

Dallas Area Rocket Society ("DARS")

Announcement: Time To Vote!

By James Gartrell



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

Special points of interest:

- Another superb article from Stuart Powley is on Page 2. Not only is it an excellent article on refurbishing a rocket, but it pays tribute to late DARS member, Brian Boyd.
- DARS Outreach Coordinator, George Sprague, fills members in on some of the latest outreach events. Check it out! Page 4.
- The 3rd Annual DARS Fall Classic Rocket contest is now a memory. Gary Briggs recaps the event for us. Page 5.
- All of the vendor ads for those supporting the classic rocket contest begin on Page 6. Check them out. They donated some really fantastic prizes for the event. If you're looking to buy rocketry products, it's a good place to start!
- A Free-B and a SOT? Did You Know, Page 7.

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Photo by Steve Rogers



Photo by Bill Gee



The December 2007 DARS meeting is just around the corner. You don't want to miss it as this meeting is the time for you to vote for the officers that will lead the club in 2008. No, Warren Benson isn't running! The above photo from NSL 2004 just looked like folks were voting, so I thought it would make a good "vote" photo. Plus, you might recognize current DARS Vice President Royce Frankum signing in with an original Estes Cineroc ready for launch on the table in front of him. The only thing better than that is an actual launch photo, which is shown at right! Royce flies one on a fairly regular basis.

Another incentive for coming to the meeting to vote is that normally each year folks clean out their closets and bring in some cool rocketry items to auction. Don't miss out!

Restoring the Aerotech Astrobee D

By Stuart Powley

This story begins a few months ago at a DARS auction. A former member's parents had donated some of his rocket related items to the club, and the club decided to auction them off to raise money for an educational fund. Therefore after the meeting, everyone grouped around and started bidding.

The arrangement of items was quite varied. There were motor mounts, body tubes, parachutes, etc. There were also a couple of complete rockets....well, mainly complete anyway. In truth they had been flown pretty hard and had been in storage for quite a while. The combination put them in fairly rough condition. I, personally, had my eye on a couple of nylon parachutes.

As the auction progressed the parachutes that I wanted kept going just a little out of the range of what I wanted to pay. Finally, toward the end, there were a couple of Aerotech body tubes that I saw that had yellow nylon chutes attached. I went ahead and bid and actually won. I was really only interested in the parachutes, but when I went up to get them, I realized that what I had actually purchased was a rather ragged Aerotech Astrobee D.

To say that the model was in bad shape is an understatement. It had only three of the four fins, had been cut off and repaired at the tail section, and had at least two distinct layers of paint, both of which were flaking off. Only about half of the decals were still there. It had only one of the two plastic scale "launch lugs"...and it was broken. In addition, it was clear that after the crash that had necessitated the repair of the tail section, the previous owner had really beefed up the epoxy, so now there were large brown globs of it all over the fin joints.



At first I thought it was a total loss. I decided to save the nose cone and maybe the fins, and put the tubes aside for possible future projects. However, the more I looked at it, the more a little voice in my head said "you can fix this." It was clear that this little voice didn't know what it was talking about, but since I've always wanted an Astrobee, I decided to throw caution (and good sense) to the wind and give it a try.

The first thing I did was focus on the large globs of epoxy. Taking a hobby knife, I gently chipped away at them until after about a day of work, they were mainly gone. A word of caution here: if you ever do this, wear eye protection. I wear glasses and I still managed to get a tiny piece of epoxy in my eye. It hurt for almost a week, and it could have been much worse.

Despite my best efforts, while chipping away the epoxy, I tore the top layer of the body tube away in a couple of places. I decided that this was not critical, as I could fill it in with Elmer's wood filler. As it turns out, I was to use quite a bit of filler on the model, but more on that later.

Next I contacted Aerotech and ordered a new fin and new decals. These aren't cheap, but if I could get this bird flying it would still be a great value, so I went for it. While waiting for them to arrive, I began the long (and I do mean LONG) task of stripping down the body tubes.

It was obvious that the model had been painted and then flown a while and then repainted over the original paint. The decals had been masked off for the second painting. Since it had been sitting in storage for a number of years, all of the paint was coming off in various places. Painting over it again was not an option.

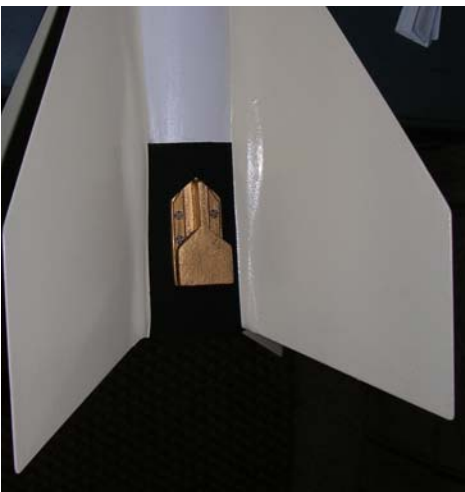


I started by pulling off the old decals. These would be replaced by the new ones I had just ordered. I also popped the antenna pods off of the nose and set them aside for later. I then started sanding the tubes. This process didn't go as smoothly as I would have liked. In places the paint flaked off with barely a touch, while in other places it clung to the tubes like a dog that had just stolen the Thanksgiving turkey. In addition the two coats behaved differently in different areas. It became clear that the best I was going to be able to hope for was to get most of it off, and then smooth it out with my old friend the Elmer's wood filler. This process took days to get a half-way decent finish. Finally I decided

that it was good enough...for a start.

The fin and decals arrived during this ordeal, and so I turned my attention to installing the new fin. As you may know, Aerotech uses a through the wall mounting technique that joins the fin root to the motor mount inside the main body tube. The fin that was gone had snapped off flush to the tube. The root tab was still firmly epoxied in place on the mount, and I had no way of removing it without destroying the whole aft end of the model. I decided to work around the problem. I snapped the tab off of the new fin (a weird feeling, considering how much it had cost) and sanded it flush. I then took my Dremel tool and drilled tiny holes along the root edge of the fin and matching holes along the tab on the model. I took some heavy duty paper clips and cut two inch lengths out of them. I then inserted the clips into the tab and applied epoxy. Then I placed the new fin on the other end of the paper clip prongs and epoxied it on. The result was a sort of rebar effect that ended up being quite strong.

I had not ordered new scale launch lugs because I decided to build my own out of basswood. I took my one damaged lug and used it to make templates for the new ones. It took a little work, but pretty soon I had a couple of lugs that looked close to the originals.



Then it was back to more sanding, filling, sanding, filling, etc....The area around the fins was particularly difficult, and I actually had to mold parts of it out of the filler due to parts of the body tube being damaged by bits of old epoxy. Finally I got to the point where I thought it was time to hit the model with a coat of primer to see how close I was. As it turned out, I did this about three or four times because each time I did it, I found new areas that needed to be worked on. Eventually, I pronounced it "good enough" and moved on to painting.

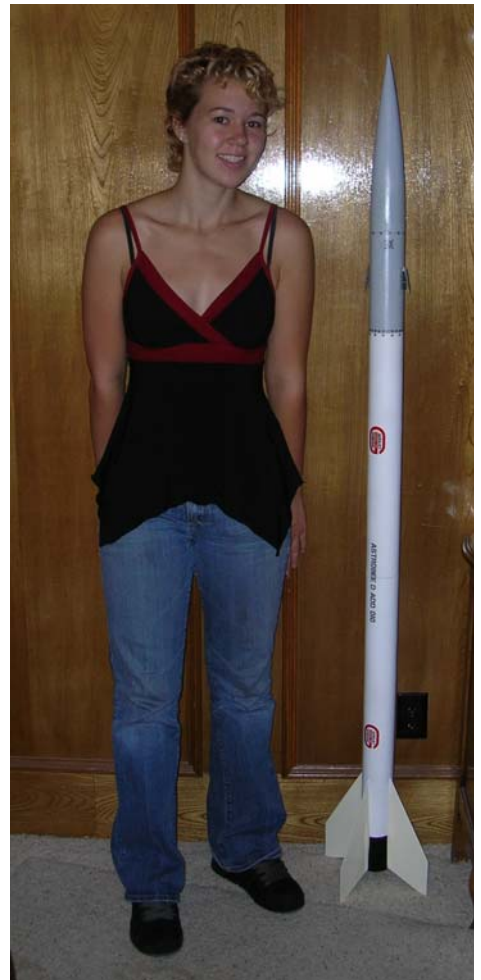
The paint scheme of the model uses six colors; tan, white, gray, black, silver and gold. The silver and gold (antenna pods and scale lugs) are the easiest to work with since you simply paint those parts before putting them on the model. As far as the main model goes, I hit the whole thing with white first. Then I masked off the fins to paint them tan. Had I been building the kit like it was meant to be, this would have been easier, since you simply paint the fins before putting them on the model. That wasn't an option now, but it actually went pretty well. Then I masked off the black section by the fins. Again, had I been building the kit for the first time, this step would have been done before the fins were applied. However, it wasn't too difficult. I then masked off the gray nose section and painted it. The last thing was to apply those antenna pods and scale launch lugs. They went on without a hitch.

The decals are the peel and stick type that I really don't care for, but as it turns out they went on well. I only hope they stay on well. I hit them with a pretty good coat of clear to make sure. The final step was to put a small "BB" on the model in honor of the original owner. Since this was obviously a rocket he loved enough to rebuild and paint several times, I felt it was fitting that he still have some

sort of ownership of it. I then stood back and looked at the results. It looked....well, darn good, actually.

After the months of work and blood sweat and tears I've asked myself if it was worth it and if I would I do it again. I think, over all, it was definitely worth it. A proud model is once again ready to take to the sky. I don't think if I had known how hard it was going to be that I would have tackled it, but seeing the results I think I would do it again...maybe. I'm most proud of the fact that a sort of legacy to a former DARS member remains. I'm glad I could be a part of that.

Photos by Stuart Powley or his daughter, Alisha, pictured with the finished rocket. Stunning! Yep, both! (Editor: James Gartrell)



OUTREACH BONANZA!

By George “The Other” Sprague

If there is one thing that DARS is known for it is its outreach program. And September has proven to be a busy, busy month for such activities.

First up, on Saturday September 7, Troop 520 out of Cedar Hill, headed by DARS member Neil Tarasoff, brought out 16 Boy Scouts to earn their Space Exploration merit badge. The day began with the build session conducted by myself, and thanks to a very generous contribution from Estes we had an intricate rocket kit to build: the new Estes Eggscaliber. This is an egg lofter and the egg capsule comes down on a separate parachute. It can fly on a variety of motors, from C to E. Neil wisely chose the D motors. Hmm, the contribution of motors from Estes may have had a small impact on the selection! Yes, my rocketeer friends, Estes contributed both motors and kits for this outreach.

I conducted a good portion of the Space Exploration merit badge requirements while allowing the glue to set. James Gartrell, El Supremo editor of the DARS newsletter, came

by and displayed some of his rockets and took some pics. After a pizza break the rockets were finished and we were off to Mountain View for the launch. The scouts, especially those who had never launched rockets, had a terrific time launching, and sometimes scrambling eggs.

Saturday September 15 was dual outreach launch day. First was the Little Elm Rocket Roundup, with 47 kids treated to launch a la DARS by Jack & Suzy Sprague, Sam Barone and Richard Dover. The launch went smoothly and all the kids had a fabulous time, as well as the proud parents. This has become an annual event, and the Little Elm group is well organized and the kids super well behaved!

While all of this was happening I was at Frisco where the McKinney YMCA joined the DARS launch with 116 kids to fly rockets. We were launching three at a time to get things moving along, and sometimes five at a time! The kids and parents got a kick from the handful of F and G

rocket flights. I had to leave early due to work, but Tim Sapp took over and finished up another great outreach launch with the McKinney group. They have launched before and it too has become an annual event.

Thanks to Estes for their contribution and to all the DARS members who continue to support the outreach program!



Upper right—Neil Tarasoff provides some timely eggstructions to a young Scout. Photo by James Gartrell.

Below left—OK, now! Eggsactly who's building these things! Photo by Neil Tarasoff.

Below right—DARS Outreach Coordinator, George Sprague, shows how to get the “pointy??” end up on the launch pad. Photo by Jorge Medina.



The 3rd Annual Fall Classic By Gary Briggs

Planning for this year's Fall Classic started in July. From previous years experience we knew that earlier was better, especially when working with multiple suppliers. I approached Don Magness (The Squirrel Works) and John Dyer (Red River Rocketry) at the July Frisco launch, and they offered to participate. James Gartrell joined the event planning team and soon began making requests to other suppliers.

In August I got back in touch with Loretta Hawkins and Hawks Hobby was on board for the 2nd year in a row. John Dyer returned from NSL with some MPC Kits from FlisKits that he promptly donated to the event. James started getting replies to his many requests and so Red Arrow and Pemberton Technologies were added to the sponsor list. Moving into September, Mercury Engineering came on board, rounding out our prizes for the event.

Meanwhile, I built out a 3rd rocket stand, giving us the capability to hold up to 70 rockets. After our experience in the wind at NSL, we determined that stands were an invaluable addition to the Classic tradition. As we had filled these racks at last year's event (50 rockets), I was hopeful that we could go even bigger this year.

The final logistics for the event were set at the September club meeting. We had all of our prizes in hand and we had flyers posted in several local hobby shops

promoting the event. Doug Sams volunteered to pick up the tables from Rags and bring them to the event along with his shade. I had the stands and all paperwork for the event and everything appeared ready to go with 3 weeks left. The following week, I discovered a voice mail from Don telling me that the Windom field was still largely covered in un-harvested corn, but we had the option of moving to McGregor. I called Don back and we discussed the situation briefly and decided to go ahead with the change of venue. I knew this had the probability of reducing the number of local participants, but I was hopeful that we might pick up some other participants from the south Texas clubs to compensate for anyone we might lose from the north.

It turned out to be a beautiful weekend for a rocket launch. Temperatures were in the low 90's, skies were clear, and the winds were generally low. The only negative on the weekend would be a ragweed pollen number somewhere over a zillion grains per cubic meter of air. The field had its very own private supply of ragweed with an entire space dedicated to it in the recovery area. Several folks returned from the recovery area, with watery eyes, congestion, sneezing, and an occasional round of hives.

We started distributing the prizes via a contestant drawing, entering one entry for each rocket entered. The prizes

distributed in this way included the 3 MPC ASP-1 kits (original classics) from FlisKits as well as the new Estes Interceptor from Red Arrow Hobbies, and a Mutant Daddy from Mercury Engineering. The break out was as follows:

Sam Barone – MPC ASP-1

Mike McFadden – MPC ASP-1

James Gartrell – MPC ASP-1

Gary Briggs – Estes Interceptor

James Gartrell – Mutant Daddy (James offered to give the Mutant Daddy to the next name drawn, as long as they would write an article for the newsletter, and Mike McFadden ended up getting the job and the kit.)

The 60's category was relatively light this year with only 6 models. James Gartrell took home the 2 Pemberton Technologies kits (Little Bucky Jones and the Space Ark Jr.) with his excellent example of a Mars Snooper, painted to match the 1966 catalog, with which it was displayed. Second went to my Astron Avenger, and third went to John Dyer's also excellent Mars Snooper. James ended up giving the prize to someone else, again, but I don't know who the lucky person was.

In the 70's there were 9 models, and Stuart Powley took home the 3 kits from The Squirrel Works (X-RV, Gremlin, and Calisto) for his excellent example of a A-

(Continued on page 6)



(Continued from page 5)

20 Demon. James Gartrell's 2-stage Cherokee D was 2nd and Sam Barone's Goblin, complete with a picture of a much younger Sam, took 3rd.

In the 80's category, it wasn't even close as James Gartrell took the top two places out of the 5 models displayed. The first place model was a Torellian Invader and 2nd was an Orion Starfighter. Stuart Powley was the recipient of 3rd place with his AAA HVTV model. His wife Laurie ended up with the first place prize, a Red River Rocketry P-Chuter Xtreme under similar conditions that James made with Mike McFadden.

The open category was the most hotly contested with 12 models competing for the first place prize of a Red Arrow Hobbies body tube assortment and an Estes Nova Payloader. It came down to a 3-way tie for 1st place that was settled based on order of appearance. Doug Sams 2.3X upscale Astron Avenger took home the prize with Stuart Powley's Vector V and James Gartrell's Hawks Hobby Super Sprite rounding out the positions.

Best of Show went to Mark Hawkins and his pre-production Super Orbital Transport. Just before prizes were announced, Mark flew this rocket for a perfect flight, drawing the only round of applause heard during the day. Not wanting to take home his own kit, the just released Super Solar Sailer went up for a drawing between everyone who got best in show votes. In the end James Gartrell gained another Hawks Hobby rocket to add to his collection.

Although the number of participants was a bit down this year, the quality of the modeling was improved over previous years. I want to personally thank James for all his support in putting this year's event together. Also, thanks to Doug Sams for getting the tables and shade to McGregor and for hanging out at the stand all day. Thanks again to Suzy Sprague for putting the names on the certificates this year. A big thank you goes out to the sponsors who made this an enjoyable event for all who participated. I had a great time and I hope those who competed or just showed up to stare enjoyed it as well.

Next year's event is already being planned. There are some changes being discussed, including the combining of the 60's and 70's categories as well as the addition of a theme based category (think starships, NASA rockets, Sci-Fi, etc.). If you have ideas for things you would like to see at the Classic next year, please email me:
gary.a.briggs@sbcglobal.net.



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DARS Officers

DID YOU KNOW?

John Dyer is giving away a limited edition, serial numbered kit as a bonus with larger orders (\$50 or more, I think) for a limited time. Better visit the Red River Rocketry site and put in your order fast! These won't last long, as the Free-B is a fantastic rocket!

Also, Hawks Hobby just released their Super Orbital Transport just in time for Holiday orders. If you were lucky enough to see it fly at the last McGregor launch, you know you need to get one of these. Awesome!

- | | |
|--------------------|---------------|
| President | Don Magness |
| Vice President | Royce Frankum |
| Treasurer | Cheri Scholes |
| Secretary | Terri Magness |
| NAR Senior Advisor | Doug Sams |

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.

Meetings are held in Plano, TX at:

Plano Late Night Bingo
 1805 Ave K (18th and K St.)
 Plano, TX 75074

Exit off Hwy 75 to East Plano Parkway (just north of George Bush Turnpike—Hwy 190) and go east, turn left on K St., and turn right into the shopping center just north of 18th St.



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

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