

## SMITHSONIAN SUMMER

On June 7th, at 10:00 in the morning, NARHAMS and MARS started off what looks to be a great summer for model rocketry. At that time, the first rocket ever was launched on the Mall in downtown Washington, D.C. By now you're probably wondering what was and is going on, the answer is, "A Lot!"

For the entire summer, the Smithsonian Institution is having a display on modeling of all types, including, of course, model rocketry. On every third week, alternating with the model airplane and plastic model builders, the NAR, in the form of members of the WAMARVA area sections will man a building booth in the front hall of the newly finished Arts and Industries Building. There they will demonstrate to the public the art of designing and building model rockets. Many thousands of people visit this building every day during the summer, so this should turn out to be the Association's best publicity maker yet.

Getting back to the launchings on the 7th. These were held on the hour from ten until five. While the rocketeers ran around chasing the 8 models that were launched, Jim Kukowski manned the squack box and told the numerous spectators what was happening. About Noon, none other than Harry Stine showed up and relieved Jim. It had been planned to launch only five birds each hour and to let the hungry spectators grab them, but plans were changed to allow more to be launched.

While all this was going some really dedicated NARHAMS were building in the booth. Many spectators

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Since I am the only rocketeer from the WAMARVA area to attend the M.I.T. Convention held in mid-April, I thought it would be opportune to submit my summary and evaluation to ZOG. The convention was sponsored by the M.I.T. Model Rocketry and was directed by George Caporaso. Held concurrently with the convention was a regional R&D competition.

R&D entries were judged Friday afternoon by members of the Society. As I predicted, the number of entries was very small (about five) and the projects were of mediocre calibre.

Friday evening the convention was formally opened by the guest speaker, Mr. G. Harry Stine. Stine's address was entitled, "What's wrong with Model Rocketry?" and several significant points were brought out. More emphasis must be placed on the scientific/educational aspect of model rocketry, rather than the hobby aspect. Model rocketry has not succeeded in communication of the true challenge to the hobbyists. Mr. Stine opened the floor to comments and suggestions and maintained a very substantial discussion.

Following the keynote speech was an informal NAR evaluation seminar directed by Jay Apt, LAC Chairman. A very well designed questionnaire was distributed and completed by all members present. This questionnaire surveyed members ideas for improving the NAR. These were also used at the Pittsburgh Convention this year.

Continued on page two.

## SINGER'S R&D

A note of explanation to those who didn't know, this was not meant to be serious. Bob, who by the way has been accepted to Harvard, designed that thing for NARAN-8, before he knew better. Please don't try to do it again, it didn't work.



MIT con't.

After a short pre-launch briefing, the members split up into discussion groups on scale, R&D, boost/gliders and construction. I attended the scale group which was led by Mr. Stine. These were one of the most valuable parts of the convention, however very little time was provided for the groups.

Following the discussion groups was a brief group discussion on rocket failures and catastrophes which included several humorous (and several non-humorous) anecdotes. After this was concluded, the members formed private bull-sessions which lasted late into the morning.

On Saturday, the "conventionites" started the day with a demonstration launch at Hascom Field, the previous site of NARAM-5. Like most demonstrations, this one relatively uneventful but did obtain press and TV coverage. We saw scenes from the launch later in the evening on WBZ-TV.

Following the launch was a quick tour of the M.I.T. computer facilities. Next, the R&D contestants presented their reports in the auditorium. Afterward was an excellent banquet at which the R&D trophies were awarded. I cannot recall the winners, but I think they were all in the Junior age category.

In the early evening we saw movie films of historical space flights, the international meet at Czechoslovakia, the Pittsburgh Convention, the first M.I.T. Convention, a tour of Estes' plant, all highlighted by a film taken from a rocket-borne movie camera. The camera was built from scratch by someone in the Mid-west (who didn't attend the convention) and is being submitted for a patent. The films were truly outstanding.

After the films, we again broke up into discussion groups on scale, R&D, payloads and model rocket laws. This time I led the group on R&D with Gordon Mandell. Again private bull sessions lasted through the night. The next morning consisted of a farewell brunch and departure.

The convention was attended by about 80 rocketeers, mostly NAR members. The average age was again higher than that found at the Pittsburgh convention. The convention was very well organized and both George Caporaso and the membership of MITMRS deserve a round of applause. Displays were erected by Estes, Centuri, and Bomar. Bomar had the most impressive display and sells an excellent line of kits. Model Rocketry magazine passed out copies of back issues and of course the convention will be covered thoroughly in a future issue (sorry, MR made it out before ZOC). Unlike the Pittsburgh Convention, this one was attended by only one NAR Trustee (Stine) and one LAC member (Apt).

There is some feeling within MITMRS to advertise the convention as a regional one in the future, for over 90% of the people there were from the New England area. This would encourage other sections to also hold regional conventions in the areas.

In general the convention can be termed a success and those members who failed to go this year are urged to go next year.

C.K.

#### HQSM-11

HQSM-11, a section meet, will be held on July 12, 1969. Since the field is still a bit uncertain, "A" lettered events will be flown if the meet is held at Goddard, "B" events will be flown if we can get a bigger field. (DCRC is out.)

1. Class I (A) or Class II (B) P/D
2. Open (A) or "Chute (B) Spot Land
3. Sparrow B/C
4. Hornet (A) or Hawk (B) B/C
5. Scale
6. Plastic Model (anything)



## SMITHSONIAN con't.

gathered around asking questions on the technique and launch procedure, but mostly on where they could get the rocket kits and engines. Luckily, the Smithsonian was selling the kits of Competition Models in the room next to the booth. No engines were or will be for sale.

As stated previously, rocketry gets the booth every third week and NARHAMS takes the Sundays of these weeks. People are needed to man the booth in three hour shifts from ten each morning to ten that night. Interested persons should contact Jim Barrowman. The NARHAMS days are:

June 22

July 13

August 3 and

August 24

The half-refinished Arts and Industries Building was unofficially opened on June 3 when a informal gathering of invited persons were treated to a look at the exhibits and some fairly good white wine. Chuck Gordon, Sheila Duck, Jim Barrowman, Bob Singer and the editor attended from the NARHAMS and Col. Kuhn was there representing NARS. There was a mock-up of one of the Saturn engines that I think is big enough to drive into (in a Mack Truck).

On the whole, it looks to be a really great summer, so get the family to come to Washington for vacation and see the works.

## Club Photos

In a frantic effort to raise some money to get to the Nats, Danny O'Steen has gone into the photography business. For a long time past, as he will continue to do in the future, Danny has been taking and printing pictures from NARHAMS activities.

He has contact sheets of all of his shots and you're probably in a few of them yourself. Prints are going for the unbeatable price of 25¢ for a 8x10!! See him at the next meeting, or call him at 277-2644.

## TRACKING TROUBLES SOLVED

Yes someone has finally solved that everpresent problem of "track lost" with a system almost every section should be able to use. The credit for this feat goes to none other than Bob Singer. As usual with something this good, everyone wonders why nobody thought of it before. The editor, who is (or was) a habitual complainer on tracking failures is afraid he doesn't know.

Anyway, this is what Bob did: He took one of the NARHAMS scopes, which were lying in his basement and mounted his father's 7x50 wide-angle binoculars on them. The NARHAMS scopes were typical open-sight-on-a-beam optics (below).



Bob just laid a washcloth over the beam for shock absorption and held the binocs in place with about five rubber bands. It wasn't even necessary to remove the old sights! This is what resulted:



The editor was working the phone while Bob tracked Design Efficiency at WAMARVA-1. This is usually a difficult event to track, but out of about 60 birds launched, Bob followed all but two which went directly into the sun.

Then Bob had to pick up some sclae judging sheets at Howard Kuhn's house, so I got to use the scope. It was really unbelievable. Each bird could be seen on the rack, colors and all, AND they could be seen all the way up. In the end, I think we broke 90% tracked and closed.

With this record on its first time out, plus its availability and ease of use, the Singer Scope is definitely the way to go.

THANKS BOB!!!



## PHONE TREE and ROSTER CHANGES

The following changes should be made in your (yes, that means YOU!) roster and phone tree:

Change Danny O'Steen's street no. to 6020 Emerson instead of 60202.

Art Chapman's phone no. is 942-5763 not 942-9763. Some people have already called that and found out that it is the 7-11 in that area.

Under Bruce Blackistone, drop John Hunter. You can also cross him off your roster.

## MAYHAM A MESS

ZOG went to MAYHAM-1 with his usual ride and was therefore about an hour and a half late. This however was no loss at all, in fact, it was for the better. Arriving at 11:30, all we did was sit around in the hot haze and watch the trackers lose all the NARHAMS rockets. Things were so messed up that by the time the editor decided to fly, at 12:45, the first event was still only half over.

This continued for the rest of a meet that saw a lot of problems. ZOG estimates that through the two tracking events, Design Efficiency, and Pee Wee Payload, not more than 30% of the birds were tracked and closed. This may have been due to the haze, or perhaps to inexperienced trackers, in any event it was bad.

The thick air brought poor times to the two B/G events. This was the first time that Hornet B/G has been flown to ZOG's knowledge, and some new designs turned up, including a 6" span Bumble Bee trimmed in yellow and black magic marker by Bob Singer. The Mantas, however, took most of the places.

The bad weather, along with the fact that MARS beat our section once again, leads ZOG to the very biased conclusion that MAYHAM-1 was a flop.

## STOLEN COPY

From "Once Upon A Rocket" made up by SSB and found in The Banner.

I am a poor small rocket,  
Inocently sitting here,  
When all of a sudden this engine  
Kicks me in the rear.

From the Tracker, Southland  
Section in Los Angeles.

"It looks as if the the Great American Section Newsletter Contest is well under way. Quite a few NAR sections are really trying to take home that trophy from NARAM, this year US included. And why not?"

## COPY NEEDED

ZOG 43 is also going for that trophy, but we don't have a chance unless our members start turning out some copy for me to print. Articles and plans are needed; bylines are of course given. Let's get moving club.

Bob, where is my article about designing those double ellipse fins? Paul, what happened to that chart of boost/gliders that you promised?

ZOG 43 is an official publication of the NARHAMS section of the NAR. It is sent free of charge to section members and sections who send us their newsletter. Others may receive ZOG 43 by sending the editor a stamp for each issue with their address.

Editor - Andy Elliott  
Cartoonist - Bruce Blackistone

Special thanks to Carl for the MIT article.



SAD STATE con't.

WAMARVA cometh, and the kid, who still thought that competition should C E N S O R E D, decided not to build one rocket for the meet. He'd decided that rocketry was still only his hobby, not an obligation and the idea was to enjoy it, not to work it to death. He slopped together pieces of three different birds to fly in Egg Lofting with two "C's" and got third place with over 240 meters. He then took the body of the egg lofted and stuck on a nose cone and a 24" parachute and won P/D. He even got to track with the new Singer Scope.

My enchantment with rocketry has been totally reinstated, more than anything by the over 90% track. I've hooked my glider back up on the wall and have decided to build a perfectly finished fleet of new rockets for the next section meet and the Nationals. R&D projects are again swirling through my head, designs are appearing for Open Payload and Plastic Model. I just have this feeling lurking in the back of my brain that Hung is again on my side.

#### NATIONAL'S NEWS

The events are finally finalized for NARAM-11, to be held 11-15 August 1969 at the Air Force Academy in Colorado Springs, Colo. Entry forms have been sent to most members of the Association. Remember that these are due in to William Roe, the C/D at the latest 11 July 1969.

Two discrepancies that ZOG noticed in the application: One I am very happy with, that the eggs will be BT-60 size, but I wish them the best of luck finding 100 Grade A eggs over 2 ounces that will fit that tube. The other is that Will says, "accumulated contest points for the year will not be the only basis for selection," but there is no space on the entry blank to fill in any other qualifications one might have.

#### WAMARVA-1 REPORT

WAMARVA cometh and ZOG extends its heartiest congratulations to the MARS section for a very smoothly run contest. Although over 120 people returned their applications, ZOG estimates that not over 90, if that many, people actually showed up. Even so, the processing ran exceptionally well. The first event, Design Efficiency, showed that there were many more people there with last names in the A-M category than the N-Z category, as the lines were originally divided up. After this event the alert MARS staff changed the way the alphabet was divided and there were no problems for the rest of the meet.

Tracking, as stated before, was excellent, to the point of magnificent, with the help of experienced trackers and the Singer scope. ZOG doesn't know who was at tracking 1, but thanks go to him and Larry Lutz who was at tracking 2. The winning Design Efficiency was over 80, a very high standard, although the Egg Loft altitudes were comparatively low due to the ban on "F" engines. It was, however, a good prelude to the Nationals, where "F's" are also banned.

The sun came out during the P/D event and there was a consistent thermal that drifted downwind in the base housing.

Sunday, the clouds were ominous during Sparrow B/G, Scale and Space Systems, and the rain finally came, forcing the cancelling of Spot Landing. Because of the heavy cloud cover, B/G times were only fair.

The two highlights of the meet came Sunday (aside from the tracking). First, a crew from Life magazine was there taking pictures and comments from the rocketeers. The other was the awards ceremony. There were so many trophies it felt like the Nats.

All in all, it was a good meet that ran like clockwork. Way to go MARS!



(Ed. Note: This should more properly be called a reaction to "AAM Scratched" which appeared in the last ZOG 43. The copy is made up of excerpts from two letters received from George Flynn and Carl Kratzer. It is nice to know that someone really reads ZOG.)

"...more members contacted preferred to stick with American Modeler, if it would give more coverage to model rocketry." This seemed to us to be an impossibility last spring when we decided to organize the magazine. Since that time, AAM has abandoned Harry's column and the promised replacement with a series by Jim Barrowman has not appeared. Furthermore, the badly needed technical articles, necessary to stimulate the development of the hobby have been neglected by AAM. Harry Stine informed us that the rules set down on his column were "no equations, no graphs, etc." This magazine came about because we decided that the scope of model rocket coverage possible in AAM could never meet the needs of the growing model rocket field."

	<u>AAM</u>	<u>MR</u>
NAR material p./issue	2-3	6-8
non-NAR rocketry "	3-4	32-40
rocketry ads "	1	3
lag time (months)	3	1.5

"Andy...does not appear to realize that if AAM did receive these articles...they would probably not publish any more rocketry material...because the amount of model rocketry advertising and NAR circulation does not warrant any increase; in fact, it warrants a decrease."

"To be frank, only those NAR members who also have a keen interest in model aviation (the editor pleads very guilty) could possibly prefer AAM over MR."

"Model Rocketry is not an M.I.T. publication; it is published by a private corporation...George Flynn and George Caposaso do not "represent the controlling interests" of the magazine. I know of at least seven stockholders in the corporation."

(The opinions stated herein are those of the editor alone, who has been in rocketry for 4½ years, which helps to explain what is going on.)

In the beginning, there was a poor little kid, 11 years old, who wanted to be rocketeer, so he bought an Astron Mark, a piece of 1/8 inch music wire, a six volt lantern battery and some engines. He had a lot of fun going up to the schoolyard and firing off his great piece of workmanship in front of his friends. Then, one day, at the field where he always launched, NARHAMS showed up for HQSM-3. Doug Frost expounded the virtues of the Association and the kid joined and had even more fun with other guys who liked rockets too.

But then came HQSM-5. By this time the kid thought that he might go into contest work, so he dug up some rockets that would work in the events that were being held. Lucky he was and he won Hawk B/G with a Space Plane. By the time ECRM-1 appeared, this kid had about ten rockets in flying condition. So he brought them to the meet and lo and behold, he came second overall!

Thinking he was becoming something of a rocketeer, he decided to build a few rockets especially for the events at ECRM-2. His payload didn't get tracked, his B/G pranged and his chute duration floated out over the end of the world.

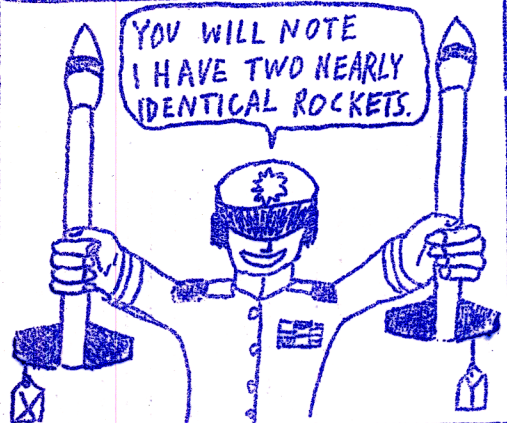
The kid was now in high school, and was considered a old-timer by the newer members of NARHAMS. At this stage he'd learned the Thermic trick, the Conner method of finishing and secret of getting a parachute to make its own thermal. At the next meet, his altitude birds worked so well, the trackers couldn't follow them, his beautiful Thermic rode its thermal far off into the distance and his P/D followed that. The very disenchanting modeler cursed model rocketry for two weeks, wherein he retired to the relaxation of flying his R/C 6 foot glider.

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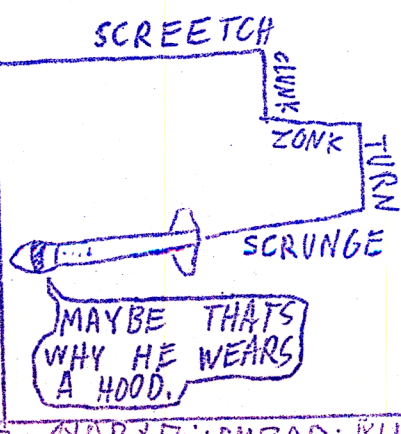
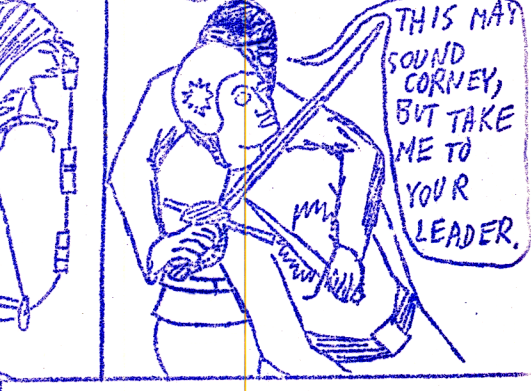
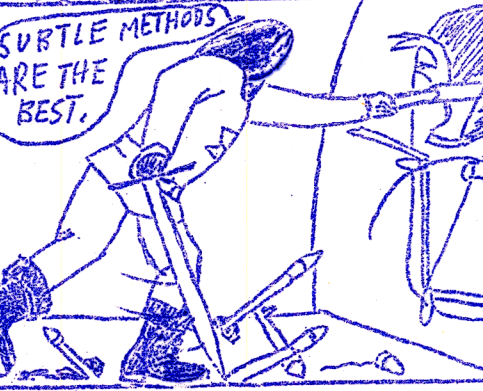
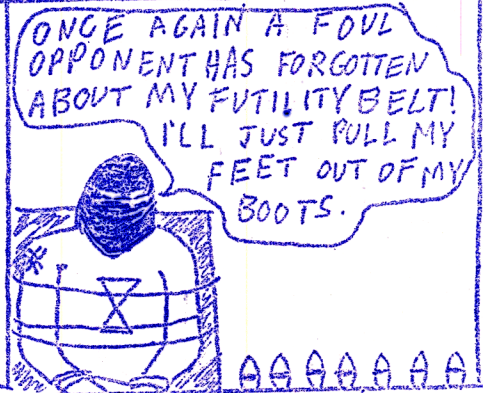
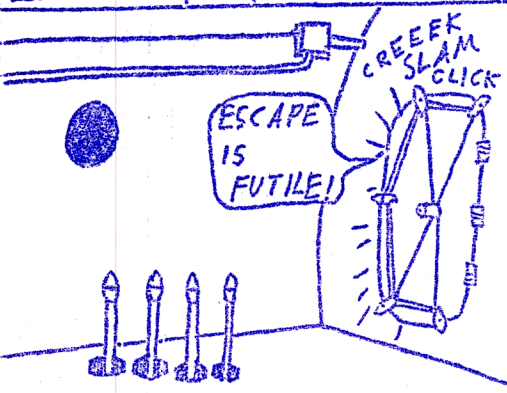


SPQR. #11  
 Attila X-RATED  
 OF NARHAMS  
 BY: Bruce Edward Blackstone  
 SP: PATTMXTM. NAR 6413

When we last left our hero he had fallen into the clutches of Captain Ra Coon (son of the sun god), leader of the evil Martians aboard their flagship, the ItgoLo. MPMHMD:PHM:4488NK



NO ONE UNDER 16 PERMITTED TO READ PAST THIS POINT!



HAS OUR HERO SUCCEEDED IN CAPTURING A VESSEL OF MARS?  
 OH COME NOW, HIM?  
 (ARE YOU SURE YOU'RE OVER SIXTEEN? ARE YOU SURE THE OTHER GUY IS?)  
 PREPARE FOR THE NEXT CHAPTER [G] RATE