



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

Special points of interest:

- "Ignition!" We had an election. Look to the right to see who won.
- Scott Whitemyer gives us a tale of love and loss...about a rocket, of course.
- The TWA Moonliner comes to life with the second, and final, part of the article.
- The DARS Fall Classic finally happened!
- Doug Sams shares his photos of the event.
- Want to see your words in print? We tell you how!

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Ignition!

By J. Stuart Powley



DARS officers for 2010. From left to right: President Jack Sprague, Treasurer Suzy Sprague, Secretary Bill Gee, Vice President John Dyer, and Senior NAR Advisor Sam Barone.

Well, here we are at the end of another year. Flying has been tough this year, mainly due to the extremely high humidity (read: constant stupid rain). However, the few launches we have managed to pull off between cloud bursts have been fun, and one tends to appreciate them more when they are rare.

president, Tony Huet- Treasurer, Terri Magness- Secretary, and Sam Barone- Senior NAR Advisor. They all did a great job! Actually, Sam is continuing doing his great job, since he wasn't able to dodge the train and was elected to his position again. (Thanks Sam!)

On that note, we move on to our newsletter. This issue has the second half of my Moonliner article, as well as an article sent in by DARS member Scott Whitemyer that shows why you should never completely give up on finding a rocket. We also have an article by Gary Briggs that gives us the low down on the 2009 DARS Fall Classic. Doug Sams rounds out the piece by providing the photos! Share and enjoy!

After the December elections, we have some new faces in office. The "new" officers for 2010 are all well acquainted with the ins and outs of running DARS, having served many times in the past. Their experience will be a valuable asset in the months to come.

Speaking of appreciation, I'd like to take this time to express my appreciation for this past year's DARS officers; Royce Frankum- president, Don Magness- vice

50 Days Later– Confessions of a Newbie

By Scott Whitemyer

My son Nathan (14) and I decided we would build the PML kit Callisto as our first mid powered rocket. After attending a Frisco launch and watching several of the G models fly high, we were hooked. The kit was purchased and several days later it was ready for launch.

For the first flight we used a single use F42T. The day was perfect for flying, no wind or clouds. The launch went flawless and the recovery was within 40 yds of the pad. I immediately went to the hobby store and purchased a bigger single use G40. Nathan was concerned about the tightness of the piston and unbeknown to us newbies we were suppose to clean the tube after recovery. I dismissed his fears and we launched the Callisto. Again it went flawless and was recorded by a friend, Scott Brookman. Upon deployment of the chute Nathan yelled, "I love this rocket!" The recovery was very easy.

I decided we would show off our new hobby to a few neighbors and friends, so off to the hobby store I went to purchase another G40 single use. The next Saturday we had 10-12 people watching as we readied the Callisto for launch. It was the fifth rocket flown this day as Nathan's friends brought their Estes kits and launched them with zest. The big show was about to begin as we started the countdown. We were so proud of our mid powered rocket and made quite a show of the rocket before setting it up on the pad. The launch went beautifully as it soared high overhead.

As it reached apogee a funny thing happened. The chute came out but was not connected to the body tube. Our beloved Callisto returned to earth

with the sound of a mortar and core sampled into my front pasture to the amazement of all the kids. It had buried itself a full 4 inches into the black gumbo; thanks to all the rain that week. My youngest son Alec (10) was first to the scene and was unable

The Callisto was restored to flying status and I went off to the store again to purchase another single use engine. Of course you guys know what I bought; a bigger engine, the G80W. Bigger is better.



*Scott and Nathan with their prized PML Callisto
All photos S. Whitemyer*

to recover the rocket. It took quite some effort to get it unstuck and I was amazed that the body tube was not crushed. You got to give credit to PML quantum tubes. It probably took 30 minutes just getting all the clay out from the inside of the tube. After investigating the scene I decided that the knot had come undone. Another newbie mistake, I didn't know about the double overhand knot. I was just following the directions off the kit.

Again we had friends up to the farm for lunch as we readied the Callisto for launch. The only difference this day was the wind. It was steady at 12mph gusting to 16. My son Nathan expressed concern about the wind and my wife stated flatly, "It's too windy to launch that thing." Of course I overruled them both as we prepared for its greatest launch yet. My friend Scott Brookman had driven 50 miles to watch and record the launch so I couldn't cancel.

As the Callisto sat on the rod we watched it sway back and forth with the wind. Nathan again stated, "Dad! It's too windy to launch!" I took control of the launch controller as I decided my son didn't have enough backbone to be in charge. In a moment of still wind I launched the Callisto. No count down or video, I just pushed the launch button. It soared way up into the sky and scared my friend who jumped 6

inches as his back was to the rocket unaware of my eagerness. It made a perfect deployment but began to drift and drift and drift. It was way up there and I followed its return to earth with my finger. It landed in my neighbors pasture to the north, behind a hill.

The search lasted 2 hours that day with my embarrassment and many chigger bites in waist high Johnson

grass added in. I hated calling off the search but I had guests getting chigger bit and sweating from the heat. I didn't want to leave the Callisto out overnight but didn't have a choice.

I searched for 4 days total spending about 8 hours total searching with a neighbor's four-wheeler. We did a criss-cross grid; the whole shebang. No Callisto. I couldn't believe I had lost our first rocket. I really felt bad not to mention the berating I received from my entire family for not listening to them. I admitted my mistakes not to mention several safety concerns that we won't talk about. We listed the Callisto as LOST on the flight sheet.

Several weeks later I ordered Nathan a new PML kit, the Phobos. He really wanted to get his youth certification. He spent many nights building and painting the kit and produced a great rocket. We have flown it twice on G single use motors with great results and await a day to get certified. I myself purchased the AMRAAM 3 PML kit and have built it. Nathan and I look forward to getting certified level one very soon; as soon as the rains stop.

50 days after being lost, the Callisto returned home. My neighbor Rick Thompson was aware of the rocket somewhere in his pasture and found it while feeding cattle. Rick and his young sons had attended one of DARS outreach programs and he was more than eager to find the lost rocket. Again I was amazed that the rocket was intact and despite being a bit wet will fly again. Nathan is giving it a new paint job with a new name yet to be determined. Even if we certify with our new rockets I have a funny feeling the Callisto will always be our favorite.



Scott shows off the newly found model!



Scott says these may be cow tooth marks...he may be right!



At Left: Muddy, but sturdy, the recovery system survived!

The TWA Moonliner– Part II

By J. Stuart Powley

In the last episode, we reviewed a bit of history of the Disneyland TWA Moonliner, and went over some of the thought processes (such as they were) that lead to the beginning of the project. This time we will pick up where we left off. Also, we will see if this beast actually flew!

I now had to face the part I had been dreading- the landing gear. I found quite a few pictures of them on the internet and one thing was clear; they had a lot of curves and weird angles. I wasn't sure how to tackle this issue at first. I considered building them out of balsa blocks, sanded to shape, but I realized my carving ability really wasn't up to it. Then I thought about building a frame and using my old friend Fill & Finish to build up parts of the structure, but my head hurt just trying to figure out exactly how that would work. I then decided to think like the original builders. They built a frame and then attached sheet metal over it to give it the correct shape.



The balsa landing gear bases before the wooden dowels were added.

The frame was easy enough to build. I used wooden dowels and sheet balsa to get the basic shape down. The sheet metal was another matter, though. At first, I tried using aluminum tape, but I found that it wrinkled like crazy. Then I tried regular masking tape, but that tended to come unstuck. Finally, I thought about how I had used typing paper on the nose. If it was good enough for the nose, it should be good enough for the landing gear as well. I was able to tack it to the frame with CA glue and then rub a thin layer of CA on the backside of the paper. I then wrapped it around the frame and cut off any excess paper. For the "knee joint" area of the gear, I used masking tape like I did on the body tube/ tail cone seam. I then coated everything with good old Fill & finish and sanded it smooth.



An almost completed landing gear. Typing paper wrapped around a dowel did the trick!

I referred to my photos of the original Moonliner to get the angle right for the deployed gear. After using epoxy to attach the gear to the tail cone (and lots of it) I measured and cut the small gear struts out of small dowels. I used some scrap balsa for the strut slides and the gear slides at the top of the gear. I drilled small holes in these parts for the struts and used epoxy to stick everything together. After the main gear were finished, I drilled holes in the bottom of each one and epoxied in smaller dowels. I then epoxied on wooden discs (a small one and a large one on each gear) to the ends of the smaller dowels. The main construction was finally complete.

Now came the moment of truth. I had to see if I could make my creation stable. It may seem strange that I left such an important issue until so late in the process, but the truth is that due to the unorthodox "fins" I couldn't think of a way to test it before this point. Therefore, I added my shock cord and parachute, grabbed some fishing weights and kite string, and set out for the backyard for a little high tech rocket swinging.

After putting in an engine and tying the string around the center of gravity I started to swing the model in a wide circle. There was not even a hint of stability to it, as it tumbled around completely at random. I added a little weight to the nose and tried again. There was no change. More spinning, more weight, more spinning more weight, etc... Finally just when I was deciding that I had built a

pretty good display model that would never fly, something clicked and the Moonliner started tracking straight and true! It took two full ounces of nose weight, but it was finally stable. I quickly epoxied the weight into place and began to think about painting.



The model decked out in gloss white. The decals are waiting to be applied.

The Moonliner's TWA paint scheme looks fairly simple at first glance, but it does offer some challenges. I first sprayed the whole model with primer and gloss white. Next, I focused on the nose cone. The nose has a scalloped red stripe that bows around the "TWA" logo. I masked this area off and sprayed it with Rustolium gloss red. After it had dried, I removed the tape and marked off the area for the top red stripe. I used a gloss red paint pen for this stripe and the ones on the landing gear due to the angles making masking difficult. I was pleasantly

surprised at how smoothly the paint went on. It was very simple to stay inside of the pencil marks I had drawn to mark the areas. I then brush painted the nose tip and the undersides of the landing gear with silver. Next came the decals.

I used Testors decal paper and our color printer to make all the decals. The nose "TWA" logos were very simple to make. I just used Arial font that was bolded and put in italics. I did the same for the tail cone logo (although I used a smaller font size) The black portholes were periods that were bolded and blown up to the appropriate size.

As a slight aside, the Hagerty plans are a little off on the porthole placement. I noticed in the photos that the lower holes are not placed evenly around the diameter of the rocket, and that the top holes actually have one less hole than there would be without a cockpit. Luckily I found a paper model of the Moonliner at www.disneyexperience.com/models/moonliner_model.php that showed the correct placement and number.

The scripted "Moonliner" logo for the tail cone was a little more challenging, since I couldn't find any font that matched it. I ended up taking a picture of the original from the internet and cropping in close on the logo. I then increased the size slightly and increased the contrast on Paintshop so that it was true black and white. All in all, it came out pretty well, and it has the distinction of probably being the only part of the model that is absolutely perfectly true to the

original. I hit all the decals with clear coat and put a small "26" on the bottom of a footpad (the Ace Disaster Company team number).



The completed TWA Moonliner!



Detail of the landing gear and the aft decal. Below: The nose detail.



So there you have the story of how I finally realized my dream of having a flying Disneyland Moonliner. It was probably one of the most challenging builds I have ever attempted, and one of the most rewarding. I am pleased with the results, although there are always things that you think you might could do a little better next time. I think that it will fly well on a D12 (if my math works) although I'm a little nervous about having all those hours of effort zipping through the sky. Still, it was built to fly, and fly it shall...

UPDATE:

Since I wrote the above article, I had the opportunity to fly her. I entered the Moonliner in the DARS Fall Classic, since DAR-STAR TNG ended up getting cancelled. Part of optimizing your total points in the Classic is to fly the model. It was nerve wracking, but I did it.

I loaded the Moonliner up on the four foot 3/16 inch rod that Jack Sprague had brought to the launch. I wanted every inch of help to keep the rocket flying in a general upwards direction! As the count down progressed, I got more and more stressed. What was I thinking? Rockets need fins, dadgummit! FINS!!!

The count reached zero, and the D12-3 roared to life. The Moonliner streaked into the

sky on a column of black smoke. As she reached the end of the coast phase of the flight, she fish-tailed a bit. I think this was due to all the nose weight, but I'm not sure. She arched over and the D12-3 blew right on cue! Her yellow nylon chute (which I almost couldn't fit in with the wadding) billowed out and she drifted slowly down. A perfect flight!

She hit a bit hard on one landing gear, which snapped off the lower dowel and footpad. I looked around the whole area, but I never found it. No worries, though, I made a new one when I got her home. Her lead filled cone had actually stuck into the ground, but the damage was much less than I would have thought. I reglued the tip and smoothed it all out again with Fill & Finish. The only downside to the launch was that apparently no one got a picture of her in flight. I may have to fly her one more time.....



The original Moonliner being lifted into place at Disneyland in 1955.

Photo: Disney



The Moonliner on the display table at the 2009 DARS Fall Classic!

Photo: Doug Sams



She awaits her date with destiny...

The 2009 DARS Fall Classic!

By Gary Briggs

This year's Classic was delayed by the fall rains and ultimately ran up against one of the busiest shopping days of the year. To add to that, it was probably the coldest Classic since the first one, with temperatures hovering near 50, but with a cold north wind. Not the sustained 30 MPH barrage we had the 1st year, but more up and down like we had at NSL 2006, when we determined that racks were a must-have for the event to go forward. Undaunted, the classic contestants came out and competed in Frisco, and the large crowd got to see some excellent examples of the old and new rockets that make this hobby great. We had 31 rockets in the 3 categories, across 11 participants.

The 60's/70's category was the biggest this year with 15 rockets. John Dyer's Saturn 1B was the class of the field, emulating the old Estes and Centuri designs with a Semroc body and Apogee capsule. He took home the Inflight Model Rocketry Nike Smoke for his efforts. Stuart Powley got second with a crowd favorite R2D2 model and won the Red River Rocketry Lepton. George Sprague's Astron Starlight rounded out the category for third place. A couple of other notables on the table for this category were John Dyer's Centuri Enerjet Athena displayed with a 29mm Enerjet Blackpowder F motor! Ted Mahler brought out another of his vintage launch systems. This time it was the Estes

Phantom Electro-Launch System, with Semi Scale Saturn V perched on top of it, complete with a set of Eveready Photo Cells. Ted flew the Saturn later in the day for a great flight. Ted and John also had some vintage 60's catalogs so it was a great trip back into history.

In Starships we had 7 rockets from 6 contestants. John Dyer took 3rd place with a nicely painted Semroc clone of the Centuri Taurus. Stuart Powley took 2nd place with his very cool TWA Moonliner. Stuart had prepared this rocket for a NAR F/F scale contest, so it came complete with a documentation packet. If you check the Newsletter archives, you can see the build article on this one. He made a late in the day flight to try and secure the victory in this category, and it flew great for a rocket with nearly no fins in the wind, only displaying a small wobble on ascent. Unfortunately it landed a bit hard, popping off one of the landing pads. For his efforts he added another Red River Rocketry Red Star to his collection. 1st place went to Scott Cook with his nicely detailed Interceptor, winning the \$25 gift certificated from HobbyTown USA on Walnut hill.

In the Classic Upscale category we had 9 rockets from 7 contestants. George Sprague took 3rd place with his much larger version of the Astron Starlight. The clean sweep of 2nd place ribbons went to Stuart Powley with his Estes Pegasus

upscale. For his efforts this time he won the decal set from Excelsior Rocketry containing a Goblin set and an original set to turn a Big Daddy into a Red Max derivative called the DER GROSSER VATI. Ken Overton took 1st place in this category with his WAC Corporal, complete with display stand, winning him a Red River Rocketry Diamond Ring kit.

Best in show voting was close as it usually is, but the final nod went to Ken Overton and his WAC Corporal. This achievement won for him the Nike X model from Q Modeling and bragging rights for this year.

Earlier in the day we had a couple of other drawings for prizes. A few months back, my neighbors were doing their spring cleaning and discovered an Estes flight box that they bought for their son several years ago (He is now a senior in high school). The box had some blue tape on it, but the contents were unused and in new condition. I had told Royce that I wanted to give this away at a Frisco launch, but that is where things stopped between vacations and rain outs. We finally got to do this at the December launch, and since we had a pretty large crowd with lots of kids, it worked out well. We took down the names of 20 or so children under the age of 12 and Royce drew the winner, Avery Brennan. I hope you enjoy the kit Avery! Come back and fly with us some time. For

The Classic contestants we had a drawing for two \$10 gift certificates from HobbyTown USA on Walnut Hill, and those winners were Ted Mahler and Pete Harper.

Well that wraps it up for another year. We extend a big thank you to this year's sponsors which included Q Modeling, Red River Rocketry, Hobbytown USA, Inflight Model Rocketry, and Excelsior Rocketry for the great prizes. Thanks to Sam Barone, Royce Frankum, and Doug Sams for their support for the event. And the list wouldn't be complete without thanking the contestants from this year and all previous years that have helped to make this a fun annual event.



A close up of some of the excellent models this year. The quality was quite high and competition was fierce!



The complete lineup for the DARS Fall Classic 2009!

All photos: Doug Sams



Avery Brennan with his new Model Rocket Range Box, complete with launch system and Alpha III.



Ken Overton with loot, and his Best in Show winning Wac Corporal!



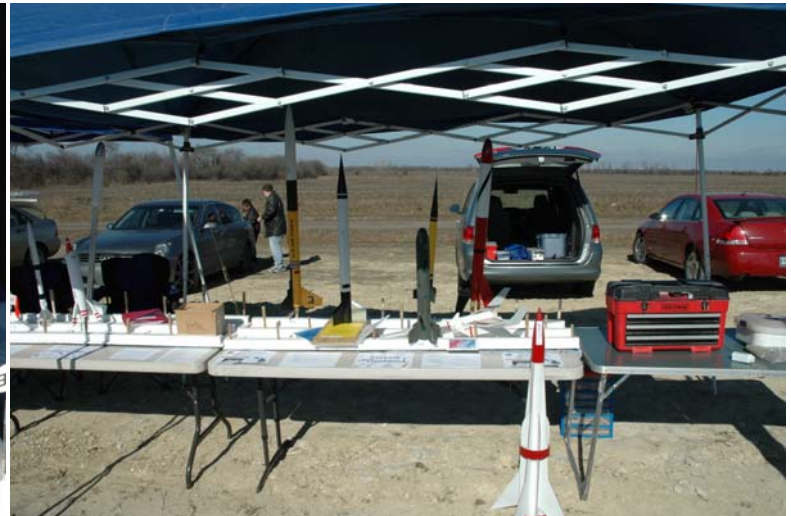
Stuart Powley and John Dyer with some more loot. Companies were very generous with their donation of prizes this year and it was much appreciated. By the way, that's Gary in the blue hat.



Ted Mahler's Phantom Electro-Launch System...Very sweet indeed!



Where else but at the Fall Classic could you see a Rock-A-Chute next to a Camroc, next to a Semi-Scale Saturn V on a vintage launcher?



The Upscale end of the table!



Doug Sam's Cherokee D roars to life!

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	Royce Frankum
Vice President	Don Magness
Treasurer	Tony Huet
Secretary	Terri Magness
NAR Senior Advisor	Sam Barone

DARS

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.

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