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Dallas Area Rocket Society ("DARS")

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SHROUDLINES

A Dallas Area Rocket Society Production

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A Newsletter of the Dallas Area Rocket Society



DARS
NAR Section #308
Nov/Dec
2003

Volume 12, Issue 6

Dallas Area Rocket Society ("DARS")

DARS Elects New Officers for 2004

By James Gartrell

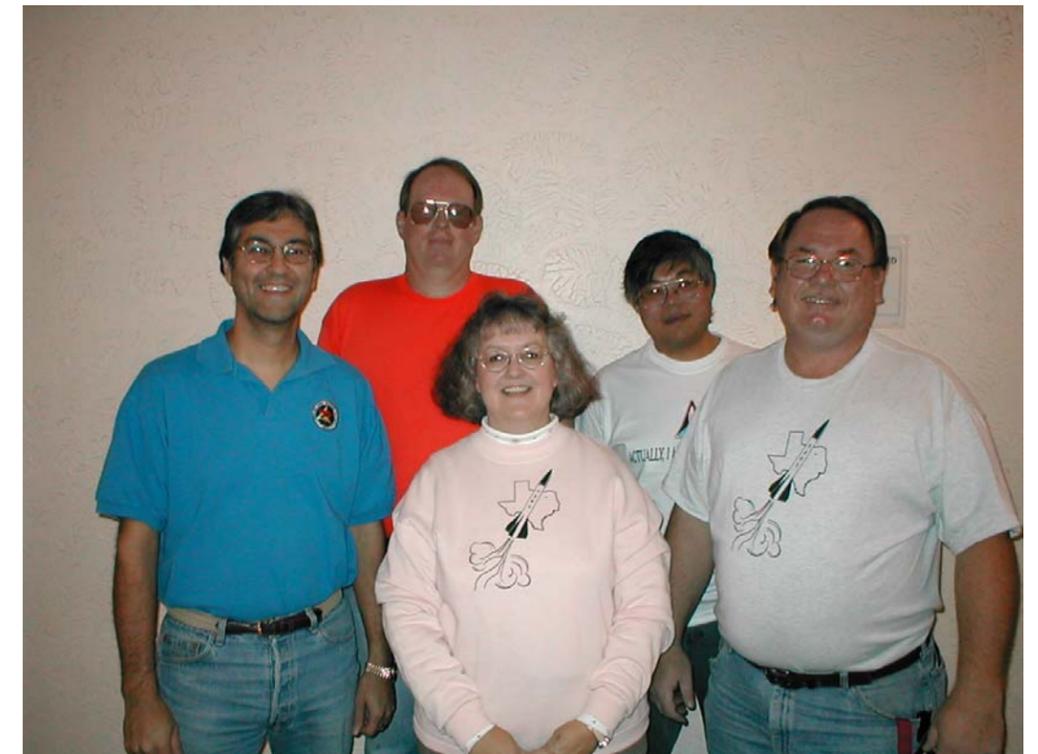
Happy New Year! Hard to believe it's been a year since we elected new officers. If you weren't able to make it to this year's election, be sure to congratulate our new officers and offer your support for the coming year. Your support will be critical to their success. Also, be sure to give a pat on the back to the outgoing officers for a job well done. We certainly want to thank them for their efforts during 2003. It was a year that started off with a lot of doubts for continuation of the hobby, but ended with a spectacular program about our hobby and the promise of a more secure new year.



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

Special points of interest:

- New officers for 2004!
- Check out THE PAYLOAD BAY to find new members.
- DARS is the 2002-2003 NAR Section of the Year. Find out the details in THE CENTER OF PRESSURE.
- Expanding on an earlier article, George Sprague gives some exceptional insights on the duties of the RSO volunteer.
- DARS gears up for the Team America Rocketry Challenge ("TARC") 2004.
- Per Ron DeJulius' request, I've tried to provide a list of vendors used by DARS members—see Page 6.



President, Rags Fehrenbach (front right) Vice President, Dave Schultz (back left—yep, that's a smile!)
Treasurer, Suzy Sprague (front middle) Secretary, Bill Gee (back right) Sr. Advisor, Tony Huet (front left)

Photo by James Gartrell.

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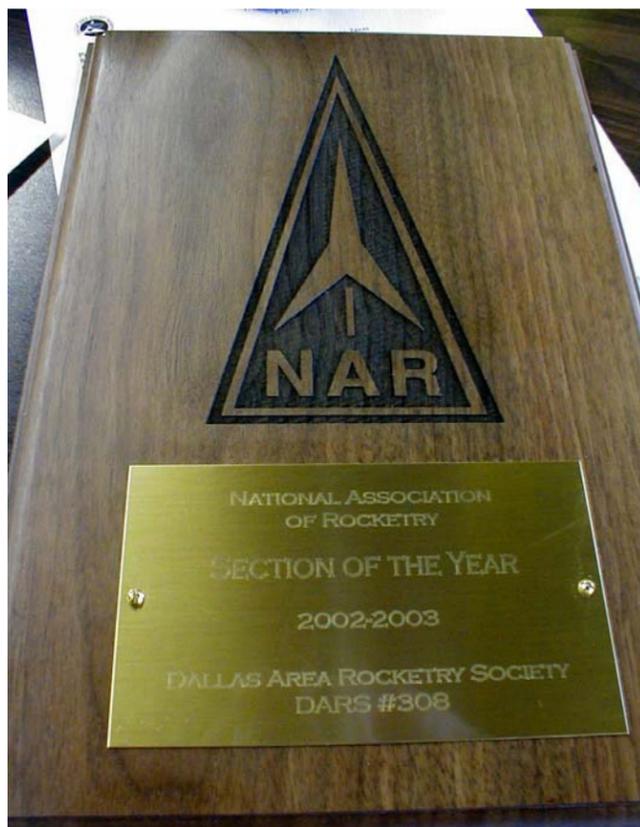
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As Rags noted at the December 6 meeting, "When we started the year, we were unsure if we'd be able to fly our rockets. Now, we've found ways to operate within the rules and folks are flying whatever they want." Whew! And just in time, too. Looks like Aerotech is finally producing motors with some regularity as well. Yay! Although, the high power flyers didn't seem to miss them too much, with Pro-38 and Animal Motor Works stepping in to fill in where they left off. I'm sure Aerotech will find that some significant competition has developed during their down time. So, I think we can all look forward to an outstanding year for 2004, and we have an excellent lineup of officers to lead the way. Congratulations!!

THE CENTER OF PRESSURE

By James Gartrell

Last issue, I noted that DARS achieved a very prestigious honor. Well, if you haven't heard by now, I thought this would be an appropriate time and place to fill you in. DARS won the NAR Section of the Year award for the 2002-2003 contest year. Wow! Words can't really convey what it took to win this award, but all the folks whose hard work and dedication over the course of the year certainly know what it took. And I find it especially rewarding that, at a national level, those folks have been recognized. No, their names aren't on the plaque, but we all know who they are. So, when you see them, shake their hands or pat them on the back and thank them for a job well done.



Here it is! THE Award! Photo by Richard Benavides.

While there were a number of factors considered in assigning the award, the principal reason we won, as I understand it, is the extraordinary Outreach program conducted by DARS. And, of course, we certainly wouldn't have gotten the award if Doug Sams hadn't sent the application in to NAR. Thanks, Doug!!

There were over fifty Outreach events involving about 1500 kids in which DARS members participated over the course of the year. That's impressive! Kudos to George Sprague and Buzz McDermott, who ran the Outreach program during the contest period, and to Chuck Gibke, Jack and Suzy Sprague, Tim and Beth Sapp, Rags and Shea Fehrenbach, Doug Sams, Scott Shaw, Bill Gee, John Bittner, Alex Huss, Bob Wilson, Richard Benavides, Robert Richer and all the other volunteers who assisted. I even assisted in a few of these, and honestly, they are one of the most rewarding aspects of our hobby.

In addition, under Buzz McDermott's leadership, DARS members assisted seventeen TARC teams and arranged a number of dedicated launches to allow team participants to launch their rockets. Key contributors to these efforts were Chuck Gibke, Scott Shaw, Dave Schaefer, Brad Gibbons, and myself.

Now, on top of all that activity, add the fact that DARS hosted the 2002 NARAM. Certainly, this was the icing on the cake! Hosting a national event of this magnitude is no small feat, but Scott and Nettie Hunsicker and their team, Bill Gee, Jack and Suzy Sprague, Bob Wilson and Dave Schultz, rolled up their sleeves and worked many long hard hours in the Texas heat to pull off a superbly run event that the club can be proud of for years to come.

Other elements which helped to win the award included a large number of active NAR members in the club, participation by eleven DARS members in sanctioned contest events, our website, and our routine club meetings, launches, and newsletter.

I hope you are as impressed as I am. While I probably left a few people out, unintentionally (and please accept my apologies now), those achievements were accomplished by a relatively small portion of the club's membership. Imagine what could be done with assistance from a larger portion of the membership. Take some time out this year and volunteer. I know it's a sacrifice, but it really is appreciated, and you'll have fun.

DID YOU KNOW?

Neil Tarasoff arranged for Kinko's to print the last issue of Shroudlines in color. That was nice! Way to go, Neil! Be sure to say thanks, next time you see him.

A list was recently put up on Ye Olde Rocket Shoppe's website that provides the nose cones used for a large number of Estes' kits. John Brohm compiled the list. If you can add to the list, be sure to let them know on the website. It is a fantastic resource for cloning rockets. A similar list for body tubes is targeted to be added soon, so check back later.

SpaceShipOne, Burt Rutan's rocket, was launched December 17, 2003, from an altitude of 48,000 feet attained by its mother ship, the White Knight, and then rocketed up on its own power to 68,000 feet and achieving Mach 1.2 (930 mph). Gliding back to its initial launch site, SpaceShipOne retracted a landing gear upon touchdown causing the rocket to veer off the runway. No one was hurt and damage was minimal. Very exciting folks! Armadillo Aerospace, John Carmack's team, is probably abuzz after hearing of this.

Have you seen pictures of the new Estes Outlander? See photo at right. The kit is supposed to be out in December, 2003. Watch for it! Looks like a "new age" Mars Lander, huh? Can't wait to get mine. They also have another new two stage rocket out called the Renegade that is very cool, too. Hobby Lobby 1/2 price sale, take me away!! That is, if I'm lucky—I never saw any of the Orbital Transport reissues at Hobby Lobby, although someone told me they saw one at the one by them. Naturally, it didn't last long, though. Whomever it was told me they bought it. I doubt that the Outlanders will last long enough for the 1/2 price sales either. Oh well!



THE PAYLOAD BAY

The list of members is growing! There were more in December, but I'll list them in the next issue. Look these members up at the next meeting and say hello! They probably would love to hear about your experiences.

I personally talked with Royce Frankum. He has been flying rockets for quite a while. He showed up at the Discovery Program get together with a vintage Astron Scrambler and a working Estes Cineroc, and launched both of them! You know he loves rockets!! And he has exceptional taste in rockets. :-)

Below are the new members:

- Marcus Pelt
- Royce Frankum

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.

The club 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.

Vendors

By James Gartrell

Ron DeJulius a while back asked to know what vendors DARS members like to use. I asked DARS members to send me their list, but got no response. So, I decided to make a list based upon my observations and talking with various DARS members. Let me know if I've missed any, and I'll be glad to update the list for future publications. Since it would take several pages to cover all of the vendors products, I've provided a very brief statement that summarizes what I believe is their specialty.

Local

- A-1 Hobby (Mesquite)—Estes rockets and motors. DARS member discount.
- Hobby Lobby (All over the metroplex)—1/2 price sales; mostly Estes, Quest and Custom kits, but I've also seen them carry Holverson Designs and Aerotech kits; small to mid-power motors.
- HobbyTown USA (Dallas and Plano)—small to high-power kits and parts; small to mid-power motors; 10% DARS member discount and expert staff (Jim Cook is exceptional and a former DARS member).
- Mike's Hobby Shop Superstore (Carrollton)—similar to Wild Bill's, except they have a higher level of expert service in my opinion.
- Sapp'n Your Time (Tawakoni)—DARS member Tim Sapp supplies all your hybrid motor needs.
- Squirrel-Works (Irving)—DARS member Don Magness produces some really unique model rocket kits at very reliable prices. Naturally, he provides a discount to DARS members. He is also on the internet.
- Texas R-C Modelers (Plano)—read the HobbyTown USA review.
- West Marine, Inc. (Dallas)—West Systems epoxy.
- Wild Bill's Hobby Shop (Irving)—similar to HobbyTown and Texas R-C, except I don't think they have much of a selection in the mid/high-power arena or have the same level of expert service, and I'm not sure of discount—ask.

Internet

- Aerospace Specialty Products—model rocket contest materials and kits.
- Animal Motor Works, Cesaroni, Ellis Mountain Rocket Works—high power rocket motors and motor hardware.
- Apogee Components—RockSim, model rockets, motors and building supplies, educational materials, and of course the 1/70th scale Saturns.
- ARA Press—Jack Hagerty's [Spaceship Handbook](#).
- Art Applewhite Rockets—saucers and micro models. Your source for micro to high power saucers. Art has a terrific internet site and provides a discount to DARS members.
- Balsa Machining Service ("BMS")—THE MAN for everything you need to clone your favorite old Estes rocket. Also makes custom laser-cut centering rings and fins for mid/high-power rockets and offers some really unique kits. Be sure to check out his laser-cut fin set for cloning the Estes Orbital Transport—now that's a time saver.
- DG&A—high power rocket kits and parts. They produce the Armageddon—need I say more. I believe Danny provides a discount to DARS members.
- Flis Kits—unique line of rocket kits including the Deuces Wild everyone's been raving about.
- Hobbyline—small to high power rocket kits and components, small to mid-power motors, and all you usually find in a typical nicely stocked hobby store.
- Launch Pad—exceptional scale mid-power rocket kits.
- LOC/Precision—mid to high power rocket kits and components.
- Magnum Rockets—mid to high power rocket kits, components, electronics, motors and motor hardware.
- Pratt Hobbies—mid to high power rocket components, hybrid motor equipment, and outreach kits like the Super Six.
- Public Missiles, Ltd.—mid to high power rocket kits, components, and electronics—featuring the CPR (close proximity recovery) system.
- QuickBurst—igniters.
- Saturn Press—Peter Alway's [Rockets of the World](#), [Scale Bash](#), etc.
- Semroc Astronautics Corporation—Recently entering the cloning market, providing kits and parts for your favorite Centuri clone. Yes, Carl has the Laser-X kitted. Woohoo!
- Tango Papa—decals and Mars Lander kits.
- Top Flight Recovery—parachutes and streamers.
- Totally Tubular—those hard to find tubes and other supplies. Slow delivery.

RSO - Where are You?

By George "The Other" Sprague

The rockets are on the pads. The sky is clear. It's time to launch! And the person that gives us the countdown is the Range Safety Officer (RSO). Would you like to volunteer for this fun position at your next launch? It's not hard at all, and loads of fun.

Lets take a look at a few ideas that can make this important duty run smoothly. To begin with, the fliers can contribute greatly by printing legibly the required information on their flight cards. This way the RSO doesn't have to hold a meeting with other range personnel to try to figure out what the card says!

We know to check to make sure the sky is clear before launching. Also, look at the pads and make sure no one is close to the rocket being launched.



NARAM 45—Vern Estes at launch control, with Scott Hunsicker looking on. Probably a lot of RSOs dream to have him there (uh, sorry Scott, I meant Vern ;-) Photo-Chris Taylor-Naram Live website.

Having a 3-2-1 countdown for model rockets, instead of 5-4-3-2-1 will speed up the process. If a high power bird is carrying altimeters, try to get it in the air as soon as feasible; battery power is a concern to the flier! Work with the pad manager to insure to steady loading and launching of rockets, always with safety in mind. Move from model to high power and mid-power in an orderly fashion. Clear as many pads as possible before sending fliers out to the pads. Always look to see if the recovery device has deployed and make sure the rocket, no matter what size, is not going to drift, or zing, into the crowd. Heads up!

An example of why it is so important to fill out that launch card, giving the specs on your rocket. ;-) Buzz McDermott with his "scratch built from stuff around the house" rocket. Very cool!! Photo by James Gartrell.



Hey, Doug Sams! You could probably fill that flight card out a little easier if you wrote with your hands. ;-) Photo by James Gartrell.



Ink pen

And lastly, save routine announcements for when the pads are fairly empty. Remember, those fliers are raring to go! So, grab that mike, give us a countdown and help make the next launch a smooth one!

December Auction

By James Gartrell

Well, for those that missed the final meeting of 2003, I thought I'd fill you in on what you missed afterwards—the auction. Just so you know, Scott Hunsicker, Buzz McDermott, Richard Benavides, John Bittner, and Don Magness all brought some spectacular items for the auction. After all, you might be able to talk them into letting go of some of the leftovers at after-Christmas special prices. ;-)

"Put your hands up and step away from the motors!" I'm not exactly sure what Doug Sams is doing here. He's either blessing Scott Hunsicker's motor auction or waving everyone else away—"They're mine, all mine!" Photo by James Gartrell



Below—Buzz McDermott's wide array of tubes, cones and much more. Scott Shaw explains to Doug Sams why he should have first rights on one of the kits. Er, well, maybe something like that. ;-)



Left—John Bittner poses with some new additions to his regular "for sale" items. Bottom—Richard Benavides and Bill Gee discuss many varied opportunities for a very nice looking nose cone. Behind, on the floor, are some of the goodies Richard brought to the auction. Photos by James Gartrell.



Scott Hunsicker added a whole new meaning to the words "motor pool" with an impressive selection of OOP rocket motors. Just about every purchase made, Scott would remind the buyer, "Uh, remember you can't use these at a DARS launch." These were long ago OOP motors. He had just about every type of old motor you could imagine, AVI, Cox, FSI, MPC, certainly some I knew very little about. You know, legendary motors, the ones you sometimes hear about spoken in somewhat reverent tones. I was most interested in the Estes motors, though. Ooh! Aah! He had some nice ones, too. Plenty of those old blue tubes and blue diamond boxes were available. Yeah, baby!

Buzz McDermott brought out more tubes, couplers and nose cones than I have in my entire build box. He had a whole slew of two-piece Nike Smoke cones and the fin cans and tubes to go with them, and just about anything else you might want in the model to mid-power range. I was lucky enough to pick up four 24mm black shaft tubes and he threw in the remaining piece of 18mm. Wow! Talk about legendary, my contest skills just went up a notch. Actually, I only bought two of the black shaft tubes, thinking someone else might want some too, but when I went back a little while later, they were still there. Well, I couldn't just let them stay in that box. I mean, that just wouldn't be right. ;-)

Richard Benavides got some of my money too for a real good deal on a Estes Super Big Bertha and some really nice nose cones. Thanks, Richard! All I could do was drool over the Estes Saturn V LE release and Mercury Redstone LB7 kits he brought. Included with them were some really nice after market decals to expand your build possibilities for the kits. Very nice, Richard!

Don and Terri Magness brought plenty of Squirrel Works kits, too. It's amazing how they've trained those squirrels to strategically place those kits in front of people. Oh, well, maybe they bought those kits. Sorry, squirrels, I didn't mean to wrongly accuse you. The moose made me do it!

Last, but certainly not least, John Bittner was there with some of the usual and some unusual, too. Check out the photo. The contraption to his right is some kind of major hydraulic camera tripod that would make one of the most versatile and easy to set up launch pads I have ever seen. Surprisingly, it is extremely light, too. Check it out if you get the chance. Very cool! The entire auction was cool!

TARC 2004

By James Gartrell

The Team America Rocketry Challenge ("TARC") for 2004 has begun. Registration is completed and forty-nine states are represented by 590 teams, fifty-seven of which are from the Great State of Texas. Woohoo! Registration was down across the nation, 873 teams last year, and in Texas, 95 teams; however, with the experience gained from last year, more teams are expected to qualify this year. DARS members who have committed to assist should be even more proactive this year and stay more in contact with the schools they will assist. As Trip Barber, national coordinator for TARC 2004, noted in a recent email to mentors, "Please be pro-active and reach out to make contact with the teams, don't wait for them to contact you. They need you, even if they do not yet know it." Good advice for us to follow. Even though rules changes this year will help their odds, by eliminating the use of composite motors in the upper stage, teams will need to be reminded of the deadlines and encouraged to get their models ready for testing to improve chances for developing a rocket with proven and consistent performance. Let's do everything we can to assure a Texas team wins this one! Well, OK Bob Melton, or one from the six Oklahoma teams. ;-)

Buzz McDermott will coordinate activities for the TARC teams in the North Texas area, at Trip Barber's request. When I asked him what my assignments were, he said, "I don't make assignments. I just ask a lot of questions and take notes." I think that means we just need to keep him periodically apprised of our activities. Based upon how well he handled the task last year, I'm sure he'll be certain we are well informed and motivated. So, I'll just say thanks in advance, Buzz.

Oh, and by the way. On a related topic, be on the lookout for a flying field close by. If you find one, get a telephone number or some means of contacting the owner/agent and let Rags or George Sprague know. They are our official committee set up to locate a field to supplement the Rockwall site, since we seem to have problems keeping a launch schedule there, but all of us can lend a hand. Let's do it! We need to be sure our TARC teams have an adequate field so they can fly all those test rockets.

Here are our schools: A.W. Brown - Fellowship Charter School (Dallas); Talented and Gifted Magnet High School (Dallas); Denton High School; Paschal High School (Fort Worth); North Garland High School; Howe High School; Gene Pike Middle School (Justin); Richland High School; Richardson High School; Rockwall High School; and Weatherford High School. Whew! I think that's it. Buzz will let us know if I've missed any. OK! Let Buzz know which school(s) you'll contact and let's get to work.

Photos from the 2003 TARC team testing efforts: Below—The thrill of victory! A successful flight with two unbroken eggs. Yeah! Photo by James Gartrell.

Right—The agony of defeat. Well, based upon the girl's smiles, they don't look too defeated. After all, isn't science all about trial and error? That's the spirit! Wait a minute. Isn't that Brad Gibbon's rocket standing next to them? ;-)

