SHROUDLINES



DARS NAR Section #308 Jan/Feb 2008

Volume 17, Issue 1

Dallas Area Rocket Society ("DARS")

What is a Newsletter?

By James Gartrell



of Rocketry ("NAR").

Special points of interest:

- Doug Malewicki has a new highspeed mass transit system that I think will impress you. It did me. This could be our future mode of transportation. Check it out! Page 2.
- What do you do when the rain and burn bans keep you from flying? Your Editor relays what he's been doing. Page 3.
- A rare cloning opportunity has fallen in my lap. Doug Malewicki passed along the details of his Sky Cycle X This should become one of DARS' classic articles. Set your browser zoom to 200% or more for some great details. Page 4.
- Want to find the latest info coming from the vendors? It's all available for you on Page 6.
- A few tidbits on an item that I think will be of interest. Did You Know, Page 7.

Inside this issue:

Sky Tran ™	2
Rainy Days and Burn Bans	3
Sky Cycle X-1—The Real Deal	2
Breaking Vendor News!	6

DARS Officers

Did You Know?

7

It's sad. Photo by James Gartrell. If you're reading this, then I'm speaking to you. That's what a newsletter does. It speaks to those interested in taking the time to read it. As large a club as DARS is, this newsletter should provide to its readers a wide spectrum of diverse opinions and activities. Instead, you mostly just get to listen to me. Now, I try to make our newsletter as interesting as possible, but nothing can replace the input of other members. You have something that is important or interesting to the other members in this club. Really! That is the purpose of this newsletter, to tell folks about that latest kit you built or showing off your humongous scratch built rocket. I've met most, if not all of you, and I know you all have some really great

stories to tell. You certainly have some really fantastic rockets to show off! So, come on! Send me a story!!

Sending a story is easy. Write up a few paragraphs in a Word document or even Notepad or Wordpad, take one or two pictures (100Kb minimum - jpg, tif, or bmp), and then send them to me at thegartrells@hotmail.com. I'll edit the text if you like, and if you can't get any pictures just let me know. I can usually find a couple of pics that will go with a story. Also, I'll be happy to take a picture of your rocket at the next launch. I'm at most launches, but just let me know to be sure and I'll bring my camera to get a couple of photos for you. It's easy! I know everyone would love to hear your story.



Look at all those cool stories hanging in the netting! That's no small story laid out in front of the modeler, either! Oh, cool! Look at those great stories just down the flight line, too. Think about it. All those cool stories just waiting to be told, and what, nothing. Silence. It's terrible! Do you hear them crying, pleading to be told? It's sad. Photo by James Gartrell.

Page 2 SHROUDLINES

SkyTran™

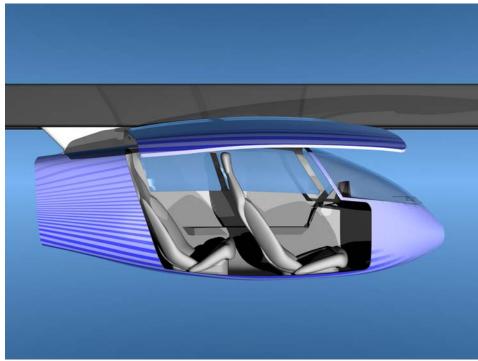
By James Gartrell, Illustrations courtesy of Unimodal, Inc.

Recently, I came into contact with Doug Malewicki. That's a name that many old rocketeers know. Doug is a true rocketry engineer and has added significantly to our hobby over the years. One of his recent ventures has the promise of having a significant effect of reducing pollution in our cities and freeing up some much needed space. Tired of having all of our rocket fields lost to the latest highway project? Doug has come up with a solution, SkyTran.

What is SkyTran? Well, you really should check out the company website to get the real scoop. www.unimodal.com I'll try my best to summarize. Basically, it's a low footprint, personalized, high-tech, mass transportation system. What really makes the system unique, in my opinion, is the personalized aspect. The biggest drawback to mass transportation systems is that they aren't personalized. You join a bunch of other folks who are going along the same route and stop everywhere they want to stop, finally arriving at your

specific destination. It's slow and not very efficient. With Doug's system, you go and stop only where you want, and you get there at about 100 mph. There's also no waiting for the next bus or train. You just walk up to a portal and get into an aerodynamic personalized vehicle, punch in where you want to go and relax as the vehicle speeds towards your





destination. You can even surf the net along the way if you'd like. Now that's my kind of transportation system, and it really works! This isn't science fiction. Doug has used current technology and his understanding of aerodynamics to design a truly low-cost system that comes closest to the personal automobile for purposes of travel than any system currently in existence, only better.

Certainly, a system that offers that level of personalized transportation could substantially reduce the number of vehicles on our system of roads. Imagine how much impact that would have on reducing the pollution in our cities. Have you noticed how much land we have tied up in highways, too? That's another fantastic aspect of the system, the low footprint required. The rails are overhead, and speed the cars along connected below it using a magnetic levitation system. One rail system has the same capacity as a 3lane freeway! No more traffic jams and no wrecks, either. The vehicles on the system are computer controlled with sensors that keep the vehicles spaced to avoid collisions. I am very impressed by the system and hope to see it operating around the country very soon.

Doug's venture is currently seeking to establish at least one demonstration system. This is needed to showcase the system, sort of proof of concept that people can actually see and evaluate. I sure hope he's successful. With more and more tollways and light rail extensions planned, places to fly our rockets are getting fewer and farther between, and our air quality is becoming almost noxious. I think it's fantastic one of our "old rocketeers" actually came up with the system. I guess it's to be expected. Rocketeers are always looking for a better way to do something. Check it out!

Volume 17, Issue 1 Page 3

Rainy Days and Burn Bans By James Gartrell

Don't let those rainy days and burn bans bring you down. The last launch I attended was in October, 2007! That's bad! Seems every launch was either canceled because of rain or a burn ban. I've certainly missed flying, but I've still kept pretty busy. I managed to repair most of the rockets I had in the active repair bin: repaired the Hawks Hobby Mark 305. Red River Rocketry Free-B. and Squirrel-Works Metropolitan Police Call Box and Red Baron. I also repaired a few parachutes plus I'm just waiting for the humidity to drop so I can paint my newly built Super Mars Snooper Hawks Hobby gave me for Christmas. Yep, lot's of rocket stuff to keep me busy even with all of the rainy days and burn bans. It was a good way of getting even with Mother Nature.

The Mark 305 repair was pretty easy. The nose cone and motor mount both needed to be replaced and the parachute needed a couple of lines re-attached after its last flight. Unfortunately, about a 20 mph wind gust caught it just a few feet off the launch pad and sent it up at about 40 degrees from vertical and when the chute deployed it was already nose down and coming in fast. When the chute deployed it ripped the shock cord from the motor mount and the body tube caught up with the nose cone, ripping out a large chunk. As large as that chunk was, I was surprised how little damage there was to the body tube, even after burying up a



few inches into the ground. The shock of the sudden stop wasn't too kind to the motor mount, though. It was shattered into about five pieces. I ordered the replacement parts though and moved on to the next project while waiting for them to come in, repairing everything later.

Fixing the Free-B was a short project as I only needed to add a little CA around the base of one fin to tighten it up. I guess 15 mph winds and streamers don't mix too well. I went to the window and sneered at the rain on that day. My next repair, the Metropolitan Police Call Box wasn't quite as easy. At the last McGregor launch it decided it wanted to get to know the door to the DARS trailer a little better. The middle of one of the fins caught the middle of the door and crunched balsa-Trailer: 1, Balsa: 0! It had also sustained some road rash on its maiden flight out at Woodruff park after making a three point landing on the asphalt parking lot and then being dragged by those two big chutes about 5 feet just before I got to it. If you look close you can see the road rash signs in the picture, which was taken just before it kissed the trailer. The fins were papered so, luckily, the damage



wasn't that bad. I cut a chunk out and replaced it with a section of balsa and then filled in the seams and a piece of the base that also needed a little TLC with Elmer's Fill 'n Finish. It didn't look too bad. I took the opportunity to sneer at the rain one more time since it was keeping me from getting it painted. It dried out the next couple of days, though, and I did the touch-up painting. One more repair to go!

The Red Baron was in about four pieces after one of those hot Estes ejection charges shattered the rocket. Luckily, the breaks were pretty clean, so I was able to put a couple of pieces back together and drizzle in a little CA to fix it. Drizzle, hold, drizzle, hold, drizzle, hold and I was done! Once again, just a little Elmer's Fill 'n Finish was added to smooth things out and then touch-up paint and it was ready to fly again. I was happy! The first two flights were awesome. Perfect flights straight up and lazy glides back down. It even continued trying to glide on the third flight after the ejection charge blew the top wing off! I'm sure looking forward to the next flight—assuming we ever get to fly again!

Building the Super Mars Snooper was a ton of fun. It looks so cool! I really like the improvement made on the fins. They are now tabbed and slotted into the tubes, attaching to the motor mount—much stronger than the earlier version that had them surface mounted. Now, if the humidity will just cooperate!



Page 4 SHROUDLINES

Sky Cycle X-1—The Real Deal By James Gartrell, Photos courtesy of Doug Malewicki

Connecting up with Doug Malewicki has been very cool. Having such great old rocketeers as Allen Wilcox and John Dyer in our midst, it takes a lot to impress me. I'm impressed. Having a Masters degree in Aeronautical and Astronautical Engineering from Stanford is a good start, but it's what he did with the piece of paper that is impressive. There are many reasons you might remember Doug's name, such as on Centuri's TIR-100, Altitude Prediction Charts, or any of many technical articles written for the Model Rocketeer in the '60s and '70s, but probably a lot of folks remember him for having designed the Sky Cycle. Doug Malewicki recently sold his original static and sub-scale models of the Sky Cycle X-1. No,



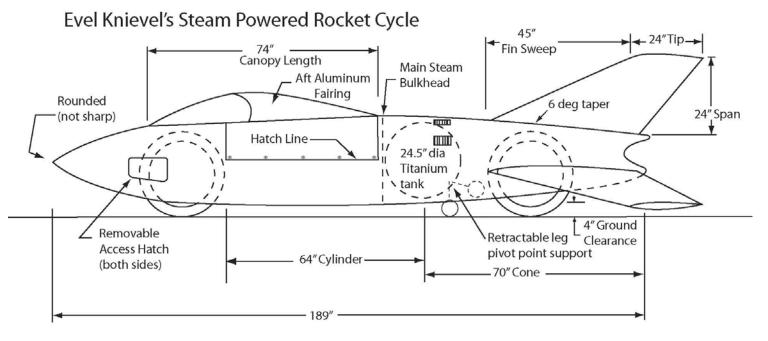
don't email me to tell me I have the number wrong. Read on. Considering the popularity of Evel Knievel's infamous September, 1974 attempt to jump Snake River Canyon, most people are familiar with the Sky Cycle X-2. That's the rocket Evel used for his attempt. The X-1 was a test model. Doug was gracious enough to send me some pictures of the X-1 prototypes and test rocket for this article, plus a fairly poor quality dimensional drawing. Luckily, our President, Don Magness used his Squirrel-Works designing skills to recreate the drawing shown below. It looks great! Doug was really pleased when I sent it to him, thankful for being able to replace the existing drawing on his website.

The model on the left in the picture (shown left) is the static model used for PR purposes. While fantastic and having its own fame, primarily for the movie poster on the George Hamilton Evel Knievel dvd, the focus of this article is on the rocket on the right, one of the test rockets that was used for proof of concept before building the full size test rocket shown on the

next page. The photo was of one of many promotional events to reveal the rocket and stimulate interest; shown are Doug shaking hands with Evel as Robert Truax, steam engine designer, on the left looks on with one of his partners, Facundo Campoy. Looking at the rocket you can see some obvious differences between the X-1 and the X-2. The X-1 was designed more like a motorcycle while the X-2 was what I would consider more tricycle in design.

Besides the two photos showing Evel squeezing into the test rocket, the remaining photos show greater details of the smaller test rocket, illustrating external details. The length of this rocket is 21 inches, or 1/9 sub-scale of the larger one. It flew on a Flight Systems F-100 solid propellant motor.

I certainly want to thank Doug for making the photos and dimensional drawing available for this article. I couldn't be more pleased having this made available to club members. All I can say is if you get the opportunity to meet Doug, shake his hand and give him a big Texas "Thank you!



Volume 17, Issue 1 Page 5 EVEL XIVEYE

Page 6 SHROUDLINES

Breaking Vendor News! By James Gartrell

EMRR announced the start of the 2008 EMRR Challenge contest. Similar to last year, a Design This Spaceship contest is incorporated into the challenge, plus a Youth Participation contest. The 2008 challenge is a little different than past years in that specific challenges must be completed by a date certain during the year, rather than by the end of the year. The prize pool for all of the contests is fantastic, so join in on the fun and you could win a great prize.

Due to popular demand, ARA Press has released another printing of the popular Spaceship Handbook. These were beginning to sell for premium prices on eBay, so now's your chance to get one at regular price. No, Jack didn't even raise the price! He also has a new resource on his site available for modelers, the Next Shuttle by Dave Ketchledge. This is a CD book and includes dozens of prototypes that can be modeled for the NAR Future/Fiction Scale competition.

Watch for Balsa Machining Service's next Clone Kit of the Month. Last month's FSI Viking will soon be available as a regular kit on BMS' site. If you missed the special price, well, you get another chance at a special price on this month's new release. Don't miss it!

FlisKits recently announced three new kits, the MTTM Stinger, a micromaxx downscale of the 18mm Stingray, the Adfecta, a 24mm model, and the Praetor-II, a booster for the 18mm Praetor.

I don't remember if I noted this before or not, but Hawks Hobby's latest releases are the Super Orbital Transport, Super Solar Sailer, and Texas Thunder. These are all fantastic kits!

JonRocket has three new products: Birdie clones from West Wayne Rockets; the X-1 N.E.A.V. from Cygnus Model Rockets; and the Flash 24 from Starlight Rockets.

Madcow Rocketry has added two new kits to their 4" line of scale kits, the British Sea Wolf naval missile and the U.S. Army's Patriot missile.

Pemberton Technologies has a new 1.6" tube fin kit, the Kraken. The



model on his website looks really awesome!

Q-Modeling has released their newest kit, the BT-60 based upscale of the Estes Andromeda. It is over 70 inches tall!

Wow! Lots of new stuff!



www.pembertontechnologies.com





Volume 17, Issue 1 Page 7



RED ARROW HOBBIES

For the best deals on model, mid and high power rockets, model rocket engines, reloadable rocket motors and rocketry building supplies.

www.redarrowhobbies.com

DID YOU KNOW?

Quest is building a "museum" page on their website to celebrate the history of model rocketry. Too cool! Not much there at the moment, but promises of some old Stine memorabilia and articles, including the Stine/Carlisle letters, will make this something you'll want to visit often. Also, they will be making a limited edition reproduction of the Model Missiles Aerobee Hi available later this year. See their website for more details.



DARS Officers

President Don Magness

Vice President Royce Frankum

Treasurer Cheri Sapp
Secretary Terri Magness

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.



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



Valwood Branch at: 13940 N. Stemmons FreewaySuiteA, 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