# The ZOG-43

The Newsletter of NARHAMS, NAR Section #139.
2001 National Champions

## NARHAMS Supports Rockville Consortium of Science

by Ed Pearson, NAR 5694

For more than two decades, retired government scientists have pursued the dream of having a science center in Rockville, Maryland, to allow young people the opportunity to explore and use their minds scientifically.

That dream is still alive and gets closer every year. In the meanwhile, the growing group, known as the Rockville Consortium of Science (RCS), holds an annual science day displaying the wares of zoologists, geologists, archeologists, computer scientists, astronomers, chemists and others. Some are from industry, e.g., PEPCO, some are from government, e.g., NIST, and some, like NARHAMS are educationally oriented hobby enthusiasts.Our participation is a building workshop and launch.

The fourteenth annual Science Day held by the RCS occurred this past April 27. NARHAMS members have supported the activity each year and this was no exception. On hand were Kevin Johnson, Jennifer Ash-Poole, Alan Williams and myself.

We arrived at the Rockville campus of Montgomery College, the traditional venue for Science Day, between 10-10:30am and secured our room. We set up and Alan made tickets for the rocket drawing and staffed a show and tell table…. each year there are more people who wish to build than we have models so we draw lots, so to speak, for the building session. (This was the idea of Mary McCoy who along with her hubby John, were missed this year).

*Three participants in the RCS make it-take it proudly display thier rockets. Photo from www.rock.net.*

After the drawing at 1 pm we sat down and helped build two dozen Alpha III models. We gave the children engineer builders (ages 8-16) a short lesson in physics and principals of flight.

After the session, Jennifer had to leave to greet houseguests, but Kevin, Alan & I moved out of the classroom and out to the athletic field where the rocketeers rejoined us an hour later. At 4 pm, we flew the Alphas on A8-3s and lost none. About 100 spectators came out to watch and help us celebrate this year's occasion. It was a nice launch and carried on a fine tradition that one-day will find a regular home in a science center in Rockville.

Thanks go out to the RCS who invited more than 40 groups to this year's science day, provided the children the models and who are good friends of NARHAMS. More than 1,000 people visited Science Day this year. Much thanks is due to Kevin, Jennifer, Alan and others who helped make it particularly special with a great rocket activity.

JUNE 2003
Vol 25 Issue 6

Inside this issue:

## *ZOG-43*

**Volume 25 Number 6**

JUNE 2003


*ZOG-43* is the official newsletter of NARHAMS the National Association of Rocketry Headquarters Astro Modeling Section # 139

NARHAMS is the oldest model rocket club in the United States!

ZOG- 43 is dedicated to model rocketeers of all ages, abilities, and interest. We are committed to providing the most current, up-to date information on model and real world rocketry, and to provide educational material as well as entertaining information. ZOG -43 is published monthly and is available to anyone on a subscription basis. Current rates are $10 for meeting pickup or email or $15 for postal mail U.S. Funds for 12 issues a year, payable to NARHAMS


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For more information.....

If you have any questions about ZOG-43 or NARHAMS, or if you have any comment(s), correspondence, free merchandise or if you'd like to submit an article, send them to :


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ZOG-43 is edited by Kevin Johnson, and is a six-time winner of the NAR/LAC "Rockwell" Trophy, recognized as the best NAR section newsletter.

Years won: 1969, 1973, 1975, 1990, 1991, & 1992

Zog-43 staff typist is none other then Jennifer Ash-Poole a.k.a. Secretary to the Stars !

Photographs: by Kevin Johnson, except where noted.

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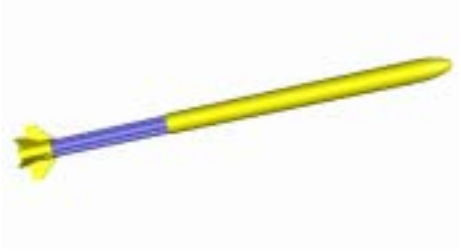
**This Edition:** ***35 copies***

### *NARHAMS ON THE WORLD WIDE WEB*

http://www.narhams.org

Send and receive E-mail with other NARHAMS members through NARHAMS Web page grouplist via yahoo-groups.



NARHAMS serves Baltimore, the state of Md., Washington DC and the surrounding Metropolitan areas. The club is a section of the National Association of Model Rocketry (NAR) and we are the oldest continuously active model rocket club in the United States, first established as a high school club in 1963, changing our name to NARHAMS when chartered as a NAR section in 1965. NARHAMS is the only four time winner of the NAR "Section of the Year" award.

Years won: 1997,1998,1999, 2001

NARHAMS members regularly fly their model rockets at NASA's Goddard Space Flight Center on Soil Conservation Rd. in Greenbelt Md. The launches are open to the public and are held the first Sunday of every month (weather permitting), starting at 1 PM.

Sport Launches are usually held the second Saturday of every month at Middletown Recreation Park in Middletown Md. Check the web page for updates.

NARHAMS welcomes all prospective new members to our monthly meetings. They are held on the first Friday of the month from 7:30 to 9:30 PM at the College Park Airport Annex Building. Dues are 10 cents a week, with an initial 50 cents up front (good for 5 weeks) as a sign of good faith.

***NEW: Monthly meetings available on-line via chat-room , simply go to the NARHAMS homepage and click on the link.***

### *ZOG ROYAL COURT*

### *( NARHAMS OFFICERS )*

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***KEEPER OF THE HOLY WORDS*** ( Secretary )

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### *Directions to College Park Airport:*

Follow I-495 to Kenilworth Ave. South. Make a right onto Paint Branch Parkway, then make a right on Cpl. Frank S. Scott Dr. At the airport entrance go straight to the Operations Building, the annex building is adjacent to the "Ops" building.

## President's Message June '03

We are well into the flying season now and you should be getting in lots of flights. Wait.....what's that.....your flying has been limited due to frequent rain? Well, welcome to soggy 2003. I guess that our prayers for rain last year have worked too well. Anyway, hopefully Ole Sol will return and we can get back to launching our rockets in great frequency soon. (I think that I saw some fungus growing on my Fat Boy).

Several club members traveled to the National Sport Launch in Clark's Summit, PA over the Memorial Day weekend. Saturday was a washout but we had some fine mud-bog driving at the entrance to the field. Sunday's forecast was cloudy in the morning and possible rain in the afternoon. We got lucky and had sun all day. I heard that we did over 700 flights. Monday started with rain early but the hardier types got in some flights by the range closure at 2:00 pm. Overall it was a pretty good meet and we met a lot of great rocket people there. Tom Ha, Mike Howie, Alan Holmes, Richard Hickok, Chris Greco and I attended NSL 2003.

At NSL we had an NAR town meeting on Saturday night in which Trip Barber emphasized the importance of every NAR member responding to the ATF's NPRM (Notice of Proposed Rule-Making). Commentary on this proposed change is available on the NAR website www.nar.org and in the NARHAMS yahoo-group in a message from Mark Bundick forwarded by Jim Filler titled "NPRM Comments Desperately Needed". It is imperative that whether you fly low power, mid power, high power, or combinations of the three that you join together with all NAR members in opposing the unfair ATF restrictions to rocket motor use in the NPRM. Even though you may not be personally affected by the bigger motor rules, we (the NAR) can only be effective as a group when everyone works together. Make your opinion known. Send your comments to the address listed in Mark Bundick's letter to the NAR members asking for NPRM responses.

*King Zog*

## From the Editor

Wow, May certainly has been a busy month for us here at NARHAMS.. so busy in fact, that I had to add a couple of pages to the Zog-43 this month to hold it all! I want to thank all who shared articles or photos for this issue, especially those who contributed for the first time.

I also want to thank the people who donated raffle prizes for ECRM-30. Without your continued support, we couldn't offer the high caliber of prizes to the contestants. Please show your thanks by supporting the following vendors: Pratt Hobbies, Aerospace Speciality Products, Edmonds Aerospace/BMS, and S&J Hobbies. Thanks go to Jennifer Ash-Poole, Tom Ha and Don Brown for donated prizes as well.

Don't forget that we have a new subscription type for the Zog-43- email delivery! For $10 (the price of a meeting pickup subscription) you get a full color PDF sent to your email address the *day before* the meeting. If you already have a meeting subscription, it's as easy as sending an email to zog43editor@yahoo.com to switch to email delivery.

## July Astrobulletin

By Jennifer Ash-Poole, NAR 61415

July, the 7th month, is also known as blueberry month. Fresh blueberries will be at your farmers' markets and grocery stores so pick some up and eat some blueberry pancakes, or blueberry muffins. This month was named after Julius Caesar, one of those great Roman emperors that had fun straightening out our calendar.

July has some great days in it. Forty-five years ago on July 1, Explorer 1 was launched. On July 29 of the same year, NASA was created. We also have July 4, Independence Day, lots of fireworks and picnics. Wave those American flags and eat some blueberries as well. July 4 this year is aphelion day, when the Earth is farthest from the Sun. Wait! The longest day of the year in the Northern Hemisphere is June 21, yet we are farthest from the Sun July 4. When you add in trigonometry, geometry, and math, sometimes things don't line up (or add up). Romans messing with the calendar don't always help either.

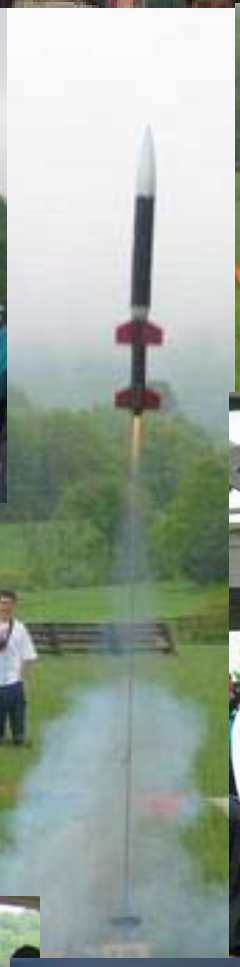
This month, Jupiter and Mercury meet up. Early in July, around 9:30pm, go out and look to the west on the horizon for the planet, Jupiter. Jupiter can be one of the brightest things in the sky. If you follow it every night, Mercury will rise up to meet Jupiter. When both planets look like they are in the same place in the sky, it's called conjunction. That will happen with these two on July 25.

During the month, Mars will rise in the east-south-east in the late evenings/early mornings. Starting July 25, and going until July 31, you will see the meteor shower known as Delta Aquarids. The peak should be at 2 am the morning of July 28, and will be about 20 an hour. Not as high as the Perseids, but you will have a dark sky to view them this year. The view will also be good because Mars will be the same area, another "conjunction".

Hopefully we will conjunct on Middletown to see great models fly on July 12.

# Team America Rocketry Challenge
# May 10th, Great Meadow

Several members of NARHAMS supported the TARC launch by providing volunteer support. 'HAMStersTom Lyons, Jennifer Ash-Poole, Tom Ha, Maria Ha, Zach Ha, Chris Ha, Khim Bittle, Kris Bittle, Kevin Johnson, Alan Williams, Chris Kidwell, Ed Pearson, Paul Miller, and Jim and Judy Barrowman all pitched in as part of the range crew. This event was large and awesome. From my post in the steward's stand I didn't get a chance to see much, so I'm glad that Chris Kidwell, Tom Ha, Lori Filler, and Doug Pratt have shared their photos!




Post-
Flight
Rocket
Returns

## Cyrus launches at Goddard

by his dad (Ed Pearson, NAR 5694)
Photos by Ed Bardo

"Model rocket Sunday" returned to Goddard Space Flight Center's Visitor, last month on May 4, also marking the birthday of my son Cyrus.

The model rockets are a resumption of the successful and widely known program which ran twice-monthly from 1976 (a year after Cyrus' birth)-September 2001, introduced thousands to the hobby and launched more than 25,000 models during the 25 year span.

The Visitor Center was closed ANE (After Nine Eleven), reopening in January of this year for limited viewing/tours by scheduled groups on weekdays and an occasional weekend.

Since it opened five months ago (the same number of months as there are letters in the word C Y R U S), members of the club, visitor center staff, public affairs, the education office and security have been talking about resuming the successful program.

This reached fruition this past month as the visitor center reintroduced *its first general public program* since its closing 19 months back as DJ Emanuel, the visitor center operations manager agreed to volunteer his time, and the NARHAMS agreed to support the activity: this time on a monthly basis with the launches scheduled on the first Sunday each month.

*Members of the 501st Garrison lent some Star Wars feeling to the launch.*

*Jennifer Ash-Poole helps load rockets as Ed Pearson looks on.*

The first rocket off the pad on the new program was a Quest falcon built by Alan Williams, the program's RSO for an estimated past 20 years. Participating in the first ceremonial launch was DJ who launched the falcon and Jennifer Ash-Poole who coordinated with DJ and the club to get the launches resumed.

Besides Alan and Jennifer, three other NARHAMSters were in attendance: Chris Kidwell who along with Jennifer helped the rocketeers, Robert Edmonds who launched a glider he said he was developing for kit feasibility, and Ed Pearson who served as general announcer, launch control officer, and son embarrasser ("Would

everyone please join in a chorus of 'Happy Birthday' to Cyrus!!").

Eight rocketeers flew during the one-hour program resumption in a relaxed atmosphere, except when Cyrus' rocket and others went over the fence and DJ had to drive around to retrieve them. The weather was great: light winds and mid-seventies.

Watching in the crowd, besides Cyrus, were five members of the Fighting 501st Legion of Storm Troopers (Stars War's costume recreationists) assembled by TK17something aka Ward Poole (Jennifer's hubby) who came out to add color to the event.

A personal highlight for this writer was when Jay Emanuel, nephew of DJ, brought out a model Mercury Redstone and memory awoke that 42 years back to the day—Alan Shepard's real Redstone lifted off from another NASA center propelling the first American into space. Jay's flight was perfect.

Another highlight was when Chris inquired about the Desind and Stine memorial launches…celebratory flights made each model rocket Sunday in the past to remember club member Herb Desind who faithfully attended these GSFC launches for more than a decade before his death and Harry Stine, founder of the NAR, who fostered the hobby in so many ways. We promptly launched the next two models in honor of the aforementioned, resuming another GSFC tradition.

And of course a *pearson*-al highlight was, as you might have imagined, the launching of a rocket by son Cyrus.

## Calendar of Events for 2003

***Jun 1*** - Sport Launch, Goddard Space Flight Center
***Jun 6*** -Monthly meeting, making decals
***Jun 14*** -Sport launch
***Jun 21-22*** – MARS 29 Regional Meet, Great Meadow The Plains, VA
***Jun 27*** -Monthly meeting, UFO building session
***Jul 12*** -Sport launch, UFO theme
***Jul 20*** - Centennial of Flight launch
***Jul 26*** -Short meeting then building session, Hobbytown USA Frederick, MD
***Aug 3*** - Sport Launch, Goddard Space Flight Center
***Aug 9*** -Sport launch
***Aug 15*** – Monthly meeting, Night Launch for Newbies
***Sep 5***- Monthly meeting, elections, pirate building session
***Sep 7*** - Sport Launch, Goddard Space Flight Center
***Sep 13*** -Sport/night launch, pirate theme 12:00 pm start
***Sep 28*** -AIAA launch Columbia, MD
***Oct 3*** -Monthly meeting, electronics
***Oct 5*** - Sport Launch, Goddard Space Flight Center
***Oct 11*** -Sport launch, Oktoberfest V-2 day, picnic launch
***Oct 11-12*** -SCST-3 Jonesburg, PA
***Oct 17*** -Short meeting then Skywriter building, Hobbytown USA Frederick, MD
***Oct 25***- Planning meeting College Park Airport
***Nov 2*** - Sport Launch, Goddard Space Flight Center
***Nov 8*** -Sport launch, writing implement theme
***Nov 14*** -Monthly meeting, finishing techniques
***Nov 22*** - Centennial of Flight display College Park Airport Museum
***Dec 5*** -Monthly meeting, pot-luck holiday party
***Dec 7*** - Sport Launch, Goddard Space Flight Center
***Dec 13*** -Sport launch

Sport launches are held at Middletown Park from 10am-4pm, waiver up to 3.3 lbs and "G" motors not exceeding 62.5 grams of propellant. All flights "E" power and above are restricted to 5 degrees from vertical and between the hours of noon and four PM. Call ahead to confirm launch and waiver availability.

Business meetings are held at the College Park Airport Annex Building, **except where noted above**. Meetings begin at 7:15pm with building sessions or presentations and last until 9:00pm or so. Regular Business meetings follow until 10:00pm. If no presentation or building session is scheduled, please bring whatever project you are working on currently.

Questions? Call Club President Don Brown at 410-781-7539 or visit NARHAMS online at http://www.narhams.org

# NARHAMS Operates Model Rocket Launch for GSFC Inspire the Next Generation at Work Day

By Tom Bagg

The local National Association Of Rocketry Headquarters Astro Modeling Section (NARHAMS) of the National Association of Rocketry (NAR) operated the Model Rocket Launch for the NASA Goddard Space Flight Center (GSFC) "Inspire the Next Generation at Work Day" held Thursday, April 24, 2003. "Inspire the Next Generation at Work Day" is NASA's version of "Take Your Kid to Work Day". Myself and Jennifer Ash-Poole of NARHAMS organized the model rocket activities.

Twenty-four children of GSFC employees built one of two Estes model rocket kits: Generic E2X, or Alpha III. QSS Group, Inc. provided the rocket kits. Tom Bagg and his daughter Morgan supervised building the Generic E2X models. Jennifer Ash-Poole and Jim Suraci supervised building the Alpha III models. All the parents got into the fun as they helped build the rockets, including Kamran Mortezavi with his daughter Saba.

I brought a display of my personal collection of model rockets to this event. Some models dated back 40 years and are still flyable!

The building session was in the morning with launch in the afternoon to allow for safety checks and to ensure that the glue dried completely before launch.

The local National Association Of Rocketry Headquarters Astro Modeling Section (NARHAMS) of the National Association of Rocketry (NAR) was invited to operate the launch to ensure safety when launching live rockets with a crowd of observers. Tom Bagg and Jim Suraci showed the kids how to pack the parachutes and prepare the engines for flight. Alan Williams was Range Safety Officer, and Jennifer Ash-Poole was Launch Officer. D.J. Emmanuel provided logistical support. Each child got to launch his or her rocket two times. Launch sequence include 1) loading rockets onto the launch rails 2) connecting wires for electrical ignition, 3) countdown, 4) ignition and liftoff, and 5) recovery. Two rockets landed on the Visitor Center roof, and three were retrieved from the trees; but all rockets were recovered safely.

Judging by the smiles on both the children and the parents, during both the building session and the launch, all had a great time.

Thanks to all who supported this effort: QSS Group, Inc. for the model rockets; Tom Bagg and Jim Suraci of QSS; NARHAMS members Jennifer Ash-Poole, Alan Williams, and Tom Bagg; and Visitor Center employees D.J. Emmanuel and Maurice Henderson.

**More images from the day are available on the web at:**
**http://www.qssmeds.com/~tbagg/Inspire_Rockets/**

## NSL - Telling it Like it Was

By Richard Hickok, NAR 74359

I just finished unloading the car after the trip back from NSL. Here are some of the more vivid recollections I have of the weekend:

Of the 3 days in Clark's Summit, Sunday was THE day....good weather, wind blowing the "long" way in relation to the field. Monday, the wind was blowing in the "short" direction, too close to the tree line for to launch anything big or with that I'd hate to lose.

The host hotel (motel?) was very nice, especially after memories of NARAM 43 outside of Rochester. Good coffee (other drinks), cookies and brownies...all free…were served at the NAR town hall meeting, where the most questions from the audience put to TripBarber came from Chris Taylor.

Much of the field was high grass, almost up to your waist, and it was still mighty wet after the rain from earlier that day or the night before…soaking your shoes, socks, and pants as you slogged through to recover your rocket. I'm glad I bought spare clothes (and sandals) to the field. If you fly a sod farm or a fallow farm field, be grateful for what you've got.

People posting to R.M.R. aren't exaggerating about how slow the line was for the sole food vendor. It wasn't that line was long, it was just that those two old guys cooking and serving didn't have their act together, so it moved VERRRY slowly. The guy in line behind me got 3 or 4 calls from his wife on the cell phone from across the field wondering why it was taking so long. Every square inch of that grill should have been covered with burgers, but instead if you wanted two, they'd throw two on the grill. I was in line between 30 - 45 minutes and asked for a bag of chips as an appetizer once I made it to the counter because I knew it would still be another 10 minutes till I got my burgers and fries.

Talk about long lines....Sunday, Mike Howie (and others) was in one of the two lines for two hours waiting for the 3/16 inch pads! That was ridiculous. The range crew should have shifted over some other pads to the size rod that was in demand. I was about to CA 3/8" lugs onto a BT-80 rocket just to get in a short line.

*Mike Howie poses with one of his rockets. Photo by Jim Flis of FlisKits.*

I met some great people at the launch. I was surprised by a guy from western Mass who knew the names of my obscure scale scatch-builts (many of them Russian). He got the Sea Skua, Amos, almost got the AA-6 Acrid, and more.

I was dazzled by Carl Tulanko's museum quality Harpoon and Maverick models and pleased with his willingness to give advice about decal printing techniques, simulated bolts, and more.

There were also way more girls there than I usually see at launches.

Another hit was the foot pump actuated quad hand washing thing outside of the (delightfully clean and seemingly brand new) Port-O-Sans!!

I also got delayed by and eventually took up the rear of the Memorial Day Parade in the wee town of Nicholson en route to Monday's launch.

*An upscale Deuce's Wild launches with 2 38mm motors. Photo by Jim Flis of FlisKits.*

*There were many creative rockets at NSL like this one.. made of LEGOS. Photo by Jim Flis of FlisKits.*

# ECRM-30

By Jim Filler, NAR 27862
Photos by Lori Filler

The thirtieth edition of the East Coast Regional Meet was held May 17th & 18th at Middletown Park in Frederick County. I can tell you that as the CD, it is becoming more and more clear that the meet and its legendary weather just will not let go of all of the acronyms that are tied to contests name. East Coast Rainy Meet, Extremely Cold Regional Meet, Extremely Cold Rainy Meet, the list goes on and on. I do remember at one time, John McCoy used to bring the very accurate weather rock. We might have to see if it is available for next year and place a reservation for some nice weather ahead of time. As I watched the weather forecast the days leading up to the meet, it kept changing and at one point looked as if it might be decent by ECRM standards. Ha! Mother Nature was obviously trying to get my hopes up. We got enough rain both days to keep everything just damp and miserable. On the other side, we had just enough time without rain to fly the meet.


With the inception of "MADROC" this year, we hoped to have a good turnout not only from the club, but also from other sections from out of the area. The result was good; we actually had six sections including NARHAMS represented at the meet. This year's selection of events tried to use NARAM events as well as events that would be practical to fly on our field.

Friday night Dr. K and Bubbles arrived at the hotel, the Days Inn in Frederick to open up registration to people coming in from out of town. We provided very nice looking laminated name badges to all contestants. Thanks to Chris and Jennifer and John for their time in putting these together. I stopped by to check on our registration team to see if they needed anything. Everything was going according to plan.

Saturday morning arrived with light rain and a low cloud deck. After setting up the trackers, we started setting up the range head. We were almost done a few minutes before 9 and someone asked where were the launch rods? Somehow I missed them when I packed up the truck on Friday night. Back to the field. We installed the launch rods and called for a contestants briefing over the PA. We started up at about 9:45 after I reviewed the range rules and selected the altitude for the random altitude event.

200 meters became the target for everyone for their first altitude flight. We also opened for spot landing at the same time if you chose. I took the first 2& 1/2 shifts of RSO because everyone signed up for something else. I watched all kinds of model - motor combinations and even offered some limited advice to the crowd based on my observation. Small diameter models were punching the cloud deck causing track lost. Larger models were much easier to see and proved to be the way to go in Random Altitude and Set Altitude which you had to fly after random. Set was already known to be 150 meters. Dark tracking powder was the order of the day. Tracking actually went rather well considering the conditions. Spot landing let a lot of flyers show their stuff, we had several flights over the day that were less than 10 meters. Also as just a note, many of the Baby Berthas built for the Opossum Open Meet reappeared for contest duty at ECRM.

Saturday afternoon was not much better for weather. Jennifer Ash-Poole and good Ole Ed Pearson stepped up and worked as RSO to allow the CD to actually do some flying. Many competitors were overheard that they were going to wait for Sunday to try and fly duration events in better weather according to the forecast. Jennifer Ash-Poole and Beth Bittle took orders for subs from Subway and supplied chips, cookies and soda. Saturday afternoon also started scale judging at the Pratt Hobbies enclave erected on the far side of the field. Even with the light drizzle at times, the models were never exposed to rain, just damp air. Each year we make a conscious decision to hold scale judging at the field. It helps keep costs down and makes it so the scale judges aren't forced to stay over night. This was the 1st time we had any trouble as we had a model DQ'ed because it exceeded the 20mm diameter and 30cm length dimension for Peanut Sport Scale. Some thought it could be because of the wet and damp conditions caused it to swell. The effort was made to look at this as closely as possible. The model failed the measurement test with two different pairs of calipers, and another model of similar diameter was measured after being in the elements equally only to pass with room to spare. Something happened to cause this; we just do not know what it was.

Saturday evening we met at the Golden Corral in Frederick for a group dinner. We arrived about 6:45 to find the place packed and really busy. I asked for the Manager to let them know our group was about to start arriving. We all got to sit in one area together for the most part. I actually think everyone really enjoyed the evening after being in the cool and damp weather all day.

Sunday morning arrived and not only had the forecast changed, the rain was coming down at a pretty good clip. We delayed opening the range by an hour. Those that chose not to fly any duration on Saturday did not get better conditions on Sunday. "A" Helicopter had some good flights, but with zero thermal activity, most good flights were close in time. 1/4A Boost Glide proved to be very challenging with poor air. Some managed decent flights, but nothing great. Peanut Sport Scale flights flew at any time. Most were good flights despite the conditions. I guess looking back at the entire weekend, even though we had to deal with the rain, dampness and cool, for the most part the wind wasn't bad. The one thing that will stand out in my mind about ECRM-30 will be the fact that as soon as the last flight flew for the day, we started to tear down the range, and then the sun started poking through the clouds. Absolutely amazing timing! We finished packing up the range and headed to one of the park pavilions for the annual ECRM BBQ/Picnic. Here the credit goes to my wife for going and buying the food, setting up the picnic, getting the charcoal going, then doing the cooking. Thank you Lori for your efforts in making for another good ECRM picnic. After

everyone had a chance to get their fill, we proceeded with the results and award ceremony. Special Thanks also go out to the Ha family for bringing food for the picnic, and for donating to the door prizes. Thanks to Jennifer Ash-Poole for donating to the door prizes and collecting from our vendors that donated. Please thank our vendors who donated by letting them know we are thankful for their generous donations, and by shopping with them for your hobby needs. This year and for the last several years, many thanks to Doug Pratt and his Pratt Hobbies ***www.pratthobbies.com*** for donations and for scale judging. Thanks also for the last several years to Andy Jackson of Aerospace Speciality Products ***www.asp-rocketry.com*** for the generous donations. Thanks to Robert Edmonds for his constant donations to the club and to the ECRM door prizes year after year. Last but not least to Scott Branch of S & J Hobbies for door prizes year round.

Some notables for the results. In "A" Division Zach Schaffer from PSC showed us all he had come to win. He won 1st place in all 5 events he entered amassing 1800 contest points by himself. "C" Division was taken by Glenn Feveryear who flew everything on Saturday and did not enter scale and still totaled 972 contest points. "Mostly Harmless" Dr. K and Bubbles (which still sounds to me like an evil duo) took "Team" Division Champ with 1722 contest points. NARHAMS took the Section title with 10,668 contest points. This year the not so coveted "Ole Ed Dead Last but Finished Roving Trophy" was received by the National Contest Board Chairman Tom Lyon. In order to be selected for the award, you must be either a "C" or "T" entry and have the lowest contest point total, and be present at the meet. Proxy entries are not eligible. Overall we had 8 entries in "A" division, 15 in "C" Division, and 6 teams rounding out the contestants. Thanks to Dr. K for all of his time and effort in helping with the contest and providing the data for results on field. Thanks to all of the NARHAMS members for coming out and helping with ECRM-30.

## Popular Science Teacher's Collection of Space-Related Items Now Available to Researchers at Smithsonian's National Air and Space Museum

NASM Press Release- Herbert Desind was a science teacher in Maryland with a passion for rockets and the space program. During his lifetime he amassed a remarkable collection of space-related photos, tapes and documents. Desind died in 1992, and in 1997 his family donated the collection to the Smithsonian's National Air and Space Museum.

After years of cataloging by museum archivists, the collection is now available to researchers at the archives of the National Air and Space Museum in Washington, D.C. Access to the collection is available by appointment, which can be arranged by calling (202) 633-2320 or writing to: National Air and Space Museum Archives, National Air and Space Museum, MRC 322, P.O. Box 37012, Washington, D.C. 20013-7012.

Desind's sizable collection – 109 cubic feet of photographs and documents – covers the history of manned and unmanned space flight. It includes materials from United States government, military and corporate sources, and from international sources including Australia, Brazil, Germany, Great Britain, Japan and South Africa. While the collection focuses heavily on the space program, it also contains a substantial number of photographs of aircraft from the 1960s through 1980s.

Besides being a dedicated, popular and enthusiastic teacher, Desind also was a freelance writer/lecturer on space history and an avid model rocketeer. He used his collection of more than 100,000 black-and-white and color images to illustrate classroom lectures and his magazine articles.

He also used it as a reference for building and documenting accurate scale models for national and international sport model rocketry competitions held under National Association of Rocketry guidelines. He launched more than 11,000 model rockets in his career, and created a model rocket club at Laurel High School in Laurel, Md.

Desind, a 1967 graduate of the University of Maryland, College Park, taught at Cabin John Junior High School in Montgomery County, Md., and Dwight D. Eisenhower Middle School and Laurel High School in Prince Georges County, Md.

In 1985, Desind applied to NASA's Teacher in Space program. On his application, Desind said, "If I can inspire a future scientist, astronomer, poet, or parent who will pass on the love of science to children, I will know my time and efforts were worth it."

In 1991, Desind was named Outstanding Science Teacher of the Year by Prince George's County and the Potomac Electric and Power Company (PEPCO).

The National Air and Space Museum, located at Sixth Street and Independence Avenue S.W., is open seven days a week from 10 a.m. to 5:30 p.m. Admission is free.

Herb Desind was a member of NARHAMS and was a fixture at the club's launches at the Goddard Space Flight Center. Having his collection available for study continues his lifelong mission of education.
- Kevin

NASA's Space Place

# Eggs in the Air

By Patrick L. Barry

The sky will be filled with flying eggs on May 10, 2003, when a thousand students converge on The Plains, Virginia, for the first-ever national high school rocketry competition.

Called the Team America Rocketry Challenge (http://www.rocketcontest.org), the competition sets the goal of flying a custom-built, two-stage rocket carrying two raw eggs to a height of exactly 1,500 feet, and then returning the eggs to the ground unbroken. The team that comes closest to 1,500 feet without breaking their eggs will win the national title.

The competition is being organized by the Aerospace Industries Association and the National Association of Rocketry (NAR). NASA administrator Sean O'Keefe will attend the final event.

"The idea is to get kids interested in the world of aerospace," says Trip Barber, director of the competition and vice-president of the NAR. "And they will learn some important lessons about the power of math and science-and cooperation and teamwork-along the way."

To develop their designs, the students first used computer simulator software provided by NAR. Then they had to apply old-fashioned ingenuity and craftsmanship to bring the design to life and flight testing to refine it.

Students constructed rocket bodies using a combination of hobby-store rocket kit parts and custom materials. A typical rocket might consist of cardboard tubes from paper-towel or wrapping-paper rolls, a pre-made nose cone, rocket-kit body segments cut to size, and light-weight, balsa wood fins. But the greatest challenge for many was designing the compartment for the eggs.

Some used plastic Easter eggs as casings, padding the inside with bubble wrap, foam peanuts, or even gelatin. Others decided not to "reinvent the wheel," making a cradle from the egg-crate material used for shipping eggs. Some chose to make larger, more powerful rockets big enough to carry the eggs inside, while others made smaller, more efficient rockets that have a bulging egg compartment mounted on top.

**In the end, it's all about the future: Future technologies and the kids who will grow up to create them.**

A hundred unique designs will be put to the test in Virginia. Only one will win. But for the students, the real prize has already been won: Learning an approach to problem-solving that works, whether you're launching eggs over a field or sending astronauts to Mars.

In the end, it's all about the future: Future technologies and the kids who will grow up to create them. Many advanced technologies are being developed now by NASA's New Millenium Program (http://nmp.nasa.gov). Who will do that work in the future? Perhaps some kids who spent their weekends launching eggs in the air.

Are you a kid? Would you like to build your own rocket? Visit NASA's Space Place and learn how to make a bubble-powered rocket! (http://spaceplace.jpl.nasa.gov/rocket.htm.) It won't take you to Mars, but it's a good way to get started.

*A Boeing Delta II (7326) rocket launched the New Millennium Program Deep Space 1 spacecraft on October 24, 1998.*

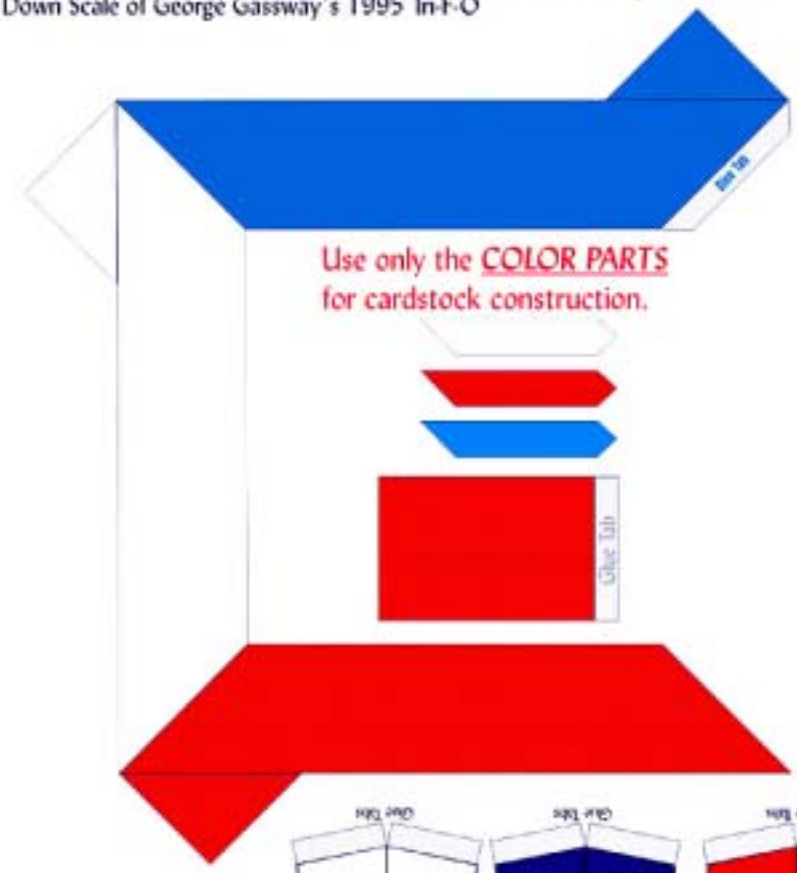
*This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.*

# McCoy's Micro Wonder Works

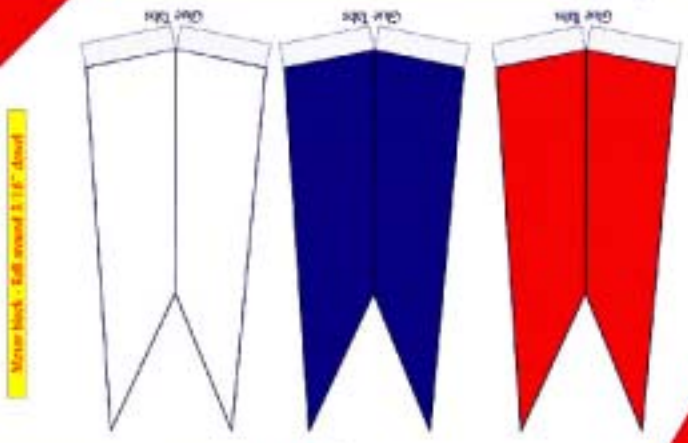
Drawing Revisions Complete: 04-30-03
First Micro Tri-ny complete: 04-25-03
Down Scale of George Gassway's 1995 Tri-F-O

## Tri-ny F-O Saucer Odd-Roc

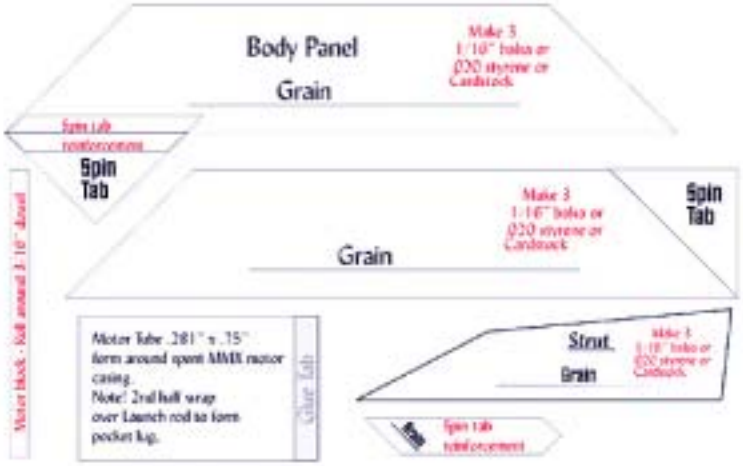
1 inch square

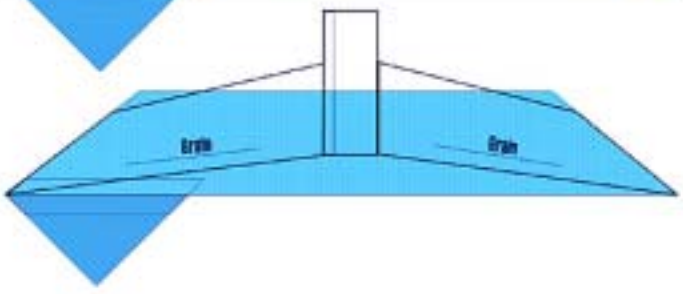



* Print these full size parts on light cardstock or file card.
* Use only Color parts for cardstock construction.
* Cutout with scissors and a straight edge.
* Fold & glue parts together as shown.
* Glue folded strut halves full length for extra strength.
* Fabricate the motor tube and struts assembly first.
* Form motor tube around a spent MMX motor casing.
* Roll motor block strip around 3/16" dowel glue into top of the motor tube.
* Glue reinforcement strips to underside of spin tab joints before assembling the body triangle.
* Glue the body to the tube/strut assemble.
* Add or push a launch rod under the over wrap of the motor tube to form a launch lug.
* Tape in a MMX motor and have a good flight.





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# ZOG-43




NARHAMS Model Rocket Club Newsletter

## Launch Schedule

SPORT LAUNCH
Middletown Park

***June 14***

CONTEST LAUNCH
MARS 29 - Regional Meet
Great Meadow, The Plains, VA

***June 21-22***

SPORT LAUNCH
Goddard Space Flight Center
Visitor's Center
1:00PM-2:00PM

***July 6***

Next Issue's submission deadline is June 23!

ZOG-43, The ***ONLY*** NAR Section Newsletter Published Monthly!