

# THE UPSTATE ROCKETEER

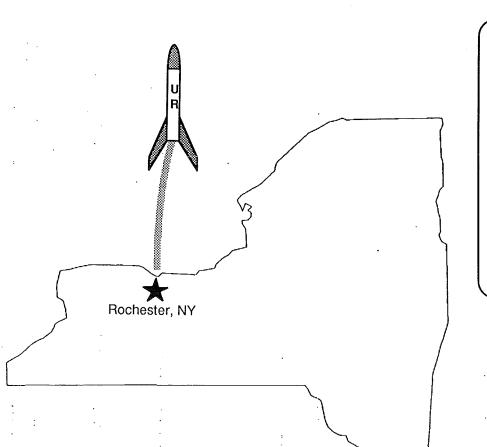
The Official Newsletter of MARS NAR Section #136



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#### The Upstate Rocketeer

Volume 6, Number 1 February, 1993

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

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Contributors this issue: Jay King, Roy Metz

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#### MARS Membership - February 1993

President, President Elect - Jay King
Vice President - Jeff Ryan
Vice President Elect - John Viggiano
Sec./Treas., Sec./Treas. Elect - Ferenc Roka
Mike O'Brien John DeMar
Wayne Foster Richard Kerr
Merrell Lane Bud Piscini
Roy Metz Jessica Ryan
Dan Wolf Mary Wolf
Sarah Wolf

This issue of the *Upstate Rocketeer* marks the sixth calendar year for the newsletter. Well, after six years, we have someone else writing the editorial for a change. Thanks to Jay for giving me a break in both writing this editorial as well as for the many other articles he sent in for this issue. Hope you enjoy it.

Until Next Time,

Dan

#### Loudly From a Broken Soapbox Guest Editorial By: Jay King

Fred Williams published an editorial in *Apogee* regarding R&D. His position was that the R&D event was becoming a "point hog" for NARAM participants and that little of worth or value was coming from it. I responded to the editorial but *Apogee* folded soon after and my response was never printed.

There is little R&D that we in the hobby can do that is not better done by professionals. We should therefore recognize the portion of the process that is if real value.

R&D provides a learning opportunity for the participants, not based entirely upon the project's content but also on the process. To provide such a learning experience is a worthwhile endeavor but the current process needs to be changed to emphasis additional elements.

For a project to be successful the research study or development effort must be carried to completion then reported and communicated to the interested public.

The current system requires all of these elements but falls short in the last. The standards for the written report are loose and do not adequately reward a participant who makes his package more publishable.

R&D reports must be published, perhaps not in their entirety but with at least enough information that other experimenters will be able to repeat the work or duplicate the application. Without publishing, R&D competition is little better than a science fair. The R&D competitor should be required to submit a publishable paper and the organizer should be required to see that it is distributed.

Organizations that exist only to serve their own interests soon fail. For an organization to flourish it must provide a service to the community. NAR R&D competition with it's learning experience provides such a service. Original work should continue to be encouraged but more emphasis should be placed on communication of the results.

# January MARS Meeting Report (reported by Jay King)

For the first time in months we had good weather on a meeting night. The group gathered at the RIT Research Center and the meeting began at 7:30 PM. John Demar, Wayne Foster, Rich Kerr, Jay King, Ferenc Roka, Jeff Ryan, John Viggiano and Dan Wolf attended.

Jay handed out copies of the NAR Regional Sport Launch Guide, recently updated by C. D. Tavares, articles on building with fiberglass and copies of the "Estes Classic Plans" book he picked up at NARCON 92.

The new constitution was voted on and approved. Dan suggested an additional change, to replace "model rocketry" with "sport rocketry" throughout the document. This was approved. Officers now serve through a complete contest season, from August to July, incoming officers are responsible for having a schedule developed by August. The office of Senior Advisor has been combined with President.

Election of officers for 93/94 flying season was conducted. Jay was nominated for President/Senior Advisor, John Viggiano for Vice President, and Ferenc Roka for Treasurer. All three are insured and running unopposed, a motion to accept the current slate was accepted.

An announcement letter for MARSCON 93 has been drafted and was reviewed. It will be modified and mailed in the next few weeks. Dan will check with the church to insure we can have space for the convention activities. John Viggiano volunteered to host a vellum workshop and Dan one on tissueing. Jay will prepare a form letter to mail to potential prize donators. Ferenc volunteered to follow up and collect the donations.

UPSTATE IV is scheduled for April 18 and 19 and we will be contacting the Antique Warplane Museum to use their field. A waiver will be requested. Wayne will check with the museum to see if they would like us to present a static display at the fly in breakfast.

RemTech 1 will be held 12 and 13 June in Allentown PA. Events include B Heli MR, 1/2A SD MR, DDualELD, B RG, 1/2A PD and A BG.

A motion was made and approved to donate \$50.00 to the high power defense fund. Our donation will be accompanied by a letter stipulating that it go to the generic portion of the defense fund.

Dues of \$10.00 per member will be collected at the next

meeting. Those unable to attend are encouraged to mail a check to Ferenc Roka at 67 Ashwood Drive, Rochester NY 14609-2205. Make your checks out to him.

Jay brought a press kit describing SpaceArc, a "high tech" time capsule. See details elsewhere in this issue.

Dan brought us up to date on the new flying field search. The Genesee Community Collage has shown some interest and asked a few questions. Dan is preparing a follow up letter with additional information. Their major concern seems to be how far rockets may drift.

Jeff brought the latest copy of the Edmund Scientific catalog. We were all excited by the "green, glow in the dark paint" and thought it would be fun for a night launch.

John Viggiano brought the SDI Satellite model mentioned in the "First Flights" report. After it's successful flight John gave it a coat of Krylon clear which reacted with the 24 caret gold paint making it run. It's still a fine looking model and a tribute to John's craftsmanship and hard work. Dan advises to never put Krylon over anything!

Ferenc brought a new E2X helicopter kit. He feels that while it may not be a contest performer, but it will qualify. He also got a sample from Quest for the Tiger Tail II igniter. Basically the same as the original it doesn't have the tab that sticks to the engine. Instead they have their own version of the Cobra plug.

John Viggiano proposed that we purchase a copy of the North Coast Technical Report set (\$28.00). The motion was approved and John will make the purchase.

The meeting closed and Dan entertained us with a high power video including the flight of "Down Right Ignorant".

If you're not attending meetings you're missing much of the fun, fellowship and insanity of belonging to a premier NAR section.

# First Flights, MARS January First Sport Launch By: Jay King

MARS members Jay King, Ferenc Roka and John Viggiano attended MARS' first launch of the new year. Jim Cost and Matt Pompeii were our guests. While weather was questionable in Rochester we had a fine day in Farmington. It was cold at 20 Degrees F, and breezy but fairly clear.

Jay arrived first, John and Matt followed closely. Launchers were an immediate problem. Between the three, there was a tripod and 3/16 and 1/4 rods but no 1/8. So the larger rods were pushed into the ground and blast deflectors made from pieces of ice.

The first rocket off was John's Firehawk MP with an E25-7. With the authoritative countdown that is John's trademark (the rocket would lift without a motor) he made the first MARS flight of the year. Aimed up range into the wind, the touchdown point was about 200 yards to the north. This was the first time that a) John flew the Firehawk at a MARS event, b) had the parachute deploy and c) didn't land it on somebody's truck.

Ferenc arrived and saved the day with a with 1/8 inch rod which was immediately pressed into service for Jay's first flight with a new construction Alpha. It had the classic paint pattern and a 1/2A6-2 for a classic Alpha kind of flight. Ferenc followed with a Quest Antari and a 1/2A6-2 which turned in a fine flight as well.

Matt brought out an old, unidentified, Centuri kit with a Centuri C6-3. The engine turned out be equally old and responded in the predicted way with a cato through the top of the rocket without even leaving the pad.

John put up his Firehawk a second time with an Estes C6-5 (of more recent vintage) for a beauty flight and parking lot landing.

Jay flew again, this time with an Estes Sprint built 20 years ago, again on 1/2A6-2. The superior flight performance of the streamlined Sprint versus the Alpha was obvious to all.

Matt was up again, this time with a Centuri Apogee and another Centuri C6-3. The results were best described as a "Yard Sale". The expected cato resulted in parts scattered over a good portion of the range. Better save those engines for the collectors Matt.

Ferenc was up again with a Leprechaun with a 1/2A3-2T that ended up on the grass for a fine landing. Ferenc followed with "Norbert", one of his own designs. The model started as a Colonial Viper made of old Estes tubes but due to lack of interest was completed with scrap parts. It flew well after some troubles with the igniter were corrected. Then Ferenc brought out his Der V3 with an Xform 'chute. An authoritative countdown in German was provided by John and the Estes D engine gave a great flight.

John was next with his Eon-24BT on a B6-4. His own design, it featured an upscale Pink and White paint job specially color coordinated not to clash with the Estes igniter plug. We were later advised that the precise shade of pink is "Glowing

Cherise"! This is truly a "Deeesigner" model.

Jim Cost arrived with his camera carrying Initiator on an F50. Launch preparations for this bird are a bit complex. Jim turned on the camera which then began taking pictures at about two frames per second. Matt manned the launch button and fired as soon as Jim was away from the pad. The rod looked a little wobbly with the heavy model but the boost was straight and followed the same trajectory as John's first flight with the Firehawk. The camera came back OK but the "Leggs Egg" nose cone was cracked.

Ferenc brought out his flying saucer with an Quest C6-0. Not having Bud's truck to aim at it settled onto the grass nicely.

Prizes were awarded in several categories. Best flight went to Ferenc for his Der V3, he selected an Estes Delta. Matt was recognized for the Gutsy-est flight for his use of the old Centuri engine. This award was made for his second flight, any normal person would have stopped after the first one catoed. Rumor has it that John Viggiano is negotiating secretly for rights to the remainder of Matt's engines and will be featuring them in his scale models this spring. Jim Cost was recognized for best technical flight and encouraged to drag out his checkbook and join MARS. He selected a Super Big Bertha. John received the craftsmanship award for his Eos-24BT with the special paint job, he took home an Estes E2X kit.

At this point your author grew tired of using engine casings as hand warmers and excused himself to retire to a restaurant in Canandaigua and warm up. Others on site related a final flight by Johns SDI Satellite. John had originally planned this model for the craftsmanship event and reported that he spent 80 hours in construction. Flown on a C6-3 it went up to about 75 feet where it was reported to have hung for about half an hour (or so it seemed) then began to drop back to earth. The ejection charge went off about 15 feet up and the chute fully deployed just as the model touched the ground. A collective release of breath was heard.

Overall it was a fine day for flying and bodes well for the coming year.

#### Heard on the Range

A suggestion to hold a wet tee shirt rocket contest was made and ignored. Most of us don't look very good in *dry* clothes!

During the summer with all the dry grass, we had a fire hazard on the range. John Demar was heard to say "Grab your jugs and run out into the field".

There's a special place in Hell for people who scale up tiny model rockets into high power models.

# Are You A "He Man" Rocketeer? By: The Sarge

There's been some loose talk lately about the "Ole Sarge's" rocketry habits. Some of you wise guys have even accused the Sarge of using Kevlar parts and composite engines in his sport models. Well, I'm here to tell you that the Sarge is a real man and a real man flies mans rockets.

In case you don't understand what I'm talking about, I've prepared a self test. Select the answer that best describes yourself.

- 1) Attach parts to rockets with:
  - A) White glue
  - B) Cyano
  - C) Epoxy
  - D) Pop rivets
- 2) Preferred "big" engine:
  - A) Reloadable composite (because it's environmentally responsible)
  - B) Disposable composite
  - C) Rocketflite black powder
  - D) Huge clusters of Estes Ds
- 3) General purpose igniter of choice:
  - A) Estes "Solar"
  - B) Quest "Tiger Tail"
  - C) Flash bulbs and thermalite
  - D) Bare nichrome wire
- 4) Launcher power supply:
  - A) Solar collectors
  - B) "D" cells in original "Electro-Launch"
  - C) 12 volt car battery
  - D) Military surplus generator set
- 5) Recover rockets from trees with:
  - A) Fishing pole or golf ball retriever
  - B) Ladder
  - C) Younger brother
  - D) Chain saw
- 6) Greatest fear:
  - A) Lose election to NAR board of trustees
  - B) Censure by NAR board for unsportsmanlike conduct
  - C) Win election to NAR board of trustees
  - D) Cubans infiltrate NAR board of trustees and disrupt the NSL

- 7) Favorite scale model:
  - A) Starship Enterprise (convinced it exists)
  - B) New Estes 1/100 Saturn 1B
  - C) Old Estes 1/48th Saturn 1B
  - D) Full scale Patriot
- 8) Buy model building supplies at:
  - A) Local hobby shop
  - B) Mail order
  - C) Direct from dealers at meetings and events
  - D) Sears
- 9) Favorite contest event:
  - A) Flex wing BG
  - B) Parachute duration
  - C) R&D
  - D) Spot landing
- 10) Favorite sport model:
  - A) Estes Alpha
  - B) Anything from Quest
  - C) Only fly contest models
  - D) Super Big Bertha

Give yourself points as follows: A-0, B-1, C-2, D-3.

- 0 to 5 points You are a quiche eating, mineral water drinking, civil libertarian wimp rocketeer. You believe in pyramid power and still send mail orders to Jerry Irvine saying that he is just a busy guy who was misunderstood and will eventually send your stuff.
- 6 to 10 points You're OK but are in danger of being labelled as an undesirable. Try hanging around the hobby shop a little more but don't talk to those R/C airplane guys!
- 11 to 25 points The fellows in the section like you and you win a lot of contests but are never satisfied. Build a few sport models and take off that damn "Rocket Scientist" tee shirt, real men wear flannel!
- 25 to 30 points You are a real "He Man Rocketeer"! You subscribe to "High Power Rocketry" and "Soldier of Fortune" and use "Eau de Ejection Charge" after shave.

## As The Rocketry World Turns... (news & rumors heard 'round the hobby)

Manufacturers News...The new Estes catalog has started to appear in hobby stores and people's mail boxes. Word is that it is a complete rework, unlike last years. Overall the new catalog is said to be laid out well and includes all the new kits including the Maxi Honest John, Jayhawk, and the Terrier/Sandhawk. Also new is the "Omloid", a new egglofter with an also new egg capsule that screws together (no more tape). Another new kit, the "Skywinder" is a helicopter recovery model that stays together as one piece, making it suitable for helicopter duration.

The Omloid and Skywinder both have a screw in retainer ring to hold the engine in (no more engine clips). Also, the Astrocam makes a reappearance, apparently redesigned for "Gold 200" 110 film (the old one was designed for KodaColor 400, which is now difficult to find). An interesting footnote is that some of the 24mm engine mount kits now have Aerotech E15s and E30s on the recommended engines list.

Regulatory Update...The following is a press release from Aerotech dated 1/6/93.

"On behalf of AeroTech, Inc. and the Tripoli Rocketry Association, Inc. Larry Bierlein of the law firm of Shaw, Pittman, Potts & Trowbridge has filed a request with the U.S. Department of Transportation (DOT) to seek concurrence/confirmation of, or alternatively, an emergency exemption for the flammable solid classification of all AeroTech/ISP reload kits. This request was filed December 29, 1992. AeroTech has been withholding shipments of its model and high-power rocket motor reload kit products because of concerns raised by the DOT early last year regarding their proper shipping hazard classification.

The granting of this petition would set a legal precedent for the classification of all similar reload kits as flammable solids. The wording in the exemption request describes this commodity as containing 'propellant and delay charge modules which consist primarily of ammonium perchlorate dispersed in synthetic rubber. Reload ejection charges, also in the kits, contain small quantities of black powder.' Certain standards are also discussed relating to the specific packaging of the reload kits, which would be required of any other manufacturer seeking to become a party to the exemption. Aerotech and Tripoli have pledged to assist other manufacturers in either receiving their own reload kit DOT classifications or becoming party to the exemption should it be granted.

75% of the cost of the services of Shaw Pittman are being borne by the Tripoli Legal Fund which was established at LDRS-11. AeroTech is assuming the balance of these fees. In addition, AeroTech will be responsible for the costs associated with the testing of its propellant formulations and other incidental expenses. The National Association of Rocketry (NAR) has also offered to contribute an unspecified sum toward that portion of the petition that is generic to the industry. As of this date, approximately \$9,000 has been donated to the legal fund. However, more donations are needed to reach the initial funding goal of \$20,000. AeroTech would like to take this time to thank the Tripoli Rocketry Association and the NAR for their outstanding support of this important initiative!

The DOT petition was filed late last year to allow it to be considered with the other December requests and save 30 days processing time. Normally, requests for exemptions take up to six months for the DOT to process. Therefore, the application was filed on an emergency basis citing that the present situation of withholding shipments has resulted in severe economic damage to the hobby rocket industry. It is not yet clear how long the petition will take to be approved but is expected to be addressed shortly.

AeroTech, Tripoli, and the NAR will inform hobby rocket consumers as soon as a decision is reached by the DOT. Aerotech is grateful to the hobby rocket community for their continued support and patience as this problem is resolved!"

#### SpaceArc, "The Archives of Mankind".

Who among us has never dreamt of actually travelling into orbit. The SpaceArc project is your opportunity to place a bit of yourself in space. Following are excerpts from the SpaceArc press pack.

SpaceArc is a not-for-profit educational project initiated by the Rochester Museum and Science Center in Rochester, New York and developed in partnership with NASA, Hughes Communications and others.

It is a "high-tech" time capsule of words and images, created by individuals of all ages, for launch aboard a Hughes Communication satellite planned for orbit in July 1994. Individuals inscribe essays, drawings, poetry and etc. on SpaceArc forms. There is also space on the form for a photograph. The completed forms will be optically scanned, stored and placed aboard the satellite. At the end of it's useful lifetime the satellite will be moved to a "storage orbit" where it is expected to remain for more than 2,000,000 years.

Duplicates of the SpaceArc time capsule will be available at computer based Earth ground stations in museums and science centers around the world to provide long term access for education and cultural sharing.

Though it has the potential to store millions of messages, SpaceArc is for and about the individual. It invites each one of us to define for ourselves who we are, what we are and what we want to convey to future generations.

To submit a message to SpaceArc send a check payable to SpaceArc for \$7.95 for the first kit and \$5.95 for each additional kit to SpaceArc, 657 East Avenue, PO Box 1480, Rochester NY 14603.

Note: Kits will be available at MARSCON 1993.



"D'yer like that color for my next rocket?"

#### **Review Page**

(reviews and news of various products and manufacturers)

#### Quest Apollo Kit Review by Roy Metz

Kit:

Apollo

Manufacturer:

Ouest

Price:

\$7.99

Skill Level:

2

Finish Weight:

2.02 oz.

Length:

26.88"

Recommended Engines: A6-4(first flight), A8-3, B6-4, C6-5

This kit is basically a skill level 1 until you get to the decal application. The decals are the "contact paper" style. They are difficult to apply straight, and are very thick. The parts made of plastic remind me of the old MPC kits. They are easy to assemble. I did not paint them. Kit instructions say to paint with clear gloss after completion, but not knowing what type plastic the fins and transition couplers are made of, I hesitate to do so for fear of "crinkling" the finish.

The directions for the kit were clear and concise, and easy to follow. The only negatives are the plastic gripper tabs for the parachutes. They are very large and take up much more space than necessary in the lower body tube. I used them on only one of the two parachutes. If they were about one quarter of their current size, or made in a 'T' shape, they would be much better.

I would also recommend using short bungee connectors with each chute, as I did. All three body tubes should be painted before any decals or assembly is done as noted in step nine. This step also step states that the two upper body tubes should be painted, but all three should be done!

The flight preparation instructions call for recovery wadding between the Kevlar shock cord and elastic bungee cord. This is not called for in the building instructions, nor is the silver band on the forward tube called out.

The Apollo is a nice looking model when completed, but I would have called it a skill level 1, for someone who has already built some rockets at this level.

#### Manufacturer Review: Supercircuits By: Jay King

Supercircuits specializes in small size video cameras and transmitters. One color camera measures a mere 31/8" X 37/8" X 1" and weighs 4 ozs. Black and white cameras are even smaller and weigh less than 2 ozs. Transmitters use ATV (Amateur Television) frequencies at up to 2 watts output with range listed at 2 miles. The catalog also lists R/C airborne videos from planes and helicopters.

Call or write to: Supercircuits, 13015 Debarr Drive, Austin TX 78729, 512-335-9777.

#### Manufacturer Review: Eagle Miniatures Inc. By: Jay King

A meeting with the contest committee made me aware of the difficulty of flying "Plastic Model" because of the lack of suitable kits for conversion. Eagle Miniatures goes some of the way toward providing a solution.

They manufacture models for R/C scale, most from vacuum formed styrene. The line includes: WWII 5" rockets in 1/5 and 1/6 scale (1" and 0.8" OD), AIM 54 Phoenix, AIM-7 Sparrow, AIM-9 Sidewinder and AGM-65 Maverick. Most come 2 or 4 per kit with prices ranging from \$20 to \$30 per kit.

You won't get a lot of points for degree of difficulty but you will have fun.

Eagle Miniatures Inc., PO Box 468, Steamwood IL 60107, Catalog \$1.00.

## MARSCON 1993

#### MARSCON 1993, 6 and 7 March

It's been a long cold winter so Section 136 is bringing some sun to upstate New York with MARSCON 1993, "The Winter Cabin Fever Reliever", a convention and NAR sanctioned Open meet.

#### **Special Guest**

We're guaranteeing sun by bringing Ed LaCroix of Apogee Components from Phoenix AZ. He'll have a "range store" stocked with competition kits and hopefully his new launch towers.

#### **Helicopter Construction Workshop**

Bring your own hand tools, adhesives and finishing supplies. We will provide plans and components.

#### **SpaceArc**

SpaceArc is a program sponsored through the Rochester Museum and Science Center. A video outlining the program will be presented and convention attendees will have an opportunity to prepare a SpaceArc submission package. Take this opportunity to send a bit of yourself into orbit!

## NARAM Strategies Discussion

Several championship competitors will be attending. They will chair a group discussion covering contest strategies and construction tips.

#### **Rocket Videos**

From the MARS section library, videos include: Chuck Mund 1986-87 ("Large and Dangerous" and giant Orbital Transport), Danville 1990 I, LDRS X, Rocket Men 4, Culpeper High Power Launch Fall 1992, NARAM 31, NARAM 33 and Old Rocketeer Reunion.

#### **Vellum Construction**

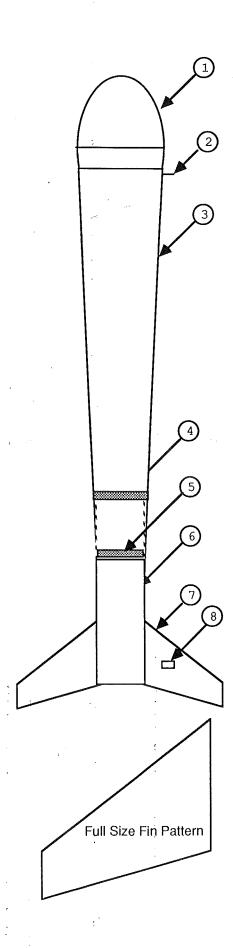
MARS member John Viggiano will demonstrate construction techniques. Participants will have a opportunity to try their own hand too.

#### Presentation of R&D Reports

Open meet competitors will present their R&D reports. If you're working on something for NARAM and it's not quite finished or you'd like to just bounce some ideas around feel free to participate.

R&D reports must be turned in for initial judging by 2:00 PM March 6th.

# D Eggloft Duration Plan "Variation on a "2 Minute Egg"



#### **PARTS LIST**

- Egg Capsule. Use two large halves of plastic Easter egg or Apogee Capsule
- 2. Upper Launch Lug. Bend from music wire and attach to top of shroud.
- 3. Cardboard Shroud. Make from card stock. Length depends on size of chute and personal preference. Size shown (1/2 scale drawing) is 8.5". Use shroud formula from "Handbook of Model Rocketry". For 8.5" shroud, r1 = 12.153", r2 = 20.66", angle = 14.8°.
- 4. Shroud centering ring. Use two or three Estes BT-50 to BT-55 centering rings stacked together.
- 5. Engine Block. EB-50.
- 6. Body Tube. Estes BT-50 (4").
- Fins (3 required). Method 1. Use 1/8" balsa. Sand to tear drop airfoil and fill grain till smooth. Method 2. Use 1/16" plywood. Sand in airfoil with 220 grit and smooth with 400 then 600 grit. (or could use waferglass if preferred).
- 8. Lower launch lug. Small piece of 3/16" launch lug or make from music wire.

#### ITEMS NOT SHOWN

- Shock Cord. Attach Apogee Kevlar Cord, KSL-100 to shroud centering ring. (Drill hole through centering ring. Pass cord through it knot on other side and glue in place. Make cord 12" to 18" long. Attach 12" to 18" round elastic to end of Kevlar and to capsule.
- 10. Parachute. Use 36" to 54" chute depending upon the weather and your chute packing ability. Make from mylar or dry cleaner bag. use 16 to 24 shroud lines.

### **Sport Scale**

Static judging of sport scale models will be done Saturday afternoon and evening. Models and data must be turned in by 2:00 PM.

#### Craftsmanship

Bring an example of your best work. We will have round table judging and several prizes.

#### **Open Meet Events**

R&D Sport Scale
B Helicopter Duration D Eggloft Duration.

Static judging and R&D reports will be done Saturday evening. Flying starts at 10:00 AM Sunday morning and continues through the early afternoon. Sport flying is encouraged as well.

#### Schedule

The convention opens 1:00 PM on Saturday March 6th, activities continue through the evening. Flying starts at 10:00 AM on Sunday. The range is available for contest and sport flying.

#### Presenters???

If you have a topic you would like discussed or would like to do a presentation please contact the organizers

#### **Directions**

Saturday convention activities will be held at the Dewey Ave. Presbyterian Church, 1261 Dewey Ave. Take Rt. 390 N to the Rt. 104 Exit, head East on 104 to Dewey for 2 miles, turn South (right) and drive 1 mile to Seneca. The church is on the corner.

Sunday flying is at the Videk field in Farmington, one mile south of Rt. 90 (NYS Thruway) from exit 44 (Victor).

#### **Fees**

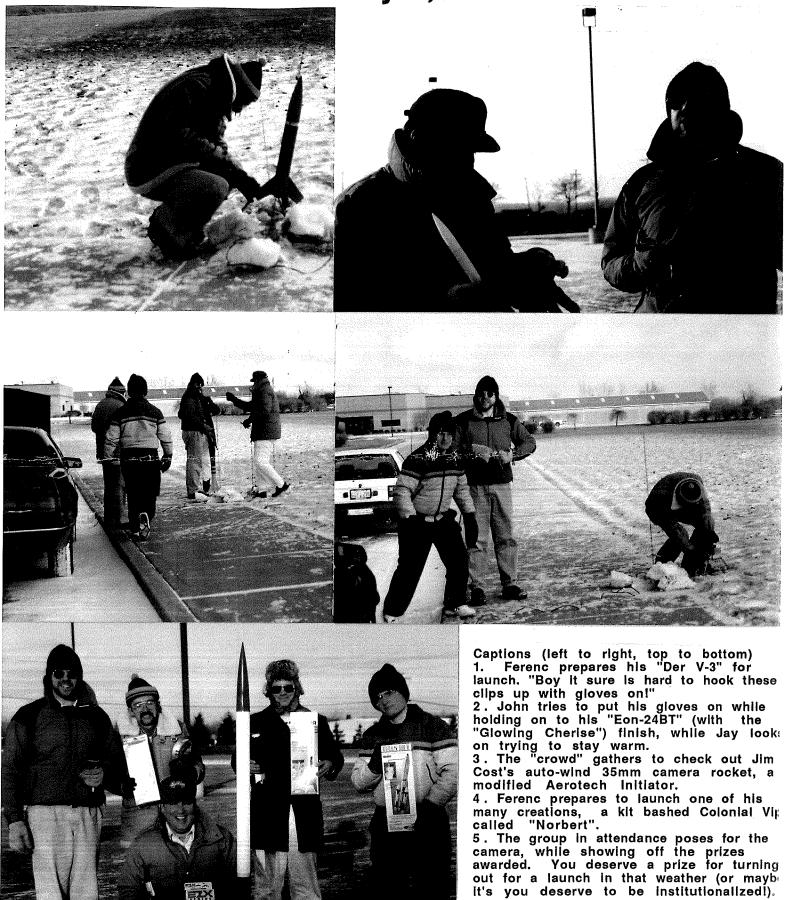
You do not need to be an NAR member to attend, fees are \$7.00 for adults and \$3.00 for under 18.

We would appreciate knowing in advance the number of people attending. If you plan to come please call one of the organizers.

#### For more information contact:

Jay King (home) 716-288-5945 or (work) 716-338-6652 John Viggiano (home) 716-359-3869 (work) 716-475-2792

# "FIRST FLIGHTS" PHOTOS January 1, 1993



#### **Events Calendar**

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

## February 12th, MARS Club Meeting, 7:30 PM.

Regularly scheduled MARS club meeting.

Location: RIT Research Center. Contact: Jay King 288-5945.

#### March 6-7, Open Meet & Mini Convention

Contest Events: R&D, Sport Scale, B Helicopter Duration, D Eggloft Duration.

Schedule: Saturday - Mini Convention, R&D Presentation, Sport Scale & R&D Judging.

Sunday - Duration Flying, Sport Scale Flying.

Note: More detailed information on pages 8 & 9.

Contact: John Viggiano 359-3869 or Jay King 288-5945

#### March 12th, MARS Club Meeting, 7:30 PM.

Regularly scheduled MARS club meeting.

Location: RIT Research Corporation

Contact: Jay King 288-5945.

MARS Meetings - Usually the 2nd Friday of the month @ 7:30

MARS Meetings - Usually the 2nd Friday of the month @ 7:30 PM @ Videk.

MARS Sport Launches - Usually the 3rd Sunday of the month

@ 2:00 PM @ RIT Research Corporation

## March 21, MARS Sport Launch, 2:00 PM

Location: Videk, Farmington, NY

Monthly club sport launch.

Contact: Dan Wolf 458-3848 or Jay King 288-5945

#### April 18-19, UPSTATE IV, Regional Meet.

Note: Date Tentative

Location: Geneseo, NY.

Events: 1/2A PD(MR), 1/2A SD(MR), 1/2A Cluster Altitude, A Helicopter, B Rocket/Glide, B Super-Roc Altitude, D Dual

Eggloft Duration, Open Spot Landing. Contact: John Viggiano 359-3869

# August 1-7, NARAM-35, National Association of Rocketry Annual Meet.

Location: Middletown, MD

Events: 1/2A PD(MR), 1/2A SD(MR), 1/2A Cluster Altitude, A Payload, B Helicopter, B Rocket/Glide, C Super-Roc Altitude, D Dual Eggloft Duration, Sport Scale, Research & Development.

Contact: Tom Lyons, PO Box 1746, Prince Frederick, MD

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





