

STARDUST

May-June 2000

National Sport Launch 2000

Text and photos by Mark Hutchinson

Saturday started off as a mostly cloudy Memorial Day weekend, air temperatures around 70 degrees, with little in the way of wind. With the directions from the web site firmly in hand, we left Rensselaer for a day trip to see the east coast's largest exposition of mid- and high-power rocketry.

We'll skip the mad dash trip to get our travel rations. If you really want the whole story, come to a meeting, there's some scary stuff in there! After a lengthy delay and a messed-up food order at the local McDonalds, Alex and myself were on the road. Traveling west on the Thruway was an interesting ride; it was good that there was no lightning, because at 88 miles per hour, we would be going back in time.

Geneseo is a small town, but a winding road was good for one missed turn on the unfamiliar journey. Luckily for us, our hobbies are sky-bound and a plume of K-powered smoke brought us back on course. Parking was close and an easy walk led us up the path past the vendor tables and the refreshment stand.

Let me pause now and re-live the hamburgers again... Wow, I think I just gained another two pounds! I'd like to know if it's possible to book the "in-flight" crew for ASTRE events! Prices on hamburgers, hot dogs, soda, ice tea and whatever else they had were very good, a definite cheap-date... Service and quality were definitely A+.

Alex and myself arrived around 11:00 am and found ourselves a bit hungry, so after the stop for food at the stand, made our way around the vendors to see who was there. Tom Prestia of Tango Papa Decals was there with his custom decal service,

with several dozen sheets on display, including the set of metallic gold "Colossus". Since NSL-2000 was a three day event, with most staying overnight, Tom was offering overnight printing for decals so that they were as fresh and sharp as possible. An order went in for the Mini Marz Lander and Orbital Transport. Total cost was under \$20 and that included first class mail back to Rensselaer, since we were only going to be there that day, and Tom had no power to print from his van. Too bad, I would have loved to see the printing process! Also on display was Tom's up and downscales of the Mars Lander, one of which was a 6x of the ORIGINAL 1970's Estes kit. This rocket used a sonotube, and a majorly upgraded engine and parachute from the original C engine and 12" chute. Chad Ring from Ring Rocketry had a table and a fresh, short haircut. His wares included tubes, egg-



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loft nosecones, mid/high power parts and kits, and reload kits. After a quick perusal, a couple 13mm lightweight competition body tubes, and some Kevlar shock cord for our upcoming A SuperRoc competition made for another purchase. It's still unknown why, when the Kevlar cord was priced by the foot, and a request for ten feet was made, why there seemed to be confusion. "Ten feet?" "Yes, ten feet of this Kevlar cord, please." "Ten feet, huh?" "Yes, ten feet". Well, perhaps that is why every other vendor had a tent, to shield them from the hot sun.



Wrapping up the vendor purchases was an event shirt. There was a choice of Small, Large, and XXL. Since I, err, shrink a lot of my T-Shirts, I decided on XXL, with Alex going for the Large. Apparently thinking his, ahem, washer being easier on cotton than mine, he opted for the Large.

One of the big launches was from Michael Varacins, from Tripoli Wisconsin. Although I didn't get many



details, I believe Michael put this bird up on clustered K's, and did it ever go like a bat outta hell. Michael's girlfriend likes his hobby, too, unfortunately, I cannot remember her name. Too bad the notes I took couldn't be found, or I'd have more details...

After watching dozens of flights from 1/2A to K, we were graced with NAR President Mark Bundick,



also known as Bunny. After a few uneventful flights, Bunny hit a bit of a launch pad snafu, with ten out of ten NFG attempts. It was a few minutes without the drift of BP smoke before a successful launch and a cheer from the crowd. After a few more minutes, and a CATO fire on pad 6 that consumed what appeared to be a Big Bertha style rocket, it was time for a special launch. There were two rockets of the Estes Rattler placed on the pads, one on the specified B6-4 and one on a slightly more powerful L, with a 12" sonotube body and a 12 foot parachute. After a no-go on the standard Wally World version, the upscaled version was up. Launched from the farthest pad (which looked about 500 yards away!) the lift-off was slow, steady, straight and loud. After a beautiful flight, the 'chute deployed at the altimeter set 800 feet, and hung in the air at least four times on it's way back to earth. One time happened about 200 feet in the air, and the translucent white fabric made it look like a jellyfish had made a meal of a rocket over the field.

Most memorable Quote from Mark Bundick --
"Welcome to High Power Rocketry... Now open up your checkbooks!"

STARDUST

May-June 2000

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Stardust is published bimonthly by the Albany, Schenectady, Troy Rocket Enthusiasts (ASTRE), Section #471 of the National Association of Rocketry (NAR). You may contact us via:

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Contributions by: Alex DeMarco, Mark Hutchinson, Eric Schadow, and Jeff Vincent.

Editor's Thermal

Busy Busy Busy...



It's been a busy spring and it's been tough keeping up with the newsletter. Here's a quick rundown of recent events:

- ASTRE has continued its schedule of monthly meetings (meeting minutes included in this issue).
- ASTRE hosted a sport launch and three NAR sanctioned meets (results elsewhere in this issue).
- ASTRE members attended the National Sport Launch in Geneseo (cover story) and the RAMTEC regional in Pennsylvania (coverage in our next issue).
- It has been announced that the next NARAM (see the Calendar for meet events) will be held in Geneseo, NY in August 2001, less than 250 miles away!

Aside from that, ASTRE has been experiencing good growth this spring (must be the rain?). We'd like to welcome these new club members:

| | |
|-------------------------------------|------------------|
| Doug, Aaron, and Timothy Hallenbeck | Schenectady |
| Bob Kelly | Valatie |
| Dan Wolman | Marlboro, MA |
| Nelson and Alex Toth | Latham |
| Dan Wilson | Scotia |
| Fil Fina | Saratoga Springs |

— Jeff Vincent



The rocket-devouring jellyfish of Geneseo.



One of Geneseo's vast tracts of arable land.

The Mice 'Loader

by Jeff Vincent

reprinted from *Star-Date* 11.91 and 12.91

These are the plans for the Imploding White Mice Team's (Chuck Weiss & Jeff Vincent) NARAM-winning and U.S. Record-setting A Payload model. Chuck built the model for the BART-90 meet in September 1990, but it was never flown (I was too busy blowing up my own models). In keeping with our intense NARAM effort this year (1991), it was our only model for NARAM PL. Luckily, due to the weather on Wednesday (tracking day), the flying was rescheduled to Thursday morning and restricted to one flight (so we only needed one model — hey, we knew that).

The model features a compact, efficient design, reducing that all-important drag coefficient. The model is based on old CMR parts, although most of these have substitutes available today. Unfortunately, one integral part, the 0.78" hollow plastic nose cone (NC-77P), is not available. An Apogee PNC-18 with a thin TT-19 ring (as a stop for the payload tube) is probably the best you can do with premanufactured parts.

Parts List

| Once Upon A Time | Today |
|-----------------------|---------------------|
| NC-77P (two) | Apogee WNC-19 & ??? |
| RB-77 (3.5") | Apogee TT-19 |
| RB-74 (0.25" & 1.0") | Estes BT-20 |
| RB-50 (4.5") | Estes BT-5 |
| CR-5074 (two?) | Estes AR-520 |
| 1/16" basswood | same as it ever was |
| squid line (~30") | " |
| small parachute (~8") | " |

The construction is pretty straightforward. The tip of one of the NC-77Ps is cut off so it slip-fits over the RB-50 as a boattail. The shock cord is knotted and mounted in a notch in the CR-5074. The 1.0" RB-74 tube is glued into the boattail and onto one centering ring (or two, I couldn't confirm if a second ring was located at the opposite end of the RB-74). This serves as the mating surface for the payload

section — sort of an inverted nose cone. The nose is joined to the payload section with the 0.25" tube. The nose joint is filled and carefully smoothed. The shock cord is attached inside the tip of the nose cone, running along the side of the payload. The fins are tapered, airfoiled, and attached to the model. The model was finished with several coats of red sandable primer (not one of Chuck's glass-like finishes, but apparently sufficient — hey, it was only built for a regional!). The model was flown with an Apogee payload and a small parachute.

The model was flown from a tower, augmented by a piston launcher (18" BT-5 piston tube). I think the piston launcher made a big difference. At NARAM-31, I got a decent piston-launch on my first C PL flight for 500 meters. The second flight (same model, same engine batch) got a good pop off the piston and flew to 553 meters. My A PL flight was similar, and I think that helped us reach the highest altitude. The single flight rule probably didn't hurt either, since we got everything right the first time.

Above: The Mice 'Loader A PL.

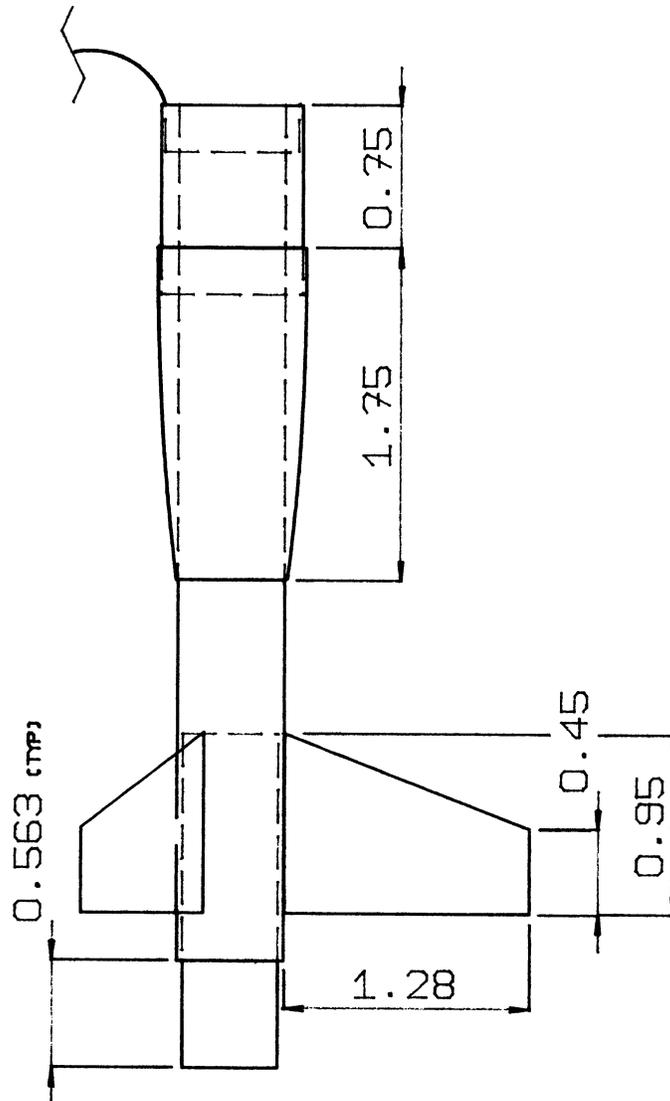
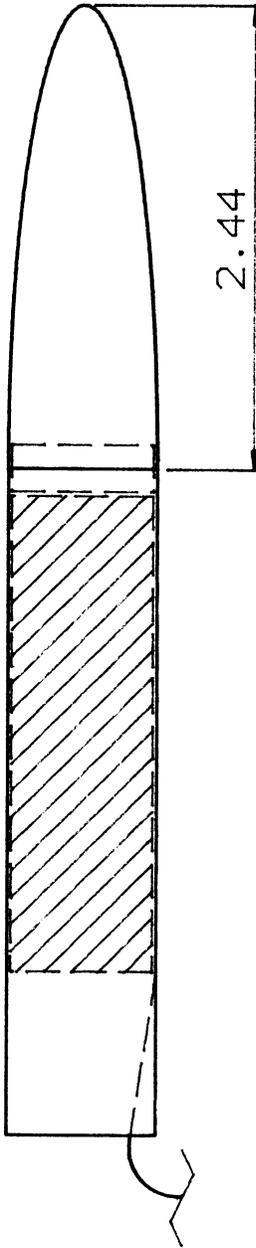


Below: The more conventional C PL mentioned above (approximately the same scale).



A Payload - U.S. Record

Imploding White Mice Team
Performance 130 meters
Date August 8, 1991
Engine Estes A3-4T
Gross Launch Mass 50 gm
Mass Minus Motor ... 42.5 gm
Designed & Built by C. Weiss
Flown & Drawn by J. Vincent
with BeckerCAD ST, 11/91



S is for Space Open Meet Results, May 6, 2000

| Results | Name | 1/4A PD MR | 1/2A SD MR | 1/2A B/G | SpSc |
|---------|------------------|--------------|---------------|----------|------|
| A Div. | Eades, Nicholas | — | LST / UNS | UNS | — |
| C Div. | DeMarco, Alex | 38 / 26 / 40 | 55 / 52 / 43 | 21 / 11 | 418 |
| | Eades, Ed | SEP | 28 | 38 | — |
| | Hutchinson, Mark | 21 / 57 | 22 / SEP | 26 / 19 | — |
| | Kelly, Robert | — | — | — | 495 |
| | Vincent, Jeff | MAX | 44 | NR | 2 |
| | Wolman, Dan | 55 / 43 | LST / 51 / 34 | 38 / 32 | 740 |

| Points | Name | 1/4A PD MR | 1/2A SD MR | 1/2A B/G | SpSc | Total |
|--------|------------------|------------|------------|----------|------|-------|
| A Div. | Eades, Nicholas | 0 | 24 | 0 | 0 | 24 |
| C Div. | DeMarco, Alex | 220 | 240 | 68 | 160 | 688 |
| | Eades, Ed | 0 | 48 | 136 | 0 | 184 |
| | Hutchinson, Mark | 88 | 24 | 204 | 0 | 316 |
| | Kelly, Robert | 0 | 0 | 0 | 240 | 240 |
| | Vincent, Jeff | 44 | 96 | 34 | 80 | 254 |
| | Wolman, Dan | 132 | 144 | 340 | 400 | 1016 |

Section Points ASTRE2514 Independents 208

T is for Time Local Meet Results, June 4, 2000

| C Div. Results | Name | C ELDur | A SRDur | 1/4A SD |
|----------------|------------------|-----------|-------------|----------|
| | DeMarco, Alex | 50 / 44 | SEP / SEP | 50 / 44 |
| | Hutchinson, Mark | SEP / SEP | EJ / 5850 | 17 / SEP |
| | Petrone, Ben | — | — | 30 / 26 |
| | Vincent, Jeff | 109 / 40 | 4350 / 6732 | 30 / 15 |

| C Div. Points | Name | C ELDur | A SRDur | 1/4A SD | Total |
|---------------|------------------|---------|---------|---------|-------|
| | DeMarco, Alex | 96 | 0 | 80 | 176 |
| | Hutchinson, Mark | 0 | 78 | 16 | 94 |
| | Petrone, Ben | 0 | 0 | 48 | 48 |
| | Vincent, Jeff | 160 | 130 | 32 | 322 |

Section Points ASTRE640

ASTRE April 7, 2000 Meeting Minutes

Compiled by Eric Schadow

Attending: Eric Schadow, Jeff Vincent, John Sicker, Ed and Nick Eades, Ben Petrone, Alex DeMarco and Mark Hutchinson.

Meeting called to order at 6:25 pm in Jeff's basement.

NAR insurance discussion. New NAR membership rates will take affect at NAR renewal. Check was mailed to NAR for Launch Site insurance. Coverage will take affect April 5th.

April 15th launch discussed and decided on 10AM to 3PM. Range gear and \$1.00 entry cost for senior members. There is a \$5.00 meet sanction fee paid to NAR for the meet.

Frangible Rocketry discussion and other newsletter ideas discussed. Also Sport Rocketry and Extreme Rocketry magazines.

Publicity - 7th Grade Technology class mention by Ben. Alex has delivered flyers to Mardels. Jeff discussed purchase of the Men in Space from Mohawk Valley railroad. Hobby town has a new ASTRE sign. Also Ben Franklin's in East Greenbush. Also ASTRE is listed on the Times Union Communities Web Site.

Discussed Estes kit reissue.

Discussion held regarding merging NAR/TRIPOLI Court Case against the BATF. Currently waiting for BATF response.

ASTRE/TRIPOLI Albany Rocket Club Merger. Ideas discussed regarding merging clubs. Main item for TRIPOLI Albany is finding a suitable launch field. ASTRE is more competition based while Tripoli is more HPR. Nothing stops members from joining either club.

Next Meeting Friday May 12th 2000

Treasury Report March-April 2000

3/19/2000 Senior Membership renewal for Jeff Vincent and John Sicker. Family renewal for Ed Eades.

4/4/2000 Senior Membership renewal for Pat Perrella. Pat included a nice note in her renewal. She is very active in the USS Slater Destroyer Escort located at the Port of Albany. Also family memberships for Van

Antwerp and Hallenbeck. Also deposited \$25.00 from cash to checking.

4/7/2000 Check #145 issued to reimburse Alex DeMarco for the ASTRE Charter and Insurance and mailing expenses. Family renewals for Schadow and Petrone. John Sicker purchased Apogee Helicopter kit from ASTRE.

Current Checking \$166.64 and Cash \$70.10

ASTRE May 12, 2000 Meeting Minutes

Compiled by Alex DeMarco

Attending: Jeff Vincent, John Sicker, Alex DeMarco, Chuck Weiss, John DeMar.

Meeting called to order at 6:25 pm in Jeff's basement: meaning we ordered pizza!

John Demar presented ASTRE with the NYSPACE Cup. About 2 years late, but gladly accepted. John discussed the possibility of a meet during the month of July in Syracuse. Jeff stated that there is a good chance that several ASTRE members may attend.

Food and Beverage was consumed.

Jeff noted he has membership monies to give Eric for Bob Kelly, Dan Wolman will be sending in his membership dues.

Chuck left a check with Jeff to give to Eric for Chuck's and Mike Seaman's membership renewal.

ASTRE/TRIPOLI Albany Rocket Club Merger. Not much discussed other than the officers are looking at the bylaws of ASTRE to see what changes may be needed.

No news reported on the possible launch site in Saratoga.

It was determined that the next meet will be Saturday June 3 with the following events:

A SuperRoc Duration

C Eggloft Duration

1/4A Streamer Duration

Also, we scheduled two ASTRE meetings: Friday, June 23, 6:30pm and Friday, July 21, 6:30pm. Both of these meetings will be held at Alex DeMarco's home.

ASTRE June 23, 2000 Meeting Minutes

Compiled by Alex DeMarco

Meeting 6/23/2000 Held at Alex DeMarco's home.
7PM-9PM

ASTRE members present Ben, Mark, Alex, Jeff and Eric.

Meeting started with Jeff presenting Egglofter construction techniques. He handed out a Two-Minute Egg building instructions with some additional notes. Discussion of B and C motors usage and recovery followed.

Next was a discussion about a NYSPACE launch in July 15th/16th. Would be held in Geneseo.

Also a Syracuse (Clay, NY) launch scheduled on August 19th/20th.

Several members of ASTRE attended the RAMTEC meeting in PA. Saturday weather was hot and windy and rain was a factor on Sunday. Mark Hutchinson had a pretty long but successful stroll searching for his Black Brant model.

Mark and Alex described their adventure traveling to the National Sport Launch.

Treasurer Report as of 6/23/2000 Checking 226.64/
Cash \$50.10.

Received family renewal for Mark Hutchinson (\$15.00)

Next a discussion was held regarding the the BATF/
NAR/Tripoli lawsuit.

ASTRE July 21, 2000 Meeting Minutes

Compiled by Alex DeMarco

Attending: Alex DeMarco, Mark Hutchinson, Ben Petrone, and Chuck Hemker.

Current Treasurers report. 7/21/2000
Deposited Hutchinson Family Renewal in checking
account.

Totals Checking \$241.64/Cash \$50.10
- Submitted by Eric Schadow via email

We discussed the upcoming Regional events and the postponed NYSPACE event. The possibility of a trek to Syracuse was bounced around.

Alex DeMarco, showed some of the "Ivee 2G" Boost Glider's to the gang, he also showed his Apogee Payloader model, and a new Egg Lofter kit from QCR.

Mark Hutchinson passed around his single and 2 stage kit from Apogee called the Centrix / Super Centrix.

Ben Petrone displayed his UNOPENED acquisitions: Honest John, Super Big Bertha, Maxi Alpha and V2.

Mark discussed the possibility of a field off of Route 9 in Schodack. He will be investigating this weekend.

As far as scheduled meets, we have the Syracuse event in August (19,20) should that get delayed or canceled we will schedule an event for the last weekend in August. We will also schedule an event in September, and possibly 2 events in October (meet and then a sport launch) to end the 2000 ASTRE flying season.

After a brief membership discussion we headed out front for a twilight Micro Maxx launch. Once Alex found all the parts we launched all the micro max kits. Kinda neat in darkness...



TRAINS & HOBBIES

277 Troy Schenectady Rd.
Latham, NY 12110

(518) 782-0981

Estes · Quest · Aerotech · North Coast
"You Need It, We'll Get It"

| CALENDAR | | | | | | |
|----------|----|----|----|----|----|----|
| | | | | 1 | 2 | |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

ASTRE Calendar

| CALENDAR | | | | | | |
|----------|----|----|----|----|----|----|
| | | | | 1 | 2 | |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

ASTRE Contacts :

Alex DeMarco 462-8557 demarco@sysadm.suny.edu
 Jeff Vincent 439-2055 jvincent@wizvax.net
 Chuck Weiss 883-8312 cbweiss@telenet.net

How to get to Alex's house (244 Madison Ave)

Coming from Albany take Route 9&20 East.

- Turn left onto Hampton Ave. (note: 2nd left after 2nd light by Kmart)
- Follow this road for about 3/4 mile and turn right onto Summit Ave.
- Take second right onto Madison Ave. I'm the first driveway on the left, you'll probably have to park on the street.

From I-90 get off at Exit 9 heading south on Route 4.

- First light make a right on to Red Mill Road (RT 151). Stewarts on the corner.
- Go about 1/2 mile make left onto Eastern. If you make it to the light you've gone to far.
- Follow Eastern to end, then go right onto Madison. Go down the hill through the first intersection (Summit Ave) I'm the first driveway on the left, park on the street.

Note: ASTRE events appear in **bold type**.

For the past couple years, we have held meetings in member's homes. The meetings are usually informal bull sessions where club business is discussed first, followed by either general "what's new," or a predetermined topic or activity. This schedule can change, and it is advisable to contact Jeff Vincent to find out about any last-minute changes.

August 19-20 - Syracuse Regional Meet - Syracuse, NY.
 Events: 1/2A B/G, PMC, B PL, 1/2A SRAIt, PredDur.
 Contact: John DeMar, 315-451-6470.

August 25 (Friday) - **ASTRE Meeting** - at Alex DeMarco's house, 244 Madison Ave., Rensselaer, 7:00 pm. Contact: Alex DeMarco.

September 9-10 - NYSPACE-2000/Finger Lakes Classic X Regional Meet - Geneseo, NY. Events: 1/4A PD MR, 1/2A B/G, B SD, B ELDur, PMC. Contact: John Viggiano, 716-239-6046.

September 16 - **ASTRE Meet** - Johnstown, NY. Date tentative. Events: TBD. Contact: Jeff Vincent.

October 28 - **ASTRE Spooky Sport Launch** - Johnstown, NY. Date tentative. Contact: Jeff Vincent.

August 4-10, 2001 - NARAM-43 NAR Annual Meet - Geneseo, NY. Events: 1/2A B/G, 1/2A FW, A Alt, B SRAIt, C SD, C ELAlt, D HD, Sport Scale, R&D. Contact: John Viggiano, 716-239-6046.

For more NAR Northeast Region meet info, see:
<http://www.wizvax.net/jvincent/nercb.html>

ASTRE Membership Application

Name _____
 Address _____
 City _____
 State _____ Zip Code _____
 Phone _____ Date of birth _____
 NAR number _____ Tripoli number _____

Membership Dues (check one):

Junior member - \$5.00
 (under 18)

Senior member - \$10.00
 (over 18)

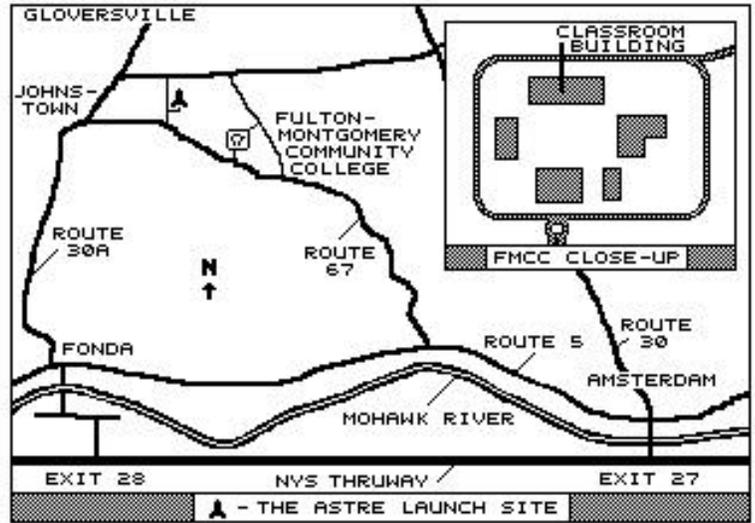
Family membership - \$15.00
 Number of newsletters: _____

Send to: ASTRE
 c/o: Eric Schadow
 123 Rotterdam St.
 Schenectady, NY 12306

Please make checks payable to
 "ASTRE".

How To Get To The Flying Field

- From the east, take the Amsterdam exit (#27) off the Thruway
- Take a right and follow Route 30 North for one mile.
- Take a left at the second light after the bridge onto Route 5 West.
- Follow Route 5 for three miles. Take a right onto Route 67.
- Follow Route 67 for 5.5 miles. Shortly after passing FMCC, take a right onto the small road by Ed's RC shop. After one half mile you will see a white fence on your right. Follow the driveway and park in the parking lot and walk to the range.



ASTRE's Next Meeting - August 25 - Friday evening, 7pm at Alex DeMarco's house
ASTRE's Next Launch - September 16 - ASTRE Meet, events TBD
In This Issue - National Sport Launch 2000 and NAR Payloaders

Jeff Vincent
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