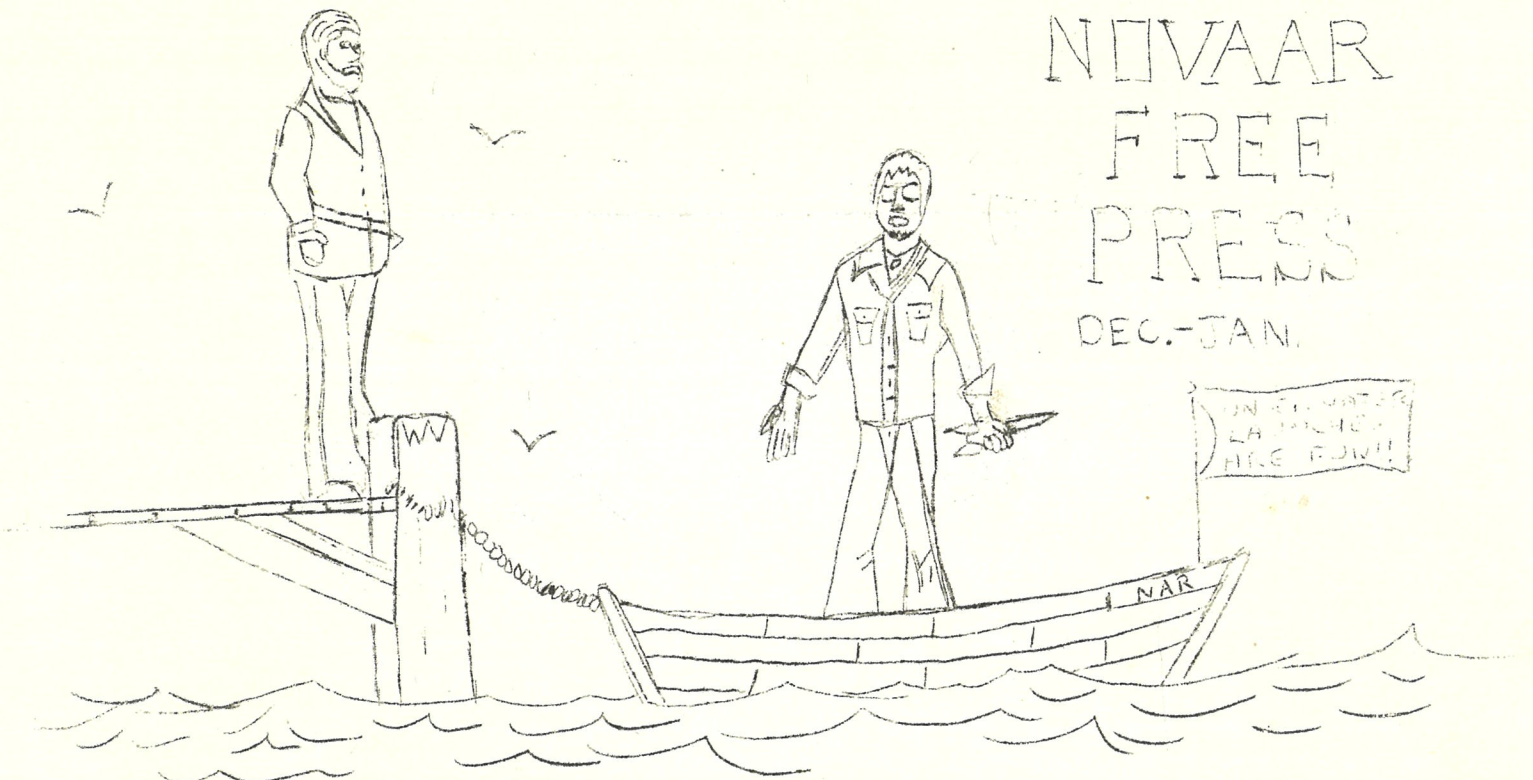
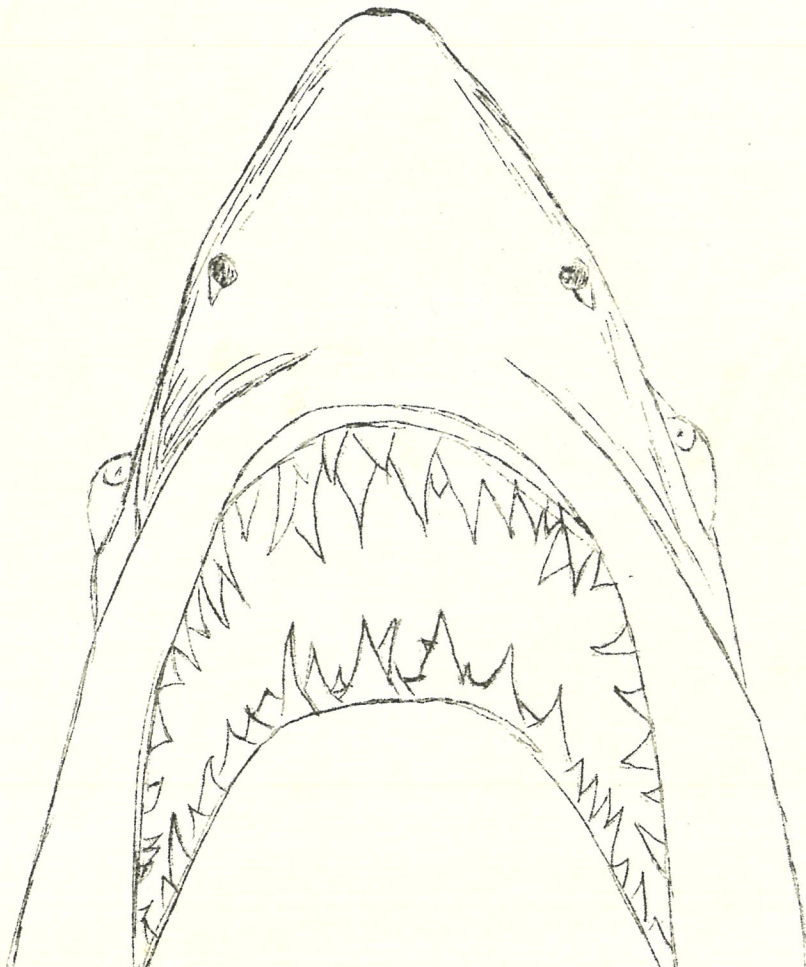


NOVAAR FREE PRESS

DEC.-JAN.



"MY INSURANCE COMPANY? NAR \$1,000,000 LIABILITY OF COURSE. WHY DO YOU ASK?"



WE HAVE RETURNED!!!

As those of you who have read this far now know, it's NOVAAR FREE PRESS time again. This time we have an issue jam-packed with all those things rocketeers love best. Many of our members have contributed to this issue, giving us even more variety than we usually have. I'll take this opportunity to thank those who contributed: Michael Alexander, Sam Jaskilka, Dan Winings, Chris Tavares, and Don Larson. Doesn't that make all of you who didn't help out feel bad? Some how I doubt it, but if you have a guilty conscience there will always be a FREE PRESS. Just keep those articles flowing.

Just a few short comments before getting into this issue. First off we have decided to fly AARDVARK as a club this year instead of ECRM. If some of you missed MARS this year (which we flew as a club) you can fly ECRM as an independent without hurting our shot at the championship. Remember- you must enter as an independent and you must have enough meet points left to fly all our meets.

Secondly, the VIKINGS turned down our challenge to a meet between us. It seems we would deprive them of too many points. That was the whole object of the meet. Oh well, that's the breaks, so let's get on with the paper.

Novaar-19..... Michael Alexander, NAR# 21377

NOVAAR 19 was our most recent section meet. It had some really good events like eggloft and payload. When we got to the field in Manassas it was cold and foggy. We decided to set the trackers and get ready to fly. Everything was set up but it was too cloudy and foggy to fly so we waited. It was supposed to clear up around 10:00 or 11:00 o'clock. When 11:00 came it was still cloudy, you could barely see the trackers, and couldn't even see to the end of the field. While we were waiting we found out that we had 10 people. Sam Jaskilka was the only B division member, so he would have to be combined with the A division. If we had decided to do this we would have lost about one third of our total points. We decided not to have the meet, instead it would be a fun launch, no competition. Unfortunately since it was supposed to be a competition not many people brought their sport rockets. Only about ten rockets were launched. Four rockets were powered by D's. Three were D12's, one of which catood. It was David Alexander's Estes Red Max. When it was launched it went about twenty feet and then blew up. It was all over the sky. Of the rockets that did fly most of them went into the clouds. Sam Jaskilka's egg lofted took off sideways and was lost. When we left the Frielanders found Sam's rocket but not his egg capsule. Dan Winings flew one of the new F.S.I. D20's. His Estes Sandhawk Took off like a shot, went into the clouds, and landed downfield. We left at about 1:00 and went to Pappy's Pizui.

Novaar 19 has been rescheduled for this Spring, Sunday, April 27.

NEW METHOD

Sam Jaskilka

Finishing Estes body tubes for scale is not difficult. First with rough sand paper, apply maybe one coat of sealer to the whole body and then the good part: Take a small dab of TITTBOND glue on your finger and smooth it on the spiral joint preessing firmly. Wipe off any excess escaping around your finger, let dry, then sand. Put on one more coat of glue to the spirals, sand then add another coat of sealer to the whole body. Keep doing this till you feel it is ready to paint. This goes much, much faster than sealer alone on the spirals. It is obvious you should end up with a few coats of sealer rather than glue before painting.

NOVAAR Members point standings Dec. 1,1975

A DIVISION	W*	POINTS	B DIVISION	W*	POINTS
David Alexander.....	5.....	231	Edie Cheris.....	4.....	31
Michael Alexander.....	5.....	222	James Le Croy.....	5.....	169
Robert D'Antonio.....	2.....	29	Brian Kilgore.....	1.....	16
Denis Dean.....	4.....	50	Sam Jaskilka.....	3.....	114
Mark Friedlander.....	5.....	155	John Middendorf.....	1.....	23
Joel Kenny.....	4.....	48	Mark Raysin.....	1.....	12
Joseph Nicroski.....	4.....	9			
Arturo Solano.....	1.....	4	C DIVISION	W*	POINTS
Sean O'Malie.....	1.....	21	Randy Thompson.....	2.....	79
Brian O'Malie.....	1.....	3	Paul Shalton.....	3.....	114
Robert Vogel.....	1.....	24	Daniel Winings.....	4.....	114
			Chris Tavares.....	5.....	169
NOVAAR TOTAL.....	5.....	1217	Howard Kuhn.....	1.....	30
			Brett Lawler.....	1.....	30
			Don Larson.....	3.....	124

SCALE MODELERS TAKE NOTE :

Sam Jaskilka

The NASA building in Washington D.C. at 400 Maryland Ave., Room 6035 has photos of many sounding rockets including D-Region, Nike-Tomahawk, Nike-Ajax, Super Loki dart, trailblazer, and many different javelins, Astrobees and more. They are B&W though and there are no more than two different shots for any one bird.

Don's Corner

Don Larson

News from the FAI Dec. meeting- "Space (Rocketry). Offer from USA withdrawn due to lack of positive proposal from National Association Of Rocketry; tentative offers expected from Yugoslavia and Czechoslovakia. To be resolved by end of March." So now we know that the internats won't be held in the U.S. and I must say, this is really a sad thing.

At our NOVAAR bi-monthly meeting we still get from 12 to 18 members to show up. At our Dec. 16 meeting we had a Christmas party at Langly School. It was given to us by the Friedlanders. We also voted on the meets that NOVAAR would fly at next Spring and Summer. NOVAAR will be flying at AARDVARK V in June, at Center Valley, PA. The U.S. Nationals will also be held there this August.

At NOVAAR 19 on Dec. 14 we were all ready with all twelve rails working, and all of the rockets ready, but where were the tracking scopes? They were out there somewhere in the ground fog. By 12 noon we gave up and so NOVAAR 19 will be flown on April 25 at our Manassas Field. The events are the same, all altitude ones.

At this time we have been teaching the boys about scale, B/G, and R/G's at our meetings. So do come and share your ideas with us.

NOVAAR members will be able to go with us to Wallops Island on a tour Feb. 6th or the 13th. This should be a good trip as it was last year for all paid NOVAAR members. This will be a special tour for us. We will need fathers to drive because it will be on a Friday from 5a.m. to 9a.m. to see the rocket launches at 9-10 a.m. Please call me so I can see who can drive and who is going.

The Blue and Gray open meet was the first meet that I was late getting to, they started on time. Thirteen NOVAAR members were there flying very well. The best flight I had was my class 3 world record flight of 1,101 meters, breaking the old record by twice. In my opinion the meet was well run. I also

AIRFOIL DETAIL

SHEET

CUT ALONG LINE
AND TIE TO OTHER

DIHEDRAL $1\frac{1}{2}$ " UNDER EACH WING

$\frac{1}{64}$ " PLYWOOD

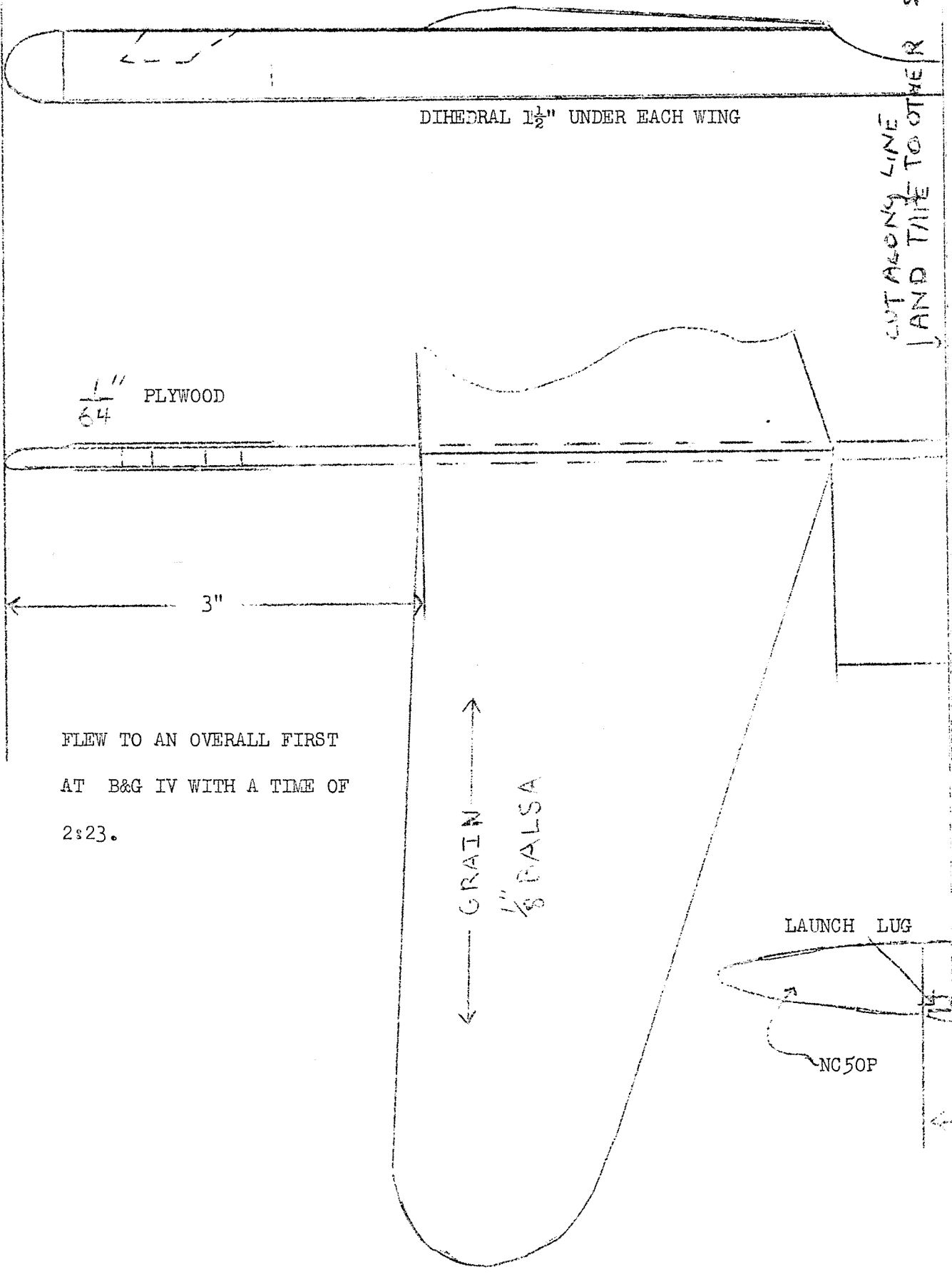
3"

FLEW TO AN OVERALL FIRST
AT B&G IV WITH A TIME OF
2:23.

GRAIN
 $\frac{1}{8}$ " PALS

LAUNCH LUG

NC50P



YANKEE FLYER
SPARROW B/G

1/8" x 1/2"
SPRUCE

1/16"

1/16" BALSA

6 3/8"

RB 50

ENGINE HOOK

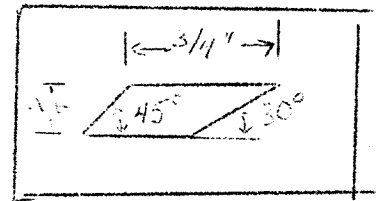
LAUNCH LUG

SHOCK CORD

1/8" x 1/2" SPRUCE

6 3/8"

RECOVERY BY STREAMER



PIECE X

7/8" LONGER

PIECE X CUT FROM
FUSELAGE

1/4" FROM END

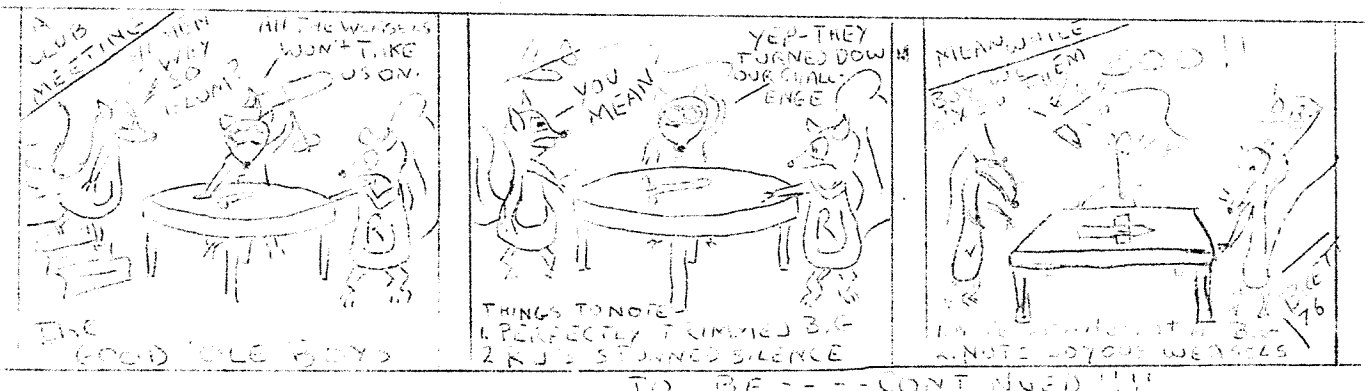
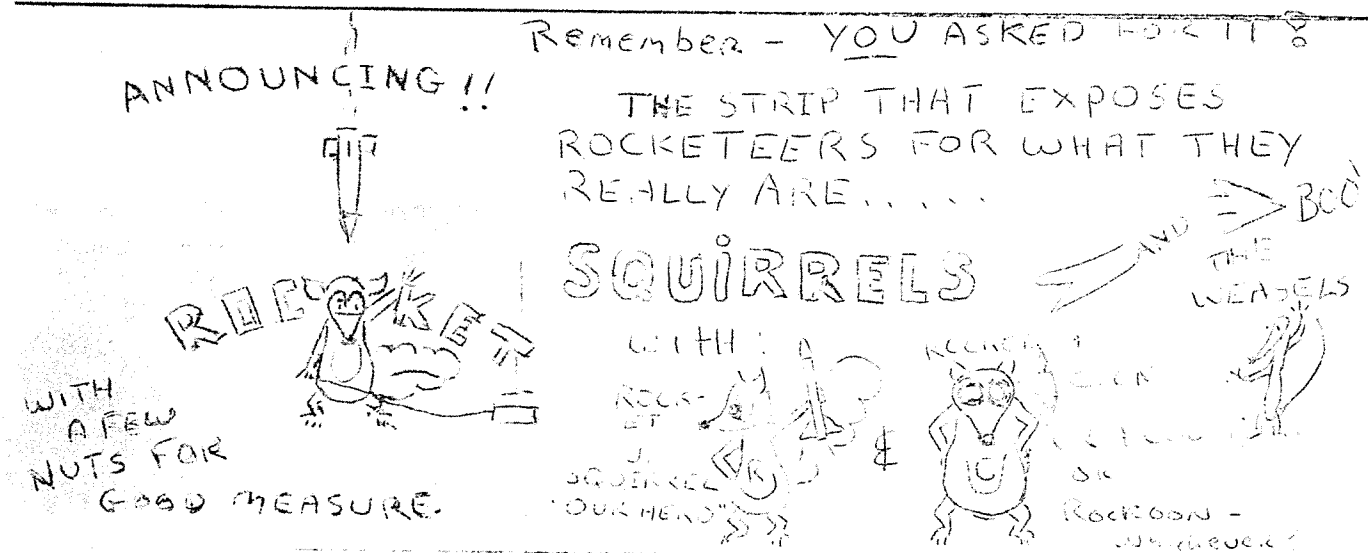
DRAWING AND DESIGN BY
DANIEL WININGS NAR# 20815

This is the last NOVAAR FREE PRESS to be sent out to non-members of NOVAAR, so do come to our next meeting and see us. Jan. 27 and Feb. 10 at the Langly School in McLean at 7:30 p.m.

Once more we are sending the PRESS to several nonmembers of NOVAAR in the hope that you will come to a club meeting. Why join the Northern Virginia Association of Rocketry? Organized rocketry is the only way to go, really. Our club offers a complete multi-rocket launch system at our club launches and a huge flying field where you can fly those H-U-G-E rockets you always wanted to fly. If you are an ultra high altitude man you can actually get your rocket back. The real benefits of a club, however, are the great amounts of knowledge, construction and flying tips, and experience that are gained in a very short time. Some of our men have been flying for years. You can easily imagine how much you could learn from such a person. We can learn from you too. I'm sure that some of you, who have been flying for a while, have developed methods that can benefit our whole club.

We can also show you how to join the National Association of Rocketry. This is a must if you want to fly competitively. The NAR sanctions all competition in the U.S. They keep records of all meets flown by each individual and this determines national champions at the end of the year. The NAR prints a monthly magazine, "THE MODEL ROCKETEER", with photos, articles, upcoming meet lists and technical articles. NAR members also have \$1,000,000 liability insurance coverage while flying model rockets.

Well, the benefits, to both you and our club, are obvious, so I'll let you decide. Why not come by a club meeting and get into the swing of competitive model rocketry.



ONE DEMO DOWN, ONE TO GO

Our demonstration on March 28 was the most successful demonstration ever held by the club. Over 150 people stayed for the three-hour program, asked questions, picked up literature, and filled out application forms. The spectators stayed so long we ran stock out of engines! Photographers from the Post and Star were on hand to catch a picture of the egglofter, which, wouldn't you know, was the last rocket planned to go off. They stayed long enough to get some pictures of other flights, although the Post never printed theirs. A few mishaps marred the meet slightly. First, the entire first rack misfired, to everyone's embarrassment. When we tried again to launch our first "spectacular" model (a Patriot with a D-6 for a nice slow liftoff) the liftoff was so slow that it power-pranged. Very few other models pranged; perhaps 3% or so, which is a good average. The worst mishap was when a model carried its rod with it, and let go of it over the crowd. But those were it: the other 50 or so flights were picture-perfect, and impressive as all get-out!

The display table was fantastic. There were about 30 or more models on display, many of them real display pieces! Our PR people spent the whole three hours answering questions and talking about rocketry with the crowd.

Our thanks to AVI for the kits and engines, to the people who donated display models, to the flying team, to the parents who came, and to everyone who helped out. And for valor above and beyond rooftop level, a special presentation of the Order of the Rocket-Eating Tree to Jim LeCroy for rescuing Don's scale Nike from the fate of "permanent display".

Don't forget! May 15th is another demo, this one by request of Estes. Let's do it another time, just like the other time!

WELCOME, NEW MEMBERS!

NOVAAR has gained 4 new members due to our successful demonstration on March 28. Let's welcome Alan Ball, Roy Higoski, and Deborah and Greg Rawson. In addition, a cheer for Steve Chambers who moved back to Virginia some time ago, but was only recently browbeaten into rejoining the club! We expect a few more members shortly; out of principle, this list only contains the names of new members who have already paid their dues.

If this is your first copy of the Free Press, and you haven't been to a meeting yet, do come - we'd enjoy having you! We're still meeting every other Tuesday night (next meeting is May 4th) at the Langley Private School in McLean. Call Chris Tavares (370-8629) or Don Larson (591-3629) for more info.

LETTERS TO THE EDITOR

Dear Chris,

I don't guess I qualify as one of those loyal readers [You're too modest! -ed] but I have commented about your newsletter several times. Again I comment.

I was not appointed Treasurer of the NAR. Al Lindgren is temporarily assuming the Treasurer's job. This was the most glaring mistake I found.

Terry Lee

[Right you are. I hesitate to ask: what were the others?!!]

Gentlemen:

Thank you for the recent issue of the NOVAAR Free Press...

I noted on page 4 the following statement: "Lonnie Reese (who, by the way, does not make his own engines at FSI, but contracts for them) says that they will be remarked to whatever impulse Standards and Testing comes up with." Please be assured that FSI engines are made by FSI for FSI. To be sure, I personally have little time to involve myself directly with their manufacture... Possibly my mention of the fact that the engine dispute started before I became involved with the company could have been misleading. In any case, I would appreciate a clarification of this in one of your future issues. Also, a definite way of changing the ratings over has not been decided upon by either ourselves or Standards and Testing as of this writing... There should definitely be a list published by the NAR as to which Contest class you may use our motors in... We will see that all NAR sections receive a copy of this list regarding our motors. It should be a really wild contest year. At PittCon, we were told that we would have that information in a couple of weeks. To date [March 20] we have received nothing.

Keep 'em flying!

Lonnie H. Reese, President
Flight Systems, Inc.

[Well, that's almost it. What led me to that conclusion was a statement you made during Dr. G's seminar on Engines to the effect of: "I and (whoever makes the engines) have had arguments about whether our engines are really up to power or not, and we weren't getting anywhere arguing." I assumed, from the sound of it, that it was an "arm's-length" dispute rather than an argument between the President of a company and an employee. I stand corrected. But I still could swear that there were expressed very definite plans as to dual markings on the current batches of engines, and solitary, Standards-and-Testing-approved ratings on future batches. I do imagine things like appointments of Treasurers, but I do think those plans I described were much too detailed for even my fertile imagination to have fabricated...]

WART II

Tired of the same old competitions? You are? You aren't? You what? (No, I can't print that!) Well, whether or not you are, we'd like to hold the Third Washington Area Record Trials sometime in July, when nothing much else is happening. It's a fun event: bring any models you like, try to set a record in any event you desire! If you groan at flying more of our traditional 1/4A-to-B events, now's your chance to try out for Condor R/G, Scale Altitude, or Sperm Whale Super-Roc! (Well, maybe not Scale Altitude...)

Again we ask neighboring clubs to let us know soon if they are interested. But take heart, club members; there's nothing to keep us from holding this all by ourselves if we absolutely must (i.e. if the response for WART-II is anywhere near as overwhelming as it was for VACUUM-I), and snarfing all the records for NOVAAR (heh heh heh.)

One note: if you intend to set any World Records (and I hope some of you do, because it's about time we got some of them back) you have to have an FAI stamp BEFORE the record-setting flight! If you are interested, Don has all the details.

FIVE TIMES FASTER THAN BALSA FILLER

Here's a trick that Don Larson has been onto for years, but which I only tried last week. If you don't dig infinite coats of balsa filler to make your fins ultra-smooth, try going to your neighborhood K-Mart or Zayres and buying a tube of auto body filler putty! It costs about \$1 a tube, and it will last you a long, long time. Thin it down with dope thinner or clear dope, and paint it on your fins, body tubes, or anywhere else you want a fast, smooth finish. It sands about as hard as plywood, and gives you a great finish with one or two coats (mostly depending on how good you are at thinning it right the first time.) If you want an easier time of it, wet-sand it with 400 and then 600 sandpaper. (Make sure you are using "wetordry" type sandpaper, or else all your grit will rub off!) Don't risk wet-sanding body tubes, because the coat you put on them isn't thick enough to keep you from rubbing off layers of wet tube if you try it.

Also, not having used white glue in years, I was amazed recently at how poorly it fillets. Epoxy is fine for those smaller fillets like on fins, but it's too expensive and heavy for filleting a joint between parallel body tubes, for example. On the other hand, white glue is cheap, but it shrinks, bubbles, and leaves holes. Also, the interior of a thick fillet takes a week to dry. Steve Chambers recommends "Epoxolite" for this kind of job. It's light, cheaper than epoxy, and very smooth. And if any of you know where I can find some, I'll try it and report back to you!

COUNTDOWN CALENDAR

- Tuesday, April 20 NOVAAR Meeting. 7:30 PM, Langley School, Balls Hill Road, McLean. Occurs every two weeks. Call Chris Tavares at 370-8629 for directions.
- Sunday, April 25 NOVAAR-19. Pigeon E/L, Robin E/L, Pred. Alt., Single P/L, Design Eff., Cl. 0 Alt., Fat Cl. 1 Alt. (18mm engines only!) - 25 cents per egg entry fee if you are flying eggloft.
- Saturday, May 15 Demo for Estes, Hunter's Woods Village Center, Reston, 1:00 PM.
- Sunday, May 23 VACUUM-I. Events: Sp R/G, Sw B/G, Sp B/G, Ho B/G, 2 S/D, 1 P/D, Ro E/L, 0 S/L.
- Weekend, June 12-13 AARDVARK. (NOTE DATE CHANGE!) Contact Don Larson (591-3629) for events.
- Sunday, June 27 NOVAAR-20 (NOTE DATE CHANGE!) No events yet.
- Sometime, July WART-II! The Third Washington Area Record Trials. Any event you so desire.
- August 1-7 NARAM-18, The vast wastelands of Center Valley, PA. Contact Don Larson for events.

Wadding Scraps

This past month, I received a copy of AVI's Safety Manual. If you think it's odd to have someone ask you, "What would happen if a child ate one of those motors?" let me mention that this manual answers that very question...!

Nobody in Alexandria seems to know offhand if it's legal to fly there. But they can't sell model rocket engines due to "a 1928 statute concerning the transportation of dynamite." I suppose there will always be someplace that hasn't got the word...

We have given up trying to convince WTOP that rocketry is safe. The chief news honcho doesn't think it is important enough to correct. Ho hum...

Again, no "Reliable Rocketry" column. Next issue, I promise! While I'm thinking about it, any suggestions from the readership?