



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

Special points of interest:

- A lot's going on in the world of hobby rocketry. Find out the latest on page 2.
- Get a leg up just in time to plan for the next Extreme Black Powder contest. Doug Sams shows us how he built his Super Better Bertha. Awesome! See page 3.
- DARS Outreach Coordinator, George Sprague, is in the Center of Pressure. Page 4.
- DARS members got a special treat at the last meeting. Cineroc movies! Yeehaw!! Check it out, page 5.
- Turn to page 6 to catch up on DARS events. You'll want to update your calendar so you don't miss out!

Inside this issue:

Rocket News	2
Super Better Bertha: Nine Motor Cluster	3
The Center of Pressure	4
Home Movies	5
DARS Events	6
Did You Know?	7
DARS Officers	7



The above scan of my 1966 Estes catalog cover might have been, for many of us, our early vision of traveling into space. We've come a long way since then. Now, the City of Dallas is in for a great treat this year. The Dallas Chapter of the National Space Society ("NSS") is hosting their annual conference right here. NASA is the presenting sponsor. DARS is participating as an Affiliate sponsor with several DARS members assisting at the conference. Club member Mark Fulmer is leading the way for DARS. Speakers and guests for the event include just about anybody notable

in the world of space development, including Hugh Downs who is Chairman of the NSS board of governors, astronaut Buzz Aldrin, and even John Carmack of Armadillo Aerospace just to name a few. John will be bringing one of his VTOL vehicles, like the one he flew in the most recent X-prize cup competition, to the event, too. That is way cool by itself!

The price of the event is very affordable for almost four days of activities that includes the latest information about the development of space. Don't miss it!! Visit <http://isdc.nss.org/2007/> to register.

Rocket News

By James Gartrell

Surfing the net, I often find a lot of rocket news. I thought I'd pass along some of what I found. Not all of the info came from the net, but it's still news!

Locally, there's some really hot news. DARS has acquired a new rocket field, thanks to the efforts of Tim Sapp and others. It is located in Frisco and is a really nice G-capable field. This field will be excellent for handling outreaches! The details of the field can be located on the DARS website. Check it out!

For more local news, John Dyer just released his newest kit at NARCON, the Extreme P-Chuter. John gave me one to beta test for him. I haven't finished building it yet, but to say it is a really nice kit is downplaying the quality of this kit. It is tremendous!! Imagine his regular P-Chuter up scaled to fly on E-G motors. Woowee!! The motor mount is awesome, and construction allows the TTW fins to position themselves in a way as to become part of the motor

mount. A baffle kit is also included, minimizing the need for recovery wadding. The parachute is 1st class, too, made from ripstop nylon with metal grommets that secure the shroudlines. Very cool!! Probably not something John would ever suggest, but I'm guessing it won't take long before you'll see folks making the modifications to fly it on H or I motors. The quality of the kit is that good! Check it out on his website.

Newton's 3rd Rocketry, a vendor out of Oregon, has some new hotwire canisters. If you're into electronic staging or dual deployment, you should check these out. Their website address is: www.newtons3rdrocketry.com

Hey, if you haven't visited the Rocketry Planet, they have some great news, some of which I've used to complete this article. As a supplement to Rocketry Online, they really are a good source for the latest news in rocketry. I noticed one article there noting that the NAR has expanded its

OOP motor testing. NAR members can now apply to participate in a continuing program to test the OOP motors. Don't miss this opportunity!

If you haven't visited Semroc's site lately, you should. He announced the release of his three newest kits at NARCON, retro repros of two old Centuri kits, Defender and Centurion, and Estes' old K-59 SPEV. The Centurion is just a great classic rocket, reminiscent of a sleeker Big Bertha, but the Defender and SPEV are very unique rockets with lots of transitions that invoke the lines of the Saturn rockets.

Right—A scan from my 1967 Centuri catalog reveals the classic lines of the Centuri Defender.

Below—Here's some news you won't find just anywhere! Stuart Powley's upscale clone of the Estes Scamp landed upright at the 11/06 DARS Turkey Shoot. Way cool! Photo by Stuart Powley.



The New
DEFENDER
SPACE PROBE

3 Engine
POWER !!

- HI-ALTITUDE PAYLOAD FLIGHTS
- NEW AERO-SPACE DESIGN
- PARACHUTE RECOVERY
- TERRIFIC FOR DISPLAY

FUTURISTIC DESIGN

The DEFENDER represents the latest in Futuristic Aero Space Design applied to Model Rocketry. Launch your payload (up to 3 ounces); in either of two compartments to high altitudes with 3-Engine Cluster thrust. The DEFENDER is a real challenge for the experienced modeler. Kit comes complete with all parts, decals, detailed assembly instructions, and engine clustering and launch information. Engines not included. Recovers safely by large 20" two-color parachute.

Only \$3.50

Catalog No. KC-35
Shipping Wt. 16 ozs.

SPECIFICATIONS
Overall Length --21"
Body Diameter --1.64"
Net Weight ----2.0 oz.

RECOMMENDED ENGINES
A. 8-3 B. 8-4

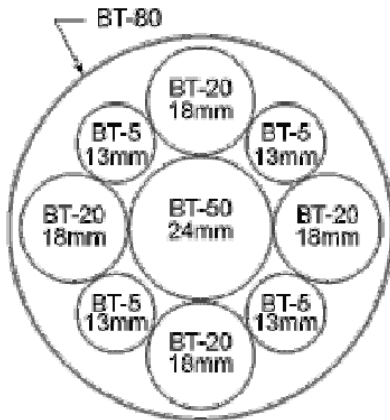
Here's another great piece of news. Ken Allen of Performance Hobbies has acquired Smokin' Rockets. As a grand opening sale, he's offering a limited number of the 7.5" Nike Smoke and Honest John kits for \$259. Wow! If you're into high power, you'd better grab one of these quick. They normally sell for close to \$400!

Super Better Bertha: Nine Motor Cluster

By Doug Sams

I've spent hours drawing cluster patterns for model and mid-power rockets, but have actually only built a few implementations. That hasn't stopped me from jumping in with both feet when the topic comes up as it frequently does on the various web forums.

Last time I waded in, it occurred to me that I should build one of the monsters instead of just talking about it. So I decided on a BT-80 (2.6") cluster of one 24mm motor, four 18mm motors and four 13mm motors. Then I realized



I could use one of my unbuilt kits instead of scratch building a new rocket.

That would reduce my unwieldy stash as well as giving me the new cluster. My Maxi Alpha III was 2.6". Could I use it? Upon further consideration, the squarish nature of the cluster called for a rocket with four fins. So the Maxi Alpha III went back into the 'round-to-it' pile and the Super Big Bertha was chosen instead.

Here's how it turned out (right photo). Needless



to say, I'm quite pleased.

Building it started with the motor mount. The tubes were glued up, then some wood strips were glued to the outside tubes. With a little sanding, they make for a perfect fit in the BT-80. Two pieces of 2-56 all-thread were epoxied into the voids between some of the tubes and a brass ring fabricated to act as motor retention. No motor blocks were used in any of the tubes. Instead, tape rings on the aft ends of the motors function as thrust rings.

Besides the motor mounts, other key modifications include splitting it apart in the middle and 1/4" launch lugs. The nosecone was glued in, and a LOC 2.6" coupler used because its added length keeps the halves aligned much



better in the presence of lateral forces. In other words, it helps keep the rocket from folding up at the joint. Instead of the balsa pieces provided as gussets for the fin roots, I applied fillets of Elmer's Fill 'N Finish, then applied a thin layer of glass over the fillets to keep cracks from showing through.

The fins came out kind of flimsy, and it was too late to glass them, so I added a couple layers of dope and tissue to them. But two of the fins, from softer balsa, remained a little flimsy. If I had it to do over again, I'd either glass them or use thicker balsa or some other stiffer wood such as birch ply.

On Saturday, March 25, 2006, at the DARS launch in McGregor, Texas, the Super Better Bertha flew with nine motors on its maiden flight, and all nine lit. The center motor was an E9-P. It was surrounded by four C6-7's and four A10-PT's. Woo-hoo! It was a great flight. When the LCO hit the button, it took off quickly and kept burning for a good while.

The 30" chute brought it down safely. It was a pleasant surprise to find that all nine motors had indeed lit. My previous best was four out of five on the Douger.

Here's a close up of the motors after the flight clearly showing they all lit. Suhweet!



The Center of Pressure By James Gartrell

Do you know George Sprague? If you don't, you should. Did you know he's a magician? As a matter of fact, he's a very good magician. So good, he makes his living as a performing magician. That's pretty cool! He's a fun guy to be around, too. After all, he is a performer. On top of that, George has run DARS' outreach efforts for the last several years. That's way cool, too!

Tirelessly, and without much recognition, he has coordinated the arrangements with hundreds of groups to further advance our hobby. Working with these groups, he has helped to teach probably thousands of

young people how to build and fly model rockets. There wasn't any magic involved either, just hard work. Hard work and a little help from people like yourself. He depends upon you to contribute a little bit of your time to help him accomplish that effort.

Times I've participated though, it's usually the same group of people that are helping. Now, I know everyone is busy. Heck, George is busy, I'm busy and all the people who help George are busy. He really could use your help. Why not take a little time and get to know George a little better. Log onto the DARS website, look on the

calendar and find out when the next event will be. Then email George (there's a link right on the website) and let him know you want to help. Honestly, it will be one of the most rewarding experiences of your life. As a matter of fact, the experience is almost magical! By the way, when you see George, shake his hand and give him a pat on the back. He's earned it!

Oh yeah, one more thing. If you ever need a good magician, you now know one to call. I'm sure George would appreciate it.



Left—A TARC participant checks the igniter on a test rocket.

Right—TARC participants pose for a photo-op just before the launch of one of their test rockets.

Bottom left—Pelham Swift captures a typical outreach photo.

Bottom right—George Sprague takes a little time out for some fun launching his own rocket at NSL 2006.

Photos by James Gartrell, unless otherwise indicated.



Home Movies

By James Gartrell

Home movies is a term that probably generates a much different vision to most younger rocketeers than it does to the older rocketeers. As such, a little history about the term is probably appropriate.

Making home videos was a big craze that probably started in a big way in the '50s. Families could purchase a relatively inexpensive home movie system that included a camera that took movies using 8mm film which could be sent for processing and then viewed at home using a projector on a white screen. You younger rocketeers should ask your grandpa about them. He would probably love to tell you all about them (snicker!).

My Dad would pull out his 8mm movie camera and take photos of the kids playing in the yard, photos at the latest party, vacation photos, or just about any excuse possible to act like Cecil B. DeMille, a big movie director in the '50s and '60s (we'll leave the history of Mr. DeMille for another day). Naturally, Dad was not a

professional, so the quality of the movie was usually very poor. Nevertheless, Dad just waited for the moment to show someone (anyone, actually) the wonders of his movie making skills. Of course, the object of his big movie usually involved us kids. Naturally, as we got older, our boyfriends or girlfriends were prime targets for viewing these movies, as Dad would entice them with some reel that showed us jumping around half naked as small children in the lawn sprinkler, or worse. From there, they could move on to the last ten years of vacations and home parties. I think you get the idea. Home movies is not a term that necessarily generates fond memories.

“What,” you ask, “does that have to do with rocketry?” Well, in the '60s the film used in the home movie cameras was radically improved with “Super8” film. This was the latest and greatest technology in home movie-making at the time, and is still available today. The technology was also useful in

rocketry, as Estes came out with the Cineroc that used the Super8 film. Finally, home movies had an object that we all loved to watch—a rocket taking off from the launch pad, floating back to Earth and landing. Woohoo! So, at the last February meeting, DARS' Mr. Cineroc, Royce Frankum, brought his movie projector and treated us all to his home movies—a whole reel full of Cineroc flights.

In addition, he also brought a DVD of video he had taken using the CVS camera, which, unlike the Cineroc films, was complete with sound. Don and Terri Magness provided popcorn, complete with movie popcorn boxes, making the whole home movie event something really spectacular.

Royce provided commentary during the movies, pointing out interesting tidbits that you might not otherwise notice. It was really quite informative, as Royce pointed out many of the do's and don'ts of video rocketry. Thanks, Royce!



Top left—Royce starts setting up the Super8 movie projector as DARS members get ready for the show.

Bottom left—Bill Gee arranges the white screen for optimal viewing pleasure. Way to go, Bill!

Top right—All systems are go, as DARS members relax, eat popcorn, and watch the numerous Cineroc flights Royce captured over the years. Notice that Doug Sams is watching the projector. What else would you expect an engineer to do? Ha Ha!

Bottom right—A couple of vintage Cineroc's, complete with the two-stage D-powered boost unit, the Omega rocket. Oh, and popcorn!



DARS Events

By James Gartrell

Alright, we're flying! With a fair amount of rain, the burn bans have been minimized. Hopefully, we can get enough rain between launches to keep it up. Last I heard, cows are back on the McGregor field again, so the field isn't as overgrown as it was. Yippee!!

Don't forget to make the club meetings. I'm not sure what Don has planned for the next few meetings, but you don't want to miss another Cineroc movie afternoon.

Stay in touch!

LAUNCH SCHEDULE

DATE	EVENT	CONTACT
4/21	Sport Launch—Frisco	Tim Sapp
4/28-29	Sport Launch—McGregor	Don Magness
5/19	Sport (YMCA) Launch—Frisco	Tim Sapp
5/26-27	Sport Launch—McGregor	Bob Wilson
6/16	Sport Launch—Frisco	Tim Sapp
6/23-24	Sport Launch—McGregor	Don Magness

OUTREACH SCHEDULE

DATE	EVENT	CONTACT
5/12	Annual Scout Show—Dallas Market Hall	George Sprague
5/20	Scout Launch—Arlington	George Sprague

OTHER EVENTS SCHEDULE

DATE	EVENT	CONTACT
1st Sat. of each month, 1pm-?	DARS Club Meetings—Plano Bingo Hall	Don Magness
5/25-28	International Space Development Conference	Mark Fulmer



FREE SHIPPING on Model Rocket Kits, Supplies and Parts!

Below, and on the next page, are ads from some of the club's most recent sponsors. Of course, Red River and Squirrel-Works contribute in some way to almost every launch, and Hobbytown provides a routine 10% discount to DARS members. Our vendors are supporting us, so please don't forget to support our vendors with your rocketry dollars.

stepping up from low power?
take your next step with us...

- balsa cones
- balsa boat tails
- laser cut parts
- slotted tubes
- kevlar® cords
- nomex® pads
- nylon chutes
- all standard**

Madcow Rocketry
put some fun in your rockets!

24338 El Toro Road Suite E-134, Laguna Woods, CA 92637
(949) 547-8847 www.madcowrocketry.com

Red River Rocketry™
FLYING MODEL ROCKETS

Rocketry Is Our Passion!

- Original Designs
- Laser Cut Fins
- Water-Slide Decals

Order Your Rocket Kits Online Today!

www.redriverrocketry.com

Tired of flying the same old rockets?
Ready to try a kit that doesn't just fly great, but looks cool too?
Then check out the selection at

THE SQUIRREL WORKS™
MODEL ROCKETRY

www.squirrel-works.com



Hawkshobby
UPSCALE CLASSICS

" Just Lookin' To Have Some FUN!!! "

www.hawkshobby.com
sales@hawkshobby.com
281-217-3217

DID YOU KNOW?

Apogee Rockets has a continuing promotion that can earn you a \$100.00 gift certificate for purchases from their site. Submit an article to their "Peak of Flight" newsletter, and if it is printed you get the gift certificate. Submit articles to: johnm@apogeerockets.com

Speaking of articles, it's easy to submit an article for the DARS newsletter too! I know you have a great rocketry story to be told, so go to the DARS website and click the "Contact" tab and you'll see a link for the newsletter. That's my email address. A simple Word file and a couple of jpeg photos are all you need. I'll even help you get that article written. Come on, what are you waiting for! Just do it!

Have you been to the Estes site lately? It's much better than it used to be, and it includes a User Forum. The User Forum is like a new Estes marketing tool. They actually want your opinion about their products. Pretty cool!! Go sign up and let your voice be heard. www.estesrockets.com

HobbyTownUSA
Dallas , TX
Best Rocket Selection
In The Metroplex

10% OFF FOR DARS !



214-987-4744
8041 Walnut Hill Ln #870
Dallas TX 75231
Next to Dave & Busters

DARS Officers

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.

Kinko's Makes



Valwood Branch at: 13940 N. Stemmons Freeway Suite A, Farmers Branch, TX 75234
Telephone (972) 406-116, Fax (972) 406-9998, www.kinkos.com

Dallas Area Rocket Society (“DARS”)

James Gartrell
1006 Canton Rd.
Cleburne, TX 76033



Permission to reprint articles is given as long as proper credit is given to author and DARS.

WWW.DARS.ORG

SHROUDLINES

A Dallas Area Rocket Society Production