

THE OFFICIAL VOICE OF DRAGONFLY BUILDERS ALL OVER THE WORLD

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Chris Walterson in front of his beautiful Mark II

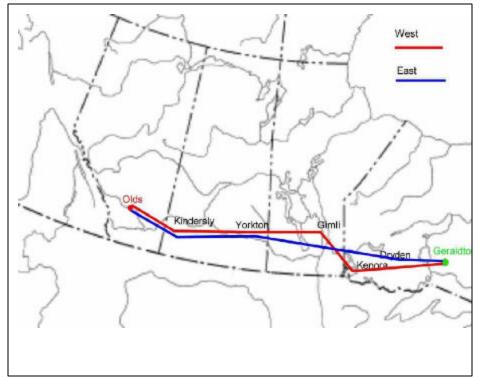
#### By Chris Walterson

This summer I had a family reunion happening in Salmon Arm British Columbia. I had installed the Turbo Subaru in my Dragonfly a couple years ago and had only flown it about fifty hours, so it was time for a real test. The reunion was in the last week of June and this was the same time as the G8 summit being held in Kananaskis, British Columbia.

After reading all the NOTAMs I realized I could only get as close as

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## Chris Walterson's excellent adventure, continued from page 1



Olds, Alberta without being escorted by an F16. But it just so happened my sister and brother in-law live in Olds and they were going to

the reunion in their Winnebago and I was welcome to come along.

I have been going through the mid life crisis thing for the last twenty years, and having an understanding wife she let me attempt the journey on my own. She is also a pilot and the last time out west with the VW installed she did most of the navigating. Things seemed to

set in and it wasn't flyable until Wednesday.

Now I was getting short on time and



The breathtaking view of Gimli airport

be coming together. I figured at the most it would take me three days to get there. I was planning on leaving on a Monday, but really bad weather then I figured, if I can work for 12 hours at a time, why can't I fly the entire distance, 1250 miles, in one day? Wednesday morning 6AM I was in the air. Three hours later I was in Kenora. After that the next stop was Gimli Manitoba. I had gotten my private license there in '89 so I dropped in for a visit. Although all the faces have changed they were still a friendly, helpful bunch. They were teaching the Air Cadets to fly gliders and I was envious. I always wanted to try that. The next leg was to Yorkton Saskatchewan. They were patching the cracks on half of the runway when I got there so me and another pilot landed on the left side of the runway to avoid the tar. Gimli and Yorkton where both built during the war years for the Air Force and the governments haven't done a lot to the runways since. You wouldn't notice anything in a Cessna, but in the Dragonfly it's a little rough. Next stop was Kindersley Saskatchewan, home of the RAF gyrocopters. Lots of honest people there. You turn on the fuel pumps, fuel yourself up, go inside

and make out your own Visa charge and drop the bill in a box. They also have a courtesy car that you can use for the approximately two mile drive uptown.

It was mid afternoon now and the temps were in the 30+ degrees C area, that's the high 80's F for my A m e r i c a n friends. I hadn't had much to drink or eat

since I left home so I stopped for a break and sat in a nice cool restaurant for a while. Sure drank a lot of

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Chris Walterson's excellent adventure, continued from page 2



water. Left about an hour later for the last hop to Olds, Alberta. Landed about 7 o'clock their time. I chatted with a fellow aviator while I waited for my sister. Everyone I meet still asks me what the heck it is I am flying.

The next day we left for the reunion and had a real good time. I came back to Olds on June 30 and spent some of Canada Day (July 1) checking and cleaning the airplane. Everything was just like it should be. I cleaned it all up and got fuel in preparation for leaving the next day. I met one fellow building a Glasair 3. What a nice plane. He almost had it finished. His used engine cost more than my entire airplane.

Checked out the weather channel that night and it looked like I could also make it home in one day. On the way out there I had been bucking head winds and saw only 120 mph on the GPS most times, now it looked as if I would follow those same winds home. I wanted to leave early so I figured I would go home on the same route and be able to fuel in Kindersley. If I went south to Medicine Hat I would have to wait for someone to show before I could

#### Chris' turbo Subaru Mark II

get fuel. So by 6 am I was in the air. Stopped in Kindersley and Yorkton. Made a flight plan from Yorkton to Dryden Ontario with a stop for fuel in Gimli. Two hours later I was descending into Gimli and called for the advisory. Now " Murphy's Law" rears its ugly head. I had inadvertently forgot to ask for the NOTAMs and it so happened that Gimli was shut down for line painting the runway. No problem, I had a good tail wind and since the Subaru is good on fuel I knew I could make Kenora as long as my bladder held out. Getting close to Kenora I still had lots of fuel so it was on to Dryden. 3 1/2 hours in the air and I was in Dryden. Still had my header tank full. I filled up with 38 liters of fuel and rested for a bit and then took off. Two hours later I was landing at my home base of Geraldton, Ontario. Took nine hours from start to finish to get home and I burned 110 liters of fuel. Those prevailing westerlys I had fought on the way out had given me a GPS cruise of 165 MPH and as high as 180 mph on the last leg. The trip was an adventure after doing only local flying. It showed me the Dragonfly is a very good cross county airplane and after

folding maps in turbulent air, setting the GPS while bouncing around, landing and taking off on 3500 long runways at 3,000 foot field elevations at 30 C temps I have gained more confidence as a pilot.

#### **Canada Chris**

## More about the Kansas Fly-in, from Spud

Kris and I plan on camping ourselves on the grounds, Thursday, Friday and Saturday evenings. They have this great area (room for 12 to 15 good sized tents) that is tucked inbetween three of the hangars that will supply shade for part of the day and a wind break. They have two very clean shower faculties that will be at our disposal for the duration of the event. If we get some real bad weather we'll just go inside as the building will be open on a 24 hour basis during the event.

I also plan on bringing down some extra tents, one being a ten person dual compartment tent (which will house 4 to 6 people comfortably)

**Continued on page 9** 

## **Twenty-Four by Twenty-Four at Livermore**



From left to right. Jim Patillo, (Q-200) Kelly Poor (Tri-Q) Alan Thayer (Q-2) Charlie Johnson (MKII) Brad Hale (MKII) and Tim Iverson (MKII). Alan Thayer is conspicuously absent from the photo, as he's behind the camera, and Bob Farnam with his Q-200 was still giving rides.

Subtitled: My Day Away Near the Bay By **Tim Iverson** 

I once heard, "If you build it, they will come." I thought that this line was only referring to baseball until I met up with some folks at the "Second Annual Livermore Tandem-Wing Fly-In". The fly-in, as advertised, was a chance to get to know the builders, owners, flyers and just about anyone who cared for, or even dreamed about getting one of these birds. This was my first time to attend this gathering and the first fly-in that I had ever been to in my newly acquired aircraft. But, even before I bought the plane, I kept hearing about the upcoming Livermore Fly-In. I knew that if I had the opportunity, I would go to it. Fortunately, I was given that chance. I had no idea what to expect, but here is what I found.

First, I'd like to introduce myself. My name is Tim Iverson and I live in Torrance, CA, a city about 25 miles southwest of downtown Los Angeles. I became interested in a specific Dragonfly aircraft when a flight instructor introduced it to me. He kept raving about it during a post-flight briefing. That was two years ago. It wasn't until three

> months ago that I had the opportunity to purchase a 1984, plans-built, Dragonfly MK II. It has an 1835 HAPI engine with 600 hours total time. I bought it from Troy Burris who many of you know as being very active in the Dragonfly circle for many years. Troy is a great guy and a very interesting gentleman who has been in aviation for more than 65 years. As a highly skilled and talented builder, he finished this project in just

**Continued next page** 



Saturday morning a Quickie Q1 was present for a short bit

## Twenty-Four by Twenty-Four at Livermore, continued from page 4

twenty-two months. It's a great story and one that should be told at a later time.

I embarked on my journey from Chino, CA at 21:48Z on Friday, 16Aug02. Because of the raging Oregon fires, I spent nearly three hours in 'haze filled' California's Central Valley. You can just imagine how comforting it was when I reached my destination and saw the runway at Livermore. After landing, I taxied to the northeast hangars where I saw 157JG taxi in front of me. We tipped our hats to each other about the time that I heard him request transient parking. Knowing that this was a good idea I told 'ground' that I would like to follow that Dragonfly. Minutes later, as we parked, I met Charlie (OneSkyDog) Johnson of Ogden, UT. Soon after, I peered over my shoulder as Kelly Poor from Phoenix, AZ had just arrived in his Tri-Q (33LQ). Ι thought to myself that this was the start of something good.

After exchanging warm hellos, we found ourselves at Beeb's Restaurant for food and libations. Our



Although the week before, and the week after, central California skies were filled with smoke, Saturday proved to be severe clear!

hosts, the Q-guys, Jim Patillo (46JP), Bob Farnam (200QK) and Alan Thayer (an active and very excited dual-project builder) were thrilled to see that we had arrived. With this very warm greeting I felt

<image>

From left to right, Jack Houston, Tim Iverson and Charlie Johnson

something like royalty; and all I did was just show up. Another Dragonfly was to tiedown later that evening. It was 931BE piloted by Brad Hale. from also Southern California. Brad and I have shared numerous Dragonfly stories since we first met a yearand-a-half ago. That day Brad came to Torrance and gave me my first ride in his Dragonfly, an experience that I will never forget (thanks Brad). Well, anyway, after a few hours of living it up at Beeb's it was time to retire to a good nights' sleep.

The next day was a full day beginning at 7:30am. Lynn French, a Q-200 builder from Nebraska, drove Kelly and me to Carrow's Restaurant about three miles away. I was so excited that I forgot to call Brad for breakfast (sorry Brad). We were stuck in traffic on Interstate 580 for about 20 minutes so we just talked about the weather (I'm kidding!). Actually it was a cool morning which became a clear day with a high of about 84 degrees and headwinds from 10 to 15 knots - in other words, just perfect.

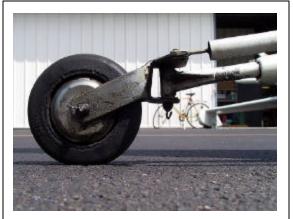
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Plenty of hangar talk for everyone

After a quick breakfast, we returned to check our tandem-wings and then proceeded to see what was cooking at the northeast hangars.

We spent the rest of the day asking and answering questions, and getting to know the builders, flyers, enthusiasts, significant others and their stories. I met some very nice folks and it seemed as if I had some sort of deja-vu thing going on, as everybody seemed very familiar to me - as if I had met most of them before. Charlie and I found that we both had worked for the Northrop Aircraft Corporation during the same time period from 1979-81. Everybody was giving rides on Saturday but, I did not (I know what you are thinking; but, I was thinking that it was a fly-in, not a flyaround.). Really, it was because of three things. 1) I needed to find a passenger that was less than 150 lbs. as I am 6' 4" - 245 lbs., 2) I was sunburned, dehydrated and I missed lunch, and 3) I was enjoying folks on the ground more than usual that's for sure. A kid named Chris did ask for a flight at the exact same time that Pat Panzera was preparing for a photo shoot of the tailwheel for an upcoming article.



Tailwheel photos for a future article

Pat wanted to arrange the shot three ways. The first way was empty weight only. The second way was with my weight in the cockpit and the third way was at gross which included weight. Chris climbing into the cockpit. Well, Chris and I just stood in the cockpit to satisfy Pat's need to produce the result of weight on the tailwheel. I think that Pat may have been better served to

take our picture standing there. (It looked very funny.) After that, Chris went and hitched a sure ride with both Jim and Bob.

There were a couple of things that really bothered me on Saturday. The first one was that that I missed videotaping Jim buzzing the runway at 180mph. WOW! Congratulations to Jim who took his son for his first ride in Jim's very beautiful. "Lindy Award Winner" Q-200. If I were Jim's son, I would be proud of my "ol man", and I would live in that plane on the weekends! The second thing that bothered me was when I bid adieu to the party prematurely. Not only did I miss lunch. but I also missed the BBQ. That's a heck of a way to lose weight!

Overall, it was one of the most enjoyable weekend experiences that I have had in my life. I am looking forward to doing it again next year. I plan to stay on through Sunday morning, have breakfast with the group, and proceed to gather grapes in the "wine country". After that I'd like to tour the San Francisco Bay area from above. Any takers?

Well that's the story of my 24 hours at Livermore, and 24 months with the tandem-wing Dragonfly. I hope that all of you get the opportunity to attend the fly-in next year, meet with the organizers, and share in their hospitality. I would like to thank our hosts/organizers of the fly-in - Bob, Jim and Alan. You guys did a great job putting it all together and making this weekend a fun and memorable event. Each one of you has definitely earned your "wings"! To the rest of the folks that came and made it happen, thank vou also.

Keep up the good work and we will see you next year!

### By Andrew Arguemeina

Last week I got this great idea on how to get a look at the HP my plane was delivering to the air. I figured that if I measured the weight of the left gear when the motor was running at a known RPM and subtracted the static weight, I could then determine the torque the motor was delivering to the airframe as a result of delivering power to the air. Yea, I know, but these things just come to me as I am building rockets (actually, Pat gave me the idea and the formula).

It was too simple a test to not try it. So here is what we did. Got 2 bathroom scales that went to 300 lb each. Got the wheels of the plane up on 2x4 boards and chocked them all. Replaced the left wheel blocks with the scales (and a little sheet of plywood to distribute the load between them). Measured the distance from the center line of the engine to the tire contact point on the scales. It was 3.50 ft. Weighed the left wheel. It was 394 lbs. Cranked up the motor and (after warming it up) took it to 2000 RPM. Weighed the left wheel. It was 460 lbs. Cranked out the Horse Power value by this equation :

### HP = Torque \* ( RPM / 5252)

460 lb - 394 lb = 66 lbs (difference in applied load to tire)

66 lb \* 3.5 ft = 231 ft\*lb (force created by torque times distance)

HP = 231 \* (2000 / 5252) = 88 hp (as measured @ 2000 rpm)

That concluded the actual data recording and scientific component of this article. Here is where the engineering analysis (techno-babble) starts. Projected HP (@ 2500 RPM) = (2500 / 2000) \* 88 = 110 HP

Prop efficiency is about 80%, the test measured the "delivered" energy.

#### Estimated Max HP (corrected for prop efficiency) = 110 / 0.80 = 137.5 HP

We were guessing about 140 ponies from our motor based upon its displacement and fuel delivery systems.

Engineering notes : The torque curve of a motor is not linear, our analysis assumed it was. The pitch of the prop affects the test, we ran 2 different pitches and they yielded similar results. There is a  $\pm$  20 pound cyclic loading with a 4 hz frequency applied to the scales. This oscillation makes reading the scales very difficult and rather subjective. I took the high and the low



Drew weighs his landing gear on a pair of bathroom scales.

values of the cycles and just picked a middle value. The SD was  $\pm/-5$  lbs. We ran the test several times to level out the errors. We had to use tie downs to the wheels to keep the aircraft from moving, so some error may have been introduced by the ropes. Having somebody in the plane (holding the brakes) helped a lot. That require 3 scales and an extra few guys (safety spotters)

Drew in sunny Fl.

## Mark Snow's plane is a total loss



Officials at Tucson International Airport look at wreckage of the single-engine, kit-built aircraft that crashed on landing July 19, 2002. The California pilot, Felix Boston, told officials he had just bought the aircraft from it's builder, Mark Snow of Carlsbad NM. The pilot and his passenger, Joseph Hettinger, were walking around after the crash. Airport flight operations were not affected, even though the wreck occurred near the main runway. TRICIA McINROY/Tucson Citizen

Boston bought the plane the Wednesday before the crash, from Mark D. Snow, of Carlsbad , N.M., Anderson said.

A flight plan shows the men took off from an airport near El Paso, Texas, and planned to stop here to refuel before flying to Danville, Anderson said. She said the crash may have been caused by turbulence from a large passenger plane that took off on a parallel runway just before the smaller plane crashed.

When the small plane crashed, it broke into two large pieces. The engine tore away from the fuselage and smaller pieces of the plane were scattered.

Before the crash, Boston was in contact with the tower "and they made a circle around the airport and were making their final approach," Anderson said.

On the following page are a few alarming photos of the wreckage, supplied to me by Justin Mace. ~Ed.



This may be one of the last photos of Mark's airplane, which was shot during the 2002 Laughlin fly-in. Mark brought the plane to Laughlin to show to Felix, with the hopes of making a deal.

DAVID L. TEIBEL Tucson Citizen July 19, 2002

A small airplane crashed, cartwheeled and broke into pieces while trying to land at Tucson International Airport yesterday. The cartwheels may have softened the impact and spared the pilot and passenger serious injury, said Lorie Anderson, an airport spokeswoman. The aircraft was piloted by Felix Boston, 52, of Danville, Calif.

Tucsonan Joseph Hettinger, 48 was the passenger in the single-engine, kit-built craft, Anderson said. Both men were walking around after the crash, Anderson said. The plane crashed near the main runway shortly before 10 a.m. The runway was not closed and flight arrivals and departures were not affected,

Anderson said.

More about the Kansas Fly-in, from Spud Continued from page 3

that we use to use for Oshkosh throughout the 1990's, which the attending pilots referred to as the "Spudley Hilton". The idea of these extras tents is to be for the guy & gals that fly into the event in their Dragonfly's and Q-birds that would like to save on the motel thing. The idea is to help lighten their load, so all they need to do is worry about is bring some clean duds and their tooth brush.

## Spud Spornitz

Olathe, Kansas

12th Annual Tandem Wing Fly-in September 27th, 28th & 29th, 2002 Coffey County Airport - Burlington, Kansas (913) 764-5118 E-mail: bspornitz@sbcglobal.net Mark Snow's plane, continued from page 8



http://pages.sbcglobal.net/bspornitz/fly-in2002.htm

# **Dissimilar Materials**

#### By **Owen Strawn**

This is not difficult to understand, but it is a little complex. You don't need to understand calculus or anything like that. You just have to understand a couple of simple concepts, then you have to visualize how they interact.

### **CONCEPTS**

1) Different materials have different elasticity rates. This means that when you pull on a material it will stretch a certain amount before it breaks. Rubber will stretch a long ways before it breaks, steel not as much. Carbon will stretch only a tiny bit before it breaks.

2) The distance a material will stretch is proportional to the amount of load. Put 10 lbs on a rubber band and it will stretch farther than it would with 5 lbs.

There are two more helpful concepts that are NOT crucial to the problem - you can skip them if you want:

3) The distance a material will stretch is also proportional to the length of the material - a 20 inch long rubber band will stretch farther than a 10 inch long rubber band under a 10 lb load.

4) Materials have different strengths (load capacities) - a rubber rod that will support exactly 1000 lbs before it breaks will be much thicker than a steel rod designed for the same load, **Continued next page** 





### **Dissimilar Materials** Continued from page 9

and a carbon rod will be thinner still. (Note that elasticity is NOT NECESSARILY proportional to strength, though these examples are)

#### **INTERACTIONS**

Make a rod of carbon that is thick enough to support exactly 1000 lbs before it breaks, then make it long enough so that it will stretch exactly 0.01 inches under a 1000 lb load.

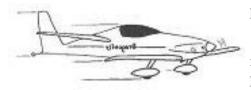
Now make a 1000 lb strong rubber rod, and cut it to the same length as the carbon rod. Because of concept 1), we know that this rod will stretch more than 0.01 inch before it breaks. How far depends on what kind of rubber it is, but let's say that the rubber we are using will stretch 1.0 inch before it breaks.

If the rubber rod stretches 1.0 inch under a 1000 lb load, then it will take only 10 lbs to stretch it 0.01 inch (approximately).

If we attach the two 1000 lb strong rods together at both ends and pull on them together until the assembly has stretched 0.01 inch, then we know that the carbon rod is supporting 1000 lbs and the rubber rod is supporting 10 lbs. The total assembly is only supporting 1010 lbs! But if we pull any harder, the carbon will break, and the remaining rubber will only support 1000 lbs before it too breaks.

#### MORAL

Two 1000 lb strong rods of different materials will support less than 2000 lbs.



Micro time again! Man, I'm thinking this has to be the 1,000<sup>th</sup> time I have reached for a mixing stick. Hey, there's a thought! I can actually count the number of times I have reached for and mixed, stirred, shimmed or braced something on this project with a wooden stick. I can do this math because I can count the number of empty tong depressor boxes sitting on shelf. Five empty boxes and one about a three quarters of the way gone.

Hummm. Now that I do think of it, there is not one operation or pieces part of this plastic airplane that did not require the direct use of a "Popsicle stick". Quite literally from initial layout (where they were glued together to form shapes) through design (used for straight lines and markers) into construction (you name it and I done it with these little buggers) to final conformal micro application (self explanatory) we be always using "doctor's little helper".

It is truly shocking the number of these "marmot splints" that we have gone through. Averaging 4 hrs of final sanding and micro application per session. I realized that I am using these "cricket surf boards" at an astounding rate. Since I use them for everything from mixing sticks to "bonded in place" shims, life as we know it would come to an end with their absence. More alarming vet. is the realization that I am only averaging a foot of completion per day and my last box of "termite burgers" is rapidly emptying. Thank God this airplane is not very long. What will happen if they stop making those "precious planks" before I finish the plane ???

And while we are in whining mode...... Has anybody noticed the price on these "Arbor Foundation Poster Children". I mean, really. Does "Big Lumber" think we do not know who is really pulling the strings here!!! The "say" wooden sticks are no more addictive than TV. For years, I have not been able to work on the airplane unless I have at least a pack of the darn things on hand. It seems every few minuets I have to have another one. I am so weak. Having shelled out for 5 +boxes of them to date (and I mean the big boy, 1000 count, industrial whopper size boxes with the preperforated quick release cardboard tabs on the lid ) I am appalled that they are now \$12 per box. That is nearly 1.2 cent each!!!!! First they get you hooked, then they squeeze and squeeze.

The truth is out there. This builder is on to you "Mr. Chips". I am going cold turkey. I don't need your "crutches" to get me into the sky. I will do it the hard way. I will use sweat, determination and little plastic coffee stirrers.

Yes, a new dawn is coming. I will be free of ...... "The Thin Man".

SSA (Stirring Sticks Anonymous),

# Dragonfly rights for sale

Mike Puhl has announced that the Dragonfly rights and related assets, are officially For Sale. He no longer has the original prototype available, but has instead a newer model that comes with the package. The original prototype could be purhased separately, which is currently owned by a private individual in Illinois. Mike made the impression that the total package would be in the \$75,000 to \$85,000.00 range.

#### **Continued next page**

### Dragonfly rights for sale (continued from page 10)

He requests only serious inquires please! Contact Mike Puhl at: Slipstream Industries Wautoma, Wisconsin (920) 787-5886 Website: www.slipstreamind.com

# Classifieds

*For Sale:* Dragonfly MK II N189SM, with 80hp Continental A-80. 250-hrs SMHO by Skeezix Adkisson, and dual Savier electronic ignition. 3 blade Warp Drive prop w/ Gary Hunter blades. Curses 145-150 mph on 4.9 gph. 21+ gallon fuel capacity, dual throttles, hydraulic brakes, ELT, cabin heat, oil cooler and filter. Garmin 195, vortex generators, electric pitch trim. Asking **\$23,000** or possibility trade for 2 place side-by-side, tri-gear with turbo or bigger engine. See photos in a recent KITPLANES (a) magazine, featuring details on electronic ignition. Call 618-594-2681 and ask for Terry, or e-mail:

troneill@midwest.net

*For sale or trade*: NEW Cleveland 500-5 wheels and brakes, a pair, with mounted new Lamb 11x4.00-5 tires w/ tubes, a \$550 value. Will sell, or trade for 'like new' Cleveland 600-6 wheels and brakes, no tires. troneill@midwest.net; tel: 618-594-2681 or e-mail: troneill@midwest.net

For Sale: Dragonfly MK II. Complete plane except the canard and gauges. Everything to complete a new canard except the landing gear. The canard is on the table, awaiting final lay-up. The spar is laid up, the gear leg boxes are installed and all cloth / carbon fiber to complete the project is included. The aircraft has always been hangared, and it comes with a HAPI 1835 cc engine, with latest mods. New Props Inc. 52/42 prop, spinner included. Beautiful red cloth seats. Fuselage is complete with new forward hatch cut out, but not finished. The wing and the entire paint job are both in excellent condition. I would entertain splitting up the engine from the airframe. Priced for quick sale **\$4800.00** Call Bill Brutsman at 913-888-8942, Lenexa KS, Fax: 913-599-1290 e-mail: wdbrtsmn@aol.com

*For Sale:* Carbon Fiber NACA Inlets and Spinners. Spinners are \$250 each, including back plate, but w/o front bulkhead. Inlets are \$30 per pair, set in glass. Contact Charlie Johnson, 2228 East 7875 South, Ogden UT 84405 (801)-479-7446 or e-mail OneSkyDog@aol.com

### 12th Annual "Field of Dreams" Tandem Wing Fly-In for 2002 at Coffey County Airport, Burlington, Kansas September 27th, 28th & 29th

The Field of Dreams Tandem Wing Fly-in has been the annual meeting place for Quickie, Q-2, Q-200 and Dragonfly builders, flyers and enthusiasts around the world for 12 years. Over those twelve years the event has evolved into a fast paced event covering the full spectrum of builder/pilot concerns and how-to's. The event offers a full forum schedule where the builder/pilot can choose topics ranging from Quickie/Dragonfly construction and flying techniques to engine forums that cover, VW Type I & IV, Jabaru, Subaru, Corvair and Continental engines. Other forums cover aircraft electrical/component philosophies and howto's. There's even a "Performance Run" (this is not to be considered a Race!) to measure and compare the pilot/builder's engine/prop/airframe efficiencies. Attending pilots are known to give rides in their handsome steeds. You wouldn't want to miss that chance, would you?

Social Fun? Lots of it! On Friday night pilot/builder's and friends gather for dinner where the topic is airplanes, airplanes and more airplanes! And you can't have a fly-in without an awards banquet! Saturday night we have a fine dinner in our own private facility, then we give out some door prizes and awards to builders of the attending aircraft in categories of "Longest Distance", "High-Timer", "Best Interior" a n d " B e s t O v e r a l l ". http://pages.sbcglobal.net/bsporni tz/fly-in2002.htm

This event is open to everyone, not just for those people building or flying Quickies, Q-2's, Q-200's or Dragonfly's. We would particularly like to extend an invitation to those people building or flying any aircraft that utilize the VW, Jabaru, Subaru and Corvair engine packages and/or have an original designer gross weight of 1400 lbs or less. **Spud Spornitz** (913) 764-5118

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Back issues of DBFN #89 through present are available for \$4.00 each, from Pat Panzera at the above address.

For issues #88 and back, send \$3.00 for each issue to: Bill Spornitz, 1112 Layton Drive, Olathe, Kansas 66061 (913)-764-5118 bspornitz@sbcglobal.net

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Brad Hale at Oshkosh 2002 Photo by Gene Knapp



Po Box 1382 Hanford California 93232-1382