THE UPSTATE ROCKETEER

The Official Newsletter of the MARS NAR Section and of Western and Central New York

September, 1988 **Editor: Dan Wolf**

Volume 1, Number 3
September, 1988

The *Upstate Rocketeer* is published 6 times a year by MARS (Monroe Astronautical Rocket Society), NAR Section #136 as a service to MARS members and NAR members in Western & Central New York. Subscription is a low $2.00 per year. Submit all comments, complaints, letters, articles, plans, subscriptions to:

Upstate Rocketeer
c/o Dan Wolf
235 Kislingbury St.
Rochester, NY 14613.

Table of Contents

Blowin' In The Wind

Hello and welcome to another issue of Upstate Rocketeer. First off let me apologize for the lateness of this issue. It should have gone out around the first of September but is late for various reasons (being out of town recently on business and lack of motivation after NARAM being the main two). First off, I want to thank all of you who have subscribed. This is the first issue for subscribers only and I hope as paying customers you find it worth your while. If not, please let me know. Your feedback is the only way I know if this newsletter is worthwhile to you. And along the same lines, your contributions including photos, kit reviews, plans, etc. is always encouraged. In short, send me something and I will most likely print it.

In July I received a letter from Jeff Vincent of ASTRE (Albany Schenectady Troy Rocket Enthusiasts) concerning the possibility of a contest here in Western New York next year. He thought since MARS is becoming active again we might want to host an Open Meet here. If so, then ASTRE may wish to compete. I indicated to Jeff that this is something that we would probably like to do as I think the idea of an Open Meet in the Rochester area would appeal to many of the NAR members here, particularly MARS. Jeff is not sure if they would make it but even if ASTRE doesn't show I think an Open Meet in the late Spring/early Summer is something MARS needs to consider. How about discussing it at a meeting in the near future? I kind of was holding off scheduling a meeting during the summer, prefering instead to get everyone out to the sport launches and fly during the good weather, but with fall approaching I think

the time is right. The traditional schedule for the MARS monthly meeting is normally on the third friday of the month. In keeping with this, the next meeting will be on October 21st at 7:00. At that meeting we can discuss the idea of Section Meets for the new year, an Open Meet, future meeting dates and also start thinking about what we want to do in 1989. In addition, I have slides and videos from NARAM-30 that I think many of you would enjoy. Plan on meeting at my house. A map is shown elsewhere in this issue.

The July sport launch had a good turnout with Greg Young and clan as well as Ed Norris coming from the Buffalo area to fly at Black Creek with us. Thanks for joining us guys. In addition, Mike O'Brien came out with his always interesting collection of models. Good seeing you again Mike. After the launch and obtaining everyone's NAR license numbers I rechartered the Section finally. The August sport launch was cancelled and due to the lateness of this newsletter, nothing has been planned for September. In October, a sport launch will be held. The launch will be in the Buffalo area. Thanks to Greg Young for helping to set this up. See dates and directions to the launch field in the events calendar. Greg tells me that the field is quite large and open so recovery will be easier than at Black Creek. Bring something big to fly at probably our last organized launch of 88. This is a chance for all you NAR members in the Buffalo area to come on out and have a few LAFFS (Launch Anything For Fun)!

The new Pink Book is out and you should either have received one by now or received a coupon for it. I had planned to run an article on the changes in the new Pink Book but because of what happened at NARAM and subsequent meetings of the Trustees and/or Contest Board most of the things I was going to discuss in the article have been rendered obsolete.

Many people at NARAM were not happy with the overall reduction in weighting factors in the new rules, the change in the return rule, and many other smaller issues. Thus the following revisions have been made to the new rules and they became effective on or around Sept. 1.

1. The maximum number of weighting factors per contest has been reduced by 20% . This makes a one day open meet practical again.
2. The old return rule has been reinstated (sum of two flights, one return required).
3. Names for the events that had been brought back (i.e. Sparrow B/G, Robin Eggloft, Dinosaur SuperRoc, etc.) have been eliminated (so events listed above go back to A B/G, C Eggloft and D SupeRoc).
4. Rule for human intervention of egglofters has been clarified.

Thanks to Jeff Vincent for this info. The feeling at NARAM seemed to be about 2 to 1 against the new Pink Book so hopefully these changes will turn that around.

<u>Strictly opinion on the new Pink Book:</u> The new rules are easier to read and are easier to get qualified flights under (i.e. no DQs on misfires, missing NAR numbers, hanging up on pad, partial firing of clusters and other) and with the changes stated above this Pink Book may be better than the 1979 one (which many believe to be the best ever).

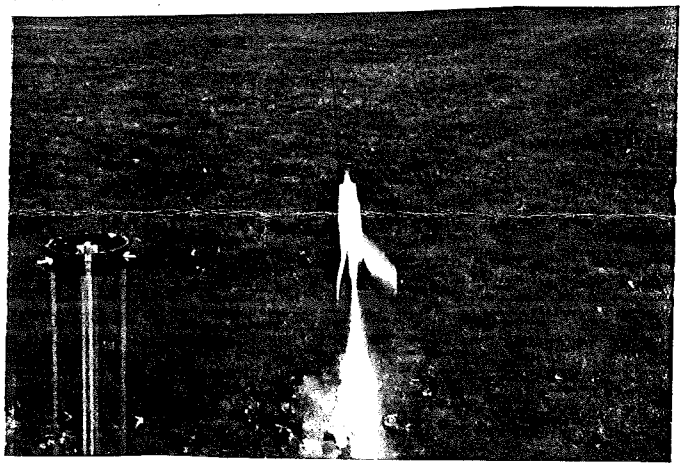
In closing, don't forget the meeting and the sport launch. Look forward to seeing you there.

Dan

SPORT LAUNCH - JULY 31ST
BLACK CREEK PARK

Mike O'Brien with his "kit bashed" D engine powered Andromeda.

Another of Mike's SciFi fleet lifts off.



The "Bottle Rocket" built from plan on next page. It really flies

Greg Young with his scratch built recreation of the Estes GYROC.

Greg puts his model on the pad while part of his "clan" return from retrieving a rocket.

The "Bottle Rocket"
An OddRoc Sport Model

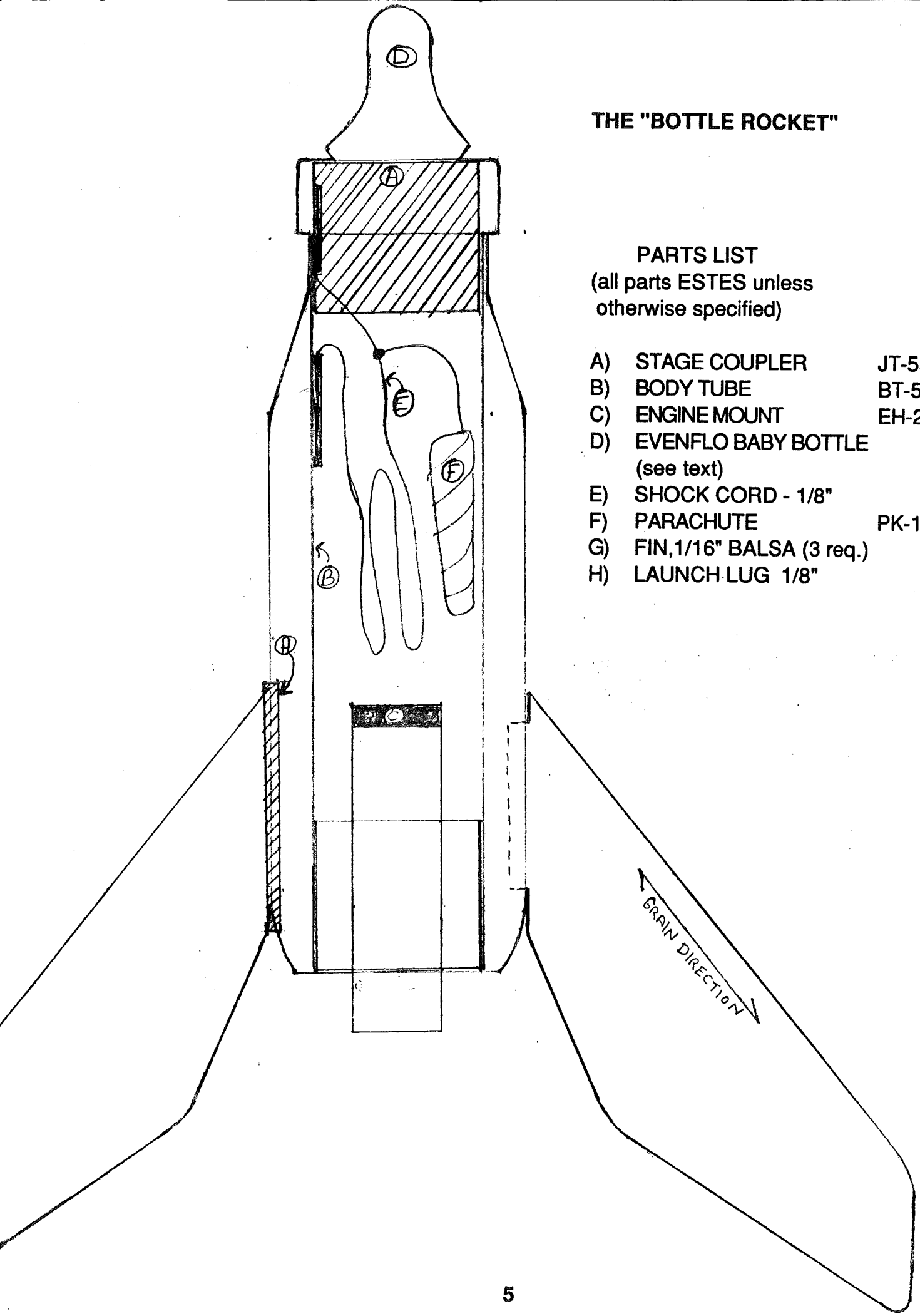
No, this article isn't about those illegal explosives on a stick that are seen around the 4th of July and are often launched from round glass containers. Instead, this is a plan for a very unique model rocket in full compliance with the safety code. I built this rocket about a year ago in honor of my then newborn baby daughter. It is actually made from a plastic baby bottle. While I made it for my daughter, I actually had another purpose in mind. That was to build a model to fly in Parachute Spot Landing. It seems that this past competition year saw PSL being flown frequently rather than Open Spot Landing as was more popular in the past. This prevented me (and I'm sure many others) from flying my old standby, a "Flying Saucer" as the saucer does not employ parachute recovery. I wanted to have something that would be fun to fly and to have fun with. In four contests this summer it placed 2nd once, 3rd once and got chump change (flight points) the other two times but it also managed to get more than a few laughs and brought out a few cameras too.

The "rocket" is made from a plastic Evenflo brand baby bottle. The bottle I used was made of pink plastic but blue plastic ones were on the shelf too. I picked mine up at Wegmans in the baby section! (I am always facinated by the places a model rocketer goes to get supplies. For example, for shock cords and cloth parachutes it's the fabric store, for covering for flexwing gliders and competition chutes it's the hardware store, for mylar sreamers and chutes it's an outdoors store, etc.) The bottle came in a three pack for a few dollars. The rest of the rocket is made up of standard Estes parts.

To start construction, first drill a hole in the center of the bottom of the bottle for a BT-20 to pass through. Install the engine mount into a 6.25" length of BT-55 so that the mount is all the way to one end with about a half inch of the BT-20 protruding. Once this assembly is dry the tube is placed in the bottle. The plastic around the top of the bottle may need to be carved away slightly so the body tubewill slide through. Once the fit looks good, use 5 miute epoxt to glue the body tube assembly into the bottle. Now take the stage coupler and glue it to the cap that normally screws onto the bottle. Also epoxy in the nipple at this time. This "nose cone" will now slide into the body tube. Note that it slides in like a conventional nose cone. Do NOT screw the top on or your bottle rocket's first flight may be its last. Make two shock cord mounts, putting one end of the shock cord inside the body tube like usual and the other on the inside of the stage coupler of the nose cone assembly. The fins are made from 1/16 " balsa. To mount to the rocket note that the bottle is not round but six sided. The fins are mounted 120° apart on the "smooth" sides (sides with no printing). Note that the fins have a "tab". The tabs go into slots that must be cut into the sides of the bottle. The reason for this tab in slot fin mounting is to help keep the fins on the rocket. Adhesives and glues do not stick well to the plastic the bottle is made of and this helps keep the fins attached. Use 10 minute epoxy on the fins. The launch lug goes into one of the fin/body tube joint fillets.

Fly with an A8-3 or B6-4. I haven't tried it but I suppose it would fly ok with a C6-5 as well. Have fun with this one.

Any other OddRoc plans out there? Send them in and we'll print them. I think Roy Metz had a "flying Genesee Cream Ale" once upon a time!



THE "BOTTLE ROCKET"

PARTS LIST
(all parts ESTES unless otherwise specified)

A)	STAGE COUPLER	JT-55C
B)	BODY TUBE	BT-55 6.25"
C)	ENGINE MOUNT	EH-2055
D)	EVENFLO BABY BOTTLE (see text)	
E)	SHOCK CORD - 1/8"	
F)	PARACHUTE	PK-12
G)	FIN,1/16" BALSA (3 req.)	
H)	LAUNCH LUG 1/8"	

How to Build Rockets and Cook Meals In the Same Room
by
Doug Pratt

[Editor's note: This is a reprint of an article written by former MARS member Doug Pratt. It originally appeared in the May 1976 issue of The SATELLITE, the newsletter of the long since defunct Buffalo Section. Doug had a column entitled "The Balsa Dust, Used Glue and Clip Crud Department" in that newsletter. A discussion about living in an apartment and building rockets while at NNNNNARAM led me to recall it and Will Safford asked if I might print it. A check with Doug (who couldn't remember the article!) said no problem and here it is. Who says we don't listen to our readers? Hope you enjoy it as much as I did when I first read it.]

It occurs to me (and its about time something did) as I sit here in my rocket filled apartment, that many of my modroc compatriots are at that time of life when they are faced with moving out of the old home nest and making their way in the world. This can happen right after high school, for college is a non-parent (and non-cleaned up, usually) environment, and not all rocketeers are necessarily contemplating college (these are the ones that get all the jobs). It can also happen upon graduation from college, or it can be unconnected with any specific event; but what I am trying to describe is that cutting of the umbilical cord that comes when you move into a place of your own. Everyone understand? Or have I made myself clear?

Many young men and women are confronted with new decisions and responsibility at this time. Often they have trouble deciding what to do with their extra socks, much less five year's accumulation of rockets. It's always something of a shock when you clean out all of these boxes under your bed and realize just how much scrap balsa you have been saving for a rainy day.

As a veteran of several (and I'm not going to say how many so don't ask) years of non-parental-home living, I feel that I could give some valuable advice to the youngster contemplating his own establishment, especially if he brings his rockets along. I doubt it, but I feel that way. After all, my apartment is livable, even if it does tend to resemble the Surveyor moon pictures at times. And I lead an active rocketry life, building away at a frantic pace in my copious leisure time. So here are some hints that I would put into an article in *Apartment Life* magazine on "How to Build Rockets and Cook Meals in the Same Room".

The model rocketeer should always consider his budget first when shopping for a base of operations. If he or she earns $100 a week he can easily afford a $180/month apartment and still have enough left over for an occasional pack of F100's. However, if he or she is gainfully employed part-time at a McDonalds and earning $50 a week, one should be prepared to be satisfied with a hole that looks like Dostoevsky got his inspiration there. What the hell, it's home, right?

Carpeting is an important factor. Shag tends to hold balsa dust like flypaper, and the only vacuum cleaner powerful enough to get it out will also tear up the floorboards. There should be plenty of space between the workshop and the kitchen area, unless you are accustomed to gritty foods. Most of all, don't use your kitchen table for modeling purpose, even if you have to eat off your lap. Sloppily mixed epoxy can result in a dinner plate firmly glued to the table.

Here are a few general rules for rocketeers who live in apartments:

1. Don't try to explain just what a "D.O.T. class C explosive" is to your landlord.
2. Placing rockets in the front window, while it impresses the paper boy, does tend to make the upstairs neighbors jumpy.
3. Dirty dishes smell funny after a week or so.
4. Adjust to the fact that the only way you're going to attend any regional closer than your back yard is by eating hot dogs for two weeks.
5. If you notice your hamburger has been brown for four days mix it into a batch of spaghetti.
6. Don't pick up girls in single's bars and offer to "show them your rockets". They never appreciate them.
7. Discussing the plot of the last "Space:1999" is not the best way to persuade the landlord to wait another week for his rent.

8. If you notice gopher holes, dig out the corners of your living room.
9. It's time to defrost the refrigerator when you can't get anything out of it anymore.
10. If you don't put down newspaper before you paint, you risk losing your security deposit. Indoor spraying is likewise discouraged.

I find the apartment life rather pleasing and if you follow these few rules, I'm sure you will too. For one thing, being a rocketeer soon gets you a reputation as being eccentric, which means you don't get bothered much. Even encyclopedia salesmen are intimidated by two Black Brants and a Saturn V in the front window. You will find that static testing an Enerjet is a great way to be popular at dinner parties. Your hobby gives you something to talk about when you meet that cute girl in 6-B at the mailbox. And, boy, can you give those noisy neighbors a surprise! In closing, I'd once again like to encourage people to write to me now and then with stories suitable for this department (what isn't)? Every now and then I collect some stories at a meet, and while it dies save postage, I tend to forget them. Please remember that this department is dedicated to the memory of the late Boris Bulzcht, the inventor of masking tape; the best material submitted will be eligible for a special Bulzcht award at NARAM. Send all entries to:

Douglas R. Pratt
Missouri Home for the Criminally Bewildered
Raytown, MO

COMPUSERVE OFFER

Doug Pratt the author of the above article is now the system operator for Modelnet on Compuserve. If you have a computer and a modem and are interested in accessing Modelnet and/or Compuserve Doug says he will send a free Compuserve intropak and documentation package to anyone who writes to him at AMA HQ and mentions they read about it in *Upstate Rocketeer.*

Write to:
Doug Pratt c/o
Academy of Model Aeronautics
1810 Samuel Morse Drive
Reston, VA 22090

Reader Feedback

I have received some nice letters from many of you throughout Upstate New York. Of course most of you sent a note along with your money for subscribing but thanks anyway for writing. Here are a few of your letters.

Dear Dan,

Thanks for the newsletter. It was the only bright spot in an otherwise disappointing start to my rocket season. It all started on my way to STATIC III. This was to be my first trip to an organized launch. Needless to say, I couldn't wait to get there. About halfway there my 1976 Chevy truck started grinding, scraping, pinging, and vibrating. I thought to myself, "well...there goes the transmission." So with 3 kids and my wife in the car we turned around and prayed all the way home. It turned out to be the universal joint grinding itself to pieces. A big let down but at least we made it home.

To make up for it the next weekend I took the family out to launch a couple rockets. The day was terrific...Clear blue sky, no wind, warm and sunny. A great day to try and "push the envelope" with my Estes Sky-High two stager. It was primed and ready to go with a B6-0 first stage and a C6-7 second stage. The Sky-High was one of my best looking models with an almost flawless red and black color scheme. This was to be it's second flight with the first one in the fall being spectacular. I backed up to get a good view while my wife and 6 year old son started a countdown. Since there was no wind (unusual for Hamburg), the rocket was aimed almost straight up. This was sure to be the flight of the summer, or at least I thought. "5...4...3...2...1...blastoff", my son shouted and within a millisecond the familiar puff of smoke and "whoosh" and the first launch of 1988 was under way. It looked great zooming up a couple hundred feet and straight as an arrow. 'POP' the first stage fell away and the Sky-High was on its way to the high heavens...but strange, as it continues to climb there is no smoke and no sound. Suddenly, the horror sets in! THE SECOND STAGE DIDN'T IGNITE!! "Oh NO", I hear my wife yell as my two boys, still smiling and looking skyward, continue to laugh thinking it's a great flight.

Luckily, the rocket was aimed a few degrees downrange for safety, so there was no danger of anyone getting hurt. I watched as my sleek little red and black missile jumped a few feet higher, still straight as an arrow, slowed...then stopped, tilted over and began it's rush for the dirt. The absolute silence of the evening was pierced by the sound of the Sky-High heading very decidedly into the ground. .....

I was beginning to think I was the only one locally who liked model rocketry. I've never been to a meet or contest but would love to attend one. Since I bought my first rocket in 1968 (Astron Sprite) I have launched close to 100 rockets. Many have crashed, floated away, blown up (yes, I've had some Estes engines that either blew

the nozzle or burned through the side), and flown great. Just recently I bought a North Coast Phantom 4000 for my first attempt at high power rocketry but have had problems with the fit of the nose cone (it's way oversize for the body tube). Unfortunately, with a demanding full-time job, 3 kids 6 and under, and an old house, I don't have as much time as I would like to work on my models...but that doesn't mean I'm not interested in them.

Sincerely,
Ed Reilly
Fulton, NY

Thanks for writing Ed. Sorry to here about your Sky-High. Hope your subsequent launches were more successful! Sorry to here about your truck too, but you were somewhat fortunate in that STATIC-III was canceled! I found out the hard way, by driving down there (3 hours) and talking to an irate hotel owner who had an entire hotel of rocketeers cancel out on him! Anyway, good hearing from you and hope to see you in the future.

Dear Dan,

Thank you very much for including me in your recent mailing of the *Upstate Rocketeer.* I was rather surprised to see a newsletter from a region so close to home. You mentioned the lack of NAR activities in the region, and I had all but given up hope of ever having any. Your letter set me to thinking about what to do with the large but unorganized group of NAR members. If several local sections opened up and prospered, the possibility of many competitive meets, whether inter-sectional or regional, would be one exciting result.

In the future, I intend to start or help start a NAR section in the Cortland-Homer area. I have recently gotten the backing of a local rocket supplier, who has offered to help get or make the required equipment. There are still a lot of problems to overcome; namely, I do not have a lot of spare time to devote to the club and the necessary paperwork, and I have not found the space to hold meetings or to launch (the field I use is very small). There are several friends of mine who are not in the NAR but enjoy getting together with me to "put a few up". I have been trying to bring them into the NAR, but I do not see them much. We alone are not enough to start a club. I received a bulletin regarding the whereabouts of local NAR members and found that there are around 6 within my vicinity. Sometime I will get around to getting them together to form a club. Until then, I will be content with my small group of launching partners.

One definite thing I would like to accomplish with this letter is to subscribe to *Upstate Rocketeer.* The newsletter, though small, is well written and covers interesting topics. The high-power manufacturer list is a help to anyone interested in "moving up". I added a few addresses to my list after reading it. I am thankful that one of us is courageous enough to take the initiative and try to bring members into sections. Hopefully, we will see sections cropping up soon.

Sincerely,
Daniel Gravatt
Homer, NY

Thanks for the kind words Daniel. Hope to see a NAR section over in your area soon. In the meantime you are welcome to participate in activities of MARS here in the Rochester area.

Dear Dan,

I enjoyed your *Upstate Rocketeer.* I agree with the need for NAR sections. I am a member of the NAR & Tripoli. Having been in model rocketry in the days when Estes had a total fleet of 12 rockets (25+ years ago), I am surprised to have been reintroduced by my 3 daughters (ages 10, 7 , & 5).

At the present we have formed a "club" with another rocketry family. The group is called "STARS" (South Towns Amateur Rocket Society). After two presentations at the local school I expect membership will increase.

I would have enjoyed attending the June 12th launch- but unfortunately I will be out of town...perhaps the next one.

I certainly am available (time permitting) to help organize/advise a Buffalo NAR section. Hope to see you in the future.

Sincerely,
Gregory Young
Holland, NY

Greg, you are indeed fortunate to have daughters who are interested in the hobby. They are fortunate also in having someone with your experience in the hobby as a father. Who knows, maybe one of them is a future A division national champion. Hopefully, there will be opportunities for them to fly in competition in Upstate New York in the next few years. Thanks for writing.

There were other letters that I don't have the space to print and I thank all of you again who took the time to write. Enjoyed hearing from you.

Lastly I must include a small note I received with a check for $5.00 from the wife of Merrel Lane of Niagara Falls. Mrs. Lane wrote: "M y husband really enjoys this! Thanks.
Thanks to you too and to all who have subscribed.

Manufacturer's News

News and rumors from around the industry

Estes

At NARAM, Mary Roberts of Estes reported that the "new" Saturn V is selling better than they had expected and that Estes will introduce two new skill level 4 kits in the near future including a scale model of a rocket that has not been kitted before.

Enertek

At the present time, the future of Enertek remains unclear. After delaying the product roll out for several months, company spokesman Bill Stine is now saying that they will not announce another date for product availability until it is a definite date. The basic problem at this point seems to be that the demand for the product is far greater than originally estimated. Enertek does not have enough supplies on hand to meet all the orders from distributors. They evidently cannot introduce the product until they are able to supply all of the hobby stores. For instance, they may have 200 or 300 starter kits but need 500 to fill the initial orders from the hobby stores. They can't ship to some hobby stores and leave others high and dry. On top of that, they do not have enough capital to purchase additional materials to make up the shortage. Sort of a CATCH-22 situation. At any rate, don't look for Enertek kits and motors in your hobby store just yet. For those of you who want to try out the Enertek motors however, they are available now with Aerotech labels and at Aerotech prices. One good source is High Sierra Rocketry, which lists the motors in their ad in the August 1988 *Tripolitan.*

Another rumor circulating about this company is that they are currently working on a movie camera payload ala the old Estes Cineroc.
Stay tuned for further developments on Enertek.

North Coast Rocketry

In the past NCR was primarily a High Power kit manufacturer. In the near future however North Coast is planning to introduce a line of products aimed at the competition rocketeer to fill the void left by the departure of CMR. Products that are planned include thin-walled tubing and vacuformed nose cones. There are other new products in the works including an electronic delay ejection timer, an audible rocket location finder and some new launch controllers and launch pads. In addition, NCR now takes VISA and MasterCard and also takes orders via Compuserve. A toll free WATS Line is said to be coming in the near future.

Apogee Components

Another company trying to fill the void left by CMR is Apogee. You may have seen their ads in recent issues of *American Spacemodeling.* They offer light weight nose plastic nose cones that they claim are 3:1 parabolas. The nose cones are made from ABS polymer and seem much stronger than the old CMR cones. They come in

three sizes. One for BT-5 sized tubes, one for BT-20 sized tubes and one for BT-50 sized tubes. In addition, they also sell an egg capsule nose cone called the NOVA EGGCONE.

At NARAM, pre-production samples could be purchased from the range store. These were molded in white. The production units are to be available after Sept. 12th and will be molded in black. The company is also selling light weight tubing to go along with the nose cones. The tubing seems to be made of the same material as Estes engine blocks, only thinner. The tubing is called "BLACKSHAFT" and is available in three diameters, to accommodate their nose cones. Lengths are 12, 18 and 30 inch. The other main product Apogee has to offer is a thin, clear plastic/fiberglass type material that they call "WAFERGLASS". Apogee claims that WAFERGLASS is "the ultimate fin material". It is available in 4 thicknesses: .015", .020", 031" and .047". The material is very tough and is said to sand easily and after sanding with very fine grain sandpaper, produces a smooth mirror like finish. The companies product line is rounded out with a variety of small items including tube couplers, launch lugs, centering rings, engine blocks, aluminized mylar and Micafilm. With the appearance of Apogee on the scene coupled with NCRs planned introduction of competition supplies, it looks like the impact of the departure of CMR will be minimized.

Aerotech

Thanks to this company, the hobby has probably the widest variety of reliable E, F & G motors ever offered. It's hard to image that less than 8 years ago the only full 20 newton-second E motors were the 24mm E20 and the 29mm E30. Now we have a choice ranging from the 7.5 second burn E6 to the .8 second burn E50. With the E10, E15, E28 and E30 in between, a motor can more easily be picked to match the model and/or the modeler's building ability. The F motor offering is equally diverse.

Aerotech does not seem content to stand still however. Case in point, at NARAM they demonstrated their new F41 motors. These motors burn with a bright white flame and white smoke trail to make tracking easier than the virtually smokeless exhaust of the conventional composite motors. Aerotech also announced that they plan on introducing some new composite motors. In addition to the D8 which is a full D motor is a standard C motor size, the company plans on introducing two more 18mm D motors, the D15 and a D30. They will be priced around $7.00 list price. They are also planning an E motor in a standard C engine size! Because of size limitations it will be a 30 Newton-second E motor. Image an Alpha III with one of these babies!

Rocket Research

Rocket Research now offers a new type of parachute called the X Form Chute. The chute is made of ripstop nylon and surprisingly is in the shape of an X. The unusual shape is said to minimize drift and maximize rocket recovery. The chute is intended for use in high power rockets being flown from smaller fields.

NARAM 30

August 6 through August 12 marked the 30 National Association of Rocketry's Annual meet. Held for the first time in Huntsville, AL. NARAM-30 was a great time of competition, fun flying and visiting with other rocketeers from all over the country. It has been almost a month from the end of NARAM-30 until the time I wrote this article. I wanted to wait until now to give me some time to "settle back" and look at NARAM-30 as objective as possible. It has been 5 years since I attended a NARAM and I was really looking forward to it. Because of a wedding I attended the Saturday before, we did not arrive in Huntsville until late in the afternoon on Sunday just as people were returning from the demo launch. About the time we arrived, Will Safford and Etienne LaVallee from ASTRE showed up. Will immediately informed me that there was no FAA waver for the meet meaning those who had brought down models weighing more than a pound to fly for fun would not be able to. This was a disappointment for me as I had brought along my LOC Heavy Duty Beauty and another large model to fly. Not only that but those two models, both 4" diameter 5'+ birds had taken up a large amount of room in the tightly packed car.

At the contestants meeting that night it was learned that the waiver had been applied for and had been turned down. Otherwise things were shaping up for this to be a good NARAM. Matt Steele, the Contest Director reported that this would be the largest NARAM in many years with over 170 NAR members present and over 100 competing! Matt recommended that the contestants fly early each day and avoid flying in the heat of the afternoon in the Alabama sun.

Monday was the day for parachute and streamer duration events. The weather was good with little wind and some good thermal activity later on in the morning. The best finish in PD was by two teams, Lee Purcell and Crunch Birds. Both teams maxed all three flights in 1/2A Int. PD but neither had any models left for a flyoff round so they tied for first. Mathias Sias also had 3 maxes in A division for first place. In B streamer, the best flight of the day was by the East meets West team with an 8 minute flight that was returned! There were no great surprises in these events but the days flying did give an indication of how the contest would be run. The range operations were in fact very good. Check in lines were not too long considering the number of contestants and moved along fairly well. Once at the pad, only occasionally did a contestant have to wait to get the model flown as there were several sets of timers available.

Monday night was the Association barbecue and Annual Meeting. After the Trustee elections and President Miller's "state of the NAR" address and a few other miscellaneous items, the evening centered in on one main topic. That was the new Pink Book. The membership was asked to limit its discussion on the process of how the Pink Book revision worked or should work, as the technical aspects and rule changes in the new Pink Book were to be discussed on Wednesday night. This was not the case however as many of the members present voiced criticism with both the process of how the new Pink Book came about and many of the rule changes. After extensive amounts of discussion, the membership passed a motion that the 88-89 contest year be flown under the "old" rules until the revision committee can "fix"

the problems with the new Pink Book. Of course this action served as merely a recommendation to the Trustees as under the NAR bylaws the Trustees as the membership's elected representatives make all decisions. This action however gave a clear signal to the trusties as to how the general membership or at least the competition community felt about the new rules. (see "New Pink Book Fixes" article elsewhere in this issue.

Tuesday was the day for B Eggloft Duration and A Helicopter Duration. Weather conditions were again ideal with many good flights. B Eggloft has always been a fun event to fly. The slow takeoffs, low altitudes and large parachutes along with getting that egg back unbroken make it lots of fun to fly and to watch. Times were good and more than one egglofter thermaled away. As in virtually all durations events flown at NARAM, new records were set in most (if not all) age divisions. Best time of the meet: Sid Maxwell's 308 second effort. A Helicopter saw some great times also, the best one being the Randy & Robyn teams 8 minute flight!

Wednesday was tracking day and the event everyone was waiting for, F altitude. Despite what many had thought going in, these F powered rockets could indeed be tracked. Thus the winning strategy for this event was the same as in other altitude events, build a light weight, streamlined, minimum diameter model,fly it out of a tower, and use plenty of tracking powder. As it turned out, the slow burning F10 & F20 birds flew slow enough and left enough smoke trail to follow them all the way through burnout. F41 and F80 powered models were more difficult to track. The flying was indeed impressive with the top four finishers in C and teams division topping 3/4 of a mile. Four competitors had flights over a mile! The best flight was an incredible 2838 meter flight by Trip Barber. Predicted Altitude was also flown with nothing exciting to report.

Shortly after lunch, the Huntsville Police arrived at the range and informed us that all flying was to cease as the local FAA office had shut us down. Contest Director Matt Steele, NAR president Pat Miller and others attempted to explain to the FAA officials that every thing we were doing was in strict compliance with the FAA's own rules, specifically part 101, to no avail. It took a call to FAA headquarters in Washington, DC to get the range reopened several hours later. Nevertheless, the local FAA officials were to be seen in their white shirts and ties walking around the range the remainder of the week watching the proceedings.

Thursday was glider day with both D Int. B/G and B R/G being flown. R/G was probably the least impressive event of the contest as the times overall were nothing to write home about. B/G was another story however with George Gassoway of the Zunofark teas turning in three maxes with his R/C model. George made it look easy. Wayne Hendricks also maxed three times using flexies. The wind had picked up a little bit making the glider events more challenging to fly.

Thursday night was the time for the R&D presentations. Turnout for R&D at NARAM was good with 18 total entries, 12 in C division. First place went to the Zunofark team who have developed a rocket that always flies into the sun. Employing on board electronics including servo controlled fins and photocells. The control system compares input signals from two photocells mounted on opposite sides of the rocket. The system

adjusts the angle of forward mounted fins to cause the rocket's direction to change until the signals from the two photocells is the same. On sunny days the rocket flies directly toward the sun and on overcast days, the system causes the model to fly straight up. The presentation included a video tape of several flights including cineroc movies from on board the model.

Friday was the day for Spot Landing and Sport Scale. In C division, Giant Sport Scale was flown meaning the models had to be at least 36" long or greater than 3.75" in diameter. There were several entries in this event and a wide variety of models were flown including a few Saturn Vs, a Space Shuttle, an Honest John, a Trailblazer, a Sandhawk, and the winning entry, Lee/Purcell team's Little Joe I.

The awards banquet Friday night was held at the Space Center, an appropriate setting. The banquet, like the contest all week was well run and with the many door prizes given out, even those who did not place (or even fly) stood a good chance at going home with something.

Other items worth mentioning:

1. The Range Store - The range store was very well stocked and proved a popular place in the evenings and gave many a chance to pick up some composite motors, high power kits, and those NARTS items that you always wanted but never got around to ordering. At the end of the week the range store also featured T-shirts that read NAR 2, FAA 0 indicating the fact that for the past two years the FAA has shut the NARAM range down only to have it later reopened.
2. The Alabama Space Center - The Space Center was another part of this years NARAM. A ten dollar pass allowed NAR members access to the Space Center thee entire week of NARAM. Highlights of the Space Center include the many rockets on display in the rocket garden, hands on exhibits and the Omnimax theater showing the film "The Dream is Alive".
3. Miller Rocs - Friday at the end of the flying 6 "Miller" rockets were flown. Called the "Millers of the World" and built by Randy Redd these oddrocs were flying models of NAR president Pat Miller in different nationalities including "Crazy Horse Miller", "Gandhi Miller" and others.
4. The CHAD Saturn V - Also on Friday Ric Gaff flew a "plastic model conversion" of a Saturn V. The model was actually an inflatable version of the Saturn V sold in the gift shop of the Alabama Space Center, standing over 3' tall and 6" diameter when fully inflated, it is a cheap alternative to that "other" Saturn V and turned in a safe flight with balloon recovery.

All in all a good NARAM (the best NARAM I have attended) and HARA and Matt deserve credit for doing a super job running a smooth meet. On the following pages are the results of the meet.

NARAM-31

August 7-11. 1989

Manassas National Battlefield Park, Manassas, VA
Site of NARAM-16
25 miles from Washington D.C.

Hosted by:	NOVAAR	
Contest Director:	Trip Barber	
Motel:	Ramada Inn, Manassas, VA (2 miles from field)	
Meals:	Awards Banquet only	
Events:	B Boost Glide	C Streamer Duration
	A Rocket Glide	1/2 A Parachute Duration
	B Altitude	C Payload
	D Eggloft Altitude	B Helicopter Duration
	Plastic Model	Radio-Control Rocket Glide
	C Scale Altitude	R & D
Special Events:	Bus Tour to National Air & Space Museum	
	Reunion/Reminiscences for Old-Time NAR Members	

NARAM-30 Results

1/2 A International Parachute Duration

	Name	Seconds
A Division		
1st	Mathias Sias	360
2nd	Phillip Travis	347
3d	John Marsh IV	334
4th	Donald C. Linder	312
B Division		
1st	Marty Williams	306
2nd	Tim Barklage	292
3d	Kathy Kmetz	205
4th	Upton B. Catherine	198
C Division		
1st	John A. Marsh III	358
2nd	Dan Domina	348
3d	Barry Saterthwaite	347
4th	John Kmetz Sr.	329
Teams		
1st	Crunch Birds/Lee Purcell	360
2nd	East Meets West	354
3d	Jankov/Pavlov	255
4th	Randy & Robyn	253

B Streamer Duration

	Name	Seconds
A Division		
1st	John Kmetz Jr.	273
2nd	Andy Linder	245
3d	William Moser	240
4th	Daniel Travis	200
B Division		
1st	Chris Martin	236
2nd	Lee Olyniec	219
3d	Kathy Kmetz	216
4th	Tim Barklage	124
C Division		
1st	Terry White	349
2nd	Wayne Hendricks	290
3d	Dan Domina	277
4th	Kay Goforth	267
Teams		
1st	East Meets West	752
2nd	Crunch Birds	217
3d	Higher Straights	175
4th	Randy & Robyn	174

B Eggloft Duration

	Name	Seconds
A Division		
1st	Andy Linder	180
2nd	Jean-Etienne LaVallee	98
3d	Donald C. Linder	56
4th	Phillip Travis	50
B Division		
1st	Wesley Thomas	63
2nd	Kathy Kmetz	55
3d	Upton B. Catherine	37
4th	Lee Olyniec	34
C Division		
1st	Sid Maxwell	308
2nd	Donald L. Linder	194
3d	Trip Barber	159
4th	Dan Domina	117
Teams		
1st	Dual Egglofters	171
2nd	Crunch Birds	147
3d	Sweet & Sour	82
4th	Jankov/Pavlov	73

A Helicopter Duration

	Name	Seconds
A Division		
1st	Mathias Sias	187
2nd	Andy Linder	118
3d	Derek Nolin	114
4th	John Kmetz Jr.	108
B Division		
1st	Marty Williams	314
2nd	Kathy Kmetz	191
3d	Tim Barklage	116
4th	Chris Martin	71
C Division		
1st	Carl Gustin	486
2nd	Dan Domina	237
3d	Robert B. Hart Jr.	147
4th	John Kmetz Sr.	137
Teams		
1st	Randy & Robyn	567
2nd	Crunch Birds	313
3d	East Meets West	308
4th	Lee/Purcell	162

D Altitude

	Name	Altitude (meters)
A Division		
1st	Phillip Travis	824
2nd	John Marsh IV	808
3d	Daniel Travis	738
4th	Maria Barber	639

F Altitude

	Name	Altitude (meters)
B Division		
1st	Kathy Kmetz	1340
2nd	Marty Williams	1274
3d	Tim Barklage	980
4th	Upton B. Catherine	901
C Division		
1st	Trip Barber	2838
2nd	Dan Domina	1574
3d	Larry Shenosky	1365
4th	Dan Kafun	1306
Teams		
1st	East Meets West	1891
2nd	Crunch Birds	1805
3d	Lee-Purcell	1666
4th	Mutt & Jeff	1304

Predicted Altitude

	Name	%
A Division		
1st	William Moser	0.6%
2nd	Chris Weaver	1.1%
3d	Derek Nolin	1.4%
4th	Lisa Barber	2.0%
B Division		
1st	Anne Burgess	1.5%
2nd	David Marcinski	6.0%
3d	Jason Haynes	8.8%
4th	Lee Olyniec	12.0%
C Division		
1st	Jon Rains	0.9%
2nd	Rob Freeman	1.0%
3d	Trip Barber	1.8%
4th	Fred Gravagna	1.9%
Teams		
1st	Dual Egglofters	0.0%
2nd	East Meets West	0.7%
3d	Iron Banana	3.1%
4th	Jankov/Pavlov	4.1%

B Rocket Glide

	Name	Seconds
A Division		
1st	Jean-Etienne LaVallee	219
2nd	John Kmetz Jr.	203
3d	Mathias Sias	168
4th	Andy Linder	135
B Division		
1st	Marty Williams	299
2nd	Lee Olyniec	134
3d	Kathy Kmetz	68
4th	Tim Barklage	57
C Division		
1st	John Kmetz Sr.	345
2nd	Dan Domina	198
3d	Trip Barber	149
4th	Donald L. Linder	144
Teams		
1st	Crunch Birds	208
2nd	Iron Banana	173
3d	Zunofark	163
4th	Dual Egglofters	125

D International Boost Glide

	Name	Seconds
A Division		
1st	Mathias Sias	595
2nd	Andy Linder	361
3d	Lisa Barber	339
4th	Joel Burgess	270
B Division		
1st	Kathy Kmetz	422
2nd	Marty Williams	370
3d	Tim Barklage	84
C Division		
1st	Wayne Hendricks	810
2nd	Phil Barnes	747
3d	Jimmy Williams	738
4th	Dan Domina	674
Teams		
1st	Zunofark	810
2nd	Lee/Purcell	688
3d	Jankov/Pavlov	555
4th	Randy & Robyn	506

Research and Development

A Division		
1st	William Moser	
2nd	Donald C. Linder	
B Division		
1st	Tim Barklage	
2nd	Marty Williams	
C Division/ Teams		
1st	Zunofark	
2nd	Donald L. Linder	
3d	Chuck Hall	
4th	Martin Catt	

Sport Scale

	Name	static/flight	
A Division			
1st	Jean-Etienne LaVallee	710/134	844
2nd	Mathias Sias	655/147	802
3d	Andy Linder	641/148	789
4th	Chris Weaver	626/156	782
B Division			
1st	Marty Williams	698/148	846
2nd	Jason Haynes	614/173	787
3d	Tim Barklage	584/114	698
4th	Kathy Kmetz	573/120	693

Giant Sport Scale

C Division/Teams			
1st	Lee/Purcell	710/160	870
2nd	Crunch Birds	682/161	843
3d	Zunofark	643/163	806
4th	Jankov/Pavlov	665/100	765

Parachute Spot Landing

	Name	Distance
A Division		
1st	Samantha Moser	15 ft 6"
2nd	William Moser	27 ft 7"
3d	John Marsh IV	36 ft 2"
4th	Donald C. Linder	40 ft 5"
B Division		
1st	Jason Haynes	64 ft 9"
2nd	Kathy Kmetz/	+100
	David Marcinski/	+100
	Chris Martin	+100
C Division		
1st	Ken Brown	8 ft 2"
2nd	Tina Barber	22 ft 8"
3d	Donald L. Linder	23 ft 2"
4th	Ed LaCroix	26 ft 6"
Teams		
1st	Lee/Purcell	37 ft 5"
2nd	Crunch Birds	53 ft 0"
3d	Dual Egglofters	53 ft 10"
4th	Higher Straights	63 ft 3"

Meet Champions

	Name	Section	Points
A Division			
Champion	Mathias Sias	HARA	3,629
Reserve	Andy Linder	NIRA	2,764
B Division			
Champion	Marty Williams	HARA	5,201
Reserve	Kathy Kmetz	HARA	3.623
C Division/Teams			
Champion	Crunch Birds	ASTRE	3,808
Reserve	Zunofark	HARA	3,336

1988 National Champions

	Name	Section	Points
A Division			
Champion	Jean-EtienneLaVallee	ASTRE	7,908
Reserve	Donald C. Linder	NIRA	7,706
B Division			
Champion	Marty Williams	HARA	10,685
Reserve	Tim Barklage		9,263
C Division			
Champion	Dan Domina	NOVAAR	7,534
Reserve	Donald L. Linder	NIRA	6,775
Teams			
Champion	Crunch Birds	ASTRE	9,494
Reserve	Zunofark	HARA	8,206
Section			
Champion	HARA	63,790 points	
Reserve	NIRA	36,465	

Special Awards

Estes Space Camp Contest Winner	Mary Beth Lemon
Gregorek Memorial Award	Chris Weaver
Best Midwest Qualified Flight Award	Mark Johnson
NARAM-30 Appreciation Award	Jimmy Williams
Nartrek Achiever of the Year	Bob Hegwood
LAC Newsletter Trophy	Ascent from Midgar
President's award	Bob Kaplow
Galloway Award	Art Rose

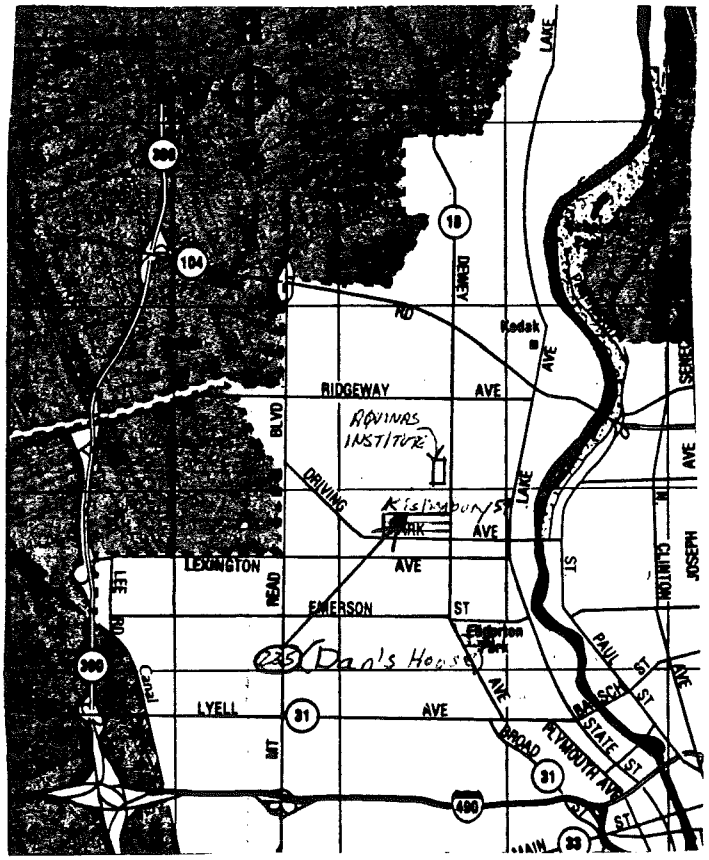
Upcoming Events

Oct. 15, 1:00 PM - Buffalo Area Sport Launch. Old NIKE Base. The last organized launch for the year in Western New York. To get to the launch site (from Rochester or east) take the Thruway to the Hamburg exit (exit 57). Go right at exit on Camp Rd. Continue to Rt. 20. Turn left on Rt. 20 and go a few miles to Lakeview Rd. Go left onto Lakeview Rd. Go past the small airport, past the first NIKE base, continue past the model airplane area. The launch site is the next area past the model airplane area.
Raindate - Oct. 23, 2:00 PM.
Contact:
Dan Wolf 458-3848 (Rochester area)
Greg Young 537-2830 (Buffalo area)

Oct. 21, 7:00 PM - Monthly MARS Meeting. Dan Wolf's house. See map at right.

In the next Issue

Glider plan, October sport launch coverage and more!



THE UPSTATE ROCKETEER
c/o Dan Wolf
235 Kislingbury St.
Rochester, NY 14613

THE UPSTATE ROCKETEER