SHROUDLINES

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DARS NAR Section #308 May/Jun 2003

A Newsletter of the Dallas Area Rocket Society

Volume 12, Issue 3

Dallas Area Rocket Society ("DARS")



of Rocketry ("NAR").

Special points of interest:

- Kinko's now prints our newsletter!
- TARC Update.
- Check out THE PAYLOAD BAY to find new members.
- Ed Jacoby is in THE CENTER OF PRESSURE.
- · Lots of outreach events:
 - CAP
 - Scout Show
 - Carrollton Library

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Carrollton Library

DID YOU KNOW?

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Kinko's now prints our newsletter! were ready to print the newsletter for us again, free I m.

Scott and Nettie were ready to print the newsletter for us again, free I might add. However, when I showed Scott the last issue he said I would need to lighten the pictures or they would print too dark again. So, I took the newsletter home and tried to lighten the pictures. Unfortunately, not being a photo pro I was not too successful. So, I had the newsletter printed at work. They did a fantastic job, but it was costly.

Around that time, I got an email from Neil Tarasoff. Neil thought he could get Kinko's to print the newsletter for free, if we provided them with the space for a 1/2-page ad. Talk about answering prayers. Woowee!! I was spending way too much time working on the photos. Thanks Neil! And a big THANK YOU to Kinko's! Check out their ad on the back page. Probably the biggest sell for the quality of work they do is to show someone a copy of this year's Issue 1 compared to this one. The difference is all Kinko's!

Team America Rocketry Challenge—2003 Update

On May 10, 2003, the top 100 team finalists from across the country gathered at Great Meadow, The Plains, Virginia, for the final event of the Team America Rocketry Challenge ("TARC"). Despite off and on rain, all contestants managed to complete their flights. Boonsboro High School from Boonsboro, Maryland, was the winning team, launching their rocket to exactly 1500 feet and recovering both eggs unbroken. Liftoff weight of their rocket was 498 grams (about 1.1 pounds) and was powered by two C6-3s and one D12-0 in the lower stage and an E9-6 in the upper stage. Of the 15 Texas teams competing in the finals, four teams made it into the top 25: Cypress Springs High School, Cypress, (12th); Mt. Enterprise High, Mt. Enterprise, (a four-way tie for 17th); Channelview High School, Channelview, (tied 21st); and George West High School, George West, (tied 23rd). Complete results can be viewed at http://



Surrounded by dignitaries, TARC 1st place winners receive their check. Photo by NASA/Renee Bouchard Page 2 SHROUDLINES



Centuri Payloader II—1967

THE PAYLOAD BAY

Several new members were recently added!

- Roger Lower
- Eric Mok
- Kurt Nelson
- Mark Wagner & family: Stephen, Jacob & Aaron
- Joe Rowe
- Bill and Darlene Beecher

Look them up at the next meeting and say hello.

We lost a member, too. Chris Stevens moved to Philadelphia in June.

I'm sure there were lots of certifications (fill me in), but here are a couple I know of:

- Tim Sapp—Level 3—way to go, Tim!
- Rusty Patterson—Level 2—and a beautiful flight it was!



Tim Sapp with his Level 3 rocket. Very cool!! From the DARS website.

CAP Captures the Sky!

By George "The Other" Sprague

Sunday, 2 March 2003, 0830 hours (that's 8:30 AM for you non-military types). The Civil Air Patrol, Texas Wing, Fourth Group descended on Camp Wisdom to conduct their rocketry day. Nineteen cadets from various squadrons reported for duty to earn their Model Rocketry Badge.

DARS was present, front and center, providing launch equipment, building materials and the expertise of DARS President Rags Ferenbach, son Sae, Jack Sprague and myself.

The day began with two build sessions. Estes Wizards and Alphas were the rockets of choice. The rockets were built by the numbers, and set aside to dry. All present were treated to chow (that's food for you non-military types). Hot dogs, chili, baked beans, potato chips cookies and soft drinks. Energy for the launch!

After chow, the cadets were instructed in the specifics of their mission which consisted of two flights per rocket. The NAR Model Rocket safety Code and other particulars were discussed. Then, while Jack Sprague guided the cadets through the intricacies of prepping the rockets for flight, the rest of us set up the six launch pads.

At 1400 (that's 2:00 PM for you non-military types) the launch began. The motor of the day was the A8-3. The flights were great, exciting and sometimes disastrous. Repairs were made hastily in order to complete all four required flights.

I am happy to report that all nineteen cadets earned their coveted badge. And the DARS volunteers were presented with CAP certificates and Badges. Mission accomplished. What a great day!

"Nineteen cadets from various squadrons reported for duty to earn their Model Rocketry Badge."



The CAP Rocketry Patch. Photo by James Gartrell.

THE CENTER OF PRESSURE

(It isn't often someone volunteers to be in the Center of Pressure. Ed Jacoby, however, is running for the TRA Board of Directors. Here's a chance to get to know him a little better. Editor)

Ed Jacoby TRA 5876 L3

I am pleased to announce my intentions to run for the Board of Directors for TRA. My name is Ed Jacoby, living in Dripping Springs, TX, a small town about 30 miles SW of Austin.

I am 56 years old, born and raised in Central Texas. In 1968, I left Texas and moved to Portland, OR. I returned to Texas in 1984 after a 1982 marriage to my college sweetheart. We dated first in 1965 and married in 1982. Yea, we wanted to make sure we got it right. She couldn't handle the wet climate in WA (she was a Texas girl) so we came back to the Lone Star State. I spent from 1968 till 1989 in the medical diagnostic business and in 1999 transitioned to computer engineering and training. I am currently a principal in a computer training and consulting business associated with St. Edwards University in Austin as well as a partner and VP of Technology for a startup teleradiology business.

Rockets have been a part of my life it seems like forever. I know I had a room full of rockets when in junior high and high school. I think I personally tried to keep Vernon Estes in business. Unfortunately my parents ditched all those vintage models when I went to college in 1965. When I moved back to Texas in 1984 I needed something to replace my pyro hobby that I was so involved with in Washington State. Texas was not nearly so friendly to hobby pyrotechnics as was Washington. High power rocketry seemed to fit the bill.

Recently I ran across my first application that I filled out to Tripoli. Dated 1984, had I mailed it I would have had a very envious TRA number. For some reason the application was not mailed and I went back to making black powder and potassium perchlorate motors as was very common in the pyro world. Still have that application and catalogs from several motor and rocket vendors framed on my wall. Finally in 1998 I did join Tripoli. I am currently active in Tripoli Amarillo as well as Tripoli Austin. In Tripoli I have found the challenges and the friendships that have kept me absolutely obsessed with this hobby. There is more knowledge, excitement, commitment and talent in this group than I've experienced in any other group with which I've been associated.



Now, why do I want to run for the BOD? I've always been told, "you dance with the one what brung ya". All of you brought me here and I feel that I owe something to you, the members of Tripoli, and the sport I love. I wouldn't have the level of expertise and the feeling of satisfaction that I have without the unselfish support of so many people in Tripoli. I firmly believe we are on the right track for relief from the ATFE on both the legislative and legal tracks. I do not see them as being in conflict, but complementary. I do believe that we, the members of Tripoli, deserve to receive regular communication concerning a matter as important as this, even if that communication was an update and did not contain sensitive detail. Every effort would be made on my part to make that happen.

We have huge challenges in front of us. I was told late last week that I was crazy to run for the board with the current political climate but then if you do it when all is well, what's the point? My experience includes sitting on several boards with complex problems most of which were resolved through teamwork and cooperation. I enjoy being part of a team and feel that I have the skill, time and resources to be a significant player in our effort. I am asking for your vote for Board of Directors of Tripoli Rocket Association.

Sincerely,

Ed Jacoby



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Launch Report—McGregor Sport Launch March 22, 2003

By Jeff Mondlock

If you happened to be driving to McGregor on Saturday, but turned around because of the early morning rain, you missed what turned out to be a very fine day for rockets. It's true, the day started off chilly with light rain falling all around the Waco area, but around 11:00 AM the rain stopped and in short order we had the range open and launching underway. Although it remained overcast the entire day, there was absolutely no wind, and many rocketeers were rewarded with very short walks for recovery.



Some interesting poses. Gary Santarelli and Chuck Cummins seem to be praying. I'm not sure what Rusty Patterson is doing. Hmm, maybe the Hokey Pokey? Photo by James Gartrell

With a cloud ceiling of around 7,000 feet, it seemed that "low and slow" was the order of the day for high power. Gary Santorelli started off the day early with an impressive Level III certification flight, flying a scale Standard ARM on an Animal Works Green Gorilla motor. At 65 lbs, the rocket rose slowly and majestically on the signature bright green flame. The loud rumble of the motor noticeably impressed the crowd as they watched the rocket travel straight as an arrow to apogee where a large main chute was deployed. Since there was no wind, the rocket seemed to hang above our heads for a long time, streaming out heavy smoke from the spent motor. We had a bit of a scare when the rocket finally drifted over a parking area, and settled with a loud WHUMP just a few feet in front of a line of parked vehicles. All in all it was a truly impressive and successful Level III certification.

Chuck Cummins from Houston wowed the crowd in the afternoon with another low and slow flight of his large scratch built "Big Red Rocket" on an Animal Works L-777. Chuck travels with the rocket strapped to the top of his Ford Expedition, and it is quite a sight. At ignition the L motor came up to pressure quickly and moved the rocket slowly up the big rail at the away cell. A huge white flame was visible as the rocket pushed up to apogee at around 1,600 feet, where a small drogue was deployed with a noticeable bang. Main chute deployment was handled via a remote radio control device, and Chuck chose to deploy the main at around 1,000 feet, causing the rocket to settle about 100 yards just north of the launch pads. For me it was of the best flight of the day.

I got in two successful launches. First was my PML Endeavor, *Phantom Regiment*, flying on a Cesaroni J300 motor. Overall flight was beautiful and with the dual deployment system powered by a Missileworks RRC2 the main deployed at 500 feet right in front of the flight line and the rocket recovered only about 50 feet from the launch pad. It's hard to do better than that! My second flight of the day was my LOC EZI-65 model, 'Lil Tex, flying a Cesaroni 2 grain motor, the H-153. Again boost was nice and straight with a nice recovery close in.

Fortunately for the attendees, the McGregor Fire Department arrived around noon with their set up for BBQ, chips, and cold drinks, which is always a welcome addition to any launch. The BBQ sandwiches tasted especially good after a couple of successful launches. If you have not been to the McGregor site before I do recommend it, even though from

(Continued from page 4)

Dallas it is a bit of a hike. Since the site is large and centrally located in Texas there are usually lots of flyers from many different Texas Clubs in attendance, and it's a great way to see lots of different rockets and meet people from around the state who share a love of rocketry.

All in all it turned out to be a very satisfactory day.





3/22 Launch Stats: Compiled by Bill Gee

Motor	Sat	Sun	Total
1/2 A	2	3	5
A	0	1	1
В	1	2	3
C	11	7	18
D	6	5	11
E	7	2	9
F	15	12	27
G	7	13	20
Н	7	5	12
I	10	16	26
J	7	11	18
K	2	3	5
L	1	0	1
M	1	0	1

Above left—Rusty Patterson and his son, Eric, just before Rusty sent up a perfectly beautiful L2 cert flight. Eric's rocket, Leviathon, also had a nice flight Saturday on a J350. Very nice! Rusty's wife, Cathy, was there too. She was very proud of both of her boys! ;-)

Above right—Brad Gibbons and Bob Melton take a break from high power and prepare their rockets for an unbelievable Comanche 3 drag race. Both flew beautifully. I don't remember who won, but who cares. It was an awesome race!

April Madness Regional Contest

Scott and Nettie Hunsicker, with significant help from Richard Benavides, ran the April Madness contest on Saturday and Sunday, 4/26-27. And what a contest it was! Participants from DARS, AARG, NHRC, and one independent entered the contest, so the state was well represented. Holly Johnson (2,136 points) and Carl Johnson, IV (1,860 points), both from AARG, took 1st place in A and B divisions, respectively. DARS' Suzy Sprague (1,608 points) was 1st in C Division, and AARG's Team, Shovel Recovery, took 1st place in Team division with 1,704 points.

Saturday was by far the best day with almost no wind. The most spectacular flight during the contest was Dave Schultz' SuperRoc on a B motor. Dave definitely capitalized on Saturday's fine flying weather putting up his SuperRoc with a time of almost 17 minutes. Yep, that's minutes! He took 1st place in the event, of course. Too bad he wasn't able to return the model for the record. Unfortunately(?), it was still going up when it went out of



Jack and Suzy Sprague placed 1st and 2nd, respectively, in Peanut Sport Scale competition. The AIM-120 is Suzy's. Both rockets were very nicely done! Photo by James Gartrell.

sight! Talk about "Big Air"! Wow!!!

We certainly thank Scott, Nettie and Richard for all their hard work to make the contest happen.



Dave Schultz ready to send up his egglofter in the C motor, dual eggloft event. Sorry! We didn't get a photo of his SuperRoc. Photo by Eric Vandergriff.

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Extreme Scout Show 2003

By George "The Other" Sprague

"DARS handed out 100 fliers and spoke to gazillions of people."

DARS once again said front and center to the Circle 10 Council Annual Scout Show held at the Dallas Market Hall. Your fearless outreach leader (that would be me) was expertly assisted by El Presidente of DARS, Rags Fehrenbach and son Shea, Jeff Mondlock and son Alex, Richard Benavides and Gary Santarelli. Tim and Beth Sapp were performing scout duties but found time to come by and help at the booth.

And it was quite the booth! Gary brought his Level 3 monster, which elicited questions such as "Is that thing real?" "Does it really fly?" Rags, Richard and Jeff brought a variety of high power rockets. Richard brought his award winning scale models. Gary brought an impressive display of rocket motors, from A to M. Jeff had printed a beautiful sign with the NAR Safety Code. Rags brought pictures and his laptop with rocket videos that drew ooohs and aaahs from young and old. I brought the fliers.

Photos at the Scout Show, courtesy of Rags Fehrenbach.



Above—As guests arrive, from left to right are DARS members Alex Mondlock and dad, Jeff, sitting, and Richard Benavides standing between them. George Sprague standing behind table next to Shea Fehrenbach with Gary Santarelli standing at the front taking in one of Rags' video.

Right—Shea works on a nose cone, partly disguised and surrounded by Richard's excellently crafted scale models.

Below—Jeff's Motor display and Rags' laptop show.





DARS handed out 100 fliers and spoke to gazillions of people. And we even obtained keen first aid kits (for free!) at one of the booths.

Speaking of booths, you name it, it was there. The Civil Air Patrol brought in an experimental glider and an almost-to-scale replica of the Space Shuttle cockpit. All sorts of activities were available, from landing paper airplanes on a mock aircraft carrier to catapulting old tennis shoes into buckets to tossing rolls of toilet paper in a commode!

Thanks to all who participated! All of us talked rockets up one end and down the other, and I have a hunch we will be seeing some more born again rocketeers at our launches.

"Aim for the sky and hope you don't miss."

May 10, 2003 Outreach—Carrollton Library

Well, the weather hasn't been particularly cooperative for DARS launches. As you can tell from this newsletter, though, the poor launch weather hasn't diminished DARS efforts in the community. Suzy Sprague was busy on May 10, 2003, with another outreach event. Below are some pictures from that event, provided to Suzy by Kelly Burns, Carrollton Librarian. Suzy said the kids had a ball flying their seltzer rockets. Enjoy the photos!

Some discussion of rocketry history, etc starts the day. Note Suzy's rockets in the top right. And isn't the room otherwise appropriately decorated for the topic? Very cool! I'm thinking purple for my rocket room. Black ceiling with stars. Yeah!!

OK!! Great! Time to build rockets. Woohoo! Plenty of help from volunteers for this event. Amazing, a little glue, some paper and a film canister, and voila, rockets! OK Suzy, how does that work? Guess I'll have to make the next event to find out, huh?



Below—Look! Up in the sky! It's a bird, it's a plane! No! It's a seltzer rocket! I guess I'm really dating myself with that line. Oh well, lots of excitement and loads of fun. Can't beat that.



Below—Ooh, pretty rockets. I'll bet those are some proud kids. What an accomplishment! You may be looking at some future astronauts.



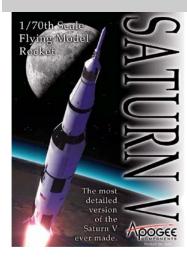


Left—
Circled, a
seltzer
rocket, ready to launch.
Hey, somebody push the
button!

Right—Circled, a seltzer rocket is up, up and away! I'm not sure who's having the most fun here, the adults or the kids. You really should participate in an outreach event. It is extremely rewarding.



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DID YOU KNOW?

Here's the answers to the word scramble from last month. Note that the first three letters spell LAR, for the Lancaster Association of Rocketry. Did you know that the Apollo program was established to land people on the moon and return them safely to Earth?

3) CEKORT

1)	NAL	CHU	2) OLAPLO			С
1	L	A	U	N	С	Н
2	A	P	О	L	L	О
3	R	0	С	K	Е	T

Okay, now for the next puzzle. Do you know the nine planets in our solar system? Circle the letters of each planet. Letters of each planet must be in consecutive order, either vertical, horizontal or diagonal, and it's OK to use a letter more than once.

	E	V	E	N	U	S	X	J
.	O	A	Y	N	A	U	R	U
1	E	W	R	T	L	N	A	P
Q>	P	L	U	T	O	A	Z	I
\	S	R	A	M	Н	R	J	T
A	N	N	E	P	T	U	N	E
<i>/</i> \	M	E	R	C	U	R	Y	R

"SpaceShipOne designed by Burt Rutan "... could become the first successful privately funded manned space program....."

The July 2003 edition of Popular Science has an article entitled "Your Ride to Space Is Ready." SpaceShipOne designed by Burt Rutan "... could become the first successful

privately funded manned space program..." Not everyone thinks so, though. Check it out. It would be an interesting rocket to build at the least. The rocket is carried aloft to 50,000 feet under it's mother ship, sort of X-15 style, then released to rocket upwards to more than 300,000 feet. The entire aft section of the wings and tail sections are elevated upwards at 65 degrees for re-entry, and then lowered to allow the rocket to return as a glider.



Put your name and phone number on the shoulder of your rocket's nose cone. That will increase your chances of getting it back if you lose it.

Make a cheap paint holder for your smaller model rockets using some yellow glue, a spent engine casing (18mm or 24mm), and the rolled tube from a dry cleaner pants hanger (it's 13mm). Put a generous amount of glue on the pants hanger and stuff it into the front of the engine casing (wrap masking tape around hanger to fit 24mm). After it dries, you have a paint holder that fits 13mm and either 18mm or 24mm engine mounts.

LETTERS TO THE EDITOR

Correction to the Center of Pressure article about Allen Wilcox in the last newsletter. Allen doesn't live in Fort Worth.

Ron DeJulius suggested compiling a list of quality vendors regularly used by DARS members. Sounded like a really good idea to me. Send in your suggested vendors for kits, motors, kevlar, tubes, nose cones, etc. If I get enough suggestions, I will include a listing in the next newsletter.

John Bittner thought I shouldn't have included a picture of my granddaughter in the last issue, since that really has nothing to do with rockets. I disagree because I believe we are a "family" and appreciate knowing what's happening to our families. Let me know your thoughts.

John also suggested I let everyone know that I am the writer of an article when no author is attributed in the newsletter. Done!

Stay in touch! Your comments are sincerely appreciated.





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



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

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.



Valwood Branch at: 13940 N. Stemmons Freeway, Suite A, Farmers Branch, TX 75234 Telephone (972) 406-1116, Fax (972) 406-9998, www.kinkos.com

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