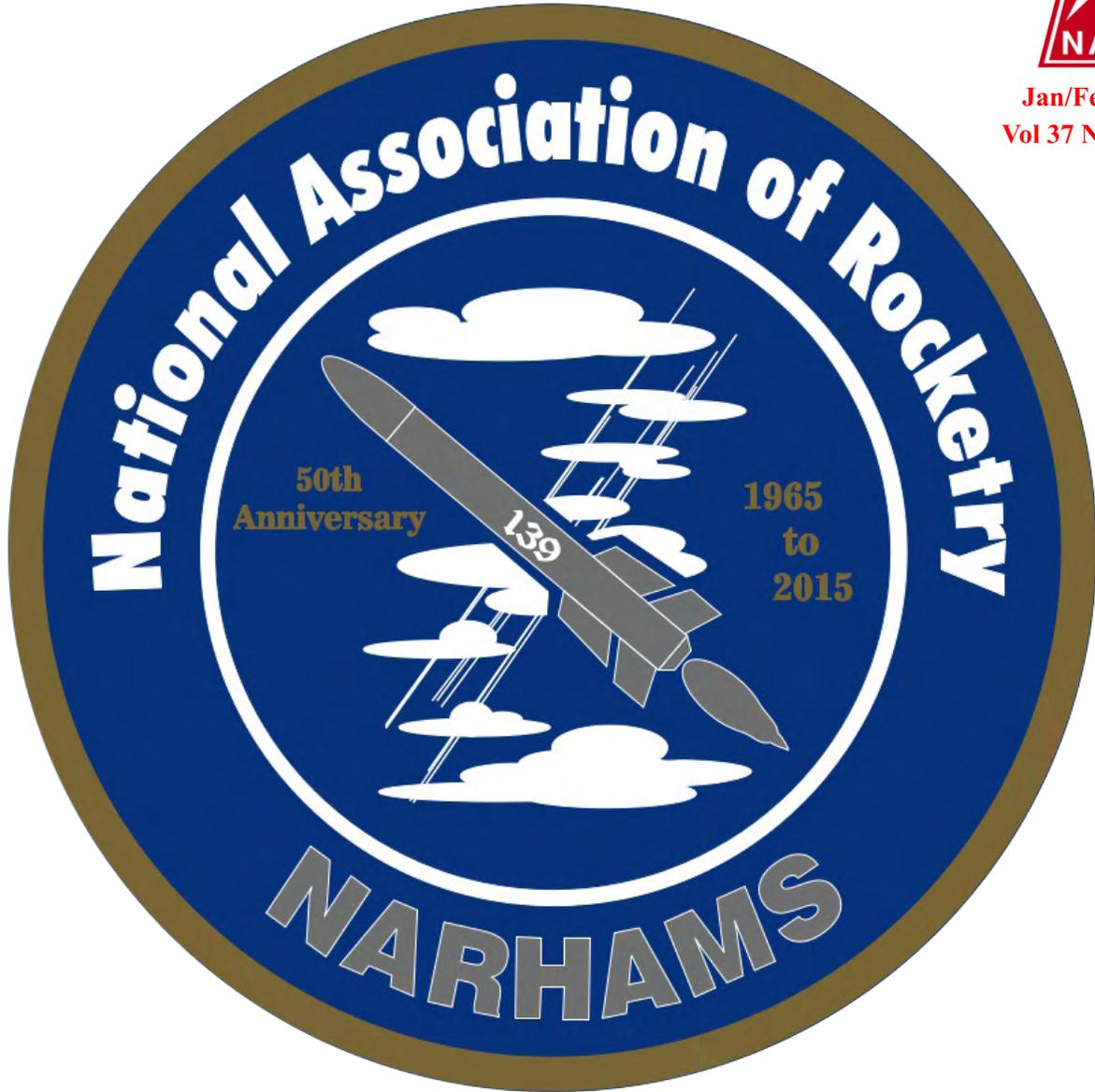


# 206-43



Jan/Feb 2015  
Vol 37 Number 1



# 50 YEARS!

## IN THIS ISSUE:

- |                             |                                  |
|-----------------------------|----------------------------------|
| 50th Celebration Info       | New Subscription Policy          |
| 2014 Holiday Party Coverage | Building for ECRM                |
| NARHAMS History Pt 1        | Launches GSFC, Carroll Co Ag Ctr |
| Outreach: Westowne Elem.    | NARHAMS Gold Rocket Kit          |
| Thunda Down Under Pt 1      |                                  |

**ZOG-43**  
*Volume 37 Number 1*  
Jan/Feb 2015  
Official NARHAMS Newsletter  
Editor: Don Carson

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 bi-monthly and is available to all paid up members of NARHAMS. Club membership is open to all, dues are 10 cent per week.

Material in ZOG -43 is copyrighted. Free and unlimited reproduction is granted with the proper credit to the author and/or ZOG-43.

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

ZOG-43  
117 Coventry Ct, Macon, NC 27551

E-Mail us at: [zog43editor@yahoo.com](mailto:zog43editor@yahoo.com)

#### **ABOUT NARHAMS**

The National Association of Rocketry Headquarters Astro Modeling Section, or NARHAMS, serves Baltimore, the state of Maryland, Washington, DC and the surrounding Metropolitan areas. The club is a section (#139) of the National Association of Rocketry (NAR).

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 seven time winner of the NAR "Section of the Year" award (1997, 1998, 1999, 2001, 2004, 2006, and 2007).

NARHAMS members regularly fly their model rockets at NASA's Goddard Space Flight Center in Greenbelt Md, at Old National Regional park near Mt. Airy, Md. and at the Carroll County Agriculture Center, near Westminster, Md.

NARHAMS welcomes all to our monthly meetings and launches.

For details, dates and directions to our club, meetings and launches, go to:

<http://narhams.org>

## **NARHAMS Turns 50 in 2015!**

**You are invited to the 50th anniversary party at the College Park Aviation Museum on March 7, 6 - 10 pm.**

**For more information and to RSVP, go to our website at: [NARHAMS.org](http://NARHAMS.org)**



#### **ZOG ROYAL COURT (NARHAMS OFFICERS)**

**ZOG** (President) Alex Mankevich

**VICE ZOG** (Vice-President) Alan Willaims

**COLLECTOR OF THE ROYAL TAXES**  
(Treasurer) Maria Ha

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

**COURT JESTER** (Section Advisor) Mark Wise

#### **ECRM-42 Events:**

**1/2A Parachute Duration  
FAI A Streamer Duration Multiround  
B Helicopter Duration  
C Rocket Glide  
Predicted Altitude  
Random Duration**

**Date: June 20-21, 2015  
Location: Mt. Airy, MD**

# NARHAMS IS TURNING 50 YEARS OLD!

**Jim Filler NAR # 27862**  
**“Zog Emeritus” (one of many)**

The National Association Rocketry Headquarters Astro Modeling Section was started in March of 1965 by some students at Northwestern High School. Fast forward to March 2015 and all of a sudden the same club that just happens to also be the oldest continuously running club of the NAR, is now 50 years old!

So, how do you celebrate such an event? Well the core club members, aka as the usual suspects have put together a plan. We normally have a business meeting the first Saturday of each month at the College Park Airport. The airport was established in 1909 when Wilbur Wright arrived to train Army pilots. Oh and by the way, the College Park Airport just happens to be the oldest airport in the world. So we're having a party instead of a business meeting at the airport museum to welcome current, and former members, as well as any model rocket hobbyists that want to attend. The party will be catered with finger foods and soft drinks. If you go to the NARHAMS website, there is a page for more information on the details.

NARHAMS has also commissioned an anniversary kit to be offered for this occasion. Club member David Fuller who was the winner of the design contest, has been working with Jim Flis of FlisKits to get his design produced for those interested in grabbing a piece of history. “NARHAMS GOLD,” the name of this kit, was named by member Mary McCoy. There are only 139 of these kits being produced. They will be numbered and be an instant collector’s item. Why 139 kits? Well 139 is NARHAMS section number for the NAR. We are going to also offer raffle tickets for a chance to win kit # 139 and kit #43.

What is the significance of the number 43? The club newsletter was dubbed ZOG-43 back when the club was started. Ole Ed Pearson, one of the clubs driving members for all 50 years, will be delivering a short address at the anniversary party next month. Wild rumors are that Ed will

**Continued on page 4**

## From the Editor

We kick off Volume 37 of the Zog-43 with the celebration of the 50th birthday of the NARHAMS. Through the year we will be featuring articles about various aspects of the club throughout it’s history. This month Ole Ed starts a series that takes us back to when it all started, long, long ago, and probably not in living color.

There are exciting things coming for the newsletter. Last issue we debuted a new feature called Shop Spotlight, featuring the shop of John McCoy. In the future, we’ll be taking a peek into lots of workspaces - so far, all of them very different. This month we introduce the Competition Corner. It is build season, so looking forward, we have Jim Filler showing us how to get ready to fly events at our marquee contest - ECRM. Come on out and fly an event or two or more, in addition to your sport flying. It's fun and, besides, it's two days of flying rockets!

There were lots of launches as the year closed out and the new one rolled in. The cold did not keep us shut-ins. See coverage of our periodic launches at Mt Airy, the Carroll County Ag Center and at the Goddard Space Flight Center, and other outreach activities. Our 2014 activities wrapped up with the Annual Holiday Party in Greenbelt, Md. The coverage of the party includes the kit bash results and the send off of one of our most steadfast members.

Going international, Tom and Maria Ha are heading to the land down under for Thunda Down Under in March, and this issue features an article leading up to the trip.

If you are surprised to be getting this issue of the Zog-43, check out the club’s new subscription policy for the newsletter. Older issues of the Zog-43 are posted online for anyone to access at <http://www.narhams.org/zog43.html>. We’ll be updating the archive with more recent issues. As we develop the electronic version, we plan to offer some enhancements. This month, we introduce clickable hot links leading you to more information.

Last, but not least, we have an ad for the NARHAMS Gold commemorative rocket kit - get one while they last!

# 2014 Holiday Party!

## Jennifer Ash-Poole

The NARHAMS 2014 holiday party was low key this year, even though we had the voting for the 50th anniversary paint scheme, the kit bash voting, and of course, lots of stuff to raffle off. (Oh, and food! Yummy food!)



Photo by J. Miers

Alex gave Alan Williams the job of the raffle bucket (It's what the VP does, Alan!), and the money started rolling in.

While people did voting for stuff, we had food. Kevin brought the traditional NARHAMS meatballs, Ed made his usual punch, Maria and Tom



Photo by J. Miers

brought way too many yummy things, Alan brought his cornbread. We had new entries this year, with a family coming, and the girls made really yummy frosted rocket cookies! Dave Fuller made this awesome cheese potato soup (but you could add the bacon, so Kidwell could get some) and it was gone!

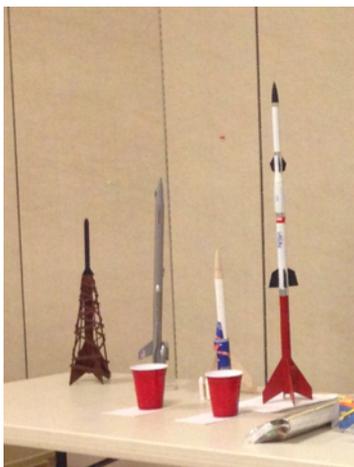


Photo by T. Ha

There was also the voting for the kitbash. Only 4 entries showed up, and people could vote for their top 3. Using complicated math that only Maria and Jennifer understood, the votes were put in, and the winner was Jim Filler! Others who entered were Maria Ha, Frank Panek and Kevin Johnson.

# NARHAMS TURNING 50 (cont.)

finally be divulging the significance of the number 43, and how it relates to the NARHAMS model rocket club.

A 50th anniversary commemorative patch will also be offered for your collection. Be sure to go to the website at <http://www.narhams.org/anniversary.html> to get more details on attending the party, and how to buy kits and patches.

Pay it Forward.

The voting for the color scheme of the 50th was easy, put a ticket in the cup of the scheme you liked the best. Hopefully, you have bought a kit, so you know what has won!

Before the announcements of the voting, a service plaque was given to Dr. Chris Kidwell, who has moved to Florida. Three of us put our heads together to come up with everything Chris did. I am sure we missed something. Chris promises to be back for the 50th, and will visit during TARC finals (no one does data like Kidwell.)



Photo by T. Ha

The raffling went long into the night, Maria Ha was the big winner, a Dromida Ominus quad coptor courtesy of Hobby Works, Laurel. Much rocket stuff was exchanged and food was eaten.



Photo by K. Johnson

# NARHAMS History

by Ed Pearson

## Part 1 – Prehistory, The Clubs Before the Club

*On the occasion of the section's 50th year, Don asked for an article on how the club started and the early days. These are recollections and thus suffer from cognitive dissonance—that grab bag term meaning forgetfulness, false memories, and tricks played on the mind trying to make sense out of seemingly contradictory data. (Oh, there may be some truth in here too). Despite this and the bane of all history recounting—omissions, this is about the best you are going to get; from someone who was there.*

A while back, in a Sport Rocketry Magazine article, Doug Frost called me NARHAMS #1. And although it is true I led a core group of high school students who became NARHAMS, that group would not have come together except for Doug. We might never have become a NAR section except for Doug introducing us to Jim Kukowski, and Jim pushing us to finally form the section. We would never have made a lasting place in NAR history as a serious and great club without Jim Barrowman, and Doug introduced Jim to our group. It is true too, we certainly wouldn't have become as competitive or as fun if it were not also for the outstanding people in our club, through the years. And we would not have been as successful as we were in holding contests without key spouses who pitched in. This then is the story of how NARHAMS was founded, why the name, how we became NARHAMSters, how we grew, and (fortunately or unfortunately depending on your perspective) clearly subjective personal observations.

So professor, please dial the way back machine five decades and some change. Set it for when people complained at Esso and Sinclair that gas was \$.30/gallon, postage had increased to \$.05 to mail a letter, and we now had to use a five-digit ZIP code instead of one-digit Zone code (ZIP=Zone Improvement Program). Set way-back to when it was common to see Studbakers and Checkers but

nary a Mustang in sight. Go before the Internet, before PCs, before electronic pocket calculators (we had pocket calculators; they just were sliding pieces of plastic), before Superbowls and before Star Trek was on TV. Let us go to when President Kennedy was alive; and just months after Martin Luther's King's march to Washington and the end of Project Mercury. Here is when we start our story: the Fall of 1963.<sup>1,43</sup>

The 1963-4 school year had just started at Northwestern Senior High in Hyattsville (Md) and I was outside at a fire drill when I met Doug Frost. He had just moved into the area from North Carolina, had been in a section there, and attended NARAM-5 (Hascom Field, Ma) over the summer. And, he was working the crowd: introducing himself, asking about you, and then telling you about model rocketry. For me, this was unusual. First I hadn't met another rocketeer (I was a lone model rocketeer for five years previously), and second, most people just mill around waiting for teachers to do whatever they do before we went back in. Doug was gregarious, outgoing, sincere, and enthusiastic. He had the knack for finding others interested in the hobby. That Sunday I saw him again—he went to my church! That sealed it, something was going to happen.

Continued on page 6



The Northwestern Model Rocket Club

## **NARHAMS History cont.**

The guys Doug gathered formed a club—the Northwestern Model Rocket Club or simply the NMRC. Doug was elected president and I was vice president who had only one task: to be the club’s firing officer! Our shop teacher, Mr. Gordon, said we could use him as our advisor fulfilling a school requirement; but we were self-led and directed. Being a group without being adult-led seemed normal to us, but it was definitely anomalous with other rocket groups (this we were to find out when we got into the NAR--adult advisors in the other clubs eyed us warily). The club lasted two years and I remember only a few of the guys now that time has eroded memory: Jan Blickenstaff, Paul Conner, John Connors, Dick Geldoff, Bill Holmes, Bob Hoyt, George McMullen, Dick Moran, Jim Nagle, John Newquist, Ken Price, Rusty Rice, and Karen Summerfelt come to mind. There were a lot more, though. Not everyone made the transition over to a NAR section, but many did. There was not a stinker among them. A lot of us were shy, self-conscious, introverts—no problem. A good few of us recognized we were having more fun than you could find with other school groups, and enjoyed watching the rockets even though we weren’t into designing, building or flying—no problem; there was room to bird dog and recovery and that was a challenge and well appreciated by the others.

Most wanted to somehow be in the space program, and most of us later went to college. I am afraid that was an eye opener for several where desire and ability or circumstances diverged.

Singularly they were great to know and to associate with (i.e., play). However, collectively, our group was awesome: the synergy of putting diverse, talented individuals together united in a common interest melded together an exceptional group that accepted each other despite individual differences. Those dollops of synergy intensified experimentation to discover better rockets, find a competitive edge, and also magnified collective hi-jinx. When we were together, the club’s reflective thoughtful types acted as a peer governor to others’ impulsiveness and mischievous rambunctiousness.

We launched wherever and I remember a park in Riverdale we used more than once. By the end of the school year, a few of us planned to attend NARAM—Doug as a contestant (teamed with a Canadian, Roy Seivers—the

spelling isn’t quite right I think) and Paul, Rusty and I as spectators.

NARAM-6 was at NASA’s Wallops Station (later Wallops Flight Facility) and Major Bill Rich was the contest director. [He worked at NASA headquarters and was senior advisor to the NOVA (Northern Virginia) NAR section]. At NARAM, Paul and I signed up to track. We used lensed theodolites. It was difficult because the magnification gave us a small field of view, and thus easy to miss a bird. We didn’t miss a jet pilot, Bill Anders, buzz the supposedly empty field where we tracked. Anders used his afterburners and I remember the loud roar; Paul at the other end of the baseline remembers the temperature suddenly rising! Anders landed and later we got to meet him. He said he was an Apollo astronaut; the U.S. had just finished Mercury and was now into Gemini; we didn’t know what he was talking about. (Later he took the iconic “Earthrise” photo from Apollo 8). We also met Willy Ley, the famous German science writer; NAR founder G. Harry Stine; Vern and Gleda Estes and their daughters; and Jim Kukowski.

Jim was executive director of NAR and lived in Rockville. He now lives in Tennessee, has impeccable character, and I hope one day to tell his story fuller. For now, it suffices to say one night he invited us to his room where we met Pat Stakem of LaSalle High School of Cumberland (Md) and Jay Apt of Pittsburgh (Shady Side Academy – Jr/Snr High). Jim impressed upon us the importance of forming sections, and I daresay that without these new-found friends, Jim’s talk, the experience at NARAM, and the realization that high school would end the following year (and thus for us as seniors the NMRC), we likely would not have continued as a group in rocketry.

### **Continued Next Issue With: Part 2 – NARHAMS Is Formed**

#### **In Memoriam**

It is with great sadness that we note the passing of Ken Brown on January 8, 2015. Ken was a true competitor and many knew him through his company, Qualified Competition Rockets (QCR). He and his company provided a start for many of us who have enjoyed competition rocketry over the years. Our thoughts go out to his family and friends.

# Launch Report: Carroll County Ag Center November 29, 2014

**Tom Ha**

We came, we saw, we flew a lot of rockets! The day started with loading the gear into the truck for the trip down from Pennsylvania, and it ended with a tired but happy pair of volunteers, headed to



get some food and travel from Maryland to West Virginia for the Blue Ridge Rocketeers business meeting. Thanks to the able assistance of Richard Crisco, we were able to manage the sudden onset of hordes of kids, from the Catonsville 4H program and from a local group of Cub Scouts. I ended up as RSO and some check-in, Maria helped with getting the rockets on the rods and prep and Richard helped with prep and check-in. Without a PA system, I had to use my “booming voice” (per Alex M.),

but the kids and parents were very well behaved and did listen, aside from the excited chatter after a particularly cool launch.



We had weather, but it was actually nice, especially with no wind during the period from 10AM until 11:30AM when Maria and I waited for someone, anyone, to show up (no one did) to fly during the member-only window. The sun was warm when it was out, as the intermittent clouds got in the way.

We had only a few NARHAMS members represented, those already mentioned plus Chris Greco, Alan Williams and Ed and Diane Pearson. We did have one occasional visitor also, a NAR member and MMAR member, Masanori Suzuki, who flew rockets twice during the day.

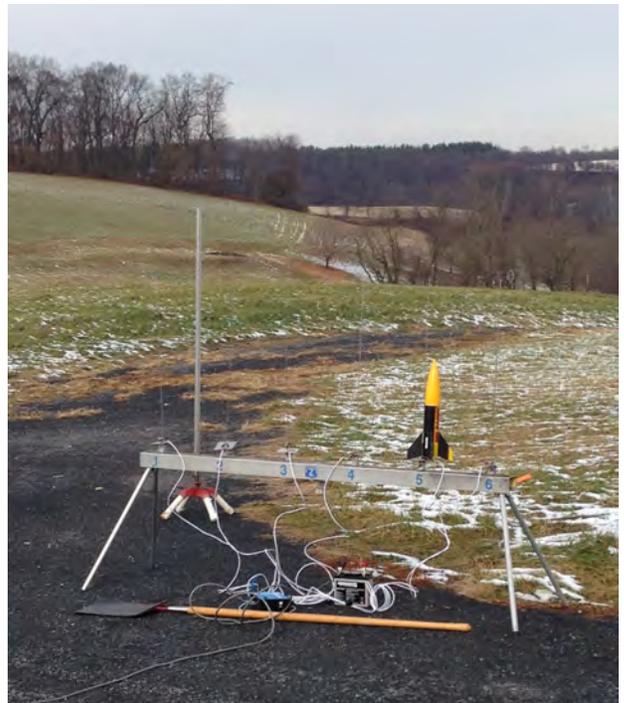
We also had one kitbash flight, well before the visitors arrived, of Maria Ha’s Oil Derrick Gusher rocket, which flew well enough to qualify.



We ended the day with 55 flights recorded, which made me glad that I had doubled my original print run of flight cards from 40 to 80! The

Mach 8 launch controller worked flawlessly and the only on-field work was turning some spent engine casings into stand-off’s for the rods.

A rough count of adults and kids would be about 40 kids and about 60 adults for the day, all in all a very good day, with lots of excitement! By impulse, we had 24 A motor flights, 12 B motor flights, 9 C motor flights (mostly by Matthew Hilliard, flying a two-stage C11 combo), 8 D motors and one E9 flown by T.J. Crooks. By number of flights, Neel had the most with 10, but by motors flown, Matthew had the most with 11!



## **NARHAMS – An Organization at the Maturity Stage of its Life Cycle.**

**Alex Mankevich**

**NARHAMS – President**

It has been pointed out that just like people, an organization evolves through a life cycle. An organization becomes born, grows through adolescence, matures, slows down and eventually declines. Each stage of the organization's life cycle has its own challenges and opportunities. Different goals and strategies are needed to address the requirements and threats presented at each life cycle stage.

Having achieved our "Golden Anniversary" let's just assume that NARHAMS is at its "mature" stage. We've sailed through the stage where there had been overwhelming excitement over the implementation of new programs. We now have a proven record of the services and outreach programs we offer as core programs to our members and to our local rocketry community. We have become predictable in the quality of our outreaches and the reliability by which we can be depended upon.

One would think that achieving organizational maturity would mitigate any challenges or risks that would threaten to decline our section. Our programs are well-established and they are recognized as worthy by many in the local rocketry community. Certainly after 50 years, we're a stable organization. We enjoy a vast ocean of wisdom from our veteran members. We have a deep bench of members with impressive knowledge and skills. What do we need to worry about?

We have benefited from a diverse group of members who have taken the lead to display their innovation and reliability by spearheading the various projects connected with our 50th anniversary celebrations. We have members who have done an outstanding effort to design the 50th anniversary patch, design and market the 50th anniversary model rocket kit, select and procure the celebration venue, select and hire the caterer and to put forth the announcements of the upcoming celebration so that our local rocketry community is informed and involved.

After the dust settles on the 50th anniversary celebration

and we give ourselves a well-deserved pat on the back, perhaps then will be a good time to reflect on how we can stay effective and continue to offer services that are responsive to our members and are in touch with our outreach community.

The ugly consequence is that when an organization becomes very stable, that same stability may render the organization and its programs stale. Stable and mature organizations are challenged by unavoidable declines in passion and excitement. A risk develops that the organization will remain in a self-perpetuating state with few new, exciting programs being offered to the membership. Recognizable signs that an organization has become stagnant are reflected by a stable number of members, lack of new funding sources, conflicts among members, leadership burnout and the inability to fill key officer positions.

It becomes desirable to re-new the excitement and passion within an organization when stability reaches the point of stagnation. Goals, vision and mission can be renewed when members agree that their organization's track record of well received services is far too cherished and too valuable to let decline. Members will then have to decide how we can breathe new energy and new passion into our section.

NARHAMS members can evaluate their organization and its relationship with its local community for new opportunities. Instead of just perpetuating our existing programs we can assess how we can keep on having a positive impact on the local rocketry community. New collaborative relationships and partnerships can be formed. A proactive public relations campaign can bring attention and focus to the programs that our section offers to the public. Crucial tasks in renewal efforts are to keep our key stakeholders updated, involved and informed.

NARHAMS has undertaken some renewal efforts lately. We have an inspired new Editor for the ZOG. We have recently decided that the ZOG will be available free to all paid and current members. We have done outreaches to ride the wave of STEM clubs that have become very popular of late. We have recently upgraded our launch range with the acquisition of mid-power away pads.

**Continued on page 9**

## NARHAMS - An Organization... Cont.

The pathway to assure our continued success is to nurture a culture in which we have a persistent rededication to assessing our relevance and to achieving results. Our goal should be to use our organizational maturity as a springboard to keep on having a positive impact on our local rocketry community.

Happy 50th anniversary NARHAMS! Many more years!

---

## Outreach: Tom and Johanna Bagg at Westowne Elementary School.

By Alex Mankevich  
NARHAMS President

Tom and Johanna Bagg conducted a rocket build session and a launch for seventy-eight 4th-grade students at the Westowne Elementary School in Catonsville, Maryland. Tom and Johanna had been involved with presenting space exploration and conducting model rocket launches at this school for over a decade. Launch day was on Friday November 21, 2014. Alex Mankevich was there to help on launch day.

Tom had earlier demonstrated the construction of an Alpha III model rocket in the class room. The 4th-graders then built their Alpha III models at home. Tom safety-checked each rocket and repaired the rockets as needed all launch week at home. On launch day, Tom gave a talk in the morning about the history of rocketry beginning with ancient rocketry up to the start of manned spaceflight. He then talked about the Mercury, Gemini and Apollo projects. His presentation culminated with a look at future of space flight by discussing NASA's Orion Multi-Purpose Crew Vehicle and some of the commercial space operations. Tom



All Photos: A. Mankevich

proudly talked about a space probe called OSIRIS-Rex, the asteroid sample return mission in which he is involved. Johanna demonstrated to the students how NASA astronauts prepare their meals and eat food in the weightlessness of space. Johanna had three student volunteers dress up in a blue NASA flight suit, a white clean room 'bunny suit' and an EVA suit. A display of



various model rockets ranging in size from the Mosquito model up to the Perseus missile served as a backdrop to the presentations. Tom wrapped up the presentation phase with a review of the rocketry safety rules.

After lunch, everyone went outside to launch the rockets. We had earlier set up the launch range prior to the classroom presentations using the launch system that Tom stores at his place. Tom arranged for a demo rack for the teachers to launch, and then launched the students' rockets by class. It was cold but thankfully there was very little wind chill.



# Thunda Down Under - Part 1

Tom Ha

So here I am, eagerly waiting out the days until Maria and I travel to that magical place known as “Down Under”.

Yes, the place made popular by the boys from Down Under, Men At Work, from their 1981 hit on radio and MTV. Since the day we heard there was a rocket launch being held there, we worked towards being there for it. Thunda Down Under is March 12-15, 2015 and it



takes place on a farm 4.5 hours drive away from the nearest large city, Brisbane (pronounced “Briz-ben”). Brisbane is about half-way along the East Coast of Australia. We’re staying in a town with a quintessential Australian name, Meandarra. The whole motel is three rooms for rent, next to (and part of) the Sara Street Café, where we expect to get meals including cut lunches.

While I’ve read up on Australian slang, I’m not at all worried about understanding the locals. Part of the reason for that is Australia uses many British English words, from the origins of the country as a penal colony for England. I’m not English, but I’ve read lots of books on the old days of sailing ships and British mastery of the seas, and many words they use are the same as what I’ve come across as Aussie slang. I just have to remember that ordering an appetizer gets you flagged as a tourist, and that an entrée is really an appetizer, and an entrée to us is really a “main course” in Aussie language.

Certainly I’m going to be all touristy, gaping at roos and wallaby’s and koala’s along with the rest of the foreigners.

I’ve already had three separate requests for a live koala, but I think I’ll pass on the difficulties of arranging that, since none of the requestors work for a zoo. In fact, it is recommended against driving early mornings or late evenings due to the higher chances of hitting a kangaroo, a wallaby or a pig!

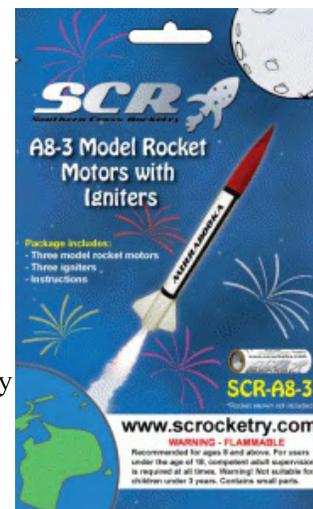


So, rockets. Yes, I haven’t forgotten them! Maria and I are taking along rockets to fly, plus we arranged for rockets to meet us there, in kit form. I was quite pleased to see the announcement of the Fly-It, Take-It (FITI) program reaching its first international large-scale event, so we will be both bringing along built rockets to donate, and building a locally-produced kit (the “Mirrabooka”) for the event.



The event is being sponsored by Southern Cross Rocketry, who also sells Chinese-made rocket motors in the A, B C range, very much akin to the Estes motors.

The rockets I’m planning on taking are the LOC/Precision Lil ‘Diter, the scaled-down version of the Expediter (which I also have but am not taking), the Cosmodrome Rocketry Nike Smoke, and my treasured Mountainside Hobbies 4” V2. Waiting for me there is a PML AGM-256 Pit Bull rocket, a rocket similar in look to the SA-Archer that I built and flew successfully for my L2 certification. I’m actually not sure that I can build the Pit Bull, only because it may not fit into my luggage on the way back!



Maria is planning on taking her Christmas present, the Giant Leap Rocketry Talon 2, which she plans on building here in the States. We think she can build it such that the fin can will travel separately, and be attached for flights by retaining screws. She also plans on taking other rockets, perhaps her much-

**Continued on page 11**

## SEMROC Acquired by eRockets!

Great news, a buyer has been found and SEMOC will soon be back in action. From the eRockets press release:

“eRockets is proud to announce the acquisition of Semroc Astronautics Corporation.

eRockets will relocate Semroc to their facility in Dayton, Ohio, and resume full production of Semroc flying model rocket kits.

Semroc was originally founded in the 1960's by Carl McLawhorn to enhance the options for flying model rocket enthusiast. The remaining family members decided it was going to be impossible to continue the company without Carl and ceased production.

The plan is to have production restart sometime in February with flying model rocket kit re-releases beginning shortly after start up. Boadway indicated that the first kits produced will be the popular kits where we can get parts through the pipeline quickly. In its prime Semroc produced over 150 different kits."

Carl's wife Sheryl was very particular about to whom they would be willing to sell the company. She wanted someone inside the model rocketry community to take over. Many of us know Randy Boadway of eRockets and this looks to be a great solution to continue the great tradition that SEMROC had created.

### Thunda Down Under cont.

flown BumbleBee rocket, or perhaps “Raspberry”. We will also be taking along some limited supplies that may not be available there, like our Epoxo-88 from Andy Jackson’s Aerospace Speciality Products.

Speaking of luggage, it would certainly be easy if we weren’t rocketeers! We were each planning on taking one checked bag, because we are used to luggage limitations on domestic flights. Even then, I was expecting to pay something to take one along. Instead, we get two checked bags each, with no cost for either. So our second bags become rocket bags, taking along FITI and personal rockets and bringing back our rockets plus what we ordered to build and fly there. We’re still not sure if we want (or need) to take a golf case or similar, to handle longer/larger rockets.

My personal plan is to bring back one rocket that has been signed by the people at the launch, and retire it to a display-only rocket. I’m just torn about which rocket to use for that! I do hope to get Homer Hickam, Jr.’s autograph on it, since I really like his books (all of them) and the movie October Sky that was based on his earliest book, Rocket Boys. I’ve got his autograph from his appearances at TARC, but not on an actual rocket. I do find it ironic that I’m traveling to Australia and meeting up with a West (by God) Virginia author!

### New Zog-43 Subscription Policy

At the January meeting the club voted to make the following changes the Zog-43 subscription policy:

- Effective immediately, all NARHAMS members with dues paid up will receive the digital version of the newsletter.
- Hard copy subscriptions (both mailed and meeting pick up) will no longer be offered. Current paper subscribers will continue to receive their newsletter until their subscription runs out.
- Non-member digital subscriptions will not be offered, but anyone can join NARHAMS to receive the newsletter. Dues are 10 cents per week (and have been for 50 years). To save you the math, that’s \$5.20 per year.

Note also:

- NARHAMS will continue to mail hard copies to the LAC newsletter award judges.
- This change does not affect club-to-club newsletter exchanges.
- Past issues of the Zog-43 are available on the NARHAMS website: <http://www.narhams.org/zog43.html>



# Competition Corner: Building for ECRM-42

By Jim Filler, NAR# 27862

What is an ECRM ? The Forty Second East Coast Regional Meet is scheduled for June 20th & 21st 2015. NARHAMS has been hosting this NAR sanctioned contest for years. I do not know much of the history before ECRM 17 which was the first one I attended as an adult in 1990. I have been the contest director for this event since ECRM 24 with the exception of last year of which I won't go into the details. So if you look elsewhere in this copy of ZOG-43 you will find the list of events. 1/2A PD, FAI SD (MR), B HD, C RG, Predicted Alt, RDD. So what exactly does this mess of numbers and letters mean? I am going to offer you some more detail on this and what some options are for you to participate in some or even all of these events. All events must use contest certified motors. The list is located here: <http://www.nar.org/standards-and-testing-committee/nar-certified-motors/>

You need to read the specific rules for every event to clarify details. The link to read the sporting code events is here: <http://www.nar.org/contest-flying/us-model-rocket-sporting-code/>

**1/2A PD** The abbreviation stands for parachute duration using a 1/2A engine. So what are some models you might be able to use for this? Something as basic as an Alpha or similar sized model will certainly work for this event. You need to make 2 flights and get one of them back for a return. There are certainly many strategies you could use. If you want to purchase a high performance kit you can get one from ASP here; [http://www.asp-rocketry.com/store/moreinfo.cfm?Product\\_ID=536&Category=176](http://www.asp-rocketry.com/store/moreinfo.cfm?Product_ID=536&Category=176)

If you want to build a model from scratch you can get a great plan here: <http://www.psc473.org/naram51/contest/Parachute/tbasd.pdf>

**FAI SD (MR)** This is Streamer duration flown as a multi-round event where you make 3 flights using a model that is

at least 40mm in diameter and 500 mm long. You can qualify with a Quest "Big Betty" kit and add a happy birthday banner as streamer. If you want to fly something more competitive you can get a 40mm parachute kit from Apogee.

[http://www.apogeerockets.com/Rocket\\_Kits/Skill\\_Level\\_4\\_Kits/International\\_Thermal\\_Sailor](http://www.apogeerockets.com/Rocket_Kits/Skill_Level_4_Kits/International_Thermal_Sailor)

You would need to replace the included parachute with a streamer. There really are not any published plans that I am aware of, however if you contact the author, you could arrange to build one of these in his basement for the cost of a beer!

**B HD** This is helicopter duration flown with a "B" engine. The choices are to either build a contest kit from either Apogee

[http://www.apogeerockets.com/Rocket\\_Kits/Skill\\_Level\\_4\\_Kits/Gyro\\_Chaser](http://www.apogeerockets.com/Rocket_Kits/Skill_Level_4_Kits/Gyro_Chaser)

Or another kit option is here from Flis Kits [http://www.fliskits.com/products/01prod\\_fs.htm](http://www.fliskits.com/products/01prod_fs.htm) (note this link does not go to the "Rose-A-Roc kit you will have to click to get to it)

If you want to build from scratch you can get a great plan here:

<http://www.nar.org/wp-content/uploads/2014/05/Rotaroc-BC-HD-Gassaway.pdf>

**C RG** This is the rocket glider event that uses "C" engines. I am not familiar of any currently available commercial kits. You can build a model from scratch from this plan: <http://www.nar.org/wp-content/uploads/2014/05/Golden-Girl-C-RG-Wolf.pdf>

**Predicted Alt.** This is an altitude event where you must use an approved altimeter from the list located here: <http://www.nar.org/contest-flying/us-model-rocket-sporting-code/appendix/altimeters-approved-for-contest-use/>

For this event sport models with a payload bay are great choices. You can also practice flying this event at sport launches prior to the event. You cannot practice fly on the

## Competition Corner (cont.)

day of the contest. You must predict the altitude in meters to which the model will be flown. The Predicted Altitude shall be recorded on the flight card prior to your flight. The minimum altitude prediction allowable is 100 meters.

**RDD** Random Duration is another event that you can use a sport model. The target duration is selected just prior to when the event is flown, by draw, dice, or other random device. The target duration shall be a multiple of 5 seconds between 30 and 120 seconds. All contestants shall attempt to achieve the same selected duration time.

All of these events might seem somewhat overwhelming, but can be understood by reviewing the rules for each event in the sporting code referenced earlier in this article. I would encourage you to come fly at the contest even if you think it would be tough to win. The later 2 events do not require contest type models. Come out and join the contest flyers and you might just surprise yourself. If you have questions let me know, always happy to answer questions about flying contest events. You can reach me at [zog139@yahoo.com](mailto:zog139@yahoo.com)

## GSFC Visitors Center Launch December 2014

### Ole Ed Pearson

We had 50 or so kids flying at GSFC Sunday. I'm still impressed that so many groups would schedule in December, but I guess it was so early in the month that there weren't really any holiday conflicts. Still it was impressive and Alex Mankevich and Richard Crisco deserve credit and did yoman service.

Lots of kids in December and during the midst of a Redskins game when dads usually aren't here. One dad was heard to say, "you know I'm missing the football game but I'm having more fun here." No wonder; his kid was happy and the 'skins lost 24-0.



We have a little wind today!



Come on, land in my finger!



Bringing it back home.



All eyes on the flight.

*All Photos: E. Pearson*

## More of the December GSFC Launch



Will it hang on the Delta?



Alex checks a model



Shorts and a T-shirt in that cold, that's a tough rocketeer.



Rocketeers queue up to launch.



Rocket eating tree at Goddard, sometimes people will come and visit their models.



Loading up 1 of 13 racks of rockets launched!



One of two prangs this day.



Richard Crisco retrieved rockets out of trees. Here he extends a retrieval pole.

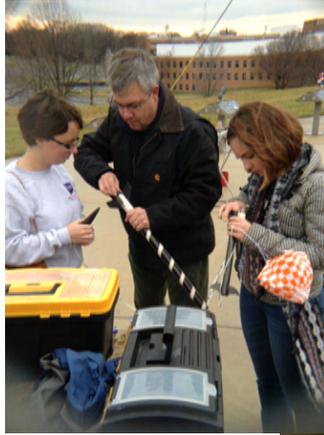


Loading more rockets.

# GSFC Visitors Center January 2015 Launch Ole Ed Pearson



Prep



Load



Launch



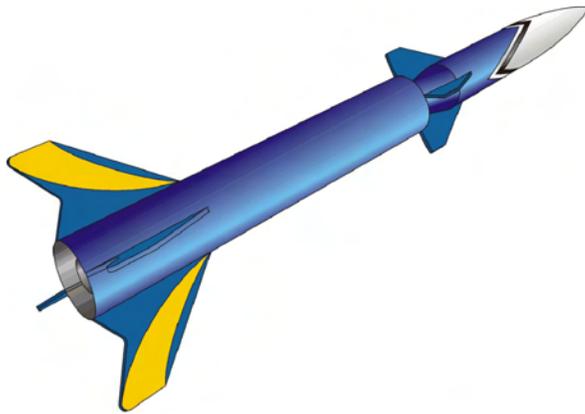
Time the flight



Recovery

A man and a pole.  
Richard Crisco is a  
rocket retrieving  
machine.



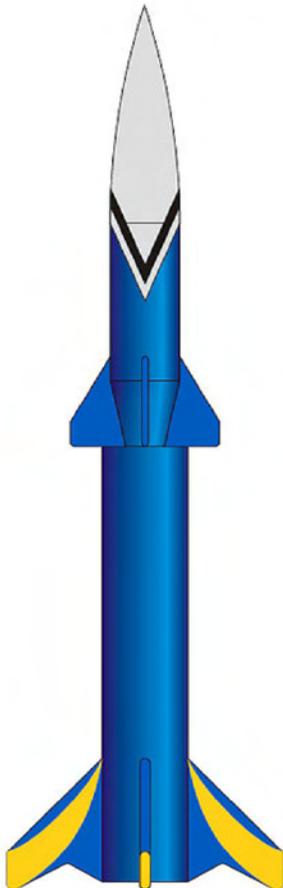


# NARHAMS Gold

National Association of Rocketry  
Headquarters Astro-Modeling Society  
(NARHAMS), NAR Section 139 presents:

## Limited Edition 50<sup>th</sup> Anniversary Model Rocket Kit

Only 139 numbered kits available!



Unique Ducted Booster  
2-stage styling  
Quality Kit Production  
Decal sheet included

Length: 20"  
Diameter: 1.34"

Suggested Motors:  
B6-4 (first flight)  
C6-3  
C6-5

Per kit price: \$30

Kits available in early March, 2015

Send checks (payable to NARHAMS)  
to Maria Ha, NARHAMS Treasurer,  
512 Chestnut Street, Mount Holly  
Springs, PA 17065

or  
PayPal to [rocketha@gmail.com](mailto:rocketha@gmail.com)

*Please use the send money to friends  
or family option when using PayPal!*