

THE UPSTATE ROCKETEER

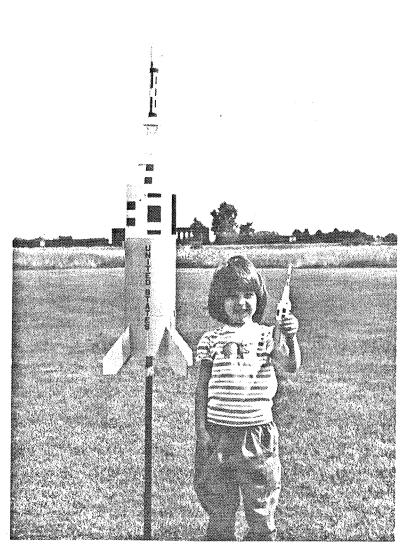
The Official Newsletter of MARS NAR Section #136



Volume 4, No.3

Published by the Monroe Astronautical Rocket Society

August, 199



Mary Wolf holding an Estes Little Joe II while standing next to a much larger model of the Little Joe II that was used to mark the spot landing target at NARAM-33. Read about NARAM-33 inside.

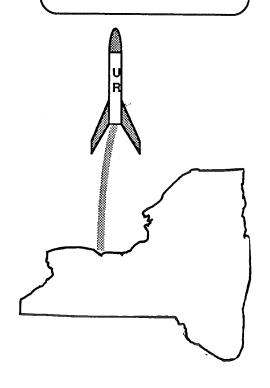
NARAM 33 ISSUE!

NAR GETS INSURANCE! (details inside)

NARAM 33 & NATIONAL SPORT LAUNCH COVERAGE

CLUB NEWS

LATEST FROM THE MANUFACTURERS



The Upstate Rocketeer

Volume 4, Number 4 August, 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:

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MARS Membership - July 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)

Greetings fellow modelers. Welcome to another issue of UR. This issue is our post NARAM issue so most of it deals with what happened at this years National Association of Rocketry Annual Meet (NARAM) and the National Sport Launch. Regular readers of this newsletter know that lots is happening in our hobby at the present time and the events and occurrences of this years national gathering reflected Besides the NARAM and Sport Launch activities, a flyoff was held the weekend prior to NARAM to help select the team members who will represent the United States in the 1992 World Spacemodeling Championships to be held in the United States. This activity along with manufacturer news, trustee elections, the NAR auction, Astronaut Jay Apt's presentation on STS-37, and other activities made for a busy and exciting week. Those of you who weren't there missed out on an exciting week of rocketry. Of course, I would be the first to admit that I am prejudiced about this because through the 13 hour drive to Chicago, a first flight DO, lost models, rain, and other calamities, I managed to fly well enough to take the C Division national That's right, your old editor championship. somehow managed to, in the course of the week, move from a pre-NARAM position of 6th to 1st and end up the 1990-91 C Division Champion. I want to take the time and space to give thanks to Ferenc Roka and John DeMar for helping me field test my R&D project the weekend before NARAM. That work was crucial to my success. Also thanks go to my wife Chris for her support and patience while I worked feverishly during the end of June and all of July to finish up the report and still build my other models.

In closing, take note of the upcoming club activities described in this issue. The upcoming year looks to be another exciting one for the hobby and for MARS as well.

Until next time,

Dan

MARS CLUB NEWS

Spaceweek - Niagara Frontier

Spaceweek activities were held at Buffalo State on the weekend of July 19-21. The Spaceweek program was originally started in 1979 to commemorate the 10th anniversary of the first Apollo Lunar Landing. Over 125 cites across the United States now participate each year from July 16th-24th.

This year, Merrell Lane asked if MARS could participate in the program. Last year, Merrell had done it himself, but this year it conflicted with his vacation plans. The club's participation consisted of a static exhibit, on display in the main exhibit area as well as a demo launch Saturday evening. The display was similar to the display we had at the St. John Fisher Science Fair. One big difference was that the exhibit included some nice posters on engines, flight profiles, model construction, model rocket literature and publications and other interesting items. These posters were put together by Merrell and were very well done. The exhibit was on display all day Saturday.

Other exhibits included some NASA static displays describing NASA facilities, as well as displays from Calspan and Moog. The Moog display featured liquid fuel engines and a nice video of various rockets and missiles that use Moog products.

Unfortunately, turnout for the show was poor. Total attendance Saturday was probably less than 200 people. This was unfortunate because the event coordinator and her small team had put a lot if effort into the program.

The low turnout didn't dampen the spirits of Mike O'Brien, Ferenc Roka, or Dan Wolf as they prepared for the demo launch however. A "crowd" of 25 or so spectators sat in bleachers on the edge of the field and watched as an assortment of sport, competition and scale models were flown. Crowd favorites included an Estes "Flying Saucer", V-2, Saturn V, and as a finale, a LOC Graduator powered by an Aerotech F25 motor. In general, the demo went well and the MARS crew had a good time with it in spite of the ninety degree weather and low turnout.

All in all, the day went well, with the demo launch one of the highlights of the day. On Sunday, NASA Astronaut William Gregory (who grew up in nearby Lockport) was to be present so hopefully larger crowds were present (unfortunately, MARS could not make it that day as it conflicted with our club sport launch).

MARS Sport Launch

Sunday, July 21st, (the day after we were at Spaceweek) several club members got together for the July club sport launch. Turnout was fair, although better than the turnout at the May and June club contests. Club members present included Mike O'Brien and his family, Ferenc Roka, Bub Piscini, Dan Wolf and his family. Also in attendance was John DeMar and family from Syracuse. Newcomers to the launch included Steve Viggiano who had heard about the club from picking up the club newsletter at Edmund's Hobby Shop and some friends of Steve's, Frank and John Cost. The weather for the most part was good. Although scattered showers were present in the area, they only caused a minor interruption in the flying.

It was a typical MARS sport launch, in that we saw an interesting mix of old and new rockets. On the old side were some "classic" Estes kits flown by Bud. Bud flew an Estes Maxi-Alpha on D12 power for two successful flights. Bud also flew the long since discontinued Estes BT-70 size Little Joe II. It's been a long time since we had seen that one fly. Bud finally flew a current Estes kit, the Black Brant II. This one really got up there under D12 power and landed near Rt. 332 on the other side of the medical building. Steve brought along some nice looking Estes kits including an Astrocam which instead of taking a picture of the launch area and everyone's smiling faces, instead weathercocked to the north for a picture of an empty Videk parking lot. Other highlights included John DeMar's Mini Katana flown with a complete load of engines including a composite E and 7 air-started 18 mm black powder motors and Mike O'Brien's scratchbuilt model of the Patriot missile. If you missed this one, plan on coming to the next MARS sport launch on August 25th.

Upcoming Club Events

As the end of the summer draws to a close, it usually means the end of good flying weather here in Upstate New York. However the last few years have brought us very good flying weather in the months of August, September and October. At the present time, the club has only one launch scheduled for this time and that is the sport launch coming up on Sunday, August 25th. This launch will start at the

NARAM 33 & THE NATIONAL SPORT LAUNCH

The 33rd National Association of Rocketry Annual Meet and the National Sport Launch were held concurrently in St. Charles, Illinois from Saturday August 3rd through Friday August 9th. The host club was NIRA (Northern Illinois Rocketry Association) however CMASS (Central Massachusetts Spacemodeling Society) ran the Sport Launch part of the range. A report of these events will of course appear in an upcoming issue of American Spacemodeling including an event by event accounting of the National meet. Thus I will not give a detailed account of the flying in this report but rather an overview of the week along with the things that left an impression on me and what I think may be of most interest to MARS club members (If I reported on everything that I saw happen during the week, the report could fill several issues of this newsletter). This report is broken into three general categories. First is the National Sport Launch, second is the NARAM competition and third is miscellaneous. One last comment, this report does not contain information on the Association meeting or the Manufacturers Forum. Some of what happened at these two meetings is covered in "As the ModRoc World Turns" on page 8 of this newsletter.

National Sport Launch

This was the second year for a National Sport Launch. Like last year, this launch had an FAA waiver allowing rockets weighing more than 16 ounces to be flown (although it limited them to a 1700 foot ceiling). This year however, with the NAR's move into high power, class B motors could be flown. The combination of a 1700 foot ceiling along with H & I motors resulted in some creative flying by many participants. Unfortunately, we arrived late Saturday night and after settling in Sunday, didn't make it to the field until late in the day. Thus we missed some of the most active days of the sport launch. Some of the highlights of the sport launch included Roy Green's Mega Alpha flown on an I211 reloadable. This rocket was truly an "Alpha with a thyroid condition", a scaled up version of the classic Estes kit. Roy even scaled up the thickness of the fins and they were nicely airfoiled. The finish and paint job looked identical to the catalog photo including a beautiful scaled up version

of the Ahpha decal. The Mega Alpha stood about 4 foot tall and was one of the few I powered models of the launch. Will Safford probably flew more total newton seconds than anybody, flying his LOC Warloc 4 times, including 3 flights on ISP I engine reloads (the noise from one of them scared the heck out of my daughter Sarah!). Will also brought along a rocket he calls the "Maxi-Ness", a 3" diameter rocket similar to the seven C engine clustered "Mistah Ness" that was featured in a plan in this newsletter 3 years ago. Will had the "Maxi-Ness" loaded up with a Vulcan G21-12, two Aerotech E15-7s, two Estes D12-7s, and two Estes D11-9s. Unfortunately, this one ran into problems when the two D11 engines catoed. Another interesting cato occurred in a rocket flown by Scott Hunsicker (a LOC Minnie Magg I think) with an RMS H motor. Apparently the nozzle split moments after ignition and the engine seemed to burn in a pulsating fashion, chugging across the sky. The reduced thrust was not enough to keep the rocket vertical and it angled over and chug-a-lugged like a steam engine into the ground. Mary Wolf may have been the youngest flyer at the NSL as she flew her baby bottle rocket and the "Flying Elf". Both rockets flew with quieter (and considerably cheaper) B6-4 engines.

In general, the NSL seemed to be a big hit. The idea of gathering on a large scale basis to fly for fun rather than competition seems to be catching on. Many people while flying both at the NSL as well as competing in the NARAM, were more interested in the Sport Launch part of the activities. NARAM seemed to be secondary. This is in sharp contrast to when NARCON was ran concurrently with NARAM. Then NARCON always seemed to be lower in priority for most flyers. Of course having the waiver and thus having an opportunity to fly big rockets is part of the reason for this. Still, this was the least competitive NARAM I have experienced. The mood and feel was more relaxed.

One last observation about the NSL. There didn't seem to be any problems with flying these large rockets at the same time that the small stuff was flown. In fact, the whole setup seemed to work quite well. It was sort of like being at NYSPACE and Danville at the same time.

In conclusion, I really liked the NSL. Unfortunately, I put most of my emphasis on the

competition and NARAM and thus didn't fully take advantage of it. Finally, CMASS did an outstanding job running the NSL. They have set a standard for running the NSL that will be difficult for others to match.

NARAM-33

The competition started on Monday with the Parachute and Streamer Duration events. weather that day set the tone for the meet. Good lift was hard to find and the wind was blowing in the wrong direction. With a west or southwest wind, which is the normal or prevailing direction, the flying field had ample recovery room. But with the wind from the east, the swamp was only a few hundred feet away and beyond that, trees and woods. Due to a severe drought in northern Illinois, the swamp was actually dry, meaning one could walk through it. However when you did so, you found yourself in a very thick growth of tall grass, "cat-o-nine tails" and other native Illinois plant life that was in places 7 feet tall and higher. If your rocket went in there, it could take some time to find it. The woods was equally challenging if not more so. These recovery obstacles and the launch area were separated by a set of railroad tracks. These tracks ran north-south and they were built up on an earth mound 10 or 12 feet above the field so that the trains on this north-south track could cross over an east-west track that was north of the field a few hundred yards. With the wind direction as it was, a popular and effective strategy that many teams and clubs employed was to post a person on top of the railroad tracks just west of the launch area. This person would usually be equipped with a walkie-talkie and would wait while his teammate or fellow club member would prep his rocket and fly it. The elevated view provided from this station proved helpful in locating where your rocket landed. Those of us not fortunate enough to have a confederate to aid in recovery this way were often helped by the group of modelers standing up there waiting for their rockets to be flown. I was able to get a good line on several of my rockets from people stationed up on the tracks. This situation was repeated much of the week as the wind continued to blow from the wrong direction. Due to the weather and the wind, performance in the duration events was not up to usual NARAM standards.

One positive thing that stood out however was the smooth range operations. Check-in lines were virtually nonexistent, and when a contestant was ready to fly, he usually went off immediately. This

was a trend that was also repeated for most of the week and NIRA and the NARAM RSOs should be commended for a smooth range operation. It was the best on field operation at a NARAM I have ever seen including NARAM-30 which was also quite good.

Altitude events were scheduled Wednesday. After trying to retrieve PD and SD birds on Monday and HD and R/G birds on Tuesday from the woods, most competitors looked forward to flying B Eggloft Altitude and A Payload. The range crew got off to a slow start however so flying didn't begin until 9:45. The sky was overcast and it looked like we were in for a rainy day. The baseline was 150 meters which seemed like a good length for the events flown but it was probably set up too far from the range making it somewhat challenging to spot those small A Payload models against the clouds. I was part of the first tracking shift, and although most of the models were easy to see, once in a while an A Payloader would simply vanish. Given the weather conditions, distance from the trackers to the range, and the challenge of tracking to apogee, I thought we did pretty good on Wednesday. Personally, I enjoyed tracking to apogee and would like to try it at MARS meets this coming year.

Around 11:30 or so the rains came and scrubbed the rest of the flying for Wednesday. After some interesting discussion that evening, it was decided that the remaining altitude flights would be flown Thursday morning with each contestant limited to one flight per event. Thursday morning's weather was not much better than Wednesday but we managed to get all the altitude flights in. Given the weather conditions, I was impressed with the winning altitudes in these events. Both events saw altitudes in the 130 meter range, considerably higher than we saw at any of the Upstate New York contests this year. Reasons for this include the use of the Apogee medalist B7 composite mini B in Eggloft (at \$8.00 a flight!) and the use of piston launchers by most of the winners in A Payload. I was really impressed by the performance of those B7s. Although expensive, they are an amazing improvement over the Estes B4 and B6 engines for egglofting.

B Boost/Glide was flown Thursday afternoon. The weather cleared up a bit early in the afternoon but there was still little lift. For some reason there was a high number of red barons in this event as well. There weren't that many good flights that I recall. One exception was the Southern Comfort team's two flights. Both were outstanding as the glider was trimmed perfectly and was also

quite light as its sink rate appeared incredibly low. Another interesting flight was made by Will Safford. After a poor first flight, Will used a composite B7 to get a higher boost. The wing somehow stayed on and the model found some good air for one of the best flights of the day.

RC R/G was also flown Thursday afternoon. In this event, both a target time of 2 minutes per flight plus a target spot as in spot landing must be hit by the contestants. The scoring is done by adding the difference in time from 2 minutes to the distance from the spot in meters for each flight. Three flights must be made and the total score is the sum of scores from the 3 flights. Like golf, the lowest score wins. George Gassoway and Jeff Vincent put on a clinic in this event. In spite of strong north winds George managed an incredible score of 12 (that's an average of 2 seconds error and 2 meters from the spot per flight!) while Jeff had a score of 28. I thought Jeff's 3rd flight was particularly impressive because the winds had really picked up at the end of the day (George wisely made all his flights early), and he still managed to bring the glider down near the spot. The spot was north of the launch area by about 60 meters and the wind was coming from the north at around 15-20 mph. Some competitors struggled to get their gliders anywhere upwind from the launch site yet George and Jeff seemed to do it with ease.

The strong north winds continued on Friday, making Open Spot Landing difficult to fly. Many models couldn't get upwind far enough or were easily blown back to the launch site resulting in several 50+ meter flights. Peanut Sport Scale brought out a lot of nice looking tiny models. Although the Little Joe II was probably the most popular entry, there was an interesting assortment of entries including Team Nuetron's winning Saturn 1B. One of my favorites was a BT-5 sized Mercury Redstone flown by one of the NIRA members. A couple of the Little Joe IIs were nicely done, George Gassoway's and Tom Beach's specifically. Other models I liked included a Block Saturn 1B (by one of Always I think) and an Arianne by Tom Hoelle. As might be expected, there were a few Patriot missiles entered. Unfortunately I was measuring Spot Landing models when most of the scale birds were flown so I didn't get a chance to see many of them.

Overall, the competition went fairly well. The main complaints were about the weather and the late posting of results. In summary though, this was one of the best NARAMS that I have attended. Hats off to Mark and Barb Bundick, Bob and Judy

Kaplow, Ric Gaff and all the other NIRA members for doing a great job.

Miscellaneous

Besides the on the field activities, a lot of what goes on at a NARAM happens off the field. This year, the Holfdome was a perfect setting for this. The NARAM headquarters, range store and most of the manufacturers all had rooms on the first floor, around the pool. Walking through this area in the evening was like walking through a shopping mall devoted exclusively to rockets. Besides the range store which carried Apogee, Estes, ORI, MRC, and NARTS items, Aerotech, NCR, QCR, and Microbrick all had rooms with wares on display and/or for sale.

A special treat at NARAM this year was that NASA Astronaut Dr. Jerome (Jay) Apt was present Thursday and Friday. Jay, a former NAR Trustee and founder of the legendary Pittsburgh Spring Convention, flew as a mission specialist on STS-37 last April. Thursday night a pool side reception for Jay allowed everyone a chance to talk to Jay. Former MARS member Rob Landis took advantage of the opportunity and talked to Jay for over half an hour (Unfortunately, we were away from NARAM that night having dinner with my brother Dave and his family.) Friday afternoon Dr. Apt made a presentation on STS-37. He used both a 16mm movie made from footage shot by the crew on board the flight as well as a set of 35 mm slides the crew shot during the mission to show us what the mission was like. The talk lasted about an hour and was the highlight of the week. As an added bonus, Jay handed out autographed NASA photos of himself to all those in attendance.

A big part of NARAM is the social side. This year, Will Safford threw a party for those of us who frequent Compuserve's Modelnet. (the party conflicted with my R&D presentation but I sure enjoyed stopping by for some refreshment afterwards and a chance to meet some of the other modelnetters face to face.) Of course there were all sorts of informal gatherings during the week. NARAM is always a great time to talk to fellow modelers from around the country. In conclusion, this years NSL/NARAM will certainly be remembered as one of the better ones. It also showed how high power class B rockets and smaller model rockets can be flown together successfully on the same rocket range.

NARAM 33 Winners & Awards

1990-91 Contest Year Final Standings

A Division

Champion

Reserve Champion

Third Place Fourth Place

Matthew Whymark Matthew Koenn

Andrew Miller Jason Whymark

B Division

Champion

Reserve Champion Third Place

Fourth Place

Bobby Gormley Chad Ring

John Kmetz Jr. Ryan Woebkenberg-

C Division

Champion

Fourth Place

Reserve Champion Third Place

Bob Kreutz Jim Sexton Ken Brown

Dan Wolf

Teams Division

Champion

Reserve Champion

Third Place

Fourth Place

Southern Comfort Imploding White Mice

Beach Bums

Jankov/Pavlov/Kovalev

Sections

Champion

Reserve Champion Third Place

Fourth Place

RCA GSSS ASTRE

NOVAAR

SPECIAL AWARDS

Presidents Award

Jay Apt

Howard Galloway Memorial Award

C. D. Taveres

(for his work in getting the new NAR model rocket and HP rocketry insurance)

> LAC Newsletter Award **ZOG-43** (NARHAMS)

> > Honorable Mention Apogee - MIVARS T-5 - HUVARS MAX-Q - HARA

Best Midwest Qualified Flight

Phil Wing

(for two wayward A R/G flights off of a piston)

Also, Dr. Jerome Apt presented Vern Estes with an Estes Scout that was flown on STS-37. Jay also presented to the NAR a montage made up with items flown on the mission including a US flag, Crew Patch, NAR flag and photos.

As the ModRoc World Turns...

(New and rumors heard 'round the hobby)

Special NARAM Edition

NAR News...The big news from NARAM for most NAR members is that the NAR finally has rocketry insurance. The policy, to take effect on January 1st, 1992 provides individual coverage of one million dollars for model rocket flying and advanced high power rocketry as well. Cost is \$15.00 a year. The policy carries a ten thousand dollar deductible but the NAR will cover claims up to that amount. The insurance is secondary, meaning that any other insurance the individual has pays out first (This is the same as the previous insurance the NAR offered from the AMA). Insurance for clubs cost \$30.00 a year for million dollar coverage with site owners insurance costing \$10.00 per site. In conjunction with the insurance, the NAR is moving the section renewal to coincide with the calendar year and the new insurance. A special NARAM offer allowed clubs to sign up at NARAM for the insurance for a thirty dollar fee that included the insurance and the renewal fee (savings of ten dollars). A minimum of 700 people must sign up for the insurance in order to meet the minimum costs for the policy.

In other NAR news, President Miller reported that membership is down to 3700 from a peak of over 5000 in 1989. This was blamed partly on the recession and partly on the sale of Estes and the effect of that on the hobby. Also at the Association meeting, several by-laws changes were proposed. Notice of these proposed changes which will be voted on in the future will likely appear in upcoming issues of *American Spacemodeling*.

At the Association meeting it was announced that next years NARAM and NSL will be hosted by the SPECTRE, the Aerotech NAR section in Las Vegas, Nevada. It has already been dubbed the "Alphabet NARAM" for having an event for each engine class. The preliminary list of events for NARAM 34 is 1/4A R/G, 1/2A B/G, A PD, B SD, C Eggloft Altitude, D Flexwing, E Super-Roc Altitude, F Helicopter, G Rocket/Glide (R/C okay), Plastic Model Conversion, Super Scale. This list of events is for C Divisioners. A & B Division will possibly have lower powered events substituted for the F & G events and Scale for Super Scale. NARAM 34 Contest Director and Aerotech Marketing Director Bob Sanford said that the field is

2 square miles in size with a surrounding relatively open area of another 17 square miles.

The other big item at this years Association meeting was that this year was an election year for the NAR Board of Trustees. You may recall that in 1988, "voter turnout" for the election was very poor (possibly less than 200). This years turnout was over 800, which considering the present membership is at 3700 and also considering that only leader and senior members are eligible to vote, wasn't too bad a turnout. Anyway, the new Board of Trustees is:

J. Patrick Miller, President / Executive Committee
Mark Bundick, Vice President
C. D. Tavares, Secretary
Jake Kane, Treasurer
Vern Estes, Executive Committee
Chas Russell, Executive Committee
Larry Shenosky
Matt Steele
John Pursley
Connie Pursley
Gary Rosenfeld
Greg Kennedy
Steve Lubliner

Manufacturers News... A total of nine manufacturers were present at NARAM-33's manufacturers forum. In alphabetical order, they were each given an opportunity to say something about their current and future plans and products. First up was Chuck Mund representing Aerotees, a company offering T-Shirts and caps with sport rocketry related designs and slogans such as "ROCKETS, now that I have your attention...". My favorite, "RTS RELOADABLE T-SHIRT Clean Thoroughly After Each Use." Next was Gary Rosenfeld and Bob Parks representing Aerotech/ISP. They reported that the Phoenix R/C R/G will be available in the November time frame and will retail for around \$180.00. The glider was flown several times during the week by Bob and other members of the Aerotech team. Gary also talked about the model 18, 24 and 29 mm class C reloadable motors. These will become available by the end of September. Gary also mentioned that in the expendable motor area that the company has had

great difficulty in locating a reliable casing supplier. Therefore Aerotech has developed and will be phasing in over the next several months, a molded case that they have developed. Peter Alway, representing himself as author of the book Scale Model Rocketry, talked about his future plans. First, his stock of the book is getting low so if you wish to purchase one, do it soon. He indicated that his current plans, although not definite, include a book of model rocketry plans with sections on scale plans, contest plans, unique sport plans, etc. Look for this one in the 92-93 time frame. A new edition of the scale book would probably not happen until the 95-96 time frame. Ed Lacroix of Apogee Components was up next. The big news from Apogee is that the company is moving from Minnesota to Arizona. Apogee's new address is: 19828 N. 43rd Ln., Glendale, AZ 85308. Apogee has two new kits out to take advantage of their composite mini-B motor. One is the "B-Liner" for B Eggloft and the other is a maximum length B Super-Roc kit made from PT-13 and PT-6 tubing. The eggloft kit was a popular item, with many of them flown in B Eggloft Altitude at NARAM. Similar in appearance to the other Apogee Eggloft kits, the shroud on this one is red and tapers down to the 13 mm base tube. Mary Roberts represented Estes and had little new to report however she hinted that Estes is not standing still and to look for many new products from the industry leader in the next year or two. Bill Stine represented MRC and had very little new to report. Michael Platt represented Microbrick Technologies. In the past, Microbrick has been primarily a distributor of Aerotech class C and Estes engines, offered at a modest discount. This year, Microbrick has expanded to offer the Aerotech/ISP line of reloadables from the 18mm D up to the 98mm M motor. The Microbrick pricing has also changed with most Aerotech items at 22% of list. The big news at NARAM however was that Microbrick has announced 3 kits. All three kits include thick phenolic impregnated body tubes, seamless nose cones, pre-cut Finolic (G10 material) fins, G-10 centering rings and fluorescent orange ripstop nylon parachutes. The three kits are the Primero, Potemkin, and the Proteus. The Primero, at \$24.75, is a 2.6" diameter, 48" long model with a swept fin design and a 29 mm motor mount. The Potemkin at \$28.75 is a 2.6" diameter, 57" long model with a "Hawk" fin design and a motor mount for a three 24mm engine cluster. The Proteus at \$23.25 is a

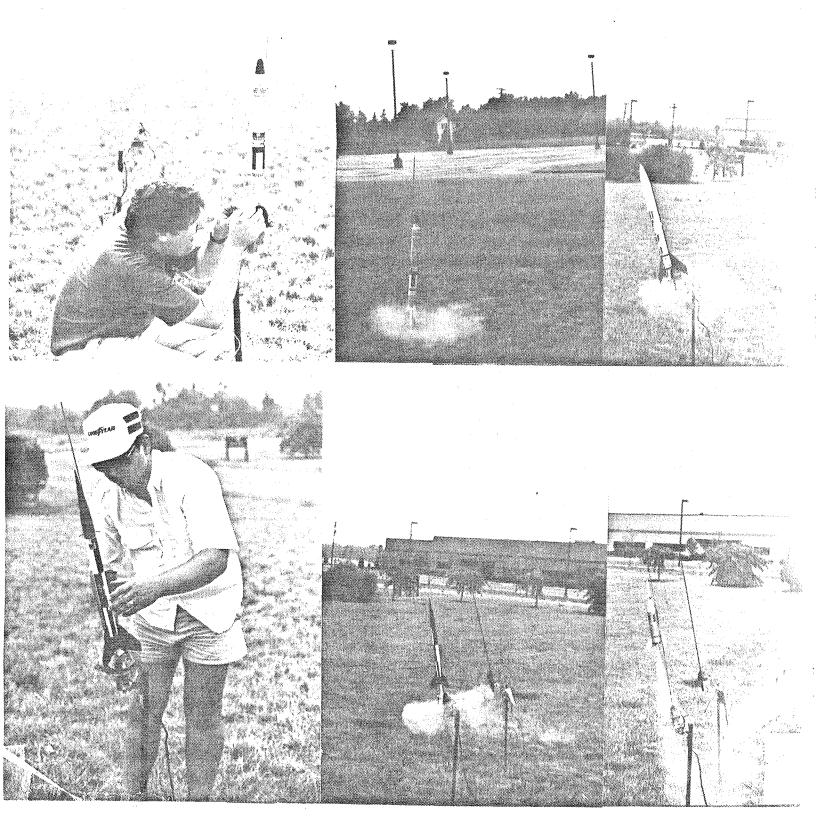
2.6", 33" long model with "diagonal" fins and a main 24mm motor tube surrounded by six 18mm motor tubes. These kits looked really nice and are priced attractively as compared to comparable offerings from LOC and NCR Speaking of NCR, Matt Steele represented North Coast Rocketry. Matt reported that NCR's headquarters is moving. The new mailing address for NCR is 13011 Branscomb Road. Huntsville, AL 35803 (205) 883-6020. All billing, correspondence, inquiries, and catalog requests go to the Huntsville address. Also, shipment of product and returns should be sent via UPS to the current plant address: North Coast Rocketry Kenbridge, Highland Heights, OH 44143. showed a prototype for a Shuttle like rear engine glider that NCR will soon be offering. The glider can also be flown with a pop pod for "hands off under boost" flying. Matt said a new catalog is in the works and should be out sometime this fall. Last but not least, Ken Brown representing Qualified Competition Rockets announced two new kits to their lineup of competition rocket kits. These were the "Never Loop(1/4A)" Boost glider and the "Easy Slide(1/4A)" Rocket/Glider for 1/4A B/G and R/G events.

Upcoming Club Events (continued from page 3)

usual 2:00 PM and will be held at the club field in Farmington. Since we will not be having a regular club meeting until late September, it would be nice to have a "mini-meeting" at the end of the sport launch to make some preliminary plans for contest and sport launches through the remainder of 91. So please plan on attending the sport launch if you can.

A regular club meeting will be held on Friday, September 20th. We have not had a meeting for some time so we have lots of items to discuss. The agenda includes contest planning for the 90-91 year including NYSPACE. At this time it looks like MARS will be hosting NYSPACE next spring and we need to start planning for it now. Other items to be discussed include club insurance, a new club field and membership dues. Also, we have videos from recent club launches as well as videos from NARAM-33 and the National Sport Launch. This should be a good meeting so plan on attending.

PHOTO PAGE #1



Captions (left to right, top to bottom)

- 1. Steve Viggiano hooks up the clips to his Titan.
- 2. The Titan at liftoff.
- 3. Bud Pisicini's Maxi Alpha lifts off into the wind under D12 power.

Note: It's nice to have new faces at our launches. (especially when they bring new rockets or at least ones we haven't seen in a while!)

- 4. Bud sets the angle of the rod before launching his Black Brant II.
- 5. The Black Brant at liftoff with a D12 engine for a nice high altitude flight. Bud had a nice walk to retrieve this one.
- Another of Bud's models, the long since discontinued Estes BT-70 version of the Little Joe II, heads up the rod for a successful flight.

PHOTO PAGE #2



Captions (left to right, top to bottom)

- 1 & 2 Mike O'Brien makes final adjustments to his son Jason's original design BT-60 model. The model at ignition. (Hey guy's, how about a plan of this bird for the newsletter?)
- 3. The O'Brien's X-15 as it clears the rod.
- Shuttle Astronaut Dr. Jerome Apt presents Dan Wolf with the 1990-91 C Division National Champion Trophy.
- 5. Dan Wolf's Estes Patriot model heads skyward.

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.

August 25th, MARS Sport Launch.

Location: Videk, Farmington, NY. 1/4 mile south of Thruway exit 44 at corner of Rt. 332 and Collett Rd. Come on out and fly with us. Everybody welcome. Contact: Dan Wolf 458-3848.

September 14th - BART vs. the Gnats Open Meet.

Events: 1/4A SD MR, 1/4A SRDur, 1/4A B/G,

E BG MR, PMC.

Hosted by ASTRE. Raindate - Sept. 15. Contact: Jeff Vincent (518)439-2055.

September 20th, MAR Club Meeting. Regular MARS club meeting. Agenda: Fall and Winter activities planning meeting, NARAM 33 and National Sport Launch Report, Photos, and Videos. Should be fun. Don't miss this one.

Location: Dan Wolf's house. Contact: Dan Wolf 458-3848.

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





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