

THE UPSTATE ROCKETEER

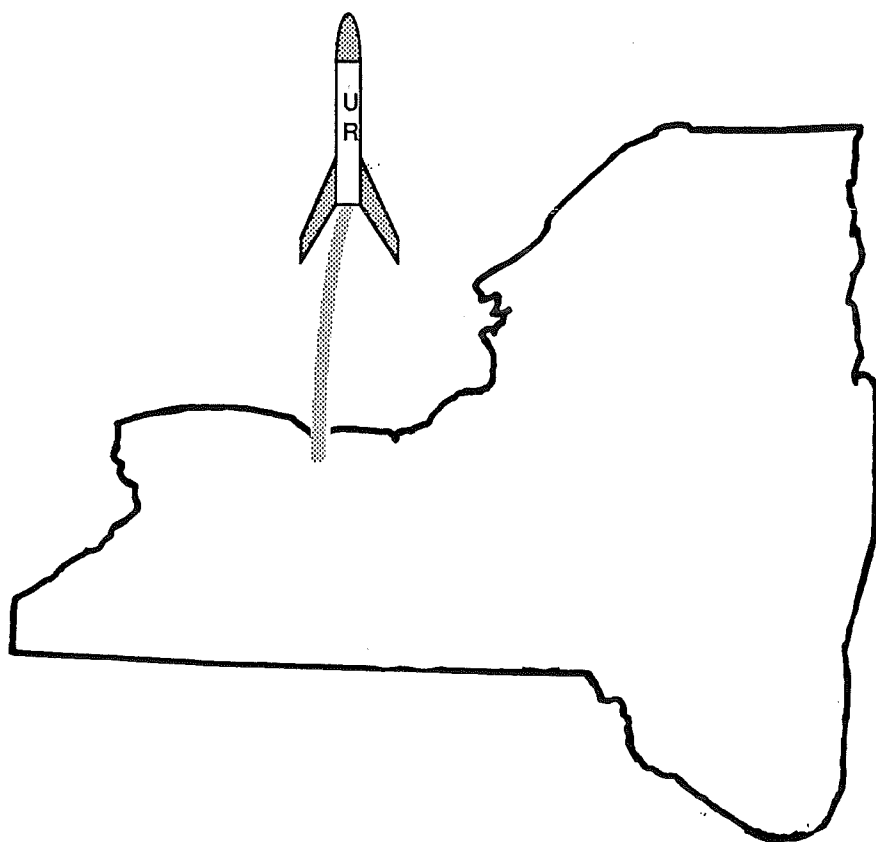
The Official Newsletter of MARS
NAR Section #136



Volume 4, No.5

Published by the Monroe Astronautical Rocket Society

November, 1991



INSIDE THIS ISSUE

RETURN OF THE "LUCKY"
ROCKETEER

SPORT LAUNCH
COVERAGE & PHOTOS

1/4 A SUPER-ROC PLAN

NEW ROCKET COMPANY
DEBUTS AT RCHTA SHOW

The Upstate Rocketeer

Volume 4, Number 5
November, 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 Kislingbury St.
Rochester, NY 14613

Table of Contents

Editorial	2
MARS Club News	3
The Return of the Lucky Rocketeer	5
Thin Man 2 - 1/4A Super Roc Plan	6
As The ModRoc World Turns	7
Photo Pages	9-11
Events Calendar	12

MARS Membership - November 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	Bud Piscini
Jessica Ryan	William Springer
C.J. Urlaub	Mary Wolf
Sarah Wolf	

Blowin' In the Wind (Editorial)

Hello everybody. Just when you thought it was safe to go back to your mailbox, another issue of *UR* is here. This issue is about a month late mostly due to me putting in extra hours at work since returning from NARAM. Unfortunately, this schedule will continue until at least January (and also unfortunately, I don't get paid for these extra hours). Contrary to any rumors out there, the World Series had nothing to do with it. Over the years I have learned to watch baseball/basketball/football while simultaneously typing at the computer keyboard (this explains a lot about some of my past editorials). Anyway, this issue is finally out due to the efforts of club members Mike O'Brien, Bud Piscini, and Ferenc Roka who contributed a plan, article, and photographs respectively. That coupled with the recent news from the manufacturers, (mostly tied into the RCHTA show in Chicago where most major announcements in the hobby have occurred in the last few years) and the result is an issue that I was able to put together fairly quickly.

Anyway, this issue has a little of everything with reports and photos from the August and September sport launches, a competition plan, a interesting essay from Bud, and lots of news from the manufacturers. Hope you enjoy it.

Until next time,

Dan

MARS CLUB NEWS

August and September Sport Launches

After the last two sport launches, one of two conclusions can be reached. Either our club members are too darn busy in the summertime to make it out to club events or most club members prefer fun flying over competition. The turnout for these two launches was the highest turnout we have had at a launch since the St. Patrick's Day sport launch in March. Present at one or both launches were Mike O'Brien (and family), Jay King, Roy Metz, Bud Piscini, Ferenc Roka, Steve Viggiano, Dan Wolf and Mary Wolf from MARS along with John DeMar (and family), Greg Anglin, and Pete Deierlein from SRBs. We also had some new faces at the launches including some friends of Mike's, friends of Dan's and others. Between the two launches we had over 30 different people present! This is in sharp contrast to our May and June open meets when only 5 to 6 people attended.

Of the two launches, September had the better weather of the two with August's launch being a little breezy. The winds were coming from the south east and caused a few recovery problems. One of Steve's models landed inside the lumber yard fence but Dan was able to retrieve it. Ferenc also had a bird land past the lumber yard fence but we weren't able to find it. Bud "The Lucky Rocketeer" Piscini lived up to his name by eventually getting back two rockets that he had given up for lost. The first was the capsule from his Estes Mercury Redstone kit. This was the old Estes kit that employed a balsa capsule and wooden dowel escape tower and a cardboard capsule wrap around. Although it landed in the cornfield on the northeast corner of 332 and Collett Road, Bud was not able to locate it after several minutes of searching. Later Bud lost his original Centuri IRIS kit (Estes re-released this kit a few years back). Flying on a C6-7, the model took off and simply vanished, victim of a smokeless delay train and an apparent ejection charge failure. The IRIS was found the next morning by Dan's boss at Videk, sitting in a small tree (the IRIS, not Dan's boss) next to the Videk patio. The recovery system had fully deployed and the model was not damaged. Within arm's reach, Dan was able to retrieve it easily. Then on Tuesday, Dan found the missing Mercury capsule midway in the corn field. Growing up in Indiana, Dan used the only technique he found worked for recovering rockets from corn fields, starting at one end of the field, walking up and down

every row until the rocket is found. It only took Dan two lunch hours to find it! The September launch had better weather with only light winds on a nice sunny day. This saw people flying several different rockets that were not flown in August. Steve took advantage of the weather to test fly his B engine powered boost glider. The boosts were good but the glide wasn't always consistent although one of his flights worked well. Steve also flew several other of his nicely built birds that we have enjoyed seeing the past three launches including his Titan, X-16, Hercules and others.

Here are some other items of notes from the two launches. It's difficult to remember at which launch some of these things took place.

Ferenc Roka had some nice flights on FSI E5 engines. These long burn motors are always fun in light rockets and Ferenc always has some suitable birds for this engine and the flights are always fun to watch. Roy made it out to the August launch and it was good to have him there. With Roy's current job and work schedule, it has been tough for him to make it to club events (virtually impossible to get to meeting) and so we were glad to see him make it out. Roy flew some crowd favorites including a "birdie" and his Miller beer can rocket.

Mary Wolf also pleased the crowd by flying her "Flying" Elf, Baby Bottle Rocket and the "Flying" Crayon. At the August launch the Crayon turned in a perfect flight with an F50-4, making a 4 point landing on its fin tips in the parking lot. At the September launch, the Crayon did not fair as well, when the shock cord broke on the 4" diameter "skywriter" and the body tube pranged in hard near the launch site, grazing a spectator's car in the process. There were no dents although the crayola did write a purple streak on the door. Fortunately, the owner wasn't too upset and it appeared that the paint could be easily removed with some cleaner and elbow grease.

Meanwhile, Mary's dad also had separation problems when the ejection charge on his Initiator blew the top off the ejection baffle unit (which the shock cord screw eye is attached to). Fortunately, the body tube floated down sideways however the nose cone drifted on the X-form chute until it landed on a power line (since then the wind has blown it off of the line but it is now wedged between the pole and the transformer with the chute and shock cord tangled on the transformer).

John DeMar also brought along some crowd pleasers including the "Cone Head", an Estes Rainmaker, Estes Ranger and the "rocket that couldn't be lost", his black and silver V3. All these models turned in nice flights.

With the light winds at the September launch, several high powered models were flown. Notable flights included Mike O'Brien's Aerotech Tomahawk, which turned in a nice maiden flight on an E30. Mike flew another E30 in one of his scratchbuilt futuristic models. This one was a "USF Cirius" <sp?>, which Mike says is a "star class attack cruiser". Anyway, this model made from Estes body tubes and light weight plastic had one of those "neck snapping" launches for an impressive flight. Pete Deierlein flew his unpainted Aerotech ARCAS kit with a F25-14. Even Pete began to wonder if the ejection charge choice was too long as the model was streamlining in at a pretty good clip when the chute finally deployed and the model landed safely. Pete also had some nice flights with his Aerotech Mustang which he finally got around to painting. Dan had a couple of successful high powered flights as well including his NCR Thunderbolt and the maiden voyage of his Aerotech Arreux.

All told, a phenomenal number of rockets were flown at these two sport launches. The number of rockets flown was only surpassed by the size and variety of the rockets flown. Most important, these two launches were simply a lot of fun.

(Editors note: Although it seems every launch we have is unique and has "its own story", I find my write ups to sound the same from one launch to the next. Thus I am looking for a volunteer to write up articles for launches next year. After four years, I think it will be interesting to read about our launches from a different perspective for a change. If you are interested in doing this for any or all of the launches next year, let me know. I also think it would be interesting if we started keeping statistics of our launches in terms of the number of flights, kits flown, successes and failures, etc. Perhaps a log at the range head could be filled out as each rocket is launched. This would also be a good reference for whoever does the write up for the newsletter.)

NYSACE 92 Update

The New York Spacemodeling Annual Championship and Exhibition is an annual NAR sanctioned regional. In addition, all New York NAR sections are invited to participate in order to determine the championship NAR section of New York state. Last year was the inaugural year for NYSACE with host section ASTRE taking the title. This year, MARS is hosting NYSACE. Work got under way at the September club meeting when the events and date for the meet were selected. The date for the meet is the weekend of June 6-7 with the following weekend to be used as the rain-date. The events are: 1/2A Altitude, C Super-Roc Altitude 1/4A Parachute Duration (Multi-round), 1/4A B/G, A R/G, B Eggloft Duration, Sport Scale, Open Spot Landing. In addition to selecting the events and the date, the contest sanction has been sent in and a notice of the contest has been sent to *American Spacemodeling* to appear in the Launch Windows column.

There is still much work to be done to organize this event. Activities to be worked on include final site selection, organizing range operations, obtaining prizes, and determining the weekend schedule. Although many of these tasks do not need to be implemented right away, a preliminary list of activities has already been compiled and we will start to break these down and assign tasks to various club members at the November meeting. Thanks go to Jay King for getting the ball rolling on this.

Next Club Meeting - Friday, November 15th

This Friday, being the 3rd Friday of the month, MARS will be having its regular club meeting. We will be breaking down tasks for NYSACE 92 as well as talk about meetings and launches over the next few months. After the formal meeting, plan on sticking around to watch videos of recent club launches and others, as well as hearing the details from the RCHTA show and browsing newsletters we exchange with other clubs. We'll try to have the business part of the meeting stop by 8:30 to leave time afterwards for the videos and the bull sessions.

**The Return of The Lucky Rocketeer
(or a letter to the editor)**

by "Bud" Piscini NAR #54692 AMA #110232 A.R.S. K02WL

A few months ago, while working the astronomy booth at St. John Fisher college "Science Exploration Days" I happened to see through a crack in a display wall a familiar shape, that of a miniature launch vehicle. Having been a fairly active rocketeer for 23 years now, this sight automatically brings to mind that wonderful (although my wife doesn't think so) smell of expended propellant. I got someone else to hold down the fort, and quickly made my way to the rocket display. There I saw an old rocketry friend, Ferenc Roka and met Dan Wolf, current MARS president. Our discussion went from launch site difficulties to them enlightening me on the high powered stuff. Having not been an NAR member in the past and not even knowing that MARS still existed, I could readily see what I have been missing from just a 15 minute discussion with these guys. The propellant smell got stronger. Before leaving, I grabbed one of the nicely prepared handouts that contained both a MARS and NAR application. When I got home that evening, I told my wife of my good fortune of finding MARS again. Her usual supportive "are you going to join?" was enough for me and I proceeded to fill out the applications for both MARS and the NAR.

On June 9th, I attended the second day of the MARS hosted AUR meet. I was not available for the entire weekend due to prior commitments but did manage to get there on Sunday afternoon to watch and help if I could. I first got to see the streamer duration flights. To me, the words **STREAMER** and **DURATION** do not go together, but leave it to **CONTESTERS**. I thought the whole idea of a streamer was to get your rocket back on a windy day? Regardless of how the contesters have redefined certain things, those of us who love this stuff still get that flow of electricity down our spines at the sight, sound and smell of a rocket motor igniting. I spent the rest of the day timing duration events, trying to keep vehicles from landing on the pavement and just enjoying the entire experience and camaraderie of other rocket enthusiasts. As the events progressed, I began to think, "Where do I fit into the competition arena?" I like to build scale models, this is where my term "miniature launch vehicle" comes from. I like to have my rockets perform and look like the real thing. I don't consider

myself a true scale builder, in that I am not meticulous about the smallest details that separate the men from the boys in scale competition, but I am a standoff scale builder, as defined by the AMA. I like my rockets to look good from a few feet away. My other love is multistage rockets, but I don't know of any scales in this class. So what do I do on contest days? Stay home and miss everything? No way! Just go out there and be a spectator, and maybe help out with timing and such? Maybe. Show up and throw off the competition by competing using scale and semi-scale models? Definitely! Why not use my IRIS sounding rocket in streamer duration! How about a Patriot in PD? I think that the Patriot might even work for egglofting! Having models to enter in scale won't be a problem. Do I have to compete to win these events? Not if it's not my cup of tea, which in my case it isn't. I can compete for the fun of being there launching my rockets and getting together with others who share my interest in the hobby. If all else fails, I can just make some demo launches in between events. I know that just about every time out there I am going to learn something. I know I will have a good laugh and hear a good story. And who knows, if I'm lucky, you might just see "A PD winner Bud's IRIS!?!". I think I will have to build something non-scale for heli though. Just imagine how confused the contest guys will look when they see rockets with paint on them in their events! I may not be a national winner in any of these events, but I will still feel just as good. If you don't like to compete try looking at it from a different angle and turn it into fun! What counts is that you get out there and enjoy with the group.

MARS is fortunate to have members that kept it going during the lean times and have made it one of the oldest NAR sections. We are also fortunate to have the best newsletter I have seen from any organization of this type. Hopefully, the efforts of the New York State sections will be a major stepping stone in the resurgence of our hobby. Come and help MARS lead this effort by just getting out and having fun participating with us! I hope to see you at the next one.

THIN MAN 2

1/4A Super Roc Duration

Designed by Mike O'Brien 9/12/91

(Drawing shown half-size)

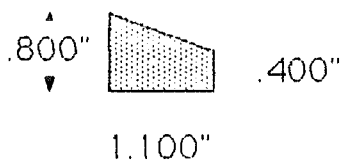
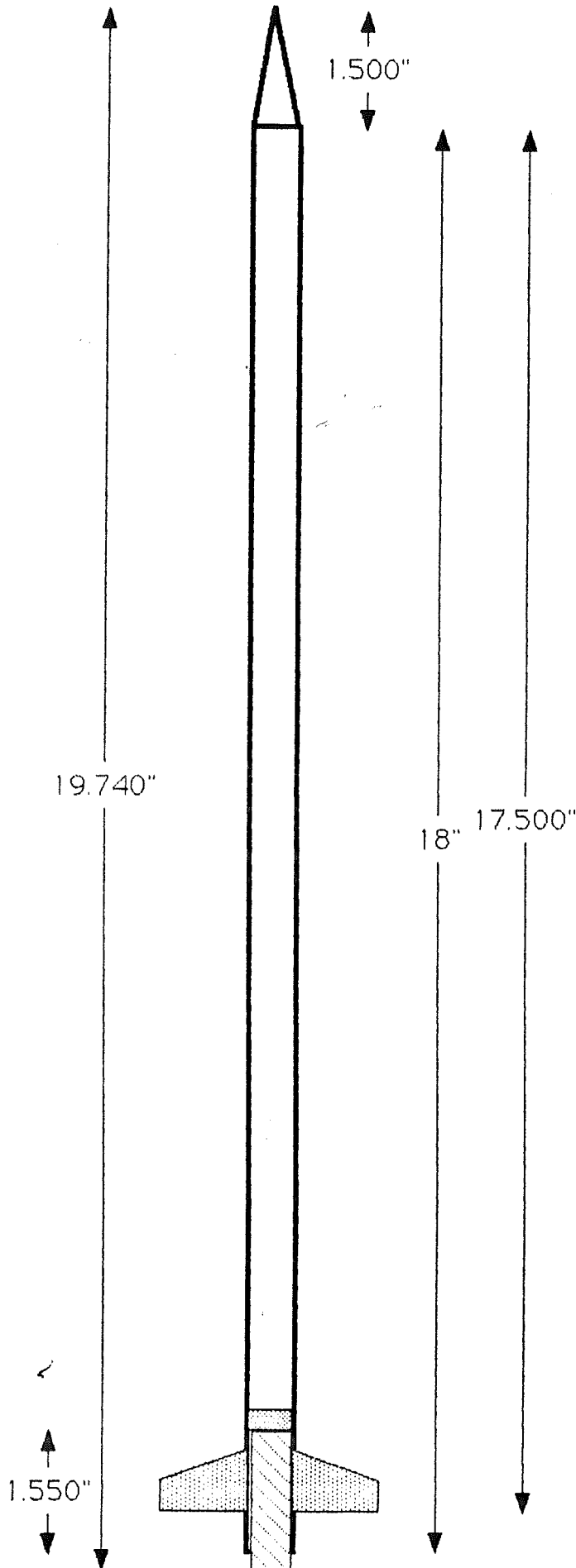
Parts List:

- 1 Estes BT-5 18"
- 1 Estes BNC-5S nose cone
- 1 Estes JT-5C stage coupler (engine block)
- 3 Clipped Delta fins per dimensions below cut from 1/64" plywood.
- 36" 15lb test braided nylon fishing line for shock cord.

I used aliphatic resin glue to mount the engine block and cyanoacrylate with accelerator for the fins and fillets, putting the shock cord in one of the fin fillets.

Due to production tolerances, I would measure before gluing your engine block to assure max length. Mine was about 50.3cm long.

Using a 12" square cleaner bag 'chute with four shroud lines, launching from a tower, I managed a best time of 46.5 seconds. This was enough, despite some 'chute sticking on the second flight, to capture 1st place in 1/4A SR DUR at BART vs the Gnats 91 Open at Astre's field, 9/14/91.



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

Manufacturers News...Most of this months manufacturers news comes from last weeks Radio Control Hobby Trade Association (RCHTA) show in Chicago. Leading off with news from Estes. The market leader made good on the rumors of introducing a line of high power products. Among the new products are three kits powered by D12 clusters including a 1/6 scale Patriot powered by a cluster of 4 "D"s. and an R/C BG kit called the "Astro-Blaster". Also new is the Transroc II transmitter that serves as a recovery beacon (reported to be similar in appearance to the original Transroc). The D12 kits are called the Pro Line series and range in price from 40 to 60 dollars. Other new items include a large launch pad and a companion controller as well as a series of almost ready to fly kits. Rumors still persist that Estes will be introducing a line of composite motors in sizes E and above in the future. Speaking of engines, Estes also has plans to discontinue several engines popular for NAR competition. Gone are the A10-3T, B4-2, C6-3 and possibly a few more. As usual, several kits have been discontinued as well including the Astro, Blazer, Blue Star, Cajun, Dark Star, Javelin, Jammin, Laser, Liberty, Meteor, Micron, Raven, Stinger and Surveyor. Although it is too early to tell, the possibility exists for the discontinued engines to be offered via another company like the A3-2T and A2-6T engines were offered initially by HO Sales and later by Apogee. Finally, Estes plans to come out with a series of their long since discontinued kits as a limited collector's edition. First out will be the original Mars Snooper for \$24.99.

Aerotech will be shipping the Phoenix R/C RG by the end of year with a retail price of \$189.95. This includes the glider kit, RMS motor case and an adapter to allow it to be launched from the Mantis launch pad. Aerotech has lowered the price on the Mantis launch pad to \$49.95 and the Initiator Systems package to \$99.95. Aerotech continues to lower prices on its single use motors as well (see Microbrick item later on in this column).

Perhaps the biggest news from the RCHTA show was the debut of a new model rocketry company called QUEST Aerospace Education, Inc. The principals behind QUEST read like a who's who of the model rocket industry and include Bill Stine, Dane Boles, Ed LaCroix, Grant Boyd, Jeff Flygare

and G. Harry Stine. We received a mailing from the company that coincided with its introduction at the RCHTA show. QUEST will be offering two lines of products. A complete line of kits, engines and accessories to be sold through hobby stores and a second series of products targeted towards schools, scouts, 4H and other groups. The second line will not be sold in stores but will only be available directly from QUEST. On the hobby store side, QUEST products will be distributed by Hobbico, a major distributor of hobby products (and until recently, one of the distributors of the Estes line). QUEST President Bill Stine said, "This is the first time a model rocket company has completely designed model rocket products and programs to fit the teacher or youth group leaders' needs, and focused the marketing of the product on these groups." Not surprisingly, QUEST's products bear a lot of similarity to the old MPC line. The body tubes, nose cones, and fin units all look like the old MPC line. Different however are the parachutes (have a unique shroud line attachment technique), launch pad (tripod that appears to be constructed from 1" PVC tubing), and the igniters. The igniter, called the tiger tail, bears a strong resemblance to the Aerotech copperhead igniters but has a special cardboard sleeve so that standard micro clips can be used (no special clip or tape on the igniter). It would also appear that these igniters require less current to ignite than Copperhead igniters as they can be launched from the QUEST launch controller that uses 4 AA batteries. The catalog lists a limited number of engines, the A6-4, B6-4, C6-5 and B6-0 although there are already reports circulating of other engines to be offered including C6-3s and others. It looks like one of QUEST's strategies is to compete on price with Estes, both on its kits and on its engines (something that MRC has not been able to or has not chosen to do). As an example, the QUEST "Astra", a dead ringer for the venerable Estes "Alpha" has a catalog price of \$4.50 versus \$6.79 for the Alpha. As for engines, 3 B6-4 engines from QUEST sell for \$3.60 versus \$3.99 for Estes. Other items of interest in the QUEST product line include a scale model NIKE SMOKE and a series of 4 teaching guides for using model rocketry with science, math, social studies and english.

Strictly opinion on the developments at the RCHTA show. First, in light of announcements in

recent years regarding new rocketry companies, I will believe this one when I see it. What happened to the companies that debuted at last years RCHTA show (SMI with its low cost composite A, B and C engines and QED, the company with kits made from LOC parts). Then there is COX with the rerelease of its old plastic almost ready to fly line of rockets (which rumor has it is about to be discontinued by COX). Also, there is MRC with its shaky initial introduction and subsequent improved product line at perhaps too high a price. Last but not least, the Enertek vaporware (although some of it did finally materialize thanks to Aerotech). Although most of the above mentioned companies are still around, none of them have had a major impact on the hobby except for Aerotech and none have been able to successfully challenge Estes directly. This is what QUEST appears to be attempting to do, especially in the schools, scouts, and other youth group markets, an area of the market that Estes has total control of today. It remains to be seen how QUEST will be able to do what others have not, that is, make the mass model rocketry a two horse race again.

Second, the QUEST announcement raises other questions that will effect the hobby and possibly NAR competition. First, it would appear that Bill Stine's involvement with MRC has ended. Will this mean that MRC will pull out of the model rocketry market. If they do stick it out, who will be doing their product development in the future? Second, how will Ed Lacroix's involvement with QUEST affect Estes' relationship with Apogee as the manufacturer of the black powder portion of the Apogee medalist engines? Or will Apogee be switching to QUEST as the supplier of its engines in the future?

Note: Some of the above information was provided from messages on Modelnet (and those in attendance at the RCHTA show) including Bob Sanford and others.

As mentioned earlier, Aerotech motor prices continue to fall. Here are the current prices from Microbrick Technologies on single flight E, F and G engines:

E15 & E30 - \$3.57

F25 & F50 - \$5.37

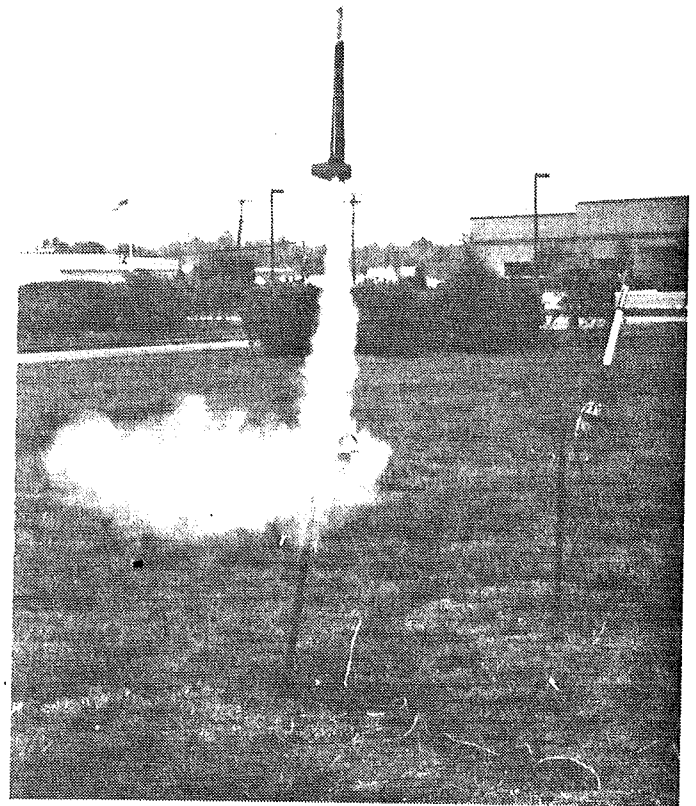
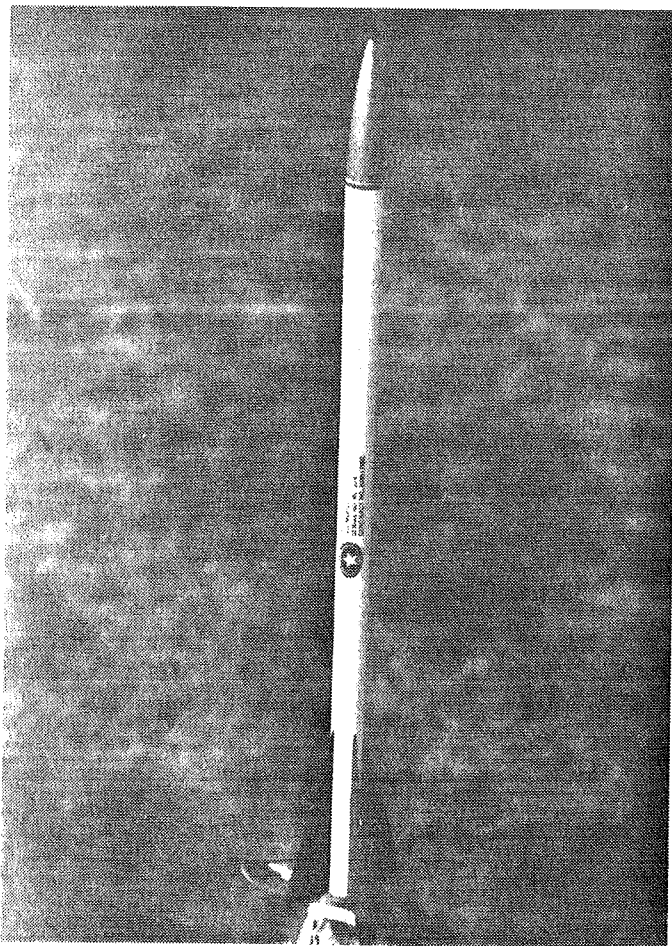
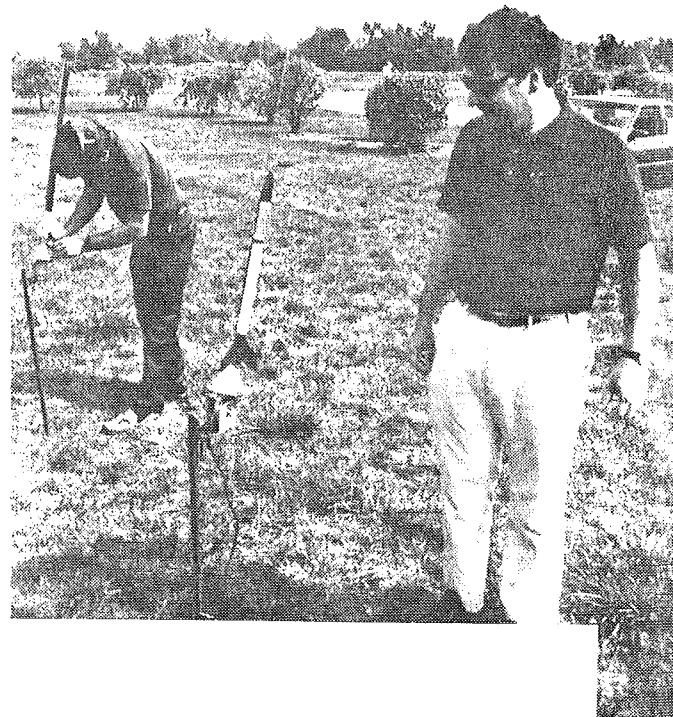
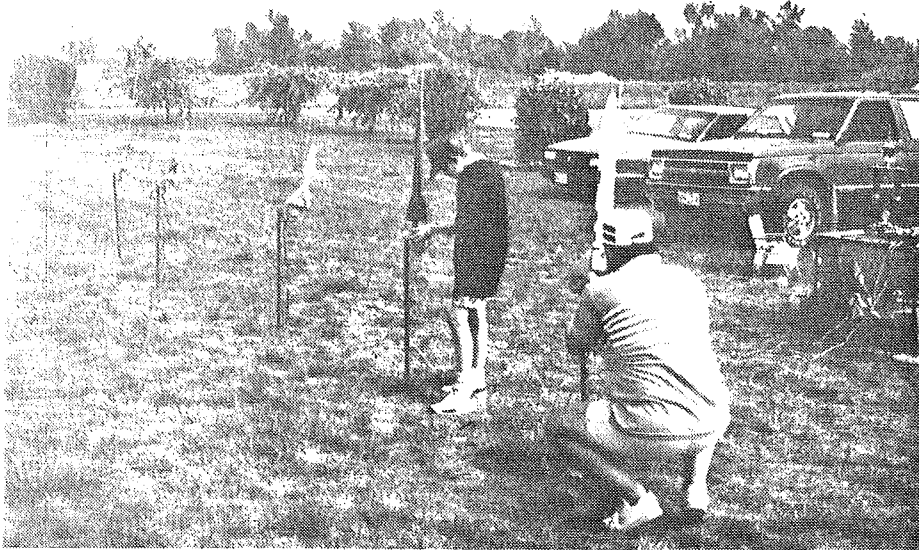
G40 & G80 - \$5.97

This is a significant reduction. Consider that if you were to purchase a G40 this summer at Dan's Crafts and Things the price was \$16.95! Microbrick has also introduced a new high powered kit. The kit, called the "Electric City" is 3.2" x 60" and features thru-the-wall (to the motor mount) fin attachment,

3/32" Finolic (G-10) fins, 38mm motor mount, G-10 centering rings, Phenolic impregnated airframe, 12" payload section, 36" ripstop nylon parachute, seamless one piece nose cone. It is designed to fly with G through I motors including the high thrust ISP reloadable line.

Tripoli News... Things seem to be going well with Tripoli at this time. Bruce Kelly has been doing a great job with the Tripolitan, both with the schedule and the quality. In a clever move, the cover of the magazine now reads, "The TRIPOLITAN... AMERICA'S HIGH POWER ROCKETRY MAGAZINE! This "name change" of sorts has helped in getting the magazine distributed to hobby stores and a number of shops around the country now carry it (including Walts in Syracuse). There has also been an increase in the number of high power launches in the east. From the end of 1987 through the start of 1991, Danville, IL was the only game in town. This year there has been high power launches in northern Illinois, Michigan and Virginia. Most recent were launches this past weekend (November 9-10) at Three Oaks, Michigan and at Culpepper, VA. Both launches were hosted by Tripoli Prefectures and had FAA waivers to 10,000 feet. This fall's Danville launch, held the weekend of October 26-27, was almost a total washout with only a few flights made between the rains and those mostly on the "low" power side (F, G and a few H motors). The talk of this year's Danville happened off the field, in a hotel room. Bob Hegwood was checking continuity of a thermalite type igniter installed in an I65 motor mounted in a LOC EZI-65 when the motor somehow ignited. Fortunately, Bob kept his cool grabbed the rocket and braced it against the wall of the hotel room while trying to keep the motor exhaust away from anything that might burn. Thanks to his quick thinking, no one was hurt and Bob immediately made restitution to the hotel. We're certainly glad that Bob wasn't hurt but it does go to show how one can never be too careful around rocket motors. Bob is one of the most safety conscious rocketeers I know and this incident will make me be more cautious with igniters in engines in the future.

PHOTO PAGE #1

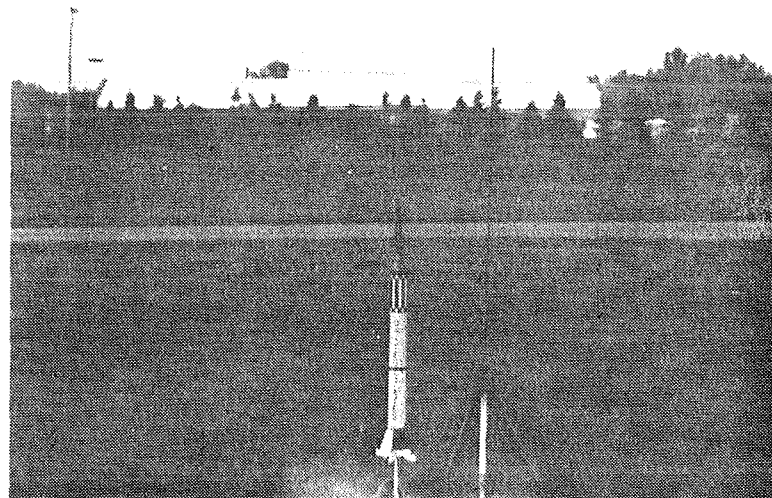
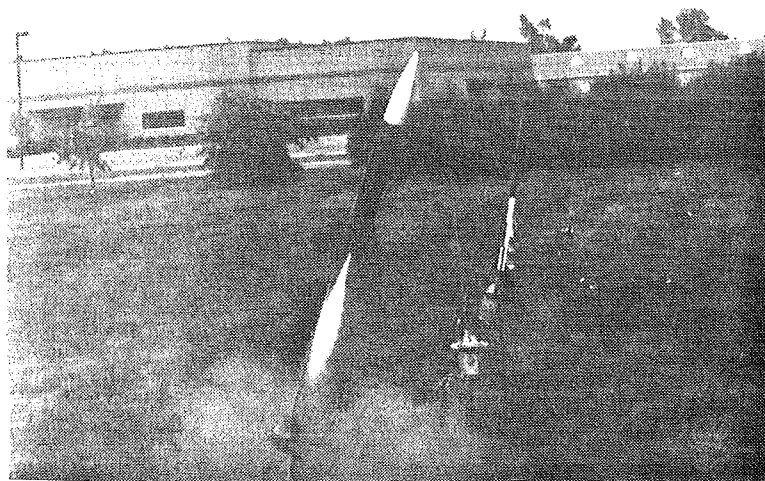
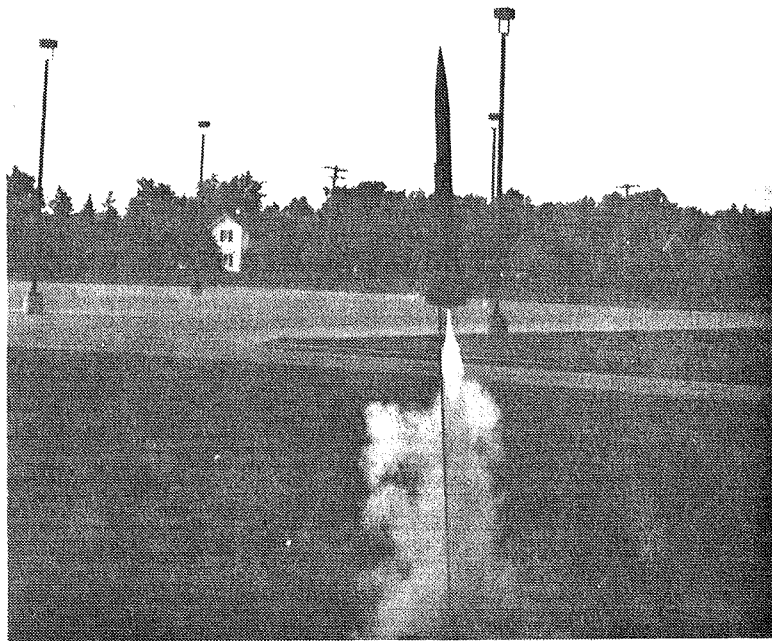
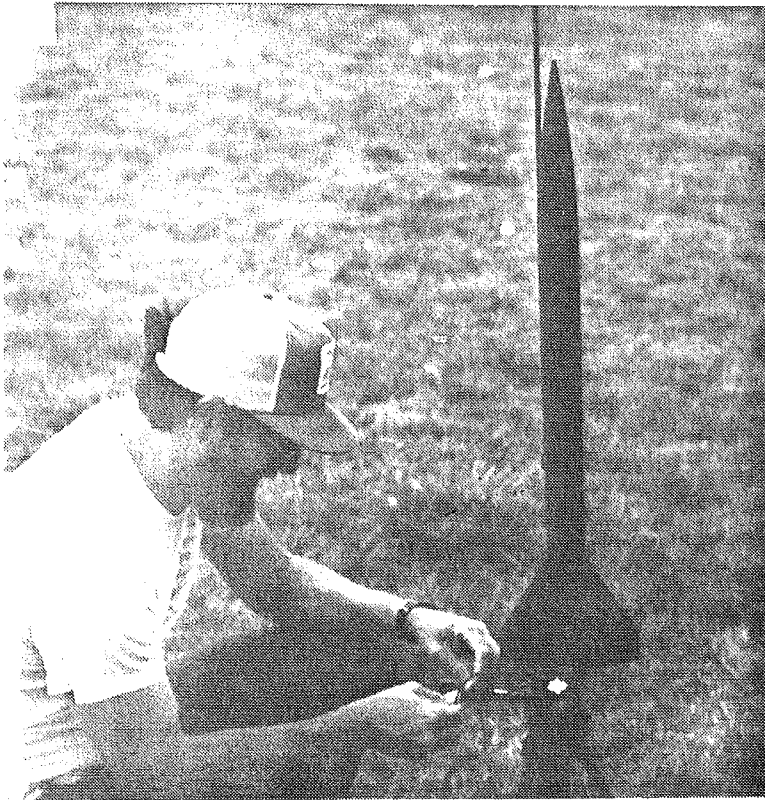


THIS PAGE (left to right, top to bottom).

1. Shawn O'Brien prepares his original design BT-55 bird on pad 2 for launch while Bud Pisicini hooks up his Maxi-Alpha 3 on pad 1. The birds on pads 3 and 4 are the DeMar's Conehead and Steve Viggiano's Hercules.

2. Steve gives his Hercules one last look to make sure everything is in order while in the back, Roy Metz prepares his E5 powered FSI kit for launch.
3. A nice shot of John DeMar's A.S.P.
4. Mike O'Brien's rear hinged helicopter model on its way to a successful flight.

PHOTO PAGE #2



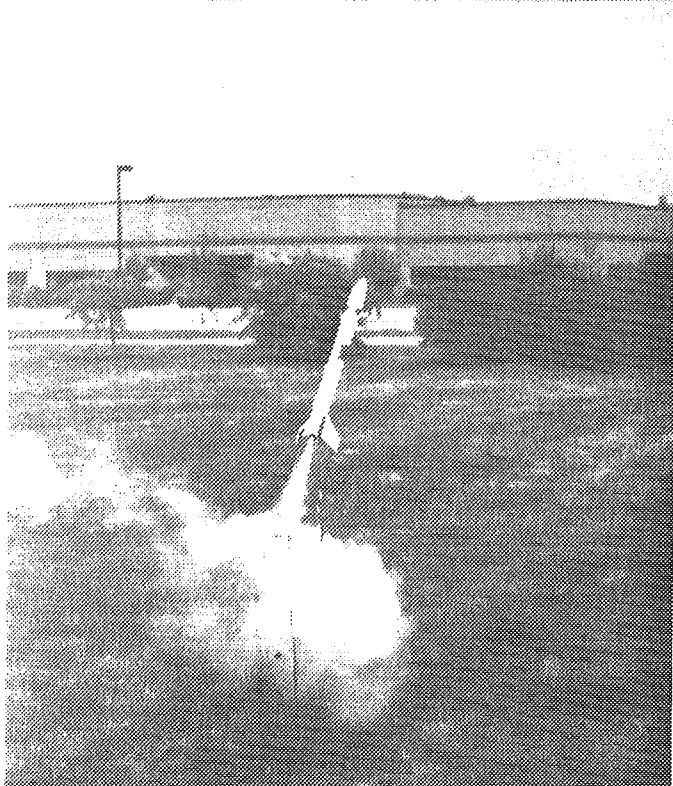
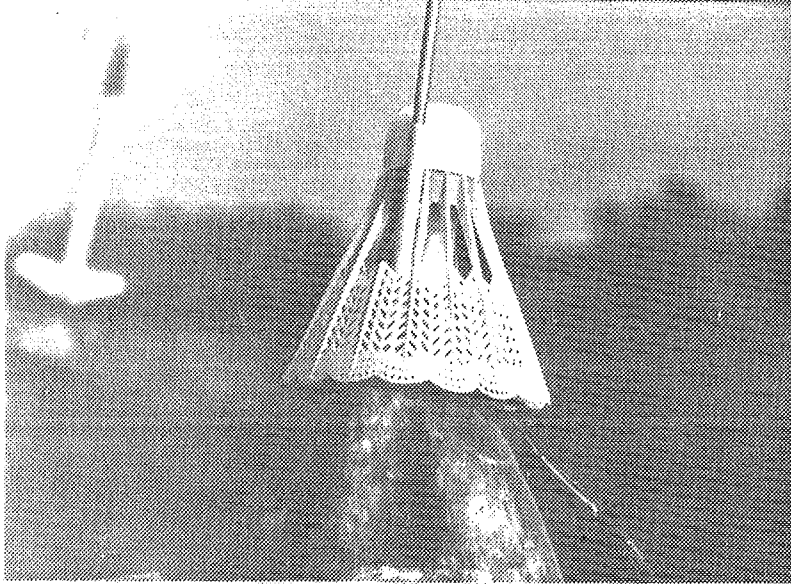
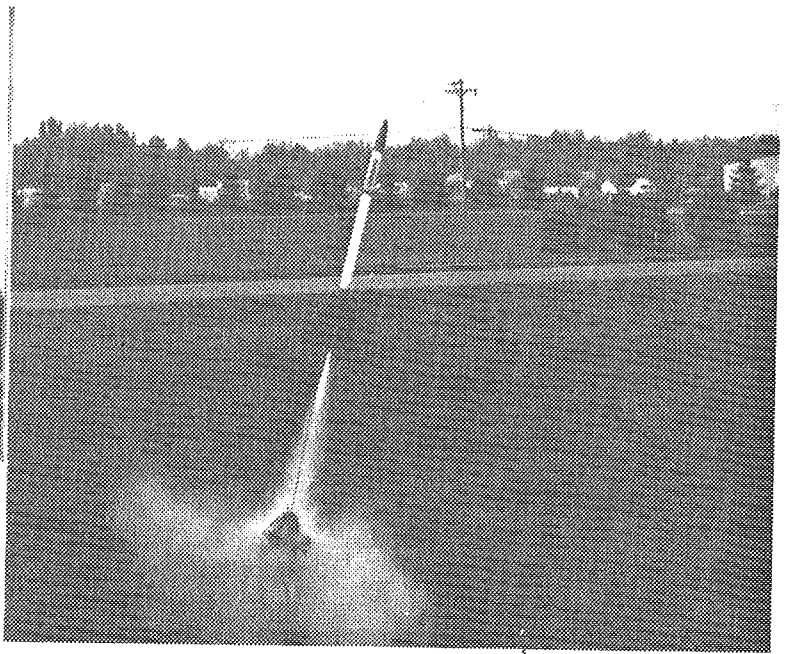
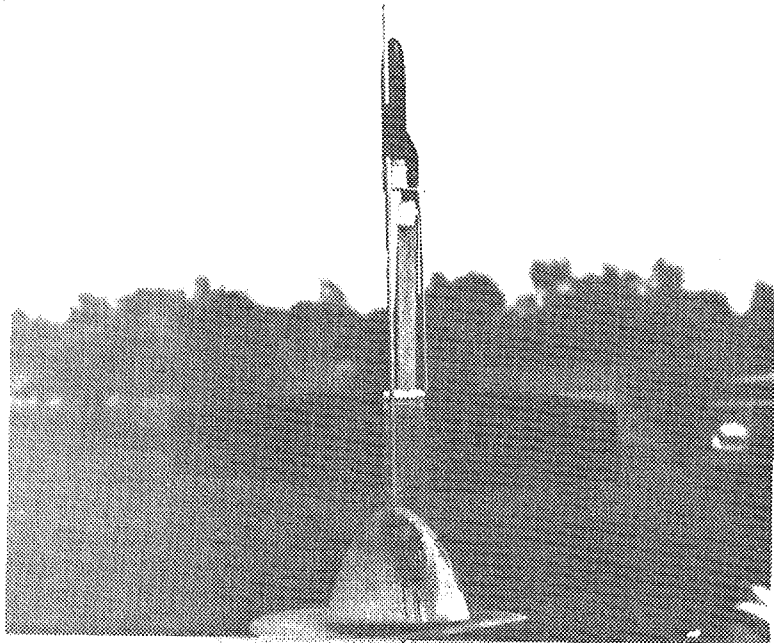
THIS PAGE (left to right, top to bottom).

1. Pete Deierlein hooks up the clips to his Aerotech Mustang for its first flight as a painted rocket.
2. Pete's Mustang at liftoff.
3. John DeMar's "Der V-3" at liftoff under D12 power.
4. Bud Piscini's vintage Estes Mercury Redstone milliseconds after ignition. The capsule was recovered 48 hours later still intact (although the astronaut was reported to be hungry).

NEXT PAGE (left to right, top to bottom)

1. Mike O'Brien's Liberator, a mini engine powered rocket glider.
2. Steve Viggiano's Hercules at liftoff for a successful two stage flight.
3. Roy Metz' original Estes Birdie.
4. Mary Wolf poses with her "Flying Crayon", prepared for flight with an F50-4 motor.
5. Dan Wolf's MRC Iron Man at liftoff with extra smoke from 3 FX engines.

PHOTO PAGE #3



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.

November 15th, MARS Club Meeting.

MARS club meeting. Agenda: NYSPACE-92 planning, summer and fall club launch videos.

Location: Dan Wolf's house.

Contact: Dan Wolf 458-3848.

June 6-7 NYSPACE-92 (New York Spacemodeling Annual Championship & Exhibition) Regional.

Events: 1/2A Altitude, C Super-Roc Altitude, 1/4 A PD (MR), 1/4A B/G, A R/G, B Eggloft Duration, Sport Scale, Open Spot Landing. Special NYS Section Champion Award. Contact: Dan Wolf 458-3848.

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

