

Newsletter of the Jet Pilot's Organization

# *Contrails*

Spring 2012

Volume 24, Issue 2



Scott Marr's large *Futura* shows its lines  
at Desert Jet Storm in Surprise, AZ.  
Greg Moore Photo



**FAA**

Hopefully, this will be the last update on the SUAS subject. As you have seen in the various media and AMA communications, the FAA reauthorization bill was signed into law by the President and we are mostly exempted from FAA regulation. In speaking with my AMA contacts, there will still be some overlap in the five-mile radius areas of airports, and the FAA will still have some impact on model aviation if they believe that our operations impede the safety of full-scale aircraft. We also need to be mindful that things can change quickly, so we should continue to fly safely and be good neighbors to our full-scale brethren. 'Nuff said!

**Going Green**

We are attempting to encourage the membership to "go green" and elect to receive their issues of *Contraails* electronically. Not only does this help the environment, but issues will be available on a more timely basis and in full color. If you elect this option, you will receive a specific email with the *Contraails* PDF attached. This will also reduce overall JPO costs, as the printing costs are by far our organization's largest expense. As an incentive to "go green," we are offering a free JPO logo T-Shirt to those that elect this option. Please drop me an email at pilot114@aol.com to take advantage of this offer.

**Trailer Racks**

Over the years, I have seen many trailers at jet meets. Most are specific purpose trailers, with fixed storage racks for the models. I have been a trailer owner for a number of years myself, but also use the vehicle to trailer my motorcycle, haul construction materials and generally haul large items. Living in Florida, I was also a bit uncomfortable leaving electronics in an enclosed trailer in the heat of summer. As such, I looked for a plane rack that could be wheeled out of the trailer easily, when necessary.

I designed a first generation rack about four years ago and it has served me well. However, as with most first generation projects, I did find things that I wish I had incorporated in the design. My planes have also gotten larger over time, and so I reached a point a few months ago where it made sense to design a new rack. I'll share my experiences here, and hopefully you will find them useful if

you have ever thought about a roller rack.

One of my first objectives was to keep the project "easy" and inexpensive. I actually researched a welded metal rack, but rejected the thought due to cost, weight, and the inevitable knowledge that, over time, my inventory of planes will change and demand different configurations. I built my first generation rack out of two inch PVC and it had held up well, so my new rack was built from the same material. The advantage of PVC is that it is readily available, is inexpensive, can be worked quickly without expensive tools and can actually be reconfigured to some extent, if necessary.

In my first generation rack, I had used standard lawnmower tires. They worked well, but the four fixed wheels made turning the rack on the ground difficult. So in the update, I installed large four inch casters ... two fixed and two rotating. Relatively inexpensive casters are available from companies like Harbor Freight, and I believe that they will handle the weight of the rack better than the lighter tires I had previously used.



**Four inch casters provide mobility. Two freewheeling casters up front make maneuvering easy.**

As you can see from the pictures, the rack has three tiers. The lowest tier is ideal for wingless fuselages, like the *Ultra Bandit* shown here. Varying the height of the lower shelves will allow the tail sections to overlap, or you can carry the planes in opposing configurations ... nose to tail. The middle tier can hold two fuselages, or one larger plane, such as the *Tucano* shown here, or my soon to be completed A-10. The third tier is smaller and well suited to planes with wide bodies, such as *KingCats*, or planes that you want to transport with the wings attached. I did make this third tier removable so that the middle tier would accommodate large planes that have tail structures that might not fit between the side-uprights. The top layer is held in place with removable pins as shown in the second photo.



Basic rack configuration.



Removable pins hold the top tier in place, but make it easy to remove if you have a large tailplane model you want to carry on the middle rack.

Final thoughts: make the rack as wide as your trailer will handle, leaving space to slide by on the sides, if possible. Also, make the rack as short as your planes will allow, which will contribute to maneuverability, durability and space utilization in the trailer.

I secure the rack in the trailer with two fixed-length chains and two ratchet tie downs. In my V-Nose trailer, I can



The large trailer accommodates my CARF Corsair along with the rack with up to five jets.

accommodate my large *Corsair* in the front, the rack with four jets in the rear, with room left on the sides for fuel, tools and a canopy. It takes less than three minutes to loosen the ratchets and wheel the rack in or out. The simplicity and ease of reconfiguring the trailer makes it a more versatile vehicle.

If you have any questions, feel free to contact me. I would also welcome any pictures or ideas you have if you have experimented with mobile racks as well and have thoughts to share.

Good luck and fly safely!

Keith

### From the editor

Many (most) of us use computers on a daily basis, and as such, are comfortable with the speed with which information can get to us ... and for many of us, how our R/C club's monthly newsletter arrives.

Last year we looked into printing the entire issue in color, but the expense was more than the officers felt comfortable with. Since a full color .pdf version is produced for the website, it is super easy for you to receive each issue between two and four weeks faster, directly to your inbox, which also helps the organization to contend with the constantly increasing costs of postage.

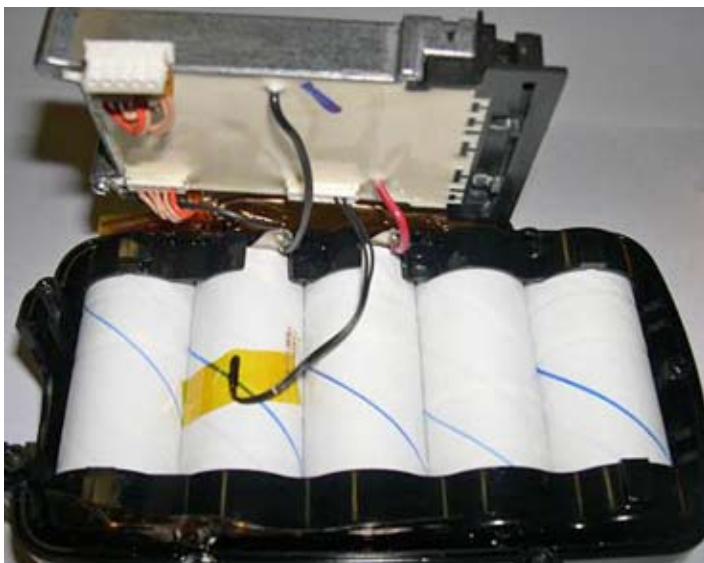
All it takes is an e-mail to either Keith or me for you to be added to our "e" list, and you get a free shirt!

Greg



Things have been quiet as far as flying goes in my neck of the woods. The weather has been simply horrible - cold, wet and windy! Hopefully, we can get the flying season underway before April disappears ... normally we can make it before the end of February, so we will just have to make up for lost time when the opportunity arises.

As most of you know, I have been using A123 batteries in all my airplanes for the last four years or so. Checks over the winter have shown that all my batteries are holding up extremely well with no degradation in capacity from when they were new. I have purchased my A123s from either Fromeco or NoBs Batteries, but recently I decided to harvest some cells from DeWalt and Black and Decker power tool packs since the 1100 mAh and 2300 mAh A123 cells that we use were originally designed for DeWalt and Black and Decker.



The DeWalt 36V, DC9360 pack contains ten - 2300 mAh cells, and the Black and Decker VPX0111 pack contains two 1100 mAh cells. These battery packs can be purchased on eBay for reasonable prices - I purchased one DC9360 pack for \$125.00 and two VPX011 packs for \$40.00 - these batteries were brand new - do not purchase used batteries!

As you can see from the photos, the cells are packaged in series using spotwelded steel straps, so it is easy to cut them apart in the configuration you want and add the necessary wiring. If you decide to go this route, be careful not to short anything out - these batteries will make it exciting if you do!



Go to the internet and search for: "Dissecting a DeWalt DC9360 battery pack" and you will find several tutorials describing how you can best perform this task. As far as the Black and Decker pack goes, it is very easy to remove the two 1100 Mah cells. Simply remove the label and you will be able to pry up the tabs and remove the top and bottom.

Adding the power wiring and the charge/balance wiring to the cells is easy since we have the steel straps to solder to. It is not a good idea to attempt to solder directly to the ends of the cell since the heat can damage it. FMA Direct sells the Cellpro JST (5) position plug/pigtail for \$1.99 each, which handles charging and balancing, and interfaces with Cellpro chargers. These pigtails are ten-inches long and can be used with two, three, or four-cell batteries.

I recently found a website in China that sells genuine A123 cells at a very reasonable price - both 1100 mAh and 2300 mAh. The website is "OMG batteries" and they do business through eBay. Shipping is free and you will get your batteries in about ten days. They sell separate cells and spotweld tabs onto them, or you can have them assembled in many configurations already spotwelded together and ready for wiring.

Adding and spotwelding the tabs only costs 30 cents per cell! I tried them out and ordered six 1100-mAh cells made into three packs with spotwelded tabs, and the total cost was \$15.70 shipped to my door! Adding the required wiring and connectors to these three packs will cost about \$6.00 each, to give a total cost of approximately \$33.70 - that is \$11.24 for a 6.6-volt A123 1000-mAh pack! These are genuine A123 cells, so you can see a huge savings here, and the same goes for the 2300-mAh cells. These packs have been charged, load checked and perform just like the ones I purchased from the suppliers mentioned earlier. While it was fun playing with the DeWalt and Black and Decker batteries, OMG is really the way to go!

That is all for this issue of *Contraails*. If you need any more information on this topic do not hesitate to send me an e-mail or give me a call. My contact information is on the oil inside back cover of the magazine.

Happy landings, Al



## District I Report

Bob Radford

Connecticut  
Maine  
Massachusetts  
New Hampshire  
Rhode Island  
Vermont

As I write this, we are hours away from 2012 jet flying in District II!

2012 promises to be a great year with three Plum Island Events: The New England Jet Rally, the Maine Jet Rally (which will be sponsored by Horizon Hobby and turned into the Horizon Air Meet 2012). *New England Jets* has a number of weekends scheduled, plus we have Capitol Jets, Big Apple in District II and a new jet meet in Sherbrooke, Quebec - so there are plenty of events reasonably close to home.

We had great news from the US Congress in February, as the FAA authorization bill has exclusionary language for the R/C hobby included. You will want to visit the AMA website for additional details. The Notice of Proposed Rule Making has also been pushed back, once again, and we will also want to respond once that is published.

I am expecting an influx of topic suggestions and guest writers for exciting topics in the coming issues, but in the meantime: go slow, be methodical, and use your checklists as you get back up to flying speed.

JPO hats and shirts are now available. Please go to the website: [Jetpiots.org](http://Jetpiots.org) for information.

Bob

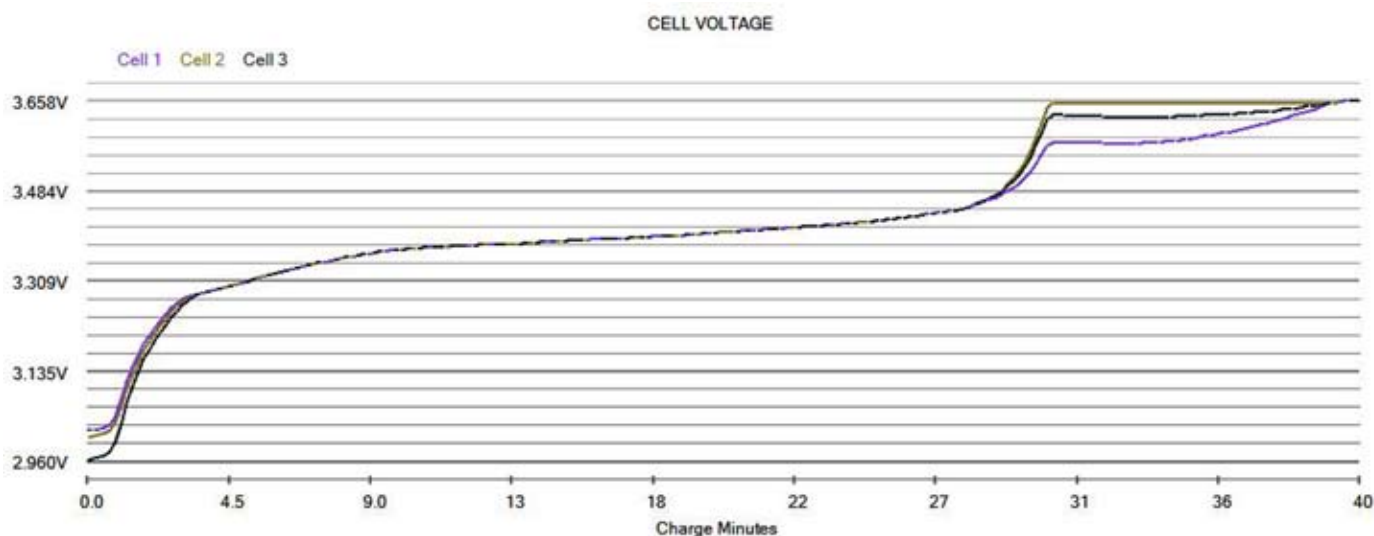
## District VI Report (cont'd)

accessory, to connect your laptop up to it while it's charging, which will chart the rise in voltage for each individual cell over time. Why should you care, you ask? If this chart shows all the cells really close to each other as it charges, then it's a good pack. But if you see a large difference between them, it is showing that you might have a weak cell in the pack. A weaker cell will discharge faster when you do the discharge, and thus start at a lower voltage when you start the charge. When charging, the weak cell is going to be the one that charges up first, too. Remember, on an A123 discharge, the voltage is very stable until it gets to its end, then it drops off like a rock. You don't want one really

weak cell dropping off that ledge much earlier than the rest, bringing the entire pack voltage down too early. I don't do this very often, but it's nice to check out the charge on the laptop, once or twice a year per pack, to make sure an individual cell isn't going out the window. Having now charted nine A123 battery packs over a couple of years, I've not seen a bad cell yet, but I do see differences between them.

Flying season is upon us, and I look forward to catching up with many of you at the jet meets this summer.

Lance



Preset Name: A123 2300 mAh Accurate Charge Set4.00A BAL Chg  
Time Started: 10:06:25 10-08-2011  
Start Fuel: Pack 1 = 0%  
Pack 1: 2034 mAh IN Cell 1 Cell 2 Cell 3

Firmware: V1.67

District III Report

Mark McCracken



Ohio  
 Pennsylvania  
 West Virginia

As the 2012 season has begun here in District III, it is great to see many new jet aircraft, and a few jets rebuilt over the winter with new looks and power - now burning kero. Not much to report here in the district, just a few upcoming events in OH and PA.

The first event of the year is the summer version of the OC-Turbo Fest, located at the Titusville Airport in Titusville, PA.. The dates for this event are June 15-16, 2012.

In early August, there will be a jet event returning to the Donegal Springs Airpark. Mike Leshar has decided, with the help of family and friends, to once again host the Liberty Bell Jet Rally.

For the last 10 years, Mike Leshar, with the help from his family, has turned this event into essentially a large family gathering with pilots and their families coming from all over the lower 48, and even from Canada. Donegal Springs essentially opens their home to us for the four full days of nonstop flying, going from early in the morning till late afternoon. This is one of the best events on the east coast. Information can be found at: [www.libertybelljetrally.com](http://www.libertybelljetrally.com).

The next event will be found in North Jackson, OH, where the NightHawks R/C Club will host Jets Over The Valley on August 25-26. Information at: [www.Nighthawksrc.com](http://www.Nighthawksrc.com).

Last event for the season in eastern PA is located in Hamburg, PA. Hosted by the Farview R/C Flyers, this is the best grass runway one can hope to fly off of. An 1800-foot long rolled field with wide open fly-over areas, provides for the 200 pilots and aircraft the best possible season-ending jet rally. Information at: [www.farviewflyers.net](http://www.farviewflyers.net).

Like LBJR this event has grown over the past few years to be one of the biggest jet events in the northeastern part of the country, with pilots coming from a dozen or more states and Canada. Also, if you enjoyed the day filled with flying, stick around for the nighttime camp fires - as they are known for some great story telling. Dates for this season ending event are October 4-7.

Please enjoy a few photos from last year's Hamburg event, and until next time: Fly safe!

Mark





## District VI Report

Lance Campbell

Illinois  
Indiana  
Kentucky  
Missouri

Spring is in the air, and I've already been in the driveway, irritating the neighbors with the sounds and smells of test running my jet engines, but, before you go racing to the runway, there are several things to consider.

### Battery Health and History

For years, I've watched the health of my batteries very closely. There are a handful of things on our airplanes that, if they fail, you're picking up rubble, and batteries are one of them. A battery can fail or short-out catastrophically, but that's not very common. More likely, it is that your battery pack has gotten a bit of age on it, and it doesn't hold the capacity that it used to. That latter reason is the thing I'd like to focus on.

I used NiCad batteries for years, then a few years ago I swapped out the entire jet fleet to Andy Lowe's (Electrodynamics) A123 batteries. An interesting thing that I have noticed, now that I've gotten a few years' experience

with them, is I find that the same practices I used for the NiCads seems to be holding water on the new A123s.

Three times a year, I triple-cycle all my batteries. That is, each battery gets three full charge and discharge cycles - in sequence, three times each year. I note how much power it delivers when put on a load (I do a 2-Amp load on the A123s), and jot that number down in a spreadsheet. A quick bit of math, and I know as a percentage, how much power it's putting out versus its rated capacity. For example, a 2300-mAh rated battery that actually delivered 2225-mAh, put out 96.7% of its capacity.

Do this three times a year, and after a year or two, you can start to see a pattern emerge. These patterns are consistent on both NiCads and A123s, and I'd wager on other chemistries as well. Once a battery is only delivering 80-85% of its capacity, I really start losing trust in it, but that's not a cast-in-stone rule, though. A brand new battery might only deliver 90%, yet continue to deliver that same amount for five years. It's really the pattern that emerges, showing the decline of the batteries is what matters. This can be seen in my spreadsheet, below.

A second issue that you can watch for on the A123s (or LiPos), is how each cell is performing. I'm using the CellPro 4s charger, and it's got a neat little cable you can get as an

### Battery Maintenance

Actual mAh delivered

Battery	Date	Volts	Rated	Time 1	Time 2	Time 3	% of life
14 Ch Tx	Nov 08	7.4	2200	x	x	2250	102.3%
Charge	Mar 09	7.4	2200	x	x	2197	99.9%
New July '09	Jul 09	7.4	2200	x	x	2196	99.8%
	Mar 10	7.4	2200	x	x	2126	96.6%
	July 10	7.4	2200	x	x	2020	91.8%
New Spring '11	Nov 11	7.4	2200	x	x	2189	99.5%
	Mar 12	7.4	2200	x	x	2054	93.4%
F-15 Rec	Mar 10	6.6	2300	2171	2194	2195	95.4%
Discharge	July 10	6.6	2300	2156	2177	2184	95.0%
A123 2 Cell	Nov 10	6.6	2300	2109	2101	2148	93.4%
New Fall '10	Nov 11	6.6	2300	2082	2104	2126	92.4%
	Mar 12	6.6	2300	2086	2096	2097	91.2%
F-15 Ecu	Mar 10	9.9	2300	2148	2158	2179	94.7%
Discharge	July 10	9.9	2300	2221	2134	2140	93.0%
A123 3 Cell	Nov 10	9.9	2300	2091	2111	2128	92.5%
New Fall '10	Nov 11	9.9	2300	2047	2097	2088	90.8%
	Mar 12	9.9	2300	2041	2076	2084	90.6%
F-15 Smoke	Mar 10	6.6	2300	2172	2166	2172	94.4%
Discharge	July 10	6.6	2300	2125	2166	2170	94.3%
A123 2 Cell	Nov 10	6.6	2300	2100	2093	2119	92.1%
New Fall '10	Nov 11	6.6	2300	2052	2080	2077	90.3%
	Mar 12	6.6	2300	2050	2067	2089	90.8%

Continued on page 5.

District VIII Report

Ron Schwarzkopf



Arkansas  
Louisiana  
New Mexico  
Oklahoma  
Texas

Sorry for missing last quarter's report - I was working to a deadline one month later than I should have! I need to learn how to read e-mail reminders, I guess. Nevertheless, I hope you've had time to go through your models and equipment, and work any tweaks you've been putting off, because we are now well into the flying season! I am doing just that to get ready for The Mississippi Afterburner in early May. I've finally made a little electric pump set-up to get smoke fluid out of my smoke containers and into my model - working the little hand pump was getting a bit tiring. Or perhaps I am getting lazy?

**The Arizona Jet Rally - November 18-20, 2011**

Before getting to 2012 events, I would like to say I was able to make it to this event, which is held on the east side of Phoenix, AZ. Austin Goodwin, and members of the Arizona Model Aviators, once again did a nice job of running this event. The weather and flying was great - with a nice backdrop of the Superstition Mountains. We even had a chance to get 3 turbine-powered PST *Reactions* in the air at the same time - that was fun, and we'll have to do that again! If you are into EDF jets, this is a nice event to attend, as the EDFs are never in short supply here. The following are a few pics from the event.



**Epic Victory Jet.**



**Some of Mike Neff's Depron EDF squadron.**



**Two very nice e-Bandits.**

**District VIII (and nearby) Upcoming Events**

- May 17-19 Central Texas Jet Rally, Austin TX.
- June 14-16 Mt. Pleasant Jet Rally, Mt. Pleasant TX
- September 6-8 30th Greater Southwest Jet Rally, Waco TX

**Battery Connections - Safety**

Recently, I was replacing receiver battery packs (another model changing over from old chemistry NiCad to A123 packs) because the packs were getting a bit old. In the process of installing the new battery packs, I noticed an unusual smell. As I quickly removed the pack from the model to see what happened, I found that I unknowingly allowed the connector end of the battery pack to touch a retract valve inside the model. This shorted the battery pack (for perhaps 3-5 seconds) enough to begin melting/deforming the battery connector. The contacts that are visible on the side of the connector (not the end) are what I believe made contact with the conductive retract valve - these portions of the contacts are visible in the photo.



So, I just want to relay the idea that when these battery connectors are not plugged into a mating connector, they can errantly swing around during transportation of a model.

## District VIII Report (cont'd)

Ron Schwarzkopf

With today's high discharge batteries, it is important to protect the contacts. The photo shows various safety clips that can be used to cover these connectors when not in use. Note the cover in the upper portion of the photo, when installed, will cover the entire male and female end of the connection, and can also be used to almost entirely cover the battery connector end when the battery is not plugged in. These cover types might be ideal for those fliers who tend to not use switch harnesses, and prefer to plug the battery directly into the receiver, or an extension when powering up the model.

### Building an External Smoke Tank

I really didn't accomplish as much as I'd have liked to during this building season, but one task I did accomplish is finishing setup of a smoke system in my recently finished BVM *Bandit*. I test flew the model with only the smoke pump and a small smoke fluid tank installed - the intent was to install all the other smoke system hardware after the initial flights had been completed, since one item I was going to need was an additional smoke tank. The *Bandit* ARF can be a bit tight on space as far as locating additional unneeded hardware, and I was not able to find a purchasable tank that would allow itself to be used as an external tank, so I decided to make my own. I kinda wanted to make my own, anyway!

I started down the route of using an integral centerline pylon and body of revolution to create the tank, but after seeing some photos of teardrop shaped fairings on the bottom of some large-scale aircraft (used either for additional baggage, a big gun, or for antenna arrays), I decided to make a removable bolt-on teardrop-shaped fairing. At the time, I decided to make this tank so it would carry 18-20 ounces of smoke fluid. This, along with another small tank inside the model, would supply the Jet Central Smoke System that this model would be using.

I will briefly go through some of the steps used to make the tank. The neat idea with this concept - it is scalable to larger tanks for larger models.



1) The first step was to work up a suitable shape to represent the final outer contour of the tank. This was made from a combination of balsa, plaster and body filler. The final shape was fiberglassed to harden the surface, then primed and clear-coated to a smooth surface. I temporarily bolted it to a flat "floor-plane" surface, and created a "parting

plane" (the black surface in the first photo) - another flat surface that will allow for making a LH and RH side fiberglass mold.

2) For the molds, I usually use inexpensive polyester resin. This is easily obtainable from hardware or car parts stores - Bondo™ is a popular brand. These molds are small, and are not meant for high volume production. The basic process calls for waxing and buffing the plug shape, along with the parting and floor plane surfaces, then laying up fiberglass cloth and polyester resin to build up a sufficient thickness for the mold - in this case, 1/8" thickness is sufficient. After this is complete, the parting plane is removed (we waxed it so the parting plane will "pop" off), then the opposite side of the mold is laid up in a similar manner. Popping off the mold halves after final cure results in the next photo of the just-used plug shape, plus the LH and RH molds.



3) The molds are bolted together, and after another waxing/buffing, fiberglass cloth and epoxy resin is laid into the mold to make the final part. I added a small amount of graphite cloth to stiffen up the shape where the "wet" portion of the tank will be. Another basic mold shape was also built up, to create the upper, forward and aft sides of the tank. When epoxied to the inside of the teardrop shape, this will create the tank volume. At this point, I also installed the tank vent and some screw-in clunk hardware from BVM.



4) The next photo shows the original plug shape, the LH/RH-side mold halves, and the final part unpainted. At this point, I decided a relatively clean, but simple, way to hold

the tank to the fuselage would be to use a nylon ¼-20 bolt at the very aft end, and up front I would create two small "wings" on the side of the tank of plywood, that will hold the forward portion of the tank. These wings or tank mounts will use two, ¼-20 nylon bolts, with rounded heads. One-quarter inch tapped plywood "hardpoints" are easily added to the model. These hardpoints are immediately aft and forward of the access panel on the *Bandit*, but can be located where needed, depending on the "host" model.

material to set off the edges, and to ensure the fiberglass edge of the tank isn't rubbing against the bottom of the model. Holding this magazine upside down will allow you to see what the tank will look like when the model is right-side up!



5) The above photo shows the painted tank, as installed on the bottom of the model. I added some rubber trim

6) This final photo shows a better view of the tank. Proper locating of the tank on the model will allow you to keep the smoke fluid lines, that run upward to the smoke "hopper" tank inside of the model, well hidden. Well, I missed that part, since my hopper tank happens to be right above the forward portion of this external tank! So, in this case, I have a forward-facing vent on the front of this external tank, and a short length of tubing that runs 1.5 inches forward of the tank, and up into the fuselage. These features are not shown in the final photo.

I finally had a chance to test fly the tank a couple weeks ago, and I'm very happy with the results. I suspect I lost a few mph off the top-end speed of the model, but now I can put out smoke for about 50% of the flight time, which is perfect for me. I think when the time allows, I'll make another one of the same size for my PST *Reaction*.

Happy Landings,

Ron

### Upcoming Events

Mount Pleasant, TX Jet Rally: June 14-16, 2012  
Mt. Pleasant, TX  
[www.mtpleasantrc.com](http://www.mtpleasantrc.com)

OC-Turbo Fest-Early Summer Edition: June 22-24, 2012  
Titusville Airport; Titusville, PA  
[jacknbets@aol.com](mailto:jacknbets@aol.com)

Thunder Over the Valley: June 22-24, 2012  
Woodland, CA  
[www.wdarc.org](http://www.wdarc.org)

Big Apple Jet Rally: June 23- 24, 2012  
Brooklyn, New York

Jets over the Heartland: June 28-30, 2012  
Winamac, IN  
[http://winamacaeromodelers.com/whats\\_new.html](http://winamacaeromodelers.com/whats_new.html)

Jets over Kentucky: July 6-15, 2012  
[www.visiblebanonky.com/events/kyjets.htm](http://www.visiblebanonky.com/events/kyjets.htm)

Capitol Jets : July 13-15, 2012  
South Albany Airport, S. Albany, NY  
[www.capitoljets.com](http://www.capitoljets.com)

Liberty Bell Jet Rally: August 2-5, 2012  
Donegal Springs Airpark, Marietta, PA.  
[www.libertybelljetrally.com](http://www.libertybelljetrally.com)

Michigan Jets Annual Charity Event: August 9-12, 2012  
Grosse Ile, MI  
[www.michiganjets.com](http://www.michiganjets.com)

New England Jet Rally: August 17-19, 2012  
Gardner, MA  
[www.wachusettbarnstormers.org](http://www.wachusettbarnstormers.org)

Minnesota Jet Rally: August 23-26, 2012  
Rushford, MN  
CD: Dave Dennison: [ddennison@yahoo.com](mailto:ddennison@yahoo.com)



## District X Report

David Reynolds

Arizona  
California  
Guam  
Hawaii  
Nevada  
Utah

First off, an apology for missing the last issue of *Contraails*. The silence was brought to you by family health, housing, and job issues all happening at the same time.

If you are tired of freezing in the middle of the winter and itching for some jet action, you need to check out Desert Jet Storm, held each February, just north of Phoenix. Check out the pictures and start planning for next year!

Does your local event have a noon break to let the crowd in to look at all the jets on the runway centerline? I've been hearing of a new idea that takes this a few steps further that I think should be done at all events, if possible. Think of it as a jet ambassador. A few pilots volunteer to take spectators through the pits in small groups and discuss/explain what is involved in/on some of the various models. It is a win-win situation! Pilots that want to keep flying don't have to stop flying for an hour, and John and Jane Q. Public are more controlled and get a more in-depth look at our hobby. Give it a try at your next rally.

If you would like to contact me about your favorite event or a project you are working on, I have a new address, which is listed on the inside back cover.

### Desert Jet Storm

By: Chris Balling

Desert Jet Storm 2012 was held February 6-12 at the International Speedway Race facility in Surprise, AZ (just west of Phoenix). Sixty-two pilots, their families and guests assembled over those six days in that superb weather that the southwest is so famous for. Flying was conducted from sunrise (although the sun in February is a pain until about 9:30am) until well past dark - with T-28s (decked out in an array of lighting schemes) flying until long after many turned in for the evening.

Fliers came from the USA, Canada, Taiwan, and Great Britain. Jonathan Smith brought a *Sprint* from his native England and made 62 sorties with it. His goal was to achieve 60, attempting to surpass the number of flights he makes in a typical 3-year period at home. The only break he took during the rally was to have tea twice a day.

Numerous vendors attended the event, displaying new items, and contributing some wonderful gifts toward the pilot drawing.

The Speedworld facility is certainly a magnificent place to fly. With 850' of glassy-smooth runway, ample runoff space, which is rarely used, covered setup tables with power at each, and five startup stations, including Jet Blast Deflectors at each one. Nearly every one of the club's 135 members contributes to the work load required to orchestrate this event. Additionally, there is bleacher seating for the huge crowd of spectators coming from the Phoenix Metropolis. Interestingly, two additional bleacher sets were brought in on Friday as the crowd was larger than anticipated.

Some interesting modifications were made at the rally. First, there was not the typical noontime shut down while spectators were allowed to walk the runway and observe the aircraft up-close. Rather, as a suggestion from the fliers, a pit tour was conducted by the pilots. Taking groups of 5 spectators at a time, volunteer pilots guided them along pit row, answering questions, taking pictures with other pilots and aircraft, and allowed the observance of real-time maintenance. The tour was a great success and it allowed flying to continue throughout the day.

An item of note is that on Friday, the FAA Team from Luke AFB, made a 90-minute inspection visit to the event. At the end of their visit they declared Desert Jet Operations as "safe as Luke" - a real testament to the skill of all pilots attending the event.

All in all, Desert Jet Storm has become a "First Class"/"Grade A+/"must-attend event. Next winter, as most of the USA, hopefully, is mired in winter doldrums; consider a trip to this weeklong rally. It truly has become "Winter's Premier Jet Event."

Please enjoy a few photos from the event. More can be found on the club website at: [www.speedworldrcf.com](http://www.speedworldrcf.com).

Continued on Page 14





District XI Report

Bob Brusa

Alaska  
Idaho  
Montana  
Oregon  
Washington

Due to some health issues (we are doing fine now), we missed Tucson Jets in March. We hope to return next year.

I finally did the maiden on my new Boomerang *Torus*, and it flew great, as all Boomerangs do. I had two flights and both went well. Here's a picture of it on the maiden flight.



The Northwest Model and Hobby Expo was held in February, in Monroe, WA. You can read more about it in the May issue of *Model Aviation*, in the Dist XI column written by VP Mike Mosbrooker.

If anybody has any photos to share of their models, please e-mail them to me. I am also looking for any articles of general interest to the jet community that you would like to see published in *Contrails*.

Bob

It's been a long winter and spring, but it looks like we are finally getting some acceptable weather for flying. I have not been out yet, but hope to this week (last week of April).

JPO is offering a free white t-shirt with the JPO logo for all of you who would prefer to "go green" and not receive your *Contrails* by mail, but rather just read it on your computer in a .pdf format. Just let your District VP, or any officer know, tell us your size, and we will send you a shirt.

We also have polo shirts and hats with the JPO logo for sale, information that you can find on the JPO website.

If you have been following the AMA news you should be aware that the FAA Reauthorization Bill, signed by the President, had an addendum that exempted model aircraft. Great news for the modeling community! With Washington being Washington, the FAA Notice of Proposed Rulemaking (NPRM) has again been pushed back until July, so we are still waiting to see how this may or may not impact us.

The spring Princeton Jets event, May 31-June 3 in Princeton, British Columbia is rapidly approaching, and I am really looking forward to it, since this is one of my favorite events.

Canada District Report (cont'd)



## Canada District Report

Paul Dries



I just got my first turbine flights in for this year, so I hope that the season can finally get some legs under it and we can see lots of flying. It seems the guys east of us had some early spring weather and managed to jump in for some flights but are now facing some late winter storms.

During our first outing, I had the pleasure of helping a new member to the jet community, Steve Hughes, re-maiden a Boomerang *Sprint* that he purchased from another modeller. Steve Nielsen spent lots of time helping Steve give the jet a complete going through and re-doing most of its install. As a result, the first flight went very well, only needing some redo of the down elevator mix with full flaps. I am happy to see Steve Hughes in the jet community, as he is also the MAAC Zone director for BC Interior, and will bring a positive influence to a region that has been experiencing a lot of resistance to turbine-powered models.

Here's an update/re-do of dates for some upcoming events in Canada. Also, more information can be found on our website at: [www.RcRallies.com/Jets2012/Pilots.aspx](http://www.RcRallies.com/Jets2012/Pilots.aspx).

Princeton, B.C. - Those who have flown in Princeton all remark on what a great venue and relaxed atmosphere this event has. Many will drive a day or more to attend these events. We keep it relaxed with lots of open flying. There are two events planned for here.

First up is the Spring Warm-up, from May 31 to June 3. Then, later in the fall, The Gerard McHale Memorial from September 20-23.

Robin Lebond In Quebec has been working hard to plan a rally there, but the dates have changed. PLEASE NOTE THE NEW DATES: June 1- 3, 2012

Wingham Jets: July 27-29, 2012 at the Wingham Airport.  
Tofield Fun Fly: August 10-12, 2012 in Tofield, Alberta.

Last year, Dean Wichmann showed up at the field with a very nice, custom laser-cut stand for his Comp Arf *Tutor*. When asked, he told me that the source was Chris Reiter in Spokane, WA. Chris is a very talented designer and builder who just happens to own his own laser cutter. He had designed the custom stand and made all of the parts to support the airframe by the wing tube and also with cradles that line up with bulkheads in the airframe. Kevin Forsyth and I immediately ordered a pair for our *Tutors*, and I was really impressed with the results.

So I sent Chris an e-mail asking if he wanted me to ship my *Ultra Lightning* him so that he could create a custom

stand for it. By this time, Chris had already created a new style of stand for Dean's *Ultra Flash*, which had the additional features of added saddles that could be inserted into the stand to support the airframe while installing the wings, etc.

For my *Ultra Lightning*, Chris took this idea one step further and provided the cradle, the extra parts to support the fuse both upright and inverted as a work platform, tie down eyes for transport, and a captivated wing tube mount using a cut down wing tube.

Here are some pics of the *Ultra Lightning* in the stand in various positions, plus one of it "dry-assembled," just to get a feel of how it will look. As a side note, when I ordered the *Ultra Lightning*, I did a partial-custom scheme using the Silver/Orange/Black, but changed the orange to a bright-red, eliminated the "*Ultra Lightning*" letters down the fuselage and carried the stripes through in place.



As far as I know, Chris has designed stands for the following types of planes:

- Comp-Arf CT-114 *Tutor*
- Comp-Arf *Ultra Flash*
- Comp-Arf *Ultra Lightning*

Chris can be contacted at: [chrisreiter55@msn.com](mailto:chrisreiter55@msn.com)

Until next time, CHEERS!

Paul



Treasurer's Report

Beginning Balance as of January 31, 2012		\$8,184.08
<b>Income</b>		
Dues - Cash/Check	\$730.34	
Dues - PayPal	\$1,077.90	
Shirt Sales	\$40.00	
Total Income		\$1,848.24
<b>Expenses</b>		
Postage/Stamps	\$47.45	
Office Supplies	\$6.91	
Internet Service	\$89.55	
JPO Apparel	\$2,020.00	
Contraails	\$1,403.26	
Top Gun Trophies	\$311.00	
Total Expenses		\$3,878.17
Ending Balance as of April 30, 2012		\$6,154.15

Respectfully submitted, Carol Brusa

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**Membership/Renewal Application**

Please add/renew my JPO membership!

Name: \_\_\_\_\_ AMA Number\*: \_\_\_\_\_

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Home Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

\*AMA membership is required for U.S. Residents. JPO Annual Membership Fee is \$25.

Send with check or money order made out to: "The Jet Pilot's Organization" to:

Carol Brusa, JPO Secretary/Treasurer, 7433 McCormick Woods Dr, SW, Port Orchard, WA 98367

Or renew online at: [www.jetpilots.org](http://www.jetpilots.org)

**\*Go Green\* and elect to receive *Contraails* online, you will receive a free JPO T-Shirt.**



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Jim McEwen's PST *ReactionXL*  
is caught in a fast, low pass at Desert Jet  
Storm by Greg Moore.