

# The Flightline



Volume 34,Issue2

Newsletter of the Propstoppers RC Club

AMA 104

February 2004

#### Editorial: California Dreamin'

It's 70 degrees, the sun is hot and the breeze soft, California Dreamin'? Well, yes, but it's real and our annual visit to our youngest daughter is usually this way in January. This year the weather for the Tournament of Roses was overcast and cool but the event is always festive, colorful and well attended. The organizers, who operate from the exquisite former Wrigley mansion, (yes the chewing gum Wrigley's summer place) are very well connected politically. How else would they attract the opening flyover that included the F117 Stealth Fighter, The B-2 Stealth Bomber and the F-22 Raptor Stealth Fighter?



F-117, B-2 and F-22 Flyover at the Tournament of Roses Parade

The spectacle is, well, spectacular! Each year the floats seem to reach higher and higher levels of sophistication. Indeed, this year the Disney float of the Tower of Terror was one hundred feet tall! It was hinged in the middle so it could clear the I-210 underpass. The 2002 Boeing float featured a boy flying a hand-launched glider (See the cover picture).

Last year, when I had more time, I searched for

### Agenda for February 3<sup>rd</sup> Meeting Marple Newtown Library, 7:00 pm

- Approval of January meeting minutes
- Brief Business Meeting
- Club Auction

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aeromodeling activities in the Pasadena area. The most interesting group I found was an offshoot of the Black Sheep Squadron from Burbank. The offshoot group call themselves the OFFC where the O stands for old and the last FC for flying club. You insert the first F! This group meets every Thursday morning in a sports complex. They meet for an hour "business" meeting followed by a couple of hours flying in the gym. Most of these people are seniors with aero industry or service experience. Of course, most of them are lifetime modelers. Last year there were 28 people present and about half of them flew something. They organize regular indoor freeflight contests of various types and these are well supported. The pleasant surprise was that this year there were again 28 attendees. Also, this year, two of them flew outdoor electric powered models in the sports complex park.

The first model flown outdoors was an electric powered A-Frame Twin Pusher; somewhat similar to the one Dick Bartkowski flew this fall. It was different from Dick's with an aft surface and GWS motors and props turning the same direction.



The second outdoor model was a simple geared speed 400 (GWS 300 actually) powered profile model made entirely from flat sheets of Depron foam with a little graphite reinforcement.



Continued on page 4

#### **Calendar of Events**

#### Club Meetings

Meeting and Club Auction 7:00 pm Tuesday 3<sup>rd</sup> February Marple Newtown Library

#### Flying Events

Tuesday Breakfast Meeting
The Country Deli, Rt. 352 Glenn Mills
9 till 10 am. Just show up. Flying
afterwards at Sleighton or Moore (weather
permitting) or indoors at the Chester
Salvation Army Gym
Call Dick Klekotka 610-692-4527

Indoor Fun Fly At Tinicum School Gym, 7 till 9 pm Friday 6<sup>th</sup> February Friday 5<sup>th</sup> March

At the Chester Salvation Army gym Saturday 14<sup>th</sup> Feb. 10 till noon Saturday 28<sup>th</sup> Feb. 10 till noon

#### Regular Club Flying

At Moore and Sleighton Fields

Daily 10 am til Dusk
Saturday 10 am til Dusk
Sunday 12 p.m. till Dusk

(Electrics 10am till Dusk)

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Propstoppers Web Site; www.propstoppers.org
Check the web site for back issues of the newsletter, pictures of club events and the calendar of future events.

Pictures courtesy of Bob Kuhn and Dave Harding
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#### The President's Message

**Dear Fellow Propstoppers** 

The Propstoppers Annual Club Auction/Sale is February 3<sup>rd</sup>. The meeting has an early start time of 7:00pm to allow time for the auction. Al Tamburro will be organizing the event for us, as in past years. Thanks Al! Please arrive early if you have items to sell allowing time for set up.

Propstoppers yearly club dues will also be collected at the meeting for those who have not paid yet. 2004 club dues are

\$60. (Bring your 2004 AMA card).

Additional Indoor flying dates have been added to our schedule. Check the "events" section of the newsletter.

Keith Watson, President

#### SO YOU WANT TO FLY CHOPPERS?

If you have access to a real flight simulator, a good rule of thumb is you are ready to start hovering when you can consistently hover a full tank on the simulator. There is no question that you can learn to hover with the training gear and a lot of restraint, but the probability of success is higher with practice on the simulator.

As you start to get comfortable with your hover, try sliding left and right while keeping the tail pointed toward you. As you progress, try sliding left and right while keeping the tail straight so that at times it's at a 90° angle to you.

There are two ways people get in trouble at this stage. If the helicopter gets too far out or too high, then it's easy to become disoriented. If this happens, keep the helicopter level. Then, get the tail pointed toward you and lower the helicopter to the ground. The mistake many novice fliers make is trying to do all three at once, overloading them and causing the helicopter to fall off the edge.

The numbers of things you have to deal with when flying a helicopter can create overload quickly so create a level flight first until it becomes second nature. First, make sure you can move left and right. Then, master forward and backward motion. When you can do this, start turning the helicopter and hovering left and right at approximately 15°, then 30°, and so on until you reach 180°. The ability to hover past 90° is a challenge. Many people never learn to hover nose in, so be aware that this step may take several gallons of fuel. I believe that focusing on hovering nose in prior to flying around reduces your risk of crashing because your orientation skills will be superior.

To learn nose in, it may be helpful to try it at a higher altitude. That way, if you get in trouble, you have a chance to save yourself. I always worked low to the ground so if I was in trouble, I could drop the helicopter. Don't fly between eight and 20 feet because you will not have enough room to save the helicopter, and if you drop the helicopter, you will do some serious damage. I can't stress this enough.

Orientation training is something you will never stop as long as you fly a helicopter. You start with your nose in and then work on flying backward and upside down. Next, work with flying in a circle with a constant pirouette upright and upside down. After you master that, you can move on to picking a cloud in the sky and doing pirouetting loops around it. You will not get a proper start until you master nose-in hovering.

By CHRIS MYERS From Notam Bayou City Flyers Katy TX

#### Minutes of the Meeting, January 6<sup>th</sup>, 2004 at Marple Library

The meeting was called to order at 7:30 p.m. by Vice President Dick Seiwell.

The roll call taken by membership chair Ray Wopatek showed 27 members and five guests present.

The minutes of the December meeting as published in the newsletter were accepted by the membership.

The treasurer's report was presented by Treasurer Al Gurewicz and accepted by the membership.

#### **Old Business:**

President Keith Watson reminded us that the February meeting would be the annual club auction. The auction will begin at 7:00 p.m. Al Tamburro, auctioneer, said he would be there at 6:30 to review and set up items for auction or table sale. Al reminded us that the club commissions are different for each type of auction and asked people to bring in their surplus modeling items to be sold.

January is the time for annual membership registration and \$60 dues.

#### **New Business:**

Dick Bartkowski brought up the possibility of flying at the Salvation Army gym in Chester. He and Dave Harding will pursue this option.

After a call for volunteers, John Drake agreed to help Bob Kuhn with updates to the club's Web site.

#### Show and Tell:

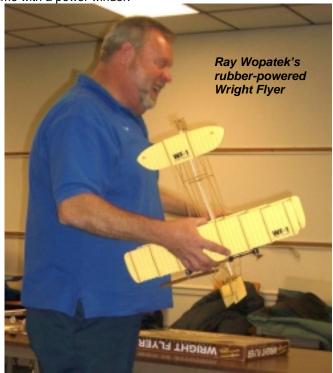
Ed Goretzka showed his scratch built Cleveland Playboy with a 64-in. wingspan in the cabin version. It has a multicolored wing and silver fuselage. Ed supplied power with an old Astro 05 on 7 cells.



Rich Bourassa showed 2 indoor fliers including a DJ AeroTech corsair with full R.C. control using lithium batteries and actuators for one and conventional controls on the other.



Ray Wopatek showed a rubber powered Wright flyer that came with a power winder.



Al Tamburro showed his scratch built hand launched glider. Adjournment: The meeting was adjourned at 8:39 p.m.

Richard Bartkowski, Secretary

#### Editorial: California Dreamin' continued from page 1.

This plane flew beautifully and with the 6:1 gearbox and a large prop it was capable of hovering flight. I believe we could organize a club activity this summer with similarly powered WWII Warbirds. More on this in a future issue. Once again the indoor activity was predominantly freeflight and this day they held a catapult glider contest.

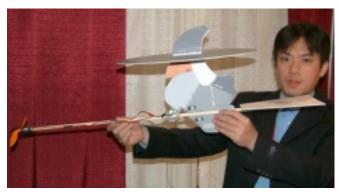
Anther key event for me in my January Pasadena sojourn is the AMA Symposium, formerly the IMS Show. This year it was held for the first time in the Ontario Convention Center. I really don't know the reasons for the change but for me, and probably others, it was not a good change.

The first reason is that Ontario is about 45 minutes of busy interstate 10 driving east of Pasadena. This may sound selfish but it is probably this much further for most people that live in the LA basin. The second reason is one of comfort. When an event is held at the same venue for so many years something happens in the atmosphere, it just becomes comfortable.

Certainly there were many fewer attendees this year and it seems as if fewer vendors participated too. Also, the indoor flying demonstration area was rather limited. It was just a small strip off to one side of the great convention hall. Now in prior years this area has been the sovereign space of the OFFC and Black Sheep folks. This year commercial interests were injected resulting in some pretty hairy "demonstration" flights over the heads of the attendees. This with large foam aerobats too. Of course, it could be that I am getting too old to accept progress!

Anyway, here are a few of the interesting items that took my fancy. First, some whimsical models from GWS. The first two are of Harry Potter and a Wizard flying their Quiditch sticks. These use an outsized hat brim as a wing.







The second pair are a couple of bugs, a bit like Rich Bourassa's flying saucer that he has been developing for a few years!

Another item that took my eye was a flying model of the Boeing CH-46 helicopter. Wow, what complexity, but since it is based on a commercial rotor and propulsion system, this one seems like it may succeed. I explained to the vendor that this was obviously an amazing feat as the CH-46 in the real world is unstable about all axes! He responded that he knew this and it is the reason that the model has two gyros, one in pitch the other in yaw!



Also on the clever idea front, RC Direct showed a really neat stick-on very lightweight antenna at about \$12 each.



They can be stuck to the surface and connected to the receiver via a short piece of wire and connector.

I usually rely on my SoCal friend Ron Samuels to seek out all the show specials so I can invest in the latest technology. Amazingly, neither Ron nor I found much to be excited about. Indeed, I only purchased two simple pin vices from the tool vendor and a Cox 15 carburetor for my O&R Texaco motor.

Even the indoor technology was down a little from other times although Chuck Havlaha continues as a leader in the micro RC arena. Here are a couple of his planes, a four motor full up RC B-17 based on the old Sterling print-wood kit, an own design profile Catalina and an Eindecker.





Tony Naccarato and the OFFC group man a series of tables where attendees are coached in Delta Dart building. Tony and his mother Adie run the very popular T&A's Hobbies in Burbank. Definitely worth a visit if you are in the area, but be patient if you want something special as the place is an organizational disaster! The OFFC are the primary group giving indoor flight demonstrations and they bring a ton of models to display and fly. Here Don Butman is shown with a whole table full of his No-Cal profile rubber powered models.



You can see the rather limited flying area to the right of the table. All of the exhibits are in the rest of the hall to the left. Many of you have seen the indoor models that Dick Bartkowski and I (and others) have made using ready-formed Depron molded wings. These wings are available, together with other electric indoor supplies from Takeoff2000, a small vendor in Nevada. Well this year as I was trying to order some I had difficulty getting a product list. It seems they are good at making the wings and stocking the parts but the customer interface leaves a little to be desired. They do provide outstanding service once you know what it is you want to order.

Vanessa, one of the owners, mailed a poor copy of their product catalog so while watching a football game last month I put their information onto a web site. Vanessa and Greg planned to be in LA at the time of the AMA Show so we arranged to meet and swap tales. They are trying to import a line of electric powered freeflight "toy" models and they showed a couple of them to me. This one is similar to their Wild Wing kit, which I built for fun in SoCal. I was unable to bring it back as it doesn't pack well.



Returning from the warm sunny weather to the icebox was a blast. Why did we come back so soon? Ask the boss!

Dave Harding

#### Indoor Flying Report

Another Indoor Fun Fly at the Tinicum Elementary School on January 6<sup>th</sup> has launched us into the New Year. We saw examples of all types of indoor flight including: rubber and capacitor powered free flight and battery powered RC and even an electric powered RC helicopter brought by a guest.



Rusty Neithammer dominated the air with his new IFO Trainer <a href="https://www.wildrc.com">www.wildrc.com</a>, which was highly modified with a twin motor drive and 3 servos that give his plane elevon and rudder control.



Rusty probably had the most flights of everyone that night. Every time I looked Rusty had another plane in the air.

New member Rich Bourassa had a maiden voyage with his Lil' Skeeter plane from Dynamic Web Enterprises <a href="www.smallrc.com">www.smallrc.com</a>, which deceptively looks like a rubber band powered plane it is so small. It weighs only about one ounce with RC throttle, rudder and elevator!



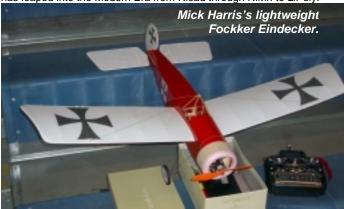
I think everyone was surprised because when he launched the plane it was so quiet and he flew it in simple left hand circles, looking very much like a rubber powered free flight. Then he started flying left and right and that got your attention. When Rich got a feel for the plane then he opened up the throttle and that little plane really was FAST! Rich also flew his DJ Aerotech Corsair successfully. The Corsair is a new plane also. See the picture in the monthly meeting show and tell.

Junior member John Drake flew his Mini IFO and some of his free-flight creations indoor at the gym. He has been practicing with his IFO for a while now flying in close to himself outdoors to get accustomed to flying in a small area.

Richard Bartkowski has mastered his capacitor powered P-47 free-flight plane. He had flight after flight with a well-tweaked airframe and had his capacitor power plant charges timed just so. The plane barely skimmed the ceiling in the gym circling and then descended. Very nice flights!

I was flying my Mini IFO and finally achieved sustained inverted flight indoors. Ok, I planted it into the floor a few times trying...but I did it! The maiden indoor mission of my DJ Aerotech twin motor P-38 was scrubbed due to a servo stripping out of the plane. Mick Harris brought his lightweight Fokker Eindecker that uses the GWS

motor, servos and Rx. with a Li Poly battery. In two giant steps Mick has leaped into the Modern Era from Nicad through NiMh to LiPoly!



If I have missed any good flights from that night, please forgive me, I was working on my own flights. Please feel free to tell us all about your flight at the next club meeting if I missed it here. Better yet, bring some digital photos for the newsletter.

With recent advances in technology micro planes have become more affordable....well, somewhat.... Lithium and Lithium Polymer batteries, Micro actuators and micro Speed Controllers and Receivers have enabled indoor flyers to take a rubber band powered sized plane and make it "full house" controllable just like the large nitro planes. Having rudder, elevator, ailerons and throttle all proportionately controlled gives them the feel of larger planes. Equipment required for these small planes was once very hard to acquire. Many components were hand made and there were very few produced, making the cost almost untouchable. Many manufacturers have stepped up with affordable alternatives to the hand made electronics including GWS and a micro line of equipment from Cirrus. Although the size of these planes is on a smaller scale the power is not lacking.

Remember that these planes aren't just for indoor flying. The investment in small planes won't restrict you to flying indoors. Flying in a secluded place like Moore field is excellent where the tree line shields from winds when at low altitude. These small planes perform excellent for those long summer evenings with almost no wind.

Thanks to Mike Black and Richard Bartkowski for the arrangements they have made to make our indoor flying possible. Also thanks, to the Interboro School District and the Salvation Army for providing a place to fly.

Check the "Events" area of the newsletter for added dates. Dates for the Salvation Army gym and a date for the Interboro High School gym have been added. The Interboro gym is 3 times the size of the elementary school gym and it should be fun to stretch our wings.

Keith Watson

#### HINTS AND TIPS FROM FELLOW MODELERS

#### IS THAT IRON HOT ENOUGH?

A good way to see if your iron is hot enough, or worse yet, too hot, is to place the iron on a stand (I use a 6-inch scrap 2 x 4) so the foot is facing up. The top of the iron should rest on the 2 x 4. Get a scrap of the material you are using to cover the airplane. Using a Coverite thermometer, heat the iron to the recommended temperature. Then, rest the scrap on the shoe. If it shrivels into a ball right way, the iron is too hot. Readjust the temperature and try again. If nothing happen, then the iron is too cold. Keep adjusting until the scrap barely shrivels. I wait until it shrivels rather slowly and use that temperature as my hot setting. For my low setting, I watch for the piece to shrivel in a few seconds. Since I use MonoKote almost exclusively, I just mark on the iron where the two settings that work best for me are located. You might have to experiment to see what works best for you.

#### **FUEL CANS**

If you have a favorite or otherwise standard fuel can in your flight box, then you routinely transfer fuel from one can to another. While you are doing this transfer, you have the perfect opportunity to make sure you are using only the cleanest of fuels. Put a coffee filter in the funnel you use for the transfer for super-fine fuel filtration.

#### SCRAP ALUMINUM

One of the most useful and inexpensive tools in the workshop are pieces of scrap aluminum angle-iron of various sizes cut to various lengths. I find that a selection of 1-inch, 2-inch, and 3-inch pieces, varying in length from one to six inches, is quite helpful, and these can be obtained at a metal supply shop. If you have a metal fabricator near you, you might try asking him to sell you some scraps of angle about these sizes. Since these lengths are considered trash to these fellows, you may get lucky and get them for free. Even if you don't, the cost should be minimal, and as useful as these are I would have purchased new stock and cut it up into pieces to obtain these tools.

What good are they, you ask? Well, here are a few of the things I use them for, and I'm sure you can come up with more once you start using them. First off, this is a great way to align the table on disk/belt sanders, drill presses, band saws, etc. You can use them to hold items to be glued or drilled exactly perpendicular to the work surface, such as drilling into the edge of sheeting, or holding ribs at 90° to the table while your adhesive dries.

#### **GLASSES AND PAINT**

Do you wear glasses? Do you spray paint your models? The next time you do both at the same time, try this. Stretch a piece of Saran Wrap over the glasses using some Scotch tape to hold it in place. Now when you finished painting, simply peel off the Saran Wrap and you'll have glasses you can still see through. (Technical editor's note: Using safety goggles is another idea.)

#### **EPOXYING HINGES**

An easy way to epoxy hinges in control surfaces and to be sure to get the glue to fill the hinge slot is to use a plastic drinking straw as a disposable "hypodermic." Flatten the end of the straw between your fingers and test fit it into the hinge slot so you will get the hang of inserting it. Then mix your epoxy, scoop some up in the end of the flattened straw, insert it into the slot, and "milk" the epoxy into the slot. You can wipe the outside of the hinge slots off before inserting the hinges. This assures that each slot is filled with epoxy. I like to take a small drill and drill though the control surface to pin the hinges with a toothpick. The toothpick should be cut off flush and a small piece of covering placed over the pin. These are only noticeable upon close inspection, and the benefit to the control surface is substantial.

#### **INSTRUMENT PANELS**

An easy and cheap way to obtain an instrument panel for that sport model is to look through a full-size airplane magazine for an advertisement showing instruments. I found one I liked and used my scanner to scan the image into the computer, and then pasted it into my word processor, scaling it to different sizes. This could also be done using a copy machine that will reduce. If using the computer, any size can be easily scaled, and I printed out several different sizes to have on hand. The ones I did were all in black and white, but if you have access to a color scanner and color printer, some really nice instrument panels can be created this way. You also could add color to black and white copied instruments using markers or colored pencils so they look more realistic.

#### MYLAR COVERING

Have you ever had trouble peeling the backing from Mylar covering material? I certainly have, especially with the lower temperature coverings. The easiest way to prevent a nervous breakdown when you are trying to peel this stuff is to use two pieces of masking tape. At a corner of the Mylar, stick a piece of masking tape on the front and back of the covering, with about half hanging over the edge so that the pieces of tape stick together past the edge of the covering material. Then peel the two pieces of tape apart, and presto! The backing peels right off. Happy covering!

#### REMOVING OIL RESIDUE STAINS

To remove oil residue stains from a four-stroke exhaust, take the exhaust from the engine and pack it into a can of hand cleaner, such as Goop or Gojo. Leave it there for a couple of days (the longer the better). Upon removing the exhaust from the cleaner, rinse it with warm water, and the baked-on residue comes right off with some light scrubbing.

#### LIGHT, STRONG SERVO MOUNTING

The servo trays that come with the radios require a 6-point mounting. They never fit right in your airplane, and they allow the servos to flop around too much under stress. A lot of kits include hardwood servo rails, but these are heavy, require reinforcement on the typical fuselage side, and are a pain to fit correctly.

Try making your own mount out of light plywood. It becomes a strengthening part of your airplane, is very light yet rigid, and you can set up your servos in the configuration you desire. Glue in a couple of light scrap balsa rails to the sides of the fuselage for guidance and to increase the gluing area. Cut the light plywood to fit the sides of the fuselage snugly and cut appropriate holes for the servos. Add an extra small piece of light plywood underneath, where the servo mounting screws will go. Now you're all set.

#### **EASY MOUNT COWL**

To prevent cowl screws from crushing balsa, drill a large hole through each side of the cowl. Drill holes through two dowels to make wooden bushings (If you are able to, use a lathe). Finally, glue in the now suitable diameter hardwood bushings. The screws can be driven into the wooden blocks or into the engine bearers.

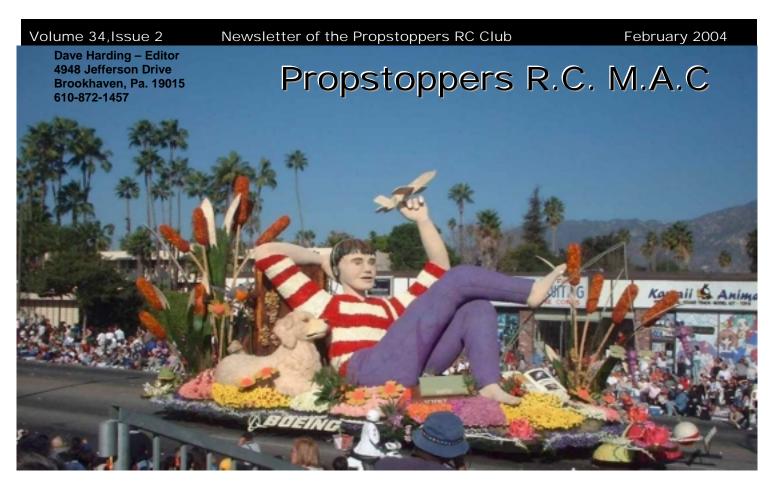
#### **CUSTOM TRIM SEALER**

Cut the ends off large aluminum rain gutter nails. Then bend, file, and polish the resulting "rods" to make custom trim-sealer tools that can be inserted into your TopFlite trim-sealing iron.

#### **CUTTING CORNERS**

For a better fitting joint when using triangle stock, sand a little off the 90° corner to provide clearance for any glue fillet that may exist.

From the January 2004 AMA Newsletter, compiled from various sources, mostly from other club newsletters.



The Boeing float at the 2002 Tournament of Roses in Pasadena, California. Love those blue skies, palm trees and mountain views.

## Membership Renewal For 2004

Membership renewal for 2004 is now due. You can renew by mail or at the club meeting in February.

Dues are \$60.

Ray Wopatek
1004 Green Lane
Secane, PA. 9018

Please enclose a copy of your current
A. M. A. Membership card,
And Please, Please enclose a

Stamped self- addressed envelope.

Ray Wopatek Membership Chairman

## Propstopper's Auction, Tuesday 3<sup>rd</sup> February

7:00 pm 7:00 pm 7:00 pm 7:00 pm

Go right now and get that something that you just know you won't use. Put it in the trunk and be there early.

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