WHAM

NEWS, VIEWS, and REVIEWS

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the Kansas Sunflower Squadron, FAC Squadron #23

Sunflower Squadron
Wichita, KS

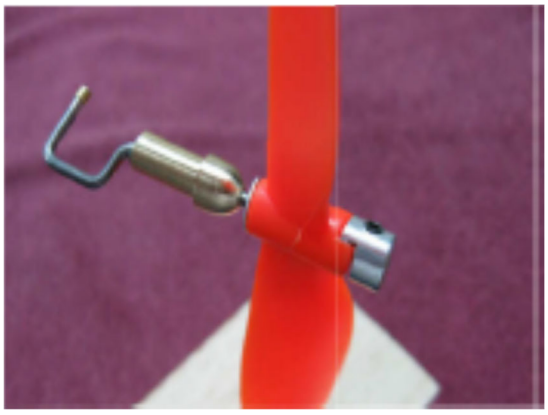
Issue JE2-29
August 2026

Cylindrical Cam for Free Wheeler Props

Here is yet another design to provide a way to fit and utilize the free wheeler cam on the front of the Peck and other plastic propellers that we use on our models.

Take a length of aluminum round rod stock of 1/4" for the Peck prop, and 5/16" for the orange Chinese prop, and leave it at a full length of a minimum of 4" in order to be able to hold on to it. In a lathe or drill press, drill a center hole in one end of the size of your prop shaft about 1/2" deep. Mount the piece firmly in a vise with the end with the hole in it pointing upward. Now take your favorite fine file and file a spiral ramp and stop to match the cam on the front of your chosen prop. Don't file the alum. cam face in reverse, as I have done on two occasions.

Think it out before you start. File the cam-step-stop in the alum. rod first. Then file the spiral down using the prop to check your profile work as you go. Your first try will take a while but as you gain experience you will get the hang of it and be able to make the part faster. When you have mastered the engagement profile you can now drill a set screw hole in the side in the middle of what will be about a 1/4" part length.





Now tap it for a threaded set screw of 4-40 or 5-40 to fasten it on a ground flat on the prop shaft. The set screw from a Du-Bro wheel collar works well here. When done cut the part off to a over all length of 1/4". When mounted on the prop shaft on the model, merely leave enough fore and aft movement of the prop to just miss the cam and allow it to free wheel when the power is exhausted. The main advantage of this system is that one can disassemble and re- place the prop shaft if bent, or the prop in the field. You can use a bobbin or a Crockett hook for wind- ing the rubber motor, maybe an "O" ring would work OK. A "Z" bend prop shaft however would require you to remove and wind the rubber motor bare handed and is not recommended.

One very good source for aluminum rod stock of any size is McMaster-Carr.

Bill Schmidt

June 13, 2026 Meeting Minutes

ATTENDEES:

Phil Burris, Jeff Englert, Linda & Chuck Powell, Marlene Hayes & Ed Salguero, Linda & Chuck Powell, Regina Marilynn & Bill Schmidt,

President Powell called the meeting to order, Minutes were approved as reviewed.

Club assets remain positive.

OLD BUSINESS:
The Indoor Contest was discussed. Texas fliers report loss of Gainsville Airport as a flying site.

NEW BUSINESS:
Outdoor WHAM contest was fun

SHOW AND TELL:

Bill Schmidt showed an F6F Hellcat. It is covered in dark blue silk. Plan used is not remembered, DT equipped.









BALSA SHEET WEIGHT CHART

I constructed this chart in a computer program to give densities of balsa sheets (in LB/ft^3) given a sheet weight in grams.

BALSA DENSITY in LB / FT^3

SHEET SIZE	4 LB	5 LB	6 LB	7 LB	8 LB	9 LB
1/16 X 3 X 36	7.1	8.9	10.6	12.4	14.2	15.9
3/32 X 3 X 36	10.6	13.3	15.9	18.6	21.3	23.9
1/8 X 3 X 36	14.2	17.7	21.3	24.8	28.3	31.9
1/16 X 4 X 36	9.4	11.8	14.2	16.5	18.9	21.3
3/32 X 4 X 36	14.2	17.7	21.3	24.8	28.3	31.9
1/8 X 4 X 36	18.9	23.6	28.3	33.1	37.8	42.5
1/16 X 3 X 48	9.4	11.8	14.2	16.5	18.9	21.3
3/32 X 3 X 48	14.2	17.7	21.3	24.8	28.3	31.9
1/8 X 3 X 48	18.9	23.6	28.3	33.1	37.8	42.5
1/16 X 4 X 48	12.6	15.7	18.9	22.0	25.2	28.3
3/32 X 4 X 48	18.9	23.6	28.3	33.1	37.8	42.5
1/8 X 4 X 48	25.2	31.5	37.8	44.1	50.4	56.7

You weigh your sheet (in grams), find the sheet size and read the density at the top. I compared the results to a couple of other charts, one from Model Aviation, Volare' Products and the BEAMS newsletter - all comparable.

But what do you do if your sheet isn't a standard size. (I seem to always cut off the edge I've labeled.) Actually, its quite simple to calculate (with a calculator, scale and ruler). Use this equation;

Weight / (Thickness X Width X Length) X 3.8096 = Density of Balsa, with Sizes in inches, weight in grams -

for example; a 1/20 x 4 x 18 sheet weighs 6.2 grams

6.2 grams / (1/20" x 4" x 18") x 3.8096 = 4.44 LB/ft^3 Balsa

SAM 56 Wichita Historical Aircraft Modelers

FLYING ACES
Sunflower Squadron
Wichita, KS

The next SAM 56 Dinner Meeting will be at:

Mediterranean Grill

335 S Towne East Mall Dr., Wichita, KS 67207

(316) 651-5599

Saturday, August 28, 2026

Social Hour @ 6:00 PM, Dinner @ 6:30 PM...

Upcoming events:

Membership Information:

Open to all interested AMA members, founded to encourage and promote model airplane building.

Member dues $20 annually, Subscription only; $12 annually, $18 foreign