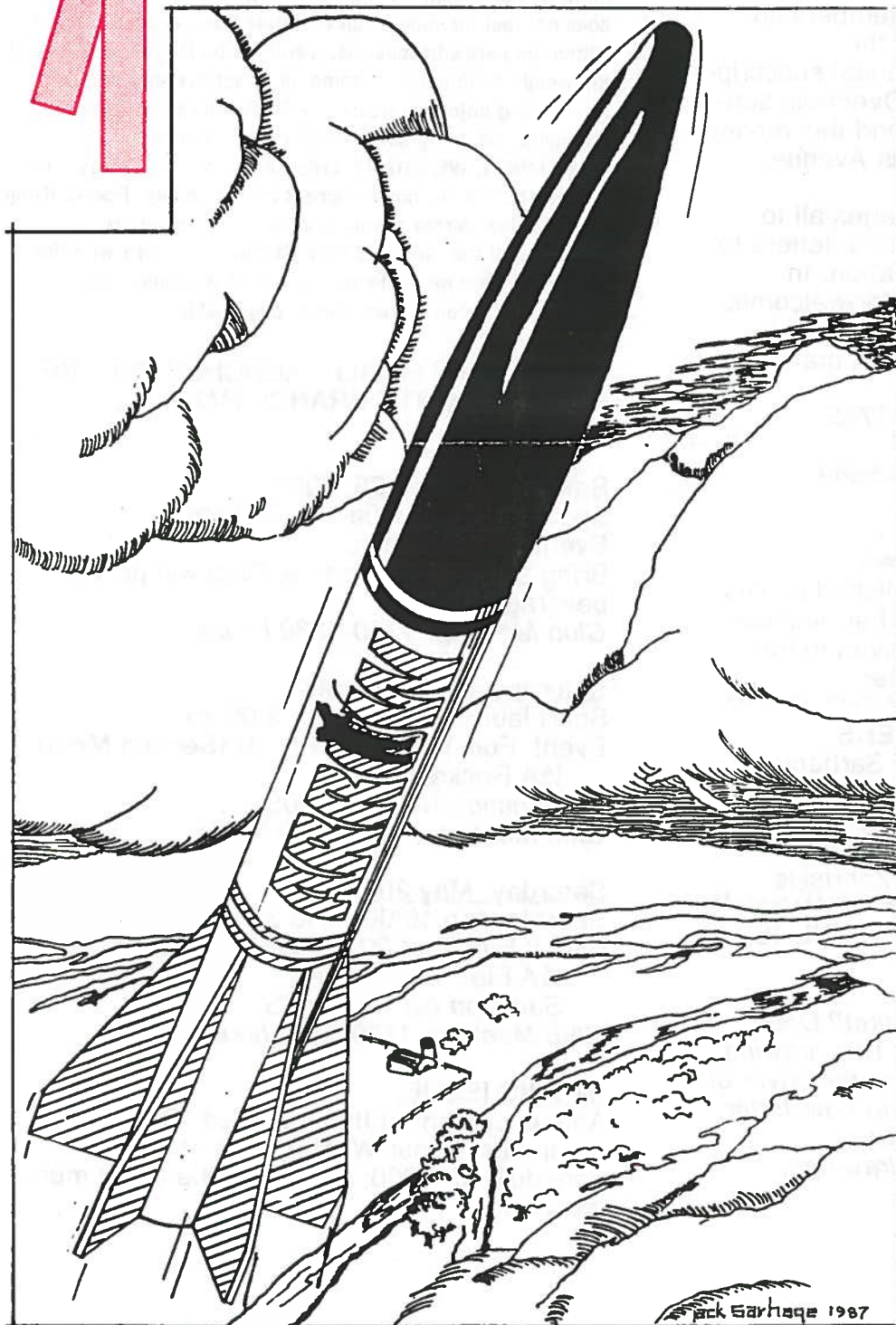
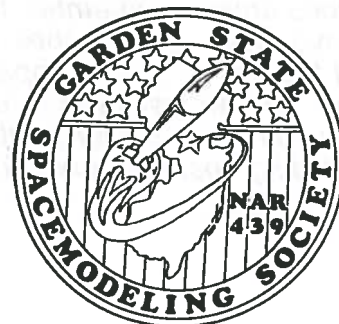


# LAUNCH RACK



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(68)

March/April  
2000



# The Launch Rack

The Official Publication of The  
*Garden State Spacemodeling Society*

MAR/APR 2000

ISSUE 135(68)

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 Editor invites and encourages all to submit articles, photographs, plans, letters to the editor, etc., for future publication. In addition to articles, etc., the Editor welcomes and encourages constructive feedback on each and every issue. Please send material to:

**Jack Sarhage, NAR 31745  
875 River Road  
Piscataway, NJ 08854-5549  
732 463-1484**

Visit our WEB site at: [www.robnee.com/gsss](http://www.robnee.com/gsss)

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## YOUR CLUB OFFICERS

*President:* .....Jack Sarhage  
*Vice-president:* .....Bob Gill  
*Vice-president:* .....Steve Pantuck  
*Treasurer/Sec:* .....Arnold Klein  
*Section Advisor:* .....Bob Zabriskie

**DEADLINE FOR NEXT ISSUE: APRIL 15**

## ON OUR COVER:

*Does anyone remember this rocket? Does anyone have one in their fleet? This drawing of the Estes "Arrow" appeared on the cover of our July/August 1987 issue of the newsletter.*

*I need articles, plans, kit reviews, building tips, cartoons, and/or drawings.*

## LAUNCH SCHEDULE

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

**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 will 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.**

### Saturday, March 25, 2000

Sport launch 10:00am to 3:00pm

**Event: Spring Picnic**

Bring something to share. Club will provide beverages.

**Club Meeting: 1130-1230 hours**

### Saturday, April 29, 2000

Sport launch 10:00am to 3:00pm

**Event: Fun Test 2000-Part II (Section Meet)**

**½A Rocket Glider**

*Sanction No. 1007-00S*

**Club Meeting: 1130-1230 hours**

### Saturday, May 20, 2000

Sport launch 10:00am to 3:00pm

**Event: Fun Test 2000-Part III (Section Meet)**

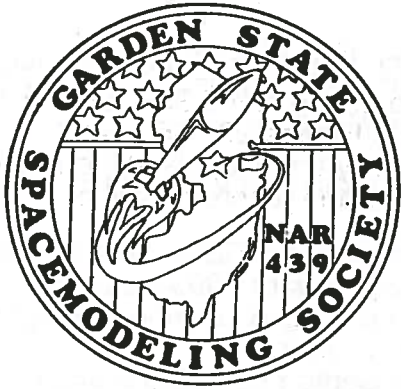
**½A Flex-wing Glider**

*Sanction No. 1008-00S*

**Club Meeting: 1130-1230 hours**

## IN THIS ISSUE:

Announcement of the proposed "Open Meet"; an update on our Webpage; the Launch Schedule for 2000; as well as the usual much, much more.



## News From Section 439

### SORRY THAT I AM LATE.....

I am late getting this issue to you because I wanted to be able to report on the Special Launch the club had on March 4, which follows...

**Cinq..quatre..trois..deux..un..Allez!** Is what Parisians may hear as they watch our launch on their television screens. That's right, GSSS will be on French television.

It began with a message left on the hot-line the Monday before our February launch. Bob Zabriskie called me (Ye Ole Editor) and we agreed that I would call back to see what was on their mind.

I returned the call of Max Kolonko. He has a show on French television called "Discover American with Max Kolonko" that is similar to what Charles Karault did on Europe for Public Television. In fact, if you want to see an example of what the show is about their Web address is <http://www.iMedia2000.com>

He wanted to do a segment on model rocketry as one of the activities that Americans participate in. He may even have said, "unusual activities".

I told him we had a launch on February 26 and originally it was set up for that day. When the weather turned out so "iffy" it was decided that the heavy clouds wouldn't make for great pictures and Max asked if we could rescheduled a launch. I told him that it depended upon whether we could get the field for the following Saturday, March 4 or not. We agreed we would talk again in the middle of the week.

Those of you at the February launch were advised of what was going on and that they would be contacted if everything was go.

To make a long story short we got the field. Max and cameraman, Tim, arrived at my

house around 10:15am. They shot some footage there of rockets being loaded, etc. Then after a brief stop at the Quick Chek for coffee and batteries it was off to North Branch.

I won't go into detail of what went on at the park. Max and Tim were amazed at what the rockets did and truly enjoyed being there. They did not believe that in a 2½ hour period they had used up almost all the film in the camera.

I want to thank each and everyone of you that came out to the Special Launch. It is these kind of activities that promote our hobby and sport. It is one of the reason why a club exists and it is how a club stays together and grows together.

**Merci beaucoup mes amis!**

### GSSS WEBPAGE ENHANCEMENTS

*Reported by Robert Nee*

The GSSS Web page has undergone some enhancements lately to serve our membership better. It has been moved to a new hosting service that provides us with much more disk space. The good news is we should be able to post more pictures from our monthly launches among other things. The bad news is the address has changed once again. The new address is [www.robnee.com/gsss](http://www.robnee.com/gsss) Hopefully it will stay put for a while.

Due to the snow we received towards the end of January our monthly launch had to be canceled with relatively little notice. The GSSS Member Directory on the Web page has been enhanced to allow email to be sent to everyone in the directory. In the future if a launch must be canceled at the last minute a notice will be sent to all members. If you wish to receive these notifications you must add yourself to the directory. A form for submitting your listing online is now available. Members who wish to receive notification but do not wish to have their email address listed in the Member Directory can indicate this on the submission form. It only takes a few minutes so visit the new GSSS web site and sign up today. Again, that's [www.robnee.com/gsss](http://www.robnee.com/gsss)

### DITTO FROM BOB Z.

Bob Z., our Section Advisor, also wanted me to ask "everyone who has email to register

## GSSS - 18 Years of Model Rocketry

### News from Section 439 continued.....

at our Web site. This is very important, so we can contact members about canceled launches, special activities, etc.

### NAR INSURANCE

Bob Z. also wanted me to remind everyone that it is time to renew your NAR insurance.

But, a card from Manuel Mejia, Jr. advised that apparently "NAR's insurance has collapsed with the closure of SFA. All policies, individual and section become void on March 31, 2000 unless a back-up policy is installed. The premium status is uncertain".

Can anyone shed any light on this subject. I know that I have not received any communication from NAR Headquarters about insurance one way or the other including the usual renewal notification.

### ANSWER TO THE "B. P." QUESTION

In the last issue we reran a plan of the "Jarvis Still B. P." designed by Manuel Mejia, Jr. and I asked what the B.P. stood for.

Manuel wrote to say it stands for "black powder" the main fuel. He reminded me that, "many years back, GSSS did a demo for some Scouts in Sussex County. The 2-motor cluster flew quite well."

### PROPOSED "Spring Challenge" OPEN MEET

By now most of you, with e-mail anyway, should have received information from member Steve Flynn about a proposed open meet to be held in April or June. The events listed are: D SuperRoc Duration, C Eggloft Duration, 1/4A Streamer Duration, and Open Spot Landing.

He then listed four other events for you to vote on that would complete the list of events. These were, A Boost-glider Duration, 1/2A Flex wing Duration, A Streamer Duration, or 1/2A SuperRoc Duration.

He also that it would be of interest to have "a fun event of 1/8A (Micro Max) Streamer Duration or maybe 1/8A Boost-glider."

The meet would be held at St. Paul's Abbey in Newton, NJ. The fields there have already been reserved by Steve for the three weekend listed in his e-mail.

I think it a good idea and I feel we should support this meet. We can talk more about this at the March Club Meeting.

### COVERAGE IN "SPORT ROCKETRY"

I hope you noticed that GSSS was written up in the January/February 2000 issue of *Sport Rocketry* in the "NAR Section Highlights" column by Gregory Elder.

It covered our September 1999 launch reported by yours truly, Ye Ole Editor.

THANK YOU, GREGORY!!!!

### HIGH POWER CERTIFICATES

I am requesting that all members of GSSS with High Power Certificates forward copies of these to me, to be used for the purpose of beginning a mentor/student program for other GSSS members that would like to become certified.

Send them to the address on page two of this newsletter.

### MORE FUN TEST 2000 EVENTS COMING!!

I again refer you to page 2 and the "Launch Schedule" column. There, you will see the next two "Fun Test 2000" events; April 29 it is 1/2A Rocket Glider, May 20 it is 1/2A Flex-wing Glider. So, start building.

I would like to see a real nice turn out for these Section Meets.

### AND FROM OUR "so you think you're having a bad day" DEPARTMENT.....

Iraqi terrorist, Khay Rahnajet, didn't pay enough postage on a letter bomb. It came back with "return to sender" stamped on it. Forgetting it was the bomb, he opened it and was blown to bits.



**MAX KOLONKO**  
**US CORRESPONDENT**  
PHONE 718 424 0389  
CELL 917 604 8526  
<http://www.iMedia2000.com>

**TVP PANORAMA**

EXECUTIVE TOWERS ONE  
41-41 76 STR SUITE 3 C  
NEW YORK NY 11373

# Estes body tube and fin stock sizes

Have some old Estes plans that call out tubes and fin stock by part number, rather than size? Here're some handy tables to figure out what you need:

## Paper body tubes

Code	Length	Inside diam.	Outside diam.	Wall thick.
BT-3H	3.00"	0.349"	0.375"	0.013"
BT-5	18.00"	0.515"	0.541"	0.013"
BT-5BP	2.00"	0.515"	0.541"	0.013"
BT-5CJ	3.00"	0.515"	0.541"	0.013"
BT-5P	5.10"	0.515"	0.541"	0.013"
BT-5T	1.50"	0.515"	0.541"	0.013"
BT-20	18.00"	0.710"	0.736"	0.013"
BT-20AE	1.50"	0.710"	0.736"	0.013"
BT-20B	8.65"	0.710"	0.736"	0.013"
BT-20D	6.50"	0.710"	0.736"	0.013"
BT-20DJ	4.00"	0.710"	0.736"	0.013"
BT-20G	3.50"	0.710"	0.736"	0.013"
BT-20J	2.75"	0.710"	0.736"	0.013"
BT-20L	12.00"	0.710"	0.736"	0.013"
BT-20M	2.25"	0.710"	0.736"	0.013"
BT-30	9.00"	0.725"	0.765"	0.021"
BT-30A	3.50"	0.725"	0.765"	0.021"
BT-30B	6.125"	0.725"	0.765"	0.021"
BT-30C	5.50"	0.725"	0.765"	0.021"
BT-30F	7.00"	0.725"	0.765"	0.021"
BT-30J	2.75"	0.725"	0.765"	0.021"
BT-30K	2.34"	0.725"	0.765"	0.021"
BT-40	13.75"	0.765"	0.821"	0.023"
BT-48BE	2.50"	0.902"	0.928"	0.013"
BT-50	18.00"	0.950"	0.976"	0.013"
BT-50AE	1.50"	0.950"	0.976"	0.013"
BT-50AH	1.875"	0.950"	0.976"	0.013"
BT-50EE	5.50"	0.950"	0.976"	0.013"
BT-50FE	6.50"	0.950"	0.976"	0.013"
BT-50H	7.75"	0.950"	0.976"	0.013"
BT-50J	2.75"	0.950"	0.976"	0.013"
BT-50L	12.70"	0.950"	0.976"	0.013"
BT-50S	4.00"	0.950"	0.976"	0.013"

BT-50W	9.50"	0.950"	0.976"	0.013"
BT-51CI	3.875"	0.984"	1.011"	0.013"
BT-51N	12.42"	0.984"	1.011"	0.013"
BT-52AG	2.10"	0.988"	1.114"	0.063"
BT-52S	3.938"	0.988"	1.114"	0.063"
BT-55	18.00"	1.283"	1.325"	0.021"
BT-55IJ	9.00"	1.283"	1.325"	0.021"
BT-55J	2.75"	1.283"	1.325"	0.021"
BT-55KG	16.75"	1.283"	1.325"	0.021"
BT-55S	4.00"	1.283"	1.325"	0.021"
BT-55V	16.35"	1.283"	1.325"	0.021"
BT-56	18.00"	1.304"	1.346"	0.021"
BT-58	12.75"	1.498"	1.540"	0.021"
BT-60	18.00"	1.595"	1.637"	0.021"
BT-60AD	14.00"	1.595"	1.637"	0.021"
BT-60AJ	10.00"	1.595"	1.637"	0.021"
BT-60D	11.00"	1.595"	1.637"	0.021"
BT-60FG	6.70"	1.595"	1.637"	0.021"
BT-60HE	8.50"	1.595"	1.637"	0.021"
BT-60J	2.75"	1.595"	1.637"	0.021"
BT-60K	7.00"	1.595"	1.637"	0.021"
BT-60KF	16.10"	1.595"	1.637"	0.021"
BT-60R	5.00"	1.595"	1.637"	0.021"
BT-63CJ	3.00"	1.639"	1.681"	0.021"
BT-63Y	1.34"	1.639"	1.681"	0.021"
BT-70	18.00"	2.175"	2.217"	0.021"
BT-70H	7.150"	2.175"	2.217"	0.021"
BT-70V	10.60"	2.175"	2.217"	0.021"
RT-70	0.68"	2.175"	2.217"	0.021"
BT-80	14.20"	2.560"	2.600"	0.021"
RT-99D	0.391"	3.668"	3.790"	0.021"
BT-100CE	3.50"	3.702"	3.744"	0.021"
BT-100Z	10.89"	3.702"	3.744"	0.021"
BT-101	16.50"	3.896"	3.938"	0.021"
BT-101K	7.59"	3.896"	3.938"	0.021"
BT-101T	2.78"	3.896"	3.938"	0.021"

**Plastic body tubes**

Code	Length	Inside diam.	Outside diam.	Wall thick.
BT-10	9.00"	0.710"	0.720"	0.005"
BT-10H	3.062"	0.710"	0.720"	0.005"
PST-20	8.00"	0.710"	0.736"	0.013"
PST-20J	2.75"	0.710"	0.736"	0.013"
PST-50FJ	6.00"	0.950"	0.976"	0.013"
PST-50S	4.00"	0.950"	0.976"	0.013"
PST-59CJ	3.00"	1.533"	1.585"	0.021"
PCT-60	1.525"	1.576"	1.595"	0.009"
PST-60R	5.00"	1.595"	1.637"	0.021"
CM-8 EA	4.18"	1.685"	1.785"	0.050"
PST-65R	5.00"	1.595"	1.641"	0.023"

**Balsa Fin Stock Thickness**

Part Number	Thickness
BFS-10	1/32"
BFS-20B	1/16"
BFS-20	1/16"
BFS-20L	1/16"
BFS-30LA	3/32"
BFS-30	3/32"
BFS-30L	3/32"
BFS-30W	3/32"
BFS-40	1/8"
BFS-40L	1/8"
BFS-40W	1/8"
BFS-60S	3/16"

**sky watch**

Contributing Editor: *Bob Zabriskie*

**MARCH**

**Mercury** will be above Venus in the dawn sky, very low, near the horizon if you look East 1/2 hour before sunrise.

**Mars** will be low in the WNW evening sky. At sundown it will be close to the crescent moon on the 8th.

**Jupiter and Saturn** in the SW sky at sunset will also be near the moon on the 9th and 10th.

**SPRING ARRIVES!!** on the 20th. The Vernal Equinox occurs at 2:36am; that is, when the sun crosses the celestial equator. The sun will rise due East and set due West.

**APRIL**

**Mercury and Venus** are not visible this month.

**Mars, Jupiter and Saturn** will put on a show in the West after sunset.

On the first Mars will be very close to and at the lower right of the much brighter Jupiter.

During the next few days Jupiter will move to the left of Mars. Then Saturn will be above and to the left.

On the 6th the thin crescent Moon will join the trio. If you have binoculars this will be a beautiful sight, especially if you have a wide field pair and fit all four in the field of view.

From the 13th through the 15th all three planets will fit in a 5 degree circle.

I suggest you take 2 or 3 minutes each clear night during the first 2 or 3 weeks and observe this wonderful and rare sight, as I will.

**IN THE NEXT ISSUE**

Did you know that the thrills of model rocketry flying were tasted as early as 1935 by a group of Scottish school boys who formed a Society and held a Long-distance Mail Rocket Contest on December 14, 1936?

Learn more about this next time as we "launch" a new column for a hobby within a hobby.

**Garden State Spacemodeling Society of New Jersey  
National Association of Rocketry Section 439**

# 2000 FLYING SCHEDULE



## 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 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 10-3.

**FROM NORTH**  
NJ Turnpike South to Exit 10, 287 North to Exit 14B,  
202/206 South to Circle

**FROM SOUTH**  
202 North to Milltown Rd.; or 206 North to Circle

**FROM EAST**  
287 North to Exit 14B, 202/206 South to Circle

**FROM WEST**  
Rt. 78 or Rt. 80 East to 287 South to Exit 14,  
202/206 South to Circle

Call to confirm all dates and locations. NAR/AMA insurance is highly recommended at all launches.

Come join us for a full year of sport flying.  
For all launch information and club information contact the GSSS  
Hotline : 908-658-9417  
or send mail to  
Bob Zabriskie  
RD#2  
3 Peachtree Rd Basking  
Ridge NJ 07920  
E-mail <Danielle@blast.net>

Visit our WEB site at:  
<http://www.robnee.com/gsss>

## MONTHLY SPORT LAUNCH Launch Times 10:00-3:00

Sat 29Jan	Northbranch Park
Sat 26Feb	Northbranch Park
Sat 25Mar	Northbranch Park
Sat 29April	Northbranch Park
Sat 20May	Northbranch Park
Sat 24June	Northbranch Park
Sat 29July	Northbranch Park
Sat 26Aug	Northbranch Park
Sat 30Sept	Northbranch Park
Sat 14Oct	Northbranch Park
Sat 25Nov	Northbranch Park
Sat 16Dec	Northbranch Park

Max liftoff weight will be determined  
by park conditions  
Maximum Engine Impulse  
80 Newton seconds

**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

**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

**GARDEN STATE SPACEMODELING  
SOCIETY -- NAR SECTION #439**  
 Robert Zabriskie  
 3 Peachtree Road  
 Basking Ridge, NJ 07920



TO:

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

**THE LAUNCH RACK**  
 NEWSLETTER OF NEW JERSEY'S SPACEMODELING SOCIETY

