



### I'll Have My Eggs Over Easy - - - Very, Very Easy, Please!

By R. Wayne Day



Member - National Association of Rocketry ("NAR").

#### Special points of interest:

- Look for the blue highlighted text as you're reading a story. Click on these hyperlinks for additional information relevant to the story. Clicking on the page numbers in the "Inside This Issue" section, below, will navigate to the particular article in the newsletter, too.
- Mike McFadden and Stuart Powley share their insights building some fantastic rockets. Pages 6 and 7.
- Your Editor, James Gartrell, shares some photos taken at the latest Frisco launch. Page 9
- Lots and lots of new kit releases from the vendors. Page 10.
- Estes shares some fantastic news. You'll definitely want to check out what's going on. Page 11.

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(L-R) The members of Northwest High School Team #1, Courtney Sims, Lea' Graham and Katy Flachsbart, with their national competition rocket at the TARC national finals in Manassas, Virginia. Photo by Team Sponsor, Wayne Day.

On a beautiful spring day in May, 2008, almost a thousand middle and high school students representing 100 schools from all across the United States gathered in a lush polo field at The Great Meadows in Manassas, Virginia, to fly rockets at the Team America Rocketry Challenge (TARC). Two teams from the Dallas-Fort Worth area were represented: one of them, the Denton High School Air Force Junior ROTC team, went on to place 10<sup>th</sup> in the national standings while the other, an all-girls team from Northwest High School in southwest Denton County, placed 32<sup>nd</sup> overall. Jack and Suzy Sprague, both long-time DARS and NAR members were the NAR mentors for both teams. As a teacher at Northwest HS, I sponsored the TARC teams there, and would like to share a few of our experiences with you in this edition of Shroudlines.

TARC, co-sponsored by the Aerospace Industries Association, a trade group made up of aircraft manufacturing firms such as Boeing, Bell Helicopter/Textron, Lockheed, etc. and the NAR, was first held in 2002. It was originally conceived as a single-year event to commemorate the 100<sup>th</sup> Anniversary of the Wright Brothers flight. But, TARC has been so successful that the contest has been extended each year, and is now about to start its 7<sup>th</sup> year during the 2008-2009 school year.

TARC is designed so that any school, youth group, or community-based activity besides an NAR section can sponsor multiple teams in the competition. For the 2007-2008 school year just passed, each sponsoring entity could have up to three teams whose members had to be in the 7<sup>th</sup>

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through 12<sup>th</sup> grades. For this year's contest, the limit has been raised to four teams, with a possible fifth team if a total of 750 teams is not reached by the organizing deadline.

Some schools sponsor just one team, as was the case for Denton's JROTC group. Others, like Northwest HS, had multiple teams. In our case, we had three teams.

Team #1 was made up of three young women, one who had previous TARC experience from three years previous when our District's Gene Pike Middle School fielded a team. The other two girls were students in my engineering class. Our second was an all-male group which included three students with previous TARC and rocketry experience and a couple more guys who were new to the contest. Our other team was the "junior varsity" – another all-male group with inexperienced fliers.

The goal of the contest was for the students to completely design, build, and fly a medium-powered rocket



Katy Flachsbart prepares to launch one of the many test flights. Photo by Wayne Day.

carrying a payload of two eggs to a height of as close to 750 feet AGL as possible, as measured by a Perfect-Flite Alt15K altimeter. Each of the rockets had to be designed and built by the students – no direct adult participation. The flight was supposed to last 45 seconds from launch to landing and could not damage the eggs in any way. Each rocket had to be single-staged with no motor containing more than 62.5 grams of propellant and no more than 125 grams of propellant total. Each part of the rocket had to be returned to ground safely – no ballistic or tumble recovery would be allowed, and, while dual-deploy was not specifically prohibited, the low apogee pretty much guaranteed that deployment would be single-event.

After answering a "help-wanted" email from me on the DARS-General mailing list, Jack and Suzy volunteered to mentor our teams and provide the expertise for a weekly training session that was designed to get all of the fliers, previous experience or none, up to the skill level that would be needed to be successful in this engineering design challenge.

We began our training sessions in late September and continued throughout the year, skipping only school holidays. Starting out with a set of the rules and general design criteria for each student, our kids started out flying a little 4FNC "A" motored Quest rocket on the second training session. While they didn't get much experience related to the contest, it did give some of them their first experience seeing a rocket lift off and deploy a streamer to recover safely.

Training sessions included RockSim, which I use in my engineering class – so there was a lot of training on that software that had to be done. The challenge here was to keep them on task, instead of having them design

rockets that were going to lift a Volkswagen bus into orbit!

We followed up with the team members building and flying Quest Couriers, a single-egg payload, so they could begin to get some idea of how fragile the eggs would be. More than one egg was scrambled in that endeavor.

By the Christmas holidays, it was time to order the parts necessary to build the competition rockets. That process was made easier by the sponsorship of Scott Olsen, who owns Machine Technologies in Haslet. He graciously offered a sizeable donation, enough to fund the building and flying of all three team's rockets up to the point where they would fly their qualification rounds.

With a contest such as TARC with teams scattered all across the United States, it was necessary to come up with a reliable way to qualify teams so that the best-of-the-best were invited to the National Finals. That's where the NAR comes in: local NAR Senior members had to be recruited to witness the qualification flights of each team and to sign the documentation that would be forwarded to the contest headquarters. From the list of teams that submitted qualified flights, the top 100 scores would represent those teams that were invited to the finals.

Each team had to declare their intention to count a particular flight as one of their two available qualification attempts. This places a bit of stress on a team to recognize when their flights are within the correct performance and design parameters, and places a premium on repeatability of performance. That turned out to be a big problem for one of our teams. Of course, breaking an egg or coming in ballistic on a particular flight disqualifies that attempt.

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The rocket designed and flown by the girls, senior Lea' Graham and juniors Katy Flachsbart and Courtney Sims had a score that put them within the Top 100 scores across the country, and they were invited to attend the National Finals in Manassas on May 17, 2008. The guys, unfortunately, didn't get close enough to the target score to make it into the Top 100.

Jack and Suzy were planning to drive to Manassas and carry the primary rocket, our motors (you can't carry rocket motors or igniters onto a commercial airplane flight!) along with our range box, tools, and other supplies. We would be carrying the backup rocket with us on the flight – and a backup was definitely needed since the rules allowed for a make-up flight if you **CATO**'ed on the pad, or the rocket was unrecoverable (trees, power lines, etc.). With four days left before Suzy and Jack departed, disaster was narrowly avoided after the rocket we had designated as the secondary rocket got hung up at the top of a softball stadium light stand.

The rocket's shock cord had managed to catch the gondola's cage resulting



in the nosecone and payload being draped over the railing, with the booster section coming down on the other side. And, to top it off, there were severe weather warnings issued for that afternoon and evening – a massive line of thunderstorms was due into the area later that day.

Somehow, though, disaster was avoided in multiple ways – the promised thunderstorms went around the area and smacked into the DFW Airport area instead of the Haslet-Justin area (just west of IH-35W near the Texas Motor Speedway). So, not only didn't the rocket get wet, it also didn't get whipped around by severe winds.

The second miracle was on Monday morning when I confirmed, as I was driving in to school, that the rocket was still up there – that was about 7:45 in the morning. I had called the school district's maintenance folks and explained the situation – they had already been apprised of the value of

this particular rocket (Hey, going to a National competition is a **BIG DEAL** at our school district!) and were prepared to either have someone climb the tower or, barring that, renting a bucket truck to get the rocket down (something that anyone who has ever stuck a rocket over a power line knows is not inexpensive). Somehow, though, between the time I saw it at 7:45 and about 9:30 when I got a call from the maintenance director, the rocket had managed to un-snag itself from the light stand and fallen to the ground, sustaining only a little dent in the nosecone, a cracked fin that was readily repairable, and some paint damage. So, we went to Washington D.C. with two rockets ready to fly, and didn't even set off any TSA alarm bells at DFW Airport! The venue for the finals was The Great Meadows, an equestrian facility near Manassas, Virginia, about 30 miles southwest of Washington D.C., and also the site of **NARAM-50** this

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**Below Left**—Hung up in a softball field's light pole.

**Below Right**—Approximately 1,000 competitors from middle schools and high schools across the United States gathered at the TARC Finals.

Photos by Wayne Day.



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summer.

During the first round of the finals teams were divided into five shifts of 20 teams each, who had one specified hour to get their rocket into the air on a qualified flight. Jack's "other" team flew before we did – they flew an exact 45-second flight that was just a few feet off the 750' mark. They were in first place, and stayed there throughout the first round.

Our flight wasn't quite as noteworthy – we did very well on the time, 44 seconds, but our altitude was 30 feet higher than we were targeting – a score that left us out of the top 18 teams which were going to fly in the second round of the competition. Those teams would automatically be eligible to participate in the NASA Student Launch Initiative program sponsored by the Marshall Space Flight Center as well as being eligible for the scholarships, a share of the \$60,000 prize money, and an all-expenses paid trip to the Farnborough Air Show in the United Kingdom that the competition winner would receive.



Above Left—Katy Flachsbart and Courtney Sims prep their rocket to fly at the TARC National Finals on a Roadrunner F60-7.

Of the 18 teams that flew a second time, though, 11 had scores that were worse than our original score, so the flying conditions were definitely different in the afternoon.

Denton's 10<sup>th</sup> place nationwide was their best in two years of competing in TARC. As this was our rookie year, we were happy to get a team into the finals. But, look out for this next year!

Besides the rocketry, the girls and I, along with Lea's Mom (as chaperone) and Jack and Suzy were able to spend a bit of time playing tourist in Washington... a great civics lesson.



Above Right—NWHS Team #1 visits D.C. with Sponsor, Wayne Day, and TARC Mentors, DARS members Jack and Suzy Sprague.

Photos by Wayne Day.

We also were able to visit the U.S. Naval Academy in Annapolis, where the girls were introduced to the Cadet Satellite Lab, run by an amateur radio acquaintance of mine – who showed the girls some of the satellites that had been built by the midshipmen and launched by NASA during the last few years.

The 2008-2009 rules are similar to the previous year: the payload will be a single egg carried to 750 feet AGL and 45 seconds duration. The difference is that instead of the egg being carried lengthwise in the

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Below—Bob Bruniga, the director of the U.S. Naval Academy's Student Satellite Lab demonstrates the abilities of the lab to members of the Northwest High School TARC team as they tour the Naval Academy.

Photo by Wayne Day.



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payload bay, it must be carried perpendicular to the axis of the rocket – which places the weakest part of the egg in the main thrust axis both on launch and recovery. That should be a bit more challenging for the students.

Information about this year's TARC competition can be found at: [www.rocketcontest.org](http://www.rocketcontest.org).

How can you get involved in TARC? There are a couple of ways you can directly play a role in this outreach effort: Volunteer as a mentor to one of the schools in the area that is putting together a TARC team. Teachers who know enough about TARC to sponsor the contest may not be rocketeers themselves, and can benefit from your expertise.

Also, spread the word about TARC to school teachers that may not be aware of the contest – if you demonstrate rockets to a school group already, wouldn't it be a kick to get them

involved in the contest? If you know a middle school or high school teacher, ask them if their school has a science or technology teacher that might be interested in doing something like this and give them a call! Many teachers have never heard of TARC but would be willing to sponsor such an extra-curricular activity if there's interest in the community.

As for Northwest HS, our future is looking pretty good, TARC-wise. One of our students, Tyler Olsen, has gotten interested enough in rocketry that he passed his [Junior Level 1](#) High Power certification this summer. Another team member, Evan Severson, the son of DARS member Eric Severson, will be attempting his Level 1 once he turns 18. And, this year, I'm hoping to bring some of our TARC team members to the DARS flights at Frisco and the HP flight events at Windom and McGregor, to get a little bit more experience with rocketry. ◀

## Tidbits from the Editor

By James Gartrell

A group from DARS was recently involved in a very special event held October 17 at the [Frontiers of Flight](#) Museum in Dallas. [Launch Magazine](#) will be doing an article about the event in their next issue. I don't want to scoop their article, so I'll wait until our next issue to fill members in on the details. If you don't currently subscribe to the magazine you may want to consider it. It's a great companion to [Sport Rocketry](#), with a greater emphasis on space-related articles but still maintaining ties with model and high power rocketry. Regardless, be sure to get a copy of the next issue. It is very special!! ▪

Election of officers for the next year will be held at the December club meeting. If you don't attend any other meeting, you should at least attend this one. **Your vote is important!** ▪

I would love to hear your input about the newsletter. I do the best I can to provide a quality newsletter with information relevant to our hobby and coverage of events specifically related to our club. The quality isn't near as great, though, without input from you, the member. So, send me a note and let me know what you think. I'd love to hear from you! Content is also better if there are articles from a variety of members. Everyone has a unique perspective or knowledge that can assist the other members. Even a brief article is helpful. It could be a build tip on a specific kit you built recently or just a tidbit of information like this article. Don't be bashful! Send me an article! ▪

Speaking of feedback, have you contacted our new NAR President, [Trip Barber](#)? If not, please do so. I'm sure he would love to hear from you. Just like the newsletter needs input from you for improvement, the NAR does too. ◀

## The Mutant Daddy

By Mike McFadden

How about taking a look at this kit released by [Mercury Engineering](#) that they call the **MUTANT DADDY**. My



first impression (and just about everyone else) was it's an Estes Big Daddy. Yes, the two are similar – both will fly on an E engine and both are 4-finned 3-inch diameter rockets. The Mutant Daddy is 6 inches taller and the fin shape is different, though.

What comes in the package: 3" diameter body tube that is 14" inches in length; 3" nosecone 14 inches in

length; twin 12" rip-stop nylon chutes; elastic shock cord, laser-cut balsa fins; card stock centering rings; engine block and hook for E motors and a spacer for D motors. All of the parts are of good quality.

I decided to build this kit stock; it was tempting to stuff a 29mm motor mount in there. This is an easy build that just about anyone can do. As with all the balsa fins, I applied finishing epoxy to each side after rounding the leading and trailing edges. Then, after the epoxy cures, I sanded the fins smooth, removing almost all of it. While the fins were drying I assembled the motor mount using wood glue, pretty straightforward as the instructions are clear on the spacing for the centering rings and motor hook. The next step was to glue the fins to the body tube; I used wood glue for this and an Estes fin alignment tool, the plastic yellow one that holds one of the fins at a time. Allow the wood glue to set, then add a fin at a time. These came out straight. After the fins were set, I laid the rocket on its side, mixed up some 5-minute epoxy, and using a Popsicle stick applied filets along the root edge. The epoxy is thin enough to settle smoothly before it cures. I've found this gives very good strength.

Next came the finishing and painting. One or two coats of Duplicolor high build primer, a lot of sanding, a coat of Krylon white primer and more sanding with 600-grit. I need more practice at diagonal lines for the nosecone but it came out OK, I went with the stock photo of the green and black colors. The final step was to attach the shock cord with the supplied paper that you fold in thirds, and attach the chutes and nosecone.

The Mutant Daddy has flown twice so far, both on an E9-6. The first was

into a bit of wind but it flew well, a slight crack to one of the fins due to one of the chutes slightly tangling. The second flight was perfect. It's a good flying rocket with good balance and the right size for a fairly slow low altitude flight.



If you haven't looked at the EMMR sight before, [www.rocketreviews.com](http://www.rocketreviews.com), this is an excellent sight for kit reviews by other builders and a large collection of RockSim files for rocket kits. Also available are flight logs, recommended motors, how to instructions, and contests with giveaways. ◀

## The Squirrel Works Gremlin

By J. Stuart Powley

I have a few rockets that simply define model rocketry for me. Most of these are models that I either had or really wanted as a kid, and just seeing them in an old catalog is enough to send me back to my black powder fogged youth. One of these kits is the old [Estes Goblin](#). I cloned one a few years ago and it still has a honored place on the shelf, right next to it's spiritual cousins, the [A-20 Demon](#) and my upscaled [Scamp](#).

Well, the fine folks at Squirrel Works remember the Goblin as well, but they went one better than my little clone. Instead of making a direct copy of the Goblin, they made what I would call a "tribute rocket." It shares many aspects with the Goblin, but with improvements in construction techniques, design, and even theme. Their rocket is the [Gremlin](#).

I won my Gremlin at the DARS rocket classic in October, 2007. I liked the way it took the old Goblin design and dressed it up with cool new graphics. At the time I didn't

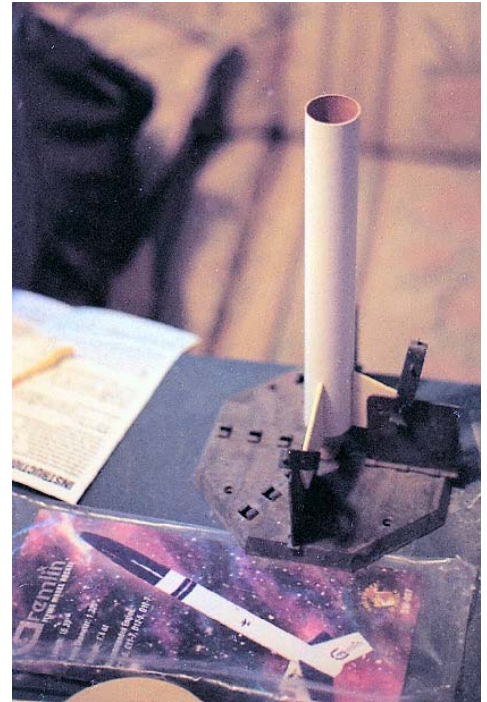
realize that there were other differences as well. I let my kit sit around for about five months before starting it, due to other projects and "life." When I opened the package and compared it to my clone, I saw that this really was a different animal.

First of all, the most obvious difference is the length. The Gremlin is about an inch longer than the Goblin. This makes the model just a bit sleeker, and should improve stability a tad (although I've never heard of a Goblin with stability issues). Secondly, instead of the standard, and much cursed, "Estes rubber band" shock cord, there was high grade sewing elastic. Third are the graphics and paint scheme.

All of the parts to my Gremlin were first rate. The nose cone was a little grainy, as balsa nose cones can tend to be, but a couple of coats of thinned Elmer's wood filler took care of that.

winding grooves, and didn't require much in the way of prepping. The kit comes with a very nice mylar streamer.

Building this bird is about as easy as it gets. The instructions are very clear, but if you have built anything comparable to this model in the past, you really don't need them. I used my old Estes fin jig to align and hold the fins as they dried, mainly because I didn't want to mess with holding them myself. The total build time, including filling and sanding the nose and fins, was about four hours.



The paint scheme I chose was gloss white and metallic blue. I hoped the blue would match the decals, and as luck would have it Testors Sapphire matches almost perfectly. I first started using H2O gloss white, but I quickly remembered why I hate the stuff. After wiping off all the runs and drips, I tossed the can and started over with regular gloss white. I just held my breath while I painted, so my

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The laser cut fin stock was soft, but not brittle, and was easy to work with. The body tube had very small



work with, but thin enough to actually look painted on.

I have yet to fly my little Gremlin, but I'm sure it will be spectacular. A D12 in a small rocket is always an awesome sight. Squirrel Works did a great job on this bird, and I'm proud to say that it now sits next to my Goblin on that shelf of honor. ◀

Stuart provided this article to me a few months back. He has since flown the rocket, and I was able to catch the following two photos at a recent Frisco launch. Editor.

**Top Photo**—Stuart takes a photo of his Gremlin on the pad.

**Bottom Photo**—The Gremlin takes to the sky in hopes of adding another little airplane to its score, as the manufacturer of the kit, Don Magness, watches on in the background.

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allergies wouldn't kill me. Oh well, at least it didn't drip! The Testors paint was a bit more of a challenge, since the metallic finish can show inconsistent spray passes very plainly. The trick is to make sure that you start spraying before you hit the model with it, and keep spraying for a second once your is done.

The decals for the Gremlin are great. If you think about it, a gremlin makes more sense than a goblin for a rocket mascot anyway. Gremlins fly, by golly! Goblins....well, I'm not real sure what goblins do, but I'm pretty sure they don't fly. The Squirrel Works picture of the gremlin is more endearing than the Estes Goblin graphic as well, so that helps. Instead of bats like the Goblin had, the Gremlin comes with small airplanes to apply as you see fit. I decided that my gremlin was keeping track of the planes that he had helped into the ground, so I arranged them like the score on a WW II fighter. In a way, I guess this was also a little tribute to Der Red Max. Anyway, the decals were thick enough to be very easy to





## *Frisco Launch - September 2008*

By James Gartrell

Below are photos I took at the September Frisco Launch. It is one of the most attended launches I have seen since we started flying at Frisco. I counted about 70 cars at the field at one point. Tons of fun! Enjoy!! ◀



Top Left and Bottom Right—George Sprague with his [Hawks Hobby Texas Thunder](#), and under chute after a perfect launch.

Top Middle and Top Right—The James Gang! Middle, James Turner's [Giant Leap Talon](#) lights up the pad, and right, James Gartrell's Red River Rocketry [P-Chuter Xtreme](#) zooms up arrow straight on one of the new [Roadrunner E-25](#) motors Bob Korman was handing out on the field to fly.

Bottom Left and Bottom Middle —Left, my Squirrel Works [Dogfight](#), gliders unpainted, takes to the sky, and middle, George Sprague's [Tango Papa Mars Lander](#) puts up an arrow straight flight.



## Breaking Vendor News!

By James Gartrell

The vendors have been very busy the past two months. Lots and lots of great products to check out!

Apogee Components has released the [3rd Edition of Model Rocket Design and Construction](#), plus they've added a lot of new rockets into their line including a whole host of Red River Rocketry kits.

FlisKits has released the [Avalear](#), their 2008 NEMROC Commemorative kit. It is a BT-50 based rocket that uses 18mm motors and is a little over 12 inches long with a wingspan of almost 9 inches. The kit includes an interesting template for aligning the fins on the rocket, simple but effective.

Madcow Rocketry has released a new 18.5 inch by 2.6 inch diameter 29mm rocket kit, the ['lil Goblin](#). The kit features laser cut plywood parts, a heavy duty body tube, and an 18-inch nylon chute. No real resemblance to the old Estes kit, though!

Mercury Engineering has released a new kit, too, the [Impulse Reactor](#). It is an 18mm rocket, 17.5 inches in length and .99 inches in diameter. The kit features laser cut fins, a heavy duty airframe and a 12" nylon parachute.

NARTS has the 4th Edition of Peter Alway's [Rockets of the World](#) book, including supplements from 1999 through 2004. Don't miss out again!

Pemberton Technologies has released an upscale of their Kraken, the King [Kraken](#). It's a 41-inch long 3-inch diameter kit that flies on 38mm motors.

Quest has their [Holiday Sale](#) page up. Check it out for lots of specials. One of my favorites is the Micro Maxx Super Value Starter Set, on sale now for a great price of \$30. It includes 8 Micro Maxx rockets, 25 motors and the launch pad. These kits also feature the new MMX-G2 igniters. The kit makes for a lot of great holiday backyard fun!

Red River Rocketry has a couple of

new kits available, too. The [Red Strike](#), a very cool rocket that is modeled after a military drone, is BT-50 based with a boattail that reduces down to fly on 13mm motors. At the other end of the spectrum is the [Merlin](#). This is a very nice mid-power rocket that flies on 29mm motors. It is a 42-inch long 2.56 inch diameter kit with a large payload section and can even be used for your Level 1 certification (read the last newsletter to find out how).

Roadrunner Rocketry has released a new [29mm E-25](#) motor. It has a burn time of 1.5 seconds and a total thrust of 39 N-S. This is a great motor for flying your mid-power rocket in smaller fields or when you don't want to chase that rocket too far!

Semroc has released a ton of fantastic new kits! You'll just need to visit their webstore to find out everything they've got, because the list is too long to repeat here. Interestingly, most of the new kits are of the Estes vintage, such as the [Orbital Transport](#), and a number of "xkits" such as the [Nighthawk](#), [V-2](#), [X-Ray](#) and [Mark](#). The xkits were canceled for a while but have now been brought back. The xkits don't come with instructions, but instead must be downloaded from a link on the Semroc site. [Golden Scouts](#) are still available, too. One of the zaniest rockets is the [Geehod](#) that flies on 18mm motors. It is hard to describe, but suffice it to say it is one of those kits you just have to get. It is way cool!

Sky King Products, LLC has released an updated Aerotech [Phoenix](#) RC rocket glider. Very cool! This isn't your ordinary glider. It has a wingspan of 50 inches. Bob Parks designed it and it flies on F and G motors.

Speaking of cool things, the latest releases from Squirrel Works are very cool. The [Pie in the Sky](#) is a saucer-style kit with a pizza decal that is just yummy. The 18mm rocket goes together in a few minutes and is ideal

for small field flights. Load up on C6-0s because your going to love flying this one! As cool as it is flying pizzas, their latest release, the [Dogfight](#), takes coolness to a new level. The Dogfight features two parasite gliders designed and decorated after two very famous World War II fighters, the [Corsair](#) and [Zero](#). The gliders are so well designed that mine glided perfectly without trimming. This is probably partly due to the included jigs in the kit that allow the builder to construct the gliders with extreme precision. Don also plans later "glider packs" that will feature other WWII fighter pairs. I can't wait to see the next two. The booster is very nice, also, and bears resemblance to a WWII bomber. Don't miss out on these! You'll want to be sure and have a drag race with a buddy once you have yours built. That is very cool!!

If you noticed George Sprague's Tango Papa Mars Lander on page 9, now is the time to buy those. He only makes them available from October through March.

Dr. Zooch Rocket's latest release is the [Ares I-X](#). This kit is a model of the next generation of manned rockets planned by NASA. It is just over 19 inches tall and flies on 18mm motors.

There are two local vendors that you need to check out, too. [BMI hobbies](#) is located very near the club at Custer and Parker road, 2109 West Parker Road. While they specialize more in R/C stuff, they now carry both Red River Rocketry and Squirrel Works Model Rocketry kits plus Estes motors and kits. I have added a link to their site on the back page, as they offer a 10% discount to DARS members. I've been by their shop and they are great folks. The other vendor, [R/C Zone](#), is located near the Frisco field at 7151 Preston Road. I don't have a lot of info about them. Their representative took the time to come to a couple of meetings, so they must be pretty cool! Check 'em out! ◀

*DID YOU KNOW?*

By James Gartrell

Rocketry Planet ("RP") posted a recent announcement that is sure to catch the attention of rocketeers who love the old classic Estes and Centuri rockets. At the iHobby Expo 2008 in October, Estes announced they are bringing back a number of the old classic rockets in a new Classic Series line. I counted 42 classics that are planned for release in two stages. The first stage rolls out in early spring 2009 and the second stage set follows in the summer. Some of the notable Estes kits planned for spring release are the Alien Invader, Satellite Interceptor and Photon Disruptor, just to name a few! From the Centuri lineage, the Excalibur II, Long Tom and PayloaderII are just some of the very cool rockets they intend to bring back. Sit down for this one. The summer release will include the Centuri U.S.S. America, SST Shuttle and the old Enerjet Egg Crate, plus a host of others. Wow!! Don't get back up. That's not all. Don't forget the Estes line. Those will include the Blue Bird Zero, Astron Nighthawk, Starship Vega, Optima and Odyssey. Woohoo!! The link to the RP article is here:

<http://www.rocketryplanet.com/content/view/2638/28/>

You can visit the Estes site to download a pdf that has all the details, too at:

<http://www.estesrockets.com/classicflyer.pdf>

Oddly, this is something old rocketeers have been clamoring for from Estes for a long time but has largely been ignored until now. Estes has released a few of the classics from time to time, but this is much more extensive. Perhaps this is a response resulting from competition from Semroc and other "clone" manufacturers of the old Estes and Centuri rockets. I certainly hope that Semroc doesn't soon face a battle with Estes. The Semroc folks have done an excellent job of bringing back the old classics in response to old rocketeers. With hundreds of old rockets yet to be re-issued, there's plenty of room for both! ◀

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<b>Vice President</b>	<b>Royce Frankum</b>
<b>Treasurer</b>	<b>Cheri Sapp</b>
<b>Secretary</b>	<b>Terri Magness</b>
<b>NAR Senior Advisor</b>	<b>Sam Barone</b>

# DARS

The Dallas Area Rocket Society is a non-profit chartered section of the National Association of Rocketry ("NAR"). Its purpose is to promote the hobby of consumer rocketry in the Dallas/Ft. Worth metropolitan area.

Membership in DARS is open to all interested persons. Membership in NAR is encouraged, but not required. Annual dues are \$10.00 for individuals and \$15.00 for families. The entire family, including children, are welcomed to the meetings. Go to the website and fill out and send an application to join or renew your membership.

The club normally meets on the first Saturday of each month at 1:00 p.m.

Visit the DARS website for the meeting location: [www.dars.org](http://www.dars.org)



Stay connected! All of us  
will reach greater heights  
with your attendance at  
the club meetings.

*Vendor Links (\* DARS member discount—confirm before ordering)*

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*Dallas Area Rocket Society*  
*("DARS")*

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[WWW.DARS.ORG](http://WWW.DARS.ORG)

**SHROUDLINES**

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