

# **JAYHAWK MODEL MASTERS NEWSLETTER**

Jayhawk Model Masters | AMA Club #2013 | Dec. 2024

[jayhawkmodelmasters.com](http://jayhawkmodelmasters.com)

## **Club Meeting Dec. 21st**

***Six-Mile Chop House***  
4931 W 6th Street  
Lawrence, KS 66049

11:00 a.m.: Lunch & socializing  
Noon: Business meeting

Club meetings—normally on  
the **3<sup>rd</sup> Saturday** of the  
month

## **TENTATIVE**

### **2025 JMM Flying Events**

May 24 – Rocketman Rally\*  
June 28 – Jayhawk Float Fly I  
July 26 – Jayhawk Fun Fly\*  
Aug. 23 – J-hawk Float Fly II  
Sept. 27 – Jayhawk Big Bird\*

\*At Clinton International Model Airport

**Newsletter Committee:** Dave Alexander  
(Ed. In Chief), Scott Stordahl and Glenn  
Minor

## **2024 Club Officers**

*President* Patrick Deuser  
(785) 596-3035  
*Acting Vice Pres.* Mike Randel  
*Acting Sec./Treas.* Scott Stordahl  
*Field Safety* Vernon Nelson  
*Board 3yr* Mike Brown  
*Board 2yr* George Jones  
*Board 1yr* John LaGessee

## **THIS MONTH'S MEETING RAFFLE PRIZE OPTIONS**



**Phoenix Models Spitfire 59" ARF  
OR  
RealFlight Evolution RC Simulator**



**with "transmitter" controller**

## November Meeting Report

By Dave Alexander

The club met on Nov. 16th at 6 Mile Tavern. Prez Patrick Deuser I called the meeting to order at 12:35 with 18 members in attendance.



Acting Treasurer Scott Stordahl brought reports for both October and November. The October report (covering September) had little activity, dues income of \$125.00 and expenses of \$831.79 (mostly raffle prizes plus some repair supplies for starter stands), giving us a net worth of \$6,245.64 to start October. The November report included the Big Bird fly-in. We had income from the Big Bird of \$1,197.86 (pilot fees, raffle, food, & swap meet) plus \$291.00 in dues and \$65.00 for shirts. Expenses of \$644.10 were all from the Big Bird (food, portapotty cleaning, raffle prizes), leaving us \$4,678.25 in the checking account. With the CD and interest (\$2,055.15) and cash on hand (\$387.00), we started November with a net worth of \$7,120.40.

Safety Officer Vernon Nelson reminded members of his recent crash [as described in last month's newsletter] and the importance of having a checklist—and paying attention to the checklist, even when talking!.

Field manager Scott S. had no report other than to say the tires on the mower will be replaced as part of annual maintenance.

### Old Business

We discussed the webcam, whether there are cheaper alternatives for connecting, and whether a 2<sup>nd</sup> camera would be useful. George Jones would like to have 2 cameras to cover more views. Bill Miller will look into upgrading the camera and connection.

## New Business

### *Nominations for 2025 officers:*

Scott Stordahl – treasurer

Vernon Nelson – vice president

Glen Minor – safety officer

Dan Reid – safety officer

Patrick Deuser - president

Jim Morris – Board member

Rob Liker – Board member

Additional nominations will be accepted until we vote at the December meeting.

Concern was raised that people have been parking on the grass near the BBQ grill, and asked if we can add parking blocks to prevent that. Others worried that people might then assume the blocks indicate parking spaces, leading to people parking facing north.

Apparently other clubs have gotten money from the county for ADA improvements. Officers will contact Parks & Rec to see if they might help with such improvements.

Someone asked why events are listed in the newsletter as “tentative”? That is because we don't consider them firm until they have been sanctioned by the AMA: they could theoretically change if another nearby club has an event on the same date.

## Show & Tell



Dave Alexander brought the field box he built from

plans in a recent *Model Aviation*. He ran into problems with scaling the plans, they were

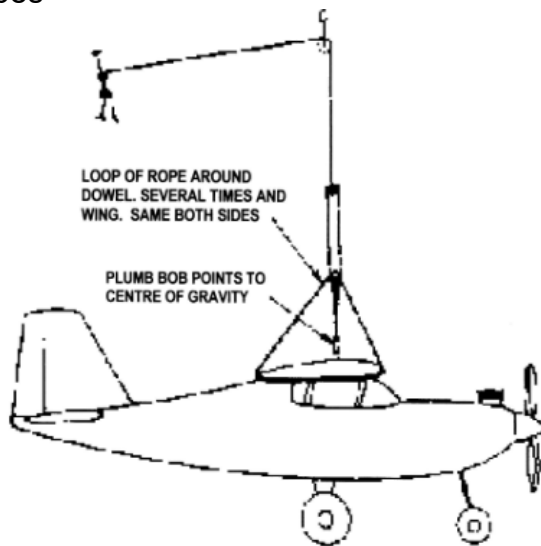
only about  $\frac{3}{4}$  scale when printed full-size. Also, some dimensions must have been off, the drawers would have been too small for the rails if dimensions on the plan were used.

Wayne Donovan brought a recent model of his to demonstrate 3 different methods of measuring the center of gravity (CG). The first is the old classic 2 vertical rods (or pivoting pads on the commercial version)

where you place the plane on the rods and move it back and forth until it hangs level.

This is fine for medium-sized models but gets impractical

for larger models. Next he demonstrated the Vanessa rig, which involves suspending the model from dowels in such a way that a plumb bob points to the CG. You adjust the ropes



holding the wings until the plane hangs level, and the plumb bob points to the CG. (See [http://creswellrcflyers.org/Text/Vanessa\\_CG\\_Machine.pdf](http://creswellrcflyers.org/Text/Vanessa_CG_Machine.pdf) for detailed description.) For the Vanessa rig to be accurate, you need a

flat place on the model where you can place a small bubble level, preferably close to the CG.

The third method Wayne demonstrated is essentially the same method used to measure the CG on full-scale aircraft, slightly modified to use only one scale (such as a digital kitchen or postal scale). This method involves measuring the weight of the model on each wheel of the landing gear, and using that weight to calculate moments (or torques), summing the moments and dividing by the weight to get the GC location. If you didn't follow all that, never fear, Wayne brought a handout that explains it all in detail, and shows the calculations with sample weights and distances so it is easy to see how it all fits together. That handout appears later in this newsletter.

Vernon Nelson won the raffle, and he chose the PC9 Pilatus.



=====



## **CG BALANCE USING SCALES** (Compiled by Wayne Donovan)

First, have the plane assembled as RTF1, but minus fuel. Find a place where you can put the nose of the plane up against a wall. Take a level and prop up the tail wheel until the fuselage is sitting level. You will probably have to take the hatch off in most cases to find a suitable area to set the level on.

Once the plane is sitting level, place masking tape under the area where the main wheels are touching the surface and draw a line where the wheels contact the tape. Make an index mark where the center of the tail wheel falls in the same manner. This mark will be on whatever you propped the tail up with. (I use magazines). It's also a good time to measure from the wall, to the point where the recommended CG is. Save that number for later.

What you are looking for at this point is the distance to each wheel from the tip of the spinner. (which should be touching the wall at this point) I use a long straightedge to get the distances

»>MUST measure to where landing gear mounts to wing/fuselage!!!«<

As an example, let's say you come up with these numbers:

- \* LH main - 22"
- \* RH main - 22"
- \* Tail wheel - 70"

Now, place a scale under each wheel individually. You will have to re-adjust the height of the other wheels each time to keep the plane sitting level. Add more magazines as necessary. (If you have three scales you can get the weights at the same time but make sure the plane is level)

Don't forget to re-install the hatch before you weigh each wheel. You will wind up with three weights, one for each wheel. Let's say you come up with these numbers

- \* LH main - 9 lbs
- \* RH main-9 lbs
- \* Tail wheel - 5 lbs

Now it's just a simple math problem to find where the CG sits right now on the plane -  
Weight x ARM (distance)= Moment

- \*  $22 \times 9 = 198$  in-lbs
- \*  $22 \times 9 = 198$  in-lbs
- \*  $70 \times 5 = 350$  in-lbs

Now add the total of all the moments and the total of all the weights.

Weights  $9 + 9 + 5 = 23$  lbs and moments  $198 + 198 + 350 = 746$

Then divide the total moments (in-lbs) by the total weights.  $746$  divided by  $23 = 32.43$

That number  $32.43$  is "in inches" how far back from the tip of the spinner to where the plane balances right now.

Compare that to-the distance that you measured earlier to the recommended CG location.

If you are off one way or another adjust items then recalculate the weights. The distances (or ARM's) aren't going to change so you already have those numbers.

Corsair- -

Distance.	Weight.	Moment LM
-----------	---------	-----------

10.875 in X	2.88 lbs	=
31.32		

RM 10.875 in X	2.81 lbs	=	30.558
----------------	----------	---	--------

T	38.00 in X	<u>0.51 lbs</u>	=	<u>19.38</u>
---	------------	-----------------	---	--------------

Total.	6.2 lbs.	81.25875
--------	----------	----------

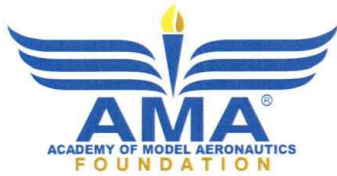
CG:  $81.25875 + 6.2 = 13.10625$  in from wall

Mfg rec:  $13.28 \pm .25$  in from wall

(3.5in from LE)



Thanks, Vern Nelson, for arranging the TV news publicity spots for the Big Bird! This is the result:



*FUEL YOUR PASSION*

October 16, 2024

Jayhawk Model Masters  
Attn: Vernon Nelson  
4112 SE Iowa Ave.  
Topeka, KS 66609

Dear members of the Jayhawk Model Masters,

Thank you for submitting your application for the 2024 Club Recognition and Reward Programs. I am pleased to inform you that your club has been awarded \$175!

Congratulations on a job well done regarding your club's event and the positive media coverage. I am sure both influenced many within your community. Organizations and people such as you make a difference not only in your communities, but also in this hobby. AMA appreciates you.

You will find an enclosed check for your efforts.

Great job and keep up the good work!

Sincerely,

A handwritten signature in blue ink that reads "Chad Budreau".

Chad Budreau  
Executive Director  
Academy of Model Aeronautics

**Academy of Model Aeronautics Foundation**

5161 E. Memorial Dr. Muncie, Indiana 47302  
modelaircraft.org/foundation | foundation@modelaircraft.org | (765) 287-1256 ext. 279

## Looking Back at 2024 . . .

### *Fun Fly*



### *Float Fly*



### *Rocketman Rally*



### *Big Bird*



