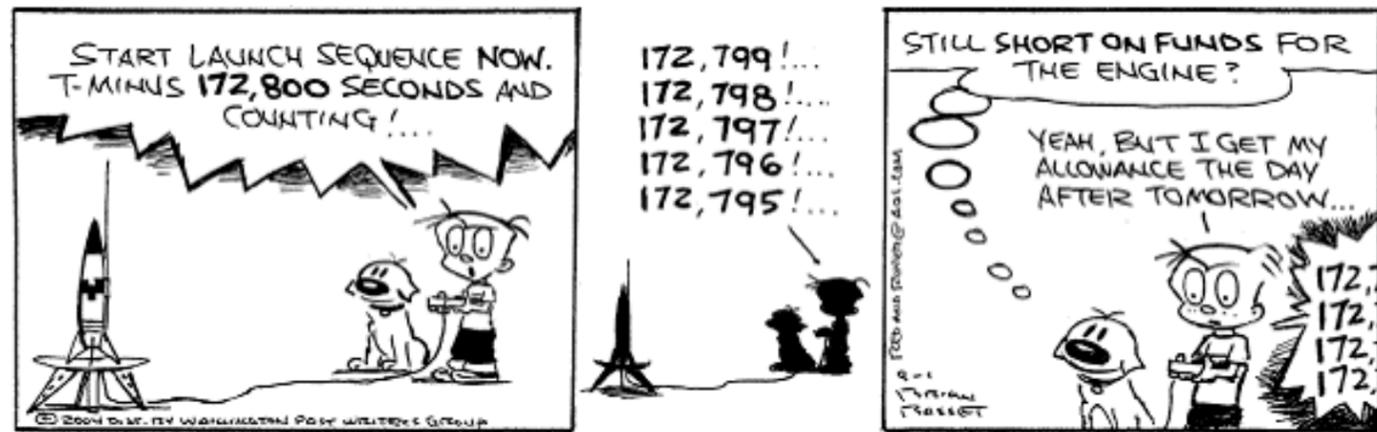


NARHAMS Comics Page

From time to time I get sent different comics from club members that have to do with model rocketry. FoxTrot and Red and Rover seem to be favorites. Here are some strips that recently were sent to me. If you want to read more, rocketry comics can be found online by doing a Google search. I found a collection of FoxTrot rocketry comics at <http://www.uvm.edu/~aporwitz/space/foxenterprises/foxtrot.htm>. 🌟

Red and Rover by Brian Bassett



FoxTrot

by Bill Amend



Founding Member Drops In

By Zog Bubbles, NAR 61415

Doug Frost, one of the founding members of NARHAMS, came for a visit at the October meeting. Doug was a high school student who encouraged several rocketeers to form NARHAMS so it would continue beyond the high school club.

Doug wouldn't divulge the secret of what the 43 means to our current King Zog, but he did tell us that he came up with the HAM in NARHAMS in honor of the monkey that flew into space.

He moved to California for college and met his wife there. They still reside in that state, Doug works for the USPS and he makes sails for parasailing on the side.

Doug was happy to see NARHAMS still alive, and he is also a founding member of BayNAR. He will contribute several things to the NARHAMS library, and the club will give him a shirt so he can wear it proudly in California. 🌟



Calendar of Events for 04/05

- Nov 13- Sport launch, no theme
- Dec 3- Monthly meeting, pot luck dinner
- Dec 5- Public launch, Goddard Space Flight Center
- Dec 11- Sport launch, no theme
- Jan 2 - 1-2 pm Goddard Public Launch
- Jan 8- 5-10 pm Monthly meeting, SF/F scale discussion (Mike Howie)
- Jan 16- 12 - 4 pm Club building session at Goddard
- Jan 22- 12 - 4 pm Sport launch, fly what you got for Christmas theme
- Feb 5- 10 am - noon Cadet building session College Park Aviation Museum
- Feb 5- 5 - 10 pm Monthly meeting, A Cluster Altitude (John McCoy)
- Feb 6- 1 - 2 pm Goddard Public Launch
- Feb 12- 12 - 4 pm Sport launch, Red Rocket Day
- Feb 26- 1 - 5 pm Udvar-Hazy Tour Dulles, VA
- Mar 5- 10 am - noon Cadet building session College Park Aviation Museum
- Mar 5- 5 - 10 pm Monthly meeting, 40th anniversary party
- Mar 6- 1 - 2 pm Goddard Public Launch
- Mar 12- 10 am - 4 pm KATE-3 section meet
- Apr 2- 10 am - noon Cadet building session College Park Aviation Museum
- Apr 2- 5 - 10 pm Monthly meeting, 1/8A techniques (John McCoy)
- Apr 3- 1 - 2 pm Goddard Public Launch
- Apr 16-17- 9 am - 4 pm ECRM-32 regional meet
- Apr 24- 12 - 4 pm Rockville Consortium of Sciences Rockville, MD
- May 1- 1 - 2 pm Goddard Public Launch
- May 7- 5 - 10 pm Monthly meeting, NARAM models (Chris Kidwell)
- May 14- 10 am - 10 pm OPOSSUM-9 open meet/ night launch
- May 21- 8 am - 5 pm TARC Flyoffs Great Meadow, VA
- May 28-30- Balticon-39 Baltimore, MD
- Jun 4- 5 - 10 pm Monthly meeting, fiberglass tubing (Mark Petrovich)
- Jun 5- 1 - 2 pm Goddard Public Launch
- Jun 11- 10 am - 4 pm Sport launch, cluster/staging theme
- Jul 2- 5 - 10 pm Monthly meeting, open building session, focus on staging
- Jul 3- 1 - 2 pm Goddard Public Launch
- Jul 9- 10 am - 4 pm Sport launch, airborne trooper spot landing, special prize for 40 troopers deployed
- Jul 10- 12 - 4 pm Goddard building session, open to public, tie in to Goddard Contest
- Jul 17- 10 am - 4 pm Goddard contest
- Jul 30 - Aug 5 24/7 NARAM-47 OH
- Aug 6- 5 - 10 pm Monthly meeting, pirates discussion (Alan Williams)
- Aug 7- 1 - 2 pm Goddard Public Launch
- Aug 13- 10 am - 4 pm Sport launch, pirate theme
- Sep 3- 5 - 10 pm Monthly meeting, elections, night launch discussion (John McCoy)
- Sep 4- 1 - 2 pm Goddard Public Launch
- Sep 10- 10 am - 10 pm Record trial, FAI S6A (A SD), night launch
- Sep 25- 12 - 4 pm AIAA Picnic Launch
- Oct 1- 5 - 10 pm Monthly meeting, leftover parts scratch building (Jim Miers)
- Oct 2- 1 - 2 pm Goddard Public Launch
- Oct 8- 10 am - 4 pm Sport launch, Oktoberfest theme, microbrew launch
- Nov 5- 5 - 10 pm Monthly meeting, glider building session (Robert Edmonds)
- Nov 6- 1 - 2 pm Goddard Public Launch
- Nov 12- 10 am - 4 pm OPOSSUM-10
- Dec 3- 5 - 10 pm Monthly meeting, holiday party
- Dec 4- 1 - 2 pm Goddard Public Launch
- Dec 10- 10 am - 4 pm 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. Meetings begin at 5pm with building sessions or presentations and last until 10:00pm or so.

Questions? Call Club President Jennifer Ash-Poole at 410-674-6262 or visit NARHAMS online at <http://www.narhams.org>

Kensington Scouts Build Polaris

By Jennifer Ashe-Poole, NAR 61415

I must say Doug, you really have faith in us. The Boy Scouts of Kensington were building Polaris models, and they had all the parts, but no directions (there was lots of newspapers in the box, though so no broken parts!). Kevin and I did a quick look, came up with a plan, and started building! Luckily, the parts are a lot like the Super Six, so we were fine.

Of course, we had lost the directions to the meeting place and were running late, but the boys got the rockets built in an hour anyway. Kevin brought some of his big models to show off and point out things like launch lugs, fins, that are easier on a big model. Thanks to Kevin for coming along (and for knowing the back way to Kensington.) And the most scary part, one of the pack leader's name was Ward. Ack! There is more than one!

This group will be coming to fly at Goddard in December. This Sunday, we have two groups coming from building sessions this month as well! We certainly will be busy the next couple of months at Goddard, so if you want to come out and help, you will be welcome! ✨



Amazing Space

By John Dailey

In October, the National Air and Space Museum celebrates another milestone at the Steven F. Udvar-Hazy Center at Dulles International Airport: the launch of the James S. McDonnell Space Hangar. The hangar has become a must-see attraction in the Washington, D.C. area because of its centerpiece, the space shuttle Enterprise, which was in place when the Udvar-Hazy Center opened in December 2003. With the hangar's outfitting, we will offer well over 100 large space artifacts that highlight human spaceflight, rocketry, space sciences, and satellite applications.

The hangar is named for James S. McDonnell, a pioneer aerospace entrepreneur whose company built the spacecraft for both the Mercury and the Gemini programs of the 1960s. Moving all these large artifacts posed unique challenges. We've become experts at moving aircraft, but the often irregular shapes and sizes of space artifacts forced staff members to be even more creative. They accomplished the job while managing the mammoth task of cleaning and restoring the Enterprise.

The entry to the McDonnell Space Hangar will be flanked by a 1950s Redstone booster, cut away to reveal its internal systems, and a 1940s Corporal with its launch apparatus.

In the human spaceflight area, there's a flight-ready Mercury capsule and the spacecraft that flew in December 1965 as Gemini 7. Close by, an Apollo "boilerplate" capsule, used for test and training, will be displayed

with a flotation collar and its three bright orange righting spheres, which would inflate to turn the capsule over if it accidentally landed upside down in the ocean.

The Gemini program's Paresev Paraglider Research Vehicle is especially interesting. Designed as an alternative to parachuting space capsules into the ocean, this vehicle features a large parasail, much like that of a huge hang glider, to deliver capsules back to solid ground. But the system never worked quite right, and ocean landings were deemed more prudent.

In the rocketry section, visitors will see some of our collection of rocket engines and missiles. The Saturn V's enormous F-1 and J-2 engines, a developmental M-1 engine, and a variety of other missile and rocket engines will line a hangar walkway. We will also display a space shuttle main engine, a Poseidon C-3 missile, a Pegasus launch vehicle, and other rare missile technology from both the United States and Germany.

The satellite applications and space sciences sections will display ATS-1 and ATS-6 communications satellites, an Agena-B upper stage, and some launch computers. Nearby will be a suite of 20 scientific satellites and probes, a model of the Mariner 10 Venus and Mercury probe, engineering models of the Mars Pathfinder lander and Sojourner rover, and parts of the Apollo Telescope Mount (used on the Skylab missions).

This is just the initial portion of the artifacts that will be viewable in the coming months. I thank the staff for their efforts and the McDonnell family for its generosity. ✨

John Dailey is the director of the National Air and Space Museum. This article appeared in the Oct/Nov issue of Air&Space Magazine.

December AstroBulletin

By Paul Miller, NAR 51615

The big brown truck left a big brown box on my porch. Whoa! I've just added a Celestron NexStar GT reflector to my optical light collectors. The lunar eclipse last night provided the "first light" with this 'scope. Garrett used our old reliable AstroScan until 10:40 p.m. to witness his view of Earth's shadowy lunar cover to totality. Now to watch the heavenly goodies listed in Jennifer's November Astrobulletin.

December has always promised an awesome array of astronomical events, and 2004 should excel. I'm most eager to focus on the big Jupiter occultation by the waning crescent Moon on the 7th of the month. Yes, the Moon will hide (occult) Jupiter briefly. Cool down your telescope outside early in the evening. Next set your alarm for 3:00 a.m. Relax, and rest your bones for a few hours. Turn off the alarm, grab a coat and chair, and join your 'scope outside. Allow ample time to gain your night vision. Watch Jupiter disappear behind the Moon's bright, sunlit edge around 3:45 a.m. Listen to some Moon music; Pink Floyd, Dean Martin, or Claude Debussy will be a good start. Just don't go to sleep! About an hour later, our largest planet will pop back into view from behind the Moon's dark limb.

In my opinion, this is the best kind of occultation. The last of its kind with a bright crescent Moon occurred in 1976. If you have yet to experience this type of event, try this one! Jupiter's Galilean moons will be an added bonus to those of you with telescopes.

Saturn dominates the evening sky in December. It rises around 8:00 p.m. at the beginning of the month. You will find him to the left of Castor and Pollux in Gemini. That's the three

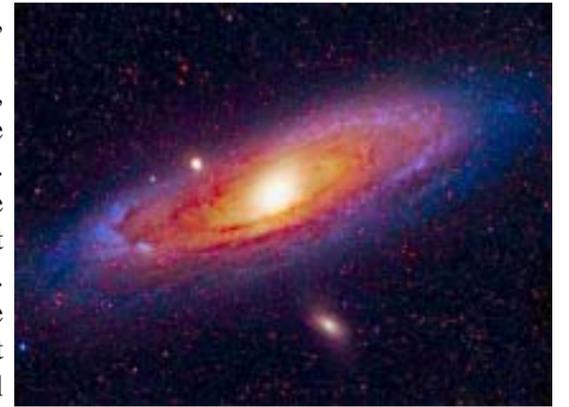
bright beauties zig, zag, zogging across the sky!

While checking out Saturn, let's stick to Gemini from the 11th to the 14th of the month. Thanks to a New Moon, the Geminid meteor shower might be unforgettable this year. Gemini is the "radiant" of the shower. This means that most of the cometary debris will appear to enter our atmosphere with Gemini as the background constellation. Expect 120+ meteors per hour anytime after 7:00 p.m. each night. The "shooting stars" are predicted to peak on the 13th and a few man-made satellites will orbit nearby as well.

Venus is our morning star in December. Mars is a much dimmer close companion to Venus in the early dawn between the 5th and 10th. Mercury will join Venus late in the month, but will be difficult to see so low on the horizon.

Canis Major, Orion and Taurus have marched across the southern winter sky and into our hearts as simply spectacular astronomical targets. Let's get Sirius (serious) here! Sure it's COLD, but where are the mosquitos? There is a wealth of stellar stuff in this lineup all winter long. So much to see, so little time...

Another winter favorite is Andromeda. Who can resist a chained maiden? Easy to find her too- she's directly overhead (that's the zenith, bunk!). Now there's a New Moon on the 11th, this is a PERFECT time to find M31 (a.k.a. NGC224) at the zenith with my telescope. In the late 1700's Charles Messier attributed 31 to the Great Nebula in Andromeda. Today we know it as a spiral galaxy much like our own! It is also a naked-eye object on a dark, super clear night. It is merely 2.5 million light years away.



Frankly, it boggles the mind that the unaided human eye can receive light from this distance. Here's hoping that December 11th presents a crystal clear sky. The new 'scope boasts a "Go To" system that can take the observer to thousands of celestial objects. Andromeda here I come! Of course, my eyes are so bad I can't see a model at a thousand feet!

We can welcome winter on the morning of the 21st. The Sun announces its return once again. Mankind has recognized this hallmark even in prehistory. Numerous religions have claimed this event as a new beginning. Our daylight will continue to slowly lengthen and spring will soon follow.

December is my favorite month. I share this birth month with about a billion individuals of our species since our inception. Newton, Kepler, Tycho Brahe and Beethoven are among these countless others. Plus I have shared 43 Decembers with my wife Shirley, who joined us on December 1, 1943.

Do you remember when Apollo 8 went into lunar orbit on Christmas Eve, 1968? Frank Borman, Bill Anders, and Jim Lovell read from the Bible. As they left lunar orbit on course to the Earth, Lovell radioed, "Please be informed, there is a Santa Claus."

Ad Astra, NARHAMSters! ✨

October Sport Launch

By John McCoy Sr, NAR 15731

Wow, did we have one of the best flying days I've seen recently at Middletown! The noon readings were 73 degrees, 54% humidity, steady barometer and very light 0-2mph wisps from the southwest! Very high broken cloud deck above 3000' allow the sun to shine through for periods all day. Just a glorious day to be outside flying rockets.

The range was set-up and ready to fly at 10am, with a PA, 4 ft table set back about 15 feet behind the picnic table range head and an east/west flight line consisting of 3 surveyor tape marked posts: one in the groundhog hole up the hill, one near the creek tree line and the 3rd behind the sign-in table with longer streamers staked to the ground pointing at the other two. This arrangement seems to have worked out fairly well. We only had to ask one or two folks to move their prep areas back behind the flight line. Our 12" speaker was C-clamped to the existing 1" steel post set beside the park service sign and the trash can up about 8' or so as far as I could reach from the ground while tightening the clamp. This also worked out great.

RSO replacements as expected was a pleaser, no problem at all, the sign at the sign in table I think also helps. I personally flew 13 micros and 1 regular size model before 2pm. Speaking of flights we had 85 logged flights 1/8A to G. Several afternoon E,F & G motor flights of saucers were made, and David's mono-copter finally lit a tough-to-light motor on the third attempt. I flew my micro mono-copters a couple times also.

Jim Miers actually painted one of his models and a very nice job it was. Dick Stafford flew several things,

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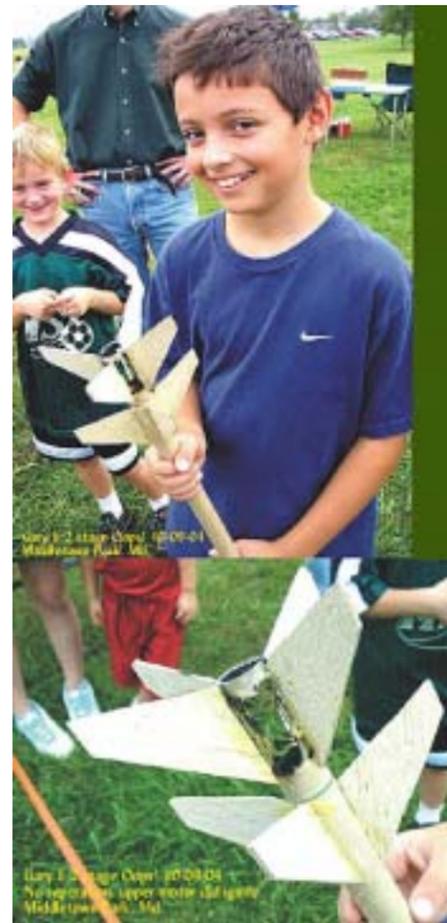
among them a very nice paper body wrapped Acme Spitfire from FlisKits. Several new folks came out, looking for membership forms but I had none with me. There were a lot of nice flights on 1/2A through D12 motors, and more staged models than I've seen in a long while. One of them by a young man named Gary sort of demonstrated the upper stage motor burn through the first stage that Mr. Frost spoke of at the last meeting. In this very nice flight, the sustainer completely burned all the cardboard body tube from between the fins and centering ring, very funny! At last head count, we had 15 people flying and maybe another 5 to 8 observing. Two of the soccer kids and their parent came over after their game to fly a model or 2 with us.

I think we only put 3 models in the trees Saturday, one with an E reload was recovered, the other two could have used the new retrieval pole. My brand new first/last flight Centuri Vulcan clone now hangs in the very top of the tallest tree beside the range.

There were a couple maintenance issues with system 3's connection cable connector and a very touchy launch control button that will require my attention, but all in all just a wonderful day on the range. 🌿



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Top: Dick Stafford shows his FlisKits ACME Spitfire. Above: Gary and his crispy 2 stager. Left: Jim Miers with his non-naked rocket. Photos by John McCoy Sr.



A Summer Vacation Tracking Down UFOs

By Diane K. Fisher

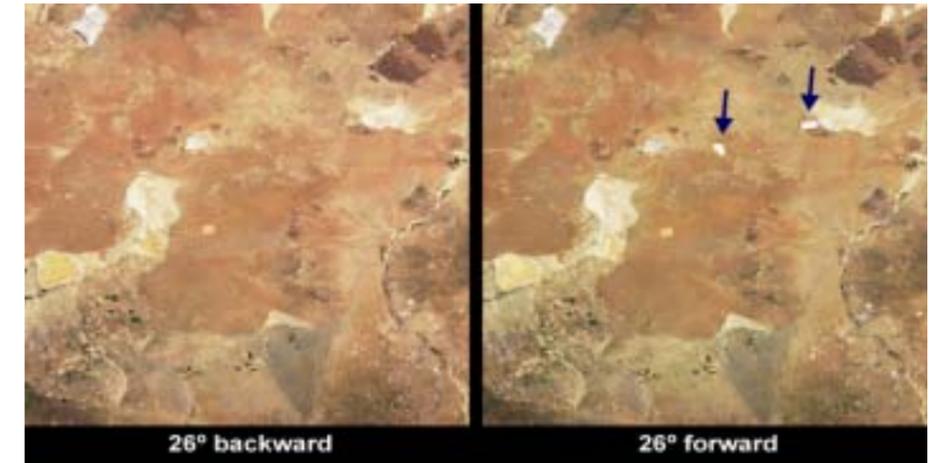
Erin Schumacher's summer job for NASA was to look for UFOs. Erin is a 16-year-old high school student from Redondo Beach, California, attending the California Academy of Mathematics and Science in Carson. She was one of ten students selected to work at NASA's Jet Propulsion Laboratory (JPL) in Pasadena as part of the Summer High School Apprenticeship Research Program, or SHARP.

But is studying UFOs a useful kind of NASA research? Well, it is when they are "unidentified flashing objects" that appear in certain images of Earth from space. Erin worked with scientists on the Multi-angle Imaging SpectroRadiometer (MISR) project to track down these mysterious features. MISR is one of five instruments onboard the Earth-orbiting Terra satellite. MISR's nine separate cameras all point downward at different angles, each camera in turn taking a picture of the same piece of Earth as the satellite passes overhead. Viewing the same scene through the atmosphere at different angles gives far more information about the aerosols, pollution, and water vapor in the air than a single view would give. Ground features may also look slightly or dramatically different from one viewing angle to another.

Erin's job was to carefully examine the pictures looking for any flashes of light that might be visible from just one of the nine angles. Such flashes are caused by sunlight bouncing off

very reflective surfaces and can be seen if a camera is pointed at just the

MISR scientists and students went on a field trip to the exact locations of



Two cameras on MISR made these images of the same part of the Mojave Desert. The camera pointed at an angle of 26 forward saw the flashes from two solar electric power generating stations. These objects are nearly invisible at the other angle.

right angle to catch them. Because the satellite data contain precise locations for each pixel in the images, Erin could figure out exactly where a flashing object on the ground should be. Her job was then to figure out exactly what it was that made the flash-in particular, to see if she could distinguish man-made objects from natural ones.

When Erin began working at JPL, scientists on the MISR project had already identified two large flashes out in the middle of the Mojave Desert in Southern California. These turned out to be from solar power generating stations. Soon, Erin began finding flashes all over the place. She learned how to apply her math knowledge to figuring out how the objects would have to be oriented in order to be seen by a particular MISR camera. One time, she and a team of

some flashes, where they found greenhouses, large warehouses with corrugated metal roofs, a glass-enclosed shopping mall, and a solar-paneled barn. For some flashes, they could find nothing at all. Those remain "UFOs" to this day!

Learn more about SHARP at www.nasasharp.com and Earth science applications of MISR at www-misr.jpl.nasa.gov. Kids can do an online MISR crossword at spaceplace.nasa.gov/en/kids/misr_xword/misr_xword1.shtml. 🌿

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

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NARHAMSters Make Strong Showing at SCST-4

Once again, the Pittsburgh Space Command put on an excellent contest in October. The 4th annual Steel City Smoke Trails regional meet was held over the weekend of the 9th and 10th and boasted a varied slate of events. Always looking to try something new and shake up the competition, CD Rod Schafer chose 1/8A PD, E BG, A FW, C Payload, and C ELD to fly.

Because it was a new event, 1/8A PD entries showed a lot of different approaches. There were 10.5mm models, 13mm models, some with boattails and some that were tapers. Many competitors chose to roll their own tubes to save weight. Several micro pistons were used as well. It was surprising to me (not having flown many MMAXX motors) just how high some of these super performance models got. One thing that hampered a lot of the fliers though was getting parachutes out of

the small tubes. There just isn't enough oomph in the ejection charge to get the laundry out unless you pack it just right.

E BG was also interesting because of the mix of models chosen. There were several Arcie II's in the air, along with several conventional (and not so conventional) free flight gliders. Some of the high performance RC models didn't fare well due to bad boosts or control issues. My upscale Manta flew better than my Arcie because I snagged the parachute and never got into a glide. Rod and Steve (those Flying I-Beam kids from the host section) tried 5 or 6 times to get their RC glider off the pad due to hangups on the launch rod.

NARHAMS boasted 14 members in attendance over the weekend, including the entire field in A division. This led to a lot of trophies to tote back to Maryland (or New Jersey, or Virginia).

Pictured here are: Jim Filler, Kevin Johnson, Katherine Humphrey, Chris Kidwell, Kate Bittle, Jennifer Ash-Poole, Kris Bittle, and Anita Rodgers showing off their hardware. ✨

Photos by Kevin Johnson, except for that good looking one of me taken by Jennifer Ash-Poole.



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From the President

Sometimes the toughest part of running a rocket club is planning everything. NARHAMS tries to work this part out by having a planning meeting in October. I have tried getting ideas from the club via the Yahoo groups, emails, cornering you at a launch, etc. This year, we had 8 people give up a Saturday to plan the next year. These 8 people helped figure out the contests, fun events, themes and anything else you have suggested. Look for the complete calendar somewhere in your Zog, or at the web site.

Some of the ideas that we came up with for the next year are to celebrate NARHAMS turning 40, some Internats events, and more outreach. We have a few building sessions which could get very big, so take a look and see what you can participate in.

Coming up is our annual potluck holiday party. Now is the time to look through your rocket stuff and see what you can add to our raffle. The club does really well at the holiday raffle, and it's always fun to see what you could get. And if you go away from the potluck hungry, you either didn't show up in time, or didn't eat enough. The potluck is Friday, December 3, at 7pm in the College Park Annex. I hope to see you there!

Zog Bubbles ✨

Did You Miss the Lunar Eclipse?

Don't worry, because a few of your clubmates caught the recent total lunar eclipse through their cameras. Here are pictures from Chris Kidwell, Michael Mangieri, and Kevin Johnson. ✨



Dr. Kidwell says of this picture, "I took 14 photos before the clouds rolled in, and this is the only one that was even close to being in focus."

Mike captured these stills from his Camcorder. Must have been nice to see the shadow move across the face of the Moon.



Kevin took about 30 pictures and picked these 5 as the best showing the approach of totality.



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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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Columbia, Md. 21044
E-Mail ZOG-43 at:
zog43editor@yahoo.com

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

Years won: 1969, 1973, 1975, 1990, 1991, 1992, 2003, & 2004

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

Photographs: by Kevin Johnson, except where noted.

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NARHAMS ON THE 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 five time winner of the NAR "Section of the Year" award.

Years won: 1997,1998,1999, 2001, 2004

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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Jennifer Ash-Poole
410-674-6262

VICE ZOG (Vice-President)
Jim Filler

COLLECTOR OF THE ROYAL TAXES (Treasurer)
Ed Pearson 301-577-7775

KEEPER OF THE HOLY WORDS (Secretary)
Chris Kidwell 571-434-7507

COURT JESTER (Section Advisor)
Khim Bittle 301-293-2399

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.

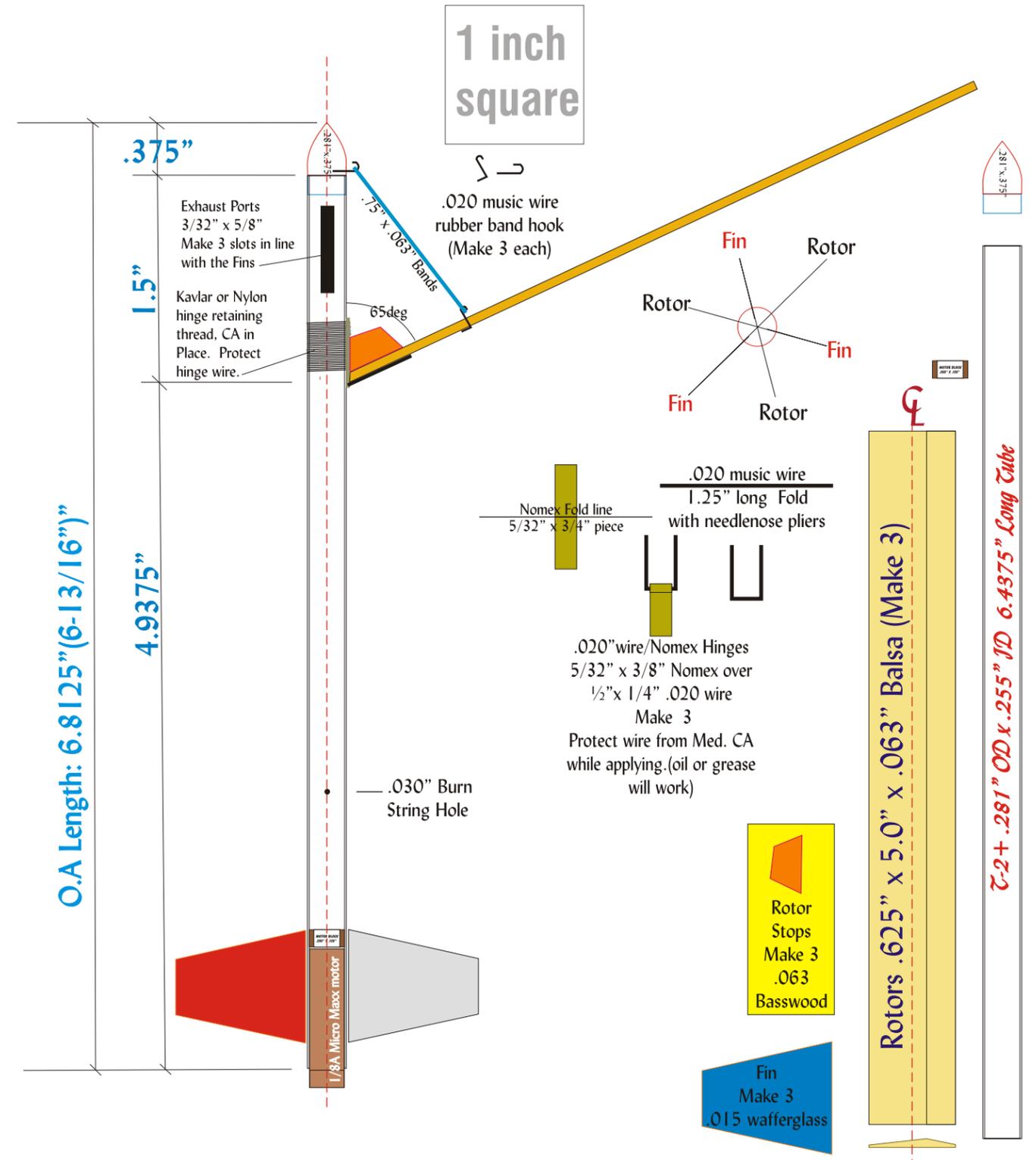


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THE 206-43

The Newsletter of NARHAMS, NAR Section #139.
 NAR National Champions 2001, 2004



Dec 11th
 10:00AM-4:00PM
 Middletown Park
 SPORT LAUNCH

Dec 5th
 Visitor's Center
 Goddard Space Flight Center
 PUBLIC LAUNCH

Nov 13th
 10:00AM-4:00PM
 Middletown Park
 SPORT LAUNCH

Launch Schedule

206 - FORTY THREE
 5269 RIVENDELL LANE, APT 5
 COLUMBIA, MARYLAND 21044

AIAA Annual Picnic a Success

By Kevin Johnson, NAR 77083
 October 16th was the date set for the AIAA Baltimore chapter picnic. Unlike previous years, instead of being held at the Applied Physics Lab near Columbia, the picnic was hosted by the Goddard Space Flight Center Visitor's Center. The customary hamburgers and hotdogs were grilled in the shadow of the rocket garden, as members from the Skylancers control line airplane club and NARHAMS provided demonstrations to the public.

Even though it was a little cold and windy, a good crowd showed up for the public displays. The CL fliers had set up a runway in the open area near the rocket garden and put on a great show of CL combat. This sport features two fliers sharing the flight circle. Each plane tows a paper streamer behind the plane which the opponent tries to cut with his propeller. The gyrations of two planes chasing each other in a closed airspace was very fun to watch.

Once the Skylancers were through, NARHAMS set up a launch system and provided a demo rack that showed the difference in power from 1/2A through C motors in models the size of an Alpha III. We followed up this launch with Paul Miller's D powered Broadsword to show what a big model rocket looked like in the air. We then opened up the rack to allow anyone who brought a model to fly. I think we recycled the 6 place launch rack at least 5 times, with some very enthusiastic Girl Scouts flying a variety of Estes kits.



Top photo by Michael Munn, all others by Kevin Johnson.

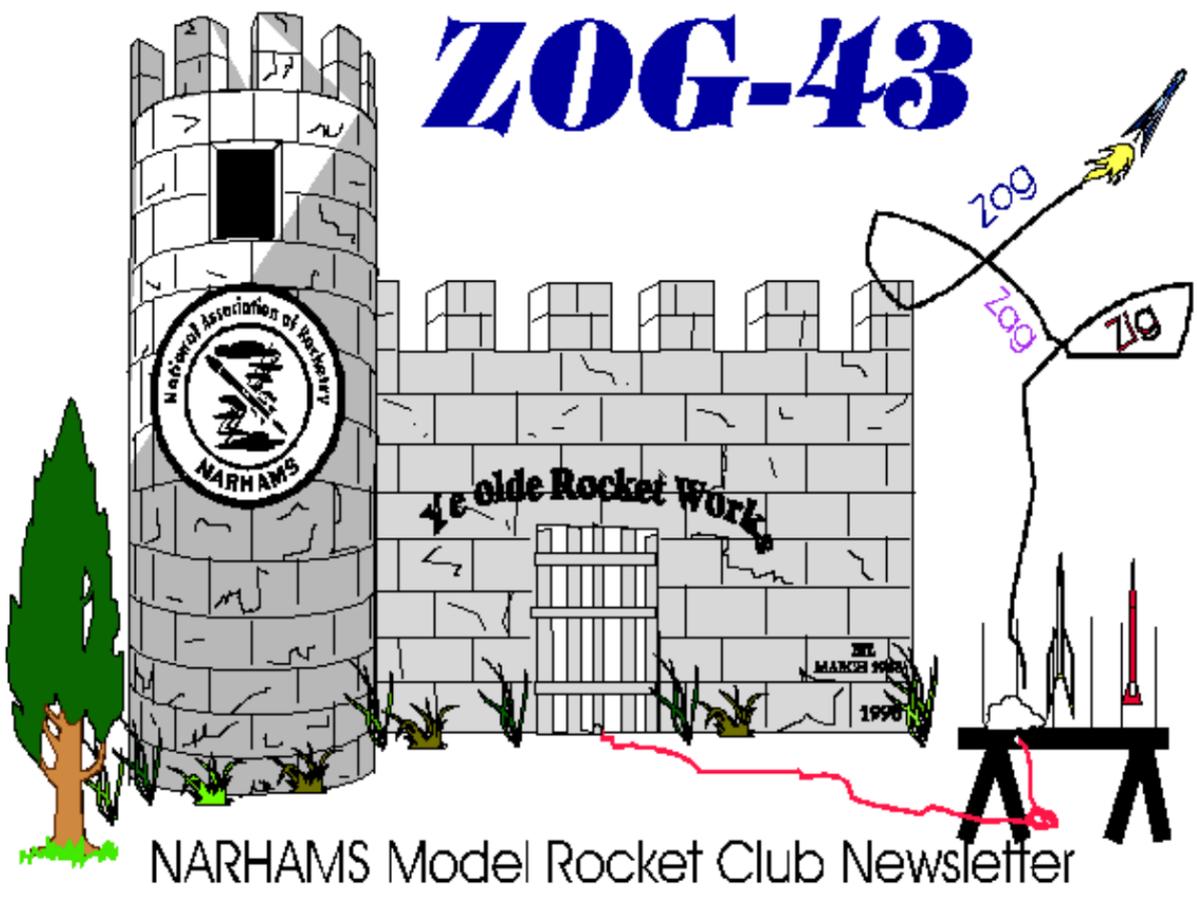
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- Page 11 1/8A helicopter plan

AND MORE!

Alan Williams, Jennifer Ash-Poole, Ed Pearson, Paul Miller and Michael Munn were in attendance from the club, helping make sure everything went smoothly. ✨



NARHAMS Model Rocket Club Newsletter