

Prop Spinner Chatter



VOLUME 22 ISSUE 2 AMA Charter # 529 Eugene Prop Spinners <http://flyinglines.org> February 2014

Club News and Other Information

Last Club Meeting

December 19, at Embers.

PRESENT: Mike Denlis, Jim Corbett, John Thompson, Tom Kopriva, Mike Massey, Gene Pape, Gordon Rea, Floyd Carter, and Roger Winz..

Mike Denlis reports - There is no specific time frame on this. As a reminder, the next step will be a meeting with the County to learn the details of the agreement, then we can present that to the membership for approval. It is my hope that this will be accomplished prior to our February meeting. I will be in touch with the County to lobby for that. We will notify everybody ASAP as appropriate. I am as anxious as anyone to get this show on the road!

Out of town Flying

John Thompson reports – Mike Hazel and I had a good flying session in Salem last Saturday. A bit chilly but very calm.

Bob Lewis reports – February 8 - I don't want to say anything, but in Roseburg after it had rained in 41 degree temperatures until about 9:00 today, it got progressively better. By 4:00 it was 59 degrees and sunny. It would have been a great day to fly if people could have made it here and back. Shrum said it was going to be a good day. I guess his reputation remains intact!

Oh well, except that Pete Benning was too ill to make it, we had a great hanger party anyway! We had to, I had to get rid of all those donuts I bought for the Fun Fly. That much was a complete success. I knew I could

count on those guys from the moment they told me they were on diets!

Next Club Meeting

Time and place – **10 a.m. Saturday February 22, at Gordon Rea's home.**

I am writing to confirm that our next meeting will be held at my home on Saturday, February 22, at 10 am. My home is at 1815 Norkenzie Road, Eugene (at the corner of Norkenzie and Minda). Parking is limited on Norkenzie, so I recommend that you park on Minda or Jeppesen.

Let's talk shop (show and tell) at the opening. I will have tables set up in the garage for you to bring some show and tell items: planes, plans, photos, engines, products you are using, etc. Please let me know what you plan to bring and I will make sure I get enough tables set up.

I hope you can be with us for the meeting. Perhaps you know someone you would like to reach out to and bring along. If you are in a baking mood, please let me know and you can help round out the refreshments.

Gordon

Oregon flying fun!

Number 2 – *Date Change* - Saturday, **Feb. 15** at Sunshine Park, Roseburg. Due to really bad weather in the south Willamette Valley.

The scheduled February 8 event was moved to February 15 in hopes that move flyers from north of Roseburg could attend the event.



January 19 Meeting - at the Embers supper club on highway 00 in Eugene.



Good turnout,
good food,
good discussions,
good meeting!

Bell Crank discussion – January 27 – 28, 2014

I continue to struggle with “porky” airplanes. One area I think that I tend to “over build” is the bellcrank platform. General Sherman would have nothing on me but on the other hand my bell cranks never come out. So in building a solid bell crank assembly, how much is too much?



So a little, quick and dirty, experiment.

I built a jig, bell crank with leadouts, and installed 1/16 very light weight balsa with the grain running the same direction as the pulling force on the bell crank would be. That is assuming you install the balsa planking at the center of the wing with the grain running parallel with the wing span. As you can see, the space between the two balsa “mounts” is about what a rib might represent. I used a 6-



32 screw to support the bell crank but the screw was not tight on the balsa mounts.

I clamped that assembly in a vice and using my scales, pull tested the installation. No surprise, it was very weak and began to rip the balsa wood with less than 10#'s pull.



Without even bothering to repair the torn balsa, I CA'ed a piece of 1/32 plywood on the top and bottom of the torn balsa bell crank mount. The plywood was scrap plywood, approximately 1” or so and in roughly a square shape. (Nobody said I was an engineer.) I then mounted the bell crank within that “repaired” mount and again pull tested. I cannot tell you at what point the bell crank will pull out as my scales only go to 50#'s. I pulled to 50#, bottomed out the scales, pulled harder and everything held just fine. I held the 50# pull for a minute or so just to see if that made any difference. It did not. The pictures do not show it well but the bell



crank mount held to the point I was bending the screw.



So how do some of you mount your bell cranks?

Mike Massey

BC jig with 32nd ply re-enforcement

Ok, Mike I just got back from flying with son number three, Mat, at Salem site, got in the house and got on my iPad saw what you wrote about bell cranks, my bellcrank on my red hot angel, I went to a 8-9 prop from a 8-6 and it had the pull I was looking for, did a inside loop, two laps than a inside loop, coming out of the loop the g's must of loaded up, it pulled the plat form from the rib with the bell crank with it bent the push rod and took out two more ribs, I knew something happened but didn't know what yet. It came down on the nose, bent the crank on my K&B .18 ,I hope that's all it did if it looks good I'll send it to K&B to get it fixed. So I would say over build you bell crank and plat form it won't hurt. Robin. No more plane.

Maybe I'm old school but I mount bellcranks in 2014 the same way i did in 1968. One piece of 1/8" plywood as the platform, 1/16" doubler on the center ribs, 6/32 screw and a couple of scrap pieces of 1/4" by 1/4" underneath the platform against the inside of the balsa ribs.

The only time I have ever had a bellcrank pull out was on a Class 11 carrier plane a number years ago that weighed way to much and had a ridiculous pull test. I have bent a couple bell cranks but never had one pull out.

Oh ya. and a bunch of 30 minute epoxy.

Don Chandler

I've built a lot of models using the 1/8" plywood mounted to two pieces of 1/4"

square glued to the planking. I stopped using this method in about 1980 when a whole fleet of combat models I built for Bob Carver had their bellcranks pull out. Since then I have been using what had become the standard in combat models which is either a screw or a pin through a thick (about 3/4") center rib. This is easy, and foolproof (though perhaps somewhat heavy as that structure isn't required in PA models).

Gene

That was a outside loop, that loaded the plane I saw I wrote two inside loops. Out side did it rip the rib apart and down the wing it came bell crank and all , the wing looked in tack then I saw at the top left panel two ribs were gone so I cut the covering off and saw what had happened, I think I will build the .40 size next and re do the bell crank plat form a lot better this plane would have never taken a pull test it would have ripped out. I sure like grass better. Better on engines. Robin

Wait a minute, Mike. I agree with "poriky", but it isn't the controls. It is the accumulation of ounces!

Experiments are fine, but not necessary. Just grab some modern stunter plans and see how the "suspended" bellcrank is mounted. I copied the technique with excellent results, and I didn't have to build any experiments or get onto any learning curve.

I try to benefit from the experiance of many others. It saves time.

Floyd

I use the method Mike used but with 1/8" ply 1/2' wide going from fuse side to side. It would seem that getting a good glue joint is pretty important and the 1/8" ply with the 1/16" planking under it gives good area for the vertical rod to adhere to. I also rough up the rod before gluing. My "Peep" has over 500 flights on it. That said I've never seen a Ringmaster type mount, 1/8" ply glued to the



bottom planking, fail if it was properly glued and I'll continue to use that construction when using "perfect" type bellcranks. Gluing a platform to two, 1/2" balsa cross members has two problems. 1st: your relying on the 2 balsa pieces to hold the load (we know the 1/8" ply is strong enough). So the strength will depend on the hardness of the balsa and the width of the platform (i.e. how much balsa the load will be transferred to). The real problem seems to be #2 i.e.: raising the platform up 1/2" which gives 1/2" of leverage.

Putting the rod in double shear, like Mike did and the "big center rib" does eliminates this leverage and doubles (top and bottom) the glue and load bearing area. It's the best but you need a stung enough rod to resist bending. The after market bell cranks I use are 1/8". Using long bolts is counterproductive on a thick winged stunt plane as bolts aren't mean to take bending loads and you'd need a pretty thick bolt to get the strength of that 1/8 of piano wire. Combat plane, thin wing, less leverage- different story.

Finally, it may be nice to re invent the wheel but sometimes it's a lot easier to go with, "Known Goods". Walker, Fancher, Buck etc know a lot more than we do. See how the

Impact, Trivial Pursuit etc are built and do that. It might save your planes life.

BOB

Here's another thing why does my super clowns bounce when they land on as fault , is the gear to stiff, it's 1/8" it didn't do it on the grass. Nothing wants to work lately.

Robin

Hey Floyd; I thought you would know Mike better by now; it's in his DNA. He HAS to calculate/measure/examine/test/redesign . . .

Not his fault however, he takes after our Dad. I on the other hand, inherited our Mother's "shoot from the hip" approach.

His Brother

Brian

...Hmm...I'm going to have to think about that.

Mike M

Bob Lewis Hanger Party – February 8, . 2014





Northwest Aeroliners, Western Oregon Control-Line Flyers, The Evergreen Aero Modelers and Roseburg area CL fliers present ...

Oregon flying fun!

A quartet of control-line fun-fly events

Everyone invited — No entry fee! 10 a.m.-3 p.m.

If the weather is bad, go to the alternate site listed for “hangar flying” socialization!

Wednesday, Jan. 1 at East Delta Park, Portland

Includes chili cook-off! Every cook-off entrant gets a ticket in the raffle!

Bad weather meeting site: Delta Park Burger King; cell 503-367-6210

Info: Aeroliners: Mark Hansen, 503-995-1158, fasteombat@comecast.net

Also attend the Tuesday, Dec. 31, midnight flying session to end the Old Year!

Contact Jim Cameron for details, 503-287-9620, iflycontrolline@gmail.com

Saturday, Feb. 8 at Sunshine Park, Roseburg

Bad weather: Elmer's restaurant at I-5 Exit 125; cell 541-537-0061

Info: Dave Shrum, 541-672-8893, dnpsrum@charter.net

Saturday, March 8 at Bill Riegel Model Airpark, Salem

Bad weather: Flight Deck restaurant, 1 block south of the flying field; cell 503-871-1057

Info: WOLF: Mike Hazel, 503-871-1057, zzclspeed@aol.com

Saturday, April 5 at Evergreen Aviation & Space Museum, McMinnville

Mufflers or electric required at grass-only site.

Bad weather: Cosmo Cafe, Evergreen Space Museum, cell 503-310-1660

Info: Evergreen Aero Modelers: J. Eichten, jerryeichten@frontier.com, 503-554-0034

- Bring any and all airplanes ... do any kind of flying!
- Every flight is an entry in the “flying raffle.”
- Flying raffle prizes will be awarded after a drawing

Come to all four fun-flies and support four great Oregon CL flying groups!

Academy of Model Aeronautics membership required

Newsletter Editor
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February 2014

«FirstLast»
«Street»
«CityStZip»



Upcoming Model Activities

Feb. 15 - Oregon Flying Fun No. 2, Sunshine Park, Roseburg, Ore. Fun-fly and flying raffle. Any kind of control-line plane, any kind of flying, each flight gets a ticket in flying raffle. Sponsored by Roseburg area CL fliers.

March 8 - Oregon Flying Fun No. 3, Bill Riegel Model Airpark, Salem, Ore. Fun-fly and flying raffle. Any kind of control-line plane, any kind of flying, each flight gets a ticket in flying raffle. Sponsored by Western Oregon Control-Line Flyers.

April 5 - Oregon Flying Fun No. 4, Evergreen Aviation & Space Museum,

McMinnville, Ore. Any kind of control-line plane (mufflers or electric required), any kind of flying, each flight gets a ticket in flying raffle. Sponsored by The Evergreen Aeromodelers.

Prop Spinner Club officers

Mike Denlis, President
Jim Corbett, VP
John Thompson, Treasurer
Tom Kopriva, Secretary
Mike Massey, Safety Officer
Jim Corbett, Newsletter Editor

Where the Action Is: <http://flyinglines.org/Action.html> **Visit:** <http://flyinglines.org> web site.