

WHAM

NEWS, VIEWS, and REVIEWS

Official Publication of the
Wichita Historical Aircraft Modelers, SAM 56, and
the Kansas Sunflower Squadron, FAC Squadron #23



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RUBBER MOTORS

Selection, Tying, Braiding, Winding

Selection: Weigh your finished model (complete; with motor peg, nose block, spinner, prop, etc. and any weight you will need to balance). Your rubber weight will be within the range of 0.25 to .5 (1/2) of this value.

Example: a 40-gram model x 0.33 should use approx. 12 grams of rubber. Many begin with 0.25 or a quarter of the model's weight of rubber. To get more aggressive, they move up to 0.33 to 0.50 of motor.

Braiding: I'm going to stick to even numbers of loops in this discussion. But the main idea is to start with a single loop that is long enough to give you the number of strands desired in your model.

Example: To make a 4-strand motor of 1/8th strip that is 36" long, start with a single loop of 1/8th rubber that is 72 inches long.

Tying the strip is done by making a regular overhand knot and lubricating the rubber (spit) before tightening. Then tying a square knot over the overhand knot. Make sure the square knot is tight against the overhand knot. Hook the knotted end over a hook or have someone hold the loop end. Hook your winder to the other loop end.

Wind in the braid turns into the single loop in the same direction (normally, CW) that you usually wind a motor. The number of winds needed to shorten the motor will depend on the ratio of unbraided motor length to the distance between the hook and peg in the model. I use between 200 and 400 turns in my motors.

Ther illustrations show the various configurations used for 2 strand, 4 strand or 6 strand motors. Even numbers are the easiest to braid. After winding in the braid turns, fold the motor (double it up) over by hooking the winder to the center and bring the free ends together. Put the free ends on a hook and allow the winder to freewheel – the motor will braid itself. It's a good idea to hold the free ends with a small rubber band to stop them from unwinding. NOTE: a single loop can be braided using mostly the same method, just wind up a single strand before tying it into a loop. (I have successfully added additional strands of different thicknesses by winding a loop next to the primary braided section and allowing it to be 'absorbed' by the main bundle as it braids.)

May 11, 2024, Meeting Minutes

ATTENDEES:

Mary Kay & George Avilla, Jeff Englert, Regina & Marty Kline, Kent Peters, Linda & Chuck Powell, Marlene Hayes & Ed Salguero, Marilyn & Bill Schmidt, Dave Wiebe,

President Powell called the meeting to order; Minutes were approved as delivered.

Treasurer's report not presented, still a positive balance.

OLD BUSINESS:

Talked about upcoming contests....

NEW BUSINESS:

Not many calm days this year for practice flights.

WHAM Spring Fling Contest (Jim O'Reilly Memorial) moved due to weather (eventually run June 15 & 16th, thought blown out Saturday).

It was moved and seconded to consider stopping printed newsletter distribution. Motion passed.

SHOW AND TELL:

Ed Salguero showed his 4 year old Jaberwock, nice. He is building another!



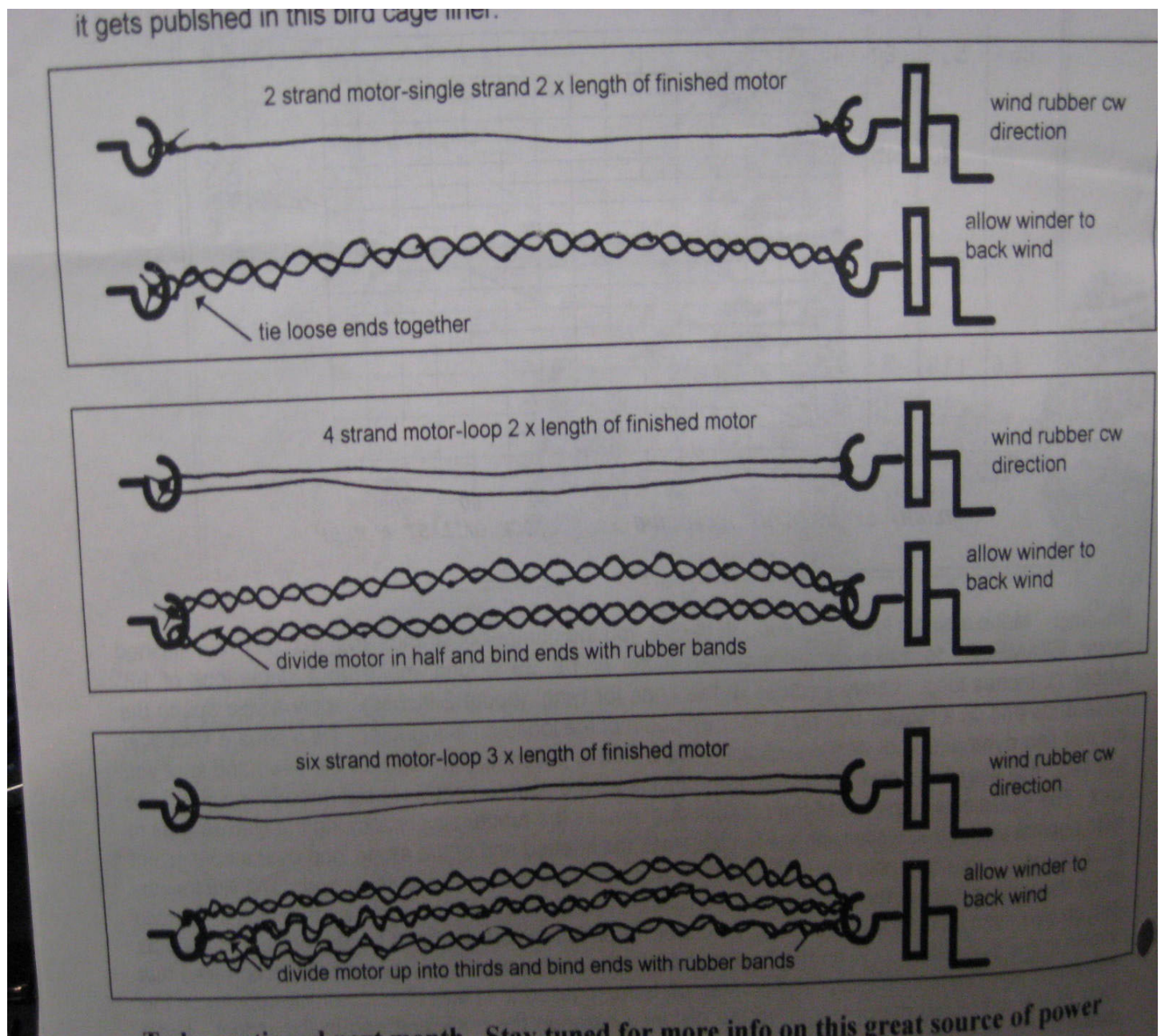
Chuck Powel displayed a Lanzo Stick. He intensified the colors by spraying with Higgins ink using a Preval Sprayer (look it up on Google – it looks nice).

Bill Schmidt had a Comet Focke-Wulf 180 from a 1943 kit plan. He had a Messerschmidt 109 also from a Comet plan. Not sure when built as the green tissue has faded to brown.



To braid a three loop (6 strand motor) just divide the wound single loop into three equal lengths. Allow the winder to freewheel it together. NOTE: you will have a free end at each end of the braided motor, so use small rubber bands to keep each end from unbraiding.

Braiding allows the motor to maintain the same CG position it has when would to launch torque. This due to the way the motor unwinds maintaining a consistent length during the powered and gliding portions of flight. A latch free-wheeling prop is required if you decide to go more than 2.5 times the distance between the prop hook and rear peg (with the motor unbraided). Motors that are 3+ the motor hook to peg length may require additional braid winds to assure it shortens adequately.



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The next SAM 56 Dinner Meeting will be at:

Mediterranean Grill

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

(316) 651-5599

Saturday, July 6, 2024

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.

Club Officers:

President: Chuck Powell,
Treasurer: Phil Burress,

Vice-President: Marty Kline
Secretary: Jeff Englert, 722-7491