



## Newsletter

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### THIS'N THAT

- ▶ Remember the picture in the last issue of the NL of the great looking Valkyrie L.A. Johnston was given on his Appreciation Day? I got a note from him saying that the right wing folded during the testing flights. He says he has all the pieces and his winter project is decided. Building once is great; rebuilding was never one of my favorite chores.
- ▶ Got a note from Kay Kasimir saying that, although he loves Cubs, he had to miss our recent CubFest because he was on a business trip to Japan. While there, he found a Japanese RC magazine. He couldn't read it but he said it had a lot of pictures and there was a bunch of them showing Cubs. They were apparently having a CubFest in one of their clubs there at the time.



This is a page showing the gathering. As Kay says, the whole world loves Cubs!!

- ▶ **For those builders** who are looking for something different, The Cleveland Model and Supply Company is the worlds oldest continuously operated model company, started in 1926 by Edward Pachasa ( later changed to Packard ) in Cleveland, Ohio.

The first major kit they mass produced was introduced in 1929 and was a 1/16<sup>th</sup> scale model of the Great Lakes 2T-1, It was their first ( maybe the first ) all

### 2017 Elected officers

Pres.....Rick Thompson.....[jrt1953@gmail.com](mailto:jrt1953@gmail.com)  
Vpres.....Ed Dumas.....[ed@eddumas.com](mailto:ed@eddumas.com)  
Secretary..Roger Kroodsma.....[rogkroods@att.net](mailto:rogkroods@att.net)  
Treasurer..Joel Hebert.....[hebertjj@gmail.com](mailto:hebertjj@gmail.com)

### EXECUTIVE BOARD

Brad Butzbach.....[warhwkbb@yahoo.com](mailto:warhwkbb@yahoo.com)  
John Baselone.....[jrbfarm@yahoo.com](mailto:jrbfarm@yahoo.com)  
Ralph Colon.....[ralphcolon865@gmail.com](mailto:ralphcolon865@gmail.com)  
Safety Officer  
Randy Philipps.....[randy@accesssolutionsinc.com](mailto:randy@accesssolutionsinc.com)

balsa structure with glued joints. Ribs and formers were ink printed on the appropriate thickness of balsa sheet and you cut it out with a razor blade or knife. Before that, their models were built of pine, spruce, or bamboo with joints nailed or thread wrapped.

The second kit they mass produced was of the Travel-Aire Mystery Ship. All their models were well researched and as true to scale as possible and with as many details as available. The Travel-Air was hangared near them and they pored over the plane getting measurements for their kit.

They produced awesome kits for 42 years, stopping around 1970 and going then to well drawn plans and patterns which they still sell. Their extensive catalog can be found on the internet.

<http://clevelandairline.com>

They sell plans and patterns of several different categories of size and quality of a huge number of airplanes..

I lusted after one of their model kits after seeing their ad in Model Airplane News magazine when I was about 12 or 13 years old. They were only available by mail, and they were expensive for a country boy in the early forties. I finally accumulated enough money and ordered a Curtis P-6 Hawk with a huge ( ~ 36" ) wingspan in ( I think ) 1941. I had been building Comet, Megow and Guillow kits in the ten to fifty cent cost range and the Hawk cost about 3 or 4 bucks plus postage ( maybe 50 cents ).

I was blown away by the kit and all the ribs and stringers in the construction! The biggest problem was the long wait from the time I mailed the order till I got the package. Must have taken about four weeks!

I tried to do my best on construction and covered the model with the tissue that came with the model. Looking back, it would have been my first effort with silkspan.. I was so proud of that model! I kept it around until I went into the air force in 1946 and just looked at it. It was too heavy for rubber powered flight and I didn't have a gas engine that would run ( the GHQ I talked about earlier ) which was too big for the model anyhow.. I don't remember what happened to that model....

► I've pretty much finished the Powerhouse I've been working on. I seem to be less and less happy with my work. I don't know whether its impatience or clumsiness ( but I do think it'll fly )...



► You've all heard by now that you no longer need to register with the FAA in order to fly legally. Ed Dumas found this article

<http://www.ainonline.com/aviation-news/general-aviation/2017-07-03/faa-offers-delete-names-refund-drone-hobbyists>

about already registered modelers who want to get their registration deleted and a refund of the \$5 fee. Ed suggests that you cross all the T's and dot all the I's if you fill out the form. You know how the government is about forms. Get the form from;

[https://www.faa.gov/uas/getting\\_started/registration\\_deletion/media/faa\\_registration\\_deletion\\_and\\_refund\\_form\\_instructions.pdf](https://www.faa.gov/uas/getting_started/registration_deletion/media/faa_registration_deletion_and_refund_form_instructions.pdf)

As you saw in the July 6<sup>th</sup> missile from AMA, Congress is working on further rules for FAA and some will impact our hobby. AMA is working with them on the wording. We'll get more info as it moves through the legislative process...■

## **SIZING THE TAIL VOLUME**

by Michael Catlin

While working on a new plane design (AeroStik) that uses arrow shafts for the fuselage boom I realized that I needed to properly 'size' the horizontal tail.

Enter the "tail volume coefficient". The tail volume coefficient is a way of setting the proper ratio of tail area to wing area with regards to the distance separating them. The formula is (for the horizontal) Volume coefficient is equal to the area of the horizontal times the distance of the mean aerodynamic chord of the horizontal from the aircraft's balance point. All this divided by the area of the wing times the mean aerodynamic chord (of the wing).

$$V_h = (S_h * L_h) \div (S_w * MAC)$$

Let's break it down. Multiplying an area times a distance gives a volume. Dividing a volume by another volume gives a dimensionless number referred to as a

coefficient. Hence, volume coefficient.  $V_h$

Multiplying the area of the horizontal tail by its distance from the aircraft's balance point provides a measure of the moment the horizontal tail is capable of providing. ( $S_h * L_h$ )  $S_h$ =horizontal area  $L_h$ =distance from horizontal's MAC to aircraft's balance point.

The wing area times its mean aerodynamic chord takes into account the aspect ratio of the wing. ( $S_w * MAC$ )  $S_w$ = wing area  $MAC$ =mean aerodynamic chord of the wing

By dividing the tail volume by the wing volume a dimensionless coefficient results that provides a 'measure' to the tails control power. Or how much power the tail will have in controlling wing angle of attack.

For a full size aircraft with a limited CG (Center of Gravity) travel such as a Piper J-3 the coefficient is 0.34 because the CG is not expected to travel far. For an aircraft such as a Navion, a 4 placed aircraft where the rear seat passengers can move the CG much more than the J-3, the coefficient is 0.692. Or just about double.

For my aircraft I settled on a coefficient of 0.50 which to my 'eye' gives an appropriate look. And the old saying goes, "If it looks right, it will fly right". My first approach using a boom length of 30 inches and the wing of my "Club Trainer" that I put into a tree 2 years ago resulted in a huge tail, nearly as large as the wing. By adding 10 inches to the boom length and thus increasing the distance between the wing and the tail the resulting size looked much more natural and still met the requirements....Michael ■.

## **KCRC Meeting Minutes – July 11, 2017**

President Rick Thompson called the meeting to order at 7:05 pm at KCRC. One new member, Peter Campbell was recognized and welcomed to the club.

Rick asked for corrections to the June meeting minutes, which there were none. The minutes were approved by unanimous voice vote.

Treasurer Joel Hebert gave the treasurer's report. It was approved by unanimous voice vote.

Phil Spelt reported that the SPA contest is this weekend, July 15-16. Warren Oliver has friends coming from Texas and Johnson City to compete. There are currently 17 contestants registered, not including Phil Spelt and Warren Oliver. Volunteers are needed for Saturday morning beginning at 7:30 am. The field will be reserved Friday afternoon for practice.

Safety officer Randy Philipps reported that there was one minor injury a couple of weeks ago, otherwise things are going fine. It was also questioned whether the runway direction arrow is really useful and whether it should be kept or removed. The consensus is that it is useful and should be kept.

## **New business:**

Rick expressed appreciation for the good job John Basalone is doing at field maintenance.

Randy Philipps proposed that the club have an



old-fashioned fun fly on August 12, 2017. Paul Funk will run it and Jerel Zaretsky will have his famous ice cream maker churning out ice cream for everyone. Paul will send out info soon.

### Crash of the Month:

Phil Spelt related a crash that occurred while he was flying a knife-edge maneuver where the right (aileron and elevator) control stick of his Spektrum DX-9 transmitter came off in his hand and caused his plane to crash. It turns out the control stick is a press-fit into the plastic gimbal mechanism. Phil will return it to Spektrum for inspection and repair. It should be noted that this was the second crash due to this transmitter, the first having occurred when the transmitter locked up due to bad firmware.

Jimmy Russell crashed his Killer Kaos due to reversed ailerons. Fresh from another rebuild, Jimmy checked the ailerons while looking from the front of the airplane instead of the rear. The flight was very short and produced a cloud of balsa and splinters. Jimmy brought the damaged spinner to show the force with which the plane hit the runway.

Phil won the CoM award in a close contest. It should be noted for future CoM aspirants that the quality of the story counts and the purpose of the CoM is not just to report on technical or pilot problems and win a bottle of glue but to provide the members with an entertaining story as well!

### Model of the Month:

Warren Oliver entered his Gee Bee R-1 Super Sportster. This is a Great Planes ARF that has been converted to electric power using an 8S 5000 mAh LiPo battery and the same motor and speed control as Warren's new Cub. The first flight is expected soon.



*Warren's MOM winning model.*

Bill Dodge entered his Ultra Sport 1000 with an OS 120 4-stroke engine. Bill noted that the wing incidence is off as the plane requires a bit of down elevator to maintain level flight. Bill is considering rebuilding the wing mount to correct the incidence problem. Warren won MoM.

The meeting was adjourned at 7:35 pm.

Respectfully submitted.....Ed Dumas, KCRC Vice-

President, filling in for Secretary Roger Kroodsmas.



*Bill's great looking Sportster*

( **Editors note::** One thing I miss most about not getting to the field is seeing the great looking models. I'd sure like to watch Warren test fly the GeeBee, which I understand can be a challenge.. )



**Long time KCRC member John Williams of Clinton, passed away on July 13<sup>th</sup>, 2017. John was 92 years of age, a marine vet from WWII who was an avid aviation enthusiast. He had his private pilots license, and loved to build model airplanes, especially twin engine models. Here shown at KCRC field winning one of his Model of the Month trophy's in June 2008 with his scratch built model. I recall several B-26 models John built of various sizes.**



-► Got a note from Doc Shacklett and L.A. Johnston on the SAM Chapter 43 ( TN ) yearly champs.

“ Jim:::The contest at Cedar Hill TN went well.

There were 14 contestants, which is pretty good in today's world. LA tried to fly by proxy for me, but I had a balky engine, so he only made one flight for me. LA placed well in some events, as well as Jeff Elliott (former KCRC president). The weather was hot, but everyone enjoyed flying.....Doc”



*That's Doc (hat in hand ) and L.A. in front next to the kneeling guys. That's tall Jeff 3<sup>rd</sup> from the right on the back row peeping over the guy in front ..*

Doc is our resident SAM Hall of Famer and Emeritus member. He's going to do an article for the NL on model estate planning.

► **The Ben Oliver Memorial SPA contest** was held at KCRC on July 15 and 16. Contest was scheduled to be held in North Carolina but due to unforeseen circumstances had to be moved to KCRC. .Eighteen flyers competed in the contest.

Roger Kroodsma sent some pictures of the KCRCers competing. Roger also performed some heroics at the contest when he battled his way through the brush and thorns down the east slope to the lake and recovered Bruce Underwood's model after one of Bruce's servos failed. Not sure that was a good idea. Last time I went down that slope, I thought I wasn't going to get back up.

Go to the **seniorpattern.com** website for a good write up and contest results by SPA webmaster Jim Johns



*Co-CD Warren Oliver .*

with pictures from the contest. CD Phil Spelt thanks all the KCRCers who contributed their labor and expertise toward making the contest a success.

► **Don't forget the cookout and FunFly Randy proposed for KCRC on August 12. Should be a lot of fun. Jerel is bringing his ice cream maker again.**

► House Mountain club has their big get-to-gether in August. Check their website for information.

► **Next meeting,at 7 PM on August 8 at KCRC field.**



*Jimmy Russell doing his thing.*



*David Johnson likewise*



*Bill Dodge also*



*Co-CD Phil Spelt*