

29

1986
NORTH
AMERICAN
ROCKWELL
TROPHY
WINNER



JOISEE 3 POSPONED
SPOOK 86 IS ON! details inside

LAUNCH RACK

Jack Sarhage, Editor
875 River Road
Piscataway, NJ 08854

ISSUE NO. 29

October 1986

The Launch Rack is the official publication of the Garden State Spacemodeling Society (Section 439 of the National Association of Rocketry) and is published monthly (except combined issues for May/June and July/August) for the enlightenment and entertainment of the membership.

Others interested in receiving this publication may do so for the yearly subscription fee of \$3.00. Please send this fee to the editor.

The editor invites, encourages (threatens?) all to submit articles, photographs, plans, etc. to be included.

Deadline for material to be published in the next issue is

October 28, 1986

Your status:

- () Your subscription ends with this issue.
- () If an "X" appears in this space it is time to think about renewing your GSSS membership. It expires _____.



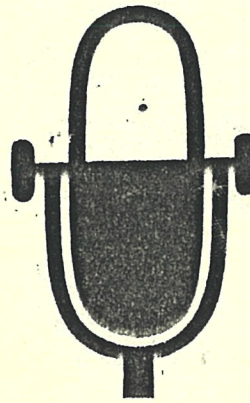
EDITOR'S PENCIL

A PERMIT BY ANY OTHER
NAME.....

There has been a lot of discussion by model rocketeers regarding the New Jersey permit regulation. It has been suggested by some that the Garden State Spacemodeling Society "spearhead" a movement in the direction of the State Legislature to abolish this statute. These discussions I mention, either leave questions unanswered or answered unsatisfactorily.

Continued page 5

PRESIDENT'S MESSAGE



by BOB ZABRISKIE

I don't have anything special to say this month. As most of you know JOISEE-3 was postponed due to the bad weather on

Saturday, September 27. The 28th wasn't bad and 8 club members showed up to fly sport. Bruce Benda, Steve Pantuck and yours truly.

Later Dr. Bob came to work on his Silver NARTREK requirements. Manuel, Alan, and Eddie Glembocki both Senior and Junior came by.

I hope to see most of you on October 26 for SPOOK-86.

COVER PHOTOS: (Top) Take from Manuel Mejia's CAMROC 110. The altitude was judged to be 45-feet. Looks higher to Ye Ole Editor. My guess is around 120-feet. Any other trys? (Bottom) This is another reminder that we won the North American Rockwell Trophy this year for "outstanding newsletter. L-R Bob Zabriskie, Jack Sarhage, Carl Cufone and Karl Zabriskie. (Ed. Note: Sorry, but no photo credit was shown along with this shot.)

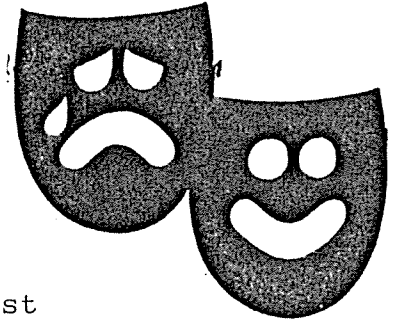


FLASH! SEE COUNTDOWN PAGE 7
FOR LOCATION AND TIME CHANGE.

SECTION NEWS

JOISEE-3 WEATHERED OUT

Due to rainy weather this regional meet was cancelled. It will be rescheduled later during the contest year. Events will remain the same.



SPOOK-3 TO BE FLOWN OCTOBER 26

It was decided to go ahead with this Open contest to be flown on October 26 at North Branch Park in Bridgewater. Events to be flown are $\frac{1}{2}$ A International Parachute Duration, $\frac{1}{2}$ A International Streamer Duration, $\frac{1}{2}$ A Helicopter Duration, A Rocket Glider, A International Boost-Glider (no flex-wings), B Egg-loft Duration. First flight will be at 9:30 AM and the final flight at 4:00 PM. Entry Fees will be Division A and B = \$4.00 Division C = \$6.00. A and B Divisions will be flown together.

If you need further information regarding rules, consult your "Pink Book". All other information should be gotten from Bob Zabriskie 201-769-0943, Jack Sarhage 201-699-9456 or Greg Zsidisin 201-437-3332.

GSSS MEMBERS TAKE ON ASTRO-3

Once again the ASTRE (Albany Schenectady Troy Rocket Enthusiasts) Section played hosts on September 6 to an Open Meet at New Scotland, NY.

GSSS members Dr. Bob Kreutz and TNT Team (in the person of Carl Cufone) represented our Section. And, from the report received from ASTRO-3 officials they did us proud. So tell them thanks when you see them next.

Events flown where $\frac{1}{2}$ A IPD, D ISD, B SRD, B ELD, $\frac{1}{2}$ A IB/G, and Sport Scale.

Dr. Bob came in second over-all by gathering 640 points. He came in second in every event except B Egg-loft Duration where he came in first. He came in 6th place in the D International Streamer Duration.

The TNT Team didn't have very good luck, but did manage 4th place in the overall NAR standings. Best showing was in the $\frac{1}{2}$ A International Parachute Duration event with a total of 228-seconds for three flights.

Jeff Vincent, CD said that this "proved to be the largest meet hosted by ASTRE thus far. "

NEW MEMBERS

We want to welcome our newest members. They are William Perlman (Junior) from Livingston and John Roszkowski (Senior) from Clifton. I know you will all make them feel at home when you seen them next.

WALLOPS ISLAND FIELD TRIP

Members wishing to join in of the planned field trip to Wallops Island Space Center (Virginia) on November 1 (raindate November 2) should make it known by contacting Bob Zabriskie 201-769-0943.

We have received work from one of the Virginia Section that they would like to join us.

Continued on page 4

SECTION NEWS Continued.....

ASSISTANT RANGE SAFETY OFFICERS ANNOUNCED

At the last Open Board Meeting held September 23rd, Ted Rebetje, Chairman of the Safety and Operations Committee announced that he has asked Eddie Glembocki, Jr. and Manuel Mejia, Jr. to be Assistant Range Safety Officers. We know that they will be an assest to this committee.

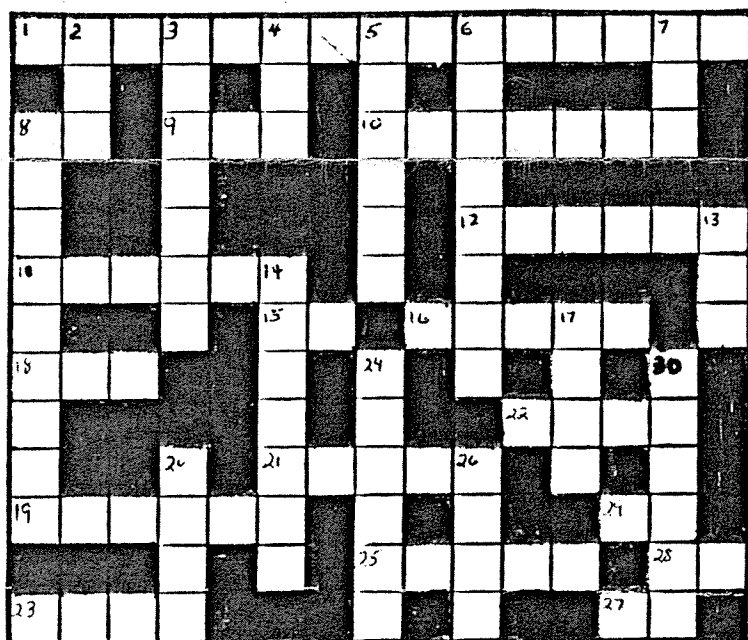
COMMITTEE HEAD NEEDED

Greg Zsidisin announced that he would be stepping down from his position as Chairman of the Contest and Records Committee. Greg has done a very fine job at the helm of this important committee.

We would like to hear from any member that would like to take over this job. Nominations will be received at the next Open Board Meeting to be held on October 28th.

TEST YOUR KNOWLEDGE...by Glen R. Phillips

(Glen returns this month with a "fun change of pace" for you to try)
Sorry, the answers will appear next issue.



ACROSS

- 1) NAME OF FIRST MANNED ROCKET
(3 WORDS)
- 8) PARACHUTE DURATION (ABBR)
- 9) LAUNCH
- 19) AFTER SPLASHDOWN ASTRONAUTS
WERE RECOVERED BY THIS
PROGRAM NAME THAT PLACED
A MAN ON THE MOON
- 12) FORCE AT LIFT OFF
- 15) RE-ENTRY VEHICLE (ABBR)
- 16) _____ GLIDE
- 18) WHAT THE NOZZEL BECOMES
AFTER IGNITION
- 19) A B6-4 IS ONE OF THESE
- 21) NAME OF ROCKET NOW IN
US SILO'S.
- 22) NAME OF US SPACE AGENCY
- 23) NOSE _____
- 25) LAUNCH AREA
- 27) BODY TUBE (ABBR)
- 28) A FRIENDLY VISITOR FROM SPACE
- 29) HOME OF THE GSSS

DOWN

- 2) SOMETHING WE DON'T LOOK
FOWARD TO AT A LAUNCH.
- 3) FREEDOM 7 WAS ONE OF THESE
- 4) GUIDES A MODEL AT LIFTOFF
- 5) WHAT WE BUILD BEST
- 6) TYPE OF TIMED EVENT
- 7) CLUB
- 8) NAME OF THE DOME LIKE
STRUCTURE THAT SLOWS DECENT
- 13) HOW MANY STAGES IN THE
ESTES HERCULIES
- 14) SHUTTLE
- 17) A HEAVENLY BODY
- 20) NUMBER OF BODY TUBE
WHOSE ID IS 0.5''
- 24) THIS TYPE OF ROCKET HELPED
PUT A MAN ON THE MOON
- 26) HOW MANY SECONDS DELAY
HAS AN A8-0
- 30) TYPE OF ENGINE USED
IN THE BOMARC

By GRP

SEALING BALSA PARTS

(or, how not to get stuck in a rut)
By Manuel Mejia, Jr.

The standard method of sealing such parts entails the use of sanding sealers such as Hobbypoxy Stuff and Pactra Plastic Balsa. The method outlined here uses white or yellow glue. The method works like this:

1. Sand and shape the part.
2. Attach fins to body tube if those are the parts to be sealed. Balsa nosecones can be held by shoulder.

EDITOR'S PENCIL continued.....

The main question is simple. Why? The State of New Jersey does not ban model rocketry. It wants to feel that a "responsible" person is carrying out or supervising this activity within the statute (The statute is the same as the NAR/HIA Safety Code).

The permit is easy to get. There is no test to take unlike an automobile license. Look at all the Drivers Licenses issued each year to "responsible people" that as soon as they get that piece of paper feel they can do as they please on the highways. Maybe there should be a test. I have seen some of these "responsible people" with the permit at our launches flying without regard to the Safety Code. Maybe, there should be a test to see if you know the Safety Code before you get the permit.

When you see another rocketeer flying not according to the Safety Code do you mention it to them? A "responsible person" would. We have got to police ourselves in order to get the State of New Jersey even to consider passing new legislature making the permit obsolete, or to allow changes in the present statute.

If the GSSS is to "spearhead a movement" it should be toward the Parks Commissions and communities that do not allow model rockets, with or without "the permit". This movement should be continued recruitment, displays, demos, etc. It should show how model rocketry in schools can improve the learning process, especially with regard to the sciences. By these means we can prove to the public that we are "responsible people", and that we can truly govern ourselves and with their help get New Jersey to eliminate the permit requirement.

In the mean time, think of the "permit" as another tool in your range box used to keep our hobby safe for all to enjoy.

Keep them flying.....

Jack

SEALING BALSA PARTS CONTINUED.....

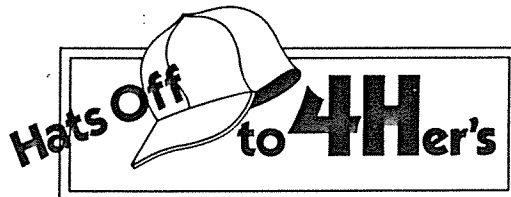
3. Apply a layer of white or yellow glue (the latter is the better glue for this purpose) by spreading the glue with your finger to all of the surfaces of the balsa part that is exposed to the airstream. Let glue dry completely.

4. Sand the layer with 400 grit sandpaper to give the layer a smooth surface. Do not oversand.

5. Repeat steps 3 & 4 one or two more times to fill the balsa grain.

The texture of the balsa becomes plastic-like, an excellent surface for using enamel paints. The chief advantages gained by this method is that it strengthens the balsa surface and it is cheaper to use than Hobbypoxy or Plastic Balsa. However, for competition models go with the Hobbypoxy to save on weight.

The method described is old. It was developed during the mid 1960's and was used as the standard sealing method. All NARAM winning contest models used this method. By the early 1970's this method was abandoned by most rocketeers who were replacing balsa parts with plastic and plywood. The few rocketeers who did keep using balsa parts (beginners for the most part) sealed these parts with sanding sealer. All is not lost though. In the age of tightening fiscal budgets some rocketeers may go back to using glue as a sealer for their models.



NATIONAL 4-H WEEK OCTOBER 5-11

KIT REVIEW: Scorpius (Estes No. 1375)

IN SEARCH OF NEMESIS

Part II - The Rescue Mission

Although it may seem like months have passed, in reality its been four days since the 'Scorpius', a space exploration ship, changed course for the faintly heard message of Asteroid Explorer 56A.

Now, their faces green from the light of the monitors, the crew, code name Z Team watches as the asteroid Kowal grows larger with each passing minute. Soon they will be able to identify the location from where the Asteroid Explorer last reported and begin descending to the surface.

Since 'Scorpius' is powered by two ion induction electrification engines it will be able to land by creating a gravity field around the ship. When they're ready to leave the asteroid the field is reversed and they are literally tossed into space.

Karl tries to rub the ache from tense muscles as he reports, "Still no sign of AE 56A."

"Wait! What's that?", Bob asks making his way toward the control seat.

"I don't see anything", says Karl. "Over there! A huge crack in the surface", informs Bob as he points out the starboard window of the flight deck.

"Okay, now I see it. Is that AE 56A? How did it get there?"

As Bob watches the altimeter he says, "Never mind how it got there, lets just get down to it in a hurry."

This futuristic space ship from Estes is designed around the ever popular BT-50 body tube and PNC-50 nose cone (what ever happened to balsa) with a few pieces of BT-20 and BT-5. Actually the nose cone is the only part that is plastic. The remainder of the model utilizes parts shown in their catalog.

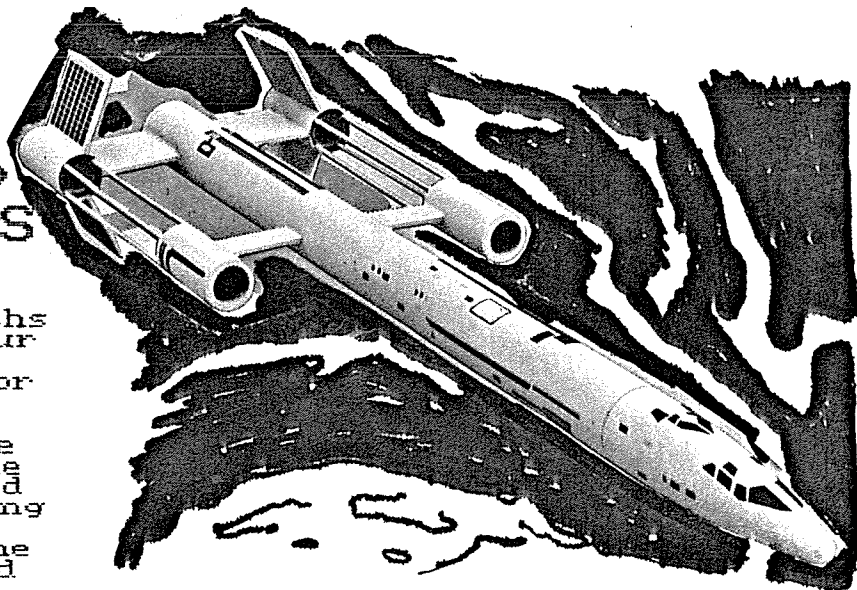
It is a Skill Level 3 kit and that means there is something out of the ordinary to be dealt with. A challenge if you like. In the case of this rocket it is the engine/fin pod assembly comprised of fourteen pieces per unit, and this pod is what gives it a unique appearance. It goes together easy, but take your time and follow the instructions.

Speaking of instructions, read them. That is the beginning of a good model, not the placement of decals. By the way, "Scorpius" comes with 3-color decals.

Back to the engine/fin assembly. A combination of 4 dowels, 2 BT-5's, and 2 adapter rings are used to complete the sub-unit that connects the front and rear pods (see Estes' catalog for a picture of the rocket). Be sure to lightly sand these for a smooth fit into the BT-20 tubes in later steps.

When you paint the rocket, give it an undercoat of white first. In fact, do this with any color other than white. It really brightens the actual color because the white shows through. You can't see it, but it does.

"Scorpius" is a swell looking



rocket and flies well. I have flown it using A and B engines and have to say that for a high drag design, the altitude is satisfactory. It is not a competition model, but it takes the prize as far as different is concerned.

"Contact. Nice landing, Bob."

Bob and Karl make their way toward the AE-56A and find it sinking into the surface. Suddenly, it disappears into the crater.

Looking over the edge they see it lying crumpled on its side, on what looks like a man-made floor. Carefully, lowering themselves down to the stricken craft they are amazed at the sight before them.

To Be Continued....

***** PRODUCT REVIEW

Ever hear of cardboard rocket fins? I never had either until I got a sample of one in the mail the other day from William T. Morse.

In fact, Mr. Morse has several ideas of interest to model rocketeers. Making Wire Ignitors, Tubing for Model Rockets to name a few.

Back to the fin. The sample plan shows how you can make fins using playing cards and toothpicks. The sample is strong, smooth and has a perfect airfoil shape.

Want to know more? Send a SSAE (#10) to W. T. Morse, P. O. Box 935, Casa Grande, AZ 85222, and tell him you heard about it through the newsletter.

***** C-O-R-R-E-C-T-I-O-N

In Issue No. 28 we reported that George Gassaway lead the NAR National standings with 4864 points. It should have read Dan Domina with 7087. George's didn't include those earned at the NARAM.

HISTORICAL LAUNCHES By Bob Zabriskie

- 10-02-62 Explorer 14 launched on a Delta.
- 10-03-62 Mercury 8 launched using Delta booster.
- 10-04-60 A Scout rocket launched from Wallops Island.
- 10-05-65 Thor booster tested at VAFB
- 10-10-46 V2 reached an altitude of 102 miles from White Sands. (Ed. I wonder if this was the one that almost landed in Albuquerque.)
- 10-11-68 Apollo 7 launched on a Saturn 1B.
- 10-14-66 Bomarc launched from VAFB.
- 10-18-61 Aerobee-Hi launched from Wallops Island.
- 10-19-73 Upper atmosphere research balloon flight from Palestine, TX.
- 10-20-60 X-15 rocket plane flight from Edwards AFB.
- 10-22-66 Luna 12 (USSR) moon explorer launched.
- 10-23-71 Secret satellite launched on a Titan from VAFB.
- 10-25-63 Atlas-Agena launched from VAFB.
- 10-26-64 Intelsat II (Comsat) on a Delta.
- 10-27-61 Saturn C-1 launched from Cape Canaveral.
- 10-29-71 Aerobee from White Sands.

COUNTDOWN (5-4-3-2-1) a calendar of events.....

October

- 26 SPOOK '86 to be held at North Branch Park in Bridgewater.
Events: ½A IPD; ½A ISD; ½A HD; A R/G; ½A IB/G (no flexies); B ELD. See Section news on Page 3 for further information.
- 28 Open Board meeting at Editors' home, 875 River Road, Piscataway starting 7:30 PM.

November

- 23 Sports Launch at North Branch Park, Bridgewater.
- 25 Open Board meeting at JFK Library Hoes Lane, Piscataway beginning at 7:15 PM.

December

?? Watch the next issue of the Launch for date and time for 2nd Annual Christmas get together at Ye Ole Editors' home.

- 28 Sports Launch at North Branch Park in Bridgewater.

HOBBY SHOP UP DATE...

We have been advised that HOBBYMASTERS located in Red Bank, NJ will stock FSI kits, parts and engines.

(Lead by Ted Rebetje)

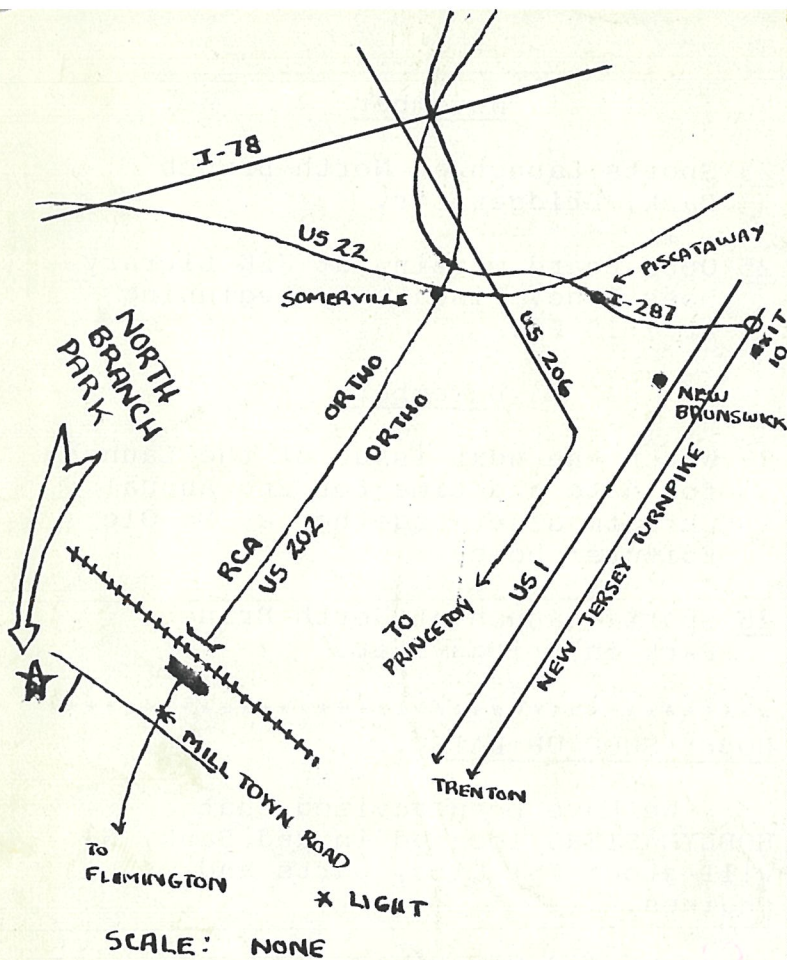
OTHER SECTION NEWS (Swipes from other newsletters)

ASTRE is now publishing a newsletter by the name of STAR-DATE NN edited by our old buddy Jeff Vincent. You can keep track of the action up New York way by sending Jeff a check for \$4.00 for 8 issues. His address is Box 95, New Scotland, NY 12127

Huron Valley Rocket Society in Michigan is running a T-shirt design contest for its members, so says their newsletter T Minus 5. Subscriptions for this newsletter can be had for \$6.00 sent to Mark O'Brien, Editor, 2742 Beacon Hill, Ann Arbor, MI 48104.

NOVAAR Free Press has a new editor by the name of Brian Robinson. Dan Mulholland left for college in Prescott, AZ. We send greetings and wish both good luck in their endeavors. If you send Brian \$4.00 at 6600 Weatherford Court, McLean, VA 22101 he'll see you are put on the mailing list.

Continued next column



APPLICATION FOR GSSS MEMBERSHIP

Name _____

Address _____

City _____ State _____

Zip _____ Birthdate _____

Are you an NAR member? _____

If so, provide NAR number. _____

Membership Category (Check One)

☐ Junior (Under 16) \$4.00

☐ Leader (16 through 20) \$6.00

☐ Senior (21 or over) \$9.00

This is a (renewal) _____ (new) _____ application.

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

Signed _____ Date _____

Send this application along with check for dues to:

Karl Zabriskie, GSSS Secretary/Treasurer

123 Duer Street

North Plainfield, NJ, 07060

GARDEN STATE SPACEMODELING
SOCIETY -- NAR SECTION #439

c/o Jack Sarhage

875 River Road

Piscataway, NJ 08854-5549



TO:

"NOVAAR FREE PRESS"
501 SOUTH TAYLOR ST.
ARLINGTON, VA 22204

EXCHANGE

Dan Mulholland
ERAU Box 8288
Prescott,
Arizona
86301

THE LAUNCH RACK

NEWSLETTER OF NEW JERSEY'S SPACEMODELING SOCIETY