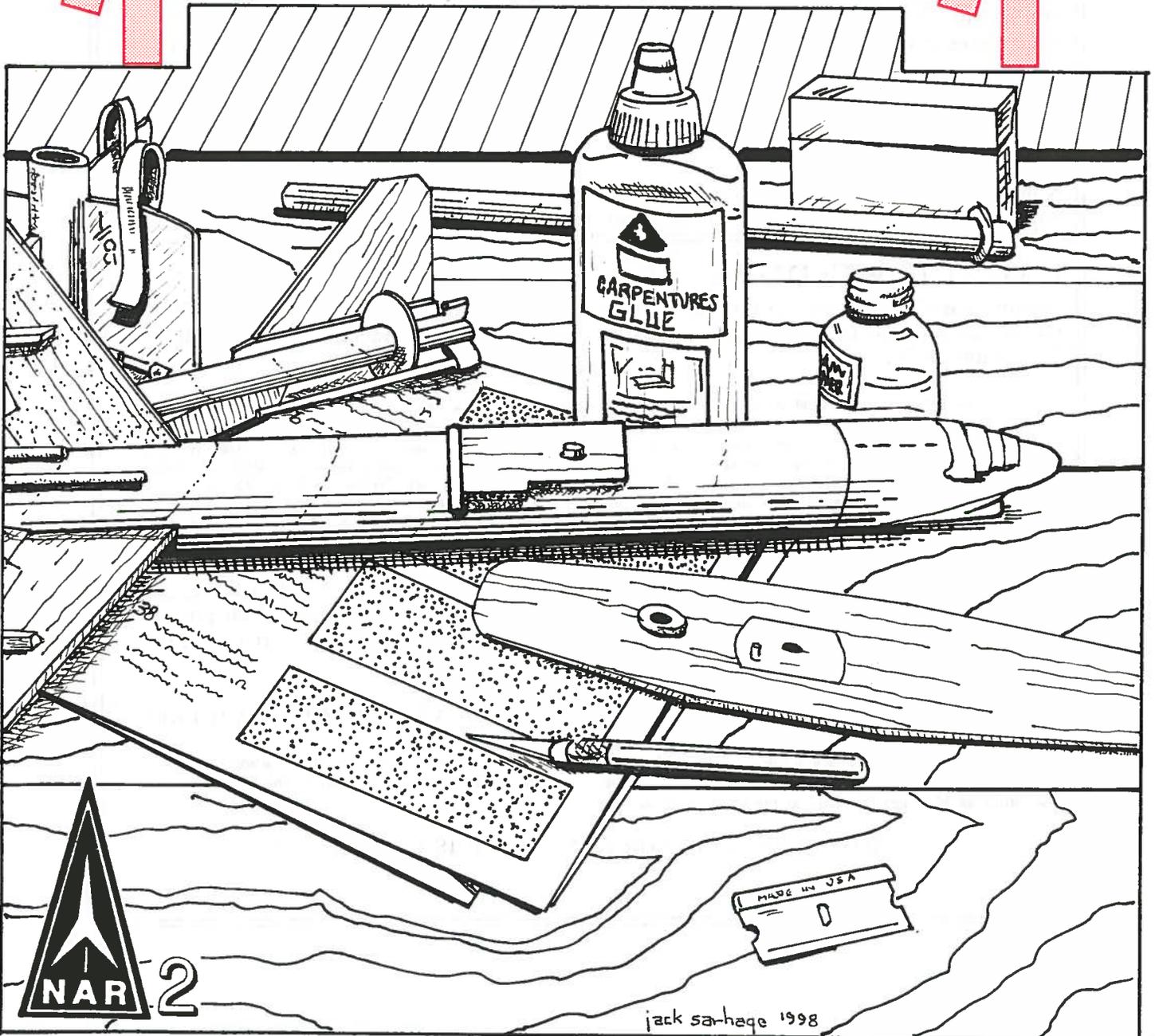


LAUNCH RACK

Journal of New Jersey's Oldest NAR Section

ISSUE 126(59)



jack sa-hage 1998

The Launch Rack

The Official Publication of The
Garden State Spacemodeling Society

SEPTEMBER/OCTOBER 1998

ISSUE 126(59)

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 payable 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, the Editor welcomes and encourages constructive feedback on each an every issue. Please send all material to:

Jack Sarhage
875 River Road
Piscataway, NJ 08854-5549

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LAUNCH WINDOW:

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 9AM.

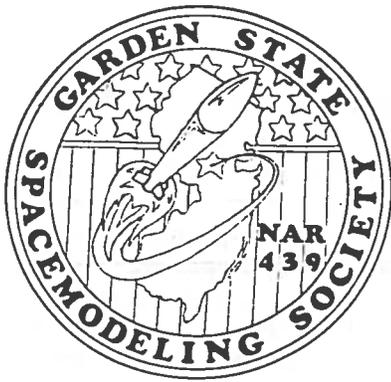
A NOTE ON NORTH BRANCH PARK. Please keep in mind that the park and weather conditions dictate what we allow to fly. Just because a rocket is under the one pound limit, do not assume it is an automatic launch. If the RSO does not feel the model can be safely flown or recovered within the park's boundaries,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

Sat., September 26, 1998	Sat., October 10, 1998	Sat., November 28, 1998
10:00 am - 3:00 pm	10:00 am - 3:00 pm	10:00 am - 3:00 pm
Fun Fly: A Ping-Pong Ball Ted Rebetje Section Meet	Section Sport Launch	Section Sport Launch

ALL OF THE ABOVE LAUNCHES WILL BE HELD AT NORTH BRANCH PARK

ON OUR COVER: This pen and ink drawing by Ye Ole Editor shows his unfinished "Crusader; Swing-Wing Glider (Estes 1961) on the work bench while he tries to catch up with other projects around 875 River Road and learn his new duties as Manager-On-Duty at the local Motel 6.

NOTE: DEADLINE FOR NEXT ISSUE IS OCTOBER 20



News From Section 439

THANK YOUS. Once again we thank Bob Zabriskie for his "Sky Watch" column.

And once again we turn to our old friend, Manuel Mejia, Jr. with the THOR Section in Florida for this month's plan: "Proton-8". Manuel says, "It is great for one day rocket lectures where novices have to build, paint, and fly a rocket within just a few hours."

A THANK YOU OF ANOTHER KIND. In our last issue we reported on the Monmouth County 4-H Club's annual event. The following letter was received in connection with that event.

"Dear GSSS.

We would like to extend our sincere appreciation to the Garden State Spacemodeling Society for providing a judge to our First Flight "Spring Blast" on Saturday, June 6th. Mr. Jack Sarhage expertly and efficiently went through the static judging of appearance and construction, so we were able to quickly move to the launch and recovery phase of judging.

We have not had a judge of Jack's background and knowledge previously. Each club involved would designate an adult to assist with the judging, and they would go through slowly, so as not to overlook any detail. By Jack's ability to quickly observe the details, and know how rockets should have been assembled, the event moved along smoothly. Also, while he was judging, the leaders could remain with their 4-H members.

Our special thanks to Jack for coming out on a Saturday morning, after working the night before. His views and judging comments gave the 4-H'ers a better perspective on rocket modeling and competition than we have been able to provide in the past. I believe that the 4-H'ers, and adults, had a positive learning experience that day.

Our Sincere Gratitude,
Monmouth County 4-H "Blasters"

It is letters like this and the knowledge that we did our best to help others learn about the hobby that bring a certain satisfaction nothing else connected with model rocketry can. Try it once for yourself and see.

TED REBETJE MEMORIAL SECTION

MEET...POSTPONED. Due to manpower not being available on September 26th to operate this meet, it was decided by the Section Advisor, Bob Zabriskie and Contest Director, Jack Sarhage to postpone this event until later in the Contest Year.

SHOW TEAM DESIRED. We would like to put together a "show team" of six GSSS members. This would give us a primary team of four, plus two alternates. This team would be responsible for designing a "show", static and/or flying to use in promoting the club and hobby. If you are interested contact the club President, Jack Sarhage at 732-463-1484 or write to him at the address in the newsletter masthead.



Photo by Steve Pantuck

At a recent sport launch we see Arnie Klein's ARNIEROC on Pad 1. To its right we see an R2-D2 being hooked up by an unidentified modeller. I know that Arnie's rocket is a scratch built job: one of many in his fleet. The R2-D2 is, from what can be seen, Estes Kit 2104 a 1:5 scale of the movie version. How about writing a Kit Review for the newsletter on this or any other model you have built.

SKY WATCH

Contributing Editor: Bob Zabriskie

SEPTEMBER

Mercury & Venus are visible all month in the Eastern sky before dawn.

Mars is also in the Eastern sky before dawn well above Mercury and Venus.

Jupiter rises at sunset and sets at dawn. It is in the Southeastern sky and should be visible by 10pm.

Saturn follows Jupiter by an hour or two and shines yellow in the Southeast.

OCTOBER

Mercury & Venus are not visible this month.

Mars is in the Eastern sky before dawn, although no an impressive sight by itself. The star Regulus will approach Mars the first week of the month and on the 7th will appear to be very close.

Jupiter rides high all night in the East Southeast sky and will be close to the Moon on the 3rd and 4th and again on the 30th and 31st.

Saturn rises at sunset and set at sunrise and should be well placed by 11pm. On the nights of the 6th and 7th the Moon passes close by.

IS THERE AN ASTEROID WITH THE EARTH'S NAME ON IT HEADED THIS WAY?

Superman, Flash Gordon, Tom Corbett; Space Cadet, the Starship "Enterprise", and in the recent movie "Armageddon" have all saved Earth from asteroids. "That's just fiction", you say. True but, even fiction is based upon fact.

The fact is that between Mars and Jupiter a belt of asteroids makes up part of the solar system. Through collision or gravity they are

knocked out of this belt; Jupiter's tug throws them free of the solar system while Mars changes their orbit that make up three groups of asteroids near Earth.

One group, the Apollo swing out beyond the Earth's orbit and their closest approach to the Sun takes them well within our path. Most through collisions with other objects knock off pieces that we see as meteor showers. Such as the asteroid 3200 Phaethon that causes the Geminid shower in December.

Another group of Earth-crossers that orbit around the sun are known as Atens. They are nearest to our path when they are their farthest distance from the Sun.

The last group, thought to feed the Apollo and Atens groups orbit the Sun totally outside our orbit. But when they are near the Sun they are also near Earth.

Just how many asteroids are Earth-crossers? More than 150 million. How big are they? The range is 10 meters to nearly 40 kilometers.

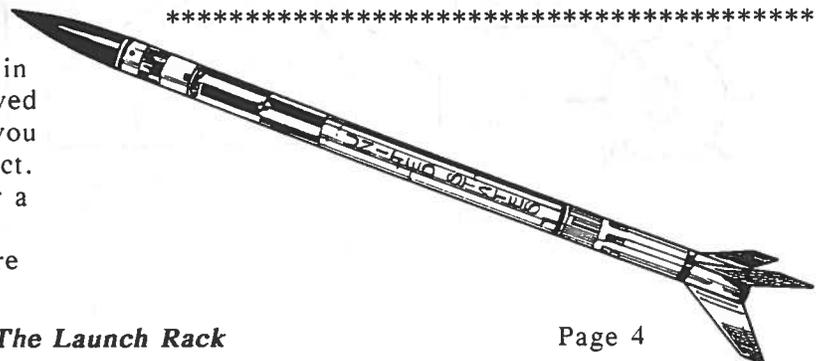
Though not called "extinction-class" there are about 2000 asteroids that are 1 to 2 kilometers in diameter that we should be concerned about that cross our path. Of these only about 10 percent have been detected.

What can you do to help? You can join amateur astronomers to make follow-up observations of those discovered and to watch the night sky and report the position of comets and asteroids. People from the USA as well as Japan, Italy and the Czech Republic are playing a large role in gathering this needed and valuable information.

What do you need? A computer, the right software, and a decent telescope with an electronic camera.

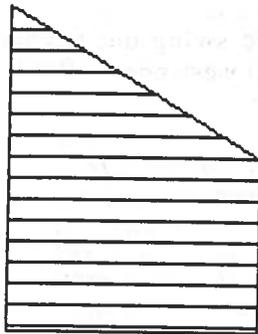
Most people view astronomy as a recreational activity but, Lowell Observatory hopes to change that. If you would like to volunteer or to get more information on how you can help try:

cfa-www.harvard.edu/iau/info/Astrometry.html



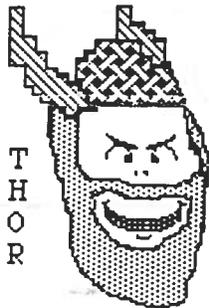
PROTON-8

DESIGN BY MANUEL MEJIA, JR., 3/98

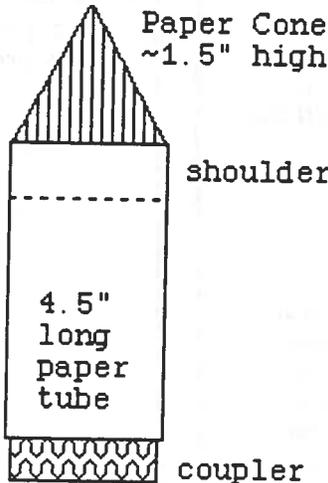


FULL SIZE
FIN PATTERN

make 8 using
heavy cardboard
or 3/32" balsa



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R



Notes:

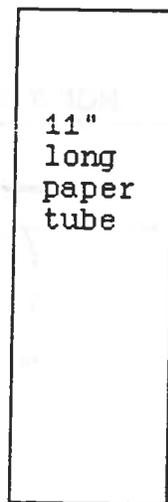
Couplers are made from 1.5" long paper tubes. Half of the coupler is inside the rocket part.

This rocket is designed to be built in sections. It is great for one day rocket lectures where novices have to build, paint, and fly a rocket within just a few hours.

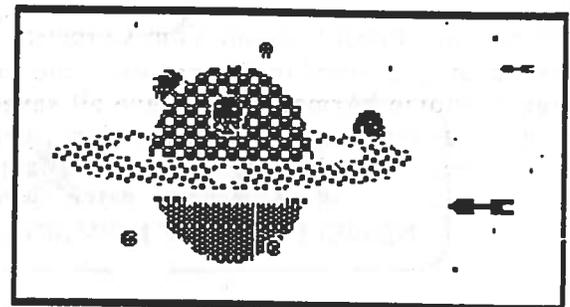
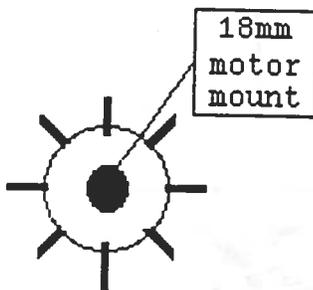
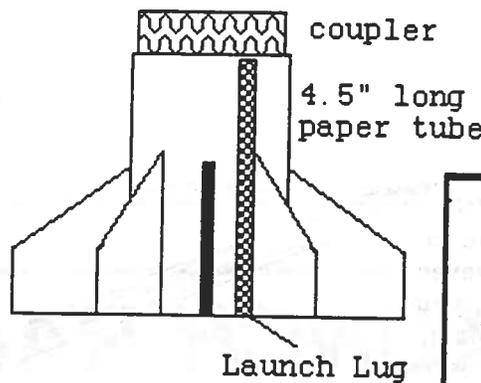
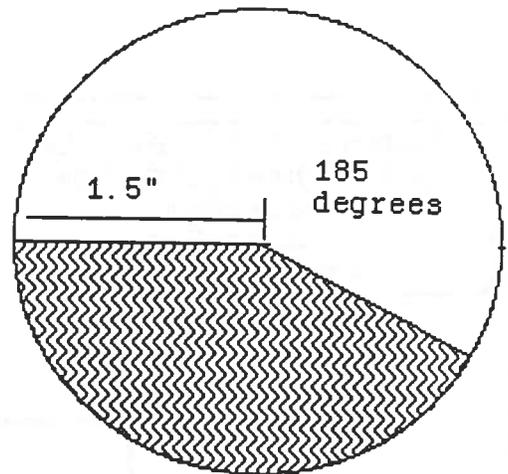
The rocket instructor assembles pieces like the motor mount before the class.

Tubes are Estes BT-60 or equivalent.

Fly using "B" or "C" motors



Nose Cone Details



**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

