

Dusters News

OCTOBER 2007



A smiling **Chris Stone** has just finished assembling his Great Planes RV-4 and is ready to take to the air.

This is a great looking, well engineered ARF with a two piece wing that spans 70 inches and is powered by an OS 108, 2 Stroker.

Chris says it could use a little more power and the big, squarish wing, doesn't roll as well as a tapered one, but it is a realistic flyer.

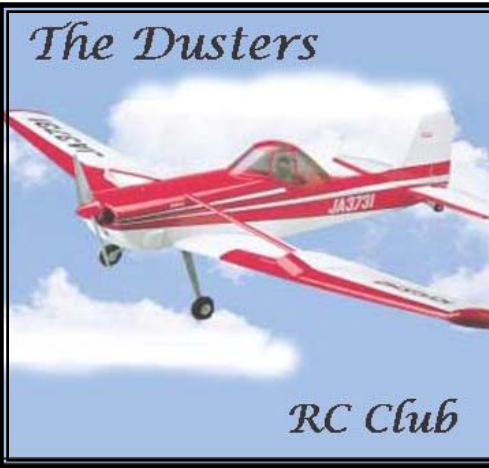
Chris was very impressed with the overall quality of this kit.

New Building on Site

Yes, Duster Field will soon have a new building on site in the form of a completely refurbished Porta Potti.

This purchase will replace the one currently in use, which will remain in our possession and used as an additional facilities for events.

The newer unit is larger and said to be much more comfortable and luxurious than the unit it replaces.



How can this be Happening ?

The leaves are turning all kinds of unusual colors and its starting to rain a lot. The nights are cooler, the days are shorter and we must adjust our clocks.

Such are the signs that fall is upon us, and supposedly, our flying season is coming to an end.

Don't bet on it..

Be thankful we live in a region where it is possible to fly all year.

We don't have to build skis for our planes or start engines after pre warming them in an exhaust pipe. We don't have to fly with gloves.

Be ready for the warm winter day when the sun is out and feels warm on the back. It can happen any time here, and I, having lived otherwise, am thankful for it.

-jay



The prolific, master builder **Sergei Dennenbaum** holding his candidate for the fastest CUB alive.

Small in scale, big on power this CUB is a product of miscellaneous CUB parts laying around the workshop and some scrap balsa from the wood box. This was all cleverly assembled by Sergei and then affixed to an OS .40 FS engine. The whole thing weighs 4 pounds 5 oz's and absolutely howls around the perimeter of Duster Field.

New Venue

The October Club meeting moves to the conference room at nelson Financial, 354 Pacific Hwy in Woodburn.

Meeting Nite is Monday, October 22

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Meeting Notes

The Dusters September meeting was called to order at 6:45 PM, Monday September 24 at the field.

There were 11 members present and no guests. Jackie Criswell filled in for secretary Penninger and read the minutes of the previous meeting, which were approved.

Treasurers report revealed a positive balance in the account. Those seeking further information are welcome to contact Dale Nelson for detailed balance sheets for this healthy club.

There was no safety co-coordinator report, but Dan Lurvey has volunteered to be our second safety co-coordinator, an act that puts in line with AMA recommendations.

Field Marshal Bill Bale will be gone October through early November. Terry Criswell will perform the necessary maintenance during that time.

Terry reported that membership currently stands at 109 members with Mike Reilly and George Bahrman the newest Dusters. Welcome aboard gentlemen!

Vice President Bob Hoover suggested that since we have the pylons on hand, that maybe we should use them. This led to a discussion about putting together a cheap racer class, using something like the MAM plane, a Kaos or some other small mid wing plane to race with. Other suggestions included a kit in the \$30 range using a .15 and an 8x4 prop to level the playing field and to get people in-

Terry Criswell presented Gift Certificates from the Woodburn Outlet Mall to our deli crew, Loretta Hoover, Jackie Criswell and Laura Steigman.

Bob also reported that the pylon racing demo at Cub nuts went very well with some good, positive feedback.

This with a sincere Dusters Thank You and appreciation for all their effort with event set ups, the Dusters deli and the meeting feeds.

Terry opened the floor for new nominations for club officers.

There being none, a motion was made and passed unanimously to re elect the current officers for another term.

Club congratulations to Terry, Bob, Dale and Jay. We welcome another year of your leadership!

The meeting was adjourned about 7:15 PM in a race with darkness...(By the way, what is the speed of Dark?)

Drawing winners:

Gift Certs: Terry Criswell
Earl Cox

Fuel Winner: Vern Ahlberg

Newsletter Correction: (While speaking of Vern) The giant Waco at the Clackamas County Fair did not belong to Vern, but was instead built and displayed by Ron Campbell. How a Bigger Bird winner like that Waco got by the newsletter editor is a mystery indeed.

Note to **Francke Snow**: We missed you at the meeting, and had you been there, you would won the \$100 progressive drawing .



Saturday at Cub Nuts '07

Cub Nuts '07 was held on Friday and Saturday Sept 21 and 22. This is the second year for this event and turn out was great. The \$20 entry fee included a burger lunch. There were, I heard, 79 Cubs and close to 90 entries in all and size didn't matter, planes ranged for 18" span to the giant 1/3rd scale biggies.. The premise for this event is to get as many Cub fliers as possible together in one place at one time just to have a good time and I think they've got a handle on it as pilots came from the Portland area, Washington, Canada and even Texas. The Dusters did their part as Bob Beardsley, Tom Thomasian, Don Schultz, Kelly Martin, Dan Lurvey and Terry Criswell, Bob Hoover and others took part.

Saturday was the "big" day and there were flight exhibitions and the one "contest". Two helicopters flew, one a turbine powered scale Hughes 500 and the other an aerobatic performance set to music flying a T REX. The aerobatics were impressive, considering the pilot has been flying helis for only 18 months and he flew to music he heard the day before.

I've only seen a few performances like this, but I would venture to say this was as good as any you will see.

There was a performance glider flight, being towed, by a mission built plane, to altitude, then doing his show. Dusters RC Club put on an exhibition of Cub racing. Three pylons and 10 laps, no limits on engines, so big engine, small well built plane = winner. The event contest was a timed event flown against the clock, one plane at a time, around the race pylons, three laps and one loop required. Time started at wheels up and stopped at touch down.

Around noon there was a full scale fly by of eight planes, four of which landed and stayed for awhile. The flybys included some touch and go's which were neat. The short landing and take off capabilities of these planes was impressive.

In the after lunch segment there was a Concourse De Cub, where all planes were lined up, 40 of them, on the runway for inspection and a winner of Best of Show to be voted for.

The winner was not a CUB but a beautiful Stinson 108. No details, except it was built from Hostetler plans.

There were pilot drawings throughout the day and if your name was called you got to pick out a prize, either glue or license plate frame or can cozy.

The big raffle came at the end of the day with prizes ranging from batteries, electric motors, accessories, to airplanes and two radios. You might consider putting this event on your calendar next year, it is less than an hour from Portland, in Mollala.

This year there was no parking fee, so you get an all day air show for next to nothing plus a nice drive through the country side. Don't miss it

Cliff Pemberton



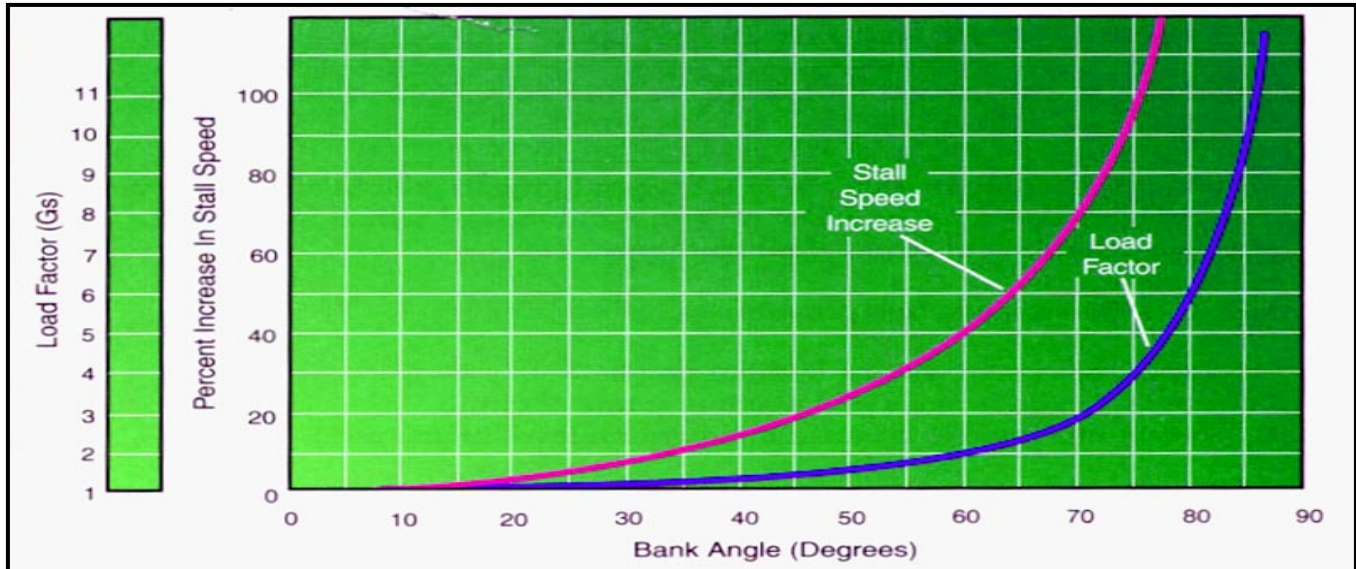
A partial view of the Flight Line at Cubnuts 2007

STALLING SPEED INCREASE WITH ANGLE OF BANK

By Bryan Brinegar

All pilots must be aware of many basics truths regarding the physics of flight. Perhaps the most basic of them all is “Stall speed increases with angle of Bank,” followed closely by “Load factor increases with angle of bank in a level turn.”

These related truths hold true for any size aircraft and graphically presented, look like this:



It seems that model flying is exempt from these rules...you seldom see models stall out of turns and a wing failure in flight is rare indeed. Models, however, have a very high differential between top speeds and stall speeds, so are seldom flown near the stall. Airplane weight is so relatively light, that wing structures can usually take the load.

For demonstration purposes, lets apply the graph to some typical model speeds and weights

| Angle of bank | % increase in stall speed | Load in (G's) | Trainer Stall Speed | Trainer Weight | Warbird Stall Speed | Warbird Weight |
|---------------|--|---------------|---------------------|----------------|---------------------|----------------|
| 0° | 0 | 1 | 31 | 6 | 46 | 10 |
| 30° | 8 | 1.18 | 33.5 | 7.08 | 50 | 11.8 |
| 45° | 18 | 1.4 | 36.5 | 8.4 | 54 | 14 |
| 60° | 40 | 2 | 43.5 | 12 | 64.5 | 20 |
| 75° | 100 | 4 | 62 | 24 | 92 | 40 |
| 90° | A “properly executed turn” is impossible | | | | | |

Note that the math says that a 90 degree, level banked turn is impossible without losing altitude. This is true, but a source of great argument amongst RC’rs. Note also that, after 45 degrees of bank, in a level, co-ordinated turn, bad things pile up fast.

Now, When was the last time you saw that 10 lb Warbird in a tight turn seem to fall out of the sky, with the pilot exclaiming that he “lost it” or had a radio or mechanical failure?

A study of the numbers should make it more clear as to what probably happened.

To see for yourself, next time you are at a safe, safe altitude and know how your plane handles stalls, perform a step-banked, level turn. Keep tightening it up and watch the airspeed slowly decrease,.

Then,watch out. You will see what I am talking about.

Mini review RC Guys Super Decathlon

The Super Decathlon from RC Guys is real close to 1/4 scale, only a few things keep it from true scale. Some of the things are the side windows, the tail wheel, and hardware. The plane is good sized at 96" and weighs about 15lbs with the OS 1.60FX two stroke I used.

The plane is well built, with only minor things I thought could be improved. The covering is pretty good, they say it's Oracover, but it's not the heavy stuff I'm used to seeing. Trying to remove some of the few wrinkles using a heat gun on med heat, shrunk the covering to the point that it caused a gap at the overlap at the fuselage side at the top. I would like to see a bit more of overlap, at least 1/8".

Hinges are the hinge-point type and installed but not glued. The hardware is not IMAA legal as the pushrods are either 2-56 or metric equivalent. The clevis's are unusable so I replaced everything with 4-40 rods and Sullivan metal clevis's. The control horns are heavy duty aluminum trumpet type and are very good. Most every thing fit well, except the door and the vertical fin.

The door is built on a flat surface, but the fuselage slants in above the window line, causing the door to gap at the top front. This can be fixed with a bit of trimming the door frame and warping a bit. The door is a nice touch as you can put your charging jack, switch, remote fueler, and remote igniter inside the cockpit for a really clean installation.

The top front of the rudder was warped to one side about 1/8" so I had to pull back the covering on the leading edge, wet the balsa and warp it back into alignment.

The vertical fin had to be trimmed as there was a gap when fitting to the horizontal stab.

None of the measurements are correct, the worst being the engine installation instruction.

There is no way to get the prop shaft centered in the cowl opening if you follow their instructions.

Check out RC Universe thread on the build and you'll see what I mean. I used the measurements for the installation of the rudder control horns and this caused the pull-pull cable to rub on the bottom of the slot where they exit from the fuselage.

Landing gear is HEAVY DUTY and is bolted from the inside of the fuselage, making a very neat installation. The wheels are medium density foam, and could be 1/2" to 3/4" larger diameter and harder as they tend to flatten if the weight of the plane is on them for any length of time.

The wing struts are aluminum airfoil shape and they do need trimming to fit properly. Plenty of room inside and you could make 3/4 cockpit with no trouble. The glass cowl and pants are good quality and look great when installed.

The dark tinted windows fit into recesses in the fuselage and look good. The top glass is supposed to be installed from the inside, but I thought it looked better if put on from the outside held by eight screws thereby allowing a bit more ease in access to the interior. Two piece wing with aluminum wing tube make transporting a bit easier.

I used an OS 1.60FX two stroke with a perry pump as the tank installation is a bit lower than I think it should be. Plenty of power, and the plane flies well, slows down good for landing and I haven't found anything bad about the way it flies yet.

At a price of about \$400 I think you could do worse.

Cliff Pemberton



2007 Dusters Officer Roster

President: Terry Criswell

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Secrtry/Newsltr: Jay Penninger

503-472-4067 jpennin@verizon.net

Vice President: Bob Hoover

503-393-2446

Safety Officer: Cliff Farnham

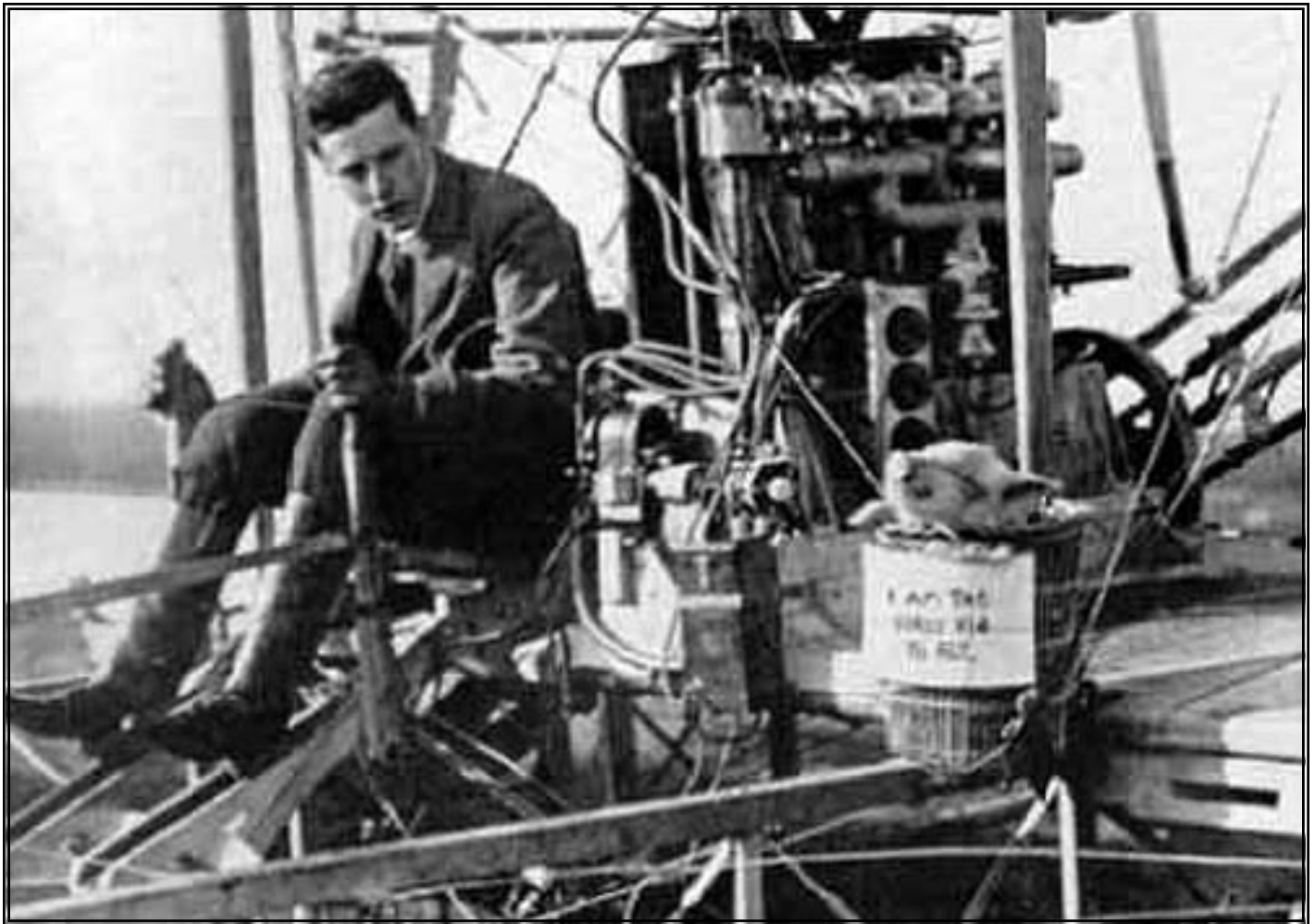
503-620-2590

Treas/Membrshp: Dale Nelson

503-981-0710 dale.nelson@raymondjames.com

Field Maintenance: Gus Opall

Webmaster: Terry Criswell



*“Yessir, You’ll get your **Dusters News** when Pigs Fly !!”*