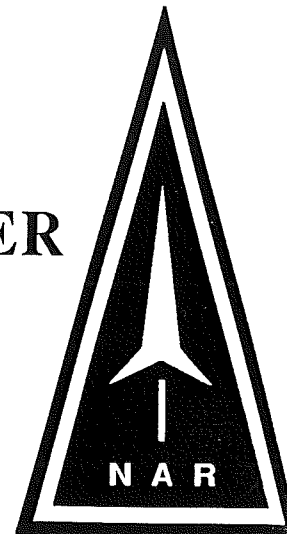


THE UPSTATE ROCKETEER

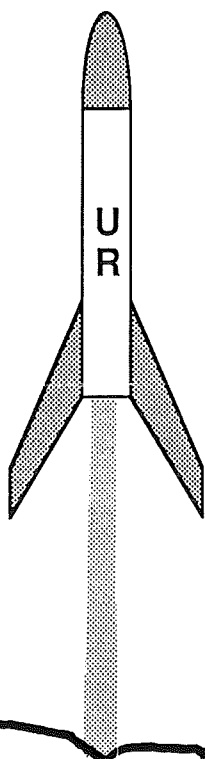
The Official Newsletter of MARS
NAR Section #136



Volume 4, No. 2

Published by the Monroe Astronautical Rocket Society

May, 1991



ROCHESTER, NY

INSIDE THIS ISSUE:
ST. PATRICK'S DAY SPORT LAUNCH,
ALTITUDE MODEL PLANS,
AND MORE !

The Upstate Rocketeer

Volume 4, Number 2
May, 1991

The *Upstate Rocketeer* is published six times a year by the Monroe Astronautical Rocket Society as a service to its members and NAR members in Western and Central New York. Subscriptions are \$3.00/year. The *Upstate Rocketeer* is edited by Dan Wolf. Send all comments, complaints, letters, plans, subscriptions, etc. to him at the following address:

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

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MARS Membership - May 1991

Dan Wolf - President	
Jeff Ryan - Vice President	
Ferenc Roka - Secretary/Treasurer	
Roy Metz - Senior Advisor	
Mike O'Brien	Mark Doty
Jonathan Doyle	Jay King
Merrell Lane	Jessica Ryan
William Springer	C.J. Urlaub
Mary Wolf	Sarah Wolf

Blowin' In the Wind (Editorial)

Greetings Upstate Rocketeers. This issue of *UR* is being distributed to hobby stores in the Rochester area for the first time. The next few paragraphs are for those of you who may have picked up our newsletter there. Regular subscribers can skip this section if you like. If you are one of those who picked up the newsletter at one of the local shops, we say welcome. MARS is the National Association of Rocketry's (NAR) local club(section) in the Rochester area. As NAR members and a chartered NAR section we receive many benefits. Among them are participation in local, area, and regional contests as well as hosting contests, receiving the bimonthly *American Spacemodeling* magazine, the ability to purchase rocketry related items and publications from NARTS (NAR Technical Services) such as the MIT Technical Journal, NAR Technical Reviews, Scale Data Packs, competition and sport rocket plans and more. This spring and summer the club has many exciting things planned including participation in the upcoming St. John Fisher College Science Fair, hosting two NAR sanctioned open meets, and also participating in the first annual New York Spacemodeling Championship and Exhibition to be held near Albany, New York on Memorial Day weekend. Also along the way will be regular club meetings and sport launches (a sport launch is when the club gets together for an afternoon of fun flying together). The club spans a wide range of ages as well as a wide variety of interests. Interests among our club members include NAR competition and contests, rockets with electronic and camera payloads, and high power rocketry (beyond the Estes D engine). With motors available from companies such as Aerotech and Vulcan, club members routinely fly E, F, and G powered rockets at local launches and several members have traveled to high power launches and flown rockets with H engines and above. Not all of our flying is high power or contests. Most of all, club members just like having fun flying rockets, no matter what the size or power. As a grand finale this summer, many of our club members are planning on attending the NAR's National Sport Launch and Championship Meet, being held this year near Chicag1x IL in August.

Anyway, if you are reading this newsletter for the first time, we encourage you to consider becoming a MARS and a NAR member. This will

allow you to further enjoy the hobby. It's a lot more fun to fly together with a group. You will be able to witness many more rocket flights without the expense and you will also have a receptive audience for your own flights. Club members can also provide support to you by relating their own experiences with rocketry projects you may be working on, offering advice and ideas to help you along. A calendar of upcoming events is in the back of this newsletter. We encourage you to come out and experience the great hobby of model rocketry and high power rocketry like you have never experienced before.

OK, the rest of the you can start reading again. This issue is made up of several reports of upcoming activities. May and June will be busy months for MARS. Many activities are scheduled. Read the article "MARS Club News" to see how you can help out the club in these activities and probably have lots of fun at the same time.

I have an update on the plan we had to work with area schools on their "model rocketry" programs. So far, we have received absolutely no response from the two schools we have contacted. At this point, I think the best thing for us to do is to wait until the St. John Fisher Science Fair and try to link up with some of the schools and teachers that we talk to there.

Until Next Time,

Dan
Dan

Famous Rocketry Quotes From The Past

"The launch failed when the pyrotechnic device lit but was expelled from the engine before the propellant could ignite." Did this happen after a composite engine "chuff" at a recent MARS sport launch? No, after a V-2 missile failed at launch during a post World War II demonstration by the captured Germans for British and other allied onlookers.

"All present were impressed with the noise, smoke, and flame." A successful F100 powered model rocket flight? No, it was the reaction of the same onlookers after the ignitor was replaced and the V-2 was launched! (From the book, *The Rocket Team* by Ordway and Sharp.)

MARS Tracking Practice

After postponing a sport launch/tracking session on April 7th due to 20+ mph winds, the rescheduled launch on April 14th was low on turnout but the results were positive. The Ryan and Wolf families were the only ones present for the tracking session on what was another windy day with winds in the 12 to 15 mph range. While Dan and Jeff measured the baseline, Amie, Chris, Mary, Jessica and Sarah kept themselves busy watching one of Dan's coworkers trying to unsuccessfully fly a stunt kite in the stiff breeze. The 100 meter baseline was setup south of the launch area to avoid the trackers having to look into the sun. It runs from a point near the southeast corner of the building straight east, ending just across Corporate Drive.

After setting up and zeroing the trackers, it was time to try them out. First off, Dan prepped his "Buffalo Bill", a large 4' tall model with a D12 motor. In spite of some communications problems and Dan knocking his tracker slightly out of alignment at launch, the track closed with an amazingly low 0.65% error (anything under 10% is a closed track). Encouraged by this, Jeff and Dan both prepped A Payload models to try out tracking some real competition birds. Jeff's model was flown first and the track again closed, this time with a 0.7% error. Dan's flight also closed with an error of only 0.8%. To close out the flying on this windy and cold afternoon, Dan prepped a B Egglofter but made the mistake of using a 2 second delay engine. The model was still moving upward when the ejection charge fired causing the tracking smoke to be a smoke trail instead of a cloud. Even so, the flight closed with a 6.8% error.

With the cold winds still blowing, we decided to call it a day, encouraged by the results of the small sampling of flights. Thanks go to Amie for serving as LCO while Jeff and Dan manned the trackers. Also, thanks to Mary for doing a great job as the recovery crew. All were rewarded by the traditional post launch pizza at Pizza Hut. We will be in great shape if the trackers perform as well at the two upcoming contests.

MARS FIRST SPORT LAUNCH OF 1991 IS A BIG HIT

The luck of the Irish was with us on Sunday March 17th as St. Patrick gave us a perfect day for flying rockets. The temperature was in the high 50s and low 60s throughout the afternoon as several MARS and SRBs members turned out for the first launch of the season. All told, 7 MARS members and 5 SRBs members turned out and proceeded to launch anything and everything to take advantage of the rare Rochester good weather.

Mary Wolf flew her "flying elf" that was featured in the December 89 issue of *UR*. The flight was a good one except the chute did not fully deploy. Not to be out done, the DeMar girls flew a BT-20 sized rocket that employed a Fisher-Price "people" as its nose cone. It also turned in a nice flight but bounced off a car upon landing. Another DeMar girls creation, the "Cone-Head" featured a green styrafoam cone on top of a 3" white styrafoam head nose cone. Although John was concerned about the stability of the Cone-Head, he flew (the rocket, not John) straight up with his swept back fins. After the Cone-Head, Mary flew her Estes Leprechaun kit in "Leprechaun" Spot Landing. This was a standard Spot Landing event except that the entry had to be either an Estes Leprechaun, Gnome, or Sprite kit or any rocket painted green. Mary's flight turned out to be the winning flight of the day.

The A divisioners weren't the only ones flying rockets of course. Ferenc Roka flew his green/black polka dotted goony bird clone with an A10-3T. Dave Pringle flew a Big Bertha for a nice flight on a C6-5 and it really stood out against the blue sky on descent with its fluorescent green chute. Dave also had a nice flight of an Estes Phoenix with a D12-7 that landed just short of the Videk building. John DeMar flew an Estes Ranger that looked like it was straight out of the catalog with a D11-9 for a perfect flight. Jeff Ryan showed that he is ready for the upcoming contests by taking first in the unofficial "practice" event of the launch, A Streamer Duration. Jeff's flight of 150 seconds was easily over the multi-round max for the event of 120. Roy Metz, a fellow we haven't seen too much of in recent months because of his crazy work schedule, managed to make it out to the launch and fly a few rockets including his Beer Can rocket for another successful flight.

After an hour or so, the big stuff started to come out. Dan Wolf started it off by flying his

"Boilermaker Special" on an FSI F100 for a perfect flight. Then Dave Pringle flew an NCR kit (the name of which I can never remember) with 3 D12s with Dave "the younger" making a nice catch as it descended on the parking lot. Jeff Ryan delighted everyone with a flight of his Aerotech Initiator on an F10 for the first composite launch of the day. The long burning engine was a real crowd pleaser and the descent on the X-form chute was pretty to watch. Ferenc Roka brought out his Estes Scud B kit complete with Hungarian markings, a veteran of many launches. It turned in a nice flight on a B8-3 and would have been in the running for spot landing had it been painted green. Dave Pringle next flew his Quantum 1 that had been prepped since last fall's Danville launch with an Aerotech F25 motor! A new member of SRBs (sorry I don't remember your name) also came over for the launch and had a successful flight of a LOC Lil Nuke with an E15 motor.

John DeMar's large scale model of the Iraqi SCUD missile was the hit of the launch. This model was over 3 foot tall. John said he played video tapes he had made from the Gulf War coverage over and over again until he could get all the markings down. The model even had scale fins, thanks to a generous amount of nose weight. John was so proud of it he flew it twice! The first time he used an Aerotech E30 while the second time he flew it with a G42. The "G" flight was especially impressive as it really put the SCUD up there on a bright flame and smoke trail. Incredibly it landed only a few away in one of the small 5 foot trees behind the launch area. This successful "G" powered flight allowed John to have his affidavit signed qualifying him to purchase H motors under the NAR's high power confirmation program. Dan also took advantage of the weather (and the stockpile of G42s he picked up at Danville last fall) and flew his NCR Thunderbolt on a G42. This flight landed the furthest away from the launch area of any flown all day as it touched down just beyond the intersection of 332 and Collet Road. Jeff Ryan flew his LOC Aura with an F41 for the last composite flight of the day.

Overall it was an outstanding day of flying, the kind we only see about once or twice a year. The only lost model was due to a separation on an A SD bird. See the Photo Pages for pictures of this great launch.

MARS Club News
or
How to Help Out Your
Model Rocket Club

The next six weeks will be a busy time for MARS. We need everyone's help to make the planned activities a success. Below is a summary of the many upcoming events and how you can get involved.

Science Exploration Days

MARS is planning to participate in this year's Science Exploration Days Program held at St. John Fisher College on May 22nd and 23rd. This program is sponsored by CWS-STANYS (Central Western Section - Science Teachers of New York State). It is a 2 day program where Jr. and Sr. High School students from area schools are invited to attend. The program is designed to expose these students to leaders in Rochester science, industry, and technology. Organizations such as the American Society of Mechanical Engineers, companies like Harris RF and Xerox, area colleges and universities and other groups will participate. There is a series of lectures and an exhibit area. MARS will have an exhibit there along with the many other organizations. At this point, we need volunteers to help man the exhibit during the two days. The exhibits will be open for viewing from 9:00 AM to 1:45 PM each day for Jr. and Sr. High students and also on the evening of May 22nd to the public from 7 PM to 9 PM. If you can help work at the exhibit during any of these times, please contact Dan Wolf by May 17th. We will do final planning of the exhibit at the regular club meeting that night.

NYSPACE

Elsewhere in this issue you will note the one page announcement for NYSACE. This is the first year for this event, essentially a NAR sanctioned contest with a special club scoring system to determine the championship club of New York state. This year the contest will be hosted by ASTRE and flown on their field near Amsterdam, NY. The meet is scheduled for May 25th & 26th. Per the rules for this contest, we need 3 NAR members from the club to compete in each event. At the present time, we have 2 senior NAR members who are planning on attending. We still need at least one more. If you have an interest in being part of the MARS team, please contact Dan Wolf as soon as possible. There are already two cars planning on making the trip if

you need a ride.

MARS Sponsored Contests

MARS will be hosting two contests this spring, UPSTATE III on May 4-5 and AUR on June 8-9. Both contests will be held at our club field in Farmington, NY at the corner of Rt. 332 and Collet Rd. Hours for the meets will be 10:00 AM to 5:00 PM on Saturday and 12:00 noon to 5:00 PM on Sunday. For a list of the events for these meets see the EVENTS CALENDAR in the back of this newsletter. The altitude events (A Payload and B Eggloft at both meets) are tentatively scheduled to be flown from 2:00 PM to 3:00 PM each day. Otherwise flying will be open (anything can be flown at any time on any day). Note however that bad weather may force the schedule to be changed (i.e. contest flown in a single day).

Even if you have no interest in flying in the contest we urge you to come out and fly for fun. We will accommodate all sport flights, time and weather permitting. We can also use help with range volunteers to serve as RSO, LCO, timers, trackers, etc. This is especially important during the hours when altitude flying will be done. Come on out, support your club and have some fun in the process.

Next Club Meeting

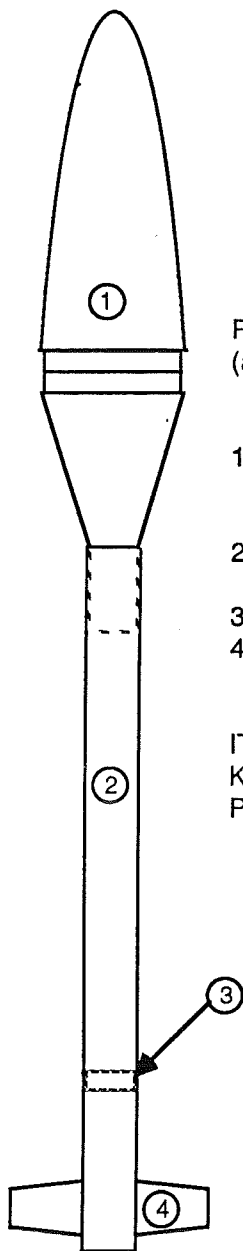
The next MARS club meeting will be held on Friday May 17th at 7:30 PM. This is a fairly important meeting as we will discuss and plan our activities for summer and early fall. If you want to have some input into the types of things you want the club to do in the next few months, don't miss this meeting. Also at that meeting we will lay out our exhibit for the Science Exploration Days as described earlier. The meeting will be held at Dan Wolf's house.

Syracuse Contests

Some MARS members are also planning on attending two contests hosted by the Syracuse club this spring, partly because of the great support they've shown us and partly because it will be a lot of fun (especially on their nice flying field). Check out the EVENTS CALENDAR for dates and events. If you need a ride, contact Dan Wolf.

ALTITUDE PLANS

B EGGLOFT ALTITUDE



PARTS LIST

(all parts Apogee unless otherwise specified)

1. EGG CAPSULE - ENC18 or CMR capsule or Easter Egg capsule
2. BODY TUBE - 9" of PT18 or Estes BT-20
3. ENGINE BLOCK - EB-18
4. FINS - Make from GBS15 fin stock.

ITEMS NOT SHOWN

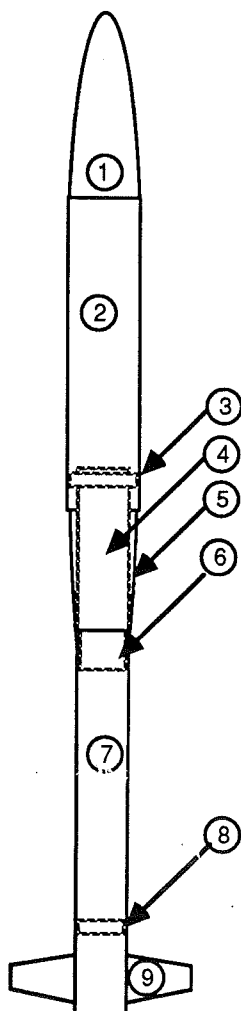
Kevlar Shock Cord - KSL-100
Parachute

FIN TEMPLATE
(full size)
3 required

CONSTRUCTION NOTES

1. Attach Kevlar shock cord to engine block by looping around and knotting. Bend block at point where cord is so that it may be inserted into body tube.
2. Launch from tower or use 3/16" rod and pop lug.
3. Examine cord after each flight for burning.

A PAYLOAD



PARTS LIST

(all parts from Apogee Components unless otherwise specified)

1. NOSE CONE, WNC-19
2. BODY TUBE - 3.4" length of TT-19
3. CENTERING RING - CR1318
4. BODY TUBE - 1.575 length of Estes BT-5
5. TRANSITION - AT-1318
6. SHOULDER - Use end piece from a PNC13
7. BODY TUBE - 4.5" of PT-13 or Estes BT-5
8. ENGINE BLOCK - EB-13
9. FIN - Make from GBS15 or GBS10 fin stock

ITEMS NOT SHOWN

Kevlar Shock Cord - KSL-100
Parachute - 12"

FIN TEMPLATE
(full size)
3 required

CONSTRUCTION NOTES:

1. The centering ring must be built up with a cardboard shim or masking tape to fit properly into TT-19.
2. Attach Kevlar shock cord to engine block by looping around and knotting. Bend block at point where cord is so that it may be inserted into body tube.
3. Launch from tower and/or piston.
4. Once payload is inserted into rocket, friction fit nose cone in place with masking tape.
5. Examine cord after each flight for burning.

As the ModRoc World Turns...
(news and rumors heard 'round the hobby)

Manufacturers News...Long time MARS members may remember the name Randy Gilbert. Randy was an RIT student who attended some of the area launches back in the mid seventies. Randy now lives in Michigan, and is President of **Original Rockets Incorporated**, a new company that offers a line of "Advanced Flying Model Rocket" kits. Prototypes for the ORI line have been seen at the last few Danville launches. Now ORI offers the first of its kits, "Das Blue Max". This kit can be described as a scaled up version of the discontinued Estes "Red Max". Standing 39.5 inches tall and 4" in diameter, the kit has several unique features not found in most kits such a special snap swivel rated at 275 pounds, .065 inch braided Kevlar anchor cord, an ejection baffle, a nylon chute with printed roll pattern, and two 11 x 17 inch mylar decal sheets. Retail price of this model is \$69.95. "Das Blue Max" was to be introduced at the recent Danville launch and the company is said to be preparing a catalog of its products for release in April. For more information contact: Original Rockets, Incorporated, 1424 Court Street, Port Huron, MI 48060. Catalogs are \$3.00. Regular readers of this column may recall the report of a company called **Space Models International**, a reincarnation of the old Canaroc, based in Canada that was present at the Chicago Hobby Show last November. The company now is selling its products through hobby stores. Ferenc Roka reports spotting an SMI starter kit in a Toronto hobby store but he didn't see any of the unique engine line. The starter kit includes a launch pad, controller, model, wadding, 3 engines, etc. The US list price is said to be \$34.95 but Ferenc reports a much higher price at the store where he spotted it in Canada (45+ Canadian). The engines are to be composite propellant with some of the line offering interesting thrust curves like the A2, B18, and the C9. The complete engine line to date includes the A2-2, A2-4, A8-3, A8-5, B4-2, B4-4, B4-6, B6-2, B6-4, B18-3, B18-5, B18-7, C9-3, C9-5, C9-7. The D engines will not be available until the end of 91 and the company plans to offer E & F motors at a later date. SMI says it will offer a direct sale option (mail order) to areas where hobby stores do not carry them with details of this direct sale program to follow. The US address is Space Models International, Box 59464, Dallas, TX 75229-1464.

Apogee Components will not only be selling the A3-2T and A3-6T mini engines (manufactured by Estes) as reported earlier, now they also will be bringing back the 1/4A minis! They should be contest certified by the end of June. Both will sell for \$3.95 for a pack of four. Lastly, **North Coast Rocketry** has finally released the JUNO I kit.

Tripoli News...It looks like new *Tripolitan* editor Bruce Kelly has solved the magazine's production problems. Another issue was mailed in mid-April. It was handed out to members at the Danville launch. That launch by the way, went well but was hampered by bad weather. Other than the weather, reports on Compuserve indicated a much better situation than last fall in terms of procedures, range setup, equipment, etc.

NAR News...The club received a recent mailing from NAR President Pat Miller updating the insurance situation. The quotes received thus far from the insurance companies are simply too high for the NAR to consider. The price of the insurance, in the \$40000 range would likely cost members more than joining the AMA to obtain it. However Pat seemed confident that a lower cost policy can be found and he also indicated that the NAR is continuing to work hard on this matter. Also in NAR news, as part of the NAR's move into higher power, an interim high power user certification program is now in place to certify NAR members who wish to fly H, I and J motors. Basically the program involves successfully flying a rocket with a G engine to be certified to fly an H. To successfully fly an H to be certified to fly an I, and so forth. At each step of the way an affidavit must be signed by two senior NAR members saying that they witnessed the flight. The affidavit along with \$5.00 is then sent to NAR HQ. Two other notes, first you must be 18 years of age to be certified and second, if you are 18 years of age and a "confirmed" member of Tripoli, you can be "grandfathered" into certification up to the J motor level. For anyone interested, the complete set of rules, high power safety code and blank affidavits are available from Dan Wolf. The affidavits will be brought to all club launches for anyone wishing to certify for the purchase of H motors. This was already done by John DeMar at our March sport launch when John successfully flew his SCUD model with a G motor.

Come explore...

NYSPACE

The New York Spacemodeling
Annual Championship & Exhibition

Date: May 25 - 26 (Raindates - 5/27, 6/1 - 2)
Flying will be completed in 1 1/2 days, starting
at approx. 10am (weather permitting).

Location: Amsterdam, NY (see map for details)

Events:

A Payload	A Superroc Alt
A Streamer MR	Random Duration
B Boost/Glider	Sport Scale
C Helicopter	

**NYSPACE is a NAR-sanctioned Regional meet
which will also determine the New York State
NAR Section Championship.**

Contact: Jeff Vincent (518) 439-2055

And don't forget ASTRE's other regional meets:

BART vs. the Smog Monster

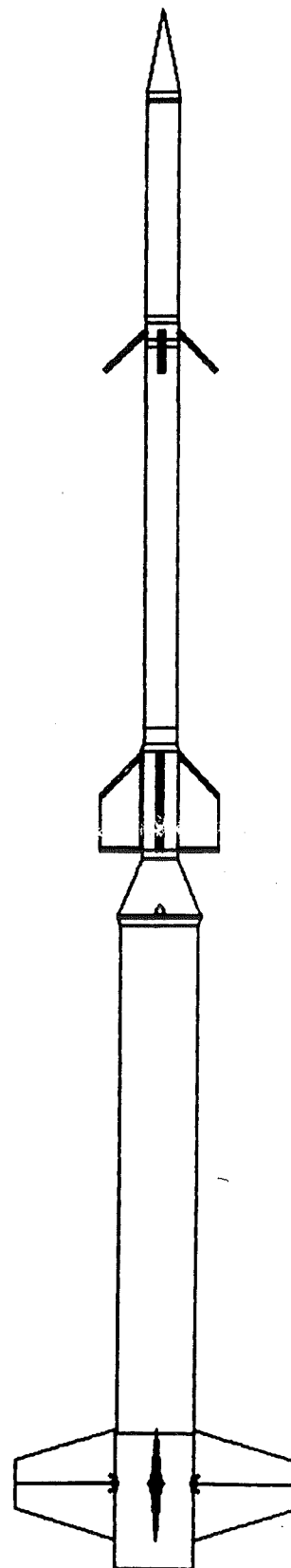
April 20-21 (27-28)

B Eggloft Alt
FAI S3A (A PD)
B Helicopter MR
E Eggloft Dur (B & C Div only)
Plastic Model Conv (B & C Div only)
B Streamer (A Div only)
B Eggloft Dur (A Div only)
Sport Scale (A Div only)

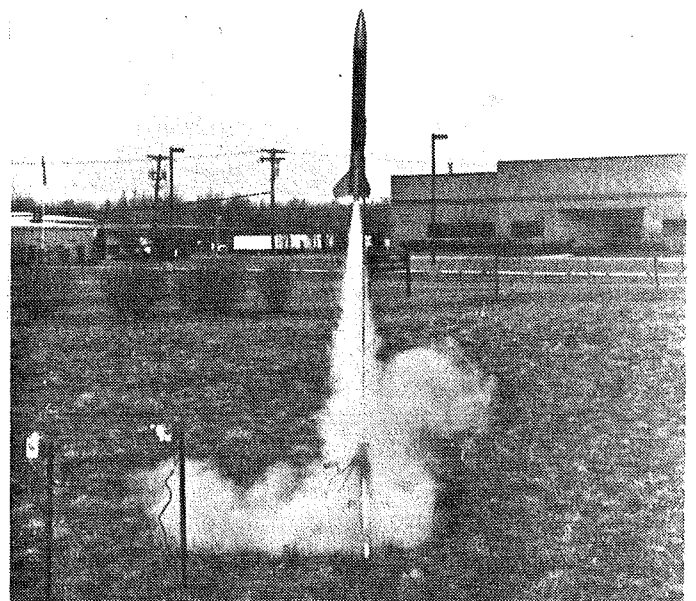
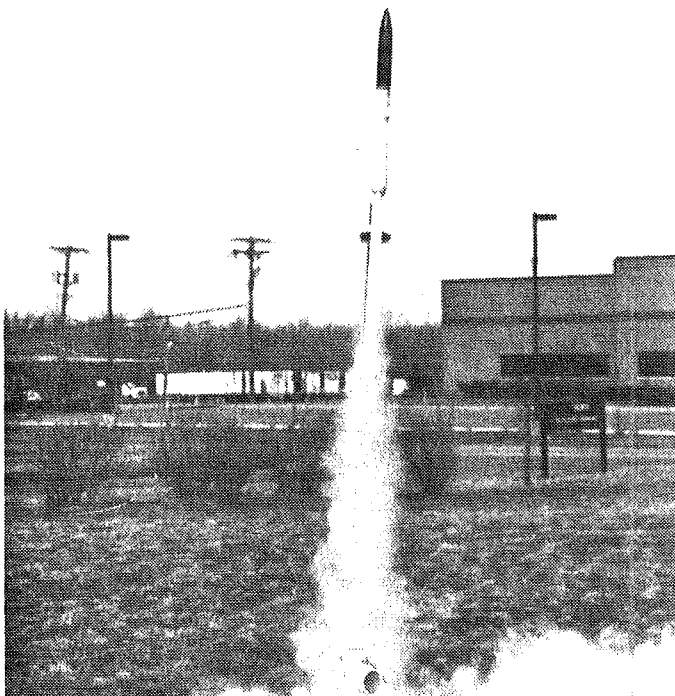
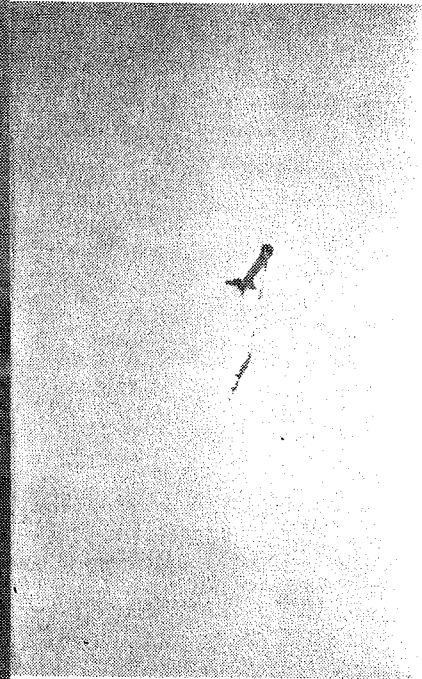
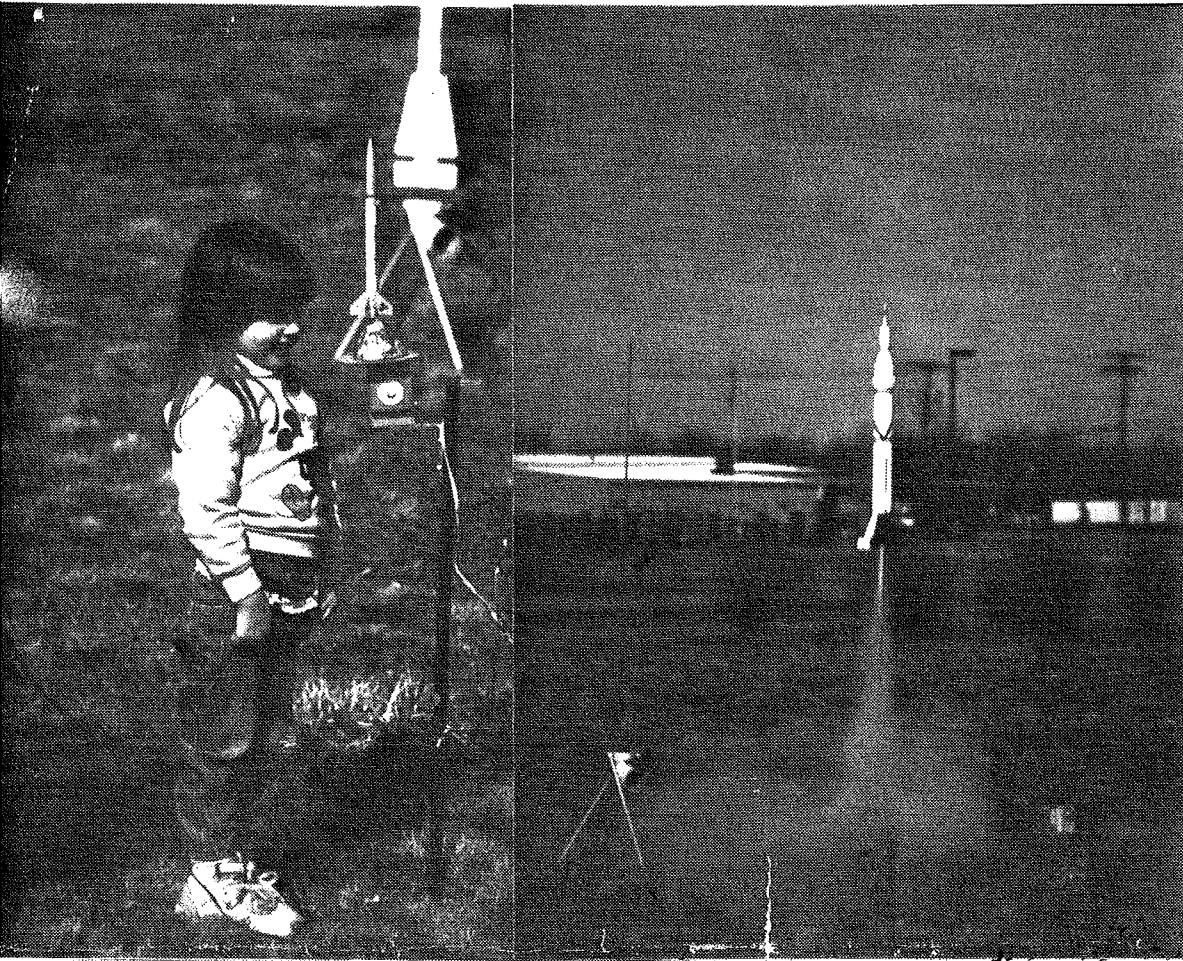
Northeast Boost/Glider Championships

May 11-12 (18-19)

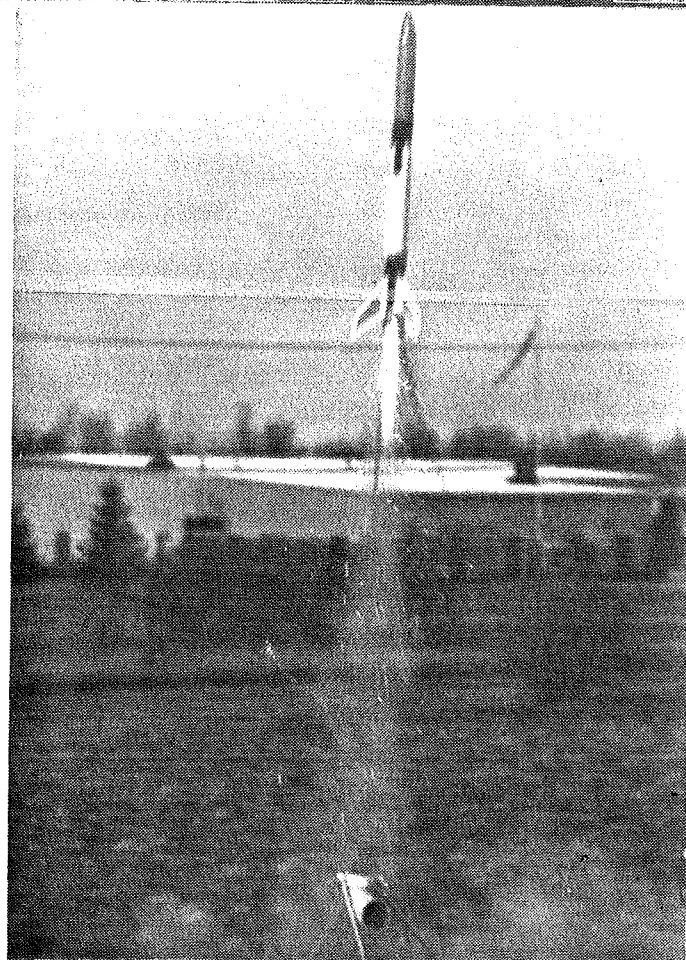
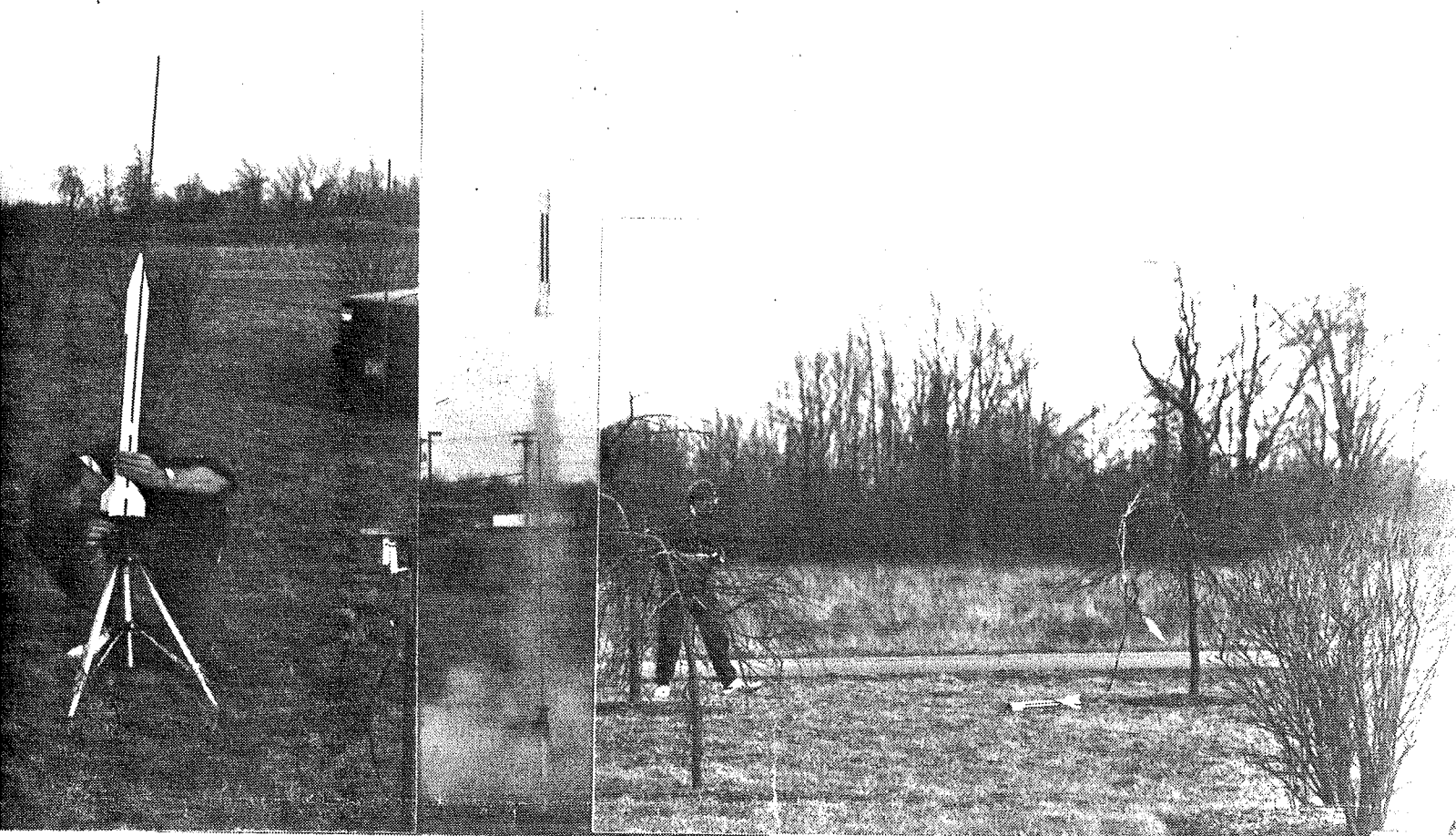
D Streamer
1/2A Flexwing MR
B Boost/Glider
D Boost/Glider
A Rocket/Glider (B & C Div only)
RC R/G (2 min) (B & C Div only)
1/2A Parachute (A Div only)
B Eggloft Dur (A Div only)
A Helicopter (A Div only)



ST. PATRICK'S DAY LAUNCH - PAGE 1



ST. PATRICK'S DAY LAUNCH - PAGE 2



PHOTOS - PREVIOUS PAGE (left to right, top to bottom)

1. Mary Wolf prepares to launch her Estes Leprechaun towards its winning flight in Leprechaun Spot Landing.
2. An Estes Jupiter-C at liftoff.
3. The Jupiter -C moments after ejection. The chute refused to come out!
4. Dave Pringle's NCR bird at liftoff under the power of 3 D12s.
5. Dan Wolf's Boilermaker Special at liftoff riding the fire and smoke of an FSI F100.

PHOTOS - THIS PAGE (left to right, top to bottom)

1. John DeMar prepares his scratchbuilt Iraqi SCUD missile for launch.
2. The SCUD at liftoff with an Aerotech G42.
3. John retrieves the SCUD from its mission target, the enemy of all rocketeers, the rocket eating tree!
4. Dave Pringle's NCR Quantum lifts off under the unmistakable power of an Aerotech F25 White Lightning motor.

JOIN THE NAR - JOIN MARS



MONROE ASTRONAUTICAL ROCKET SOCIETY MEMBERSHIP APPLICATION

Come join the fun. As a member of the Monroe Astronautical Rocket Society you will have the opportunity to participate in many fun filled club activities including NAR competition at MARS hosted contests as well as club trips to other contests, club meetings, club sport launches, as well as meeting other rocketeers who share your interests. Enjoy model rocketry to its fullest, join MARS today. Membership dues are \$10.00 for Senior members (21 and over) and \$5.00 for Leader and Junior (under 21) members. Newsletter subscription only is \$3.00.

PLEASE FILL IN ALL INFORMATION BELOW

MEMBERSHIP TYPE(check one):

☐ SENIOR ☐ LEADER & JUNIOR ☐ SUBSCRIPTION ONLY

NAME: _____ DATE OF BIRTH _____ NAR # _____

ADDRESS: _____

CITY: _____ STATE _____ ZIP _____

Please return to: Dan Wolf
235 Kislingbury St.
Rochester, NY 14613

Make checks/money orders payable to MARS, c/o Ferenc Roka

Membership Application

NATIONAL ASSOCIATION OF ROCKETRY
1311 EDGEWOOD DRIVE, DEPT M
ALTOONA, WI 54720

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

DATE OF BIRTH: Month _____ Day _____ Year _____

I pledge to conduct all my model rocket activities in compliance with the NAR/HIA Safety Code. I will never fly model rockets at the same time or in the same vicinity as other types of rockets.

SIGNATURE: _____

DATE: _____

MEMBERSHIP CATEGORY (Check one only):

- ☐ JUNIOR MEMBERSHIP (Under 16 as of January 1)..... \$15.00
- ☐ LEADER MEMBERSHIP (Under 21 as of January 1)..... \$15.00
- ☐ SENIOR MEMBERSHIP (21 or over as of January 1)..... \$25.00

FOR OVERSEAS MEMBERS ONLY

- ☐ SURFACE POSTAGE (Required)..... \$ 6.75
- ☐ OPTIONAL AIRMAIL POSTAGE (Replaces surface)..... \$33.00

OPTIONAL MEMBERSHIP SERVICES

- ☐ FAI STAMP for US Team eligibility and world records \$10.00
- ☐ FIRST-CLASS POSTAGE (U.S. & Canada only) .. \$10.50

DISCOUNTS (Select only one)

- ☐ RENEWAL (NAR # _____ Section # _____); Deduct \$1. \$ _____
- ☐ FAMILY PLAN (Details below); Deduct \$8 \$ _____

Amount Enclosed..... \$ _____

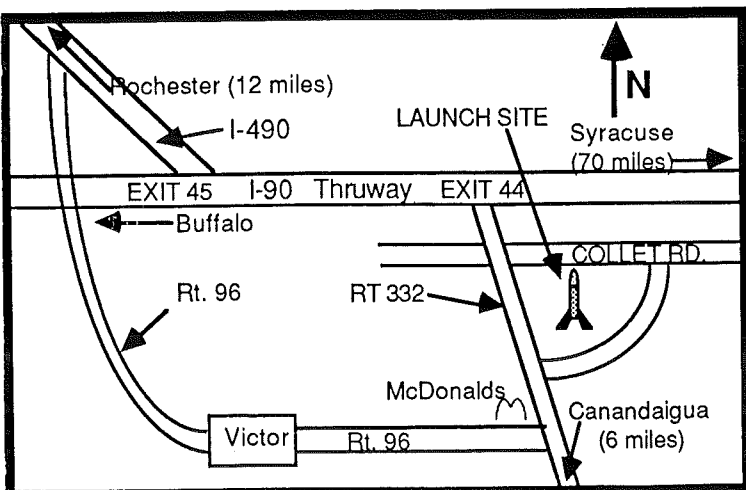
Family Plan: Full rate for one family member, others at \$8 discount — one American Spacemodeling per family.

NAR Membership dues include \$8.88 for a subscription to American Spacemodeling.

Canadian Modelers: Write to the Canadian Association of Rocketry, P.O. Box 1031, Postal Station B, Mississauga, Ontario, Canada L4Y 3W3. Rights, privileges, and responsibilities of membership begin upon acceptance of this application by the NAR. All memberships are for twelve months from the date of acceptance. Rates and services subject to change without notice. Please allow 6-8 weeks for delivery of American Spacemodeling.

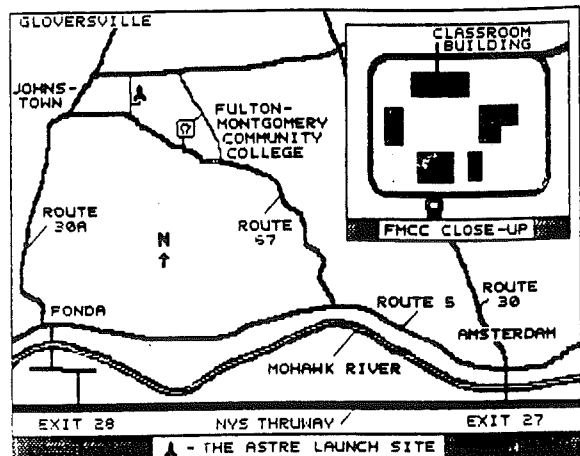
MARS FLYING FIELD

1/4 mile South of Thruway exit 44 at the Corner of Rt. 332 & Collet Rd.



ASTRE FLYING FIELD

To get there from the west, take I-90 (Thruway) to exit 28. Take Route 30A north thru Fonda, up to Johnstown. Turn right onto Route 67 (watch for sign for Fulton-Montgomery Community College). Take Rt. 67 east to small road @ "Ed's Auto Service" (yellow building with plane in yard). Turn left and go north 1/2 mile to the JBJ Equine on right. Follow driveway to left and park in lot by the barn. It's about a 3 hour drive from Rochester.



Events Calendar

Model Rocketry related events in the Upstate New York or of interest to rocketeers of this area are listed below. If you have an upcoming model rocket event planned, send info to the editor.

May 4-5 UPSTATE III, Open Meet. Location: Videk, Farmington, NY. Events: A PL, B ELAlt, A R/G, PreDur (120 sec), B HD, 1/2A PD (MR), OSL. Contact: Dan Wolf 458-3848.

May 11-12 Northeast Boost/Glider Championships (NBGC) Regional. Hosted by ASTRE, Amsterdam, NY. Events: D SD, 1/2 A FW (MR), B B/G, D B/G, A R/G (B & C Div Only), RC R/G (2 Min) (B & C Div Only), 1/2 A PD (A Div Only), B ELDur (A Div Only), A HD (A Div Only). Contact: Jeff Vincent (518)439-2055.

May 17, 7:30 PM, MARS Club Meeting. Monthly MARS club meeting. This months agenda: Summer activity planning meeting, Science Fair exhibit planning. Meeting held at Dan Wolf's house, 235 Kislingbury St., Rochester, NY 14613. Contact Dan @ 458-3848.

May 18 PATRIOT, Local Meet. Hosted by SRBs, Syracuse, NY. Events: Random Dur, OSL, 1/2A PD, 1/2A B/G, A SRDur, B SD, Sport Scale. Contact: John DeMar (315)451-6470.

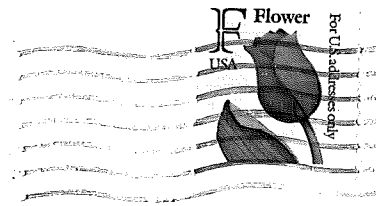
May 25-26, NYSPACE (New York Spacemodeling Annual Championship & Exhibition) Regional. Hosted by ASTRE, Amsterdam, NY. Events: A PL, A SRAlt, A SD MR, B B/G, C HD, Random Dur., Sport Scale. Special NYS Section Champion award. Contact: Jeff Vincent (518)439-2055.

June 8-9, AUR (Almost Upstate Repeat) Open Meet. Location: Videk, Farmington, NY. Events: A PL, B ELAlt, B B/G, PreDur (120 sec), B HD, A SD (MR), OSL. Contact: Dan Wolf 458-3848.

June 22-23, TOMAHAWK Regional. Hosted by SRBs, Syracuse, NY. Events: PreDur (120 Sec), OSL, 1/2A PD, A SD, B B/G, C HD, A R/G (A Div Only), RC R/G (2 min) (B&C Div Only), Peanut Sport Scale. Contact: John DeMar (315)451-6470.

August 3-9 NARAM 33, Chicago, IL. National Association of Rocketry Annual Meet and National Sport Launch. Hosted by NIRA. Events: 1/2A PD, A SD, A R/G, C HD, A PL, B ELAlt, B B/G, RC R/G (2 min), PreDur(120 Sec), OSL, R&D, Peanut Sport Scale. Contact: Mark Bundick, NARAM-33 Manager, 1350 Lilac Lane, Carol Stream, IL 60188 (708) 293-9343.

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



*Merrell,
How about coming over to our
contest this weekend.*

Dan

