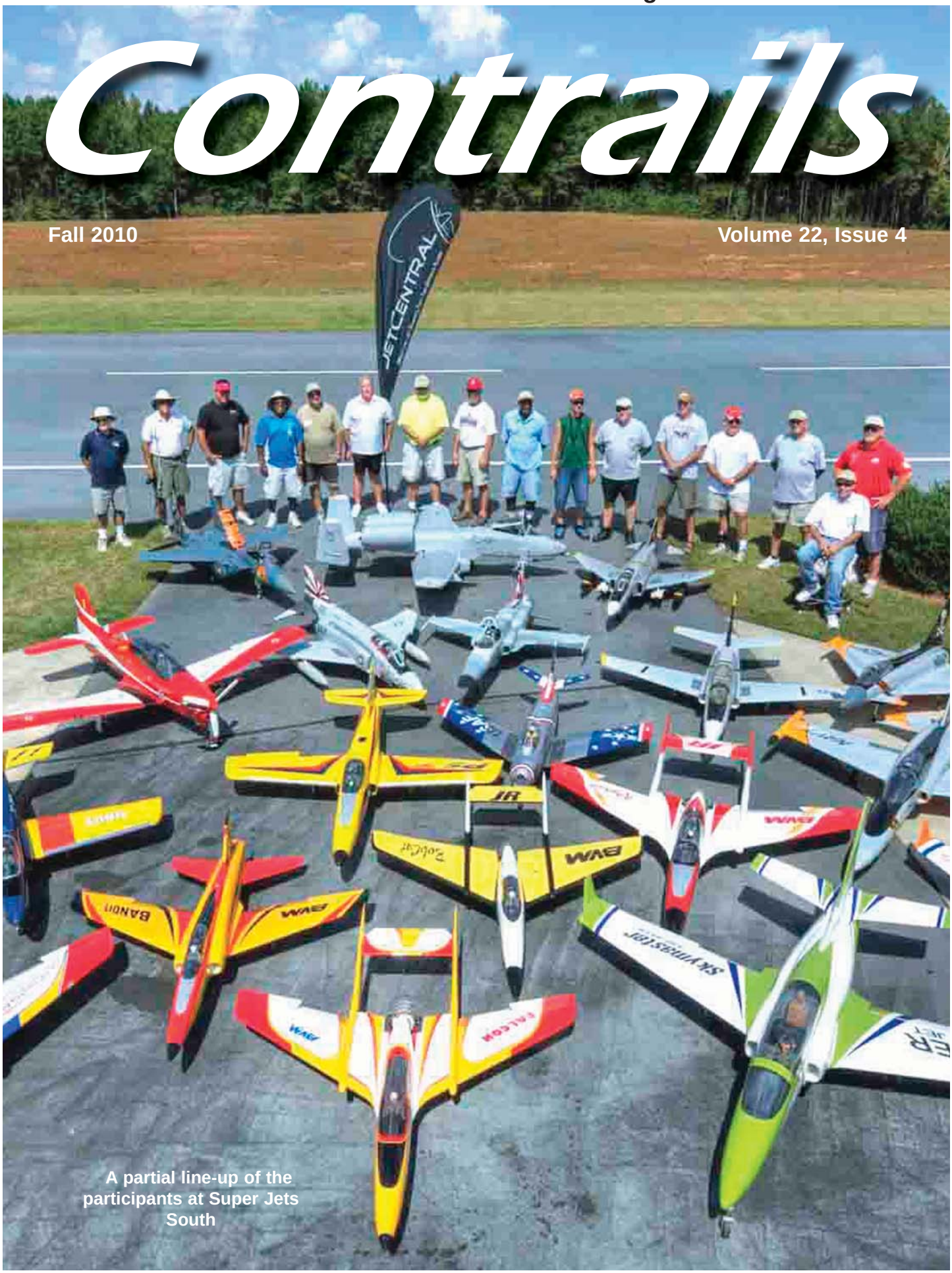
Newsletter of the Jet Pilot's Organization

Contrails

Fall 2010

Volume 22, Issue 4



A partial line-up of the participants at Super Jets South

President's Report — Keith Sievers

Family medical issues have kept me out of the workshop and off the flying field for the past several months, so my column will be short this time, but I'll provide a couple of quick updates on AMA issues that your JPO has been working on.

First, as I reported in the last issue, the Safety Committee was considering a revision to the safety regulations to require the use of a turbine aircraft for the waiver process. The revision was ultimately passed and the requirement now reads that a turbine aircraft of at least 12 pounds dry weight shall be used for the qualifying flight. Previous regulations simply required an aircraft capable of 100 mph for the waiver flight.

As you would suspect, a waiver application eventually showed up at the AMA based upon flight of a small foam electric jet, which led to the revision. While arguably it is still possible to qualify for a waiver with a *Boomerang* or a *ShokJet* and immediately fly an *Ultra Bandit*, at least the latter promote some familiarity with turbine operation and maintenance ... the gap from the *Habu* to the *Ultra Bandit* was seen as a little too large.

I received only one comment about the exclusion of micro turbines for the waiver flight, but that has not emerged as a significant issue, and there are workarounds available.

While we are on the subject of AMA regulations, there is currently a move afoot to increase the weight limit on experimental aircraft to approximately 125 pounds for prop aircraft and 100 pounds for turbines. The proposal discussed by the AMA Executive Committee would establish two tiers for Large Model Aircraft (the new name for Experimental Aircraft to avoid confusion with the FAA use of the EA term). The first would reach from 55 pounds to 77.2 pounds to align with the metric standards used around most of the rest of the world, particularly Canada.

This first tier would require paperwork be filed with the AMA but would be basically a self-certification. The second tier would stretch from 77.2 to either 100 or 125 for turbines and props respectively, and would require the issuance of a permit by an LMA inspector, much as the EA program works today.

It was suggested that perhaps it would make sense to make these changes and submit with the other rules to fit into the new FAA-SUAS proposed regulations, rather than gain approval of the existing standards and then ask for further changes in the short term.

There are two schools of thought on the issue. The first is that the increase in weight limit adds exposure to the jet community for the benefit of a very small segment of the jet population. Concerns about the state of turbine aircraft engineering capability to insure public safety is the primary issue. Supporters of the increase would argue that engineering standards and flight testing of the vast majority of turbine kits being flown is sub-standard, and that this change, particularly since it will be a low frequency event, adds little risk into the equation.

The proposal still has to go through the insurance company, as it requires a change to the weight limit in the policy, and I suspect some feelers will be sent out to the FAA before finalizing things, but it appears at this point to have sufficient momentum at the Executive Committee Level to make it through the process.

The JPO has not been actively involved in the discussions as this is another Safety Committee issue, but I would welcome any input from the JPO membership and will pass it along to the appropriate folks.

Speaking of the FAA, there is still not much new to report. The Notice of Proposed Rulemaking is not due out until next year, and the AMA has not been able to get much out of he FAA regarding their position in advance of the NPRM. The dialog actively continues, however, and I will publish any updates as they happen, either in *Contrails* or on the JPO website.

In other news, we have had frequent requests for JPO shirts and other logo materials. I have located a vendor who is also a modeler and he has tentatively agreed to produce items on demand at a reasonable price. Watch the JPO website for updates and pricing.

Ballots for the even-numbered District VPs and the Vice President are in this issue ... please take the time to vote. As always, we are also looking for volunteers to help with various initiatives throughout the year. The JPO will likely have a booth at the World Jet Masters, in Ohio in 2011 and if you are interested in participating, please let me know.

Fly safe.

Keith.

Vice President's Report

Al Watson

As I write this column, all of our "local" jet events for 2010 have been completed and the weather has changed in the northwest - lots of wind and rain. I was hoping to get the jets out one more time this year, but that is not looking too good right now. I guess it is time to start planning my activities for the next few months so that, when the weather allows, my airplanes will be ready to go since we can usually fly in late February or early March. I will be adding two new airplanes to my fleet next year - a Yellow F-15, which is 99% finished and a *Bandit* ARF that will be ready to go early in the season. My *KingCa*t is due for major maintenance as I plan to replace all of the fuel lines - something I do every other year. The airplane was first flown in September 2006 and has 220 flights using a JetCat P120, which has never been off the model. With almost 50 hours of run time the turbine is going to JetCat for a bearing change and inspection. Diagnostic data from the ECU shows no adverse tendencies and the turbine still starts and runs as good as ever, but I figure this would be a good time for some tender loving care.

In the last issue of *Contrails* I talked about landing techniques for our jets. In this issue I will offer some suggestions on configuring your radio system to lessen the load and make your flying experience more enjoyable and relaxing.

Dual Rates

I do not use dual rates on my turbine models since the control throws are set to suit my style of flying, while assuring that adequate control authority exists for all phases of the flight. Dual rates for aileron, elevator and rudder are set at 100% for all switch positions.

Exponential

Expo will smooth things out around neutral and 25% is the number I have been using for many years on aileron, elevator and rudder. Again, it is a personal thing, but most flyers seem to be in the 20-30% range. Expo for aileron, elevator and rudder is set to 25% for all switch positions.

Flight Modes

Okay, we have talked about the simple stuff, so lets talk about flight modes. At this point I should mention that I fly JR equipment and I believe that "flight modes" is specific terminology; however, I am sure that high-end transmitters from other manufacturers have similar features, but might use different terminology, so what are flight modes? Flight modes can best be described as a model configuration that is programmed to assist the pilot in performing a specific maneuver. In the case of our jets, we are talking about take-off, normal flight and landing. So here are these three flight modes as I have them programmed for my *KingCat* using the 12X transmitter:

Takeoff: 15 degrees of flap and gear down.

Normal: Flaps up and gear up

Landing: 35 degrees of flap, aileron crow and gear down.

If you desire, you could operate these three flight modes using a single three-position switch, but that would mean that you could not lower the gear without having flaps deploy. In the event of a flame-out that could cause a big problem, so I de-couple flaps and gear - gear on the gear switch and flaps and crow on a three-position switch.

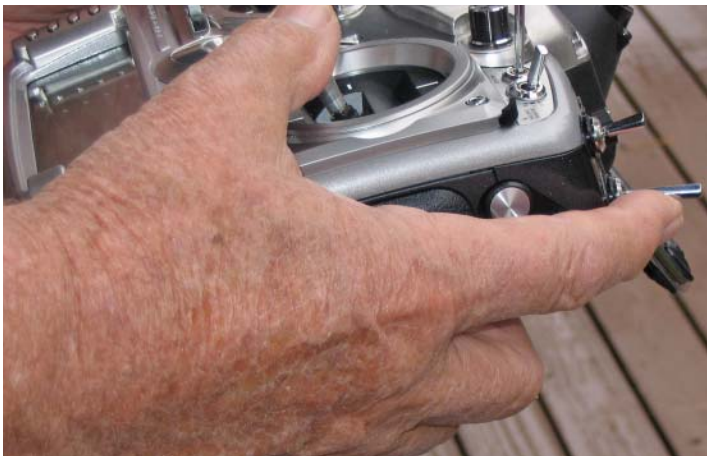
So what is the big advantage in using flight modes? With the high-end JR transmitters, here is the advantage: Take-off with 15 degrees of flap and gear down, trim the airplane in pitch and roll, pull the gear up with the gear switch and flip the mode switch to normal mode; and the transmitter will remember the trims you just inputted in the take-off mode so they will be there the next time the switch is in the take-off position. Now you need to trim the airplane in the normal mode and the same thing will happen - the transmitter will remember these trims also. Finally, go to the landing configuration and trim again.

With a new model, it takes a while to get the airplane flying just the way you want because you will be trimming three different times. This might seem like a lot of work, but you will have a model that is in perfect trim whether you are taking off, just flying around or in the pattern for landing. Also, if you are using the JR 12X transmitter, you should set the trim increments fairly coarse (such as the factory default setting of four) for the first flight in order to be able to trim quickly. After the initial flight, I switch to the finest setting, which allows you to be very precise.

Let us talk about the physical configuration of the transmitter. Stress-free flying requires that you must be able to fly the airplane without looking at the transmitter. In the case of my *KingCat,* that means finding the gear switch, flight-mode switch and brakes without looking down. I am a "thumb" flyer and fly Mode 1 - throttle on the right-hand stick and elevator on the left-hand stick. My right index finger is used to operate the brakes, which are on the right-hand

Vice President's Report (cont'd) — Al Watson

bottom corner of the transmitter - switch up is gear up and switch down is gear down.



Flight modes have been assigned to the rudder three-position dual-rate switch, located on the left-hand side top front corner of the transmitter. Switch up is "normal," middle is "take-off" and down is "landing." This switch is operated by my left-hand index finger. It is important to note that all three of these switches are easy to find without having to look at the transmitter.

All of my jets are set up the same way, using the same switch positions for the same functions. On models that have added functions like speed brakes, opening canopies etc., then things get a little more complicated, but commonality between models goes a long way toward avoiding errors.

Wishing Everyone All the Best This Holiday Season.

Al

Upcoming Events

Florida Jets: March 3-6, 2011
Paradise Field, Lakeland, FL
CD: Frank Tiano 863-607-6611
www.franktiano.com

Tucson Jet Rally: March 4-6, 2011
TIMPA Field, Tucson, AZ
www.tucsonwarbirds.com (registration)
www.timpa.org (map)

California Jets: April 14-17, 2011
Bakersfield, CA
www.ca-jets.com

Top Gun: April 27-May 1, 2011
Lakeland-Linder Airport, Lakeland, FL
CD: Frank Tiano 863-607-6611
www.franktiano.com

22nd Annual Central Texas Jet Rally: May 19-21, 2011
ARCA Club Field, Austin, TX
CD: Dan Massey
www.austinrc.org

Official Ballot

Vice President: **Al Watson** __ **Other:**_____

District II: **Len McIntosh** ___ **Other:** _____

District IV: **Lee Reightler** ___ **Other:** _____

District VI: **Lance Campbell** ___ **Other:** _____

District VIII: **Ron Schwarzkopf** ___ **Other:** _____

District X: **Dave Reynolds** ___ **Other:** _____

Ballots to be sent to: JPO Secretary/Treasurer
7433 McCormick Woods Dr, SW
Port Orchard, WA 98367

All Ballots must be received by December 31, 2010

District I Report

Bob Radford

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

What a year for flying jets in District I! We had nine great weekends of jet flying in 2010 - where normally, I get only three. Not only that, we increased District I JPO membership by a third - with Mike Fiorito, John Almeida and Pete Ileka joining our ranks. Additionally, we had three folks earn their waivers: Steve Goler, Mike Fiorito and Nada. Congratulations to you all of you. We also welcome Erik Kirste to turbine-jet flying with his *Viper* -2M.

We had great turnouts both at Gardner, and the Maine Jet Rallies where Jeff and Ray put on superb events, as usual. The new jet rally in New England is the Plum Island Jet Rally sponsored by New England Jets. Held October 23-24 at the Plum Island Aerodrome, in Newbury, MA, the crowds filled the parking lot all day! We had over 15 registered pilots for the event and have been invited back for several events next year. Also, we were offered the use of an airport near Millinocket, ME. Next year, we would like to have the Plum Island Jet rally earlier in the year. Unfortunately family matters force me to cut this short, so enjoy the photos and feel free to send me your thoughts and Ideas.

Bob

John Almeida's *Rookie*.

Jets ready to go in Maine.

A future jet pilot!

Explaining jets to the spectators.

Erik's *Viper*, ready to go!

District I Report (cont'd) — Bob Radford

Brand New Pavement at Maine!

***BobCat* ready to go at Plum Island.**

Sprinkles didn't stop Erik from getting some instruction.

Beginner's Corner (cont'd)

Continued from Page 22

Not all planes have the same equipment and thus, they all do not require the same preflight checks. I'm going to list some of the most common items, and not include such things as bomb drops, smoke tanks, or other optional items.

The purpose, obviously, is to avoid taking off and realizing you forgot something, like putting air into your retract tank. Ask me how I know! There is nothing worse than having to land on concrete with the wheels up .... So here are some recommendations for a preflight check list:

1. Vent plug removed from fuel system (check this before fueling your aircraft to prevent your tanks from damage).
2. Fuel and propane added.
3. Batteries charged.
4. Air tanks filled.
5. Retract switch in down position on the Transmitter.
6. Brakes on.
7. Transmitter on.
8. Correct model showing on the Transmitter.
9. Receiver on.
10. Control surfaces all move correctly.
11. Manual fuel shut-off valve - on.
12. Initiate start sequence.

The above checklist is a good start. You can personalize it by adding or subtracting items that are suited to your needs.

If you have questions, please feel free to write, or call. My contact information is listed below.

Until Next Time!

Bob Brusa
JPO Rep Dist XI
360-874-1517
bhaven2@earthlink.net

District III Report

Mark McCracken

Ohio
Pennsylvania
West Virginia

In District III, the season is finally coming to an end. In this article, I will cover the highlights from the Liberty Bell Jet Rally, Hamburg's Jet Jamboree and review the job of the spotter.

In early August Mike Lesher, his family and team once again hosted another great event located at Donegal Spring Airpark in Marietta, PA. With 4 great days of weather, Friday night's steak dinner and Saturday's banquet just added to a wonderful event. Saturday evening, awards were given for:

Best of Show: Phil Nuza, F-100D - sponsored by Frank Tiano Enterprises.
Best Scale Jet: Lewis Patton, F-15 - sponsored by Simjet LLC.
Best Sport jet: Greg Garneau, *Jet Blast* - sponsored by BVM.
Best Electric Jet: Bob Klenke, F4D *Skyray* - sponsored by The Electric Jet Factory.
Special Recognition Scale performance: Joe Lewis, F-86 sponsored by Frank Tiano.
Special recognition Sport performance: Joe Brown, *Reaction* - sponsored by Frank Tiano.

From one great event to another, the fall weather held out for the guys at Farview R/C flyers. Rick, Erick, Lee, Jim and the rest of the gang at Farview R/C flyers have hosted yet another year with a full flight line of tents, aircraft and about 60 pilots. Although the wind made its presence known for the first couple of days, the brave took to the air and the rest of us do what we do best, spend time talking with friends and spectators. But when the sun fell, there was nothing better then sitting around the fire and listening to Reggie and Eric telling their great jokes, as well as the secret blue magic and the popcorn balls.

For those that have never had the chance to fly at the Hamburg Jet Jamboree, this is one of the smoothest grass fields you will ever find. If there was an award to the person who burnt the most fuel, we would all have to agree this would be Brian: aka Bigbri. 17 gallons? Saturday afternoon, there was a short break in the action to hand out a few awards. They were:

Best in show: Bill Jameson, *Scorpion*, sponsored by BVM Jets and Farview R/C flyers.
Best Scale Jet: Gary Jones, F-16, sponsored by US Simjet LLC.
Best Sport Jet: Jim Baker, *Eurosport,* sponsored by Horizon Hobby.
Best Electric Jet: Mike Kramer, BVM *Electra*, sponsored by US Simjet LLC and BVM jets.
JPO Top Gun award: Dave Malchione Jr., BVM *Ultra Bandit,* sponsored by JPO.

District III Report (cont'd) — Mark McCracken

Spotters

Spotters, what are they? Are they your best friend, standing next to you watching your aircraft rip through the sky and talking about today's events, or about yesterday's ball game - or are they the ones watching your back as you fly? The answer is: yes, to both of the above. When is a spotter needed? In most cases, spotters are needed with every flight we have and communication is key between pilot and spotter. The spotters job starts with assisting the pilot in the start up of their aircraft, and once the pilot is ready, the spotter should communicate his intentions to other spotters and pilots on the flight line. These guidelines are the ones you would use while operating your aircraft at an event or when other pilots are on the flight line. The spotter should alert the pilot of any air traffic, be it R/C or full-scale.

In the past, we have all been a witness to most of the do's and more of the dont's, and all of us are guilty in one way or another of the dont's. After several years of flying jets at occupied full-scale airports, we have learned how to be better spotters. An extra measure we use while flying is I have a Nav-Com radio. This is a great item to have for the spotter while out on the flight line, or a portable scanner will work well too. With the Nav-Com, we can hear aircraft from 10 miles out making their calls for the airport we are at, and if we are up, we have plenty of time to land and clear the active. The key point I am trying to convey is that, as a spotter, you must be the extra set of eyes for your pilot and everything around.

Until next time!

Mark

District V Report

Craig Gottschang

Alabama
Florida
Georgia
Mississippi
Puerto Rico
South Carolina
Tennessee

With the flying season over, it's time to work on those winter projects. I'm "ultra" excited with my newest jet, and greatly appreciate the craftsmanship, completeness, parts fit, instructions and superb paint finish on this quality kit. I really look forward to going into the workshop these days and hope to have this big, beautiful jet flying early next year.

Whether you have a full-time winter project or not, don't neglect the rest of your fleet. The off-season is a good time to pull off those access panels and hatches and give your jets a good going over. I like to check air and fuel lines and their fittings, landing gear condition, control linkages and anything else that can be tightened, lubed, cleaned or even replaced, if necessary. I also like to cycle my batteries at least once or twice over the winter. I know they claim it's not necessary with some of the newer types, but my experience has been that batteries that sit for a long time tend to lose capacity. In any case, it can't hurt to exercise them.

The rest of my report consists of coverage of this year's Super Jet South Fly-In hosed by the Georgia Jets Flying Club. I hope you enjoy it.

Finally, it's time to renew your JPO membership! You have, or will soon receive, a postcard reminding you to do this and additionally, there is a renewal form elsewhere in this issue of *Contrails* (ed's note: Inside/bottom of the back page). You can also renew and pay online at the JPO website: www.jetpilots.org. The JPO is a relatively small organization and run 100% with volunteers. We don't have the staff, time or budget for a big time recruitment campaign and we rely heavily on each member to take the responsibility to renew in a timely manner. Thanks for your support!

Super Jet South

The Georgia Jets guys have done it again! Four great days in September of perfect weather with uninterrupted and incident-free flying. Credit the hard work of President Mike Pascoe and the efforts of other club members to have their flying field in top shape and all the support pieces in place. There are a lot of "behind the scenes" details that have to be done to make any fly-in a success and the Georgia Jets Flying club got it right.

Credit also their private, purpose-built, and jet-friendly flying site. One thousand feet of perfectly level runway, generous and smooth grass overruns on both ends, and a forgiving hedge row to protect pilots and jets at all flying stations. Because the field is located in the center of 200+ acres, there are no flight restrictions, no curfews, and no interruptions for full-scale aircraft.

Pilots from throughout the east, southeast and Canada took advantage of these ideal conditions and flew, literally, from dawn to dusk - and beyond. Some of the most exciting flying took place in the late afternoons and evenings when the *Habus,* T-28s and foamies of every description emerged from the trailers and into the air. Those with lights kept flying while the barbeques fired up and everyone else relaxed and swapped stories about the day's events.

A banquet and awards ceremony, along with drawings for prizes and giveaways, was held on Saturday evening. Special thanks to Eric Clapp and Jet Central for sponsoring the dinner, as well as to the other manufacturers and businesses who donated products. The complete and lengthy list is available on the Georgia Jets website at: http://georgiajets.org.

The following photos were taken by Georgia Jets club members Jim Little and Craig Gottschang. The award winners are all identified in the photo captions.

Boli Muente's *Tucano* with Jet Central turbo prop and smoke system. Recognized for the Best Scale Performance.

F-22 built and flown by Jed Jacobsen.

District V Report (cont'd) — Craig Gottschang

Prototype FEJ *Hawk 100*. Owner/pilot Rex Bryant is the author of the construction manual for this impressive jet.

Gordon Dicken's Swiss paint scheme *Ultra Bandit.*

Rick Chace keeps a close eye while son Ricky skillfully pilots his *BobCat.*

Skymaster F-16 flown by Ritchie Holt. The 30-pound jet is powered by a P-160.

Classic CompArf *Lightning* flown by Boli Muentes. Smoke-on passes looked great in the clear Georgia skies.

Garey Bivins readies his F-15 for another sortie. Garey is from Atlanta, Georgia.

All the way from Swindon, England, Johathan Smith made numerous flights with his AMT *Mercury*-powered *Bandit* ARF.

F-16 in patriotic scheme won Scott Harris the Best in Show award.

District V Report (cont'd) — Craig Gottschang

Pablo Fernandez (left) and Chuck Storrie pose with Chuck's big Mibo A-10. Pablo won the JPO Top Gun trophy for his impressive A-10 flights, as well as the Best Electric award with his BVM *E-Bandit.*

From Raleigh, NC, Robert Vess expertly puts his BVM *KingCat* through its paces. Robert won the Best Sport Performance award for his efforts.

***Rhino*-powered Skymaster F-4 on a gear check pass. Numerous flights and a crowd pleasing drag chute deployed on each landing, earned Mike Lesher the Best Military Performance award.**

Pilots voted Dustin Buescher as the Pilot's Choice winner for his exciting and skillfully flown flights on this Skymaster *Hawk*.

Incredibly detailed Fei Bao F-5 by Jed Jacobsen. Features lights, drag chute and a fully-functional, scale canopy-opening mechanism designed by Jed.

Lewis Patton's venerable Fei Bao F-15. Noticeably improved performance with a newly installed Jet Central *Mammoth*.

Nicely flown *Eurosport* by Larry Lewis.

District VI Report

Lance Campbell

Illinois
Indiana
Kentucky
Missouri

As I write this, the wind is howling at 35+ mph outside and the leaves are being ripped from the trees. Talk about a clear punctuation that flying season has come to an end and building season is about to fire up …

But, prior to closing the book on flying, I've got some jet meets to tell you about. I'm not sure if you've noticed yet, but I'm going to try to use the four issues per year as follows: the two mid-year ones for event coverage, and the other two for building info. Also, at this time I'm pleased to announce a new section that I hope will be a regular thing - a "Member's Corner," in which I'll pry out of our different District VI members a tidbit worth sharing with fellow jet modelers.

Minnesota Jet Meet

First on the plate this issue, is a jet meet that's not even in District VI, but is such a gem of a show I have to pass it on. It's the Minnesota Jet Rally, in Rushford, MN, hosted by Dave Dennison in mid-August. Now, before you blow past this one and think ... Minnesota? That's a long distance - let me cut you off. Rushford is in the very SE corner of MN, about 30 miles north of IA, and 30 miles west of WI. Although there are some jet guys in MN, my gut feeling is that there is a greater concentration to the south and east of here, so I wanted to point out that this one might not be as far as you think.

Anyhow, it's at a full-size north-south runway and you face east, so you can fly until dark every day. It's a low-key event with only about a dozen guys there every year, so you get as much flying as you could want, and the hospitality of both Dave and the airport manager, Mike, can't be beat. Dave and his wife bring out a catered dinner Saturday night, which is later followed up by the bonfire at the airport later in the evening. More can be found on the web at: www.mnjets.info.

The pilots and planes at the Minnesota Jet Rally.

Picturesque small town airport atop a hill, with green rolling hillside falling away in all directions. Great flying site for the MN Jet Rally.

Illini Super Jets

The 2nd Annual Illini Super Jets meet was held in Monticello, IL in late August. This event takes place at the new Eli Field (800-foot paved model runway), the club field of the Monticello Model Masters with Chris Huhn as CD, and significant support from Horizon Hobbies. The pavilion for spectators was huge, and the brand new hanger for the models was well … the size of a full-size hangar. Talk about a nice setup! This time around they had close to 40 pilots, and with some from quite a distance, we got to see some new aircraft, which is always welcome. Although the site is still under development, you can see it's going to be a first class flying site when completed, and a welcome, new jet meet to the area.

The runway at Eli Field - Illini Jets.

Brand new hanger for airplane storage at Illini Jets.

District VI Report (cont'd) — Lance Campbell

Cool train museum right next to Eli Field at Illini Jets.

Sweet looking Bizjet (Epic *Victory)* at Eli Field.

Good turnout for only the second year at Illini Jets.

Nice collection of F-100s at Illini Jets.

Steak dinner, Saturday night at the Illini Jet Rally.

US Team Selection for WJM 2011 in Dayton, OH

I was fortunate enough to be asked to assist in the US team selection to take place prior to the Route 66 Jet Meet in Litchfield, IL, in early September. The team that made the cut, when the dust settled after a 2-day selection process, looks really solid and all have a good grasp of the challenge that lies in front of them. If there's ever a chance to shine, it's when you're the host country. The event will take place during the last week of July through the first week of August, 2011 in Dayton, OH, at the Air Force Museum. Those that made the team were: David Shulman (Team Captain), Jason Bauer, Kim Foster, Scott Harris, Lewis Patton and Rod Snyder, with Bob Bush and Andy Andrews as our alternates. Congratulations guys, well earned and good luck!

Most of the competitors that fought for a spot on the USA team at the WJM Qualifier (Shulman not pictured).

Your winning US team, along with promoter Roger Shipley.

District VI Report (cont'd) — Lance Campbell

Route 66 Jets

Once again Roger Shipley and crew has done and outstanding job putting together a favorite event. Some foul weather in the beginning kept attendance down just a bit, but by the weekend, nice fall weather had returned and the air was filled with jets continually. The local support of the event by both the community and the airport itself cannot be overstated, which is a very good reflection of Roger's organizational skills.

Very convincing ABs on an F-15 at Route 66 Jets (Patty Kneip photo).

Dave Dennison's Hog at Route 66 (Patty Kneip photo).

The awards table at Route 66 Jets.

Member Contribution:
***The Vision for Jets*, from Jerry Crow**

Have you ever been guiding your prized aircraft across the wide blue yonder and suddenly there's an identical plane in extremely close proximity to yours ... and then you realize that you're having double vision? The first time it happened to me I was so startled I had to hand off my radio to my spotter. This anomaly continued to rear its disconcerting head over my next few flying sessions, though less surprisingly as I learned to compensate, but I knew I couldn't safely continue down this flight path.

I had only been wearing prescription glasses for a few years, which were a good quality, "transitions" type no-line style, but I finally decided to see my optometrist. I described my difficulty in detail, and that I was seeking a dedicated pair of sunglasses for flying fast jets. I also inquired about the possibility of enhancing my distance vision with a 20/15 prescription, which had been suggested to me in a previous conversation with Bob Violett.

My optometrist explained to me that the cause of my double-vision was a combination of looking through the "no-line" areas of the lens while tipping my head back, which I had also noted. As my everyday prescription was for tri-focal no-lines, he asked me how close up I needed to see. I indicated just at arms-length to see my radio, so taking my flying needs into account, he suggested I use a lined bifocal lens, with no close-up reading lens, and only a middle distance bifocal, set very low and shallow in the lens, with the remaining majority of the lens dedicated to the 20/15 resolution that I had requested, as I would only be wearing them for flying purposes. I also picked a medium amber colored lens for increased light contrast. I have found that I need to put them on thirty minutes to an hour ahead of time for my eyes to acclimate, which I do on the way to the field, or during set-up at an event.

I must say this was one of the best investments I have made by aiding me, not only to continue in the hobby, but giving me the best distance vision I've ever had. I wouldn't consider flying with my everyday glasses again. Now I can work on my flying skills without worrying about my vision. Perhaps my experience will help someone else.

That's it for this edition. See you next time.

Lance

District VIII Report

Ron Scwarzkopf

Arkansas
Louisiana
New Mexico
Oklahoma
Texas

Howdy folks, sorry for last issue - I was tied down with work, and was not able to get something submitted for *Contrails*. I hope you're having a good flying season; I know the weather this year - at least in Texas - seems better than what we had last year.

Greater Southwest Jet Rally

Once again, this event was held in Waco, TX (Sept 9-12) and was its 28th anniversary. The event was held at the HOTMAC club, CD'd by Larry Garrett. I made an attempt to get to the event early, but on Wednesday morning when I arrived, it ended up pouring rain for most of the day. Oh well!

We were rewarded with good weather for the rest of the event though, with about 54 pilots attending, traveling from Mississippi to Arizona. Oh - and Florida was represented too! It was a nice turnout for the weekend, flying off the 800-foot long runway. Most models were turbine-powered, followed by a dozen or so edf-powered models, a turboprop, and I believe one glow-ducted fan. We were also fed very well at the field for most of the event, from a pig roast to steak - good Texas food! The event was scheduled for Thursday thru Saturday, with open flying on Sunday, but most people use Sundays for the travel back home, so I did too. Once again, a great event hosted by the HOTMAC Club of Waco! Following is a list of awards:

JPO Top Gun: Steve Ellzey, F-100, plus flying several other models.

People's Choice: Bob Moore, B-1 Bomber Display.

Pilot's Choice: Ron Schwarzkopf, F-107A.

Best Military Jet(s): Tom Perry, F-22 and the rest of his squadron.

Best Sport Jet: Scott Marr and Joey Tamez, *Ultra Bandit.*

District VIII Report (cont'd) — Ron Schwarzkopf

Brian Gates landing his T33.

Rob P.'s Century Jet *Talon* on a go-around.

Kevin Whitlow sees how low he can go.

Bob Brubaker's *Flash's* smoke system checked out okay.

Sam Snyder's Yak business jet is ready for departure.

Bob Price's Nitro-Planes twin-edf looks and flies great.

In spite of a summer of shark hunting, Bob Covish's Barbi and *Habu*-eating killer keeps swimming through the skies

Tom Perry floats in his Avond's F-15.

Sam Snyder's DeHaviland *Swallow* sets up for landing.

District VIII Report (cont'd) — Ron Schwarzkopf

James flame-job *BobCat* settles nicely.

Most of the excellent photos in this article were taken by James Smith. He also created a large photo thread of the event in RCUniverse.

Out with the Old, In with the New (Batteries)

Having been a long time NiCad (Nickel Cadmium) battery user/abuser, I decided I would finally start replacing my flight pack batteries with the newer chemistries to get more current. (Um - no pun intended!) I had tried Nickel Metal Hydride (NiMh) batteries in the past, but was never comfortable with them. I've used LiPos (Lithium Polymer) for some electric models, but we've all heard of stories of some of the dangers associated with them, when not treated properly.

I settled on trying out the latest A123-type batteries (Lithium Nanophosphate, or LiFePO4), and if happy, I would start replacing my NiCad flight packs with these. A123 is actually the cell manufacturer and doesn't really describe the cell, but it is easier to identify with this name. These batteries are available in 1100 and 2300mAh capacities with each cell rated at 3.3 volts nominal, so a flight pack can safely use 2 cells in series, without a regulator. A couple more advantages are: they seem to take a high charge rate so one can get quick charges, they are approximately half the weight of NiCad batteries given the same capacity, have quite a flat discharge curve, and are of higher discharge rate than NiMhs. They should also take more physical abuse than LiPos, considering the cell construction.

Some disadvantages are that they should be cell-balanced, and the available pack capacities are a bit limited. So far I am happy with how they are working as flight packs, so I'll continue swapping my NiCads out with batteries manufactured by A123.

MiG Alley

I've always wanted to build a MiG-21, so about a year ago, I picked up one of the Fei Bao 1/5.5 scale kits. I can never leave well enough alone, so I picked up an all white kit, instead of the prepainted ones. The idea was that I would cover it in thin aluminum using Flite Metal or other similar products - mainly to recreate a 1/32 scale plastic model I built as a kid long ago. I am still looking at various color schemes to go with the all metal finish, and have a couple in mind. The plan is to apply the Flite Metal on a part-time basis, and perhaps if I'm lucky, by the end of this year the model will be ready to stuff.

The first part I tackled was the vertical fin. The all-white finish on the kit was less than perfect in a lot of areas, which required application of spot putty and primer, but we're getting there … with the Flite Metal going on a bit easier than I expected. I have used this material before on the tail end of my F-107A - it is really easy to add rivet detail to the material (although tedious), and it can tend to pick up little dents/dings - but I've never seen any pics of MiG-21s without dents/dings!

One tool I've found useful is a soft plastic Bondo body filler spreader, usually found in auto supply stores. The radiused portion of the spreader works well to spread the aluminum sheet over large panels quickly, and smoothly. This is important in order to minimize the number of wrinkles created by laying down the Flite Metal. The tools that are supplied with Flite Metal are ideal for working in tighter areas. Maybe by the next issue (or two) I will have an all metal MiG to continue working on - and this will give me time to finalize the markings.

Lastly, the end of the year will be here soon! Please consider rejoining JPO for 2011. The Jet Pilot's Organization is here to work with the AMA to allow this facet of the hobby to grow in a fun and safe manner!

Ron

District X Report

David Reynolds

Arizona
California
Guam
Hawaii
Nevada
Utah

For this issue, some quick shots of the finished F-3 *Demon*. If you look closely under the canopy, you can see the battery pack sitting in the one place it fits.

No lack of power on takeoff!

Right now we are still testing, so flights are limited to around two minutes. With each flight we note how many amps are put back into the pack, to see if we can push longer flights. When the amount of amps going back in gets close to the rated capacity of the battery pack, we know we have hit our maximum flight time.

Event report - Bob Brusa sent me this report about the Thunder Over the Valley event hosted by the Woodland/ Davis Aeromodelers.

Thunder Over the Valley

After 21 years, this was the final jet event to be held at this field. The Woodland/Davis Aeromodelers have been told they have until Nov 30 and then they must leave. They are developing a new field just a few miles away and hope to have it ready by December 1.

The event this year was a great success with 24 registered pilots and many more planes. The weather was quite warm and the winds were light the entire weekend with modelers coming from as far away as Seattle, WA. Except for a couple of dead stick landings with minimal damage, there were no lost planes.

The Best Jet Award went to Dan Avilla's BVM F-100; the Best Pilot Award went to Red Jensen flying his *Baby Boomerang* - he put on quite a show for the crowds; and the People's Choice went to Chris Dellinger's BVM F-4.

Thanks for the report Bob! (See folks, it's not hard to do. Help make the District X page grow.)

Till next time, keep the low passes where they belong.

Dave

District XI Report

Bob Brusa

Alaska
Idaho
Montana
Oregon
Washington

Jets Over Whidbey is now history and it was a super event. There were more pilots this year (29) than we have had in the past. We had a great banquet on Saturday night and had retired Rear Admiral Bill Newman as our guest speaker. Bill was the boss-pilot for the Blue Angels (he flew plane #1) in 1978-79, and had a Navy aviation career that spanned 35 years. He was also a fighter pilot and test pilot and had over 900 carrier landings. Bill flies radio-control now and competes in IMAC competitions, but has never flown a turbine-powered model. The highlight of the event for him was flying a Boomerang *Elan* on a buddy-box with Dean Wichmann (one of our Canadian friends). Who knows, maybe we will have a new turbine pilot next year?

I flew the maiden flight on my new *Viperje*t 2M two weeks before JOW on Friday, August 13. What was I thinking flying on Friday the 13th? Actually, it flew great! I am powering it with a JetCat P70, and it flies very well at half power, however, I would recommend a P80 to reduce the take-off roll and have more vertical performance. I have a dozen flights on it now and am very pleased with how well it flies. This is a plane I would recommend for new turbine pilots who would prefer a scale model rather than the typical sport models designed for new pilots such as the *Boomers* or R54's. It lands very slow, making it easier for the new pilots. I've seen the bigger *ViperJet* fly, and it also seems to land quite slow for a big airplane.

I've included some photos of JOW. There is one of the admiral on the buddy box, a photo of Roberto Flores' new black BAE *Hawk,* a partial photo of the noon time line-up (notice the size of the runway!), and a photo of Justin Sand's big F16.

It is approaching renewal time for your JPO dues. Many of you have already renewed for 2011 and JPO appreciates your support. Go on-line or send a check to Carol (sec/treas) to renew. Her address is on the last page.

Mark your calendars for the Pacific NW Model Show from February 11-13, 2011 at the Evergreen State Fairgrounds in Monroe, WA. Here's the link to their website: www.nwmodelhobbyexpo.com.

As a final note, remember, if at first you don't succeed, skydiving is not for you!

Bob

Canada District Report

Paul Dries

2010 Gerard McHale Memorial Rally

As this is the first time presenting the Gerard McHale Memorial Rally in *Contrails* - a little background is in order.

Gerard McHale served for many years as zone director for the BC/Yukon Zone of MAAC and was active in both management and flying activities. Gerard started the Princeton event as a scale event initially for prop planes and later scale turbine models. Today the event has become a dedicated turbine-jet event and the Princeton R/C Jet Club is managing the event and access to the facilities. The town of Princeton kindly donates the use of their regional airport and supports the club for the two annual events, and occasional club flying, all free of charge to the modelers. With Gerard's sudden passing due to an illness, the modeling community decided to recognize Gerard's contribution to the hobby by naming the event in his honor.

During the week leading up the event, the weather reports were looking very poor and the attendance reflected this. The actual weather leading up to the weekend was quite good and got progressively worse as time went on. The weather did however, cooperate for the "Ribfest" where master chef Kev-o managed to cram enough ribs into a BBQ to feed about 50 people. Due to a great group effort, a potluck dinner with Kev-o's ribs as the main course resulted in a feast for everyone. What a great way to bring the whole event together and right at the field! Having a banquet in the local eatery just doesn't have the same appeal.

This stitched photo shows just a few of the BBQ participants.

Kevin Forsyth's JetLegend CT-114 in Snowbirds colors.

Cliff Lebeau admiring his newly acquired *BobCat XL*.

Chris Hammond's Comp-Arf BAE *Hawk*.

Canada District Report (cont'd) — Paul Dries

Bart Ramsay conducting the pilots meeting.

The Alberta crew tried to mimic the BC crew that went to Cayley, and stuffed a trailer full of jets and made the trip down from Edmonton. Nate Rondeau had volunteered his Dodge pick-up to be the tow vehicle and the transmission checked out one mile from the gate. At least they made it there, instead of getting stuck enroute during the 10 hour drive. In spite of these difficulties and the poor weather, the flying went well with no losses or mishaps (with the exception of my poor *Habu*). A few maidens were performed including Jeremy (LGM)'s *Firebird* with a cranked up AMT *Olympus* and Dave's *Ultra Lightning* with a P160.

MAAC LOP

Canada shares a long border with the US and there are many Canadian pilots who travel across to the US to fly their turbine jets. Since MAAC does not have a formal turbine waiver process like the AMA does, MAAC and AMA have made an agreement to accept a Letter of Proficiency from MAAC as a substitute to the AMA waiver. Earlier this year, a new Jet Committee leader took over and several new committee members joined. Subsequently, a discussion was held that the MAAC process had not been updated since its inception and needed review. The MAAC Jet Committee is in the process of reviewing the LOP guidelines, issuing criteria and a master list, and will be revising the LOP for the 2011 season. Please watch for updates to this, especially if you are located in the zones adjacent to the Canadian border where this change is likely to have the most impact.

Closing Comment

As many of us are painfully aware, turbine-powered models, and models in general, are becoming increasingly complex in their integration of electronics and systems. During the last few years we have seen the rise to dominance of 2.4 gHz systems, which has been a great improvement for both safety and convenience, however, these are no longer "switch-and-go" systems. They are also systems that have increasing use of microprocessors, necessitating a higher degree of redundancy and reliability from the power supplies. "Brown outs" can lead to disastrous results and therefore must be eliminated. These systems also have "boot up" times just like any other computer, and your start-up procedure should allow the transmitter "transmit" lights to be on BEFORE switching on your receiver.

I encourage everyone to pay extra diligence to their power systems and I am a big proponent of having redundancy wherever possible. Having said that, don't fall to temptation and over-complicate things, as there are many great products on the market which are completely unnecessary ... and do little more than provide a false sense of security with added potential failure points. My personal favorite set-up is a pair of A123 packs supplying the receiver thru a pair of the heavy-duty JR switches. These batteries are safe to charge in the airplane, have no appreciable memory, and can deliver some significant current under heavy loads helping to prevent "brown-outs" in the case of high servo-load conditions.

Until next time - cheers!

Paul

Treasurer's Report

Beginning Balance as of July 31, 2010	**$7,262.79**		
	Income		
	Dues - Cash/Check	$275.00	
	Dues - PayPal	$71.91	
	Total Income	$346.91	
	Expenses		
		$15.24	
Ending Balance as of October 31, 2010	**$6,410.41**		
	Checking Account	$6,027.14	
	PayPal Account	$383.27	
		$6,410.41	

Respectfully submitted, Carol Brusa

Beginner's Corner

Bob Brusa

This is the third installment in the Beginner's Corner series. If you've missed the previous two, and would like to read them or re-read them, go to www.jetpilots.org and click on "members," then click on "*Contrails*-on-line". You'll find the first article in the spring 2009 issue, and the second article in the fall 2009 issue. In this issue, we are going to discuss the starting of your turbine, some safety precautions during start-up, and a sample pre-flight check list.

I get many questions at jet events asking me how I start my turbine. For those of you who are contemplating entering into the turbine world, you may have the same question, so I'll attempt to provide an accurate description of the start-up sequence.

In the second article of the Beginner's Corner, I covered the equipment, including any safety equipment, needed in flying turbine-powered models. For this article, I will assume this equipment is available, and your assistant (your spotter, usually) is standing by to help you start your turbine. The summer issue of *Contrails* had an article about the necessity, duty, and responsibility of a spotter, so I won't go into that here. I had planned to do an article in the Beginner's Corner about the responsibilities of a spotter, but Art Arro in his District II article did a great job covering this subject.

So let's get started. Assuming you have completed a radio range check, fueled your model, including propane if required, and filled your air tanks, you are now ready to start your engine. The very first item on the agenda is to put the model in a safe place for starting.

We always point the model into the wind to allow for better airflow to the turbine. It is very important to know what is behind your model since you don't want hot exhaust gases, or anything else, to blow into undesired areas. Make sure there is no flammable material behind your model, and ensure you won't be blowing rocks or debris into someone or something.

A general rule of thumb is, that except for you and your assistant, to make sure that nothing is within 25 feet on either side of the model, and 15 feet in front of it. Use common sense for a safe distance behind the model. Also, you or your assistant should have your fire extinguisher close by, in case it is needed. I also recommend that you set your brakes at this time. Explain to your assistant what he should do in case of a hot start - usually the fire extinguisher should be aimed at the front of the turbine, or at the air intakes to extinguish a hot start.

I will digress for just a moment. Your turbine has an EGT - exhaust gas temperature probe - attached to it, as well as an RPM monitor. These two items are critical to the starting and running of your turbine. You may connect some sort of ground support unit to your ECU (electronic control unit) if you desire, but it is not necessary. Some pilots do and some don't, it's a personal preference thing. The ground support unit (GSU) will display what is happening during start-up by showing you exhaust gas temps, RPM, voltages, stage of ramp and so forth. Generally, it's a good idea to be monitoring your start up.

We should now be ready to initiate the start sequence (don't forget to open the manual fuel shut-off valve!). The start sequence can be done with the transmitter, or it can be done with the attached ground support unit. Virtually all turbines sold now are totally automatic in the start-up sequence. Once you have initiated the start-up, the ECU will take over and start the turbine for you. Here is a very brief explanation of what occurs during start-up:

1. The ECU will engage the small electric motor attached to the front of the turbine, and spin the compressor wheel to draw air into the turbine.
2. Once the RPM reaches some designated value, the ECU will open the propane solenoid valve and allow propane into the turbine, as well as allow the glow plug to lite, which ignites the propane.
3. When the turbine reaches an exhaust gas temperature of approximately. 300 degrees C, and an RPM of about 18,000, the ECU will open the kerosene solenoid valve, turn on the electric fuel pump, close the propane solenoid, and shut off the glow plug.
4. The turbine will now ramp up to the idle RPM, which varies by turbine, normally 28,000 to 55,000.

The turbine is now running and you should have complete control. Detach your ground support unit, if used, install your canopy and you're ready to fly.

Let's take a brief moment to explain the shut-down procedure as well. After your flight, just like during start-up, point the model into the wind, being aware, once again, to be careful of what is behind the model. Remember, it is still blowing hot exhaust. You can now shut down the turbine with your transmitter, or use the ground support unit. Again, the ECU will control the shut down and cooling phase for you automatically. If you desire, and many pilots do, you can use a battery-operated leaf blower to assist with the cooling process. Just point the blower at the front end of the turbine or use the air intakes, whichever is appropriate.

There are many preflight check lists that I have seen, some are very extensive and others fairly short. I think most pilots make their own using the items they want to check.

Continued on Page 6

Officers and District Representatives

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

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

SECRETARY/TREASURER
Carol Brusa
7433 McCormick Woods Dr,SW
Port Orchard, WA 98367
360-874-1517
bhaven2@earthlink.net

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

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

DISTRICT II
Len McIntosh
51 Jesse Street
Freeport, NY 11520
516-623-1780 (H)
516-551-1819 (C)
mcintoshl@verizon.net

DISTRICT III
Mark McCracken
180 Blackman Street
Wilkes-Barre, PA 18702
570-760-6987 (W)
570-825-0713 (H)
jpnepa@hotmail.com

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

DISTRICT V
Craig Gottschang
1291 Blue Ridge Drive
Sautee Nacoochee, GA 30571
706-878-1098
craig@georgiajets.org

DISTRICT VI
Lance Campbell
4601 Nathaniel Drive
Columbia, MO 65202
573-474-1588
the-campbells@charter.net

DISTRICT VII
Fredrick "Doc" Gambino
530 Marywood Dr. NE
Grand Rapids, MI 49505
616-363-7390 (H)
616-485-6628 (C)
616-608-4086 (W)

DISTRICT VIII
Ron Schwarzkopf
8744 Hunters Point Way
Ft. Worth, TX 76123
817-292-5712
ronschwarzkopf@sbcglobal.net

DISTRICT IX
Vacant

DISTRICT X
David Reynolds
2126 E. Callie Los Marmoles
Tucson, AZ 85706
520-807-9633
dsr100@dakotacom.net

DISTRICT XI
Bob Brusa
7433 McCormick Woods Dr.SW
Port Orchard, WA 98367
360-874-1517
bhaven2@earthlink.net

CANADA
Paul Dries
2739 Mara Drive
Coquitlam, B.C.
V3C 5L6
Canada
604-941-1624
Paul_Dries@shaw.ca

Membership/Renewal Application

Please add/renew my JPO membership!

Name:_____ AMA Number*: _____

Address: _____

City: _____ State: _____ Zip: _____

Email Address: _____

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

Greg Moore
790 Royal Crown Lane
Colorado Springs, CO 80906

PreSorted Standard
U.S.Postage
PAID
Cincinnati, OH
Permit No. 9714

Bob Daniel's big Fei Bao F-15 shows off its lights on the Georgia Jets runway. Photo by Jim Little.