Newsletter of the Jet Pilot's Organization

Contrails

Summer 2010

Volume 22, Issue 3

Dan St.John caught
Brian O'Meara orbiting the moon with his
PHantasy in Blue F84-F at
Jets over Colorado.

President's Report — Keith Sievers

FAA Update

Not much new to report. As I have previously written, the AMA is working on an initial submission to the FAA that substantially transforms current regulations into the format specified by the FAA. There is not a hard time schedule, but it appears submissions will go to the FAA in late summer or early fall, and I believe it may take some time for the FAA to review the submission and respond. Once their response is in hand, we will have a much better idea as to where we stand relative to the FAA expectations. I have continued to communicate with Dave Mathewson on the subject, and there remains no reason to believe that the FAA has targeted the turbine community for additional scrutiny. Speed and altitude will likely be issues, particularly in more populated areas and in busy airspace around larger airports, but these will likely be directed at all modelers, not just the jet community.

Right now, it remains important to fly safely, demonstrate that the turbine community can police itself and follow the existing regulations to our best ability.

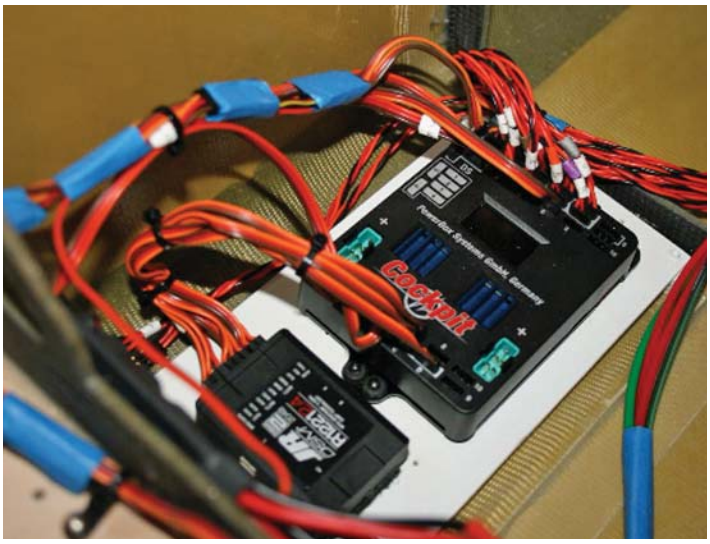
Duralite Flight Systems Cockpit

Last month, I reported on a new piece of gear from PowerBox systems, the BaseLog. About the same time, I acquired another new product from this manufacturer, the Cockpit. I have now installed this piece of gear in my Mibo A10.

The Cockpit is built around the BaseLog. It contains all the functionality of the BaseLog, including redundant power circuitry, data logging and the bright OLED display crammed with information. In addition, it features five channels of "Matchbox" capability and a built-in gear sequencer. As you would suspect, the programming of endpoints and servo reversing on the matching channels is handled through the OLED data display. Programming is accomplished through the three-button Sensor Switch that accompanies the unit ... no special programming box is required.

The unique function of this unit is in the gear sequencer. Up to five separate servos or electronic valves can be plugged into the unit, and they can be set up to operate in any sequence (or in parallel), and at operating intervals specified by the user. Again, programming is accomplished through the OLED. As an example: on the A10 with its very large forward retracting gear, I have the nose wheel on one valve, the mains on a second and the nose gear door on a third, with the landing lights plugged into the fourth slot. I programmed the nose wheel to retract first with the mains following two seconds later, and then the nose gear door. I programmed the landing lights to turn off as the nose wheel begins its retraction cycle. The sequencer controls everything.

While the programming is certainly very configurable, and you might read this as "complex," the display of all information simultaneously on the OLED screen and the intuitive nature of the system's design made setup much easier than I expected. The only negative I have found is that the maximum number of servos that can be matched is two, which meant I had to split the four flaps on the A10 to two separate channels. This is a minor point, however, and I think PowerBox has another winner in this unit. For more information, contact Jack Price at Duralite Flight Systems.



The cockpit unit installed in the A10.

President's Report (cont'd) — Keith Sievers

Changes to Turbine Regulations

As of this writing, there is an agenda item on the next AMA Executive Council meeting to consider a change to the turbine regulations. In essence, the AMA Safety Committee is recommending that all turbine waiver flights be conducted using a turbine aircraft with a minimum weight of 12 pounds. There is also some additional wording indicating that the candidate must be able to talk through issues of radio fail-safe programming, ECU operation and turbine lag, subjects that would generally require actual turbine operation for the requisite level of knowledge. I do not know at this point if the changes will be approved by the EC, but by the time this is published, the result of the EC vote should be public.

The change in the regulations was precipitated by a specific event. A turbine waiver was granted to an individual based upon a qualification flight using an ARF foam aircraft. Assuming this plane could reach 100 mph, using it for a turbine qualification flight is, in fact, strictly legal under the existing regulations. Having said this, I suspect most turbine CDs would likely recognize the gap between technical compliance and practical compliance, and would have expected more before granting the waiver. The incident was publicized on the internet, complaints were formally registered and the Safety Committee recommendation followed.

The JPO was contacted and the board of directors unanimously supported the changes. In the final analysis, we did not view this as new or onerous regulation, but rather an update to clarify the intent of the original regulations that were written before the popular explosion of light-foam aircraft. The simple argument that carried the day with the board, in my view, was the sentiment that the vast majority of individuals seek a turbine waiver for the specific purpose of flying a turbine aircraft, and it is logical this aircraft should be utilized to demonstrate both operational and intellectual understanding of this type of propulsion system. While there is a slight issue with the fact that owners of micro-turbines may need access to a slightly larger model for purposes of qualification, it is expected that these situations are rare and easily remedied. The greater concern was the granting of a waiver based on a foam aircraft equipped with a micro-turbine, and then using this as the basis for unlimited access to any size turbine aircraft.

Any comments, pro or con, are welcome. Contact information for the board of directors is on the JPO website, or you may contact me directly at pilot114@aol.com.

Keith

District III Report (cont'd from page 11) — Mark McCracken

"It is powered with a JetCat P-80, and since I only have one flight on it, I kept the power down to half throttle just to get used to it. I think I'll really enjoy this plane when I get more time on it! I chose the Peru Air Force colors because it is easy to see with the orange and white. The wing span is 80 inches and it is 75 inches long."

The next issue of *Contrails* will cover the LBJR rally, Hamburg Jet Jamboree and a build of the Skymaster L-39. Until then, fly safe!

Mark

Vice President's Report

Al Watson

Summer has finally arrived in the Pacific Northwest and turbine flying is at its peak with new models showing up at the field and maiden flights taking place. At my home field, OLF Whidbey, we are fortunate to be able to use the main runway for maiden flights - 5,000 ft. long and 200 ft. wide! During normal flying we fly off the taxiway, which is a bit more challenging.

It is interesting to sit back and watch other pilots as they pre-flight and fly their aircraft. Some people spend most of their time thrashing around trying to get their aircraft ready to fly, while others do a range check, fuel and fly. It is all about preparation before one arrives at the field. This process begins when the model is being built, and it makes no difference whether it is a full kit or an ARF. Our jets are complicated models, and attention to detail is of extreme importance. Those who enjoy trouble-free flying and fun times at the field are generally the ones who have taken the time to build/assemble the model in the proper way. I feel that if it looks good, it generally *is* good. I hate to see a tangle of wires and tubing with nothing tied down or marked. Yes, it is faster, but makes for tough sledding when things go wrong.

Maintenance of these models is another item that must be taken seriously if you are to have good times at the field. I have a regular maintenance schedule that I keep for all of my models and records are kept in my log book. Here are two examples……I use BVM wheels and brakes and those get lubricated every twenty (20) flights. Every other season the fuel system tubing is replaced and the system pressure tested. Some items are checked every time I go to the field, like the control lineages that are visible…it is easy to do when the airplane is being assembled. At the beginning of each flying session there are two more things that get checked without fail and they are a range test and a flap check. You might wonder why the flap check...well it is a personal thing for me. A few years ago while doing the range test on my *KingCat,* I noticed that the flaps were not lowered equally…one was a lot further down than the other. Those flaps were on a Matchbox and it did not appear that the arms had slipped on the servo spline, so the real cause was not really known, although I suspect that the arm had slipped. Anyhow, at the beginning of each day, the flaps get checked with a simple plywood gauge. For me, it is a feel good thing!

After a day's flying I find myself thinking about how good or how bad the day was. For the most part I generally feel good about the way things went. Over the years I have discovered that the most important part of any flight for me is to "stick" the landing. I can go out there and fly a nice routine, but if the landing is messed up then I am not a happy camper. If I simply fly the pattern and then end the flight with a perfect landing, all is well!

Since the landing is so important to me I have a routine that I stick to, no matter what, and it makes no difference if it is a right-to-left or the other way around. I started flying turbines in 2000 and I struggled that first year until I noticed that the guys that could really stick those landings had the same setup, time after time. So, here is the landing setup that I use on every flight: When it is time to bring the airplane home, I tell my spotter that the next pass will be the gear check and after that announcement that is when the landing process begins. As soon as I turn downwind, the gear goes down and the airplane is positioned in the landing pattern, with the base leg being flown just as I would if I were going to land, but at a little higher altitude and a little higher speed. The turn to final is lined up on the runway centerline and flown at an altitude of 100 feet or so and the gear down confirmed. You might wonder why I go to all that trouble…well I just practiced the landing approach itself and if I did it properly should have a good feel for the affect of any winds that might be present.

Now we proceed to the landing itself. When I go to the downwind leg, half-flaps are deployed and the speed is reduced. I like to pre-set the brakes so that the wheels have a light amount of drag and this is also accomplished on the downwind leg, although sometimes I will do this earlier in the flight. On the turn to the base leg, full landing flaps are deployed and the throttle setting is reduced to maintain altitude. The turn to final, lines the airplane up with the runway centerline, and at that point, the throttle setting is reduced to

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

maintain a constant speed and sink rate. When within a few feet of the runway, reduce the throttle to idle and flare for landing. If the model bounces, the speed is too high! Some pilots deploy full flaps on final approach, however, my rationale for earlier deployment is two fold...if there is a deployment issue, you will be at a higher altitude and have more time to get the flaps back up and sort things out. Secondly, when I turn to final, I want the airplane to be in the landing configuration so that my full attention is focused on "sticking" the landing. After touchdown, gradually apply the brakes and bring the airplane to a complete stop. Do not attempt to turn the model before it has come to a complete stop! This action generally results in scraping wingtips and will ruin an otherwise nice landing.

In the next issue of *Contrails* I will offer a few comments about configuring your transmitter/model to lighten the load and make flying our jets more enjoyable.

Until next time…Happy Landings!

Al

Upcoming Events

Jets over Whidbey: August 27-29, 2010
Whidbey Island, WA
www.wircsrc.com.
CDs: Al Watson and Bob Brusa

Jet World Masters Qualifier
for the USA Team: September 7-8, 2010
Litchfield, IL Municipal Airport
CD: Roger Shipley

Route 66 Jets: September 8 or 9-12, 2010
Litchfield, IL Municipal Airport
CDs: Roger Shipley and Jim Allen

Greater Southwest Jet Rally: September 9-12, 2010
HOTMAC club field; Waco, TX
www.hotmacrc.org

E-Jets International: September 9-12, 2010
TORKS club field; Columbus, OH
www.ejetsinternational.com

Maine Jet Rally: September 10-12, 2010
Sanford Municipal Airport
Sanford, ME

Super Jets South at Georgia Jets: September 23-26, 2010
www.georgiajets.org

OC-Turbo Fest-Fall Edition: October 1-3, 2010
Titusville Airport; Titusville, PA

Hamburg Jet Rally: October 7-9, 2010
Hamburg, PA
www.farviewflyers.net

Woodland Davis Thunder Over the Valley:
October 8-10, 2010
Woodland, CA
www.wdarc.org

Jets over Sun Valley: October 14-16, 2010
Sun Valley Field
Scottsdale, AZ
www.sunvalleyjets.com

4th Annual Central Plains Jet Rally: October 14-17, 2010
www.clearviewfield.com

Sin City Jets: November 4-6, 2010
Las Vegas, NV
www.sincityjets.com

22nd Arizona Jet Rally: November 19-21, 2010
Superstition Airpark
Mesa AZ
www.azmodelaviators.com

District I Report

Bob Radford

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

Wow! This is turning out to be some summer for flying! The weather has been fantastic and we have already had more flying days than we had in the last several years. We have a couple of new jet pilots in the area: welcome to Erik Kirste and Mike Fiorito! Additionaly, we have had two jet events at a fantastic flying site and have found another which looks very promising for more frequent use, all this going on plus our normal jet rallies.

Capitol Jets turned out to be a superb event. The site has been improved with the removal of much of the treeline across the runway. Weather was generally good, but showers did shut us down for a short while on Saturday. Frank Alvarez and Art Arro put on a first class event for us each year. They are able to organize a dedicated group of volunteers into a synchronized machine that makes it enjoyable for pilots and spectators as the organization covers all the bases, from food concessions to aircraft recovery. Thank you all for a fine event! District I's own Brian Lloyd took home the JPO Top Gun Trophy. Brian flew constantly, and went through 17 Gallons of K-1 in just over two days of flying. Fantastic flying and a well-deserved selection! Jeff Lynds was constantly seen showing spectators his aircraft, and explaining the model and hobby to the crowd. Leonard "Max" Smart took home the Best Sport Jet trophy for his unique precision flying style. His tail slides were something to see, even repeating a tail slide at a lower altitude to ensure that our good flying buddy, Chris Trump, could see it, even without smoke!

Dominic Mirabello has been putting on numerous "clinics" at our jet events with his inverted *BobCat XL*. Is there really such a thing as an inverted *BobCat*? Well no, but he flies it inverted so much, there may as well be one.

Our two jet events have been fantastic, with great weather, albeit a little humid. We have had tremendous interest from the local population and lots of good flying, too! Ray Labonte put on a fantastic show with his 3D-*Eurosport,* which features thrust vectoring. Congratulations to John Palica on getting his F-22 tamed and Steve Goler for seeing his new Boomerang *Sprint* take to the skies.

The 5th Annual New England Jet Rally, to be held August 20-22 at Gardner Airport, will be covered next issue as well as the Maine Jet rally, to be held September 10-12 at Sanford Airport.

We are planning for an end-of-the-season jet rally October 23-24, at Plum Island Aerodrome in Newbury, MA. By the time you read this, we will know if it is a go or not, so drop me a line for status.

I look forward to seeing you at these great events, they are always fun and the food is always superb. Enjoy the photos and fly safe.

Bob

Capitol Jets lineup with a nice *Ultra Bandit* in front.

Greg Garneau's scratch-built jet.

District I Report (cont'd) — Bob Radford

Jet ambassador Jeff Lynds.

Chris Trump's electric *Aggressor II.*

Battle-tested *BobCat XL.*

A composite *BobCat* with a custom paint job.

SAAB *Viggen* and 3d *Eurosport*.

Bob Michaud's *Shockjet*.

John Palicia's F-22.

District II Report

Len McIntosh

New Jersey
New York
Europe

The 18th Big Apple Jet Rally was held June 26-27 at Floyd Bennett Field in Brooklyn, New York. The event was hosted by the Pennsylvania Avenue Radio Control Society (PARCS), who provided an excellent flight line and ground control crew for the two days.

On Saturday, we enjoyed great weather with temperatures in the low 90s and winds of 8 to 10 mph straight down the runway. There were 29 registered pilots and 35 aircraft from four states and Canada.

The PARCS team manned the five flight stations with a controller at each station, who was in direct communications with traffic control in the tower. During registration they also handed out a list of spotter guidelines to enhance the pilot/spotter dialogue. This communications network provided a very safe and incident-free environment while flying five jets at time. Every pilot on the flight line knew exactly what the other pilots were doing; whether it be landing, taking off, low pass or slow roll at show center, everyone knew what the traffic was.

Also adding to the event was the outstanding job of announcing and 'play-by-play' done by Jamie Brown. The former 'Tin Knocker,' now a commercial pilot for Delta Airlines, did an excellent job as traffic controller and provided the crowd with full-scale and model aviation commentary.

In spite of limited advertising and a late start, the event drew over 1200 spectators who enjoyed the fine BBQ grilled food prepared by Sal Faraj and his crew. Hamburgers, hot dogs and sausage-n-pepper heroes were enjoyed by all.

On Sunday, due to the heat and high humidity, flight operations were suspended at 2:00 pm and the following trophies were awarded

Military Scale:	Chris Mantzaris
Sport:	Brian Lloyd
Electric:	Larry Johnson
Top Gun:	Dom Mirabello

This was our first experience at helping to organize and present a jet rally, and there were many lessons learned, not the least of which is that success requires the talents and efforts of many. We want to thank each and every one for their hard work that made this event safe and successful. Special thanks to our core sponsors: Bob Violet Models, PST Jets, Frank Tiano, DreamWorks, Tam Jets, Jet Central, Jet Pilots Organization

THANK YOU!

Len

Big Apple pilots.

Best electric winner Larry Johnson.

District II Report (cont'd) — Len McIntosh

Military Scale winner Chris Mantzaris.

JPO Top Gun award winner Dom Mirabello.

Sal and his kids.

Capitol Jets VI: Quick Report

This year, the event was held July 16-18,at the South Albany Airport in Selkirk, NY.

The contest director was Frank Alvarez, and I was the co-director. Sponsorship came from the Jet Pilots Organization and nine hobby vendors, whose donations were distributed during pilot registration.

There were 35 registered pilots, from nine US states and two Canadian Provinces, who brought and flew at least 55 turbine-powered models and 5 electric-ducted fans, which logged over 150 sorties during the 3 official days of the event.

All award winners were selected by the pilots and spectators, and were:

JPO Top Gun:	Brian Lloyd	Boomerang *Sprint.*
Best Scale:	Mike Lesher	Skymaster F-4.
Best Sport Jet:	Greg Garneau	Self-designed *JetBlast.*
Pilot's Choice:	Jorge Escalona	Skymaster F-16.

The weather was typical for the season: hot and humid, with brief "pop-up" rain showers during the afternoons, and a cold front moving through Saturday night accompanied by thunderstorms. Sunday dawned clear and pleasant, with breezes and temperatures in the 80's.

Both model jet and full scale flight operations at the South Albany Airport were coordinated by an Air Boss with no problems for either group. There were no major crashes or losses at Capitol Jets VI, but some folks landing gear were massaged during crosswind landings and takeoffs. Kudos are extended to the Thundervolts R/C Club for site preparation & teardown, parking, PA system and announcer, and the local chapter of the Civil Air Patrol, which provided site security during the event. Thanks also, to all the sponsors, since we couldn't have done it without your generous donations. Plans are already underway to host the Capitol Jets VII in 2011, and we look forward to your continued support.

Art Arro

A123/LiFe Battery Update.
by Art Arro

Many jet pilots have opted for the A123/LiFe battery technology for their airborne receiver and turbine ecu power requirements. Al Watson has described this battery chemistry along with his turbine jet experience in previous issues of *Contrails*. To recap: A123/LiFe battery chemistry provides high current output (due to its low internal impedance), quick-charging capability and long-term charge retention; all in a relatively safe package. Like most lithium-based batteries, A123s should be balance charged using a constant current/ constant voltage (CC/CV) charging procedure specifically tailored to the lower transition voltage of this chemistry.

A123/LiFe batteries exhibit a relatively flat discharge curve with a sharp drop-off in voltage and capacity at their depletion state. Consequently, conventional expanded scale voltmeters (ESVs) cannot determine a safe voltage for a "Fly/No Fly" decision. However, it has been determined that while the battery discharge voltage is relatively flat, that monitoring individual cell voltages under load will provide knowledge if a safe operating voltage and capacity remains for another flight or turbine start.

Enter the **EDR-207 Nano Tester** from Electro Dynamics, Inc. This clever device measures individual cell voltages at a 300 mA load with a recommended cutoff at 3.3 V per cell. In other words, if all A123 cells are reading above 3.3 V, then you have about 20-30% remaining usable capacity for another flight. The EDR-207 handles all Lithium chemistries (LiIon, Li Po, LiMn and LiFe) up to 6S pack size, which is important for EDF pilots using LiPo batteries to power their jets. These pilots are primarily interested in monitoring peak voltages right after charging, and the remaining cell voltages after a flight. Besides measuring individual cell voltages, the EDR-207 can balance all cells within a pack by discharging those at a higher voltage level, using 3.4 V for A123/LiFe or 3.9 V for LiPo. Finally, the EDR-207 can discharge any Lithium battery to a recommended voltage level for long-term storage. (Use 3.3 V for A123 and 3.8 V for LiPo.)

The EDR-207 comes with a single lead for checking 2-cell A123 and Lithium batteries common to most airborne receiver installations. Additional leads are available from ElectroDynamics for 3S to 6S batteries, but many balance node connectors will plug directly into the EDR-207

I use the EDR-207 Nano Tester to monitor all Li-based batteries in my turbine and EDF jets. The device will also display total NiCd and NiMh battery voltages up to 11.5 V, but in a no-load condition. This function requires an external power source such as a standard 9V dry cell and a JST connector.

Using the EDR-207 in the discharge mode for high capacity EDF batteries takes some time due to the relatively low 300 mA load of the unit, so I simply plug the EDF battery node connector into the Nano Tester and operate the EDF motor to quickly reach the desired discharge/storage level.

I recommend the EDR-207 Nano Tester for all your Li-based battery needs, including A123 for monitoring at home and at the field. It comes in a nice clear plastic case, handy for storage within your flight box or transmitter case. For further information, visit the ElectroDynamics website at: www.electrodynam.com.

EDR-107 Tester displaying individual cell voltages on a 2-cell A-123 Receiver pack. Each cell is above 3.2V and it is safe to fly another flight before recharging. A test lead allows checking batteries through the charge port on a receiver switch.

Art

District III Report

Mark McCracken

Ohio
Pennsylvania
West Virginia

Not much going on in D-III, but things are soon to pick up with both the Liberty Bell Jet Rally and the Hamburg Jet Jamboree just around the corner. Look for coverage of both events in the next issue of *Contrails*.

A friend of mine purchased a kit many years ago, and this summer finished and test flew it. Here is a description of his MB339, in his own words:

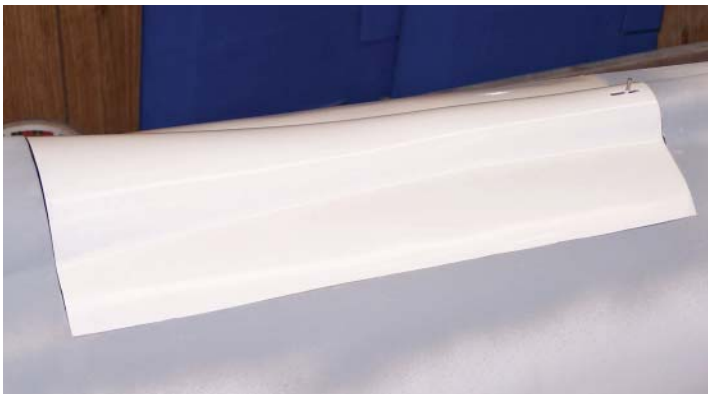
“Well, after eight years I finally got my C&C Models Aeromacchi MB339 flown and the flight went off without a problem. It is very easy to fly and only took one click of right aileron, and one click of up elevator. The reason it took me eight years to finish it, is the construction instructions left a lot to be desired, and this is not an ARF, but a kit. The fuse came in two pieces that had to be glued together and there was a strip of carbon fiber, 1.25 inches wide that had to be glued to the inside of the fuse at every 90-degrees, since this was a ducted fan kit."

"Let me explain: If you wanted a DF kit, they sent you a different nose with the inlets on the side of the fuse, while the turbine kit has the inlets in the leading edge of the wing."

"The wings and stab came already covered in obechie wood, and the ailerons and flaps, along with the elevator had to be cut out. Balsa blocks (for the hinges) along with balsa trailing and leading edges had to be glued on each wing and stab. The rudder was a large aileron-style piece of balsa that had to be sanded to the shape of the rudder."

"I had to use a 3/8 inch-diameter, 36 inch-long brass tube to cut in the slots for the aileron and flap servo leads. The wing spar that joined the wing to the fuse was two pieces of plywood, 1/4 inch thick, glued together, and then they plugged into a plywood box just behind the inlets in the fuse. Instead, I ran an aluminum wing tube (with sleeve) through the fuselage and used this to join the wings to the fuse. This tube is 7/8 inch-OD with a.065 inch wall thickness, and is 36 inches long.'"

"All formers had to be cut from printed plywood and glued to the fuselage, which had a hatch on the bottom for starting the DF unit. There was no hatch on the top, so I had to cut one out and glass the bottom hatch in place. Since I kept the hatch to install the turbine through, it was just small enough to fit the turbine, I had to remove the bell mouth of the tail pipe and reattach the bell once the tail pipe was inserted through the rear of the fuselage."



"The plans said to put the rudder servo inside the fuse just behind the canopy and run a Nyrod to the rudder. Instead, I built in a servo mount at the bottom of the vertical fin and used a Hitec HS-5125 thin wing metal gear servo. The elevator is controlled through a torque rod made from a piece of 3/16 inch music wire and a control horn that I had to machine. I also machined 3/8 inch aluminum collars with 6/32 bolts to tie the elevators to the torque rod. The elevator servo is a JR 8611 using a carbon fiber push rod with aluminum ball links. Each aileron uses Hitec HS-5245MG servos, as do the flaps. Total weight is around 19 pounds, dry."

Continued on Page 3

District IV Report

Lee Reightler

Delaware
District of Columbia
Maryland
North Carolina
Virginia

For the first time in eighteen years, we have not been able to hold the Mid-Atlantic Jet Rally at Fentress, VA. It seems that someone doesn't know the difference between four stripes and two stars. However, First In Flight, of Wilson, NC came to the rescue. The Wilson Regional Airport is conveniently located about two miles off of I-95. Judging from the turnout, this event has all the potential of becoming a huge rally. The usual "parties" associated with the rallies were not available do to the short preparation time. However, we all should look forward to next year's rally, because it's like a country fair; It gets bigger and better every year. Here's a thumbnail view of some of the participants.

Lee

Aircraft waiting at the flight line.

Eddie Lazano preparing his new F-16.

Louie Klenke's A-10.

Andy Finizo working on his F-100.

Eric Clapp of Jet Central, one of several vendors.

Larry Lewis discussing the future with the airport manager.

District V Report

Craig Gottschang

Alabama
Florida
Georgia
Mississippi
Puerto Rico
South Carolina
Tennessee

Its great living in the southeast during the summer jet flying season! Several first class jet events are within a one-day drive, and are evenly spaced so as not to conflict with each other. The inaugural First in Flight Jet Rally in late May was a huge success, and I have just returned from a fantastic weekend at Kentucky Jets. This event has grown to well over 100 pilots, and is now established as one of the premier jet gatherings in the US. As both these fly-ins are in other districts, I will leave the event reporting to others.

Within my district, however, I will report on one of the longest running and most successful jet events in the country: The Mississippi Afterburner Jet Rally. With a great flying site and a reputation for hospitality and good food, this event draws participants from the south, southwest and midwest alike.

In a departure from reporting on strictly "jet events," I have written a short article on the Joe Nall Fly-in. I noticed in my logbook that I had flown my Bandit at Joe Nall way back in 2000 and it was no doubt one of the first turbines ever to fly at the event. The fly-in has now grown so large as to be in a class of its own, and the coverage in the print and electronic media eclipses even Florida Jets by a wide margin. Therefore, my article is less of an "event report," and more a recollection of my impressions of this extraordinary R/C happening. Most of us who fly jets have participated and/or continue to participate in other areas of R/C and I hope you find it interesting.

The next jet event in District V, is Super Jet South from September 23-26. Additional information is available at www.georgiajets.org.

Finally, I want to encourage each of you to promote the JPO to your fellow jet pilots. Our membership is down slightly this year and I think in many cases, past members procrastinate or simply forget to renew. With the FAA actively formulating rules and restrictions that will directly affect our hobby, we need as many members as possible to support our cause. The JPO, working through the AMA, is the best avenue to protect our sport as we now know it. Membership applications or renewals are easily completed on-line at: www.jetpilots.org by clicking the "Join JPO" tab and following the instructions.

That's it until the next issue. Fly safe and enjoy the articles and photos!

Craig

The 19th annual Mississippi Afterburner Jet Rally was held from April 29 through May 1 at the John Bell Williams airport near Jackson, MS. If you just went by the weather predictions for rain and thunderstorms, you might have been tempted to skip this event, but that would have been a mistake! Most of the rain passed to the northwest of the airport and the flight lines were open and active all three days. Nearly 70 registered pilots enjoyed the superb flying site and the friendly atmosphere this event is known for.

As is the tradition at this jet rally, the "Mississippi Gang" of Vernon Montgomery, Dennis Lott and David Reid made sure that everyone felt welcome and well fed. The Saturday night banquet featured a genuine pig barbeque, fried catfish, homemade ice cream, and of course David Reid's famous "mudbugs." As usual, the proceeds from the event went to fund aviation scholarships at Hinds Community College.

An additional treat this year was the surprise appearance of a full-scale L-29 jet making a low approach and landing during the event. It turned out the 60's era Czechoslovakian trainer was owned and flown by R/C jet pilot and event participant Bill Culberson of Mobile, AL. The L-29 was available for close inspection and photographs during the event. Thanks, Bill!

The 20th annual Mississippi Afterburner is already scheduled for 2011 and the Mississippi gang promises it will be the best ever. You might want to mark your calendar now for the last week in April!

Here are a few selected photos from the event. The only award winning jet not pictured is Sam Snyder's *Swallow*, which won Best Military (Pre-1960).

District V Report (cont'd) Craig Gottschang

Rex Briant's big Fly Eagle F-16. This 65-pound jet qualifies under the AMA Experimental program and won the Pilot's Choice award.

Andy Andrews with his 1/6th Skymaster F-16. P-160SX provides plenty of thrust.

Perfect touchdown for Bob Daniel's CArf *Eurosport*.

Phil Nuza's *Balsa Bandit* on a flawless knife edge pass. Phil won the Best Sport Performance award.

BVM *Electra* flown expertly by Sean Sadler. Recognized as the Best Electric.

Mike Lin's JHH FJ-3 *Fury* by Global Jet Club. 50" jet is powered with a Wren 44.

Robert Kisner's Comp Arf *Flash* on a high-speed pass. Plenty of power with vintage RAM 1000 installed.

Craig Gottschang's big MIBO A-10 won both the Best Military (Post-1960) and People's Choice awards.

District V Report (cont'd) Craig Gottschang

Jay Moorhaj's *Titan*-powered *KingCat*. Most of his passes were hot and low!

George Demoral's impressive A-10. George also flies real UAV's.

76" Fei Bao F-86 flown by Doug McKay. P-70 under the hood.

Bill Culberson's full-scale L-29.

A Mississippi Afterburner specialty…Mudbugs!

Vernon Montgomery, Sherry Sadler and Dawn Ellzey enjoy serving up breakfast!

Bob Covish on the jet retrieval and transport four wheeler. Bob was awarded the JPO Top Gun trophy for his years of dedicated support to MS Afterburner (and for performing snap rolls with his electric-powered, Barbie-doll-eating "*Shark*").

District V Report (cont'd) Craig Gottschang

2010 Joe Nall Week Event
Review by Craig Gottschang

When you first arrive at the privately owned "Triple Tree Aerodrome" and look out over the 440 acre site, you see rows and rows of RVs, campers, vans, motor homes, trailers, trucks, cars, scooters and golf carts. And then more rows of vendor tents, and to the right, the 10,000 square foot hangar/museum/workshop.

The main 7000' by 400' wide Bermuda grass runway runs parallel on the left and is lined by hundreds of tents, up to three-deep. Five or six large prop planes and the occasional jet are in the air at all times while further ahead and to the right, float planes are buzzing over and shooting touch-and-goes in a 50-acre lake. In the far distance, 3-D aircraft can be seen hovering and tumbling and beyond them, smaller electrics, silently doing pretty much the same. Off to the left end of the main runway, the whine and pitch of helicopters can be heard and occasionally seen.

A portion of the main flight line.

It's officially an IMAA event, but the weeklong Joe Nall fly-in near Greenville, SC each May attracts a wide variety of R/C aircraft, and has become, by far, the largest radio control gathering in the world.

Pavilion overlooking show center on the main runway.

Jets are also a part of the mix, having been first introduced some 10 years ago as a noontime novelty, to two dozen or so participating this year. BVM, Jet Central and Composite ARF were in attendance with BVM having, by far, the largest jet presence. A variety of BVM and Skymaster turbines and electrics flew during the noontime demos, and on and off during the day. A mix of other jet brands flew from time to time as well.

One of numerous "vendor rows". Seventy-seven vendors in all.

With 954 registered pilots, 77 vendors and countless aircraft, the event is, in a word, overwhelming. It's the proverbial kid-in-the-candy-shop dilemma of not knowing where to look or where to start. Eventually, you just have to take your time and try to plan your exploration of the event, so as not to miss anything important or backtrack unnecessarily. The 3-D and electric-flying sites are so far away that a bus runs continuously, transporting visitors back and forth from the main area. You frequently run into people you know, stopping to talk, discussing R/C, catching up on other news and the inevitable "did you see what happened" on the flight line or what they have over in

District V Report (cont'd) — Craig Gottschang

so-and-so's tent? Every pass down a vendor's row of tents results in another bag of hardware, accessories, handouts and product literature in hand. By the time I left, I was exhausted, but happily satisfied from a day totally immersed in everything associated with flying R/C models.

It's a long way to go for most people, but if you ever get the chance, plan a trip to Joe Nall. It is an R/C experience like none other. (Additional information can be found at the official Triple Tree website: www.tripletreeflyin.com.)

Here are a few more photos capturing the flying action and a few of the jets.

Quique Somenzini performs during a noontime demo.

Mac Hodges and his incomparable B-29 on an inverted pass.

Jets staging for the noontime demo.

Skymaster F-16 on takeoff.

Skymaster *Hawk* on landing.

Chris Huhn's *Ultra Bandit* makes a smoke-on approach.

Pat Hartness (seated foreground) is the owner and inspiration behind the Triple Tree Aerodrome and the many R/C functions it accommodates.

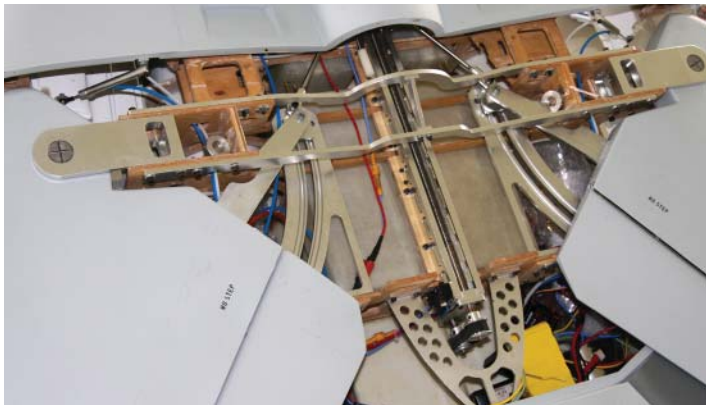
District VI Report — Lance Campbell

Illinois
Indiana
Kentucky
Missouri

Kentucky Jets

Flying season is here big time, and jet meets are rolling all over the country. One of the big ones, early on our list, was Kentucky Jets. Lewis continues to outdo himself with this one every year, and the effort he puts into it cannot be overstated. The contributing vendor list is longer than your arm, and he does a great job of passing on the names of all the companies that assist to the pilots. They even sponsor the massive circus tents that all the pilots get to enjoy, instead of setting up individual canopies. I counted at least a dozen motorhomes and campers this year, with pilots showing up, at least 9 days before the close of the event. I think the final pilot count ended up around 120, with a very large number (85) pre-registering. I'd wager that Saturday night well over 200 people attended the banquet. Although this year was hot, and I mean hot, I never saw Lewis or the people helping him out, slow down during the entire week, and were doing everything they could to make sure everyone had a great time. Another welcome bonus was the event is getting to be of such a size, that it's drawing a pretty large pool of pilots, so we get to see a wider range of birds flying. I know I ran into people who came some long distances; such as from Arizona, Oregon, Florida, Maryland, and I believe a couple from England. One last thing I want to give Lewis credit for is that even with the size of the event, he ran a tight ship safety-wise, and that seemed to go over well with all the pilots there.

Fly Eagle F14 and Mig 29 "in formation" at the bottom of the previous column, and the swing-wing mechanism of the F14, below.



**Three of your regional reps at Kentucky Jets.
Lee, Craig, and myself.
Ten new members signed up during the event.**

A hanger of many birds in Kentucky. Great support from JetCentral as well during this week.

Scott's colorful bird at Kentucky.

District VI Report (cont'd) — Lance Campbell

One of the big tents at Kentucky.

UPS Airliner - electric and big...great performance

Fly Eagle BAE *Hawk* at Kentucky.

Many *Hogs* at Kentucky this year, and the detail on all of them just keeps getting better.

St. Louis Gateway Jets

This year's St. Louis Gateway Jet Rally was on a different weekend, but still had a decent turnout. In previous years, it had around 20 or so guys in attendance, and this year was down a bit at 16 pilots. However, for those of us that were there, we had tons of flying and a great time. The local club had quite a collection of door prizes for the pilots that were well appreciated. I know that some guys may stay home b\ because it's a club field and not an airport, but, to give credit to the St. Louis club... it's one of the best model fields you'll find. Six-hundred feet x 40 feet of smooth asphalt, with 100 foot, smooth run-off's, and smooth edges to the runway as well. You can really tell the local club guys work hard on their flying site.

Great prize collection in St. Louis, drawn for the pilots by this youngster at the awards ceremony.

Noontime lineup in St. Louis.
Also note here how well maintained the site is.

District VI Report (cont'd) — Lance Campbell

Steve Collins *Cougar* at St. Louis. Steve earned Pilot's choice with this bird...Congrats!

Paul Applebaum's new scratch built bird at St. Louis.

B1-Bob sneaks not only an appearance, but his finger makes a showing at the St. Louis Jet Rally.

Jet World Masters Preparations

In case you've been under a rock and have not heard, next year the Jet World Masters is coming to the US for the first time ever in its 18 year existence. Guys, this is going to be a big deal! At this point, 50+ countries are expected, with 150+ competitors. I recently learned that by the time you count helpers and family members, there will be over 1,000 people in the US from all over the world. Not only is this being hosted by the US, it's going to be at the US Air Force Museum in Dayton, OH. Talk about a venue!

Preparations for this event are underway, and one of those is selecting the US Team members. That will be done in the days preceding the Route 66 Jet meet in Litchfield, IL, around the week of Labor Day. Contact Roger Shipley at jetadic@aol.com if you have any questions or would like to lend your support. I'm sure Roger would welcome any and all assistance in what is a monumental task.

While on the subject of the US Team Qualifier, in Mid-July at the Cincinnati Jet Rally (many thanks to Gary Jefferson for helping us out), several members of the IJMC (International Jet Model Committee) were going over preparations in nearby Dayton with Roger.

For two days, two of the members, Bill Grimsley from Scotland, and David Tappin from England, held a Judge's Training Seminar. Six others and myself were in attendance, attempting to learn everything we could about how this body does its judging, and the guidelines it goes by. David gave most of the presentation, with Bill adding supplemental information frequently. It was well organized with about 1.5 days of PowerPoint presentations in the FBO of the airport, and then was concluded with a practical session at the field. We all ran through a sample static judging endeavor, followed by two flights for practicing scoring, after which we all talked about why we scored the way we did, and were given corrective feedback from David and Bill. Thanks go to Gary for hosting this, and for David and Bill for taking the time to try to teach us.

Enjoy the flying season, and I'll see you at the jet meets.

Lance

District X Report

David Reynolds

Arizona
California
Guam
Hawaii
Nevada
Utah

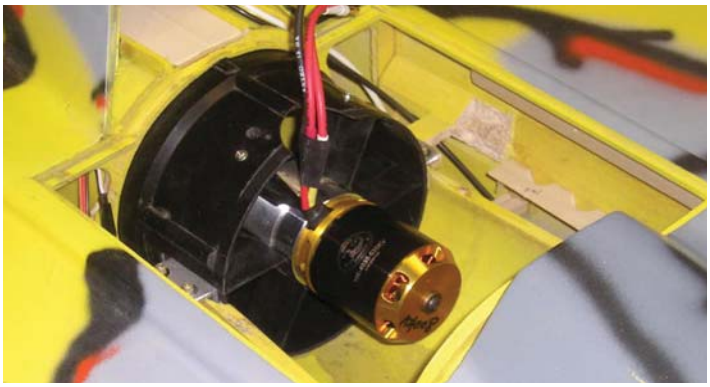
Conversions!

As electric motors and LiPo batteries get better and better, more mainstream ducted fans are seeing new life as edf machines. If you are considering reviving one of your jets from the good ol' days, the first choice to make is what fan to use. This is actually a nice problem to have, as not so long ago if you wanted to do anything bigger than a 90mm fan, you were basically on your own. Today, large edfs are everywhere you look, and the choice boils down to what do you like.

If you are converting a previously built jet, the best choice is to use an electric version of what you took out. Electric BVM, Turbax, and Dynamax fans are easy to get, come set up, and all work great. No point in re-engineering ductwork to get a different brand fan in. While it takes a bit more looking, even Byron conversions are easy to do now.

This Parkinson *Regal Eagle,* converted by Bob Reynolds, replaced a Turbax-powered by an O.S. 45 with a Turbax now spun by a Scorpion outrunner. It was a simple case of 'out with the old, and in with the new.' **(See photo at the top of the next column).**

If you are starting with a fresh kit, the decision gets a bit muddy. Ultimately, it still comes down to what you like and know how to work with. The arguments for which fan is better than the other are basically the same arguments that were had twenty years ago when these same fans were piston-powered. The only new argument is how many Amps the fans pull, which can become very important when you do not have a lot of room for large batteries.



Of the three mainstream large fans, at this time the Dynamax has a bit of an edge because of available options. Both XPS and The Electric Jet Factory produce adapters to fit different motors for the Dynamax. These companies fully support what they sell, the competition helps to bring prices down, and the ability to use different motors helps to alleviate supply bottlenecks.

Once you have a fan all picked out, the next step is putting it all in, which can be a bit of a problem, and will most likely give you the most headaches. Just where do you put three, 4s-4000 mAh battery packs like this?

On his *Regal Eagle* conversion, Bob Reynolds had it easy, since two packs fit on either side of the fan and

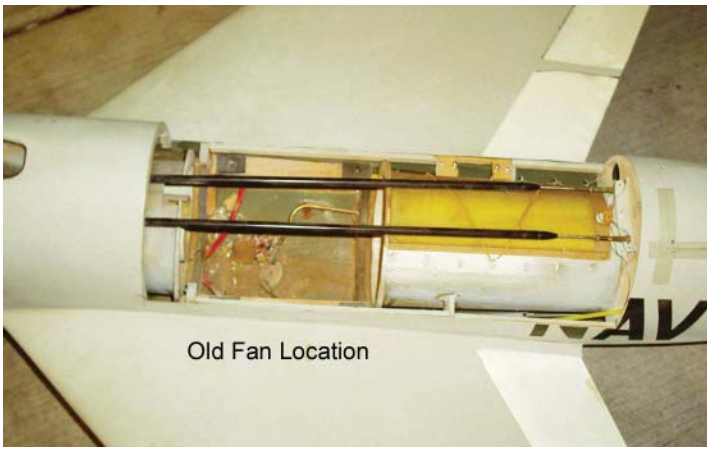
District X Report (cont'd) David Reynolds

the third stood on end under the front hatch. The nice part of this arrangement is that with the majority of the batteries simply replacing the fuel tanks, little shift in CG occurred.

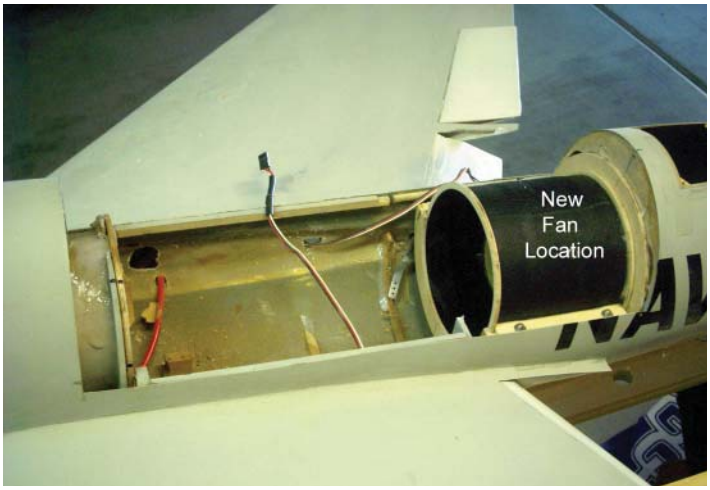
My current project is not so easy. Many years ago my father built an F3H that was powered by a Kress RK-20 with an O.S. 25 VFDF.

At seven pounds, it was a monument to good duct work as it did actually fly. A few years later, before the age of 2.4 gHz radios and brushless motors, an electric version was made from the same molds. This version died an untimely death on the second flight when motor heat melted the capacitors off the motor while turning on final. Fast forward to this summer, and I have pulled the Original F3H down from the rafters, pulled out the house insulation that the packrats put in, and started a conversion.

Due to its small body, the only location for batteries in the F3 is in the nose. Since two 5s 3300 mAh batteries going in have a total weight of just over two pounds, something will have to be done other than add two pounds of lead to the tail.



In this case, I pulled out the original exhaust pipe and moved the fan mount as far back as I could to help counter the weight of the batteries in the nose.



By the next issue, this conversion should be finished and I will be starting work on my Yellow A-4 that will be powered by a BVM fan.

For a final note, I would like to renew my call for event photos. I cannot help you promote your great events without your help and information! Either email me, or if you are shy, you can look me up at: Jet Pilots Organization District 10, on *Facebook* and post there.

Till next time, keep the low passes where they belong and send me pictures!

Dave

District XI Report — Bob Brusa

Alaska
Idaho
Montana
Oregon
Washington

Well, our long awaited summer has finally arrived in the Pacific northwest. Seattle broke heat records with temperatures in the 90s in early July, even reaching 95 degrees one day! Everything seems back to normal now, and the flying season is in full swing.

As far as jet events go, there has been only one - in Parma, ID. I did not attend this event this year but I understand it was quite windy.

The Princeton, BC event during the first weekend in June, which many of the US pilots from the Seattle area attend, is being covered in Paul Dries' column. Paul is our new Canadian representative for JPO.

The jet event in Whitefish, MT has been cancelled, thus the only other event in District XI is Jets Over Whidbey (JOW), the last weekend of August at the Navy Outlying Field in Coupeville, WA on Whidbey Island.

This year at JOW, we are having retired Rear Admiral Bill Neumann as a guest speaker at our Saturday night banquet. This is a real treat, as he was Blue Angel Number 1 (the leader) for 2 years in 1978 and 1979. He has quite an extensive Navy career, including being a test pilot and having many carrier landings. He gives a very interesting presentation so you don't want to miss the banquet this year.

Don't forget about the Princeton Jets fall event in BC being held September 15 -19.

As a reminder, encourage all your friends to join JPO. New members will receive a very useful logbook as well as a nice vinyl JPO sticker. Renewing members will also receive a JPO sticker. If anyone is interested in any additional logbooks or stickers, I have them available for $6 and $3 respectively.

I don't have any pictures this time to share, but I will have a full report including photos of the JOW event in the next *Contrails.*

Bob

Treasurer's Report

Beginning Balance as of April 30, 2010	**$7,262.79**	
Income		
Dues - Cash/Check	$175.00	
Dues - PayPal	$0.00	
Total Income	$175.00	
Expenses		
	$0.00	
Ending Balance as of July 31, 2010	**$7,437.79**	
Checking Account	$7,171.28	
PayPal Account	$191.51	
Cash/Checks on Hand	$75.00	
	$7,437.79	

Respectfully submitted, Carol Brusa

Canada District Report

Paul Dries

Hey Jet Pilots! - Since I have attended two great events, I have lots of information to report and photos to share, so here we go.

Princeton Jets - Spring 2010

The annual Princeton Spring Warm-up, was held two weeks later than usual this year, at the beginning of June. This was done to avoid the two long weekends in May, and also to try to find better weather and a higher attendance.

In reality, neither the weather nor the attendance improved with approximately 15 pilots attending, and some rain on Friday and Sunday, keeping those flying days short. Saturday was by far the best day with lots of relaxed flying and lots of sky available.

Several jets were maidened, including a P80-powered F16 and a Booster 160+ powered *Viperjet.* There were also several re-maidens of aircraft that had new owners and/or powerplants. After each day's flying, the *Habus* were broken out with up to six in the air at a time. It was great fun for all involved.

For over 10 years now, the Princeton Jets R/C Flyers have had free use of the Princeton airport, with the support of the airport management and the town of Princeton. During the spring and fall events, the town mows the grass/vegetation and provides portables free of charge.

The pilots discussed this generosity and have decided to organize a pilots' raffle as a fundraiser for the local children's care ward at the hospital. The main prize will be a new Kingtech K80 turbine engine, along with some other prizes.

I would encourage everyone who can attend this event to come out and participate in the draw and support the town and its hospital.

Chuck Bower of Whidbey Island, WA, notes the finer points of a CompArf *Flash.*

A JetLegend CT-114 in Snowbirds livery next to a matching pair of *Flashes.*

Roy Holt explains the inner workings of his *Boomerang XL* to some interested onlookers.

A line up of some very nicely-detailed scale *Panthers*.

Canada District Report (cont'd) Paul Dries

Jeremy Ferguson's *Firebird* masterfully painted in color changing "Rattlesnake" with embedded flames.

A nice view of the pits and spectator area with the Princeton skyline in the background.

Jets over Cayley - A&J Flying Ranch, Alberta

Following the demise of the High River Jet Rally, our organizer Alan Blore, searched for a new and suitable site, and found the A&J Flying Ranch near Cayley, Alberta. Our gracious hosts, Alex and Elizabeth Bahlsen, generously donated the use of their private airstrip for the duration of the event.

For a first-time event, there was a pretty good showing from both the pilots and the spectators. Travel seemed almost a necessity, as the majority of pilots were from out of province. Along with eight Alberta pilots (five from Edmonton, a few hours north), there were six from BC, five from Manitoba, and two from Washington state. Of those 21 pilots, there were two father/son teams - John and Greg Wiebe plus Wayne and Mike Beasley - something I would like to see more of! Bob Wotnoy from was the only pilot I saw flying on 72mHz which confirms the trend towards the domination of 2.4gHz in the jet community (at least at events). For event organizers, this is the removal of a huge stressor, and makes the overall feel of the event much more relaxed.

The event was dominated by sport jets such as *KingCats*, *Flashes*, and *Bandits*. Interestingly, I only saw one *Bandit* flight whereas there always seemed to be a *Flash* or a *KingCat* up. There were 31 planes at the event, of which only four were truly scale- an F18, F22, F4 and a beautiful T33 (which was the only loss). The *Flash* is quickly gaining popularity in Canada with lots of people I hear stating, "I've gotta get me one of those *Flashes*."

On both Saturday and Sunday, a *Habu* mass launch was held. On Saturday, 12 pilots gathered to fly their *Habus* with cheers and oooh/aaahs from the crowd. Given the location was somewhat away from any major population center, Saturday's spectator attendance was substantial. Alan did a great job of providing a fenced area beside the pit area and arranging a catering truck so that people could stay fed and refreshed.

As part of the event, the pilots were treated to some full-scale aviation as well. Alex Bahlsen flew a noontime demo with his beautiful Boeing Stearman biplane. I LOVE the sound of those radial engines! The Saturday night banquet was held at the Naton Air Museum where a great meal was served along with the pilot awards. After dinner, the starboard engines of the museum's *Lancaster* were run up - I also LOVE the sound of those Merlins!

I would like to thank Alan and Alex once again and based on the response from this year, I expect the event to continue to grow and be even better next year!

Some event videos can be seen on the web at: www.youtube.com/watch?v=wdiBPJWD6DU and www.youtube.com/watch?v=30sp1IYf7L4.

In spite of the lack of an official waiver process for Canadian turbine jet pilots, I have been impressed with the quality of both the event organization and pilot participation with their view towards safety. My guess is that the jet community has remained relatively small and as such mentoring seems to be the catalyst. I encourage all pilots, regardless of what is being flown, to keep this in mind and don't hesitate to pass on your experience to new pilots to help them become safer and more competent operators of turbine-powered aircraft.

Paul

Canada District Report (cont'd) Paul Dries

Kelly Williams, MAAC Jet Committee Chairman, explains turbine modeling to some of the crowd.

The *Lancaster* Bomber parked in front of the Nanton Air Museum – our kind hosts for the pilots banquet.

One of two father/son teams, John and Greg Weibe ready John's *Flash* for another flight.

Jeremy Ferguson readies his custom-painted *KingCat* for another flight with a view of the runway and wide open flyover area in the background.

A freshly painted 102" Viperjet with paint by LGM Graphix.

Some of the pilots enjoying the "ribfest" BBQ.

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Greg Moore caught Mike Warren's edf-*Maverick* electrocuting the skies at Jets over Colorado