THE UPSTATE ROCKETEER

The Official Newsletter of MARS
NAR Section #136

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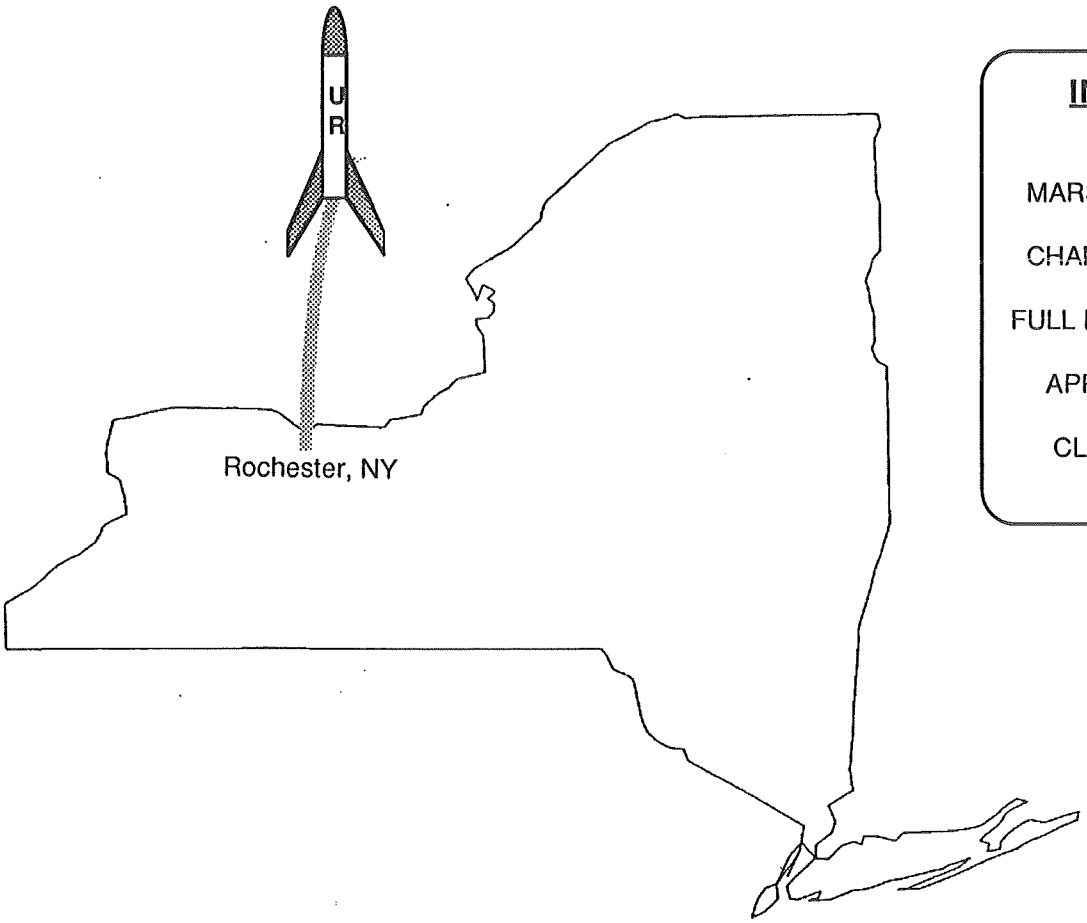

IN THIS ISSUE

The Upstate Rocketeer

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Table of Contents

MARS Membership - June 1992

Jay King - President
Jeff Ryan - Vice President
Ferenc Roka - Secretary/Treasurer
Roy Metz - Senior Advisor

Mike O'Brien	Mark Doty
Jonathan Doyle	Wayne Foster
Merrell Lane	Bud Piscini
Jessica Ryan	William Springer
C.J. Urlaub	Dan Wolf
Mary Wolf	Sarah Wolf

Blowin' In the Wind
(Editorial)

Hello everyone. Welcome to another issue of *UR*. A lot has happened since the last issue. The NFPA meeting and CPSC actions related to G engines and reloads, NARCON, and the April sport launch, just to name a few.

Of course the big item is that NYSPACE 92 is now history. As you can see by the front cover, it was a good meet for MARS in many aspects. The field was great, the turnout was good, the weather was "good enough" and everyone seemed to have a good time. Of course we're all very happy with the outcome. The entire NYSPACE project was a good one as it allow many club members to take active roles. This culminated on Saturday with eight club members pitching in and helping out where needed and still finding time to do some pretty darn good contest flying. With our May sport launch/practice session "winded" out, I was little bit concerned about how we would do competition wise. All in all, I was pleased with how we flew and obviously the results back that up. I was also pleased at how people sprung into action every time it rained, keeping flight cards, stop watches, and other items dry. In particular, the quickness and completeness of how we tore the range down on Sunday was great. Incredibly, none of the flight cards or other papers were lost and most everything stayed reasonably dry. Finally, I was pleased by the patience everyone showed when things tended to bog down from time to time during the peak afternoon hours. For those sport flyers who had to wait long periods of time for your rockets to be launched, thanks for your understanding. For those whose tracks didn't close in 1/2A Altitude, the same words apply. Incredibly, I heard no complaining about any of this or about anything else during the weekend, and for that I say thank-you to all the participants because I know that our range operations were not perfect. I will say that we did try our hardest to make it a good contest and all in all I thought we succeeded at that.

Shortly after the April issue of *UR* went to press, news broke concerning the April NFPA (National Fire Protection Act) committee meeting. Although this information is somewhat stale, I know not all of you have heard it so I thought I would pass it along to you. At the above mentioned NFPA meeting, the TIA (temporary interim amendment) that would have added provisions for reloadable motors to NFPA 1122 was to be voted on (and hopefully approved). NFPA 1122 is a set of guidelines for unmanned rockets approved by the NFPA. Many states (including New York) adopt all or part of the NFPA 1122 in their state laws dealing with model rockets. As many of you are aware by now, this TIA was not passed due to some safety questions raised concerning reloadable motors. Some of the concern was generated by the now infamous Vulcan-Estes video tape showing burn tests of both expendable and reloadable motors. The end result was that instead of a new TIA concerning reloads being passed, a TIA was passed that brought the maximum total impulse of a model rocket engine to 80 ns to concur with CPSC (Consumer Product Safety Commission) regulations (in other words, the G engine is no longer considered

a model rocket engine). Aerotech has requested a stay of enforcement with regards to reloadable motors as well as G motors. A ruling on this stay by the CPSC is imminent. If approved, it would allow Aerotech to continue to sell G engines and reloadables to the general public. In the meantime, there is no ban on G engines or reloadables as far as NAR or Tripoli members are concerned however you may have difficulty in finding them in local hobby stores (although as of last week, Dan's still had both RMS and G engines). I bring this NFPA issue up so as to keep everyone informed of the situation. Other rocket newsletters around the country have done a more thorough job of reporting on this situation. Give me a call if you would like more info. There have been all sorts of rumors flying around concerning the CPSC, DOT, BATF and other organizations getting involved in regulating model and/or high power rocketry. At this point in time it is too early to tell what will happen but for now it appears to be business as usual. Both the NAR and Tripoli are hard at work in trying to resolve this issue. Stayed tuned for further details in the coming months.

This issue of *UR* primarily deals with NYSPACE 92 as you may have guessed. In keeping with a competition theme there is an article on glider tips by QCR's Ken Brown and info for the upcoming "Sunny Side Up" Section meet.

In closing, I would like to welcome Wayne Foster, our newest MARS member. Wayne met us at the St. John Fisher Science Exploration Days. Wayne has already gotten into the swing of things by attending NYSPACE 92 and giving a hand there with timing and helping tear the range down. Wayne was also at the last club meeting. Welcome aboard Wayne. Good to have you as a member.

Until next time,
Dan
Dan

MARS Club News

Meeting Report

The regularly scheduled MARS club meeting was held at Dan Wolf's house on Friday June 12th at 7:30 PM. The main activity at the meeting was the announcement and presentation of awards for NYSPACE 92 as well as distribution of prizes to the participants. All prizes were distributed and mailed the following week.

The remainder of the meeting was spent discussing the club's activities for the remainder of the flying season. The idea of a MARS group traveling to a fall high power launch (possibly Virginia, Michigan, or Danville) was discussed and/or a club field trip to LOC/Precision for a tour of LOC and sport launch with Ron and company some weekend in the late summer or fall. Dan Wolf will pursue these two options and report back to the club.

July Sport Launch Scheduled

A July sport launch was scheduled for Sunday July 12th at 2:00 PM. The launch will be held at Videk. Also, the July club meeting will be held on Friday, July 10th at our new meeting place, the RIT research center. A map to the new meeting place can be found elsewhere in this issue. Thanks to John Viggiano for arranging this.

Section Meet Scheduled for August

Finally, MARS will have a section meet on Sunday, August 9th with the rain date the following Sunday. The contest, the "Sunny Side Up Section" Meet will feature the following events: D Dual Eggloft Altitude, B Eggloft Duration, 1/2A Streamer Duration (Multiround), 1/2A Super-Roc Duration, Parachute Spot Landing. For those just starting out, a list of kit models that can be used for these events can be found on page 14.

JUST FOR LAUGHS

(with apologies to the Santa Barbara RC Modelers)

NYSPACE 92

Introduction

NYSPACE, the New York Spacemodeling Annual Championship and Exhibition, is an annual NAR sanctioned regional open to all NAR but specifically to NAR members and sections from New York state. The contest is an opportunity for all New York NAR members to come together for a weekend of contest and sport flying. In addition to that, the New York state NAR sections go at it in head to head competition for the New York state section championship. This was the second annual NYSPACE competition and it was held on the weekend of June 6-7 at the National Warplane Museum in Geneseo, NY.

NY Section Championship Scoring

NYSPACE uses a different scoring system for determining the section champion. For each event in the contest, each section selects three club members to represent it in that event. The scores (times, altitudes, etc.) for the 3 members are added together and the resulting total score is used to determine the club places in the event and then NYSPACE points awarded to the clubs per the NAR weighting factor and point awarding system. This results in a more even playing field for the clubs to compete against each other versus the standard NAR scoring, where the club with the largest number of members and/or members in more than one age division has a decided advantage. This does not restrict participation to only three members from each section however as the sections can select a different 3 member team for each event. This year (as was last year), the non-host sections only had 3 members flying meaning that those 3 members represented that section in every event. The host club MARS was the exception, with 6 members flying.

The Participants

Contestants from three New York NAR sections turned out for this year's contest. The Spacemodeling Rocketry Buffs of Syracuse (SRBS, NAR Section #901) was represented by Dave Pringle, Peter Deierlein, and John DeMar. John, by the way, was the C division champion of last year's NYSPACE. The defending NYSPACE champion section, the Albany Schenectady Troy Rocket Enthusiasts (ASTRE, NAR Section #471) was represented by Karl "Chuck" Hemker, John Sicker, and the DWTNBFA team member Jeff Vincent. The host section, the Monroe Astronautical Rocket Society (MARS, #136) had six members competing: Jay King, Pat "Bud" Piscini, Ferenc Roka, Jeff Ryan, John Viggiano, and Dan Wolf. Besides the 3 clubs, there were four other contestants: Raul Jimenez (who drove all the way up from Brooklyn to fly with us), Ed Reilly from Buffalo, Brett Templar from nearby Honeoye Falls and veteran contest flyer Ken Mizoi from Ithaca, NY. Raul, Ed and Brett were all trying NAR competition for the first time.

Contest Flying - General

The MARS range crew started setting up the range shortly after 9:00 AM and range operations were ready to go shortly after 10:00. Most of the contestants didn't show up until after noon however, with everything getting into full swing around 1:30. Most people started out flying 1/4A PD, Spot Landing, and the glider events. Tracking started at 2:30 and was open until the range closed at 6:30.

Saturday's weather was pretty good with a few rain drops early on in the day, but partly sunny conditions from 2:00 on. In addition, there was little or no wind. That coupled with the large flying field, made recovery of models fairly easy except for an occasional stubborn model lost in the patches of tall grass that covered various parts of the field. There was some good thermal activity on Saturday, unfortunately much of it during the altitude flying window. This caused some problems as many contestants continued to fly duration events during the altitude window, resulting in the tracking being extended to four hours instead of two.

Sunday's weather was much worse than Saturday's, with overcast and threatening skies for the entire day. Rain shut the range down for several minutes shortly after noon on Sunday, and finally brought the meet to a close around 4:00. Range operations both days went fairly smooth but bogged down as usual during the tracking events. All results were posted on a large results board made by Bud Piscini. This board helped to keep all contest flyers informed of the times and altitudes for each event.

Contest Flying - Event by Event Report

Open Spot Landing

Light winds and a close spot (relative to the pads) made for an easy target to hit in spot landing. This resulted in OSL being a fairly competitive event with the top six places all being within 10 meters. Jay King lobbed a Big Bertha on a 1/2A6-2 to a first place distance of 4.2 meters. Most of the winning entries used a similar technique (low powered lobs) although a couple of flying saucers were flown.

1/4A Boost/Glide

The Pink Book gives this event a one point higher weighting factor than 1/2A B/G, implying that the lower thrust makes this a more difficult event to fly. The results from NYSPACE did not support this however as the qualification rate was over 75%. A wide variety of models were flown. The DWTNBFA Team representative, Jeff Vincent, easily took first place when he found a thermal on his second flight. The glider circled the field just west of the range area for over 2 minutes giving Jeff a 2 flight total of 183. Jeff's glider was larger than most of the entries in the event and although it did not boost as high as some, the larger wing area and light construction resulted in a very low sink rate. Jeff's experience paid off in this event as the glider was trimmed well and he knew when to

fly. Dan Wolf took second. Dan flew the Olympia 67 plan from the *MIT Competition Design Handbook*. This glider was much smaller than Jeff's. The smaller size and weight allowed it to boost much higher but on Dan's first flight, the glider did not transition well (gliding upside down for several seconds) resulting in a mediocre first flight time of 13 seconds. Dan switched to a second model and his second flight in mostly dead air was much better, a respectable 52 seconds giving Dan a total of 65. John DeMar flew the Beakers, a canard B/G that was one of the gliders featured in the February issue of *UR*. John scaled the plan down to 60%. John's first flight was 40 seconds, the 3rd best time of the meet but a cato on John's second flight "fried" the pod and kept John in 3rd place. Dave Pringle took 4th place with two consistent flights of 19 and 18 seconds for a 37 second total.

1/4A Parachute Duration (MR)

The other 1/4A event flown at NYSPACE again saw an assortment of models. Most of the models fell into three categories. First were 13mm minimum diameter models, most made from Blackshaft tubing and sporting waferglass fins. Surprisingly, there were also some 18mm models with boat tails and featuring larger chutes. Finally, Dan Wolf flew a vellum rocket with 1/32 balsa fins. This rocket featured an old CMR nose cone and the entire rocket without engine and recovery system weighed less than 3 grams. Dan's first flight found a thermal and easily made the max time of 60 seconds. The timers stopping timing at 3 minutes 50 seconds with the model still above the tree line. Needing a return of his second model, Dan elected to switch to a 12" chute on the second model (he used 15" on the first) and missed a max by two tenths of a second. Then on his 3rd flight, the chute did not fully open, resulting in only a 31 second flight and a 150 second total. John DeMar flew a conventional 13mm Apogee components built rocket. John just missed maxes on his first and third flights but a partially opened chute on his second flight killed his chances of winning the event and he had to settle for second with a 142 second total. Jeff Ryan was only 4 seconds behind, also flying an Apogee type model. The rest of the field was way behind the top three because only one other contestant (Dave Pringle) was able to put up three qualified flights.

1/2A Altitude

1/2A Altitude turned out to be somewhat of a disappointment due to the lack of achieving closed tracks. Because of the larger field, the trackers were set up further from the range than they had been during the MARS practice launches. This, plus the tree line/horizon being in a very poor spot in the trackers field of view, created a difficult situation for the trackers. The models were too small to be seen at that distance and the tracking powder cloud was not always seen or seen by both trackers at the same time. This resulted in several lost tracks or no closes.

This turned the event into something of a "crap shoot". In the end, Jay King took first with a respectable 175 meters on his marginally stable 13mm Blackshaft model. Marginally stable in that on Jay's second flight, the model went unstable! Jeff Vincent took second with a 140 meter flight on his third attempt to get tracked. Jeff Ryan and Ferenc Roka were third and fourth with altitudes of 133 and 122 meters respectively. All in all, this was a tough event to track and the people manning the trackers all agreed that this event should never be flown again (at least not with the baseline that was used).

A Rocket/Glide

After being held at NARAM last year plus several area meets leading up to NARAM, it appears that most New York flyers have figured this event out. The result, only one disqualification in the event. That DQ was a spectacular one however when the ignition clips caught the tail of Ferenc Roka's glider, causing it to do a power loop off of the pad, over the range table and into John Viggiano's box of rockets. This earned Ferenc the "Best Prang" award for a contest flight. Meanwhile, the competition was pretty tight with DWTNBFA (Jeff Vincent) beating out John Viggiano by one second, 131 to 130. Jeff flew his own design to two nice flights while John flew a QCR slide wing kit. Dan flew the "Status-4"(plan from the February issue) he flew to first place at NARAM 33 to take third with a 124 second total. No one was able to find the really "good air" in this event, with all the top flights right around the one minute mark.

B Eggloft Duration

Most people put off flying this event until Sunday. Good lift was hard to find that day so this was another relatively close event. Several contestants flew Apogee Streamliner kits with 36 inch chutes. Peter Deierlein took first when on his second flight of his Streamliner, he had just enough of a small thermal to bump his model up a little for a 55 second flight. Dan Wolf flew a "2 minute egg" with a dry cleaner bag chute to a second place flight of 46 seconds. Jay King and Dave Pringle, both flying Streamliners, tied for third at 43 seconds. Ferenc Roka took fourth with a model of his own design, an Apogee Nova Cone on top of a BT-20. The 24 inch chute took a while to open, giving Ferenc a 19 second flight. Overall the performances in this event were much better than at previous MARS meets over the past few years. Only one egg was broken and the times were good for "dead air" flights.

C Super-Roc Altitude

This was the first time many of the contestants had flown one of the higher power Super-Roc events. For the last two years, most of the Super-Roc events flown in Upstate New York have been in either the 1/2A and A engine classes. The jump up from these lower engine sizes and rocket lengths to C Super-Roc, proved to be harder than some people expected. The first several flights in the event all ended up disqualified, usually for having a non-vertical flight path, although spit engines and unsafe recovery were also reasons for DQs. Perhaps not surprisingly, the two contestants that tied for first place were

two who had done test flights at the MARS April sport launch. Jay King and Dan Wolf both had total scores of 1162 points. Dan's entry was a maximum length "Blackshaft" model of 250 centimeters and achieved an altitude of 206 meters. Jay flew the Apogee "Longshot" kit and discovered it was 2 centimeters short of maximum length or 248 centimeters. Jay managed to outdistance Dan however with an altitude of 209 meters. The 3:2 ratio of length points to altitude points resulted in the two being tied. Dave Pringle took second with a maximum length model that flew to 183 meters. There were no other qualified and closed track flights. Jeff Vincent, after a DQed first flight, flew a backup model on Sunday (there was no tracking Sunday) to tie Jeff Ryan for 3rd with 750 length points. Ferenc Roka took fourth with 747 in length points when his flight of 229 meters didn't close. In general, the tracking worked well in C Super-Roc. The closure error rates were low and Ferenc's was the only flight that didn't close.

Sport Scale

(Editors Note: The following Sport Scale report was provided by John Viggiano who was the judge for this event.)

Sport Scale static judging began Saturday night, and Ken Mizoi drew more than a few "oohs" and "ahs" as he carried his North American *Navaho* cruise missile to the check-in table. Other entries included John DeMar's huge *Lockheed X-17*, Bud Piscini's *Juno I*, Ferenc Roka's *MX* "Peacekeeper", Jay King's 1/10 scale *Patriot*, and the DWTNBFA team's *Sandhawk*. The *Little Joe II* was represented by two entries. Dan Wolf's was the large Centuri version, and Peter Deierlein entered a modified version of Estes' 1/100 scale kit.

The strategies for scale data ran the gamut. DWTNBFA's *Sandhawk* was substantiated by the NARTS data pack augmented with a brief set of notes for the judge, providing the most pertinent information in as compact a format as possible. Also successful was Dan Wolf's thick *Little Joe II* book of drawings, photographs, articles, letters from subcontractors, press releases, etc. A couple of entries were substantiated with only a photograph or two; they did not receive many points for data.

The static scores ranged from 745 (out of a possible 800) down to 460. DWTNBFA's *Sandhawk* was in the lead. The detail and craftsmanship on this entry were outstanding. Bolts, brackets, launch shoes, and antennae were all beautifully done. Close behind were Dan Wolf's highly detailed *Little Joe II*, Ken Mizoi's *Navaho* (which received maximum difficulty points), and John DeMar's *X-17*. The *X-17* contained a stage with flat sides, and transition sections which went from round to flat (and vice-versa). John's skillful treatment of these details netted him points in craftsmanship and difficulty. Peter Deierlein's *Little Joe II* and Bud Piscini's *Juno I* rounded out the front runners. These models both had nice finishes: The *Little Joe* had a beautiful silver paint job, and the *Juno I* had a gorgeous satin finish that added realism.

John Viggiano, the scale judge, arrived with the entries at 1:00 PM Sunday, right after a brace of cloudbursts. Fortunately, conditions improved, and soon it was time for flight scoring of the entries.

Jeff Vincent of the DWTNBFA team got things rolling with the *Sandhawk*. After a nice launch, boost, and coast, the shock cord gave way at ejection. Fortunately, the lower portion slowly tumbled and spun its way down into some tall grass, and was recovered undamaged, as was the nose and missile section. Bud Piscini flew his *Juno I* with the Estes-recommended C5-3, and had the parachute deploy while the model was still coasting upward. He took advantage of the second flight available in Sport Scale, this time using a C6-5, and received the top flight score of 180 (of a possible 200).

The *Little Joes* both turned in nice flights, although wet grass added a little dampness to Dan's Apollo CM. "Splashdown is part of the mission profile," he pointed out while returning his entry. "Not for the *Little Joes*, which were flown in the desert," retorted the judge. All kidding aside, both Little Joes came through with textbook flights.

Ferenc Roka flew his *MX* next. Prepped on the launch pad, the model listed over slightly because the launch lug on the clear fin unit was offset slightly from the body, to avoid interference from the launch rod. Nevertheless, the model boosted straight up, and rewarded the onlookers with a very nice flight.

Ken Mizoi's *Navaho* was readied for launch by a proxy team. Powered by two Aerotech D21s, which were off center, concerns were expressed regarding the safety of the model. Ken assured us that a pair of canted control surfaces would insure a straight and stable flight. The prototype faced a similar problem: the ramjets on the cruise portion did not operate at liftoff. All looked on anxiously as the "heads-up" was given before launch.

Perhaps a longer or stiffer rod may have helped a little, but the Navaho flew end-over-end a few times ten meters up, and landed with a thud when the thrust ran out. It was a scary flight, but fortunately, nobody was hurt. The bird seemed okay; perhaps another flight can be made someday with only the inboard engine operating.

Soon after these flights it started raining again. John DeMar declined to fly his *X-17* in the rain, deciding to save its maiden flight for more favorable conditions. Jay King decided likewise. We were disappointed by their decision, and tried to persuade them to do otherwise, but Mother Nature settled the issue with finality: the clouds opened up again, and a light rain became a downpour. The range was closed, and the flight judging came to an end.

A mere 15 points separated the flight scores of the entries that made qualified flights. Bud Piscini's *Juno I* had the top flight score of 180 points;that second flight really paid off for Bud. The *Sandhawk*, with its shock cord failure, and Ferenc Roka's *MX*, with its listing launch, both had 165 point flights. The others, all with nice flights, were between these two tight limits.

Taking first place was, to nobody's surprise, the DWTNBFA team's *Sandhawk*, with a 910 point total. A mere seven points behind was Dan Wolf's *Little Joe II*. Also "in the money" were Peter Deierlein's *Little Joe II* with an 830 point

total, and Bud Piscini's *Juno I* with 804 points. Rounding out the field was Ferenc Roka's *MX*, with 756 points.

Contest Summary - Individual

The overall championship was quite close with Dan Wolf edging out the DWTNBFA team 990 to 981. This was interesting in that both Dan and Jeff flew only seven of the eight events. Dan electing to skip 1/2A Altitude ("not worth flying due to such a low weighting factor") while Jeff didn't fly the much higher weighting factor B Eggloft Duration. Third place went to Jay King, who did quite well considering this was his first regional meet and first serious attempt at competition. Dan, Jeff, and Jay took first place in 7 of the 8 events while fourth place finisher Peter Deierlein placed first in eggloft.

Section Competition

At the outset of the contest, it appeared that the section championship might be a "2 horse" race due to ASTRE not having a full three member team in every event. However, neither MARS nor SRBs was able to take full advantage of the opportunities given them. The biggest challenge facing MARS was in deciding which 3 members should fly each event. In 5 of the 8 events, the MARS section score would have been higher if the right members had been on the team for that event. In two cases, A Rocket/Glide and B Eggloft, MARS would have won the event had the proper people been selected. For the SRBs, the problems were twofold. First and foremost, John DeMar was not able to complete all of his flights prior to the meet ending rain on Sunday. This hurt the SRBs chances in 1/4A B/G, A R/G, and Sport Scale. Second, the SRBs only entered two models in Sport Scale, the highest weighting factor event (and only one flew, due to the rain). The bottom line is that none of the three sections performed at top efficiency but MARS flew "good enough" to take first in five of the eight events. Worthy of note however, is that Jeff Vincent flying as the DWTNBFA team almost singlehandedly won the 1/4A B/G and A R/G events for ASTRE, not to mention second place in Sport Scale.

Sport Flights

In planning for NYSPACE 92, we had hoped that it would be an event for all New York Spacemodelers to participate in, both contest and sport flyers. Thus the turnout of modelers who flew only sport flights or whose emphasis was on sport flights was especially gratifying to see. To highlight and honor the sport flyers, several awards were presented to them. Due to the rain out at the end of Sunday, these awards were presented "posthumously", at the MARS club meeting the following week. The "Best Sport Flight" award was a tough choice because there were several good ones. For black powder engines, the award went to Raul Jimenez for his two 18 mm cluster flight(s) of what appeared to be a modified Estes Sentinel kit. Both flights of this nice looking model were straight and true and Raul had no problem getting both engines to ignite. An honorable mention went to Dan Garrett of Honeoye Falls for a nice D12 powered flight of an Estes Phoenix. We have seen some Phoenix models have stability problems but this nice looking model turned in a perfect flight. For the best composite engine powered sport flight, the award went to Jim Cost for his E15 powered rocket with on board 35mm camera. Jimmy brought out some of the photos he has taken with this camera rocket and they included some nice shots of the hockey rink at the RIT campus (Jim, we'd still like to see an article for the newsletter on this rocket). The Best "Oldie but Goodie" Flight went to Dan Garrett for his vintage Estes Interceptor. The Best Craftsmanship award went to Raul for his Estes Pathfinder. There were a lot of nice looking sport models flown but there was something about this model that really stood out. Farthest distance traveled encompassed two awards. One for farthest from the east, which was Raul (Brooklyn, NY) and one for farthest from the west, which was Ed Reilly (Hamburg, NY). Most times to the pad was awarded to Brett Templar. Although we didn't keep flight cards for sport flights, it seemed like every time we turned around Brett or one of his entourage was putting something on the pad (How many times did that Big Bertha fly?). The best prang for a sport flight went to Dan Garrett's C6 powered Estes Eggspress. The shock cord broke and the capsule free fell (the "miniature astronaut" didn't survive). The best prang for a contest flight went to Ferenc Roka when the clips got caught up in the tail of his A R/G and the rocket power looped over the range table into a box of John Viggiano's rockets. Honorable mention went to Ken Mizoi for his twin D21 powered Navaho. Ken only got honorable mention because we knew it was likely to prang. Of course there were several other sport flights, most of them being very good. In fact, there were very few unsafe flights, both sport and contest. Perhaps the only thing missing was the lack of high power flights, mainly due to the fact that many of the high power freaks were too busy doing contest flights. No one seemed to mind (the lack of HP) however.

At the MARS club meeting following NYSPACE, besides the contest awards and the sport flight awards, Dan Wolf handed out "Contest Director" awards to MARS club members for their contributions towards making NYSPACE 92 a success. The "Best Range Help" award went to Bud Piscini. Although everyone in the club contributed in some way, Bud always seemed to be there, whenever anything needed to be done. For this Bud received an Estes Scale Combo Pack and an Estes Nike Apache kit. Honorable Mention went to the rest of the MARS club members. The "Lose-Lose" award went to John Viggiano for volunteering to judge scale. The other people that were scheduled to judge scale couldn't make it for one reason or another and John received a couple of discontinued kits as well including a Centuri F-16 kit. The "Calibrated Eyeball" award went to Jay King, Rich Kerr, and Bud Piscini for there hard work as trackers. Trying to track those 1/2A Altitude birds proved to be a daunting task and for their efforts these three were each awarded a pair of Ray-Ban sunglasses (to help aid in

seeing these small birds) and a Kodak single use camera (if you can't see it, try taking a picture of it). Last but not least, the "Silver Tongued Devil" Award went to Ferenc Roka for his tireless efforts in rounding up prizes for the weekend. Ferenc was able to get donations from several local hobby stores as well as some nice prizes directly from some of the manufacturers. For his efforts Ferenc received Estes SCUD missile and Der V-3 models.

Summary

This is only the second year for NYSPACE so only time will tell how it stacks up to past and future NYSPACE meets. This year's NYSPACE will hopefully be remembered as a weekend of both fun and competition. Also, it will hopefully be remembered as the first of several rocketry activities at the National Warplane Museum. The Museum grounds and surrounding farm land make for an excellent flying field for almost any type of rocket activity. The Museum staff made for excellent hosts (they didn't bother us at all) and we look forward to flying there again. Finally, the turnout was good. Although we fell short of our goal of 20 contestants, there were over 20 flyers total (sport and/or contest) and there were certainly a lot of rockets flown. Finally, everyone seemed to have a good time throughout the weekend, this in spite of the rain that came and went on both days. And now that NYSPACE 92 is over, we look forward to NYSPACE 93 scheduled to be hosted by SRBS in Syracuse. *Event by event results can be found on the following pages. Photos of the launch can also be found in this issue. The list of prize contributors is shown below.*

NYSPACE 92 Prize Contributors

Thanks to all the companies and businesses whose contributions helped make NYSPACE 92 a success. Practically everyone who flew at NYSPACE took some type of prize. The following companies and businesses provided merchandise and/or gift certificates:

Area Businesses
Bausch & Lomb
Rowe Photographic Video TV & Audio
Area Hobby Stores
Dan's Crafts & Things
Edmunds Hobby
The Hobby House
Panco Hobby
Walt's Hobby (Syracuse)
Niagara Toy & Hobby (Buffalo)
Model Rocket & HP Rocket Companies
LOC/Precision
North Coast Rocketry

MARS Sport Launch III

On Sunday April 26, 1992 the boys from White Sands gathered at the test range for some crucial testing. Twenty three test flights were made, with many of those being tracked for altitude using the state of the art electronic tracking system that was designed and manufactured by Wolf Ballistic Technologies Inc. As advertised, the system functioned flawlessly. Missions were tracked anywhere from -1 to 200 meters.

As part of the tracking tests, it became very evident that 1/2A powered models that were tracked using the long baseline were invisible. The red tracing smoke produced by some of the rockets made good tracks possible though. The sky was overcast and white tracking smoke was not much of a contrast. This baseline worked effectively for all the planned events for NYSPACE 92. If you want to be sure of a qualified flight, I strongly suggest using the "Red Smoke" type engines for the contest. We also successfully experimented with tracking the larger models to apogee. This is quite feasible for events using larger models. Now for the real highlights.

Tests were performed by the following: Jay King, Rich Kerr, Ferenc Roka, John Viggiano, Dan Wolf, David A. and David J. Pringle of the SRBS and your reporter. There was a wide range of vehicles flown, lost, or CATO'd. Jay flew a variety of models with an even wider variety of results. Among the memorable was the "C" Super-Roc model that got -1 meter altitude. This powered javelin started on its ballistic arc from the moment it left the pad and proceeded to drill itself into the ground under power. Really impressive Jay, make sure the "OTHER GUYS" get copies of that plan. This 8 foot model collapses to 3 feet. Rich Kerr, who joined us for the first time flew some old standbys with nice results as well as doing a fine job at "TRACKING EAST". Glad to have you Rich and welcome. Ferenc Roka made some nice flights while taking some soundings with his IQSY Tomahawk, FSI Sprint, Estes Ninja (which performed surprisingly well) and an XR-20. Ferenc, please use new igniters next time. John Viggiano flew some perfect test flights with his Athena and Calypso. His altitude attempt with his X-16 was memorable. About how high is a 5 year old pine tree John?-'cause I know it is about two feet higher than that "EXPERIMENTAL" vehicle went. Dan Wolf made some fine test flights until his luck began to run dry, resulting in the Super-Roc and the RMS powered LOC Graduator hanging from trees. Once again the reload turned in a beautiful flight though. They both looked like Dan should have them down by now though, as they were not too far from the ground. The Pringles made some nice flights before the wonderful weather (cold and a bit breezy) chased them back east. Hope to see you soon guys. Finally, your reporter flew some of his old standards including the 1/40th scale Mercury Redstone, IRIS, Patriot, and the CATO of the day, the 1/70th scale Little Joe II. The C6-7 in this vehicle catoed quite impressively. The engine casing split its entire length and produced a fireball that had me looking for somewhere else to be rather than at the firing panel.

All things considered the tests went well and Dan is to be thanked and congratulated on the ease of use and precision of the tracking system. "And that's the way it was-"

Bud Piscini

NYSPACE 92 RESULTS

Open Spot Landing		Distance	Points
1	Jay King	4.2 Meters	60
2	Peter Deierlein	5.1 Meters	36
3	Dan Wolf	6.3 Meters	24
4	Ferenc Roka	6.8 Meters	12
5	John DeMar	7.1 Meters	6
6	DWTNBFA Team	9.8 Meters	6
7	John Viggiano	14 Meters	6
8	Raul Jimenez	17 Meters	6
9	Bud Piscini	17.6 Meters	6
10	Karl Hemker	28.7 Meters	6
11	Dave Pringle	50+ Meters	6
11	Brett Templar	50+ Meters	6

1/4A Boost/Glide		1st Flight	2nd Flight	Total Score	Points
1	DWTNBFA Team	37	146	183	240
2	Dan Wolf	13	52	65	144
3	John DeMar	40	CATO	40	96
4	Dave Pringle	19	18	37	48
5	Ferenc Roka	33	NG	33	24
6	John Sicker	11	15	26	24
7	Peter Deierlein	8	9	17	24
8	Ken Mizoi	9	-	9	24
	Karl Hemker	RB			0
	Jay King	RB	RB		0

1/4A Parachute (MR)		1st	2nd	3rd	Total Score	Points
1	Dan Wolf	MAX	59	31	150	150
2	John DeMar	55	32	55	142	90
3	Jeff Ryan	34	44	MAX	138	60
4	Ferenc Roka	SEP	31	MAX	91	30
5	DWTNBFA Team	MAX	SEP	-	60	15
6	Dave Pringle	28	12	18	58	15
7	Jay King	15	24	-	39	15
8	Peter Deierlein	SEP	17	-	17	15
9	Ed Reilly	3	EJ	8	11	15
10	John Viggiano	DQ	EJ	9	9	15

1/2A Altitude		1st Flight	2nd Flight	Points
1	Jay King	175 Meters	Unstable	90
2	DWTNBFA Team	140 Meters	-	54
3	Ferenc Roka	TL	133 Meters	36
4	John DeMar	122 Meters	-	18
5	Jeff Ryan	TL	118 Meters	9
6	Karl Hemker	TL	80 Meters	9
7	Peter Deierlein	78 Meters	-	9
8	John Viggiano	TL	72 Meters	9
9	Dave Pringle	NC	37 Meters	9
10	Brett Templar	NC	NC	9
11	Ed Reilly	NC	TL	9
	Ken Mizoi	UNSTABLE		0

A Rocket/Glide		1st Flight	2nd Flight	Total Score	Points
1	DWTNBFA Team	71	60	131	270
2	John Viggiano	73	57	130	162
3	Dan Wolf	59	65	124	108
4	Ken Mizoi	65	DQ	65	54
5	Peter Deierlein	29	22	51	27
6	John Sicker	12	33	45	27
7	Jay King	4	7	11	27
	Dave Pringle	14/NR			27
8	Ferenc Roka	UNSAFE	43/NR		27

B Eggloft Duration		1st Flight	2nd Flight	Points
1	Peter Deierlein	21	55	240
2	Dan Wolf	46	EGG	144
3	Jay King	43	10	96
	Dave Pringle	43	23	96
4	Ferenc Roka	14	19	48
5	John DeMar	8	-	24
6	Brett Templar	7	-	24

C Super-Roc Alt.		1st Flight			2nd Flight			Points
		Length	Altitude	Total 1	Length	Altitude	Total 2	
1	Dan Wolf	250	206	1162		DNF		240
	Jay King	248	197	1138	248	209	1162	240
2	Dave Pringle	250	171	1092	250	183	1116	144
3	Jeff Ryan	250	TL	750		DNF		96
	DWTNBFA		UNSAFE		250	TL	750	96
4	Ferenc Roka	249	NC	747		UNSAFE		48
	Peter Deierlein		CATO/UNSAFE					0
	John Viggiano		ENG					0
	John DeMar		UNSAFE					0

Sport Scale		Prototype	Static Score	Flight Score	Total Score	Points
1	DWTNBFA Team	Sandhawk	745	165	910	300
2	Dan Wolf	Little Joe II	728	175	903	180
3	Peter Deierlein	Little Joe II	665	165	830	120
4	Bud Piscini	Juno I	624	180	804	60
5	Ferenc Roka	MX	591	165	756	30
	Ken Mizoi	Navaho	701	UNSAFE	-	0
	John DeMar	X-17	694	DNF	-	0
	Jay King	Patriot	460	DNF	-	0

NYSPACE TOTAL POINTS

1.	Dan Wolf	990
2.	DWTNBFA	981
3	Jay King	528
4	Peter Deierlein	471
5	Dave Pringle	345
6	Ferenc Roka	255
7	John DeMar	234
8	John Viggiano	192
9	Jeff Ryan	165
10	Ken Mizoi	78
11	Bud Piscini	66
12	John Sicker	51
13	Brett Templar	39
14	Ed Reilly	24
15	Karl Hemker	15
16	Raul Jimenez	6

Section Points

MARS	2196
SRBs	1050
ASTRE	1047
Independents	147

ABBREVIATIONS

DNF - Did Not Fly
EGG - Broken Egg
ENG - Ejected Engine
MAX - Maximum Time (1/4A PD MAX = 60 seconds
NC - No Close
NR - No Return
RB - Red Baron
SEP - Separation

NYSPACE SECTION COMPETITION

Open Spot Landing		Entry 1	Entry 2	Entry 3	TOTAL	Points
1.	MARS	4.2 M (Jay K.)	6.8 M (Ferenc R.)	14 M (John V.)	25.0 M	60
2.	SRBs	5.1 M (Pete D.)	7.1 M (John D.)	50 M+ (Dave P.)	62.2 M	36
3.	ASTRE	9.8 M (DWTNBFA)	28.7 M (Karl H.)	50 M+ (none)	88.5 M	24

1/4A Boost/Glide		Entry 1	Entry 2	Entry 3	TOTAL	Points
1.	ASTRE	183 (DWTNBFA)	26 (John S.)	0 (Karl H)	209	240
2.	MARS	65(Dan W.)	33 (Ferenc R.)	0 (Jeff R.)	98	144
3.	SRBs	40 (John D.)	37 (Dave P.)	17 (Pete D.)	94	96

1/4A PD (MR)		Entry 1	Entry 2	Entry 3	TOTAL	Points
1.	MARS	150 (Dan W.)	138 (Jeff R.)	11 (John V.)	299	150
2.	SRBs	142 (John D.)	58 (Dave P.)	17 (Peter D.)	217	90
3.	ASTRE	60 (DWTNBFA)	0 (None)	0 (None)	60	60

1/2A Altitude		Entry 1	Entry 2	Entry 3	TOTAL	Points
1.	MARS	175 (Jay K.)	118 (Jeff R.)	72 (John V.)	365	90
2.	SRBs	122 (John D.)	78 (Peter D.)	37 (Dave P.)	237	54
3.	ASTRE	140 (DWTNBFA)	80 (Karl H.)	0 (None)	220	36

A Rocket/Glide		Entry 1	Entry 2	Entry 3	TOTAL	Points
1.	ASTRE	131 (DWTNBFA)	45 (John S.)	0 (None)	176	270
2.	MARS	124 (Dan W.)	11 (Jay K.)	0 (Ferenc R.)	135	162
3.	SRBs	51 (Peter D.)	0 (Dave P.)	0 (None)	51	108

B Eggloft Duration		Entry 1	Entry 2	Entry 3	TOTAL	Points
1.	SRBs	55 (Peter D.)	43 (Dave P.)	8 (John D.)	106	240
2.	MARS	46 (Dan W.)	43 (Jay K.)	0 (John V.)	89	144
3.	ASTRE	-	-	-	0	0

C Super-Roc Alt.		Entry 1	Entry 2	Entry 3	TOTAL	Points
1.	MARS	1162 (Jay K.)	1162 (Dan W.)	750 (Jeff R.)	3074	240
2.	SRBs	1116 (Dave P.)	0 (Peter D.)	0 (John D.)	1116	144
3.	ASTRE	750 (DWTNBFA)	0 (None)	0 (None)	750	96

Sport Scale		Entry 1	Entry 2	Entry 3	TOTAL	Points
1.	MARS	903 (Dan W.)	804 (Bud P.)	756 (Ferenc R.)	2463	300
2.	ASTRE	910 (DWTNBFA.)	0 (None.)	0 (None)	910	180
3.	SRBs	830 (Peter D.)	0 (None)	0 (None)	830	120

TOTAL POINTS - NYSPACE SECTION COMPETITION

MARS	1290
ASTRE	906
SRBs	888

NYSPACE 1992
SPORT FLIGHT AWARDS

Best Sport Flight
Best Black Powder Flight - Raul Jimenez, 2 engine cluster
Best Composite Flight - Jim Cost, E15 powered camera rocket

Best "Oldie but Goodie" Flight
Dan Garrett - Estes Interceptor

Best Craftsmanship
Raul Jimenez - Estes Pathfinder

Farthest Distance Traveled
Raul Jimenez - Brooklyn, NY
Honorable Mention
(farthest distance traveled from the West)
Ed Reilly

Most Times to the Pad
Brett Templar - Honeoye Falls

Best Prang - Contest Flight
Ferenc Roka, A R/G
Honorable Mention
Ken Mizoi, Navaho (Sport Scale Entry)

Best Prang - Sport Flight
Dan Garrett - Estes Eggspress

Contest Director Awards

Best Range Help Award
Bud Piscini
Honorable Mention
Wayne Foster
Rich Kerr
Jeff Ryan
Jay King
Ferenc Roka
Merrell Lane
John Viggiano

Special "Lose-Lose" Award
(for Scale Judging)
John Viggiano

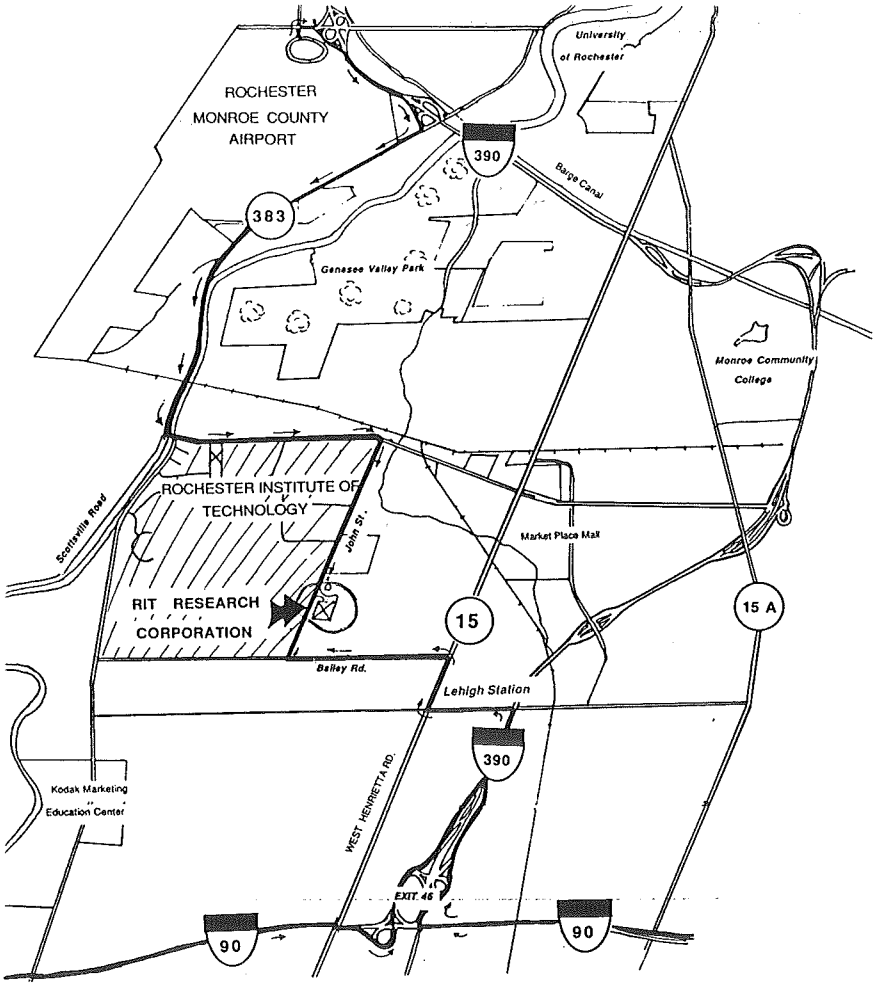
"Calibrated Eyeball" Award
(for tracking)
Jay King
Rich Kerr
Bud Piscini

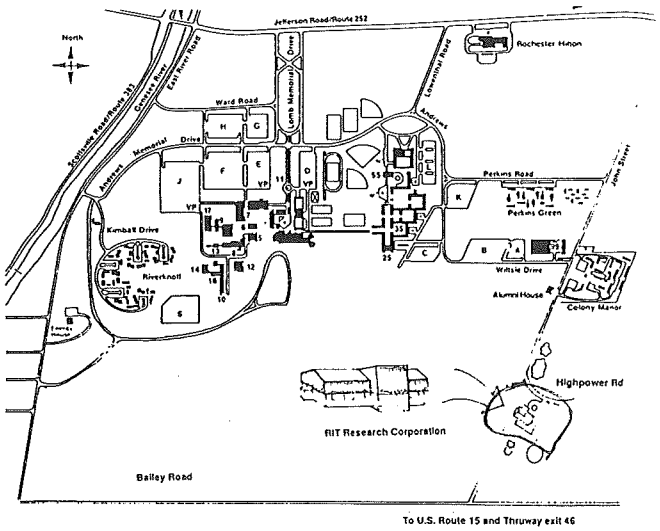
"Silver Tongued Devil" Award
(for talking vendors and hobby
shops into donating prizes)
Ferenc Roka

NEW MEETING PLACE

MARS now has a new meeting place for its monthly meetings. It is the RIT Research Center located at 75 Highpower Road in Henrietta. Maps to the Research Center are shown below.

Note: The last "map" at the bottom of the page is for the "after the meeting" meeting place.



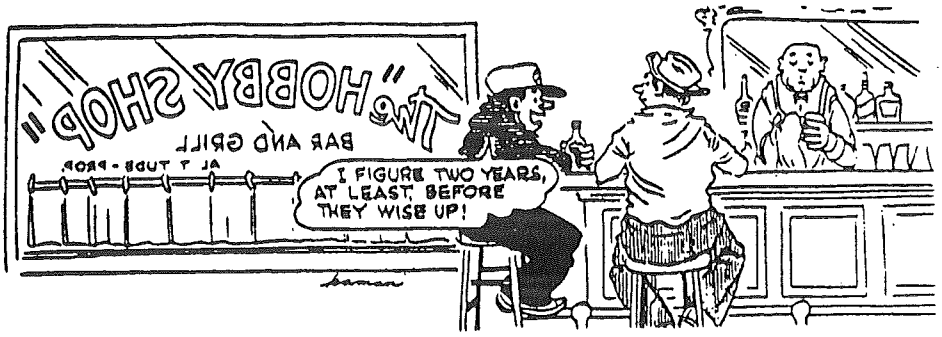


The RIT Research Corporation is adjacent to the eastern edge of the campus of the Rochester Institute of Technology. Both are located in the town of Henrietta, a suburb on the southern edge of Rochester, NY. It is approximately 6 miles from either Exit 46 of the New York State Thruway (Interstate-90) to the south or the Rochester Monroe County Airport to the north.

To reach RIT Research Corporation from the airport, turn right onto Brooks Avenue, then right onto 390 South. From 390 take the Scottsville Road exit and turn right.
Drive for approximately 3 miles, then turn left on Jefferson Road.
Proceed east on Jefferson Road passing the Rochester Institute of Technology campus, and turn right onto John Street. Proceed south on John Street and then turn left onto Highpower Road.
The Research Corporation is the first building on the right side.

To reach the RIT Research Corporation from the New York State Thruway, take exit 46 and proceed to Lehigh Station Road...
Turn left onto Lehigh Station Road to the light at West Henrietta Road (Rt 15). Turn right onto Rt 15 to Bailey Road (2nd light). Turn left onto Bailey Road to John Street. Turn right onto John Street and then right onto Highpower Road.

BENTON COUNTY RC CLUB, Jim Trump, Editor
2401 Northwest Kings Boulevard, Corvallis, OR 97330



Glider secrets not taught at your building sessions.

By Ken Brown

(from the Fall 1991 issue of the NOVARR Free Press)

Most people in competition concentrate on building the lightest glider they can and it usually isn't a winner. This is because they don't use the following secrets not found in the glider design manuals or taught at the club building sessions. Pay close attention to the following advice and you'll find more points in your glider events.

Build three gliders. Two for reliability and one ultimate. Use the reliable one for returns. If the competition is tough, use the ultimate, once you've gotten an approved return. Most NAR flyers don't pre-test their models. Therefore, the reliable models will hold up when all others are shredding.

Fly your first flight early (I prefer 9-10 AM) in the day. Make this a return flight. Sit back and wait. Observe what the competition is doing. If things are close, then go ultimate on your next flight. If others are shredding, then you can be conservative in your next flight and concentrate on a reliable flight with a decent time. The best flights are flown from 9-10 AM and 4-6 PM.

To get a return flight on an acceptable glider, add clay to a wing tip to get a nice turn that won't exceed the limit of your field. On the second flight, take off some or all of the clay for a non-return flight that will max. the clock. Keep in mind however, that when the timers lose sight of your model the clock stops. Use good judgment. Don't use a dethermalizer as too many things can go wrong.

The winning combination is a simple approach, the fewer things that can go wrong normally make for a winning model. Make the glider as simple as possible. Complex models look pretty, but tend to increase the error factor.

Have three different weight models. Contest balsa for no wind, average balsa for light breezes and dense balsa or large model for mid-day and high winds.

Thermals are the answer. If there is a thermal streamer on the field, watch it closely. If the streamer rises gently, launch! Watch what the "Hot Shots" are doing. Launch when they launch.

Color your models with bright neon colors and use reflective tape. It allows the timers to follow the glider for a longer time and greatly increases visibility of the model in high grass. A model with a good time that can't be found for a return is useless.

Don't tissue your models. Use one thickness greater of balsa. It's more reliable and less complex.

AUGUST SECTION MEET
CONTEST EVENTS AND RECOMMENDED KITS

Below is a partial list of recommended kits for use in the events scheduled for the upcoming MARS section meet.

B Eggloft Duration & D Dual Eggloft Altitude
Apogee - MCK6, "Streamliner", $15.95, Get an EET-1, "Egg Cone Extension Tube" for dual egg, $0.95
Estes - "Scrambler", No 2072, $10.99 (The capsule will hold one or two eggs.)
North Coast - "Double Eagle" (Dual Eggloft only) $20.00
QCR - #105, "No Break" II, Easteregg Egglofter
- #110, "Might Break III", Dual Easteregg Egglofter

1/2 A Streamer Duration (MR)
Apogee - MCK1, "Dragster", 5.95
Estes - Any 13 mm kit
North Coast - "Backlash A", 1/2A SD, $6.50
QCR - #1, "Straight Up", 1/2 A SD and PD (13mm), $4.50

1/2 A SuperRoc Duration (100 cm is the maximum length)
Apogee - MCK7, 1/2 A "Longshot", 8.25
Estes - "Skinny Mini" (No longer in catalog, but still in the stores)
North Coast Rocketry - "Javelin A" $12.00
Scratch - 40 inches of 13 mm tube (Estes BT-5 or Apogee PT-13)

Parachute Spot Landing
Any big and slow flyer.

Manufacturers

Apogee Components
19828 North 43ed Dr.
Glendale AZ 85308
602-780-2946
(shipping on $0-$35 order is $3.00)

Estes Industries
PO Box 227
1295 H Street
Penrose CO 81240
800-525-7561
(shipping on $0-$35 order is $2.25)

North Coast Rocketry
13011 Branscomb Road
Huntsville, AL 35803
205-883-6020

Qualified Competition Rockets
7021 Forest View Dr.
Springfield VA 22150
703-451-2808
(Shipping $5.00)

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

Manufacturer's News... This months manufacturer's news deals with companies offering various electronics goodies for rocketry. First off is a new company called Adept Rocketry. Here is a review of Adept's offering by Tom Beach via Modelnet:

If you haven't sent for the info sheets from Adept yet (see ad in the latest *American Spacemodeling*) here's what's on it: Eight (8) different staging/deployment timers in various shapes, sizes and capabilities. All of these timers employ a nifty acceleration sensing switch to detect launch (the acceleration must continue for more than 0.5 sec before the circuit believes that you've really launched it -- you can't start it by shaking the model as may happen with a mercury switch system). I got the ST1210C, the smallest and lightest timer, 1.2 oz. with 12V lighter battery. It will fire a flashbulb or electric match. Time delay from 1 to 14 seconds is set with a screwdriver. LEDs indicate when the unit is armed and when you have igniter continuity. Because of the "magic switch" it is a bit large (fits in a 1.15" inside diameter tube) but Tommy says smaller and cheaper timers are coming (perhaps in kit form, too) that are activated by burn wire or other switch. The ST1210C costs $27.95. I also got a top of the line model, the PST940A, which is microprocessor based. Delay is set by dip switch, 0.5 to 25.5 seconds (0.1 sec increments). A piezo beeper indicates (by different beep patterns) when the unit is armed and if there is igniter continuity (so you don't need holes in your model to see the LEDs). Fits 2.35" I.D. tube, weighs 2.5 oz. with battery. The battery is a GE rechargeable ni-cad, so this puppy can fire copperheads, homebrew thermalite, or up to four Solar igniters (see below). $32.95.

Adept has five sonic beacons. They use patterned beep tones that repeat every 2 seconds, so the batteries will last up to 24 hours (or so it says). All units include a mute system that can keep the beeper silent until deployment (to save battery life and the nerves of the launch crew). Again, I bought the smallest and the largest units: The SB1210A uses the tiny 12V lighter battery and puts out 85 decibels. It weighs 0.6 oz with battery, and fits in a 0.8" I.D. tube (but I think I can get it to fit into a BT-20 if I trim the corners on the battery holder). $7.95. The SB950B is very impressive (and LOUD). It is powered by a regular run-of-the-mill 9 volt transistor battery, but the circuit includes a voltage multiplier so the unit puts out over 110 dB (Joyce won't let me play with it in the house anymore). 2.7 oz., fits 1.75" I.D. tube.

Coming in July is a $49 altimeter that is great. Relatively small (BT-50?...I don't have the specs) you launch it into the air, and when it returns it will be beeping out the maximum altitude (beep-beep-beep...beep-beep...beep = 321 feet). Too cool. A $79 altimeter is due in August that will log the altitude data into EEPROM for later recovery and downloading.

Not to mention the on-board computers (four models, most with built in altimeters). Dave Gianakos' Saturn 1B (see cover of recent *'Spam & Tripolitan*) flew with a prototype of these units. And further in the future there are the transmitters ($10-$20 range), and other goodies.

If you love rocket electronics, you should check out these nifty devices. No, I don't own stock in the company or anything like that -- I just hope enough people buy these things so he'll stay in business long enough for me to buy one of each! Tommy also seems quite receptive to suggestions, so if you have some electronic device you always wanted for your rocketry activities, drop him a line and request it.

About the 9 volt battery: During his talk, Tommy discussed the special properties of the General Electric 9 Volt (well, 7.2 volt) rechargeable ni-cad battery. Because of its very low internal resistance, this battery can throw multiple amps of current through an igniter (other 9V ni-cads have a much higher internal resistance, so they CAN'T do this). I've placed some wire (the thick part of a solar igniter lead) across the terminals of a GE ni-cad... Fffzzt! Vaporized. Impressive! Tommy claims that when you use these batteries to fire copperheads, the high current will melt away any of those pesky shorts around the edges of the igniter that often make copperheads difficult to ignite (and then will pop the igniter, of course). Note that Radio Shack and other 9V ni-cads I have tried can not do this. In fact, Tommy also said the Eveready 9V ni-cad (which is really the same GE battery) will work as well, BUT BE WARNED: I have found that the Eveready 9V batteries available in my area are NOT the same as the GE (Eveready apparently has changed their source of batteries). The GE battery is has squarer corners, is dark gray in color, and is made in Hong Kong. The bad batteries have rounder corners, are black, and are made in Singapore. On the good Eveready batteries, the label goes only part-way around. On the bad Eveready batteries the label goes all the way around the battery.

--Tom Beach

For an Adept info sheet send $1.00 to: Adept Rocketry, P.O. Box 846, Broomfield, CO 80038-0846

Another manufacturer of "Rocketronics" is just down the Thruway, Microbrick of Schenectady, NY. Microbrick offers a capacitive-discharge relay system launch controller designed for the most demanding high current (ie. multiple thermalite ignitor clusters) launch situations. Microbrick also offers a timer board that is accurate to several decimal points (crystal based) and is insensitive to temperature variations, a problem inherent in many RC type timer designs.

Finally, a tracking transmitter is available in kit form from Xandi Electronics that transmits to FM radio. Phone # (602) 829-8152.

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.

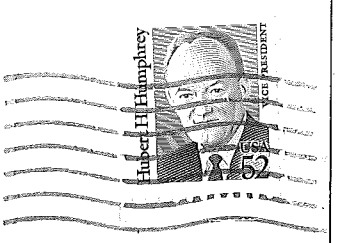
July 10th, MARS Club Meeting, 7:30 PM.
Regularly scheduled MARS club meeting.
Location: RIT Research Center (see map on page 13).

July 12th, MARS Sport Launch.
Club fun fly. Everybody is welcome.
Location: MARS Flying Field. Corner of Rt. 332 and Collett Rd. Farmington, NY

August 9th, Sunny Side Up Section Meet.
MARS Section Meet. Events: B Eggloft Duration, D Dual Eggloft Altitude, 1/2A Streamer Duration (Multi-round), 1/2A Super-Roc Duration, Parachute Spot Landing.
Contact: Dan Wolf 458-3848.

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

ROCHESTER 1992 JUN 20 P M N.Y.



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