

Newsletter of the Jet Pilot's Organization

# Contrails

Winter 2008

Volume 20, Issue 1



Joe Balabon caught John Gerhardt  
wringing out Jeff Hansen's Tamjets  
F-16 at the Arizona Jet Rally.

*Hamburg Jet Rally  
Super Jets South  
Florida International Jet Rally  
Arizona Jet Rally*



From the Editor

Treasurer's Report

Hello everyone, Happy New Year!

This issue has taken a little longer to get to you than I had planned, since the printer and I are trying some new things to give you a better quality publication.

We have our three new district rep's on board, as well as our new President. Unfortunately, do to their business travel, only Al Watson and Frank Tiano were able to get us an article/bio for this edition.

As always, I look for information about events in your part of the woods, and your reps need your help as well. Event information, and of course photos are always nice in order to document the goings-on.

Information can be sent either to me, or (preferably) to your district rep.

We also lost one of our past Presidents, and all round good guy Tom Dodgen in early January. A memmorium can be found on page 4.

Enjoy this edition!

Greg

Tom Dodgen:  
1955 - 2008



**Beginning Balance - 9/30/07**                      **\$10,505.61**

**Income**

Membership Dues - Cash/Checks	\$2,650.00
Membership Dues - Paypal	1,030.46
Bank Interest	25.00

**October Expenses**

FL Int'l Jet Sponsorship	\$1,100.00
Trophies - Super Jets South	65.95

**November Expenses**

Trophies - Pensacola Jets	\$57.95
Fall <i>Contraails</i>	1,240.24
Website Expenses	11.53

**Ending Balance - 12/31/07**                      **\$11,735.40**

*Respectfully Submitted,*

*Susan M. Moore*  
*JPO Secretary/Treasurer*

**YOUR SECRETARY/TREASURER**

I wanted to write a few paragraphs, so you know who I am and the things that I do outside my volunteer JPO duties. *If your membership application or renewal isn't processed immediately, you'll understand why after you read the following...*

I am married to the guy who is the editor of this quarterly publication, and we have a beautiful 19 year old daughter who attends Marymount Manhattan College in NYC. We also have a Shiba Inu dog named Kikko (who you might meet at upcoming jet rallies).

I have both a CPA and an MBA, but no longer practice in those fields (except for the accounting for Greg's dental practice which I do in my "spare" time).

When our daughter left for college, I experienced a "midlife crisis" of sorts...Greg wouldn't buy me a sports car, so instead, I went into the airline business and became a flight attendant for **Frontier Airlines!**

I do hope to pop in at a jet rally or two in 2008 - and I hope that those of you who have thanked me for doing this job by promising me steak dinners and alcoholic drinks live up to those promises!



## President's Report

Frank Tiano

### OUR JPO

JPO: Jet Pilot's Organization. The key word being Organization, not Jet and not Pilot!

Hi, I'm Frank Tiano, the new guy that will be heading up our "Organization" as President. Not so much because I got the majority of votes, but rather because nobody else wanted the position. Hopefully you haven't made too big a mistake by not nominating somebody else! As a new president of an organization that really operates quite smoothly, I found myself asking two things. One, what can I do to make things better for the organization, and two, does it matter? More on that later.

For now, I think it is paramount to tell all of you a little about myself. First of all, I do make my living from the hobby industry and I am promising you all right now that I will never let that be a factor in any decision or opinion I might impose. My company is one of the original companies that brought ZAP glue to the marketplace way back in 1979. There were 3 of us, Robart Mfg. and House of Balsa being the other two.

I have been interested in model aircraft since I started walking and am familiar with most aspects of the sport, having participated in Pylon, Pattern and Scale competitions. I have designed a few models: a KI-61 *Tony*, A P-39 *Airacobra*, a Quarter Scale, P-51, profile Pace Plane and an FAI Formula One racer.

In 1989 I founded an event called Top Gun and several years later started an event called Florida Jets. Both have become quite successful and have been invaluable in learning more about the marketplace, human nature and model aircraft, not necessarily in that order. I have what I think is a good working relationship with the AMA and support them in any way that I feel is warranted. Like most folks around us, I have a reputation. Fortunately, for all of us, I am fully aware of this reputation and feel it is most important that each member of JPO determines

for themselves what is true or false about what they may have heard about me. To that regard, I'll promise you this: I will NEVER lie to any of you and will always be available for any discussion on any topic. I have no hidden agenda. I do wish to keep JPO a respected organization, one that all of us can be proud to say we are a member of.

### THINGS TO DO:

I think it is very important to revisit anything that needs to be done, and that may have been placed on a back burner. I have no idea what these things might be, but feel strongly about taking care of them if it is at all possible. So first, how about letting me know what you'd like? No obstacle is too tall for me to "look" at. The actual results may vary but then I won't know until I have an idea of what's bugging you! However, if you tell me, I'll address it.

Next, I think any organization, especially one with the word Jet or Pilot in it, should be a really cool one. I think members should be looked up to as guys that know what they are doing. Saying that you're a member of JPO should be a proud statement. Others should look at you like you are somebody unique, somebody with special talents, somebody that has some answers and somebody that has a grip on what's going on around him. Making JPO a more respected SIG is one of my goals. Do I have any idea of how to accomplish this? Some. But I need to know if this is something in the interest of the general membership. I'm hoping some members will voice some recommendations that we'll be able to act upon to make JPO even better than it has been. Remember, JPO has already done some wonderful things for jet pilots across the nation. Slimming down that pesky turbine waiver program is just one of the things JPO officials are responsible for. Getting the weight restrictions modified is another. Hopefully we can be instrumental in getting even more done.

Someone asked me what I think the future holds for turbine-powered models. The funny thing is that I had been thinking about that for quite some time and I'd like to share my thoughts, and response, with you.

Look around at any jet event and you will see one glaring change that has taken place over the last several years. I'm talking about since the old ducted

fan days, when a turbine powered aircraft was really something to see. Because a waiver was required to fly a turbine-powered model, the "type" of pilot that remained a jet pilot changed.

You might remember during the early Florida Jet or Superman days 150 pilots would field 350 aircraft. Some of them pretty freaking ratty! And, of the 25 crashes we might see, you could almost bet that 75% of them involved those ratty models. Ratty meaning airplanes that had such sloppy steering that they couldn't be kept on the runway during takeoff, models that commonly had control surface flutter and models that had the market cornered on engine flameouts, (usually in the densest forest, in the far corners of the field we were flying from).

When the requirement of a waiver to fly jet models came along, the "average" pilots had no choice but to either drop out or to improve their building and flying skills, and many did just that. They learned from their contemporaries that clean, well-built models; ones that are checked over frequently, stay together for many flights. They also learned that if you wanna be cool, you don't set a ratty piece of junk model down on

the runway next to a pristine one for "show and tell"! And last but not least, it came to light that when one of these turbine models bit the dust, the financial hit was substantial, not just several hundred bucks as was the case in some ducted fan incidents. So, we watched the evolution take place. We saw better built models, better looking models, better flying models and more competent pilots flying them. That's where we are now, in jet heaven. Go to any jet event and you'll be hard pressed to find a "crummy" model or a really poor pilot. And I truly think that JPO's involvement with the original turbine waiver is directly responsible for this incredible progress. It doesn't have to stop here, there is more to be done. And JPO should remain at the forefront of any new developments.

That's it for me, for now. If you'd like to pose a question for me to answer to the general membership, just email me and I'll include the answer in the next *Contrails*. If you want to, need to or have to talk with me, my office number is (863) 607- 6611 or you can email me at [Frank@FrankTiano.com](mailto:Frank@FrankTiano.com).

Frank

### In Memmorium

Tom Dodgen: 1955 - 2008

In the second week of January, we were delivered the sad news that our long time friend Tom Dodgen had passed away. Tom was recovering from heart surgery when his condition rapidly deteriorated.

Tom was one of the most avid modelers that one could meet. He enjoyed all the aspects of aero-modeling; building and flying pretty much anything that had wings, and he was quite skilled at it. He almost always had multiple building projects going, and was always helping his flying friends by working on their models to keep them in top condition.

While Tom enjoyed all forms of models, his true love was jets. His ducted fans were some of the best performing models flying, and he was one of the first to get turbine stick time. Tom was a past President of JPO.

Those that met Tom always recognized his eagerness to help others, and his skill at making pretty much anything work. Tom was also recognized as one of the finest pilots around, and was often asked to perform the test flight on a new model.

Tom was a graduate of Texas A&M University, and for most of his adult life ran a petroleum delivery company. In his later years he went to work for Bob Violett Models where he helped ensure the quality of their product, and very ably demonstrated them.

Tom is survived by his brothers Rick and Gerry.

We shall miss him.

## District II Report

## Art Arro



New Jersey  
New York  
Europe

Year's end is a good time to reflect upon the past year and plan for the future. This district report will follow this format.

Nationally, all turbine-waivered pilots welcomed the results of the AMA Executive Council meeting in mid-August. This meeting deleted the notarization requirements for renewal of turbine waivers for successive years and wording was also introduced to clarify waiver suspension and appeal actions. We are still under a two-card system for the AMA membership card and the turbine waiver card. As these are identically-sized, I recommend contact cementing them together followed by lamination. I understand that the AMA is working on listing the waiver directly on the Membership Card once they revamp their membership and waiver-holder databases.

Locally, we've experienced great weather for jet events both in and out of District II. The **Big Apple Jet Rally**, held in mid-June was well attended with fine weather along with the **Capitol Jets Rally** in mid-July which was slightly affected by passing afternoon storms. Neighboring events held in MA, ME, Ontario and PA also yielded large turnouts in fine weather conditions. Many of these events have already been scheduled for 2008 so check the Event Calendars on the JPO website, [www.jetpilots.org](http://www.jetpilots.org) or the R/C Jets Forum of RCU at: [www.rcuniverse.com](http://www.rcuniverse.com).

District II has also witnessed growth in the number of turbine waiver holders and the consequent entries of turbine-powered models at various events. Turbine jets now dominate the jet entries and EDFs even outnumber the glow-powered ducted fans of the past. The associated skill level with turbines has risen along with a decline of mishaps, but bad landings are still the major cause of aircraft damage, including my own incident at the **Bay of Quinte Jet Rally**. I mistakenly landed with high-rate ailerons and cartwheeled a jet that I had successfully flown for over 7 years. It was a humbling experience and the model was quickly repaired only to suffer a "fire event" during subsequent

flight testing. Luckily, quick action by my spotter and a handy halon bottle minimized the damage. However, I feel it is time to move on to another aircraft.

JPO has held its own during the year but could always benefit from greater support and membership. Our former prez, Steven Ellzey maintained a steady course through the AMA rapids and many other challenges during his 6-year tenure. He accomplished much with the AMA's recognition of JPO and I'm sure that our new prez-to-be will have some novel ideas for promoting the organization and increasing membership levels. We will also have several new District VPs/Reps and I trust that they will receive the support that they deserve. Let us all work together to make JPO a premier organization for the R/C jet modeler.

I'll close on that note and wish everyone a most prosperous new year in 2008 and beyond.

Art



District III Report

Mark McCracken



Ohio  
 Pennsylvania  
 West Virginia

If you enjoy flying jets on a grass field, Hamburg, PA should be on your calendar for 2008. This past October '07, the Farview flyers hosted their first ever jet rally. Rick, Erik and the rest of the club members who help in this event have shown the jet community that flying on a grass field in the middle of fall does not get any better.

The Farview flyers have worked hard to aquire this flying site. The flightline made it easy for the pilots to park and unload, as well as starting their aircraft and taking to the sky. There were close to 50 registered pilots and almost 200 flights during this 3-day event. Mother Nature was not our best friend for the first 2 days, but that did not stop many pilots from showing their skills.

Two primary sponsors for this event were SimJet and BVM. There were jets from sport aircraft to scale aircraft and, as always, the many spectators were amazed when they took to the sky. Spectators of all ages lined the fence with their chairs trying to get as close as they could to see the action, ask pilots many questions, and enjoy the talent that was before them.

Best Sport Jet was awarded to Don DeSandre flying his BVM *Kingcat*.

Best Scale Jet was awarded to Adil Nasim for his F-4 *Phantom*.

Best in Show was awarded to the Malchione Family (Dave Sr, Dave Jr, and Pete), who burned 18 gallons of Jet A-1 in their BVM *Ultra Bandit*.

For more information and more pictures of this event, look on the Jet forum at: [www.rcuniverse.com](http://www.rcuniverse.com).

A "well done" goes out to the boys of Farview flyers and a special thanks to Rick, Erik, Dave, Lee, Jim, and the rest of the crew.

For the Facet 1200 and the Facet 2300 flyers: a new version of the Facet series is soon to take to the sky. The *Facet 1700RG* is still under construction and will be out on the flightline this spring.

Kerry Sterner started this project a few years ago and it has sat in the corner for a while since Kerry has become a USA dealer for SimJet. I have been asked to finish the Facet 1700RG and have it ready by the spring of 2008.

The Facet 1700RG, size-wise, is inbetween the 1200 and the 2300, and the RG stands for retractable gear. I will power the 1700 with a spare P-80 for now. Swept wings and retractable gear should make for a very nice aircraft. Next issue, I will post a build thread and pictures.

I have also included a few more pictures from the **Hamburg Jet Rally**.



District III Report (cont'd)

Mark McCracken



District IV Report

Lee Reightler



Delaware  
 District of Columbia  
 Maryland  
 North Carolina  
 Virginia

**A SEASON PAST**

The members in District IV traditionally start their flying season with the **Mid-Atlantic Jet Rally**, held annually in May at the Fentress Naval Auxillary Flying Field in Chesapeake, VA. From that point on, most of us have to rely on going to jet rallies in other districts because of the limited facilities in our district.

Our usual agenda includes **Jets Over the Heartland**, **Kentucky Jets**, and **Liberty Bell Jet Rally**. It was decided to try some different events this year, so off to **Georgia Jets** and the **Florida International Jet Rally (FIJR)**.

The **Super Jet South** (hosted by GA Jets) is an A+ operation. Their facility is one of the best around and the hospitality is 110%. You may need a GPS to find it, since it is well hidden in the wilderness of GA, but you should put it on your schedule for next year.

The **FIJR** had a rough start, weather wise. But, Saturday and Sunday turned out to be pretty good. This was the first event that I've attended where JPO members were recognized for their efforts and given a break on registration fees. Again, great hospitality.

The pictures and captions tell the rest of the story.

**SUPER JET SOUTH**



**A gaggle of F-18 Hornets**



**One of three startup areas**



**The main building**



**Waiting to take flight**



**Has anybody seen Barry?**



Peanuts is still looking for the bone he buried last year.



Aircraft waiting to be prepped for flight

FLORIDA INTERNATIONAL JETS



Bob Underwood (AMT) stands by waiting to assist customers



David Plaine (BVM) getting the Ultra Bandit ready



Some models displayed by Jet Central



The DC-10 crew checking the struts



BVM tent - looks like the crew had a long day



The only tree on the field is a little less tall



## District VI Report

Patrick Frost

Illinois  
Indiana  
Kentucky  
Missouri

### “WHO’S GOT YOUR BACK?”

In this Winter Edition I would like to talk a little about *spotters*. First of all, what is a spotter? How do you choose one? Does your spotter know you and your aircraft? Is this spotter experienced with jet aircraft? These are a few questions we need to ask ourselves before heading out to the flight line with any Joe Blow at an event or at the home field.

I have found over the years during my visits to jet events that I seem to have a more relaxed time on the flight line, and a better flight, if I have my "regular" spotter behind me in the box. I feel that spotters are often overlooked and go unnoticed with little or no appreciation at times. Your spotter is your "back up" pilot if anything should or can go wrong with your aircraft, engine, or radio. He/she is there to be your insurance and assistant when you need them. I know a few people that use only one particular spotter and would never accept anyone else behind them no matter what the condition. I know some people that use their spouses only and couldn't fly without them (I envy these guys and wish my wife would come to the flight line with me, but with a 2 year old on our hands, sometimes it's easier said than done).

I usually stick to three spotters at any event I go to, and I feel comfortable with these three guys. They are my friends and they know me and they know my aircraft. I usually brief them before hitting the runway of any changes I have made or if I will need help pulling the drogue chute or anything that can make my ride more enjoyable. I always give detailed information when it comes to a maiden flight or if it's a bird that was repaired after an incident, etc., etc. The more they know about what to expect for the duration of the flight then the better for the both of us. I sometimes feel that, when I am flying, my spotter is in the backseat with me giving me the information I need just as if we were on a *Wild Weasel* mission in the skies over Hanoi in an F-4. He lets me know what the traffic conditions are like, as well as wind changes or

crashes on OR off the field. The more I know, the better we both are, and the better our chances of returning home from our "mission" safely.

I have often spotted for guys that couldn't tell you where the retract switch on the transmitter was... and these people scare the hell out of me! If you don't understand your aircraft or radio, then how can your spotter assist you to the fullest extent once airborne? I always like to be briefed once I am asked to spot for someone, especially when it's a person I don't know. I was recently asked to spot for a guy at a large event. He was going to fly his aircraft for a video person who was on stand-by waiting for him to get his bird airborne. I asked the guy while he was taxiing out on the runway if his timer was on and was he set to go? He said, "Don't talk to me while I am flying - I know what I am doing!" I just took a step back and seriously thought about leaving his conceited butt on the flight line by himself since it was his show. Logic told me to stand there and help him anyway... so I did. He made his several passes at show-center and did his thing. Upon hearing his timer beeping I told him he needed to land. He again shouted, "I know, I know, DON'T talk to me" and then moved up to the runway out of his box while he landed his bird. At this point in time you don't want to know what I was thinking, but I can tell you this, if this guy asks me to spot him again, it won't happen. This kind of attitude and respect towards other spotters is uncalled for, to say the least, and not very safe.

Now... I am sure many guys could tell you that I fly my *Phantom* like a bullet train in Japan and that it may be unsafe and I CANNOT deny it at times, but I will ALWAYS listen to my spotter or flight director on the field. MANY times I have had my spotter tell me once we get back to the taxiway nearing engine cool down that I was over the centerline on my speed pass or I was too low on another pass. I will always let my spotter know that I appreciate his input and that I will do better next time... and usually I do.

One year ago I was spotting for a friend at the **Blue Grass Jet Jam**. This friend had just bought an aircraft from me that I was very familiar with and once it was airborne during his first flight the turbine quit! I immediately grabbed his transmitter and landed the jet safely on the runway and turned to him and said I was sorry for grabbing the transmitter out of his hands. He

## District VI Report (cont'd)

Patrick Frost

said he would have rather me have done that, than the alternative. He was very appreciative and we both realized that it was instinct that made me so involved with his first flight that I literally took over for him. It worked out for the best in the end, but I was just as much a part of that flight as he was. I, too, have been there, with my *Phantom* at a jet event in IL when it was having gear problems, causing the aircraft to act strange, and I asked Tim Redelman (my spotter at the time) to land it for me. He did an outstanding job bringing it down the centerline of the runway safe and smoothly. Needless to say, I had to change my diaper after that flight, but was glad to have an experienced spotter at my side.

We all have good days and bad days out there on the flight line. The object is to have MORE good days than bad! When we lose or damage an aircraft, I always try to learn from it and so do my close friends. When an aircraft is lost that is one of mine or a close friend's, it's almost like losing a family member, such as a dog or cat. One of the toughest jobs being a spotter for anyone is when they lose a jet. You never know what to say to that person, even if it was dumb thumbs that plowed his bird into the ground. I have spotted for many guys that have crashed aircraft and all I can say is, to be there for them and comfort them, is the best you can do when that time comes. When I lost my F-4 at **Spiderman** this fall, I wanted one of my best friends Paul to be there and tell me everything was gonna be alright. It was a tough phone call to make but I had to let him know the bad news. He simply told me that I had many successful flights on that bird and I was gonna get through it. He was right. Paul is one of my main spotters and he couldn't make it to that event because he had to work. Paul and I have been through alot since 1997 and he always has my back as well as 2 other guys on the flight line.

Pick a spotter that you feel comfortable with and talk to your spotter before you reach that flight line, and when the flight is over let him/her know how much you appreciate the help. I am not asking you to talk to your spotter like your wife... I am asking you to talk to your spotter like your life depended on it. Someday it just might come in handy.

Frosty



Scott Saddler spots for your scribe



Your scribe sometimes needs all three of his spotters



Your scribe, as spotter, focusing on buddy Paul Blanchard's plane

District VII Report

Tom Ryan



Iowa  
Michigan  
Minnesota  
Wisconsin

**WINTER "I WONDER" LAND?**

Every year I wonder why I decided to live in this *Winter Wonderland*. As I write this column, it's 18 degrees outside, with the wind blowing at 26 knots gusting to 41. Here in WI, the winters can bring thunderstorms, ice, snow and just about anything Mother Nature has up her sleeve. For us, that's normal. If you're going to live here, you get used to it, I guess... but sometimes I think, man there has got to be something to that "snow bird" way of life, and I'd like to try it someday. That or several winter trips south!

Okay, complaining about the weather isn't going to change it, but, for those of you who were planning a trip to WI in the winter...check with the weatherman first, and then a good mental health expert!

So, while it's nasty outside, many jet guys here are busy building new jets or fixing up the old ones. I have a Boomerang *Intro* that did 60 plus flights this last summer and came away with a few scrapes and dings, but all in all everything is still working pretty well. I'll clean her up, fix some air lines, do a little TLC and she'll be ready to go come spring.

Of course like everyone else, I have another new project sitting on the bench waiting to be completed, and hopefully flying as soon as the new season starts. For me, spring can't come soon enough.

**ANOTHER NEW GUY!**

Meet Jeff Borowski, pictured here with his Reaction 54. Jeff is the latest local turbine waiver holder and now owner of this Reaction 54 with a US Coast Guard design that seems to nicely fit that jet's profile. Jeff is new to jets but not to R/C flying. He started with gliders in 1979, then 40-sized planes, and then worked his way into helicopters. During the trip, he became a field rep for Gohbee Aviation and attends several out of state RC events every year.



**Jeff Borowski shows his P-70 powered R54**

Jeff's Reaction 54 came to him via RCU as he couldn't make up his mind on what "first jet" to buy. While looking for a used *Intro*, the Reaction 54 became available at a good price, plus, it was all ready to go and so was Jeff.

Powered by a Jet Cat P-70 and being fully aerobatic, the Reaction 54 seems to fit Jeff's needs. He likes the idea that it's mostly balsa and easy to work on should any mishap occur, or should he want to modify something, because to Jeff (a senior design engineer by trade), a balsa jet just makes more sense for a first time jet owner.

Jeff quickly earned his turbine waiver and couldn't wait to test the limits of his plane. Jeff commented; "it's all I had hoped for from my first jet!" Like the rest of us, his next project is already in the works. It's a *Sting Ray* by Yellow Aircraft. Seems the "next jet" bug has bit again!

At 50, Jeff has also been involved in racing pro stock cars and truly enjoys hunting. Living in WI, a hunter has many opportunities to get out and in the wild, as there is a full "year round" complement of hunting and fishing activities throughout the state, and Jeff really enjoys that.

Well Jeff, welcome to the sometimes crazy and always exciting world of jets, and to the JPO membership.

### JETS DO MAKE A DIFFERENCE!

There is no doubt that jets do make a difference to the success of any fly-in or air show. Just ask the event organizers!

Last season many spectators said "we came to watch the jets fly" and that helped boost the club's revenue.

One spectator said "it's the sound, they look and sound so real when they fly by!" Another said, "the engine sound of a turbine jet really brings home the realism of the jets"... I hear that all the time!

I now see more and more jets showing up at clubs, that until most recently, were "not jet friendly" but, as their popularity grows, so does the the number of spectators, something that is hard for club officers to ignore.

The trend of "getting into jets" is increasing, and that's all good, but...safety is still the paramount concern and should be the first consideration, not the cost! Just because someone can afford a jet, doesn't mean they should own one!

### LOOKING FOR STORIES

It's hard to attend all the events across the area but, we'd all like to read about them and see photos from those of you who do attend them.

Like always, I'd like to hear from you and share your photos with everyone.

If you have a story on someone in our jet community that you would like to share, or a photo or two, please send it to me so that I can get it in my next column.

Tom





## District VIII Report

Sam Snyder

Arkansas  
Louisiana  
New Mexico  
Oklahoma  
Texas

For most of us, the flying season is essentially over and many, because of the weather, are encapsulated in their workshop cocoon, repairing, maintaining and contemplating building. It is a time to build, so in that regard, this article is devoted to my favorite subject, "scratch building." In fact, this is the first of a series of articles that will address this complex subject.

There are many wonderful aircraft to replicate in ones lifetime, but unfortunately there is not enough time to build them all. Therefore, there are a number of considerations that require evaluation prior to your selection, and research on the Internet will usually provide more than enough data.

We now need to discuss some rules of thumb. If the real aircraft was a "dog" it probably means the model is not going to be spectacular, since smaller size seldom improves flight performance. However, if the full-size aircraft was a "dog" only because of the power available, this can be easily remedied, since our model jet turbines are superb when considering the thrust-to-weight ratio. In the late 40's and early 50's, the aircraft manufacturers had nothing that compares to our current model jet engine performance.

In 1957, I was checked out in the F9F *Cougar*. After taking the runway, we would advance the throttle to 100% and then call the tower for take-off clearance. Usually, by the time they approved take-off the engine would make it to 100%. In fact, the engine spool-up performance was so bad that the aircraft was limited to daylight only operations off of the carriers. (That is not all bad for those of us who have experience in night carrier ops.) However, the point is that the F9F (both *Cougar* and *Panther*) were good flying aircraft. They just had inadequate power plants, but they make excellent models. A couple of other examples of underpowered, but good flying aircraft, are the *Banshee* and the *Demon* (F2H & F3H).

In this same era of an aircraft that was a very poor performer - the F7U *Cutlass*. It not only suffered from

a lack of power, but it also had airframe problems. When in the landing configuration, the intakes were starved for air flow, so in order to wave off you had to drop the nose - not a good situation. In addition, if the aircraft stalled, it tumbled end-over-end. Consequently, it's obvious this would not be too good a subject for modeling.

Another example is the F-104 which has had some limited success. The problem with this aircraft is its lack of wing area. This means high-wing loading and really ultra-superb piloting skills with high-speed landings. In any case, you get the idea, research the full-size aircraft so that you can make a selection based on flight performance.

The next step in the design process that I use is an overhead projector and Kinkos. You can take any 8 x 11, 3-view to Kinkos and have them produce a transparency of the 3-view (cost is less than \$2). Then project the transparency on a wall with white drawing paper affixed to the wall. This will give you an excellent overall idea of the size and internal space that will be available for the turbine and ancillary equipment. An overhead projector at Staples costs \$125 or less. Please note that an overhead projector used with a transparency does have some distortion, so the drawing that you devise from this method will not be an accurate scale drawing. For scale competitors, this drawing is just for evaluation purposes prior to the actual selection of the aircraft you eventually decide to replicate.

If you do not desire to compete with the aircraft and just want one close to scale, this first drawing will be adequate. The actual distortion can be determined and corrected by measuring the projected image and comparing these dimensions to the ratios on the accurate 3-view being projected.

At this stage we can make a reasonable determination of the size of the model, which will in turn will give us an idea of the size of the turbine required and some idea of the gross weight that can be anticipated.

In the next article we will discuss the method for estimating the weight and layout. Have a happy and prosperous new year!

Sam



## District IX Report

Mike Weidner

Colorado  
Kansas  
Nebraska  
North Dakota  
South Dakota  
Wyoming

Is it Spring yet? Just a few more weeks until Ground Hog Day and then real spring follows after that - and not a moment too soon. Where I live, in the shadow of the Rockies, our snowiest months tend to be March and April. Oh well... Despite there being more months of winter to endure, I trust all had a wonderful holiday season and used the time to advantage in catching up with family members and maybe helping those less fortunate than us.

For us within the ranks of JPO, and in particular District IX, this year is looking great already. The Love-Air R/C Club will host a full-blown 3-day jet rally this year at their magnificent facility near Loveland, CO. Also, the **Missouri Valley Jet Scramble** is on again after a one-year hiatus due to runway improvements at the host location in Tecumseh, NE. We're not sure yet if the **Central Plains Jet Rally** (Conway, KS) will return for its second year. However, specific dates and more discussion of these venues will follow in our next report.

All of us extend a warm welcome to our new JPO President, Frank Tiano. I am not a personal friend of Frank's but I do know him well enough as an R/C modeler and business leader within the modeling industry to have a fairly accurate calibration of what to expect from him as our leader. As I have in the past, I know all of you will come to enjoy and respect his unique manner of thinking and the perspectives that accompany his "process engineering." Suffice it to say, at least his next year at the helm of JPO will be most interesting.

Over the holiday season "down time," I began the conversion of some of my fleet to the 2.4GHz "wireless" world of radio control. What an education I've been getting, learning about the offerings of the "Big Two" (JR/Spektrum and Futaba). In the process of educating myself on the various systems, I found myself purchasing neither one of them. I opted for the Xtreme Power System (XPS) updates to my existing JR and Futaba stuff. While XPS might not be known to the masses, there is an emerging cult following of the XPS product line. Just tune into the XPS Forum of R/C

Groups at [www.rcgroups.com/xtreme-power-systems-483/](http://www.rcgroups.com/xtreme-power-systems-483/) - and you'll soon begin to understand what became compelling reasons for my choice.

In the "2.4 Gig World," there are some special considerations concerning the batteries and power sources we use in our airborne packages. Case in point being, what happens when too many servos impose too much of a load on the voltage buss feeding our receivers? The answer is simple: the potential for impaired or complete loss of radio control, so I've been developing quite a treatise on this subject of airborne DC power systems. In its final form, I hope to have it available within the JPO website knowledge bank and written so that any adult who grabs an R/C transmitter can have an easy and immediate understanding.

In the process of compiling and putting together information on our airborne DC power systems, I stumbled across some related information I want to share with those who have or are contemplating the leap into the 2.4 Gig world: Beware - NOT ALL TRANSMITTER ANTENNAS ARE ALIKE.

If you have a 2.4 Gig system that uses a transmitter antenna resembling the one found on the box providing your home wireless personal computer network, do not be tempted to use that antenna or buy just any antenna as a spare or replacement. "So, (you're thinking to yourself) I'll just go out and buy some of these tricky cheap replacements to have in my transmitter case and, whoa, what about this 'gain' antenna?" Stop right there, you do NOT want a "gain" antenna for your 2.4 Gig R/C transmitter.

The 2.4GHz transmitter modules in use in the radio control world fall into a system of discrete frequencies whose standards for use in wireless operation are embraced worldwide. This includes output radio frequency (RF) power levels, so, in that respect there is only so much umph - or watts of RF - that can be emanated. Some antenna makers have developed specialized antennas that offer, on paper at least, improved performance because of where the RF power is directed. The key word is "directed." These are not "gain" antennas in the sense they make more RF power - they do not. They have gain only in the sense of comparison to something else which proves to be something in theory only.

To illustrate my point I have included a graphic that compares the radiation patterns of three 2.4GHz

wireless network antennas. They are presented, left to right, in increasing amounts of "gain." Two appear to be identical physically, but they are not and actually do differ a bit in terms of their practical performance.

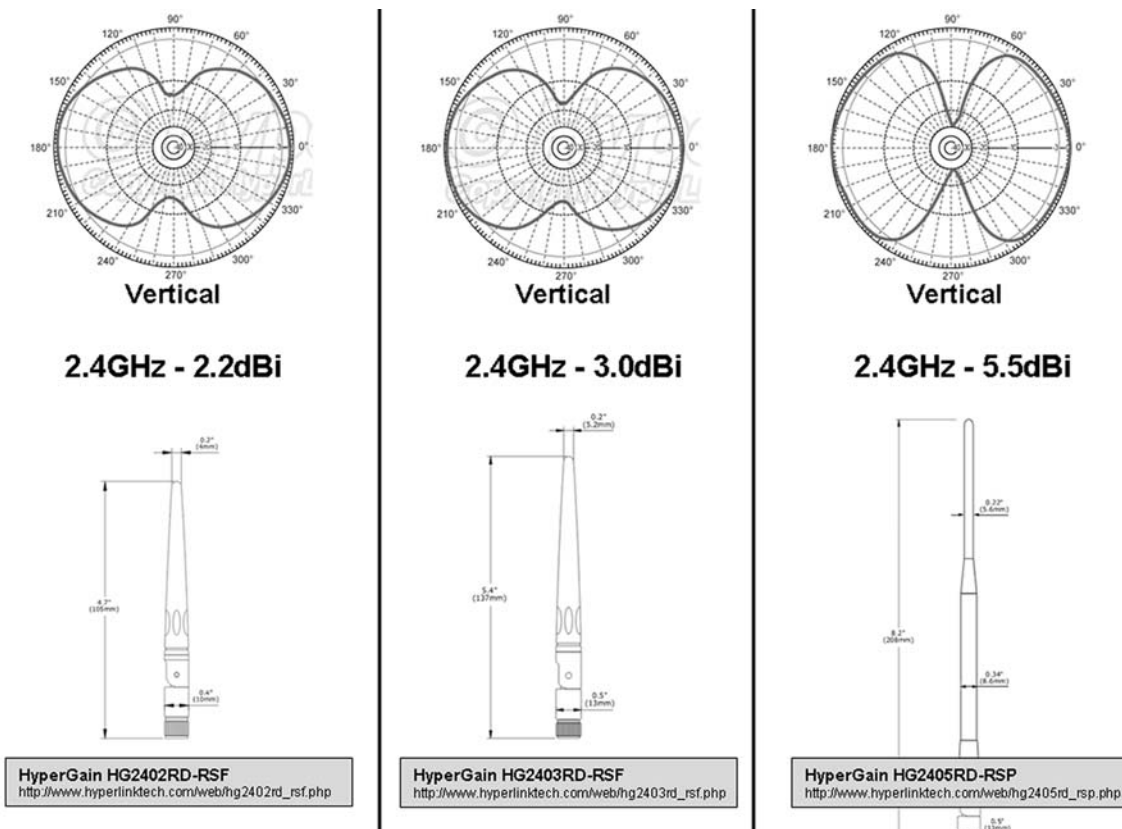
The antenna on the left is what I refer to as a standard 2.4GHz antenna, offering no gain per se other than its radiation pattern in comparison to a theoretical isotropic antenna. That is the basis for the performance label of "2.2dBi": The "i" refers to a theoretical isotropic antenna and the decibel (or dB) number makes reference to the slightly increased RF power distribution. This is the garden variety antenna used on your R/C transmitter and is available from the source indicated beneath the drawing.

OK, let's move on to the second and third antennas. By now, after reviewing the radiation patterns depicted about the Z or vertical axis, you're thinking you can step up for a gain antenna and obtain a no-cost increase in RF link integrity. Not so. A more skeptical view results when you carefully examine where the added RF energy is being placed. Remember, the antenna does not make RF energy, it only radiates it. The other radiation patterns shown for 3.0dBi and 5.5dBi illustrate there is no free lunch. The RF energy presented to the antenna is simply being radiated somewhere else.

The issue is that the modified or expanded RF pattern doesn't go where we need it. In terms of our physical orientation during a flight, we fly our RC planes in front of our transmitter antennas - NOT to the sides of the transmitter, so the added RF energy placed there is of no value to us. There might a case for our use of the 3.0dBi antenna, but I am not so sure about the 5.5dBi gain antenna. So, to be safe, if you need a replacement or an extra antenna, for now at least stay away from a "gain" antenna for the transmitter. I may have to get a couple of these gain antennas to play with and see if I can come up with a meaningful way to determine how they might perform in our real RC world, not the theoretical world. Who knows, there may be a free lunch after all. If I come across other pearls of knowledge relating to the emerging use of the 2.4GHz spectrum wireless control in our R/C jets world, I will be sure to pass them along.

Meanwhile, I need to break away and continue getting some jets out of hibernation and work on my airborne DC power systems article. When we come back next quarter in *Contrails*, I expect to have more details to share on upcoming jet rallies within our district and hopefully some shared details of newly maiden jets. Until then, fly safe and happy landings.

Mike





## District XI Report

Al Watson

Alaska  
Idaho  
Montana  
Oregon  
Washington

I got hooked on Pylon racing in the mid 70s and competed in all racing classes until I finally retired in 1999. Turbines caught my attention at that time and I obtained my waiver in 2000. I still fly some prop airplanes, but my main interest these days is building and flying turbine-powered models.

As the new representative for District XI, I would like to take this opportunity to introduce myself and to also thank Ad Clark who held this position for the past six years. Thank you, Ad.

I joined the AMA sometime in the 60s and have been a Contest Director and Leader Member-Scientific for many years. I was a member of the AMA Frequency Committee for a number of years and also served as Frequency Coordinator for District XI.

I am currently retired and was a Structural/Mechanical engineer employed by the Boeing Company for thirty-six years. During that time, I worked as a design engineer and later as an engineering manager on commercial airplanes, missiles and spacecraft. I am married, with a son, daughter and four grandchildren.

JPO is important to the growth and safe operation of turbine-powered models and, as such, must continue to grow to maintain a strong influence with the AMA. The number of JPO members in District XI, compared to the number of waiver holders is very low and one of my goals is to increase the JPO membership. As far as Special Interest Groups go, there is definitely strength in numbers.

My modeling career began as a very young boy building and flying control-line models. I became involved with R/C in the late 60s when the first proportional radios became available and, after learning to fly, I became interested in pattern and competed in that phase of the hobby for a few years.

Thank you for the opportunity to serve as your JPO representative for District XI.

Al

### Upcoming Jet Events:

**Desert Jet Storm III:** February 8-10, 2008  
Speed World R/C Club Field  
Phoenix, AZ  
[www.speedworldrdrf.com](http://www.speedworldrdrf.com)

**Florida Jets:** March 6-9, 2008  
Lakeland-Linder Airport, Lakeland, FL  
CD: Frank Tiano 863-607-6611  
[www.franktiano.com](http://www.franktiano.com)

**Tucson Jet Rally:** March 14-16, 2008  
TIMPA Field, Tucson, AZ  
CD: Debbie Sherrow  
[drsherrow@hotmail.com](mailto:drsherrow@hotmail.com)  
[www.tucsonwarbirds.com](http://www.tucsonwarbirds.com) (registration)  
[www.timpa.org](http://www.timpa.org) (map)

**Top Gun:** April 23-27, 2008  
Lakeland-Linder Airport, Lakeland, FL  
CD: Frank Tiano 863-607-6611  
[www.franktiano.com](http://www.franktiano.com)

**17th Mississippi Afterburner:** May 1-4, 2008  
John Bell Williams Airport  
Raymond, MI (suburb of Jackson, MI)  
[www.mississippijets.com](http://www.mississippijets.com)

**19th Central Texas Jet Rally:** May 16-18, 2008  
ARCA Club Field, Austin, TX  
[www.austinrc.org](http://www.austinrc.org)  
CD: Ken White 512-352-2294

**Blue Grass Jet Jam:** May 29- June 1, 2008  
SKYMAC Club Field  
Bowling Green, KY  
[www.skymacrc.com](http://www.skymacrc.com)  
CD: Mike Kirby 270-784-9276

**DFW Jet Rodeo:** June 13-15, 2008  
North Dallas RC Club Field  
[www.ndrcc.com](http://www.ndrcc.com)  
CD: Greg Pulcini  
([gpulcini@aol.com](mailto:gpulcini@aol.com))

**2nd Annual Gateway Jet Rally:** June 19-22, 2008  
St. Louis, MO  
[www.gateway-jets.com](http://www.gateway-jets.com)  
CD: Patrick Frost

**Kentucky Jets:** July 4-6, 2008  
Lebanon, KY  
[www.visitlebanonky.com/events/kjets.htm](http://www.visitlebanonky.com/events/kjets.htm)

November brings not only Thanksgiving, but also the Annual **Arizona Jet Rally** in Mesa, AZ. Joe Balabon and I both attended... and he brought his camera. Here are a few photos of the wonderful flying and weather. 50 pilots with over 100 airplanes makes for wonderful flying! Thanks Joe!



## Officers and District Representatives

**PRESIDENT**

Frank Tiano  
3607 Ventura Drive, East  
Lakeland, FL 33811  
863-607-6611  
frank@franktiano.com

**VICE PRESIDENT/  
WEBSITE MANAGER**

Keith Sievers  
12926 Littleton Bend Road  
Jacksonville, FL 32224  
904-318-7171  
pilot114@aol.com

**SECRETARY/TREASURER**

Susan Moore  
790 Royal Crown Lane  
Colorado Springs, CO 80906  
719-576-3781 (H)  
jposecretary@comcast.net

**CONTRAILS EDITOR**

Greg Moore  
790 Royal Crown Lane  
Colorado Springs, CO 80906  
719-576-3781 (H)  
jetflyr@comcast.net

**DISTRICT I**

Robert J. Radford  
P.O. Box 1640  
Plaistow, NH 03865  
603-475-2200  
r.radford@comcast.net

**DISTRICT II / AMA LIAISON**

Art Arro  
7629 Creek Farm Lane  
Holland Patent, NY 13354  
315-865-4990 (H)  
arrokats@twcnny.rr.com

**DISTRICT III**

Mark McCracken  
180 Blackman Street  
Wilkes-Barre, PA 18702  
570-760-6987 (W)  
570-825-0713 (H)  
trioval00@verizon.net

**DISTRICT IV**

Lee Reightler  
108 W. Heather Road  
Bel Air, MD 21014  
410-838-4208 (H)  
clrmd@msn.com

**DISTRICT V**

Eric Clapp  
5285 White Ibis Drive  
North Port, FL 34287  
941-468-1246 (W)  
941-423-9931 (H)  
jetartessales@aol.com

**DISTRICT VI**

Patrick Frost  
210 S. Spilman Avenue  
Rolla, MO 65401  
573-364-9214  
elegant@fidnet.com

**DISTRICT VII**

Tom Ryan  
P.O. Box 1111  
Milwaukee, WI 53201  
414-881-0070 (H)  
tomcat@execpc.com

**DISTRICT VIII**

Sam Snyder  
1215 Wilder Way  
Tyler, TX 75703  
sarita@cox-internet.com

**DISTRICT IX**

Mike Weidner  
6535 Foxdale Circle  
Colorado Springs, CO 80919  
719-531-0142 (H)  
rockymtnjets@comcast.net

**DISTRICT X**

Paul Bageman  
12184 Oakview Way  
San Diego, CA 92128  
858-513-1515 (H)

**DISTRICT XI**

Al Watson  
130-145th Ave. N.E.  
Bellevue, WA 98007  
425-746-9519  
alenawatson@msn.com

**CANADA**

Gaston Boissoneault  
1157 Dominion Drive  
Hanmer, ON  
P3P1R9  
Canada  
705-969-6728



Joe Balabon caught John Gerhardt's  
scratch built A-7 at the Arizona Jet Rally

**JET PILOT'S ORGANIZATION**



**"Focused on the Future"**

Greg Moore  
790 Royal Crown Lane  
Colorado Springs, CO 80906

