

THE UPSTATE ROCKETEER

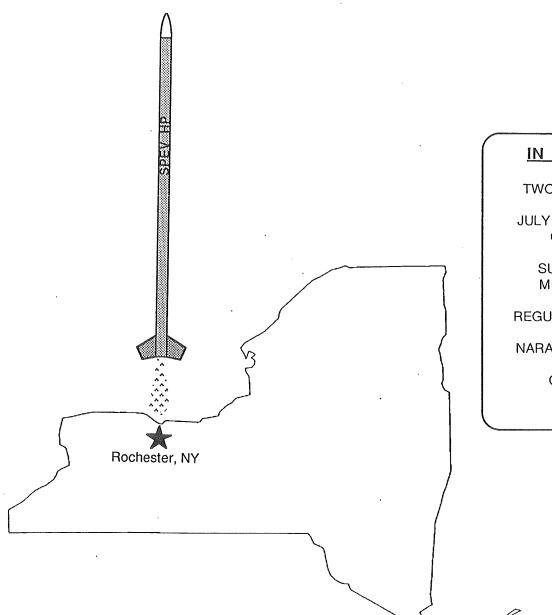
The Official Newsletter of MARS NAR Section #136



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#### The Upstate Rocketeer

#### Volume 5, Number 4 August, 1992

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

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#### MARS Membership - August 1992

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

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

Blowin' In the Wind (Editorial)

By the time you read this, August will be almost over. That means that we are nearing the end of another flying season. Since the "revival" of MARS back in 88, this has probably been our best year ever in terms of membership levels and participation. We have made slow but steady gains in adult membership over the past two years. This trend needs to continue for a couple of more years until we reach sufficient size to achieve "critical mass." Of course there is always the danger of losing old members as fast as we gain news ones. This is not an uncommon occurrence. Indeed, we did loose Rob Landis a couple of years ago as well as the Dowds. As I have mentioned before, one of the things that has held us back has been the lack of a good flying field. Although the Black Creek Park field was not the greatest (especially when the winds were from the north), it was an adequate field and served the club well for over nine years. When we were "kicked out" three years ago, we moved to our present field. In spite of all the grumbling about this field, it has served us well the past three summers and proven to be adequate for most flying. With the impending sale of Videk, the future of this field is now uncertain. After talking about it for several years, the time has come for us to seek out a new field. At the present time we have a couple of good options but further investigation is needed. In the meantime, we need all club members to be on the lookout for a new launch site. If all goes well, maybe we can have a new field before the flying weather gets lousy (I know, I know, it's been lousy all summer. but you know what I mean).

The last three issues of the newsletter have been heavily competition oriented, with plans and news about NYSPACE in the February and April issues and the write up of NYSPACE in the June issue. Thus I tried to make this issue a "sport flyers" issue although there is a report from the August 9th local meet, "Sunny Side Up." Even so, this issue features two sport plans, one low power and one high power. Traditionally, I usually include news from NARAM in the August issue as well but there have been few reports from NARAM participants on Modelnet so the news is sketchy at best. Finally, there is an item regarding the DoT situation with regards to reloadables.

In closing, the last issue contained several errors (as usual), but there were three items that I did want to mention in particular. First, I noticed that two manufacturers were left off of the list of prize contributors for NYSPACE (although they were penciled in on some copies). The two omitted were Aerotech and Quest. Also, for some reason John Viggiano's name was never added to the membership list that appears in each issue. Sorry about that John. Finally, I have repeatedly forgotten to give credit to Ferenc Roka for many of the photographs that have appeared in this newsletter. Thanks for the pics Ferenc. We really do appreciate it.

Until next time,

Dan Dan

#### **MARS Club News**

#### September Club Meeting

Friday September 11th is the date for the next MARS club meeting. This is a very important meeting as two key items will be discussed. First, the status of locating a new field (hopefully by then, we will have some good news on this one), and second, the planning of club activities through the fall, winter and spring. At this meeting we hope to at least lay out a tentative schedule for meetings, sport launches, demo launches, contests and field trips for the next 8-10 months. This is the opportunity for you to give your input on what rocketry activities you would like to see the club do in the upcoming months so please plan on attending. Also, come and look at the photos and videos from the July and August launches. The meeting time is 7:30 PM. The meeting will be held at the RIT Research Center (see map in the previous issue or call John Viggiano or Jay King for directions).

#### September Sport Launch Scheduled

Sunday September 20th is the date of the next MARS club launch. The flying site for this launch has not yet been decided. It will either be at Videk or at a potential new club field. A final determination will be made at the September 11th meeting.

#### **July Sport Launch Report**

Since no one else volunteered to write up the July sport launch, here is a quick report based on some notes I made shortly after the launch. Present at the launch were MARS members Bud Piscini, Wayne Foster, Rich Kerr, Jeff and Jessica Ryan, Ferenc Roka, and Dan Wolf. Also present were Brett Templar and Dan Garrett from Honeoye Falls and Dave Pringle from Syracuse.

It's always good to see new faces at our launches, especially because we get to see some different rockets. This was true again at this launch as one of our new members, Wayne, brought out and flew (with the help of his son) the Estes "Bailout" to a successful flight with a Cobra action figure paratrooping out on its own chute. Wayne also flew a nicely built Mercury Redstone (the most recent Estes, aka Centuri version). Wayne's Big Bertha turned in numerous flights as well.

Dan Garrett also brought along some rockets we hadn't seen fly yet (or at least in a long time) including the MRC Hawk Glider. This nice looking fluorescent pink B/G boosted well but

the glide trim was off a bit as it spiraled in. Dan also flew an old Centuri Enerjet kit with an Estes D13. To the amazement of all, the flight was perfect. Brett Templar met with less success with his Estes C6-? engine that had way too long of a delay in his Astrocam. The camera separated into several pieces upon impact. Maybe Brett can get Estes to replace it if/when they come out with a 35mm rocket camera.

John Viggiano tried to appease all of the "rocket gods" on one flight (or at least the manufacturers) as he flew his Estes Calypso with a Quest engine ignited by an MRC igniter. The cato of the day belonged to Ferenc Roka as he had his FSI Orbit blown apart by an FSI D20. Although not as spectacular as Bud's C6-7 cato in his Little Joe II at the May launch, the D20 did manage to burn a hole through the side of the casing, engine mount and rocket. Speaking of Bud, with the Little Joe II still missing the engine mount, he had to settle for flying his Jupiter C, Maxi-Alpha, Iris, and Patriot. All flights were successful. Rich made a number of flights with his "green" rocket but spent some of the time searching for it in the grass (try a different color Rich).

Jeff Ryan, with the help of daughter Jessica, made several high power flights including a nice flight of his LOC Onyx on an F25. Jeff also flew his Aerotech Initiator on an F25 for a perfect flight and recovery on its Rocket R&D X-form chute. Jeff had nice flights with his Aura on an E25 and his Super Big Bertha on a D12. Dan Wolf made some high power flights too including his LOC Viper III on 3 D12-5s and an NCR Thunderbolt on an F14 Blackjack. Dan's last high power flight was his US Rockets "Banshee", aka "Buffalo Bill" on an F25. This one separated and the bottom half was not recovered, landing some where in the tall grass behind the trucking company (although the search continues). Finally in the high power category, Dave Pringle turned in some of the nicest flights including a spectacular flight of his North Coast 1/4 scale Patriot on a G80. Dave also flew his NCR Quantum I and Aerobee-Hi models on F25s. Both flights worked well although the Aerobee landed on top of a tractor-trailer behind the archery factory. With the help of a ladder from Videk, Dan and Dave eventually recovered it in the rain.

That's right, rain. The launch was cut short when the rains came at about 4:30. The range was quickly torn down and everything thrown into Dan's car. Even so it was a pretty good launch and the turnout was great. The number of rockets flown was pretty high considering the launch only lasted a little over two hours. All told, over fifty flights were made in that time span. If we could ever get a full day without rain at one of our launches, who knows how many flights we could make.

#### Sunny Side Up Local Meet

After hosting and flying the "grueling" NYSPACE regional in June, the Sunny Side Up local meet was held on August 9th as a "fun" contest. The events were chosen accordingly. Two spot landing events as well as low power streamer and super-roc duration events were chosen to give everyone a chance to compete. Of course the name of the meet was chosen for the two eggloft events. One, B Eggloft Duration was flown at NYSPACE so most contestants were prepared for it. This left only D Dual Eggloft Altitude as a challenge to the die hard competitors, and a challenge it proved to be.

The weather was marginal as the contest started, with rain shutting things down shortly after the range setup was complete. The weather forecast of clearing and even partly sunny skies proved to be incorrect as the meet was beset with rain on and off throughout the day.

Winds were light, making the contest fairly easy to fly. There was little thermal activity as well making recovery easy. Most people flew the spot landing events first to get them out of the way. With the light winds, most competitors had no problem getting within 20 meters of the spot but no one really "nailed" it in either streamer or parachute spot landing. Distances in the 7-8 meter range won both events with Mike O'Brien taking streamer spot and Brett Templar taking parachute spot.

1/2A Super-Roc Duration turned out to be a lesson in reliability. John DeMar and Jay King had the top single flights with times of 46 and 41 seconds respectively but they had to settle for 3rd and 4th place when both DQed their second flights. John forgot to tape his engine in on the second flight while Jay's model separated when the shock cord broke. Both models were Apogee blackshaft maximum length types. Bud Piscini took second flying a stock Estes Skinny Mini. Bud used a streamer for recovery and turned in two 10 second flights of the 75 cm long bird. Mike O'Brien took first with a maximum length model whose lower portion was BT-20 and upper portion BT-5. Mike's bird was even painted, a rarity for a Super-Roc and he took first with 13 second and 12 second flights.

1/2A Streamer also had its share of disqualifications. John Viggiano took first flying a vellum rocket from the T-5 article/plan. John wrote a postscript "script" to print out the rocket plan right on to the vellum via a laser printer. The resulting body tubes were already marked for the fins and even included John's NAR number. After a first flight separation, John managed a time of 45 seconds on his second flight and just missed a max on the third flight with 58 seconds for a 103 second total. Dave Pringle took second flying a conventional rocket (NCR kit maybe?) to three qualified flights for a total of 94. John DeMar flew an Apogee type model to third place with times of 42 and 46 seconds on the first two flights but John failed to make a third flight, and missed a possible shot at first or second place. Mike O'Brien barely beat out Bud for 4th

place on the virtue of one 34 second flight. Bud had a three flight total of 31 seconds on three more flights of his Skinny-Mini that he flew in Super-Roc.

B Eggloft Duration saw very mediocre times as compared to NYSPACE, partly due to lack of good air. John DeMar took first with a 37 second flight. No one else managed to break 30 seconds although a few managed to break their eggs due to separations or lack of chutes opening.

D Dual Eggloft Altitude was flown last as we waited for the skies to clear as the weatherman had predicted. When this didn't happen, tracking started anyway around 4:30. competitors quickly learned the need for strong shock cords and reenforced chutes in this event. Several eggs were broken on the first round. Particularly noteworthy was Mike O'Brien's egglofter that tried to dump its payload all over tracking east (Bud managed to duck just in time!) and John Viggiano's "scram-jet" Initiator egglofter. Words can't describe this flight. You had to see it to believe it. Jay King had the highest tracked flight of the day at 260 meters. Jay used an Apogee Streamliner modified to handled the thrust and ejection charge of an Aerotech D21. Unfortunately, the thin mylar chute was not up to the task of the forces of two eggs at ejection. The chute stripped and the rocket landed behind the lumber yard. Dave Pringle had a good line on it and said it was easy to spot when he walked around the building as there was a "big yellow spot" on the asphalt with the rocket laying in the middle of it. That put John DeMar in first place with a respectable 182 meter flight with a D12-3. John made a second flight with a D21-4 to see what it would do. This time the egglofter tipped off badly out of the tower and tracking west lost it as it flew past a very dark cloud. With the angle, it was doubtful if it would have beat the D12 flight however as that flight was fairly straight up. John flew his own design, with a home-brew egg capsule with the top made from the top of the Estes Eggspress capsule. John wisely used a cloth chute for recovery. Ferenc Roka flew a basically stock Eggspress (modified for 24mm engines) to a nice second place flight of 141 meters. Dave Pringle, after stripping his plastic chute on the first flight and thus breaking the eggs, switched to a cloth chute and took third with a 119 meter flight. Dave flew part a heavily modified NCR dual egglofter. Dave made the rocket much shorter and modified the capsule, using the clear egglofter extension tube from Apogee. Dave's first flight was still traveling upward on a D12-3 (more like a D12-1.5) so Dave switched to a D12-5 (more like a D12-6.5) on the second flight and lost quite a bit of altitude and possibly missed out on second place. This was also due in part to the fact that we were tracking to ejection rather than apogee because of the dark overcast skies.

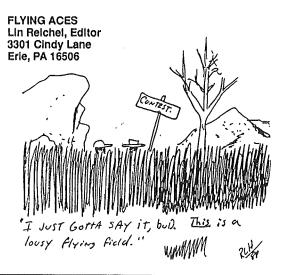
With first place finishes in both eggloft events, John DeMar easily took first place overall. Dave Pringle took second overall with three second places and one third. Dave was also

the only contestant to qualify in every event. Close behind in 3rth and 4th were Mike O'Brien and Ferenc Roka.

Besides the contest flying, several sport flights were made. Roy Metz showed up for the first time in several months and made several sport flights including the maiden flight of the Bart Simpson rocket. Bart flew well as did most of Roy's rockets including the "Miller Beer" rocket. By the way, Roy said he's working day shift now so look for him to be at more club meetings and launches in the future.

One of the biggest surprises was John Viggiano showing up with his Aerotech Initiator, a much larger rocket than we are accustomed to see John fly. John had it all prepped and ready to go on the pad when he turned and asked Dan Wolf if the 7 second delay of the E15-7 would be too long. When Dan responded with an emphatic yes, John promptly removed the Initiator from the pad. After trading Dan for an E15-4, the Initiator was again returned to the pad where upon it turned in a perfect flight. After witnessing this flight, Bud prepped the Aerotech "Barracuda" that he won at NYSPACE. Bud had painted it sounding rocket style so it didn't look anything like the catalog picture. It was best described by John V. as looking like a Black Brant II. Anyway, after no ignition with the "crapperhead", er copperhead igniter, the Barracuda made a nice flight on the second attempt.

When Bud wasn't flying his Barracuda or Skinny Mini (did you fly anything else that day Bud?) he was busy helping run the range or track. Speaking of tracking, Jeff Ryan showed up at the launch just prior to the start of tracking (Jeff and Amie had been away for the weekend for their anniversary) and proceeded to run the range while Dan and Bud manned the trackers. This was a big help as it allowed everyone else to prep and fly their egglofters. Thanks Jeff, and thanks to everyone else for pitching in to get this contest flown. Even though it was only a local meet, it seemed to take about as much effort as an open or regional. Perhaps we should consider this when scheduling a "fun" contest again. It was still a lot of fun however and everyone seemed to have a good time. Pictures of the launch can be found on the photo pages. Detailed results can be found to the right.



#### SUNNY SIDE UP RESULTS

Streamer Spot Landing			Distance			Points			
1 Brett Templar			7.86 Meters			20			
2 David Pringle			10.49 Meter			12			
3 John Viggiano 4 Dan Garrett			11.50 Meten			8			
5 Bud Piscini			17.68 Meten 20.80 Meten			4			
6 Mike O'Brien			21.62 Meten			2			
John DeMar			NDP	,		-			
Ferene Roka			SEP						
Parachute Spot Landing			Distance			Points			
1 Mike O'Brien			7.26 Meters			20			
2 Brett Templar			10.92 Meters	1		12			
3 John Viggiano			13.18 Meters			8			
4 John DeMar			15.30 Meters	1		4			
5 David Pringle			19.08 Meters			2			
6 Dan Garrett			33.70 Meters	ı		2			
7 Bud Piscini Ferenc Roka			50.0+ Meter SEP	В		2			
						-			
1/2A Super-Roc	1st (length*2	FIG.		(length	2 tin	2nd Fit ie total)	Tota	d Score	Point
1 Mike O'Brien	198	13	211	198	12	210		421	50
2 Bud Piscini	150	10	160	150	10	160		320	30
3 John DeMar	200	46	246		EJ			246	20
4 Jay King	200	41	241		SEP			241	10
5 David Pringle	S	EP		200	30	230		230	5
6 Ferenc Roka	198	14	212		DNF			212	5
1/2A Streamer Dur. (MR)	1st		2nd	3rd		Total So	ore	Points	
l John Viggiano	SEP		45	58		103		50	
2 David Pringle	39		38	17		94		30	
3 John DeMar	42		46	DNF		88		20	
4 Mike O'Brien	34		SEP	SAF		34		10	
5 Bud Piscini	9		11	11		31		5	
Ferenc Roka	SEP		DNF	DNF		-		-	
B Eggloft Duration	1st Flight		2nd Flight	Points					
l John DcMar	37		19	80					
2 David Pringle	26 CED		24	48					
3 Mike O'Brien 4 Ferenc Roka	SEP		22 DMF	32					
5 Dan Garrett	16 9		DNF DNF	16 8					
6 Brett Templar	7		DNF	8					
Jay King	, EGG		DNF	-					
John Viggiano	EGG		SAF	-					
D Dual Eggloft Altitude	1st Flight		2nd Flight	Points					
00									
l John DeMar	182 Meter		TL	140					
			TL DNF	140 84					
I John DeMar 2 Ferenc Roka 3 David Pringle	182 Meters 141 Meters EGG		DNF						
2 Ferenc Roka	141 Meter			84					
Perenc Roka David Pringle	141 Meter EGG		DNF 119 Meters	84 52					
2 Ferenc Roka 3 David Pringle Mike O'Brien	141 Meter EGG EGG		DNF 119 Meters DNF	84 52 0					
2 Ferenc Roka 3 David Pringle Mike O'Brien Jay King	141 Meter EGG EGG EGG		DNF 119 Meters DNF DNF	84 52 0 0					
2 Ferenc Roka 3 David Pringle Mike O'Brien Jay King John Viggiano	141 Meter EGG EGG EGG		DNF 119 Meters DNF DNF	84 52 0 0					
2 Ferenc Roka 3 David Pringle Mike O'Brien Jay King John Viggiano	141 Metern EGG EGG EGG SAF		DNF 119 Meters DNF DNF	84 52 0 0					
2 Ferenc Roka 3 David Pringle Mike O'Brien Jay King John Viggiano  Fotal Points 1 John DeMar	141 Metern EGG EGG EGG SAF		DNF 119 Meters DNF DNF	84 52 0 0					
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2 Ferenc Roka 3 David Pringle Mike O'Brien Jay King John Viggiano  Fotal Points 1 John DeMar 2 David Pringle 3 Mike O'Brien 4 Ferenc Roka 5 John Viggiano	141 Metern EGG EGG EGG SAF 264 149 114 105 66		DNF 119 Meters DNF DNF	84 52 0 0					
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2 Ferenc Roka 3 David Pringle Mike O'Brien Jay King John Viggiano  Fotal Points 1 John DeMar 2 David Pringle 3 Mike O'Brien 4 Ferenc Roka 5 John Viggiano 6 Brett Templar 7 Bud Piscini 8 Dan Garrett	141 Metern EGG EGG EGG SAF 264 149 114 105 66 40 39 14		DNF 119 Meters DNF DNF	84 52 0 0					
2 Ferenc Roka 3 David Pringle Mike O'Brien Jay King John Viggiano  Fotal Points 1 John DeMar 2 David Pringle 3 Mike O'Brien 4 Ferenc Roka 5 John Viggiano 6 Brett Templar 7 Bud Piscini 8 Dan Garrett 9 Jay King	141 Metern EGG EGG EGG SAF 264 149 114 105 66 40 39		DNF 119 Meters DNF DNF	84 52 0 0					
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2 Ferenc Roka 3 David Pringle Mike O'Brien Jay King John Viggiano  Fotal Points 1 John DeMar 2 David Pringle 3 Mike O'Brien 4 Ferenc Roka 5 John Viggiano 5 Heett Templar 7 Bud Piscini 8 Dan Garrett 0 Jay King  ABBREVIATIONS  DNF - Did Not Fly	141 Metern EGG EGG EGG SAF 264 149 114 105 66 40 39 14		DNF 119 Meters DNF DNF	84 52 0 0					
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2 Ferenc Roka 3 David Pringle Mike O'Brien Jay King John Viggiano  Fotal Points 1 John DeMar 2 David Pringle 3 Mike O'Brien 4 Ferenc Roka 5 John Viggiano 6 Brett Templar 7 Bud Piscini 8 Dan Garrett 9 Jay King  ABBREVIATIONS DNF - Did Not Fly 3GG - Egg Broken EJ - Ejected Motor	141 Metern EGG EGG EGG SAF 264 149 114 105 66 40 39 14		DNF 119 Meters DNF DNF	84 52 0 0					
2 Ferenc Roka 3 David Pringle Mike O'Brien Jay King John Viggiano  Fotal Points 1 John DeMar 2 David Pringle 3 Mike O'Brien 4 Ferenc Roka 5 John Viggiano 5 Brett Templar 7 Bud Piscini 8 Dan Garrett D Jay King  ABBREVIATIONS DNF - Did Not Fly Egg - Egg Broken EJ - Ejected Motor RDP - No Deployment	141 Metern EGG EGG EGG SAF 264 149 114 105 66 40 39 14		DNF 119 Meters DNF DNF	84 52 0 0					
2 Ferenc Roka 3 David Pringle Mike O'Brien Jay King John Viggiano  Fotal Points 1 John DeMar 2 David Pringle 3 Mike O'Brien 4 Ferenc Roka 5 John Viggiano 6 Brett Templar 7 Bud Piscini 8 Dan Garrett 9 Jay King  ABBREVIATIONS DNF - Did Not Fly 3GG - Egg Broken EJ - Ejected Motor	141 Metern EGG EGG EGG SAF 264 149 114 105 66 40 39 14		DNF 119 Meters DNF DNF	84 52 0 0					

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

Manufacturer's News... Estes demoed several interesting items at NARAM-34 including two new kits or actually, rereleases of old kits. The Maxi Honest John is making a return as is the old Centuri Jayhawk. Estes flew them on prototypes of their new composite motors. They also flew a couple of 4 foot tall Saturn 1Bs on composites. The first one bit the dust due to an ejection charge failure (on a G motor) but the second one flew perfect although the upper section caught a thermal and stayed aloft for a long time before it was ultimately recovered. The Saturn will not be released due to high tooling costs making it cost prohibitive.

North Coast Rocketry has come out with its 1992 catalog. Many kits in both the high power and competition product lines have been dropped. A number of interesting kits have been added to the high power line however. The Hobgoblin is an 8" diameter, 60" tall version of the old Estes Goblin kit. NCR has also added two new scale models, an 86" long, 4" diameter D Region Tomahawk and a 32" long version of the Pegasus. Two other new kits are the "Quasar NG", a 43" long, 4" diameter scaled up version of the old Centuri Quasar and "Blackhole Betty", a Buck Rogers, Flash Gordon style futuristic style spaceship. North Coast has consolidated all their operations in Utah. To request a catalog write to: North Coast Rocketry, Suite 424, 4848 South Highland Drive, Salt Lake City, UT 84117. Catalog cover price is \$3.00.

Rocket R&D has a new catalog out as well. They now carry the Public Missiles line of kits and continue to sell the THOY and Aerotech lines as well. They also continue to sell the Aerotech single use and Aerotech/ISP reloadable motors as well as epoxies, building supplies and other items. Their new catalog also outlines several "Red Hot Summer Specials" that are in effect until September 16th. These 5 special packages bundle various kits, engines and supplies together for extra savings over the normal discounted prices. For example, one special bundles the Aerotech HV ARCAS and ISQY Tomahawk kits together along with a D21-4, E25-4, and an F25-6 all for \$89 (over \$10 off of Rocket R&D's regular discounted prices). To request a catalog write to: Rocket R&D, 8901 Milbrae Court, Richmond, VA 23236. Catalog cover price is \$3.00.

On the local front, Estes engines and kits have been spotted in several area Wal-Mart stores. Webster, Greece, and Canandaigua Wal-Marts have A8-3, B6-4 and C6-5 engines in the flight pack packages. Flight packs differ from the standard Estes 3 packs in that they have one extra igniter and 12 sheets of wadding. The A, B, and C sizes all sell for the same price, \$4.96. The Canandaigua store only had A8-3s but they differed from the others in that they contained a "bonus" 4th engine for the same price. All the kits were boxed instead of being in plastic bags and they included the Big Bertha, Bull Pup, SR-71 and a couple of others They were lined up and fit right in (in terms of "look and feel on the shelf") with the plastic model kits. Price of the Big Bertha was virtually the same as the catalog price but the Alpha III starter kit was priced about \$6.00

less. Because Wal-Mart also sells a full line of Testors and Krylon paints as well as other finishing materials (Elmers "Fill and Finish", spackle, etc.) it makes the store a prime candidate for that last minute shopping spree the night before the launch after the hobby stores are all closed.

NAR News...Reports from NARAM/NSL have been few and lacking in details but most participants had two things to say about NARAM 34. First, it was hot and second, CD Bob Sanford and his crew ran a pretty good NARAM/NSL. Besides the Estes flights mentioned above, other highlights of the NSL included the successful flight of Will Safford's "12 Pack", a rocket with a cluster of 6 various F engines and 6 various G engines, George Gassaway's RC shuttle orbiter and Bill Spadafora's 2 D12, 2 C6, 3 E6 cluster rocket. A testimony to the merits of the NARAM/NSL field was Dave "Ducky" Klouser's 40 minute test flight of his PD model which he was able to recover after a long walk. We were sad to hear of the demise of Rich Zarecki's fine Ariane model at NARAM/NSL. Long time readers of this newsletter will recall the photos of this beautiful 8+ foot tall model that made an outstanding flight at Danville 1990 I on a Vulcan "Hellfire" K motor. On another K engine flight at the NSL, an apparent ejection charge failure resulted in a very hard landing on the desert floor and extensive damage to the model. Finally, congratulations to the NARAM 34 winners: C Division Champion - Dave Nauer, B Division Champion - Chad Ring, A Division Champion - Andrew Miller, Section Champion - NOVAAR, Newsletter Award - Zog 43, Galloway Award - Dr. Bob Kruetz for his work with in removing age/permit restrictions on model rockets in New Jersey.

In other NAR news, a note on Modelnet from the NAR Rules Revision Chairman, Jay Marsh. "Due to a misunderstanding regarding the expected publication date of AmSpac, the deadline for returning the Rules Change Ballot is wrong. The NPRM process specifies that 'The deadline shall be set so that it is no less than 30 days after the ballot is in the hands of the membership.' To correct this the DEADLINE has been changed to SEPTEMBER 10th. Sorry for any confusion this may have caused."

Last but not least, there have been a couple of changes to the NAR Contest Board in the last few months. First, after many years of faithful service, Art Rose has stepped down as the Northeast region contest board member. We will miss Art and want to thank him for all his hard work and effort in this position. The good news is that replacing Art in the Northeast is Jeff Vincent. Having Jeff move into this position is good news for the Northeast contest directors and competitors as Jeff has many years of flying and CDing experience "up here". Also, reports out of NARAM indicate that Matt Steele is the new Contest Board chairman. Congratulations to Matt and Jeff on their new positions.

Tripoli News...August is also the month for LDRS as well. From LDRS comes the news that *High Power Rocketry* magazine (aka *The Tripolitan*) has gone independent of Tripoli. The Tripoli Board of Directors voted to turn over the magazine to the private ownership of the current editor, Bruce Kelly.

Members of Tripoli will still received the magazine as part of their membership benefits/dues. The subscription rate to non Tripoli members will be \$25.00 for six issues. Tripoli members will continue to receive the magazine until their renewal, after which they will renew in Tripoli at a reduced rate and check a box to receive *HPR* magazine. Others news from LDRS is that Chuck Rogers continues as Tripoli President, Dennis LaMothe is VP/Treasurer and Rich Zarecki is Secretary. Also, next year's LDRS will be held in Kansas.

Regulatory Update...An entry that will hopefully NOT become a regular feature of this newsletter, the status of model rocketry and high power rocketry with the different regulatory agencies. First, no new word on Aerotech G motors. G motors are still considered to be high power motors. A stay of enforcement by the CPSC (Consumer Product Safety Commission) has not yet been granted. Second, the DoT (Department of Transportation) is investigating the shipping of all types of rocket motors. One problem the DoT seems to have is the shipping of Aerotech/ISP reloads as flammable solids. "Raids" have been made on a few hobby shops around the country and the interstate shipment of reloads has pretty much been halted until the DoT has made a final determination. The bottom line on the CPSC and DoT actions is that the mail order supply of motors of sizes G and above has all but dried up. The only way to easily obtain these motors at the present time is probably at a Tripoli or NAR high power launch. On a related note is the following item posted by Ed Lacroix on Modelnet on August 13th.

"The Tripoli Board of Directors unanimously voted (G. Rosenfeld abstaining) to establish a Rocketry Legal Fund within Tripoli. The immediate purpose of the Legal Fund will be to place on retainer Mr. Larry Bierlein of the Washington, D.C. law firm of Shaw, Pittman, Potts, and Trowbridge (the same law firm the NAR has engaged to handle the FAA regulatory quagmire). Mr. Bierlein is a specialist in DOT regulatory issues and his sole purpose in this matter will be to establish a favorable industry-wide resolution to the shipping restrictions recently placed on reloadable technology by the DoT. The cost of this legal assistance won't come cheaply, however. Mr. Bierlein's retainer is \$5000.00 and ultimately establishing an outcome favorable to our hobby may cost upwards of \$20,000."

Editors Note: It should be pointed out that this fund is specifically in support of Aerotech and its reloadable product. Also, this fund is to be handed over to a High Power Manufacturers Association when it is formed. If you wish to contribute to this fund, checks should be sent to: Tripoli Rocketry Association, c/o Scott Dingman, P.O. Box 339, Kenner, LA 70063-0039. Checks should be made out to Tripoli Rocketry Assoc. Legal Fund (be sure the check references Legal Fund!)

#### Miscellaneous News...

Message posted by Bruce Markielewski and Mike Hellmund on Modelnet, July 25, 1992

"AHPR History Is Made!"
On Saturday, July 25th, 1992, amateur rocketry history

was made! The first gyroscope controlled gimballed-engine guided model rocket was successfully launched! Four "Saturn V Project" team members, Dave Gianakos, Richard Speck, Tommy Billings, and Bruce Markielewski participated in this effort at our recent Colorado -Tripoli launch. The rocket was a 5.5" diameter by 5 foot model powered by a single, gimballed H45 motor. The rocket weighed about 9.5 pounds, and was built by Dave Gianakos as a test vehicle for the gyroscope/gimbal guidance system designed by Richard Speck. The systems were being tested for use in a future Saturn V model being designed by Dave and the group. Electronic timing systems for recovery deployment were furnished by Tommy Billings of Adept Rocketry.

The model lifted off beautifully, and at approximately 1g acceleration, rose gradually, perfectly straight up. The 7.5 second burn propelled the model to an altitude of about 500 feet, then deploying its parachutes exactly on schedule. All systems worked flawlessly, and many vital tests was passed. Richard Speck has designed an incredible gyro system using optical sensors and a magnetized pin that rotates at over 50,000 rpms. A computer commands two servos to gimble the engine. The computer also initiates a counter correction to prevent overcorrection. Richard did an outstanding job on the guidance system design and construction, marking a new milestone in our hobby's history!

#### **Sport Plan Notes**

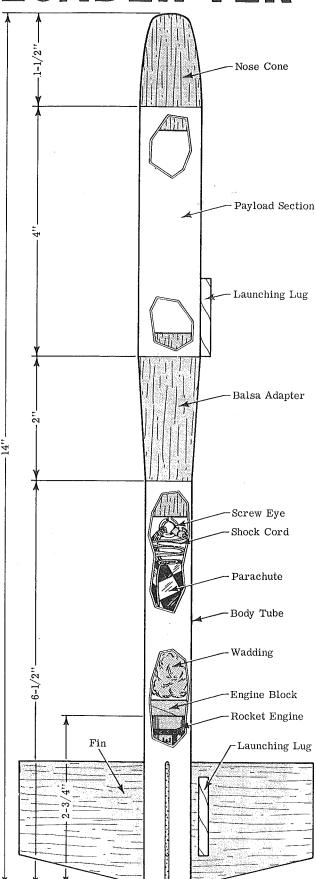
Two sport plans appear in this issue of the newsletter. The plan appearing on the next page is from the Estes Model Rocket News, Volume 4, Number 1, February, 1964. Why did UR dig through the archives to reprint this winning design in Estes "Favorite Design Contest"? Well first, it's still a pretty nice little payload bird and second, it was designed by none other than MARS member Merrell Lane. Merrell probably had forgotten all about this one. After all, it was published in MRN over 28 years ago! Most of the parts are still available, but a couple of the engines listed no longer exist. We especially like the paint job in the picture. Looks like a fun sport bird and maybe a good entry in quadrathon!

The second plan, on page 11 is the SPEV HP. Remember the Estes SPEV that they sold years ago? Although Estes wanted you to believe that SPEV stood for Space Exploration Vehicle, rumor had it that it actually stood for "Spare Parts Elimination Vehicle". For whatever reason, I seemed to have a lot of FSI spare parts around and thus, the SPEV HP (High Power) was born! This one should fly with F and G motors without any trouble and also with H motors if built strong. Just keep an eye on the CG/CP locations. I have included parts lists for both an FSI version (FSI parts) and a LOC version. Build whichever version you wish depending upon what "spare parts" you have around. If you don't have any spare parts, it might be easier to buy a LOC Vulcanite because if you have to buy the parts it wouldn't be a SPEV!

# Estes Industries Rocket Plan No. 19

# LOADLIFTER 1-A Winning Design

# Winning Design Favorite Design Contest by Merrell Lane



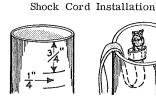
## Assembly Instructions

Spread glue around the inside of one end of the 6-1/2" long body tube as far in as you can reach with your <u>little</u> finger. Insert an engine block and push it forward into the body tube with an empty engine casing. Move the block forward until the end of the engine casing is even with the end of the body tube (and the engine block is 2-3/4" from the end of the body). Remove the engine casing immediately.

Cut out four fins and glue them to the body tube. Be sure to match the grain on the balsa with the grain direction indicated on the fin pattern. Align each fin by sighting along the body and adjusting it until the fin is parallel to the body and projects straight away from it. After the glue has dried run a fillet of glue along each of the fin-body joints.

Glue the launching lugs into place as shown in the drawing. Apply glue to the large end of the balsa adapter and insert it into one end of the payload section tube. The nose cone should fit tightly in the other end of the payload tube. If it is too loose wrap its shoulder with tape to increase the diameter.

Attach the shock cord and recovery system as shown in the illustration. Paint the model and apply decals.



Cut two slits and push section inward. Thread cord through and knot. Restore body tube contour and seal with glue.

-leading edge

Glue

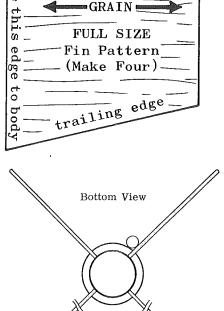
PARTS LIST				
1 Nose Cone	#BNC-50J			
1 Body Tube	#BT-50S			
2 Launching Lugs	#LL-1A			
1 Balsa Adapter	#TA-2050			
1 Screw Eye	#SE-1			
1 Shock Cord	#SC-1			
1 Parachute	#PK-12			
1 Body Tube	#BT-20D			
1 Engine Block	#EB-20A			

#### Recommended Engines

#BFS-20

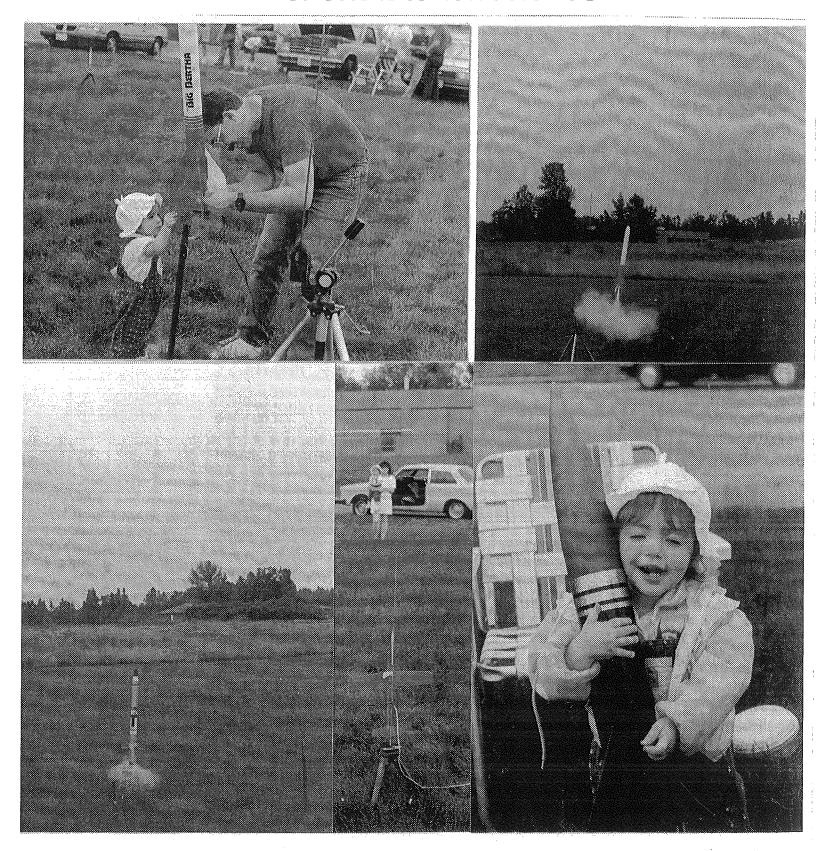
Balsa Fin Stock

1/2A6-2	A5-2
A8-3	B6-4
B4-4	C6-5
B14-5	;





## **JULY SPORT LAUNCH PHOTOS**



## CAPTIONS - (left to right, top to bottom)

- 1. Jessica Ryan gives a helping hand as her dad Jeff hooks up the clips to his Super Big Bertha.
- 2. The Big Bertha heads for the grey western New York skies under the power of a D12-3.
- 3. John Viggiano's Gemini Titan at Ignition.
- 4. Dan Garrett's MRC glider.
- 5. Jessica Ryan and her dad's LOC Onyx moments after the Onyx's successful F25 powered flight.

# **SUNNY SIDE UP MEET PHOTOS**



#### CAPTIONS - (left to right, top to bottom)

- 1. John Viggiano and John DeMar preparing their D Dual Egglofters. John V. loads his "Scramjet Initiator" Egglofter (aka "The Dual Egglofter from Hell") onto the 1/4" rod while John D. sets up to fly his more conventional design.
- 2. John DeMar's Dual Egglofter flies out of the tower on its way to a first place flight.
- Roy Metz prepares his "Bart Simpson Roc". Bart turned in a perfect flight powered by a C6-3.
   Bud Piscini hooks up the clips to the copperhead igniter in his Aerotech Barracuda.
- 5. John Vigglano's Aerotech Initator on its way to a perfect E15-4 powered flight.

### SPEV HP

#### PARTS LIST

***	m	*	
			T A

#### FSI PARTS

#### LOC PARTS

1. Body Tube

RT-225 (3 required)

BT-2.14 (2 required)

2. Nose Cone

NC-225

PNC-2.14

3. Tube Couplers

SC-22 (2 required)

Use LOC Bulkhead Plate Assembly BA-2

for items 3 & 4

4. Bulkhead Plate(s) 1/8" Plywood (Pattern Below)

5. Engine Tube -

Use LOC MMT 1.14

Use LOC MMA-3 for items 5 & 6

6. Centering Rings

1/8" Plywood (Pattern Below)

7. Fins

1/8" Plywood (Pattern Below)

Misc. Items - Launch Lugs, Screw Eyes, Shock Cord, Shock Cord Mount, Parachute.

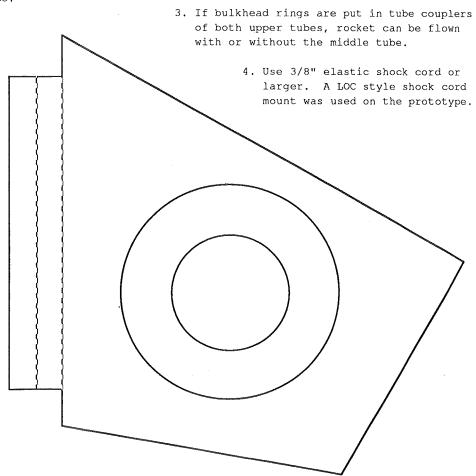
#### ·Construction Notes

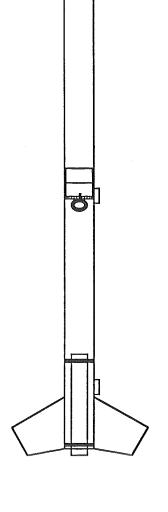
1. Fin pattern shown can be used to make 3 different types of fins. Flush mounting: Cut on right most dotted line. Drill holes in body tube along fin lines before glueing. Use plenty of glue along lines to allow it to form rivets thru the tube. This technique only suitable for lower power and thrust engines (ie. E30, F25)

Thru the wall mounting: For standard LOC type thru the wall, cut at left most dotted line. Slits must be cut thru body tube to allow fin tabs to go thru.

Thru the wall to engine mount: The strongest method, similar to thru the wall, is to extend the fin tab so that it will reach the engine mount tube. Cut pattern at left solid line. Fins get epoxied to both the engine mount tube and the body tube.

2. Use centering ring pattern to make plywood bulkhead ring. Cut it small so it will fit on the inside of the tube coupler. Screw large screw eye into center and epoxy in place.





#### **Events Calendar**

Model 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 model rocket event planned, send info to the editor.

THE UPSTATE ROCKETEER

#### September 11th, MARS Club Meeting, 7:30 PM.

Regularly scheduled MARS club meeting. Fall planning meeting. We will be planning our activities for the next 8-10 months. Please plan on attending.

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

#### September 20th, MARS Sport Launch.

Club fun fly. Everybody is welcome.

Location: MARS Flying Field. Corner of Rt. 332 and Collett

Rd. Farmington, NY

Note: Site subject to change pending possible location of new launch site. Location to be finalized at September club meeting. Contact: Dan Wolf 458-3848.

#### October 9th, MARS Club Meeting, 7:30 PM.

Regularly scheduled MARS club meeting.

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

#### October 10-11, PARA-SHOOT I, Regional Meet.

Events: C Eggloft Duration, B Helicopter Duration, Open Spot Landing, 1/4A Parachute Duration, A Streamer Duration, D Streamer Duration, B Super-Roc Duration, 1/2A Boost/Glide, A Rocket/Glide. Rain Date: Oct. 25th.

Contact: Bob Stott, PO Box 206, Richboro PA 18954-0205, (215)355-1119.

Note: A group from MARS has tentative plans to attend this contest. See Dan Wolf for details.

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



