

DARS NAR Section #308 Jan./Feb. 2010

Volume 19, Issue 1

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





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

#### Special points of interest:

- "Ignition!" Guess what? We are flying!!!
- President Jack Sprague tells us about his vision for DARS.
- Gary Briggs relates the ins and outs of contest flying.
- Stuart Powley gives us another kit review

  — This time of the Red River Rocketry Redstar.





Sam Barone loads up his boost glider at FYBOO '10. There was some fierce competition on the field and Sam ended up with fourth place in the event.

### indeed!

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**DARS Officers** 

like crazy lately. It seems that things are working out to where the very weird weather is not really affecting us too much. This is very welcome news, indeed!

FYBOO went off with out a hitch thanks to

2010 has started with a bang here at

DARS (well, not so much of a "bang" as a

"whishhhhh"). Yep, we have been flying

the efforts of John Dyer and a bevy of committed flyers. Gary Briggs shares his thoughts on his first NAR competition with us. Hopefully, it will show that competition isn't nearly as scary as some people think it is!

DARS president Jack Sprague also weighs in with his thoughts and dreams for what DARS is and what it can be, and

just where we are headed as a club.

Needless to say, he has some great ideas

and the next few months should be very exciting!

I round out the issue with a review of Red River Rocketry's Redstar. I built and flew this bird a few months ago and was quite impressed with it. Once again John Dyer has produced a high quality kit to compliment any fleet.

Therefore, sit back, relax and enjoy this issue of Shroudlines. You might also want to rest up a bit, because now that spring is coming, it's a pretty sure bet that things are going to be picking up even more at DARS. There are indications of a high power field in the immediate future, as well as a big contest coming up in May, and all sorts of crazy rocket related activities on the horizon. Hang on, it's going to be a fun ride!

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## The President's Soapbox What is the DARS?

By Jack Sprague

I've been at the head of this rocketry club for only two months now, but I've been an active participating member for a long, long time. My themes and directions so far are three fold.

- 1. Fly More Rockets!
- 2. Engage the Community
- 3. Improve the base of the Organization.

I encourage those of you who like to fly rockets, to fly more frequently. Those of you who want to support outreach, like YMCA or Scouts, get with our officers or Outreach Chair because we can really use the help. Suzy and I spend three afternoons each week working with TARC teams and the NASA SLI project in the area. In addition, between the two Sprague households, (George and Suzy+Jack) we support two (or more) launches each month for various kid's groups. In addition to the monthly Frisco launch. So, if you have a hankering to fly rockets, you should have the chance. If you want to create activity in your own area, all you need to do is find a group, and help us establish an appropriate launch site. It is with this activity that we can best engage the communities around DFW. We have two high power fields coming back online this month, so two launches will be on the schedule from now on. Class 1 (modroc) at all launches and Class 2 (high power) at either Windom or Waxahachie.

Flying Rockets is FUN! And educational when taken directly to the kids, scouts adventurers or students. We can and do make a difference when we capture their attention early on in life. And even just the two simple rocketry thoughts that; a 'C' motor has more power than an 'A'; and will take a rocket higher; provide educational exposure. If that interest then helps promote math or science or engineering, we are providing the service of "igniting" their futures. The more groups we can engage the more we can leverage their interest. And the more interest we generate, the better we insure our own ability to continue to enjoy this hobby of amateur rocketry.

And the DARS will change too. My vision for our organization is that it needs to grow again. Our current charter is strictly 'limited' in scope to that of a NAR section. While that scope is broad enough to cover a lot of rocketry, it leaves out elements that I feel we should include. First, our best high-power flyers have abandoned the club. (we have not had a successful high-power launch since before the FAA changed its rules for the hobby.) Primarily, these exmembers think that our 'NAR only' focus limits what they can do through us and with us, and they are right. But by opting out, they are not helping us to address some of the other needs of our flyers or the community at large either. High school projects cannot fly with TRA at research launches, and community demonstrations are more limited within TRA than NAR. Kids are this hobby's future, and we must be able to involve them wherever possible, in addition to better servicing the High-Power crowd.

In that context, DARS needs to become a better organization. We need to become an official 501.c educational/service entity. That will enable us to ask for and use contributions to advance the hobby, involving the community as we go. And we need to become multi-affiliated. In addition to the National Association section, we need to pursue (again) becoming allied with a Tripoli Rocketry Association prefecture. That enables the DARS to support research launches, as well as the young rocketeers. Most of our sister clubs in Texas are already NAR and TRA capable. But in addition to those two organizations, I believe that the DARS needs to look for another form off national support. The National Space Society may be an affiliation we want to strengthen, perhaps formalize. And there may be other rocketry groups we can team with too.

We will be voting on the first changes for DARS charter and By-Laws in April and May. Please get your thoughts to me soon, to include them in the discussions and recommendations. Fly 'em Safe! --Jack



#### **Confessions of a Contest Newbie**

By Gary Briggs NAR 76909 L2

Well, I hate to admit it, but even though I have been back in the hobby for 12 or so years, I have never participated in a NAR sanctioned contest. I have been involved in plenty of fun events, like the Cochran, BP Extreme, and The Fall Classic, but always saw the NAR stuff as overly complicated, and requiring too much preparation, and practice. If you needed an entire book of rules, it must be way too hard. My experience on a Sunday in January changed that perception, and I thought I would share my observations and experiences to see if it changes yours as well.

First off, I have been interested and even threatened to get involved in contests last year, but between rainouts and work craziness, it never materialized for me. I did build some A rocket gliders the beginning of last year; 1 from QCR and one from plans on the NAR site. One did the big arc into the dirt, so less than spectacular, and I don't recall if I even got the other one in the air. Obviously I needed some work on gliders, so when the chance came up again this year with the ½ A boost gliders, I decided I would try again at the FYBOO event.

I looked up plans on the NAR site and found one that looked promising, but then discovered I had already downloaded a plan, probably when I was working on the rocket gliders a year earlier. My models would be a George Gassaway design called the Fish and Chips (sure there is a story there, but I don't know what it is). I went looking for parts at the local hobby store. As far as the rules went,

there were really only a ½ dozen sentences about boost gliders and none of them were overly complicated.

The monthly meeting in January gave me a chance to speak with Stuart, John, and Sam about the contest and the events involved. I knew that D helicopter would take more work than I had time for, but discovered that I already had a rocket that would qualify for giant sport scale. To qualify for this competition you needed a rocket that was either 4 inches in diameter or 40 inches long. From there all you really needed was a clear picture of the rocket in the color scheme on your rocket. Granted there were more "rules" in this scale event, but most of them were about how points would be assigned for judging rather than requirements on the flyer. Such is the nature of sport scale. My MM40 Exocet was 42 inches long. and I had painted it in a color scheme based on pictures I had seen on the internet. It was a bit rough since it had flown many times but might make up for these issues in flight points, as it would be a cluster flight.

Of course the following week was a crazy one, and all that happened before Saturday was cutting out the glider parts. I got a little help from the rain, delaying the launch start on Saturday and ensuring a 2 day launch window for the contest. I cleaned up the Exocet and assembled the gliders. I built 2 relatively similar gliders other than their boom size, both leveraging the same pop pod. I had hoped for a little trim time on the gliders, but Saturday was done before that

happened. I assembled one E28 motor for my Exocet and would have to try to pick up motors for the gliders on Sunday.

Sunday started out foggy, but the weathermen were saying it would burn off by noon. I drove over the lake on the way to the field, where the fog was really thick. Once I started heading east things cleared up pretty quickly. When I got to the field, I found Jack and Chas out trimming gliders. Nobody else was there and they were waiting for the field to dry out a bit and for the wind to pick a direction. We eventually decided to set up towards the middle of the field as others arrived.

It turned into a spectacular day as the skies cleared and the wind never really rose much above nothing. Attendance was light, (something about a playoff game) so there was never any waiting on pads. I struck out in my attempt to find motors at a store on Sunday, but luckily Chas, was willing to trade for a couple of ½ A's. My first glider flight was not too great as the glider that I thought would do the best spiraled in with its tail up and its wings down. John told me it needed more dihedral in the wings, so I pulled out the other one and tried again. When it flew, I discovered that I had taken too much nose weight off of it, so it bobbed and looped a bit, but stayed in the air for 32 seconds. I thought it was respectable as it was only the second boost glider flight in my career. Now on to sport scale.

I put the 2<sup>nd</sup> motor together in a case barrowed from John Dyer

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and loaded up the Exocet for its trip to the pad. Jack had judged the rocket when I got to the field and said I was in 3<sup>rd</sup> or 4<sup>th</sup> in the static judging, so a good flight could put me into the pound seats. Both motors lit, and it jumped off the pad and ejected right where it was supposed to. Since there was still no wind, it basically drifted straight down for a soft landing. The bad part for me was that John and Chas had perfect flights as well, and their models were fresh builds and very cleanly executed. In the end, I landed in 3<sup>rd</sup> place, which seemed pretty good since I had no idea I would be entered in the event a week before. Chas and John finished 1-2. Jack gave me a couple of tips on how to get more points next time, so look out guys.

There were several great flights throughout the day. Chas showed us all how it was done in D helicopter, although John put up a good flight there too. Some guy named Ace Disaster Company had 2 of the most spectacular shreds of helicopters on D motors that I have ever seen. In the "you never know what's going to happen until you compete" category, contest veteran Chas had 2 unlucky flights with his gliders red baroning for DQs, and then threw up another unqualified flight that went for 90+ seconds before landing in a tree (luckily Bill Gee had the equipment to extract it).

In the end, it didn't hurt that it was a great flying day, even if the Cowboys were loosing their playoff game. What I think I learned along the way is that

NAR contests don't need to be any more daunting that many of the fun contests we participate in. Granted things do get serious at regional and national events, but stories of rockets being completed the night before, or even on the field, appear to be fairly common. Practice makes perfect, but a little luck can go a long ways as well. My recommendation is that if you are interested, you should give it a try, and there are plenty of folks in the club that can help you work through the rough spots. If you are looking for another way to have fun with rockets, this might just be your ticket. Did you hear they are planning F Super Roc for DARSTAR in May? That could mean rockets up to 13 feet long going for altitude on an F motor. How about E motor dual egg loft? Can you say omelets? There is something in the list to pique anyone's interest. Should be fun...

### DARSTAR 7 DATES AND EVENTS!!!

The Dallas Area Rocket Society Texas Area Regional 7 will be held on May 29 and 30, 2010. The events are:

A Streamer Duration

1/2A Parachute Duration

1/2A Boost Glide Duration

**E Dual Eggloft Altitude** 

F Super-Roc Altitude

Full rules can be found at: www.nar.org/pinkbook/index.html



Left to right: Chas Russell, Gary Briggs and John Dyer in deep competition mode at FYBOO ,10.

#### The Red River Rocketry Redstar

By J. Stuart Powley NAR 29573

There are some rockets that just sort of jump out at you and get your attention right away. They have a certain styling that says "Hey, I'm something special. Build me and fly me...now!" The Latest offering from Red River Rocketry is one of these models.

The Redstar is a futuristic "deep space transport" model that uses a few tricks to boost its curb appeal. It has four transitions along its 24 and a half inch length and a unique "three fin, tail ring" assembly for stability. It has both water slide decals and press on stickers for decoration. These decorations are done in the typical high quality distinctive Red River style, and they really dress up the bird. The overall effect of the finished model is striking.



The Redstar's cover art. All of Red River Rocketry's kits have great art and this one in no exception!

The Redstar comes in a typical hang bag, with a distinctive face card. Nina Dyer, Red River Rocketry owner John Dyer's wife, does the artwork for these models and she does a fantastic job. The quality of all of the parts is first rate (as usual) with balsa grain being minimal and body tube spirals being small. The instructions are well laid out and logical. This fact comes in handy because this bird is not exactly a standard build.

The first thing one notices when they open the bag is that there is a honking big balsa nose cone in this kit. The second thing is that there are no balsa transitions to be seen. That's right, all four of the transitions are done "old school." They are built out of cardstock. The reason for this seems to be twofold. First, it keeps the weight of the model down so that it can really move off of the pad. Second, it keeps the cost to under about twenty bucks. It does increase the skill level of the model from what would probably be a two out of five to about a three. Personally, I think this is a good thing. We need more challenges out there!

Rather than go step by step through the building process, I will just point out what was most interesting to me. First of all, when you make all the alignment marks on the main body tube, you have quite a few marks! It could be easy to get mixed up if you are not paying close attention. If you have a shroud lined up on the wrong

mark, it can throw off the whole project and make correcting it very difficult.



The many alignments marks can be confusing

Also, take your time with the shrouds. If you go easy on them and roll them gently, you shouldn't have any problem. However, if you rush and get fumble fingers,



Shrouds-a-plenty!!!

they will crimp and crinkle.
Also, make sure to only get glue on the tab that you want to glue because finger prints will show under the paint! Additionally, the shrouds are quite rigid and sturdy

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when completed, but you still should be mindful of grabbing this bird just anywhere and gripping too hard. A crushed shroud is a terrible thing to fix.

I was really impressed with how well the fins fit the contours of the tail shroud. They also were the perfect length to support the outer facts that the performance is fanring. That being said, you should probably go easy on the sanding on the root and tip edges. If you do too much some really nice engineering turns out too short.

The face card shows a really nice black and white paint job for the Redstar, however, I had something a little different in mind. Since the name is "Red"star, I figured it needed some red on it. This lead me to think about my Disneyland Mooniner (yes, I'm going to work it into every article I do from now on) and I decided a red and white TWA paint scheme would look nice. I used Rustolium Gloss White for the main body and a gloss red paint pen for the transitions, aft engine pod and nose tip. The only things that I added as far as decals go were some black pin striping to go around the transition lines and two small TWA logos that I made on my printer. I'm very pleased with the results!

I flew the Redstar at a recent launch and all I can say is that it moves much quicker and higher than one might expect. I suspect that the lightweight construction coupled with some cool aerodynamic effects from the transitions may have something to do with that, but I couldn't prove it in a court of law. It certainly pleased

the crowd, though!

Therefore, the Redstart is a winner. The cool futuristic lines make it look great on the shelf as well as in the air. The build has enough challenges to make it fun, but not so many as to make you wish you had never started it. Add to these tastic and you have a very solid bird from Red River Rocketry!



The TWA decals were made on my printer with Testors paper.





The Redstar in Genuine TWA paint scheme and decals!

Left: The Redstar zooms off of the pad. It was so quick, it was hard to catch!

# The DARS Photographic Extravaganza! (or, "Some pictures that we had laying about and didn't know what to do with")



Scott Cook shows off a genuine 60's vintage Estes Honest John and Electro-launch system.

Stuart Powley's Aerotech Astrobee D giant sport scale entry from FYBOO



Tony Reynolds and John Dyer discuss rocket-type stuff at a recent launch.

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A Mini-Bomarc blasts into the sky!



John Dyer preps his Red River Starliner DST for launch.



An Estes Interceptor E takes flight!



Left: A Zoom Broom zooms!

#### **How to Contribute to Shroudlines**

And now for the "last page begging part" of our publication. As I have made clear in the past, without you, we have no newsletter. We all have differing interests and areas of expertise, and that is exactly what this newsletter needs!

Once again, I'd like to thank all of those who have contributed material so far. You are very much appreciated! Still, we need more! Therefore, if you have any kind of article, picture, cartoon, rambling, etc., just send it to stu29573@yahoo.com. I usually work best with Word documents, and JPEG files, but I can make just about anything work if I have to. I can also handle stuff that is written down, but that means I have to type and that can be a bit touch and go... But I'll take it anyway!

You can also give me things at the meetings (which I almost never miss...almost), and I promise to try my best not to lose them. I can return stuff at the next meeting if need be.

As I have said many times in the past, I really want this newsletter to be by the club and for the club. You guys can think up much better stuff than I can (as is evidenced by the articles we've been getting lately). So, stop just thinking about maybe writing something and actually do it! You'll be glad you did! (as will everyone who reads it!)



#### **DARS Officers**

President Jack Sprague

Vice President John Dyer

Treasurer Suzie Sprague

Secretary Bill Gee

NAR Senior Advisor Sam Barone



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



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

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

Aerospace Specialty Products Aerotech Consumer Aerospace

Apogee Components Art Applewhite Rockets (\* 20%)

BMI Hobbies (\* 10%)
BRS Hobbies

CLE Enterprises Dr. Zooch Rockets

Excelsior Rocketry FlisKits, Inc.

Hawks Hobby Hobby Town USA— Dallas, Walnut Store (\* 10%)

JonRocket MadCow Rocketry

Mercury Engineering Co. Pemberton Technologies

Public Missiles LtdQmodelingQuest Aerospace, Inc.QuickBurst

Red Arrow Hobbies Red River Rocketry (\* 8.25% on field)

Roadrunner Rocketry Rocket.Aero

Semroc Astronautics Corporation Sirius Rocketry

Sunward Aerospace Group Limited The Squirrel Works Model Rocketry

**RC Zone** (\*10%)

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