

DARS NAR Section #308 May/June 2012

#### Volume 21, Issue 4



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

#### Special points of interest:

- "Ignition!"
- Gary Briggs lets us know about the trials and tribulations of DARSTAR VIII
- Pictures Pictures and more Pictures! (get it?)
- Do you want to be in print? Page 13 tells you how!

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

## Ignition! By J. Stuart Powley



A shot of a AAA Model Aviation Fuels HVTV Sentry at a recent DARS launch. She flew with three Estes black powder E's, although she can handle three 29mm motors as well. John Dyer taped a video camera to the side about midway down the body. This particular model is over thirty years old.

#### Inside this issue:

DARSTAR VIII- A Tale of Fortune, Good and Bad

Well, here we are again. Although the summer has been brutal so far, I think we might be getting a break soon.

NOT!!! Hey look, my keyboard just melted!

Pictures! Pictures! Pictures!

In this issue we take a look back to a time and place that seems so far ago, and to weather that seemed terrible at the time, but would be great now! I, of

course, am talking about DARSTAR
VIII. It was March. It was windy. It was

a little damp. But it was fun!

Gary Briggs lets us in on his thoughts of the event. It was a contest not without struggles, and some really, really cruddy luck, but he stuck with it anyway. Hey, at least we got an article out of it!

So crank up the A/C to "kill by hypothermia," sit back, and dig in!

**DARS Officers** 

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#### **DARSTAR VIII**

#### A Tale of Fortune; Good and Bad

By Gary Briggs, NAR 76909 L2

I tossed around many plans for DARSTAR VIII, many of which never quite landed. It ended up being an event of good and bad fortune, which turned out pretty well overall. It was also another fun event that proves that NAR competition can be a great way to learn some new things about rocketry and have fun along the way.

Over Christmas break I started looking at the scale event in DARSTAR VIII with an eye toward building something new. The Nike Ajax has always appealed to me and I had found some scale data previously that got me started looking at it again. Over the break I pulled together most of the parts and determined my approach, but is was also over the break that I took on the task of painting 2 dozen JROTC helmets, so that was bad fortune for the Nike Aiax. It was about a month before the reality set in that the time that the helmets were taking would mean something else would have to fly scale, and that became the trusty WAC Corporal.

As the event got closer, I started going through the inventory to see what might be applicable to the events on the list. I had built an Estes Javelin clone, my second of what was the first rocket I ever built. The first one had disappeared on its first launch after an especially aggressive ejection charge vaporized it at altitude. I tried this one out at the February launch and it did well with the 3"

streamer I had used for 1/8 A event the previous year. It had room for a 4" or 5" streamer so it was a likely contender. The night before the event I put together another model that was more like my 1/8 A streamer duration model with small elliptical fins to have a backup in case something bad happened to the Javelin.

I also had a model that I had built for E Dual Egg loft with a Pratt capsule that I had purchased a few years back. It had a 24mm mount so I wanted to find a D15 to give it the best possibility of being competitive. I found those motors at HTUSA in Dallas in a 9 year old package that they had marked at \$12.99. That seemed like a deal, so chalk up a few for good fortune. I also had a Custom Rockets Elite clone that I had previously built. If I could find a D10, this might make a great rocket for this event as well, although it would essentially need an altimeter bay as there was nowhere near enough room in the body tube for the altimeter and a parachute. I built a small payload section to fit under the egg capsule and connect into the main body tube with a section of BT20 as a coupler to keep the weight and inside diameter size down. Alas, I could not find a D10 without ordering from ValueRockets and by that time it was too late.

I also had a B capable boost glider in a SEMROC (Centuri) Swift. It had a reasonable glide and seemed like a possible contender. I also had a A Parachute rocket that could likely fly in A Altimeter Altitude so it seemed like things were falling into place. Good fortune, indeed.

The days leading up to the event showed that it was going to be the windiest NAR competition that I had ever tried to fly in. The days of the event did not disappoint, with winds out of the south (from southeast to southwest) never lower than about 10 MPH and gusting up to and over 20 MPH, depending on the day, with more clouds than blue sky. The good fortune to this one was that the farm fields on the north end of the flying field were still empty, so at least you had a pretty clean canvas to find your rocket on.

Most everyone flew A Streamer Duration on Saturday as that was a pretty safe event in the wind, but it did result in some very long walks. On my first attempt with the Javelin and a 4" streamer, the streamer separated at the attachment point and drifted away. I chased it 2/3rds of the way across the field north of the road on the hope that the rocket was still under it. Bad fortune won on this on in that all I found was the streamer, but in doing so, figured out how to strengthen my other streamers. Good fortune smiled on me when in walking back to the range head, I walked right to the Javelin, undamaged on the flying field. Attempt 2 with the new rocket resulted in an unstable flight as it came out of Jack's tower and was immediately hit by a big gust of wind. The ejection did show that the 5" streamer would deploy though. Attempt number 3 was with a 5 inch streamer and a blue foam plug

that Adam Amick had provided in the Javelin, and that resulted in good hang time, which ended up being good enough for 4<sup>th</sup> place. (Well, Gary's luck was consistent, at least. As it turns out Bill Gee's flight card got overlooked and he actually took 4th....Ed.)

I hadn't originally planned to fly on Sunday, but realized that I at least needed to fly Sport Scale on that day, and while I was there, I would check the conditions for Boost Glide and Egg Loft. We set up early on Sunday, and got a decent lull in the winds around 10:30 that sent folks running for their gliders. I went first, with a B6 in the Swift resulting in a spectacular shred about 100 feet up. Stuart followed my lead, with the same results, but managed to tape his bits back together for a qualified flight later in the day. Chas, John, and Jack went on to show us how it was done. Chas never fails to glide at least one away at these events. It is probably still flying over Oklahoma somewhere...

Chas offered me a D10 on Saturday for my Elite egg lofter, so I completed the payload bay that evening, thinking I had provided adequate space for the altimeter. Stuart loaned me his Jolly Logic AltimeterOne on Sunday, but a quick check showed that the section of the altimeter that plugged into the USB was not as small as I thought and it would not fit into the payload bay that I had built.

Undaunted, I moved on to dual egg lofter and placing the altimeter in the lower egg capsule and loaded an egg in the top one. I assembled a D15 and launched the rocket. It weather cocked a bit, but had a good flight overall

and even landed on the flying field. I got the altimeter out and it read 1,228 feet which was good for 2<sup>nd</sup> place at the time. The only problem was that I had not put the egg into a plastic bag, and I could not free it from the polystyrene capsule. I ultimately broke it to get it out and moved to my second attempt. Everything seemed to go well with this run, with the egg in a bag to contain any mess and also make getting it out of the capsule would be a non-event. The boost was much straighter than the first attempt, but the upper level winds carried the rocket just to the trees at the north end of the field where it landed in some small diameter trees along the edge, about 8 feet up. The Kevlar shock cord came in handy here as it was generally stronger than the wood. A gentleman and his son helped me to free it from the tree and I took it back up to the table to see the results. The good news was that the egg came out just fine. The bad news was that the altimeter had no reading. Stuart stuck it in John's computer and got a reading out of it, but it was under 200 feet indicating that the battery probably died on the way up. One more for bad fortune. At least I got a qualified flight out of it. Stuart offered me a 3<sup>rd</sup> attempt, but I was running out of my budgeted time for Sunday flying. Chalk it up to experience and a win for bad fortune.

I was originally going to fly the WAC for Scale on a D15, but I didn't have the desire for the walk anymore, and based on the egg lofting results I was thinking there was another failure mode about to present itself. I traded with Chas for a C11-3 knowing that it would be an easy lob and a short walk. I loaded it up, reefed the chute, and

waited for the launch. Someone who shall rename nameless (but whose initials are JD) was running the range at that point and while attempting to launch a sport rocket fired the WAC instead. Luckily Jack was watching the flight line, and static judging plus the flight with no damage was good enough for second place. Bad fortune and good all at once.

I ended up 5<sup>th</sup> overall. Jack Sprague ended up winning 4 out of 5 events to win the overall in definitive style. Regardless of the weather, it was a great event. We would have all loved to have flown this on a windless cloudless day, but that is part of the challenge, flying the field and conditions. I certainly could have been a bit luckier with a few things, but somedays you get the bear, and others, well you know. Good fortune or bad, it was a good time with rockets and the people we fly them with.

Turn the page, dear reader, for Gary's pics of the event!

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Figure 1 - Here's the fleet. Top to bottom Q-Modeling WAC Corporal, Dual Egg Lofter, Custom Elite Clone w/o payload bay, Javelin, low drag and stability streamer rocket, potential A Altimeter rocket, and (left) parts of Semroc Swift

Briggs photo



Figure 2 - John and Stuart looking for contestants

**Briggs photo** 



Figure 3 - Sam launching a sports model in the wind.

**Briggs photo** 



Figure 4 - An Initiator sport launch

**Briggs photo** 

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Figure 5 - What happens when you light 2 motors of a 4 motor canted cluster (in spectacular PANOMANIA!!!!!)

Briggs photo



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# Pictures! Pictures! Pictures! (You Get the Idea)



A great shot of Bob's transport!

Gee photo

Something really cool blowing up. Sometimes there is a fine line between rocketry and NASCAR.

Gee photp





Sam Barone mans the launch button

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An Areotech rocket with an Areotech motor. A beautiful sight!

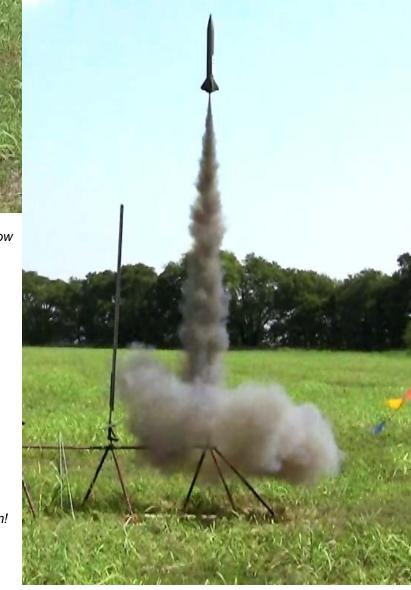
Gee photo

Ace Disaster's V-2 under construction. It grabbed 4th at DARSTAR VIII





A mid power Little John. I think this kit is by Madcow Rocketry



Little John go zoom!

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A huge, beautiful upscale Orbital Transport. The glider is radio controlled. I really wish I could remember who flew this. If it was you, let me know!

#### 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 Dave Shultz
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)

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JonRocket MadCow Rocketry

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Quest 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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