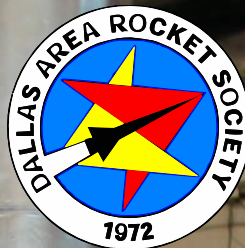


SHROUDLINES

A Dallas Area Rocket Society Production



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Association of
Rockey
Section #308



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George Sprague poses with his L3 scratch built project, The Silver Beast, in front of the DARS display at the Frontiers of Flight Museum's Moon Day event. Photo by Barbara Wege



CIVIL AIR PATROL
TEXAS WING

"SILVER BEAST"
George Sprague, NAR Level 3

Height: 36.1 IN (92.8 CM)
Diameter: 10.1 IN (25.7 CM)
Mass: 4.7 LBS (2.1 KG)

Weight at Launch Pad: 16.1 LB

Altitude: 5,130 FEET

Maximum Velocity: 750 MPH

Ignition!

By Gary Briggs

My summer vacation....

Well, I finally got out of Dodge the second week in August and made the annual pilgrimage to Michigan. I say annual, but we missed it last year due to my new job. I did make a visit last March to see my parents in Arizona, but have pretty much had my nose to the grindstone since that time. I needed a break.

I can't go north without reliving various parts of my life, many of which intersect with rocketry in some way. First up on this trip is exit 45 north of McKinney, where many outings to Windom would veer to the right. I can't pass that exit on 75 without reliving a few events, like my first organized launch, many a Texas High Power, Turkey Shoot, the first Fall Classic (and a few others), and many other great launches. It will forever be my reintroduction to rocketry for me and the introduction and learning ground for high power. Although level 1 got flown in Justin and level 2 in Amarillo, most of the preparation happened in Windom.

At my wife's parent house in Indiana my father in law was working on cleaning out his house in anticipation of a future move. One of the things that was clearing out was his rockets. At 74, his interests had moved to other things although he said if I was up there he would probably fly them. I said I would keep the ones I

wanted and make sure the rest found themselves in the hands of some new rocketeers. I would also take a few to Michigan to entertain the folks up there. One of these was his LOC Legacy that he built for LDRS in 2002. They both came down to Texas to visit us that year, but we met up in Amarillo to get my level 2 and he got to launch his first F motor in the Legacy. We had a good time watching the Gates brothers fly their incredible rockets and took in Palo Duro Canyon with the kids before heading back to The Colony. Best sausage I ever had was on the cowboy breakfast outing. Good times...

When I am in Michigan, it is awash in memories of my youth and rocketry. I remember my 1 neighbor bringing rockets to launch at my house before I had even built one. Then there were the builds and launches with my other neighbors. Much more recently, in 2013, I put my Q Modeling WAC Corporal in the top of a pine tree, and sometime in 2014 it finally came down, well at least the body tube. I believe the nose cone is still securely in place, held by the Kevlar shock cord.

The day I was leaving we had a family gathering at my brothers place, and conveniently, there was an empty pickle field across the road just itching for a launch. Winds were a little more than I would have liked, and we did put one in the corn field, but later

recovered it. I like this shot of my great nephew pushing the button on his first D motor. Good times indeed.



The content drought continues...

So what you get in this issue is a fair amount of recycled material. Stuart Powley provided content from *Shroudlines...The Blog* on the Moon Day event at the Frontiers of Flight Museum and George Sprague provide some additional pictures from Barbara Wege. Next up is Frank Di Cosimo's build of his PMC Bionic Transport as documented in The Rocketry Forum. We wrap things up with a few shots from the July Frisco Launch and shots from Frank Di Cosimo and Sam Barone's successful Level 2 flight down in Hearn.

We have now gone from spring floods to summer burn bans. Hopefully the fall treats us with good flying weather

Bill's Something #15- If the AMA had their Pink Book or the return of automotive tail fins

By Bill Gee

I watched many a Jetsons cartoon as a kid and was absolutely convinced that we would have flying cars by the year 2000. We ultimately did not, but I'll wager few are aware how close we came to that dream coming true.

If only they had chosen a car platform other than a Pinto, that crash might not have been a fatal inferno and history might be different...

Even if we never have flying cars, one aspect of them is about to happen.

The human brain is poor at handling three dimensions. Even good drivers are not likely to be able to successfully maneuver through heavy traffic in the air. Forget trying to teach the average person how to fly using only instruments. The flying car will out of necessity be self-piloted.

That is what we are about to get.

Several companies have been working on autonomous or self-driving cars. And not a moment too soon as texting while driving is fast becoming a problem. We already have cars which can parallel park themselves. Cars with adaptive cruise control which maintains a safe following distance from the vehicle ahead and automatically applies the brakes to avoid a crash. Cars which warn the driver when straying from lane. It will not happen all at once, but before we know it, Uber drivers will be as extinct as the dodo bird along with valet parking attendants.

As much as I appear to be looking forward to this future, and I am, I will insist on being able to turn that stuff off and doing my own driving. Consider the simple case of going to a high power launch and the car not knowing how to get from the field gate to the parking area.



The Jetson's—Hanna Barbera

Suppose the AMA had something like our Pink Book - they may have their version of our infamous Plastic Model Conversion contest event. In this case, incorporating the tail of a stick-built airplane with a plastic car model. The AVE Mizar might be well known today.

Henry Smolinski was a man with a mission - he wanted to make private aviation more accessible to the common man. His idea was to make our most commonly owned vehicle flightworthy. The tragic story can be read at https://en.wikipedia.org/wiki/AVE_Mizar and <http://www.cookieboystoys.com/mizar.htm>



"AVE-Mizar-1973-N68X-XL" by Doug Duncan - Own work. Licensed under CC BY-SA 3.0 via Commons

Speaking of, we will be flying high power again, hopefully sooner than later.

If you would like to discuss this further, post your comments to the DARS-General Yahoo group at <http://groups.yahoo.com/group/DARS-General> where I like to hang around.

Moon Day 2015!!!

Reprinted with permission from Stuart Powley from "Shoudlines..The Blog".
Additional pictures provided by Barbara Wege

The 2015 edition of Moon Day turned out to be the highest attended so far! The Frontiers of Flight Museum was awash with tons of space enthusiasts of all ages. The DARS booth was manned by Jack, Suzie, John, George, Dan, and myself. We needed all the folks due to two build sessions and (in a first for Moon Day) a launch! Some pictures have already been emailed and Facebooked (is that a word?) but here are mine!



The DARS booth! It was pretty big this year...



A ton of models on display...



...and more models....



DARS members help budding rocketeers in their first build
Photo by Barbara Wege



George Sprague helps the kids ensure their Shroudlines are equal length. Photo by Barbara Wege



John and Dan help kids prep models at the launch!



...while Jack got them on the pad! I helped with the controller, but I didn't get a picture of it...



I didn't really think about last week's post having anything to do with Moon Day until I met Ms. Ansari herself! She was demonstrating some new software her company is developing. She also graciously agreed to a group picture with us!

So there you have it! Until next time, fly 'em fast and high!

The Six Million Dollar Man Bionic Transport PMC
 Repurposed from The Rocketry Forum with Permission from Serpico
 A.K.A DARS member Frank Di Cosimo

Editors Note: Back in the 70s when anything seemed possible via technology, a prime time television show was created under the premise of how to repair a damaged astronaut with bionic technology. It was all science fiction at the time, but we are now seeing some of these ideas being brought to practical use for amputees and others. That being said, the show also spun off the Bionic Woman series and a bunch of toys to let kids have their own adventures with Steve Austin and Jamie Sommers. Frank Di Cosimo's imagination led him to a plastic model conversion of the Bionic Transport and Repair Station Play Set. What follows are the edited posts to show the projects progression. Steve Austin will fly again very soon.

I picked up a a mint condition Bionic Transport on eBay! Got me thinking... Plastic Model Conversion? Sure why not! I bought another not-so-mint one and plan to attempt a PMC:



There is gonna be a lot of Dremel action on the innards that's for sure - my initial idea is to gut it and use it as a "wrap" around a 4" airframe. Fins will be challenging and not accurate to the model. Maybe clear plexi?

Started the project last night - A leftover Precision Loc IV tube fits pretty well with the Bionic Transport shell after some dremel work:





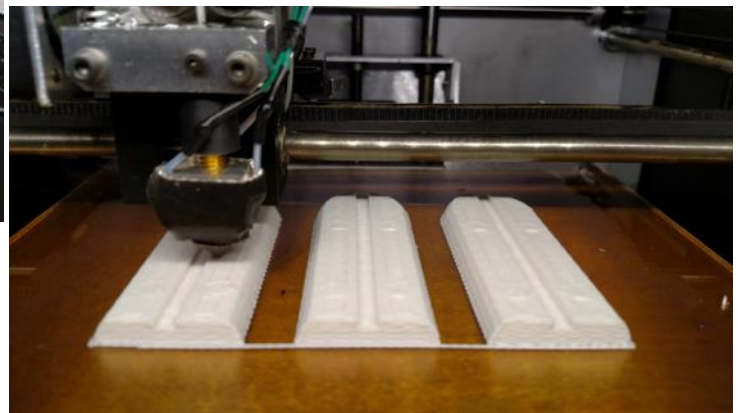
Almost finished the build. Still trying to figure out what to do about fins.



So after a lot of thought on fins, I decided to go with removable fins. I'm trying to keep as close as possible to the original toy design; adding removable fins allows me to maintain the original form factor outside of flying. Found some fins that work however I had to sacrifice another kit. Used the 3D printer to print fin mounts:



Custom retaining bracket for the motor: Expecting to fly with an Aerotech F50 ~ so far so good!

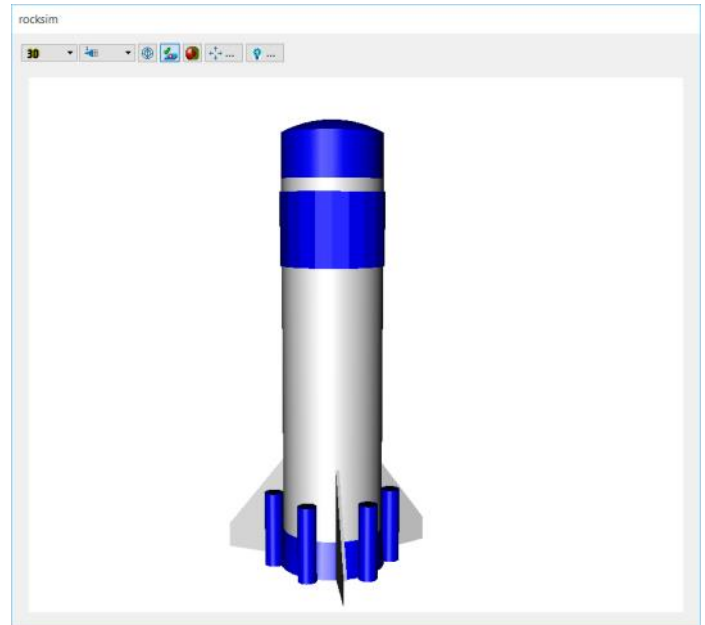




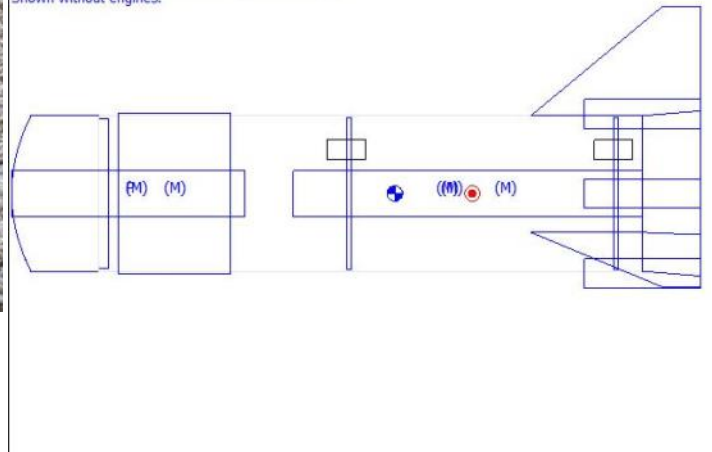
Recovery system installed. Chute fits nicely in the nosecone, cord tucks into airframe. The cord is mounted to the nosecone using a small eye hook/bolt - which mounted perfectly in a hole that was part of the toys' initial design! Like it was meant to be!!



Rocksim data below. I used fin tubes to replicate the toy rocket motors. Going to fly an Aerotech G80T-7. Should get her to 1500' ~ I expect a much lower altitude due to all the drag from the MANY MANY MANY airframe anomalies, bumps, humps, etc. lol.



Bionic Transport & Repair Station
 Length: 17.7500 In. , Diameter: 4.2500 In. , Span diameter: 9.6000 In.
 Mass 38.0727 Oz. , Selected stage mass 38.0727 Oz.
 CG: 9.8707 In. , CP: 11.8635 In. , Margin: 0.50 Marginal
 Shown without engines.



Our launch sites are under a burn ban right now :/ ... was hoping to launch last Saturday but the meet got cancelled due to dry overgrowth. I am traveling this weekend so it may be a few weeks now Will definitely do my best to get pix and video.

The original post can be found here <http://www.rocketryforum.com/showthread.php?127162-Six-Million-Dollar-Man-Bionic-Transport&p=1487236#post1487236>

Use Your DARS Card and Save Money—Member Discounts



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tors. Enter DARS in the coupon field at check
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10% Discount on all rocketry related items. Estes
kits and motors. Great selection of plywood and
balsa.

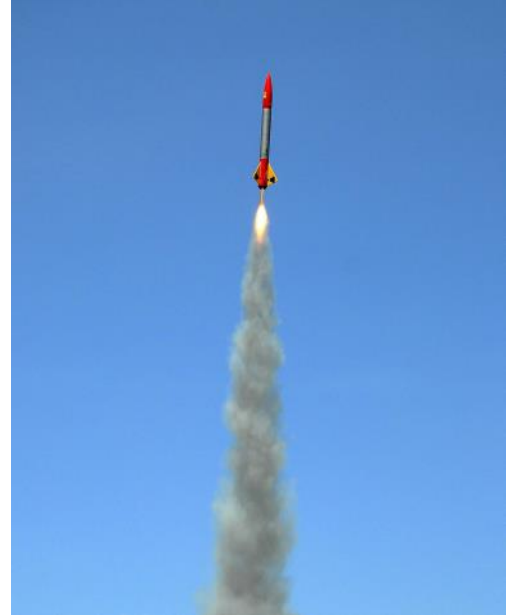
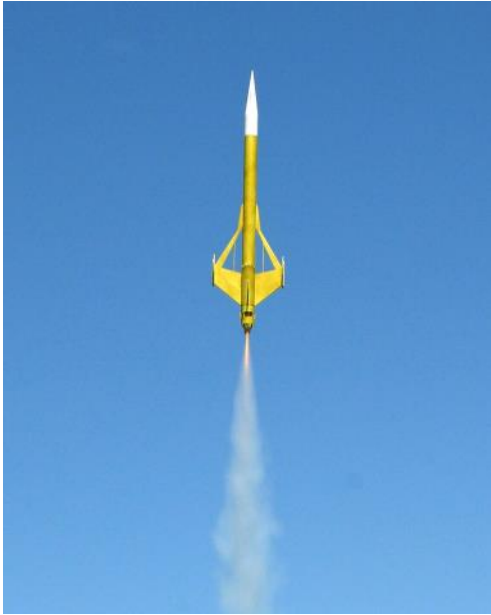
DARS supporters not currently offering a discount



Click on logos to link to websites

Parting Shots

Photos by Various Artists



Photos above by Nick Viggiano. Photo left below by Frank Di Cosimo. Photo Right below by Chris Bender



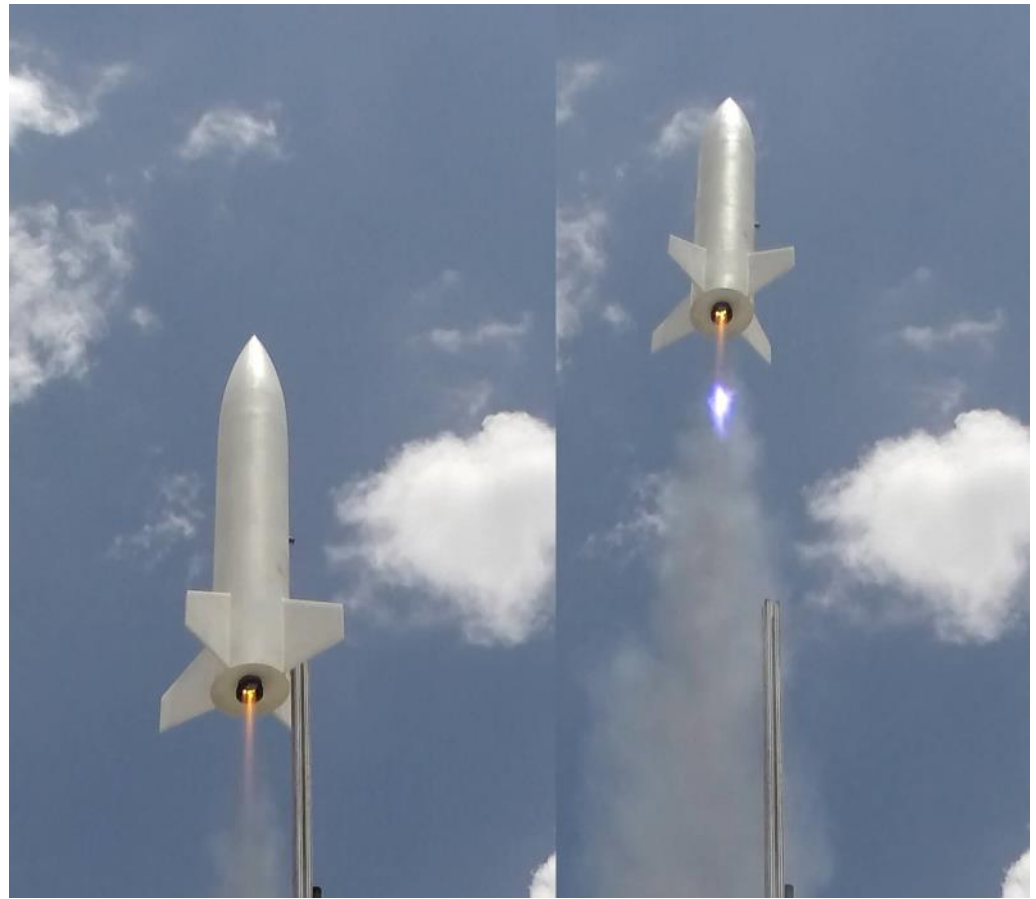
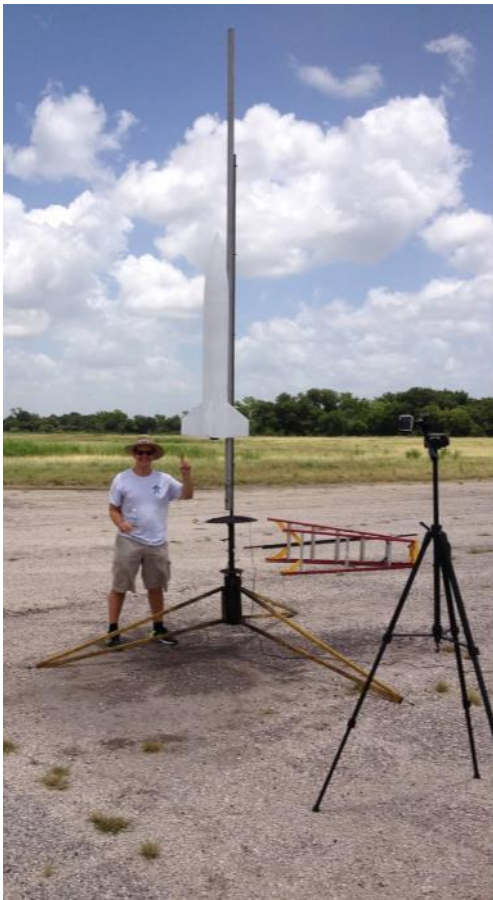


Photo above and below by Frank Di Cosimo.

Photos above by Chris Bender





Frank Di Cosimo's Andrac ready for its L2 flight. Photo by Frank

How to Contribute to Shroudlines



We all share a love for the rocketry hobby and all have different experiences and expertise to share. You don't have to be a Pulitzer Prize winner to write for this publication. Anyone can do it!

Submissions can be in the form of plain text files, emails, or MS Word documents. Pictures can be of most any format, but .jpg files are generally the norm. Keep the content family friendly and free of political discussion; just rocketry.

We publish every 2 months so we need your content submitted by the 15th of an even numbered month (i.e. February 15, April 15, June 15, etc.). You can submit via the contacts page on dars.org or direct to the editor at garyb2643@att.net.

DARS Officers

President	Jack Sprague
Vice President	Dave Shultz
Treasurer	Suzie Sprague
Secretary	Bill Gee
NAR Senior Advisor	Sam Barone

Upcoming Events

9/5	DARS Business Meeting @ Coppell
9/19	Monthly Launch @ Frisco
10/4	DARS Business Meeting @ Coppell
10/17	Monthly Launch @ Frisco

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, fill out and send in an [application](#), to join or renew your membership.

The club normally meets on the first Saturday of each month at 1:00 p.m. and the current meeting location is in Coppell, just off the Sam Rayburn toll way and Denton Tap Road.

Visit the DARS website for the meeting location: www.dars.org