



The Upstate Rocketeer



Official Publication of MARS™, the Monroe Astronautical Rocketry Society,
Section 136 of the NAR®



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Finger Lakes Fall Classic IV

Meet coverage by Bill Owens

MARS, section 136 of the NAR, held its fourth annual fall contest the weekend of September 17th and 18th this year. In addition, a waiver was obtained for the flying which attracted a good deal of mid and high power activity, including one NAR certification flight. The event was flown at the NARAM-37 field in Geneseo, NY, and with similar events to the NARAM slate provided a preview of some of the action which we will be seeing next summer.

Contest Flying

Things started out slowly on Saturday with intermittent drizzle for the first hour and a half of scheduled flying, but the first contest flights after the weather cleared a little were quite good, with four maxes on 1/2A Flexi; the International Rescue Team (John Viggiano and his nephew, Robby LaFleur) scored three of them, Jeff Ryan had one max and two no glides for second and new competitor Ray Lewis turned in a very respectable 39 seconds for third.

1/2A BG had some tight competition as well, with IRT again taking first on 64 and 40 second flights, Mike O'Brien in second with 44 and 35, and Jeff Ryan in third with 17 and 58. Bill Owens placed fourth with a single flight of 62 seconds, and didn't realize that was good, so he didn't make a second flight!

The C Streamer flights were made on both days, and the change in weather was telling in the results, with times varying from 38 to 150 seconds. Ray Lewis took first in this event, Jeff Ryan came in second after climbing a tree to recover his rocket (that was the 150 second flight, so it was worth it!), IRT was third and Ed Norris fourth. Bill Owens had a 120 second plus flight, but abandoned the rocket when it landed deep in a cornfield.

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Apollo 11 Anniversary Sport Launch

Coverage by Bill Owens

Once again MARS attracted quite a crowd at Parma Corners Park for the club's July launch. The weather was good if somewhat breezy, and once again we set up near the rocket-eating storage building. The club launch system was set up, complete with PA system, and we had a very cleanly run, professional looking flight line for everyone to see. With the large number of flights made by so many people, some went unrecorded, so this is a summary of what we managed to keep track of.

Merrell Lane and John Viggiano put together a nice static display of scale models for visitors to see, including John's X-15, Nike-Apache, Nike Smoke, Iris, and Juno-I and Merrell's Saturns IB and V. With the Apollo 11 anniversary and SpaceWeek, scale models were the order of the day. Dan Wolf flew a Little Joe I, three different Little Joe II's and his Saturn V, a visitor also flew a LJ II, and Bud Piscini had two beautiful flights on his Juno-I. Merrell Lane flew models of the Skybolt and Titan III, and Dan launched his V-2.

Unfortunately for Dan, his parachutes were a little sticky and several flights, including the V-2, recovered less than

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Op / Ed

Rhymes of the Range

Our 1994-95 contest year has begun with a road trip to another MARS (the Mid-Atlantic Regional Shoot, 18th edition) in Virginia, and our own home-grown Finger Lakes Fall Classic IV. The latter was attended by several visitors from Buffalo's new North Side Section, lead by Jim Fenzel. They really helped make the day, with dozens of people making over a hundred flights on Sunday alone. My only regret is that we had to shut down sport flying a few times while we got the contest flights done. People were good sports about this, though I would like to offer a large launch dedicated to sport flying. This way everyone can fly in turn. Check the coverage of both these meets in this issue.

I'd like to welcome to the editorial staff Bill Owens (somewhat belatedly) and Andy Schecter. Bill has been doing an excellent job of writing the articles on the club's activities, including meetings and launches. I think you agree with me that congratulations are in order.

With this issue, Andy has begun the task of gathering contributions from regular columnists, many via e-mail, and putting them in the format I need. It's a big help to me, and I'd like to take this opportunity to thank Andy for his assistance.

I've also been remiss in not welcoming these new members, preferring instead to put them busily to work, lest they notice. Welcome to MARS, Bill and Andy. Other new members are Kevin Foster, Ray Lewis, and Ed Norris. Be sure to give them a welcome to the club the next time you see them.

Ferenc Róka, founding member of MARS, is also the first member of the 1994 edition of the MARS Century Club. Here's how it works: We try to record all of the flights made at official MARS events. (We're trying to be especially good about this, now that Bill has agreed to write launch reports!) As anyone who has flown with him knows, Ferenc keeps meticulous records, going back to his very first launch (in February, 1967)! So if you record your flights made on your own, or at other functions the way Ferenc does, they count towards the 100 flight goal.

Ferenc tells us that he made his 100th flight (#2741 lifetime) during Finger Lakes Fall Classic IV, on a Quest Tracer using an FSI C6-5 engine. It was Ferenc's first flight of the day, and he used it to test the wind. By the way, Ferenc's next two flights were made with his LOC Forté, using his last two H engines in order to become "BATF Legal."

The Century Club is open to all MARS members who can document 100 flights in a given calendar year. Let's make the Century Club a new MARS tradition. With all of the events coming next year, there should be great opportunities for lots of flights!


Although you may have already heard, the *Upstate Rocketeer* was selected as the 1993-94 recipient of the North

American Rockwell trophy (also formerly known as the "LAC Newsletter Award"). Both Dan, as founding editor, and I are thrilled by this honor. Judges Douglas Kirk, Bob Sanford, and Steve Weaver have our sincere and humble thanks for this award.

I'm sorry I wasn't able to attend NARAM-36 to receive it in person. I received a summons to Jury duty, and had already re-scheduled it a few times before. Hats off to Merrell Lane for shipping it back home for us!

The November/December issue is our traditional High Impulse Rocketry edition. As I understand it, the theory is that you'll have plenty of time to build those big birds during the months of cabin fever that go hand-in-hand with those Rochester winters. There are at least two plans lined up, as well as some kit reviews and a directory of suppliers. If you have something to share, as always, please see me. In any event, I hope you're looking forward to the next issue as much as I am!

Have fun & fly 'em high!


John

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Editors of other newsletters and journals are welcome to reprint material which appears in *Upstate Rocketeer*, provided they extend to us a reciprocal privilege and they cite the source, unless the article, plan, or what-have-you indicates something to the contrary. Please contact the author if that's the case.



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As The Rocketry World Turns...

news and rumors heard 'round the hobby, by Dan Wolf

Manufacturers News . . . Estes has discontinued the manufacturing of balsa nose cones. According to reports published in ZOG-43, the Estes Balsa shop has been closed with the last of the wood run through and the last bags of debris and waste taken to the landfill. Whether balsa cones will be purchased from another source or disappear from the catalog and kits entirely is unclear at this time.

Another interesting item concerning Estes was the report that the company sells about ten million engines a year. Assuming that the average NAR member makes 50 to 100 flights a year with Estes engines, and also assuming that the NAR has 4000 members, that translates to 200,000 to 400,000 engines a year used by NAR members or about 2 to 4 percent of the total.

In other manufacturers news, in an apparent move to counter the eminent release of the North Coast Rocketry composite F & G motors, AeroTech and Magnum Industries have announced the availability of AeroTech F50 and G80 White Lightning motors (not Blue Thunder). Price is \$6.50 for the F50s and \$7.50 for the G80s.

NAR News . . . The NAR news this month comes from the Contest Board. Recently the board voted on the current list of provisional events to decide which would become permanent Pink Book events, which would go, and which would continue as provisional events. This was done in preparation for the new Pink Book which is due out this fall. Making it in as permanent events are the Cluster Altitude and Dual Eggloft Duration events. Also, C Dual Eggloft Altitude was added as a Pink Book event. The contest board voted no on the Bi-Wing and Tri-Wing B/G and R/G events as well as on Two-Stage Duration. Those events can no longer be flown for contest points. Finally, events that stayed on as provisional, meaning they can be flown for contest points but will not appear in the Pink Book, consisted of all of the NAR/FAI events.

Tripoli News . . . Bruce Kelly is the new president of Tripoli. In a controversial move that is sure to be talked about for some time, one of Bruce's first actions was to "dismiss" John Cato from his position as chairman of the Tripoli Motor Test committee. *[If the Editor were a Tripoli member, he'd be angry as heck about this. John has done an excellent job during his all-too-brief tenure.]* Bruce appointed Tom Blazanin as the new head of TMT. In other news from LDRS, many reported a repeat of last year with hot, humid, and windy weather although not as windy as last year. Highlights included an AeroTech demo of a 98mm Blue Thunder M

motor that was said to be very impressive and a scaled up Astro Blaster that shredded on a J motor. Dennis LaMothe's big rocket this year was a large Aerobee powered by three LaMothe "N" motors (dragon breath motors?). Shortly after launch, one of the motors apparently had a blow through in the side of the casing, igniting the other two motors. By the time the fire extinguisher crew arrived on the scene only the remains were still burning. It was a total loss. No one was ever in danger, as the rocket was launched from a safe distance (spectators over a mile away). The rocket, however, was a total loss.

Next year LDRS moves back to the Black Rock desert near Gerlach, Nevada. Dates are August 10-13 with the BALLS 005 experimental launch scheduled for the following day, August 14th. The hot topic at LDRS was the by-laws issue. It was this issue that resulted in John Cato losing the TMT chair. A by-laws committee has now been formed with the task of delivering a new set of by-laws that everyone can live with. In the meantime, an operating set of by-laws was passed by the membership by a 3 to 1 margin. Also in Tripoli News, Bobby Gormley has been appointed chairman of the Tripoli Contest and Records Committee. Bobby's first goal is to establish procedures for setting altitude records by motor class (H, I, J, etc.). Once the altitude records rules are completed, he plans to work on other high power events such as waterlofting. If this is of interest to you, Bobby is looking for a few volunteers to serve on the committee.

Regulatory News . . . FAA front — still waiting. BATF front — still waiting (no word yet on whether the proposed September meeting between the BATF and the rocketry reps will take place or not). DOT front — An NPRM relating to shipping classifications for model rocket motors (G size and below) was just released for public comment. With little time to respond, the NAR did send out letters to all sections with a suggested response. Cutoff for the public comment period was September 4th. This rules change would allow for all motors with 62.5 grams of propellant or less to be continued to be shipped by normal methods. There were more restrictive regulations concerning packaging however. The NAR's response was basically in favor of the new classifications but opposed to the more restrictive packaging requirements. If passed, motors with less than 30 gms of propellant would be classified as 1.4s and motors with more than 30 grams but not more than 62.5 grams would be classified as 1.4c.



FAMILY AFFAIR— Mary, Sarah, and Chris Wolf mind the rangehead during a very slow period Saturday. Things were sure busier the following day! Photo by Ferenc Róka. >

FLFC-IV, continued from page 1

C Eggloft Alt was flown on Sunday, and tracking suffered from the cloudy weather and high winds. The winner was Jeff Ryan with a beautiful 176m flight, IRT placed second with 148m and Bill Owens flew to 122m for third.

PMC, the terror event of the meet, had only three competitors; IRT flew an X-15, Mike O'Brien had a Juno-1 and Jeff Ryan pushed the envelope with a Bell X-1. The Juno-1 was first up and flew very well, with little damage for second place. The X-15's first attempt had a partial recovery failure, so John flew it again sans canopy, and earned top honors. Unfortunately the X-1 turned out to be underpowered on a 13mm A and was disqualified because of a safety ruling.

The final standings had the International Rescue Team in first with 1576 points, Jeff Ryan second with 868, Mike O'Brien third with 552 and Ray Lewis fourth with 440. A large crowd witnessed many of the contest flights, and the contest flyers were kept busy answering questions about the different events. Unfortunately, the contest flying also interfered to some extent with the sport flights, and the club will be working to avoid this in the future.

Sport Flying

We had too many sport flyers to do anything but briefly mention the flights. In alphabetical order, then:

Max and Maxine Altitude flew a mix of D-F black powder and composite motors, in a nicely finished Aerotech Cheetah, a Big Bertha, MRC ARM and a turquoise Estes Jayhawk called the Dolphin. Unfortunately, the Dolphin was the victim of two Estes E15-6 CATOs, but was mostly undamaged.

Doug Caskey launched his Saturn IB and V, on 4 C6-5's and a D12-3 respectively. He also flew a Mean Machine on a D12-3 and a Phoenix on an Estes E15-8. Steven Castrechini had his Nova on the pad four times, twice on B and twice on C power, and also flew his Blackhawk and Skywinder.

James Cost snapped a picture with his Fling camera rocket on an F39-4, and another with his autowinder camera on

a G80-4. Hopefully the pictures came out! Jerry Dawey had a single flight of his Starship Aquarius on an Aerotech E15-4. Ralph Fagnoli flew another Blackhawk, a 'Little Glider', Skywinder and an unnamed egglofter (don't know whether the egg made it).

Bill Fenzel from North Side Hobbies not only operated an impromptu range store and rocket repair shop, he flew a variety of rockets including a classic V2 on D12 and E30 power, Big Rage on E25, Broadsword on Aerotech E15 and E30, and an MRC Flare Patriot on C5 with smoke, D12, D21 and finally E25 with smoke.

Patrick Finan had his usual complement of mid-power equipment, such as his 2-stage 'SpamRam' on D12-D12 and D12-E15, Uppulse (a modified Impulse) on clustered D12's, Nonstandard ARM on E15, Block II Shadow on an F39 reload, and the big Astrobee D on a G64 reload.

The Gravinos were busy all day, with Brandon flying a Twister, Big Bertha, Wildcat, Sprint, Dagger and Rampage, and Tom with a Bullet, Bullpup, Phoenix, Cobra, Der V-3, and Big Bertha. Mark and Lynn Gugliuzza flew a FireHawk five times on B and C motors, and a Bandit on a C.

David Heal launched his Cox Saturn V to the accompaniment of an historic countdown, and it flew beautifully on a pair of D12-3's. Jim Hoffman had trouble with overlong delay, putting a C6-7 in an Alien Space Probe where a C6-3 would probably have sufficed, but it appeared repairable. He also flew a Standard Arm on an Estes E15. Matt Hughes joined the Maniac club, flying one on a D12-5.

Casey Kahler flew his Spartan on a pack of B6's, one at a time of course. Rich Kerr flew another Maniac on a D12, and his Navaho on a B6-0 staged to an A6-4. Ray Lewis, in addition to his contest flying, found time to try his home-made egglofter on a C6-3 and an unnamed scratchbuilt bird on a D12-7.

Daniel Lewis-Rzeszutek had two flights on a Gnome, and one each on a Condor and an Athena. Ben Matthews and his father Dave tried hard to fly Quest C6-5 motors in a Nova Payloader, a Falcon and an Icarus, but all three catoed. The Falcon did fly, though, on an Estes B4-4. Ed Mikolon had one successful and one less successful flight on E15's in his Broadsword, but despite a non-deployed chute the rocket was repairable. He also flew his Airwalker and a Bullpup.

Frank Mure tried his Tomcat on two flights, with partial successes; Ed Norris did better but his glider is wearing and will need repairs. Ed also flew his Cherokee D twice on D12-5's, and a Super Big Bertha, Colossus (with glider), Starship Aquarius, and Maxi Alpha all on D12's. He launched an Excalibur and a Tornado on B and A power, and a Centuri Flying Saucer on a C6-0.

Sean O'Brien had his Skywinder up on C and B power three times, and had two good flights with one partial rotor deployment. He also flew a Photon Probe and two scratch-built birds, Ranger II and Nighthawk. The Nighthawk went

on an E29-10! Kerrie O'Brien flew a Bandit and a Dagger on B and A engines.

Bill Owens split his time between contest and sport flying, launching a Maniac on an E15, a '64 Malibu B rocket glider on an A8-3 and his scratchbuilt Big Red One on an E28-7T reload Saturday. The BRO flew again on Sunday on the same engine, and he also made flights on his Phantom 4000X with an F25-4 and on his 29mm Maniac with an F25-6 and a G80-10. The G flight was his NAR high power certification flight, the only one for the weekend, and the rocket was eventually recovered from the roof of one of the buildings on the Genesee State campus!

Brett Rimes had a nice mix of rockets, with a Delta Clipper on C6-0 staged to C6-5, and an Interceptor and Heliocopter on C6-5. Brooks Rimes had a Dragonfly on 1/2A, and a Klingon Bird of Prey on a C6-5.

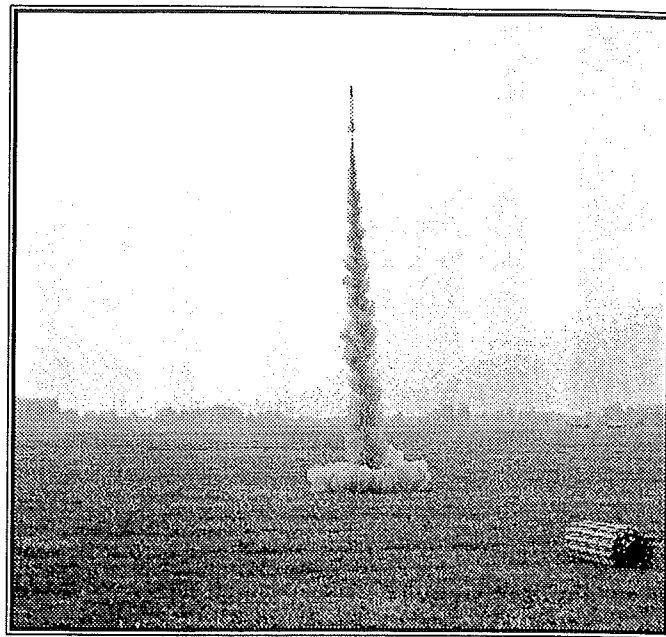
Ferenc Roka had the usual mix of old and new, including an Astra-1 on B6-4 and B6-6, Der V-3 on D12-5, Tracer on FSI C6-5, Ovation-35 and FIPS-20 on 1/2A, and an FSI Sprint on Quest C6-5. Unfortunately the last motor failed to deploy a chute, and the rocket was badly damaged. Ferenc also provided us with two spectacular high altitude flights, a gorgeous flight of his LOC Forte on an H70-10, and a classic FSI Steam Engine flight with an F7-6 in his Abby. Both flights were successfully recovered. Amazingly, the F7 was manufactured 19 years ago!

Jeff Ryan only managed one sport flight due to his busy contest schedule, but it was a spectacular one, with his LOC Onyx going up on a G80-10. His daughter Jessica flew her Mongoose twice, once on B6-4 and once on C6-5.

John Viggiano, also busy with the contest, nonetheless flew his Yo-Leven cluster model with an H128 reload and with a Rocketflite H220 Silver Streak and a mix of A8 and C6 motors in the outboard mounts. A number of the outboards were shaken out of their tubes by ejection so it was hard to tell if they all lit, but the core motor was enough for a very spectacular flight. He also got in on the Maniac action with a D12-7, had a G80-7 cato in his Strechinator and tried to CHAD stage a D12-0 to an F50-7 Silver Streak in his Pennsylvania Crude, but the stage didn't work and the rocket flopped down into the rangehead.

Dan Wolf flew an assortment of medium and high power rockets, with his Initiator and Laser-X scaleup on F22 and F25, Lucky 7 and Xtra Special on H55 and H97, and the highest power of the weekend, his Electric City on an I161. The Electric City fairly leapt off the pad, and recovered near the far edge of the cornfield across the road, for the second longest recovery walk of the weekend. Dan's daughters Sara and Mary also got to the pads, with Sara flying her Baby Bottle rocket on a B4-4 and her Rampage on B6-4, and Mary launching her Omloid on a C6-3 and her Big Rage on a B4-2.

Some statistics on the sport launches, courtesy of Dan Wolf:



GIVE ME LAND, LOTS OF LAND— One of the sport flights which took advantage of the waiver, a four-foot rocket takes to the air under H-power. More opportunities for sport flying like this will abound at NARAM next July. Photo by Ferenc "Don't Fence Me In" Roka. ➤

Total number of flyers: 39

Total # of sport flights: 144

Total # of contest flights: 45

Most popular engine: C6-5, 76 flown

Most times to the pad, sport flights: Ed Norris, 12 flights

Most times to the pad, total flights: Ed Norris & John Viggiano, 16 flights

Most Newton Seconds flown: Dan Wolf, total of 880 ns

Sport flight kit breakdown by manufacturer:

Estes = 86	Cox = 1
Quest = 17	AAA = 1
MRC = 6	FSI = 1
AeroTech = 5	MRED = 1
LOC = 3	NCR = 1
Scratchbuilt = 22	

Most popular kit: three Estes kits tied for this honor, with three each of the Maniac, Big Bertha and Super Big Bertha/Broadsword. ➤

Finger Lakes Fall Classic IV Results

1/2A Boost/Glide (WF=17)	1st	2nd	Total	Points
1. International Rescue Team	64	40	104	340
2. Mike O'Brien	44	35	79	204
3. Jeff Ryan	17	58	75	136
4. Bill Owens	62	DNF	62	68
5. Ferenc Roka	CATO	14	14	34

1/2A Flex Wing

(MR, WF=21)

	1st	2nd	3rd	Total	Points
1. Intern'l Rescue Team	MAX	MAX	MAX	270	420
2. Jeff Ryan	NG	NG	MAX	90	252
3. Ray Lewis	39	NG	NG	39	168

C Streamer (WF=10)

	1st	2nd	Total	Points
1. Ray Lewis	131	60	191	200
2. Jeff Ryan	SAFE	150	150	120
3. International Rescue Team	98	SAFE	98	80
4. Ed Norris	39	48	87	40
5. Ferenc Roka	38	40	78	20
Bill Owens	NR	DNF	-	20
Mike O'Brien	SAFE	SEP	-	-

C Eggloft Altitude (WF=18)

	1st	2nd	Best	Points
1. Jeff Ryan	138	176	176	360
2. International Rescue Team	148	NC	148	216
3. Bill Owens	122	NC	122	144
4. Ray Lewis	65	DNF	65	72
5. Mike O'Brien	NC	52	52	36
Ed Norris	NC	TL	FP	36
Ferenc Roka	NC	DNF	FP	36

Plastic Model Conv. (WF=26)

	Static Flight	Total	Points
1. International Rescue Team	590	165	755
2. Mike O'Brien	573	140	713
Jeff Ryan	624	SAF	-

Total Points

1. International Rescue Team	1576
2. Jeff Ryan	868
3. Mike O'Brien	552
4. Ray Lewis	440
5. Bill Owens	232
6. Ferenc Roka	90
7. Ed Norris	76

Sections

MARS	3668
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Abbreviations For Scoring & Disqualifications

DNF - Did Not Fly

EGG - Egg Broken

FP - Flight Points

MAX - Flight had maximum time for round

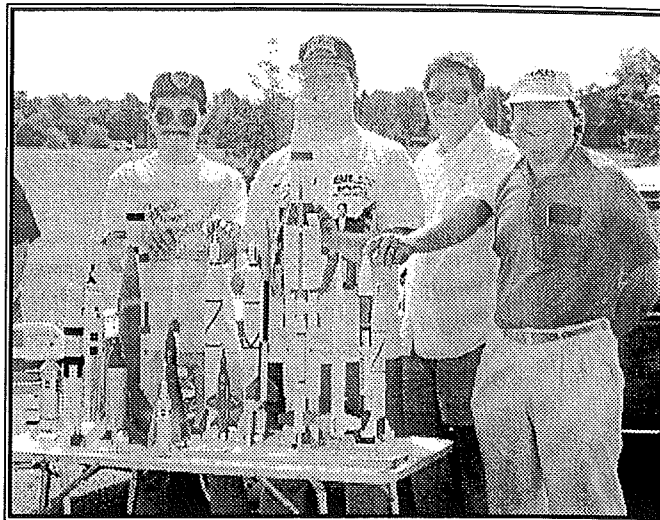
NC - No Close

NG - No Glide

NR - No Return

SAFE - Safety Ruling

SEP - Separation >



T + 788'940'000 AND COUNTING—MARS members (L to R) Jeff Ryan, Dan Wolf, Bud Piscini, and John Viggiano pose with a collection of their scale models to celebrate the Silver Anniversary of the Apollo 11 launch. Photo by Ferenc Roka. >

her homemade Baby Bottle rocket.

Rich Kerr was determined to lose his Estes Yankee, first painting it dark green and then launching it three times on C6-7's. Somehow, it was recovered on all three flights, and ended the day with only a broken fin to show for this treatment.

Steve (whose last name was unfortunately missed) launched with the club for the first time, flying the aforementioned Little Joe II, as well as minimum diameter 18mm and 24mm rockets. The 24mm flew successfully three times on D12-3's. Steve also flew a homebrew 1/2A cluster, with the engines mounted in pods separated from the main body by an intricate fin and spar design. Both engines lit perfectly, and the rocket had a beautiful, straight boost and clean recovery.

Bud Piscini was, as usual, flying staged rockets; this time his MPC Microsonde III. The bird had two out of sight flights, but all three stages were recovered both times. Bud's Maxi-Alpha III made an impressive D12 flight, and he flew his nice-looking Patriot scale model.

Jeff Ryan flew his LOC Aura on a D21 for a successful flight, but unfortunately we lost track of his other flights. We'll have flight cards next time!

Still loyal to FSI, Ferenc Roka used a couple of their engines, including an F100 for a great flight in his LOC Forte. His Ovation 35, the NAR anniversary commemorative rocket, was the first one flown by the club, and he also flew a number of models ranging from an old Enerjet Nike-Ram to new MRC Flare Patriot, Estes Screamin' Eagle and Quest Astra. And after having a successful flight on an Estes E15, he managed to have the club's first Quest A engine CATO!

Apollo 11 anniversary launch, continued from page 1

gracefully. The chute problems extended to his LOC Graduator, but flying with just an F22 it landed with a loose fin as the only damage. His Aerotech Initiator did better, flying spectacularly on an F100. Dan's children were also busy, with Mary and Sara each flying Estes rockets, and Sara

Club News

reported by Bill Owens

August Meeting

One of the best attended meetings in recent MARS history was held on the second tuesday of August, with twelve people somewhat crowding the conference room. In attendance were Andy Schecter, Ray Lewis, Merrell Lane, Dan Wolf, John Viggiano, Bill Owens, Jeff Ryan, Jay King and Ferenc Roka, and guests Jim Secol, Patrick Finan and Ken (of unknown last name).

The centerpiece of attention and of the table was the North American Rockwell trophy, won by the *Upstate Rocketeer* for the first time. The trophy is awarded each year since 1968 at NARAM to the best section newsletter. Aside from the honor of being recognized for excellence in publishing the UR, the trophy comes with a mysterious wooden box complete with a large padlock on the front. The box contains items left behind by previous winners, but we can't tell you what's inside; that's part of the unwritten rules of the award! If you missed the meeting, see Dan or John for a peek inside at all the goodies. Congratulations are due both of them for their efforts over the last year.

The formal meeting started out with Merrell Lane's report on NARAM-36. He was the only club member to make the trek to Houston, but he brought back a very interesting videotape and lots of news of the championships. The video includes the rather depressing scale competition, which had a large number of failures and crashes. Most spectacular and memorable was the unfortunate failure of the prototype NCR space shuttle. It was first in static points, but after a bizarre cato of three FX motors and a brief delay, the G80 main motor had problems igniting and then experienced ejection failure, badly damaging the shuttle. The winner in Scale was Peter Alway, with the beautiful Block 2 Saturn I featured on the cover of his latest book.

Merrell related some of the procedures used this time, including giving each contestant a number to pin to their shirt, in the style of marathon runners. He also handed around some of the materials from NARAM and the Johnson Space Center.

NARAM-37 was the next topic up, and Dan had several items to pass on. Geneseo State College has agreed to a time payment plan on the dormitory rent, which will allow us to pay smaller amounts in January and early spring, with the full fee not due until later. This should make finances much easier. With the election of Mark Bundick to NAR President, Trip Barber is the new VP and has taken over Mark's role helping out with NARAM planning. Dan is bringing him up to speed on what has been accomplished so far. He has found a trophy shop which has rockets (as opposed to John's favorite, nekkid ladies) and is working out a quote for the almost 200 trophies which will be necessary.

Dan also brought up that one portion of the NARAM preparation which every member should take an active part in is the patch design. This year's NARAM had no patch, and many participants were disappointed, so we'd like to have a great patch design for next year. Bring your designs, ideas, sketches and creativity to the next meeting!

There was a brief discussion of possibly adding RC Glider as an exhibition event at NARAM-37, because it is seldom flown at any contests and would attract some of the best flyers if we added it to the lineup. The suggestion will be discussed at the NARAM committee meetings, starting in September. Any other suggestions or ideas for NARAM can be brought up at the regular meetings or communicated to any of the committee members. Dan was officially named as chair of the NARAM-37 committee, to fix an administrative oversight.

As you no doubt know by the time this is published, NYPOWER '94 has been cancelled. Instead, the club will have a one day, non waived sport launch at Geneseo on Aug 28.

Connected to the cancellation was the announcement that the Finger Lakes Fall Classic IV meet has been expanded to two days, Sept 17 and 18. John will be applying for a waiver for up to 8 pounds and I class propulsion. The events will be 1/2A BG, 1/2A Flexi MR, C ELA, C SD and PMC, with a rain date of the next weekend.

John showed a calendar for the remainder of the winter and next spring, and it was moved that we accept it with the NYSPACE dates provisional, and further moved that NYSPACE be on May 20 and 21 if there are no objections from the other NY sections. Both motions carried.

Two new members were announced, Kevin Foster and Ed Norris. Welcome them to the club the next time you meet! Dan also announced that he has received his first NARAM information request - from Hawaii, of all places. The meeting ended with a brief discussion of a possible fun event for NARAM-37, G Hairy Stein, which you'll just have to imagine. The meeting was adjourned late, shortly after 2300, and most of the crowd retired home without pizza.

September Meeting

The last MARS meeting of the summer was held on September 13th, with another sizable group of members and guests in attendance. The meeting began with a half hour or so of socializing while we waited for a club officer to arrive; all were unavoidably delayed. But then socializing is a big part of the club meeting for most of the members, and we passed around kits, photographs, videotapes and other miscellany.

The meeting officially began with Bill Owens's presentation on Rocketry Online. He brought a portable computer and was able to demonstrate connections to several local bulletin board systems and Compuserve, while discussing and explaining the various types of access, equipment

requirements, and the resources available on the Net. Copies of the handouts are available from Bill.

We then proceeded with guest Dean Oberg's presentation of a video compilation of some notable experimental rocketry achievements in the past decades. The video included footage of the early German experimenters, the Reaction Research Society and Pacific Rocket Society launches, and some of Dean's own activities in the local area. He also had some impressive zinc-sulfur and hybrid engine components to pass around. Dean is also working on starting a Tripoli prefecture in the area.

Ferenc Roka reported on a visit to Countdown Hobbies, and showed off some of the kits and models he picked up while there. He said that although the store really does have a wide selection of rocket-related goods, it's only about twice as big as the meeting room, so everything is really packed in!

Most of the club business is now centering on NARAM-37, so Dan gave a short report on progress in that area and handed out information packets to the committee members for the kickoff meeting. We also briefly discussed the club banner/flag project; Bill Owens has a lead on a woman who makes the flags, and will contact her for more information. Bill's proposal to create a NARAM World Wide Web server was approved, and he will be working on it. Contributions and suggestions are appreciated. There was a brief discussion of changing the meeting night from Tuesday to Friday, with no consensus.

Fundraising for the club was also discussed, with John's proposal that we create a plan book, the *Best of Upstate Rocketeer*. There was some thought that this was too much work in a NARAM year, but it will be discussed further at future meetings. >

FAA Comes Through

Regulatory Update, by John Viggiano

The long-awaited changes to the Federal Aviation Administration's definition of just what constitutes a "model rocket" were published on 3 October 1994, and take effect on 3 November. These changes create a class of rocket called a "large model rocket," one which conforms to the NAR's definition of a Model Rocket (under 3.3 pounds and less than 4.4 ounces of propellant) but is larger than the old FAA definition (under one pound / 4 ounces of propellant).

The changes simplify the procedure for flying large model rockets. Previously, a waiver was required if a rocket over one pound was flown into controlled airspace or closer than five miles to an airport. This involved filing an application at least one month in advance. Further, the issuance of the waiver was at the FAA's discretion. For rockets under 3.3 pounds and containing less than 4.4 ounces of propellant, simple notification procedures are all that is required. The nearest Air Traffic Control (ATC) facility must be notified between 24 and 48 hours in advance, as must managers of any airports within 5 miles.

In order to celebrate the new rules, we will be holding a spe-

cial sport launch on Saturday, 5 November, at 2:00PM at Parma Corners Park. This day was selected because it is the first weekend day after the new regulations take effect. Rockets up to 1500 grams gross liftoff mass (53 ounces gross liftoff weight) and up to 125 grams of propellant will be permitted. Bring your bigger birds; come join us for a celebration! >

NARAM-37 Committee News

Report by Dan Wolf

Work on NARAM 37 has continued at a steady pace over the last few months. We received the income and expense reports from NARAM 35 and NARAM 36. This, along with input from the NAR Vice President and NARAM committee chair Trip Barber on his expenses for NARAM 31 have helped us to revise the figures in the NARAM 37 proposed budget so that it can be as accurate as possible. We are now very close to presenting our final budget to the NARAM committee for approval.

Merrell Lane attended NARAM 36 in Houston and passed out flyers on NARAM 37. Merrell spoke briefly about our NARAM and the site. Indications are that our NARAM has been well received and many people are planning on attending. We need to start work immediately on publicity, so that we can encourage as many people as possible to attend. Our primary publicity vehicles (for association members) will be ads in Sport Rocketry, a mailing to attendees of the last two NARAMs, a mailing to New York NAR members, and a mailing to NAR sections. In addition, we hope to have a "section highlight" on MARS appear in the magazine this year. We may also submit a short "Your Travel Agent Recommends" column on the Warplane Museum and/or the Finger Lakes region to the magazine to stir up interest.

We have reached an agreement with the NARAM committee as to what equipment the NAR will be providing on the NARAM range and what we need to supply. Overall, it's a good deal for us as it lowers our expenses (and time commitment) and provides us with top notch launch equipment.

The next meeting of the NARAM 37 committee will be Tuesday, September 27th at 7:00 PM at RIT Research Corporation. A mailing will be going out to all committee members two weeks prior to the meeting that goes into more detail on the above items. The mailing will include a list of tasks that we must complete prior to NARAM, plus a time line for when they need to be completed. We will also review the budget at the meeting and discuss ways to generate revenue to help defray expenses. Another important item that we will be discussing is the theme and/or logo for NARAM 37. We need this for our flyers, Sport Rocketry ads, mailing information, patches, and T-shirts. If you would like to be on the NARAM 37 committee please call me at 458-3848 so that you can be added to the mailing list. >

An Observer's Look at NARAM-36

by Merrell A. Lane, NAR 2135

After an uneventful flight from Buffalo, I arrived in Houston on Saturday around noon. I rented a car and set out for Johnson Space Flight Center. Traffic was heavy and there were several construction areas. After checking the map several times, I saw a sign for the NASA One exit. A mile or so down the road was the Ramada. After stopping for a late lunch at a nearby Denny's, I checked in and went to my room. I was too late to attend the Spaceweek demo held at the range. Since I had gotten up at 5am I promptly stretched out on the bed and fell asleep till dinner time.

Sunday

Sunday brought a hot humid day and with some time to kill I was off to Space Center Houston. The Space Center was a new building. The former site of the public displays is now a part of the actual NASA complex. The new building is filled with several live audience participation exhibits, including the Skylab Trainer, which you can walk through, and several spacecraft. Among the spacecraft on display are Gordon Cooper's Mercury spacecraft, a Gemini spacecraft, and a lunar lander on a simulated lunar landscape. The lighting and the way the displays are set up is very impressive. In an area called the Lunar Vault you can see moon rocks and even touch one. There is a forward section of a shuttle where you can walk through both the middle and upper decks. A display of the actual spacesuits and other flight gear used on flights is presented in the Astronaut Gallery. There are several movies of different aspects of the space program, both past and current. They even have the podium that President Kennedy used to make his famous speech at Rice University on the lunar program, during which he asked, "Why does Rice play Texas? and why do we want to go to the moon? Because we choose to do the hard things."

There are two tram tours of the Johnson Space Center. One of them is of the training and test facilities; the other is of Mission Control. Because Mission Control was closed due to the recent shuttle mission, the tour was of the new control center for future shuttle missions and the space station. I was a little puzzled as the tour guide stated that although the new control room would use industry standard hardware and software to improve capabilities, availability of replacement parts, and to keep costs down, the cost for the building and equipment was still over \$200 Million. You can buy a lot of PCs (or even Macs) for that.

Our tour guide needed to do a little homework on his space history. When asked by a kid who invented rockets, he replied, "a German during the war." I wonder what Dr. Goddard would have said to that, or the Chinese, for that matter. He couldn't remember the name of the first person to fly in space, and after some thought and whispers from the

group, he said, "a Russian."

A "rocket park" was on the tour. The display consisted of a Mercury Redstone, a Little Joe II, and what might have been: a Saturn V that would have been used as the booster for Apollo 18. Several rocket engines (or are they motors?) were displayed along side the Saturn. One thing that surprised me was the size of the Little Joe. I guess I never thought much about it but it was as tall as the Redstone and much bigger in diameter. For some reason I never thought of this test vehicle as being this big.

Well, back to the Ramada and NARAM-36 registration. I signed in and received my registration packet. It contained the week's schedule, information on certified motors, special events, several model rocket catalogs, NAR information, and two sample sizes of CA and some "kicker." That evening was a Science Fiction Film Fest. I didn't get the number but there were about seventy five contestants.

Sunday night brought the Contestants Briefing and the Annual NAR Town Meeting. An overview on the operation of the range, ground rules, and an introduction of range officials was presented to those competing. General questions on all aspects of the NARAM competition were asked by contestants. Following the briefing, the Town Meeting was held. This gave the general membership the opportunity to bring up topics of concern. The format is an open one and allows good interaction between the members and the Association Officers. The subject that took up most of the time was the content and direction of Sport Rocketry magazine. The suggestions for improvement were wide. Some thought the layout and topics were aimed at too low an age group and needed to be brought up to a more advanced level. Some felt we needed more of a technical journal than a magazine. Still others wanted more plans and better researched articles. I have heard many of these same comments at all the NARAMs I have attended. The magazine is an important link between the NAR and individual modelers. In fact, this is the only tangible membership benefit some modelers receive. So the feelings were strong that we need a well done, interesting, informative magazine for all the members.

Monday

The alarm started beeping and as I rolled over I saw that it was time to get going. It was Monday and the beginning of four days of ROCKETS! I got to the range around 8:30 and things were still being set up. The range was about a quarter of the way out in a very large field, with a concrete runway alongside the launch site. A large tent (approximately 30' x 80') was set up. The Contest and Sport launch areas were at either side of the tent. The competition launch area consisted of ten pads. Each pad was made from PVC pipe pounded into the ground. There was a continuity test button at each pad. There were no launch alleys as we have become familiar with. The Range Safety Officer controlled the PA, counted down, and had a safety switch that must be pressed

together with the Launch Control Officer's button to launch a model. The RSO also had a button on his hand controller that could sound an electronic siren to get everyone's attention.

The sport range at the other end of the tent consisted of two launch systems and eighteen pads. Sixteen of the pads were on four racks, two were further out and used for high power launches.

The ranges opened and 1/2A Parachute Duration and F Streamer Duration were flown on the contest range. The sky was clear and winds were blowing briskly in the direction of the NASA buildings. Local club members said it was an unusual direction, a direction that was to haunt the launch for most of the week. One of the early F streamers flown by Rick Gaff did a touch-n-go in front of the tent. It reminded me of the famous Wallops Island prang film. [*With music by Haggert and Beduc? - Ed.*] Rick was later to win the Best Midwest Qualified Flight trophy for this flight. We were visited by NASA security about rockets drifting into building areas. Contestants were asked to angle launches away from the building area. Flying continued on both ranges.

I took a lunch break around 1 PM and headed for the nearby Mickey D's. When I returned around 2 PM I was met in the parking lot by people walking away from the range with rockets and range boxes in hand. Flights had continued in the direction of the NASA buildings and security said the range must be closed. What about the V-2 contest? What about tomorrow? Well, no one knew. We all looked forward to the NAR meeting to be held that evening. President Pat Miller, Contest Director Terry White, NAR Trustees, and local section officers headed off to discuss the problems. You would have thought NASA of all people would understand model rocketry.

At seven that evening we all gathered at the meeting room for the latest developments in the ongoing NASA saga. After the discussion with NASA we were instructed to stay away from a sensitive building, the one with all the antennas. So things were back on track for the rest of the week.

At the annual meeting the election of trustees was held. President Pat Miller made an address to the membership and officially announced that he would not seek another term as NAR President. Pat has served faithfully and with great ability for over sixteen years. He reminisced about the people who helped him over the years. Special mention was made to G. Harry Stine, Mark "Bunny" Bundick, Vern Estes, Chris Tavares, and John Worth. He talked about the memorable experiences he had, the 1980 Internats in Lakehurst, NJ, the NARAMs, and the many people he has met. The Association had some difficult times during Pat's term, but he has managed to keep things on a straight course. The Association, and for that matter, the hobby as a whole, has continued to grow and improve through the dedication of Pat Miller. Pat received a standing ovation for his hard work.

Pat then gave an update on the membership and the financial status of the association. He also reported on regulatory activities. He stated that later this summer we should hear on the DOT and FAA decisions. The FAA regulation is written but no word on what it says. [*See story on this - p. 8 - Ed.*] We have received a stay of enforcement from the BATF until October. There will be some stiffer regulations on model rockets coming but nothing that we shouldn't be able to live with. They will cover storage of model rocket motors and thermalite, and possibly some type of user permit. The results of the election were announced with over 750 members voting this year. A new Pink Book is on the way.

Tuesday

Tuesday brought A Helicopter Duration and C Rocket Glider events. It also brought something else: several new spectators. One or two security officers, including the Director of Security, was to be present continuously at the range during the rest of the week. If and when the wind blew parachutes in the direction of the NASA buildings we would hold for a few minutes. We also had to stay on the paved areas of the Space Center when retrieving rockets. If they landed within 300 feet of the infamous black building with the antennas we had to leave them there. The sport range was active with some high power rockets and some Astrocam's competing in the Target Photography contest. Bob Kaplow brought several interesting models, as usual. What would a NARAM be without Bob's Happy Meal flight? Bob had a model that was built especially for this NARAM. Bob had recently become a father and had his own version of Dan Wolf's "Go Baby, Go!", a giant baby bottle. Bob also had a flying baseball bat which was a real crowd pleaser. Probably the most interesting of Bob's models was an upscale version of Estes's Man in Space. This one had Pat Miller's face on it, and a Pink Flamingo in the shirt pocket.

That evening was an exciting one. Astronaut Dr. Jay Apt, long time NAR member, was our guest. Jay grew up in the Pittsburgh area and was a very active modeler. He was instrumental in forming the Steel City section in the sixties. Jay brought some movies and slides of his last flight on the Space Shuttle. The views were breathtaking. Jay said we wouldn't enjoy space flight, no, not much! A second astronaut accompanied Jay during the presentation.

The Annual NAR Benefit Auction, a special interest of mine as a collector of catalogs and kits, brought out many kits donated by manufacturers. Not much of historical significance was there this year. It's surprising what comes out of those closets some years.

The A Division R&D presentations were next. The topics included model rocket drag, flexi wing dihedral, and one that should be of interest to our section: "How to Improve NARAMs." I will present the results of this discussion at our next meeting.

Wednesday

Wednesday was another hot and humid day.

Temperatures during the week had hovered in the high 90s with corresponding high humidity. Contest events were D Altitude and E Dual Eggloft. Several contestants used the new D3 motors from Apogee. They were a little hard to ignite and left little smoke trail. This caused several "track losts".

The evening events included the Manufacturer's Forum. Bill Saindon from Balsa Machining Service started things off. Bill can manufacture special sizes and shapes of nose cones, transitions, and bulkheads in diameters up to 4.6 inches and as long as 17 inches! He had samples of his product. This should be a great service for scale builders and contestants looking for that special shape and size. Next was Harry Stine representing Quest Aerospace. Harry gave us a rundown of current activities at Quest. He discussed the redesigned Flat Cat glider, how nicely the Space Clipper flies on an E (be sure to use extra glue) and that the X-30 should be out soon. Harry is also working on another book on model rockets, and had copies of the current edition of his Handbook of Model Rocketry.

Next came Vern Estes. Vern is working on a book entitled *Dear Mr. Estes*. The book will cover the early years of Estes Industries and the many letters he received from model rocketeers. Don't worry, he plans to use only initials when he prints the letters. He may include sections on how the company grew, and some history on how the original kits were developed. I'm looking forward to this one. Vern mentioned a story of when he and his wife visited California during some intense negotiations about the legality of model rocket motors. The State Fire Marshall, when introduced to Mrs. Estes, commented, "We have some great women's prisons."

Chuck Barnes of the Launch Pad had several of his excellent Military Models on display. He discussed his plan packs and kits. He also offers recovery supplies and parts, and has several new kits under development. Peter Alway, who visited us at MARSCON earlier this year, had his newest book on scale modeling. He is also offering scale documentation packs for several rockets.

Matt Steele from North Coast Rocketry was there with his new F and G motors and stated they should be shipping within the next two weeks. They are 29mm in diameter and 6" long. Fs will be 2 for \$12.95 and Gs 2 for \$14.95. The motors produce white smoke, Mach diamonds, and pink plumes, and should be exciting to see. He also had his Space Shuttle kit entered in the Scale competition. This is a real impressive model.

Last to address the group was Ed LaCroix of Apogee. Ed announced with regret that he was discontinuing the parts part of his business. Motors will continue to be available. The future of his beautiful launch tower is in doubt. Ed said that the change was for personal reasons, and you could tell he had a hard time reaching this difficult decision. He will continue to attend NARAMs and be an active competitor.

Estes Industries was conspicuous by their absence from this year's NARAM. They did donate several model kits for the auction and door prizes at the awards presentation.

Following the Manufacturer's Forum the C Division R&D

presentations were made. There were four entries. One investigated F Streamer body tube selection. Tubes were rated on burn through along with a crush test. Ken Hutchinson and Matt Steele reported on computer programs for model rocket drag computations. Another report was on why people compete and the current structure in the NAR. This might give us some ideas for Geneseo next summer. Vince Sempronio discussed his real-time altitude data program for model rockets. He also has a program for most of the functions needed for range operations.

Thursday

The Scale competition was flown Thursday, and this brought several people from NASA along with our constant companions from NASA Security. One of the first flights was Peter Alway's Saturn I. A real nice flight was followed by a little hard landing, causing some fin damage, but this was minor compared to what was to come. Chad Ring had a real nice Saturn V but due to a cluster ignition problem it hung up on the launch rod as several of the motors ignited in sequence. Chad tried later with a single motor but crashed due to a faulty ejection charge. Several other Saturn Vs flew. Jack Hagerty had a nice flight of his Titan IIIB. Newly elected NAR President Bunny flew his two (yes, two!) finned Atlas-Centaur. Who said NAR Presidents don't fly rockets?

George Gassaway had a very impressive flight of his Juho I model. The drum assembly had an electric motor and rotated! (Bud, even you would be impressed with this one.) A real nice Trailblazer had a good flight from the Sport range. There were also several V-2s and a folding fin rocket that, after an unstable flight, the builder remembered that one ounce of clay was not in the nose. Oh well, it happens to the best of us. The V-2 contest was held Thursday afternoon with several entries.

Probably the biggest disappointment of the Scale flights was the North Coast Team's big, beautiful model of the shuttle, boosters, and external tank. The main engine was a large composite said NOT to be one of the new North Coast engines. There were also three smoke generating engines in the shuttle. On the first try to launch this model all three smoke effect engines ejected at T+3. The model was checked over and another attempt was made, this time without the FX motors. The engine ignited, the shuttle began to lift off, than the motor CATOed causing severe burning of the external tank. Landing was on the concrete and a hard one. The shuttle will fly again but Matt said there will need to be some repair work.

The awards were presented following a dessert reception at the hotel the following evening. The first award given out was the North American Rockwell Trophy for the best newsletter. As I sat there I began to hear very familiar words coming from Contest Director Terry White, things like *Upstate Rocketeer*, MARS, John Viggiano, and Rochester, New York. I suddenly realized he was talking about us. Yes, through the efforts of our own President and Editor, John Viggiano, our newsletter was judged the best in the nation.

Congratulations to John for his hard work on the newsletter and to Dan Wolf who laid the ground work to make the publication what it is today. Also to those who contributed articles.

This year, instead of trophies, plaques were presented to those who placed. A very impressive plaque with an eagle sculpture was given to each of the National Champions. Between the awards, door prizes were given out. Most of the manufacturers had donated prizes. The closing evening had what the local section members called a laidback Texas atmosphere.

Past President Pat Miller passed the torch (or should I say the bird) to the new NAR President, Mark Bundick. He pre-

sented Bunny with a flamingo with bunny ears and said, "Just wait till you get home to Chicago!"

As the final part of the evening I gave a quick rundown of the next NARAM. I described the field at Geneseo, the plans for lodging, and the events to be flown. I had flyers that Dan Wolf had printed up to pass out. There seemed to be a great deal of enthusiasm. I presented Pat Miller and Terry White pins from the National Warplane Museum and said we hoped to see them next year in Geneseo.

As we all returned to our rooms well after midnight we could look back at a great week of flying and making new friendships and renewing old ones.

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Mid-Atlantic Regional Shoot 18 Contest Report

or The Methane Men Conquer MARS, by Dan Wolf

The "Methane Men from MARS" made another road trip the weekend of August 27-28. This time they traveled to MARS, that is, the Mid-Atlantic Regional Shoot. The contest was hosted by the reserve champion NOVAAR section and held at the National Battlefield Park in Mannasas, VA. NOVAAR decided that since NARAM was early this year, they would try to squeeze another contest in. It was third time this year that "MARS 1" made the trip down Route 15 (aka Mt. Hope Avenue). The first time, we only went as far as Frederick, MD for ECRM-21. The second time, we traveled a little further down the road, to Culpeper, VA and the Battleground '94 high power launch. This third and final time, we split the difference and turned off of 15 onto Rt. 234 to take us the final few miles to Mannasas.

The trip down was fairly uneventful. Shortly after MARS 1 arrived at the Mannasas Red Roof Inn, "MARS 2" showed up, having made the drive down from Syracuse. This time around we had Methane Men (and a Methane girl) flying in A, B and C divisions. John DeMar, Jeff Ryan and Dan Wolf in C division, John's nephew Mike Borzumate in B division, and Mary Wolf in A division. Mary had turned 7 just two weeks earlier, making her eligible for competition flying.

The attendance was good, and much higher than contest director Trip Barber expected. A total of 32 contestants turned out, with representatives from host section NOVAAR along with NARHAMS and of course MARS.

Saturday was the main day for duration flying. The flying got under way with everyone flying the 30 second precision duration event first as required by the Pink Book. In A division, Mary flew her recently completed Quest Big Rage with a B6-4 "just for fun". It turned out however that because of a tie for first place and a tie for second place, Mary took third

with a 13 second, 57% error flight. In B division, Mike flew a stock Big Bertha on a C6-5 to first place with a time of 33 seconds and a 10% error. This was Mike's first contest flight ever! In C division, Dan flew a 13mm streamer duration model with an Estes streamer and a 1/2A3-4T engine to 26 seconds and third place. Close behind was Jeff who flew his Super Big Bertha with a D12-3 for 4th place. Kevin Gormley and Joe Krofcheck tied for first in C division with 31 second flights. Interestingly enough, Joe's sons were the ones who tied for first in A division!

Most people flew B Rocket/Glide next as they tried to get the higher weighting factor events flown first, fearing that it may rain later in the day (but it never did). Winds were light and the skies hazy with hot and humid conditions. There was little thermal activity to be found however and the duration times were not terrific.

Jeff had two "okay" flights with his "noseless", sliding elliptical winged R/Gs. The first one glided straight however, making a beeline for the tree line. It landed in the trees at the east side of the field, costing Jeff a few seconds. On the third flight, Jeff managed to get his glider to the southwest corner of the field and found some lift, resulting in a 107 second glide. Jeff's three flight total was 201 seconds. This was good enough for first place. Dan took second flying his "Lumb Duck" models left over from NARAM 35, with a three flight total of 194 seconds. John struggled in this event, a sign of how things would go for him in the duration flying as his first two flights were DQed when the wings didn't slide. John did manage to get flight points when his third flight just barely qualified with a death spiral glide of 12 seconds. Robert Edmunds of NOVAAR flew his auto-adjusting canard R/Gs as he did at ECRM-21. Although the models glided well, Robert wasn't able to get them to boost straight this time. The lower altitudes resulted in low times and he finished out of the money.

In 1/2A Helicopter, John, Jeff, and Dan all flew "Whirl-A-Whiles", designed by John. Dan has been pestering John to draw up plans for this model for some time now. John finally did, a couple of weeks before the meet (see plan in the August '94 issue of UR). Dan had his working the best, as on both flights the boost was clean and high and the model immediately began whirling. However, on both

flights, when the model was less than 20 feet off the ground, it stopped rotating and appeared to try to rotate the other direction before touching the ground. In spite of this, Dan's times of 41 and 33 seconds were good enough to net him first place. Jeff and John were not able to get their Whirl-A-Whiles whirling as well, but John did manage to garner fourth place with times of 31 and 27 seconds.

In 1/2A SD, Dan and Jeff flew vellum body tube. Jeff's model was all vellum while Dan used vellum attached to a 2.5" section of BT-5 at the motor end. Both had decent first flights (52 seconds for Dan, 47 for Jeff) but Jeff finished out of the money when his second flight of the same model blew apart at ejection. It's tough to get vellum to last for more than one flight. Dan's model was badly charred just above the motor mount after the first flight but he removed an inch of the vellum tube and reattached it. On the second flight, Dan finally found some good air and got 75 seconds. The 122 second total was good for first place. Meanwhile, John's troubles continued as he tried to piston launch his first SD flight as practice for his 1/2A scale altitude flight. The stop burned out on his piston launcher and the model ended up taking the piston launcher with it. The second flight John elected not to use the piston but this time his 6" x 60" streamer didn't deploy until the model was half way down. Mike had two good flights (42 and 31 sec) of an Apogee "soon to be as rare as CMR nose cones" Blackshaft and Waferglass model that he built Friday night in the hotel to earn second in B division. Mary flew an Estes Phasor, her first balsa nose cone and balsa finned model, with a 1/2A6-2 and an Estes plastic streamer to fourth place in A division.

Sunday was altitude day. The baseline was a little too long for the events that were flown but after the trackers got the hang of it, the closure rate was very good. In particular, the tracking team of Tom Lyon and Charlie Sykos did an outstanding job with many flights closing with less than 2% error.

The Methane Men struggled in B Eggloft altitude, not getting the right combination of chute deployment, proper engine selection, and closed tracks on the same flights. John showed some signs of life however, and managed to take third with a 78 meter flight. Both John and Dan used an Apogee composite B motor for one flight. Dan's egglofter had a squirrely boost and a tracked altitude of only 11 meters. John's model boosted fine, but the B7-4 was more like a B7-8 and the extra delay cost John a higher place. Bobby Gormley showed us all how it is done by flying his composite B powered egglofter to a very respectable 110 meters and first place. Jim Filler of NARHAMS also flew a B7-4 and took second with 91 meters. Mary flew an Omloid with a B6-2 to qualify in A division. Had the track closed, she would have taken second as there was only one other entry in the event in A division.

The highlight of the day Sunday for MARS was in 1/2A scale altitude. John had built a beautiful scale model of the Astrobee D. John spent a lot of time putting together a very nice scale packet and then proceeded to build a model with large amounts of detail, corresponding directly to his docu-

mentation. The result was that John's static score of 880 was so far ahead of Ken Brown's second place nicely done Javelin that he didn't need any altitude points to hold onto first place. Because of this, John elected not to put tracking powder in the model. John's flight did not close but the qualified flight was all he needed to win the event. Meanwhile, Dan and Jeff were in 5th and 6th places in static judging. Both moved up one notch after the flying as Jim Filler's model was BT-20 sized, resulting in a much lower altitude than Dan's and Jeff's BT-5 sized birds.

Bobby Gormley provided us with some interesting flights each day to help break up the monotony of the competition flying. On Saturday, he tried to break the sound barrier in a fiberglass reinforced minimum diameter BT-50 sized model that he flew with a G110. The lift off was impressive, but at burnout, drag separation caused the nose cone to come off, ruining what otherwise had been a spectacular flight. On Sunday, he tried a record attempt in B altitude, flying a 13mm fiberglass model with an B7-10 motor. This one really got up there high and in a hurry. A tracking cloud could be clearly seen directly above the range head area. The model landed only a few feet from the range head too. Only one tracker was able to see it however and the record attempt was for naught.

When the points were totaled, Dan finished first overall in C division with 1623 points. John finished second overall with the first place in scale altitude providing most of his 1299 point total. Glenn Feveryear finished third overall with 1155 points and Jeff finished in fourth with 1065 points, making it a 1-2-4 finish in C division for MARS. Not bad in a field of 17 C division contestants. Mike finished his first contest with one first and one second place for a 384 point total. Mary had a 3rd and a 4th in three events for a 201 point total.

NARHAMS members took top honors in all of the divisions except C. Michael Filler dominated A division with 2046 points. Andrew Miller did even better in B division, with an outstanding 2568 point total. The Los Cohetadores team of Paul Miller and Vince Sempronio took top honors in teams with 2412 points. In spite of NARHAMS members finishing first in A, B and Teams divisions, and MARS doing the same in C, host section NOVAAR, with 22 flyers, finished on top for the meet section championship with a 13,125 point total. NARHAMS came in second with 7,749 points. MARS finished third with a respectable 4,572 point total.

Thus ended another adventure down Route 15 for the Methane Men. While at MARS, we also did some "campaigning", talking with many people about NARAM 37. Several people picked up the flyers that we placed at the range head on our upcoming meets, Finger Lakes Fall Classic IV, NYSPACE '95, and of course NARAM 37. Maybe in May and July rocket carrying vehicles will once again travel Route 15, This time heading north BEFORE the contest. Thanks to contest director Trip and the rest of the fine NOVAAR crew for a good contest and a fun weekend.

Upstate Rocketry Calendar of Events

Rocketry related events in the Upstate New York area, or of interest to rocket enthusiasts of this area, are listed below.

11 October, MARS Club Meeting, 7:00PM

Regular Club Meeting. NARAM Logo sketches are due!

16 October, Sport Launch, 2:00 PM

Parma Corners Park, Route 259, Parma.

28 October, NARAM Committee Meeting, 7:00PM

Those who wish to be involved with NARAM-37 are invited to attend.

5 November, Special FAA 101 Sport Launch, 2:00 PM

Come celebrate the new FAA regulations! Birds up to 3.3 pounds and containing up to 125 grams propellant allowed.

8 November, MARS Club Meeting, 7:00PM

Regular Club Meeting. A volunteer is needed to run a program. Please contact John at 359-3869 to volunteer.

18 November, NARAM Committee Meeting, 7:00PM

Those who wish to be involved with NARAM-37 are invited to attend.

20 November, Sport Launch, 2:00 PM

Parma Corners Park, Route 259, Parma.

22 - 28 July 1995, NARAM 37, Geneseo, NY, The Nats.

Events: 1/2 A Altitude, 1/2 A Parachute Duration, A Boost Glide, A Flex Wing (Multi-Round), C Streamer, C Eggloft, D Super Roc, Giant Sport Scale (Div. B, C, T), Peanut Sport Scale (Div. A), Open Spot Landing, Research & Development. There will be a separate range just for sport flying. Join us for a week of rocket flying fun!

Contact: Dan Wolf, 458-3848.

MARS Meetings are normally held the 2nd Tuesday of the month at 7:00 PM at the RIT Research Corporation, 75 Highpower Road, Henrietta. MARS Sport Launches are normally on the 3rd Sunday of the month at 2:00 PM at Parma Corners Park, Route 259, Parma. Contact John Viggiano at 359-3869 for more information on these club functions.

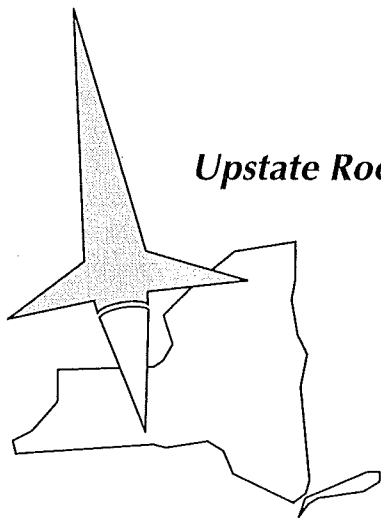
Please Note New Address:

Upstate Rocketeer

c/o John Viggiano

35 Mickens Bend

West Henrietta, NY 14586



Upstate Rocketeer

