

Propbusters

NEWSLETTER

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Rapid City Propbusters
Radio Control Club

AMA Charter 591 - Rapid City, South Dakota and the Black Hills Area

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News & Notes

To help reduce the risk of fires, air travelers will no longer be able to pack loose lithium batteries in checked luggage beginning Jan. 1, Please see http://news.yahoo.com/s/ap/20071228/ap_on_hi_te/lithium_batteries_travel for more details.

The Academy has hired Greg Hahn as its technical director. He will start his new position at AMA Headquarters January 3, 2008.

Happy New Year to you and yours. Make sure Denny has your 2008 dues and you have your AMA card stickered for the coming year.

Frost Your Buns -- One Week Late

by Jim Tiller

It has been a Propbuster tradition for more years than most of us can remember to meet at the field on the first day of the new year to spit in the mother nature's face and fly our intrepid aircraft regardless of the weather. Now some of us are older than spit and the idea of spitting into a 20 knot wind and wind chill of less than zero on January 1st, 2008 was more spit than we could muster. So, for the first time in what memory we old guys can muster, the annual Frost Your Buns Fly was postponed until Sunday, January 6th.

The few days lay off made quite a difference in both the temperature and the wind. The day was sunny with the mercury pushing 40 and, contrary to the forecast, there was only a breath of light and variable wind.

Quite a few flyers lined the field and put their old beaters into the air. The only exception was Zac Roller who used the day to maiden flight his new 35% Aeroworks Extra. The DA 80 engine allowed Zac two good long test flights hinting at the great potential of this well built and great looking ARF. Then some gremlin in the ignition system refused to let the gasser start and the eye-catching laser was packed away.

Most of the rest flew their tried and tested mounts. Ken Gatzke gets the award for the most flights with his fire engine red biplane with the flame job. I put a



couple of flight on my veteran Rapier. Bob Olson put several flights on his Super Tiger .45 powered Extra. Clancy Kingsbury aired his Twist several times. Darrell Cassidy put his LA Racer in the air a couple of times. Doc McGuigan hit the snow fence with his Spacewalker and his day ended early.



But that was all to our benefit because Doc also tended two pots of chili -- the other Frost Your Buns tradition. As usual we were asked to vote for the best chili: Arlene McGuigan's or Sheree Bernal's. After exhaustive testing the vote was a tie 143-143. This tally may, however, be in dispute. I think someone may have voted twice. By the way, you may be interested to know, Sheree's chili was delivered to our event in Denny's absence. He chose to snowmobile instead of fly with us this day. Scuttlebutt has it, a motion might be made at the meeting to cross out Denny's name on the membership list and put in Sheree's.

Building and Improving ARF's

by Jim Soque From the Long Island Aero Radio Society, Bohemia, New York

Here's a few does and don'ts to make your ARF airplane more signature and a better built ship. More familiarity with your model will only improve your piloting skills and increase your confidence as a flier. In more than six months, I have completed the following five ARF models: Great Planes Lancair ES 60, Great Planes Cessna 182, Jim Dymond Tiger Moth 120, Seagull Models PC-9, and the Kangke Monocoupe 60. These are all well-manufactured ARF airplanes, each having been tested by countless design pilots, and manufacturer experts. I fly them all with great confidence and have the utmost respect for each of their designers and engineers.

The suggestions I make in this article are my own and from my own experience:

- Read your instruction manual from cover to cover, then read it again.
- Take inventory of all the parts listed in the instruction manual.
- Measure the engine mounts; change them if you think they are too short.
- Mount the engine to the engine mount with socket-head screws, washers, lock washers, and lock nuts.
- Use a ball-link for the carburetor pushrod link on the engine.
- Change the tank if it is poorly formed and has a noticeable seam down the middle.
- Replace plastic tank tubing with brass and replace poor quality tubing with a reputable brand silicon tubing.
- If a third tube is used for fuel-filling purposes, use additional pickup line and a clunk.
- Trim the cowl with a router/sander tool, and use a vacuum cleaner with hose to vent the fiberglass dust away from you.

Editor's Note: Best if this is not done in an enclosed space. No one, not you or anyone in your family or your neighbors, need to breath this dust.

- When drilling the holes in the cowl, enlarge them using a drill bit wrapped with some 220-grit sandpaper; enlarge gradually.
- Attach a flexible pushrod material to pull the fuel hoses forward through the firewall.
- Cut the ventral vent hole three times the size of the air intake hole. This allows for maximum cooling of your en-

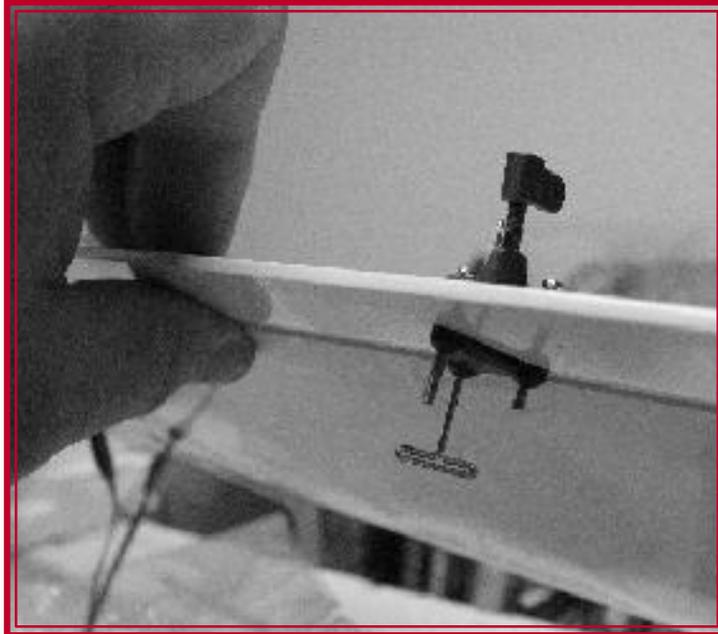
gine. • Measure the stabilizer tips to a center point over the cabin using an aluminum ruler and take note in centimeters, not inches. Measure twice and always use epoxy.

Editor's Note: Do not use any string, line, cloth measuring tapes, or anything flexible to measure with. If the measuring device sags or bends, support it so it is straight over its length.

- Level any imperfect surfaces with your eyes, then put a level on it. Take away any balsa gradually with a hobby knife.
- Use a 90° angle device for your vertical fin, or try a laser leveling device.
- If your kit comes with 2mm or 3mm hardware, switch it to 2-56 or 4-40 hardware instead.
- Change the supplied wheels to wheels with tread. Don't use cheap wheel collars.
- Use a hinge-slotting tool (I prefer electric) to widen the precut hinges on control surfaces. Use slow cyanoacrylate glue on the hinge surfaces edge, then insert the hinge.
- Use Z-bends or other quality servo connectors at the servo end of the control push rods.
- Mount your cowl with beefier screws and neoprene washers.

Editor's Note: Reinforce the part of the cowl where screws or bolts go through. Use a small piece of cloth soaked in epoxy and placed on the inside of the cowl or any other part that needs reinforcing. Fiberglass cloth is a good choice but any woven cloth will do.

- Mount your switch harness and charging jack opposite from the exhaust side of the aircraft.
- Use a glow-extension device for any inverted engines.
- Use scrap fuel line pieces to secure your clevises.
- Use dental floss to tie together any servo extensions to the servos main wire -- especially those buried in the wing.
- Run the antenna wire inside the fuselage and out the back whenever possible.
- After you finish, test run your engine, high and low end, before coming out to the field.
- Fully charge all batteriers -- transmitter, receiver, ignition, etc. before packing up and heading to the field.



Winter Solstice Fly

by Jim Tiller

Our winter solstice fly was designed to be an opportunity to try out flying in the snow. The past

in December of this year.

A few hardy souls showed up to try some ski flying or spend the morning shoveling about 4 inches of new snow. Wayne Zimmerman tried the ski route with his fun fly Extra and after getting tired of shoveling, I decided to make the best of what the others had uncovered.

I managed to get my trusty Rapier off the ground using the taxi way, and made an attempt at a



carrier landing on a small patch of cleared runway. As the photo shows, I just about made it.

Needless to say, most others waited for a little more snow to be removed.



few years we haven't had enough to warrant changing wheels for skies. That all changed

Quick Guide to Acro Your 30 Second Lesson in RC Acrobatics



Doing the Spin by Zac Roller

At one of our last fun fly events, I was approached by a few of our members on how to spin an aircraft. After this event I asked some of the area fliers how they spin their aircraft. I have come to the realization that many people do not know how to execute an accurate spin.

A precise spin starts by completely stalling the plane and allowing it to "break" on its own. To accomplish this, you first need to start at a good altitude, reduce power, and keep the plane on a straight path, allowing the airspeed to bleed off on its own. Don't worry about the attitude of the plane (nose high), but keep the tracking straight without gaining or losing altitude by slowly adding in elevator. You may recall from past articles how

rudder plays a key roll. This is yet another example; use rudder to keep the plane parallel with the runway (keep your wings level as you approach the spin). When your plane reaches a full stall it will drop the nose and drop one wing or the other. This is referred to as the "break".

One way to determine a full stall is after the plane "breaks" you should be able to pull in the rest of your elevator without pulling the nose of the plane back up. If you are able to pull the nose back up, you haven't waited long enough before the plane reached its stall. Also if the plane seems to keep flying with full elevator, you do not have enough control throw set in. Do not fight the plane when it "breaks";

rather, use the "break" to your advantage. Find out which wing wants to fall off and add full rudder in that direction (most planes after being properly trimmed will fall to the left).

You should now have in full up elevator and full left or right rudder (some airplanes need a very small amount of aileron to help keep the inner wing from lifting). Don't try to correct the spin itself, as every airplane will spin differently. After your plane has gone through a few revolutions, take the plane out of the spin. Do this by taking out the rudder and then moving your elevator stick back past neutral allowing a ninety degree flight path to the ground. This will also allow the plane to regain flying speed before you bring the plane back parallel to the ground. Don't worry about the direction your plane is exiting the spin at first. However, to complete the perfect spin you

will need to have the timing down to control your exit direction (using your ailerons to determine the stopped direction is not correct).

This maneuver will require some practice before you will get it right, so be patient. It will take the correct timing to make it look accurate. Just make sure you allow the plane to stall first with elevator fed in before you apply your rudder control otherwise you may create a snap or barrel roll into the spin which is incorrect. After you have mastered the positive spin, try a negative (inverted) spin. Do everything the same but enter inverted and use down elevator.

If you have any questions on this, would like some advice on another maneuver, or have a maneuver you would like to share with your fellow flyers, please send me an e-mail at zlr@rap.mido.net.



Propbuster Picture Album



Right: You guys still have not sent any captions, so you are stuck with mine:

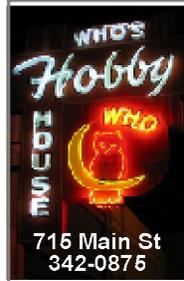
'Some days you're the windshield; some days you're the bug.'

If you have a better one, send it to me.



Above: Clancey Kingsbury's Twist at the Frost your Buns.

Left: Zac Roller and his new Aeroworks Extra.



Specifications:
Wing Span : 70 in / 1780 mm
Wing Area : 893 sq in / 57.6 sq dm
Flying Weight : 10.7 lbs / 4850 g
Fuselage Length : 62 in / 1580 mm
Engine Required : 4-stroke 1.20 engine

List: \$499.99
Our Price: \$329.99



1/7 Scale P-47

Two new offerings from World Models



List: \$349.99
Our Price: \$199.99

Skylink Electric

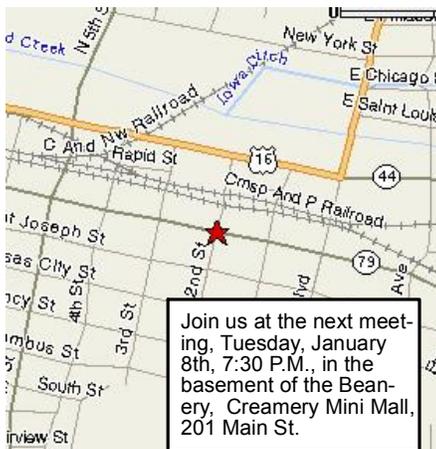
Specifications:
Wing Span : 41 in / 1040 mm
Wing Area : 264 sq in / 17 sq dm
Flying Weight : 26 oz / 740 g
Fuselage Length : 50 in / 760 mm
Requires : 4-channel radio w/4 micro servos, 20A brushless ESC, 3 cells 11.1V 2100mAh Li-Po battery and charger



Coming Events

- 01/08 - January Meeting. 7:30 P.M. Eveyone welcome.
- 02/12 - February Meeting. 7:30 P.M. Eveyone welcome.
- 03/11 - March Meeting. 7:30 P.M. Eveyone welcome.
- 04/08 - April Meeting. 7:30 P.M. Eveyone welcome.
- 05/13 - May Meeting. 7:30 P.M. Eveyone welcome.

PROPBUSTERS MONTHLY NEWSLETTER



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