

The Flightline



Volume 44, Issue 2 Newsletter of the Propstoppers RC Club AMA 1042 February 2014



President's Message

Well the indoor flying is coming along well with few exceptions: bumps on head, wings chewed and all in all great fun. Chuck has done a great job keeping the planes in the air with few accidents.

The Middletown library has new management and can no longer provide us with the second Tuesday meeting date. The dates for the next few monthly meetings are as follows 2/11, 3/11 4/15 5/13 6/17 I will have to check in May for more dates. Meanwhile we are looking for meeting room alternatives. I have come up with a few and we will go over all this at the meeting.

Don't forget club dues are due; See Ray Wopatek.

C/A field is very wet please don't drive on runway stay to the left. It seems like Elwyn field at this time seems to be the best and the parking is good no mud. TRY AND BRING SOME SHOW 'N TELL we will make time for all who

brings one in. John will have coffee and donuts at this meeting. If you have something to sell or swap put it in the newsletter or bring it to the meeting. See you at the meeting

Agenda for February 11th Meeting At Middletown Library; Doors open 6:00, meeting at 6:30

- 1. Show and Tell
- 2. Membership Report
- 3. Finance Report
- 4. Alternate meeting room discussion

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2014 Indoor Flying

Mike Black has once again secured the TinicumSchool gym for indoor flying. The dates are;February 7, 20146:30 - 9:30 PMMarch 7, 20146:30 - 9:30 PM

Brookhaven; Saturday nights 6:30 till 9:30 PM Feb 15 2014 March 15 2014

Dick Seiwell, President

Minutes of the Propstoppers Model Airplane Club January 14, 2014

Call to order took place at 6:45PM by Vice-President Al Chung

Roll call by membership chair Ray Wopatek showed 21 members present

Minutes of the November meeting were approved as presented in the newsletter. The December meeting had been canceled due to weather.

Treasurer's report was presented by Pete Oetinger

New Business:

President Dick Seiwell discussed the current field status. Elwyn Field seems OK. Christian academy field is likely very wet and muddy so he advised us to stay away for awhile.

Dave Bevan led a discussion of turbulators and laminar vs. turbulent flow over a wing.

VP AI Chung read a thank you note from the Gateway Community church at the Christian academy site for our flying demo at their fall festival.

Adjournment took place at 735 PM

Dick Bartkowski, Secretary

Calendar of Events

Club Meetings

Monthly Meetings Second Tuesday of the month. Middletown Library Doors open at 6:00, meeting at 6:30 pm. Next Meeting; 11th February

Tuesday Breakfast Meeting Tom Jones Restaurant on Edgemont Avenue in Brookhaven. 9 till 10 am. Just show up. Flying after in the summer at CA or Elwyn Field 10 am. Weather permitting.

Regular Club Flying

At Old Christian Academy; Electric Only Monday through Friday after school till dusk Saturday 10 am till dusk Sunday, after Church; 12 pm till dusk At Elwyn Field; Gas or Electric Monday through Saturday 8 am till dusk Sunday 12 pm till dusk

Indoor Flying See page 1

Special Club Flying

Saturday mornings 10 am Wednesday Helicopter evening in summer Thursday evenings in the summer

Tuesday mornings 10 am weather permitting after breakfast.

Check our Yahoo Group for announcements; http://groups.yahoo.com/group/propstoppers/

Beginners

Beginners using due caution and respecting club rules may fly Apprentice or similar models without instructors at Christian Academy Field. The club also provides the AMA Introductory Pilot Program for beginners without AMA insurance.

Propstoppers RC Club of Delaware County, Pennsylvania. Club Officers President Dick Seiwell reslawns@verizon.net (610) 566-2698 Vice President Al Cheung alandjennifercheung@gmail.com (610) 742-0602 Secretary Richard Bartkowski rbartkwoski@comcast.net (610) 566-3950 **Treasurer Pete Oetinger** 610-627-9564 Membership Chairman Ray Wopatek (610) 626-0732 raywop@gmail.com Safety Officers bgsteam@comcas.ne Eric Hofberg Ryan Schurman throttle152@hotmail.com (610) 565-0408 Newsletter Editor davejean1@comcast.net **Dave Harding** (610)-872-1457 Propstoppers Web Site; www.propstoppers.org

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Show and Tell

Joe Paradine showed a new home made slingshot plane retriever. It throws a weight attached to a line to catch a tree limb to enable retrieval of an airplane. He also showed a battery testing adapter to test if a battery had been charged.

Al Tamburo showed a fox twins cylinder 120 cc glow motor. He managed to buy two of these. He has tested one on the bench and found that it works well. He said it develops three horsepower at 14,000 RPM.





VP AI Cheung's Maiden Snow Ski Flight



When the wind subsided, went back out to Elwyn field this evening and finally accomplished a successful landing on the snow with the Flyzone Beaver. The video also shows a few of the unsuccessful landings too. It was very cold!

http://youtu.be/eYMpY9qWWwE

http://www.youtube.com/watch?v=OIBiP3YuvGU

AI.

The 18th Annual

"CABIN FEVER EXPO 2014"

Model Engineering Show & Auctions April 11-13, 2014 In The Utz Arena (Formerly Toyota Arena) York Fairgrounds & Expo Center 334 Carlisle Ave. York, PA 17404 Largest Show of Its Kind in the Country!

Indoor Flying; 18th Jan in Brookhaven Gym

Ya shudda been there! We had about 15 flyers, and probably 40/50 planes. Everyone came loaded for bear. Spectators? Seems like more of them than flyers. Families, friends, even people visiting the Municipal building. It was a great turnout. This probably led to more than a few midairs as well as a few midfloors. Many of the flyers had enough flying by 9:00, and the crowd started to thin out. All of the flyers left were 3-D and Heli so I set the Heli guys at 1 end, and the 3-D guys at the other, and let them fly the time out.

While the new flying schedule seems to be working well, it seems more flyers are bringing new, and larger, planes, which don't seem to fit into any of the scheduled slots. The guys with the small planes (Embers, Vapors, Cubs, etc, don't want to fly with the larger planes. They don't really fit in with the larger 3-D planes. They aren't aerobatic, and, basically, just want to fly oval pattern. Sooooooo, when the new schedule was made up, it appeared to cover all the bases. How quickly things change. I remember when we could have races between Mustangs, T-28s, and other small foamies. 6 or more in the air at one time. Anyway, in an attempt to fit in a time slot and not shake up to many people, I am going to change the schedule SLIGHTLY to hopefully accommodate all.

Therefore, the new schedule will be as follows---

All time slots will be reduced from 15 min to 12min each. This will allow 5 time slots instead of 4. This time slot will be for the larger planes that are popping up. The times will be posted for all to see at each of the 4 remaining indoor events.

My only other solution is to set a time slot of 6:30 to 9:30 and anyone who would like to fly, have at it.

Oh, also, no models with larger than a 9 feet wingspan. Wink-Wink!!

Chuck



Phil Whittingham and Jeff Frazier Slam January Snow Shut

Just to put bookends on the dreadful snowy cold January Phil and Jeff spent several hours flying off snowy and wet Christian Academy field on Sunday 2nd February. Maybe rather they opened our 2014 CA season. When my grandson and I tried to fly his Gentle Lady there in early January we couldn't event open the gate as the snow has been ploughed against the gate then froze into a solid block of ice. But more snow on the way®



Twisted Hobbies 35" EPP Crack Turbo Beaver



Indoor Model Maintenance By Eric Hofberg Maintaining your Coreless Brushed Motors



I recently experienced a problem with my PZ Ember indoor airplane. Once the throttle was closed, the motor would not restart and upon further investigation, I determined that the motor would restart if the prop was moved slightly.

This particular problem got me to thinking about the many years that I've worked on brushed motors with my other hobby, toy trains. One procedure that should always be followed when servicing brushed motors is to check the condition of the brushes and communicator, which also entails cleaning them. Using a magnifying lope, I carefully examined the small brushed motor in the Ember and determined that although a sealed unit, there were very small openings where the black plastic back was retained by small tabs attached to the motor case.

I used my CRC QD Electronic Cleaner (quick drying formula available from home improvement stores) and after attaching the included tube to the nozzle, I sprayed a small amount with the tube pressed against the small openings.

I'm happy to report that the motor now starts and runs normally! I followed this first attempt with the same treatment on my old PZ Vapor. The Vapor had a motor that had developed a problem causing it to always pulse, rather than run consistently at the same rpm. After first confirming that the problem still existed, I gave the Vapor's motor the treatment and I'm happy to report that the motor now runs fine.

One additional note, I had serviced both of my planes about a month before I had an opportunity to actually fly them and I can now report that they flew normally with good performance from both motors.

Eric Hofberg



Yet Another Aeronautical Challenge, Part 2

In December I described the contest event added to the Southwest Regionals Championships in the form of a salute to Alphonse Pénaud and his pioneering development of the first successful powered model airplane that he called a Planophore. You may remember that this model was flown in the Tuileries Gardens in Paris in 1871.

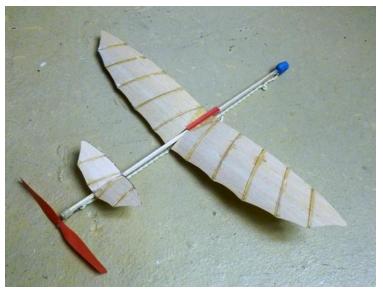
You may also remember that I built and flew a "proof of concept" version of this model at the December Brookhaven Indoor; just to see if it really could be made to fly ~ which it did!

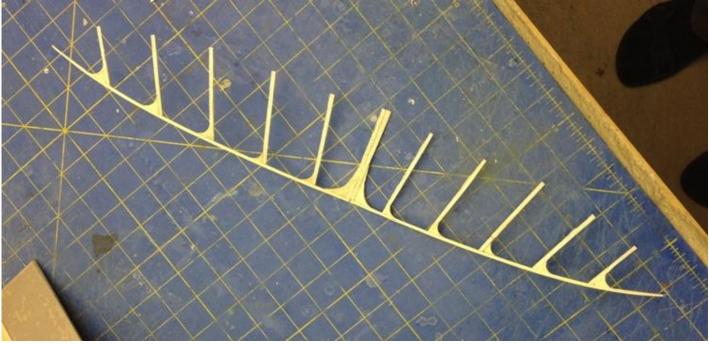
So the challenge was to build a real one which according to the rules must be made from materials available on 1871: balsa, bamboo, piano wire, tissue paper and cotton thread. Well, balsa was guestionable but that is what they allowed.

I decided to build rugged rather than very light weight because at the contest there would be no "long grass" to support out of trim test flying, and it would probably take many flights to trim then put in official times. Furthermore, the rules state the model must be flightworthy following the official flights!

So my first decision was to laminate the wing leading edge from three layers of thin bamboo, planed from window shade stock. This worked quite well so I decided to make the cambered ribs from laminations too; two layers of 1/32 balsa. Same for the tail leading edge too.







For covering I decided to use straight jap tissue without further surface coating but when the trailing edge turned out a bit floppy I added a cotton thread fastened to the ribs and covering with a lick of full strength nitrate dope.

Next the propeller; Experience shows that most props, when properly sorted to the model, end up with a pitch / diameter ratio of one. The rules stipulated a maximum diameter of eight inches so and eight x eight it would be. I decided to make a laminated three layer 1/32 balsa blade formed over a suitable tube. Fortunately I had done the math years ago so the layout was easy. During the layup I decided to add a layer of the Jap tissue to increase the cross grain strength although I also slightly skewed the layup of the middle layer too. The blades came out fine and I made a simple assembly jig to attach blades to the bamboo skewer center piece.



The final tricky bit of design and construction was to mount

the prop in such a way as to allow changes to the downthrust (upthrust!). I made it from .005 inch brass shim; aluminum was not allowed by the rules as although it was available at the time it was very precious and would clearly not fit the spirit of the rules. The following two pictures are devoid of the locking pin as they were taken after the contest when I lost the pin and just glued the fitting in place.





Finally, based on prior experience including the successful "proof of concept" model, I arranged for the wing to be mounted with a positive incidence directly on the fuselage motor stick.



Of course I needed to transport the model to California and thence to Arizona so I decided not to assemble it until the contest, so the parts were carefully mounted in an old kit box which in turn was shipped with my other model in my trusty hard sided golf bag; with a special note to the Transportation Security Authority imploring them no to smash it as they usually do!

Fortunately the box arrived undamaged and I had one more task before assembly; I needed a thrust washer. Fortunately, well not fortunately, but rather as expected SoCal eating, drinking and flying buddy Mike Myers had a box full of possibilities so I selected one of the right diameter and proceeded to complete the assembly. I had brought some rubber of various sizes and a winder. I also borrowed some rubber lube from Mike, so we were set for the long but interesting drive from LA to Eloy. Well, not interesting to the locals but my wife and I can't get enough of the Western Desert scenery, and the drive from LA to Eloy has it in spades!

The weather forecast for the weekend was for excellent conditions; cold in the early mornings but rising to the mid 70s with sun and modest winds. Interestingly enough, unlike the East Coast conditions with which we are familiar, the Western deserts experience different weather patterns. All weekend there was a modest wind in the morning slowly diminishing towards mid day then changing direction 180 degrees and picking up again. These conditions were indeed ideal for most flying but the Planophore was a bit of a different animal. I needed calm conditions if I were to adjust the flight trim for optimum, well, even satisfactory flight.

Indeed, the first two launches were either straight up then down or straight down into the dirt. So trim was adjusted with some nose weight, a hit and miss affair, literally, until a couple of successful flights were achieved.



All this was done in the RC area, so I decided the trim was good enough to drive to the Free Flight area a few miles away and put in some contest flights. We were allowed unlimited flights over the three days with the top flight time counting. But would the model last beyond one or two flights? Time to find out.

Although considerable interest was expressed prior to the event only four or five actually brought models and were prepared to fly. Still, the challenge was there and we set about making some flights. Once again the outcome was way over the map; dive into or pitch up then into the dirt, but one magic flight came out of all this and I recorded a 25 second flight. Not much but more than twice Alphonse Pénaud achieved! So I was in the book and received great support and encouragement from Greg, AI and the other competitors. So back to the RC contest and see if anyone could beat my time. Oh, with one prop fracture; easily fixed, the model remained intact and original condition. But would my high time flight hold for the weekend?

The next day we went back to assess the competition and try to improve our times; this time with rubber lube and an alternate three strand motor. The "successful" flight seemed weak on power so I expected the lube to help but the three-strand certainly would. But with maybe another dozen or so flights all I succeeded with was to match the 25 seconds with a two-strand flight and with exciting aerobatics a three-strand flight.



Old flying and Boeing buddy, Colin Widdison, times. Steve Reilly photo

Clearly a great deal more performance was possible but I had lost the downthrust locking pin in the dirt and had to glue it in place for the subsequent flights. This was a particular drawback with the three-strand motor as the model climbed to maybe twenty feet or so and pitched over into a succession of loops before cruising a few turns near the ground. I had made no provision for aerodynamic adjustments to the wing and tail; clearly a mistake. And adding a small dab of weight to a wing tip achieved the turning flight in cruise but had no effect on the critical climb.

Surprisingly, well, by design (?) the model survived about twenty "launches" and "landings" without damage except for the one prop incident.

The other competitors were very supportive of my efforts on the final day awarded me the trophy, one I will cherish, at least until they ask for it back!



Here is event sponsor and manager Greg Tutmark congratulating me for the win and Contest Director Al Lidberg awarding me the superb trophy.



Challenge accepted and mission accomplished.

If you would like to read more about Pénaud and an analysis of his achievement go here; http://www.endlesslift.com/2014/01/penaud-planophore-review/

Oh, there were other events at the Southwest Regionals. Here is a portion of the RC site.



As most of you know our competition flying is what some people call "stay up". In various classes we either; climb rapidly and then glide, or cruise until power is exhausted. In either case winning usually requires finding and exploiting thermals. This part of flying is the challenging art as you have to pick you time of day when the conditions are right then you have to find the thermals and after that, stay in them but don't get too far down wind. Suffice to say the desert is an ideal place to hold such competitions, particularly in the Arizona desert in January.



I flew my 120 inch Stardust Special, a design from 1941. It was flown in both the Texaco event where I cruised and rode the lift for over 40 minutes and in the limited motor run event to score two maximum ten minute flights, both for the win, although attendance was way down and my keen competition did not make it this year.



Of course with we also fly for fun and my West Coast eating, drinking and flying buddy, Mike Myers brought a forty year old Dolphin for that purpose. It is currently fitted with a 70 four-stroke.



But Mike suddenly found he had his hands full as it swerved left on takeoff and kissed the dirt. Oh well, it is a rugged old bird and will live to fly another day.



The other attraction is the BBQ under the desert stars; magic!



Dave

Bigger Is Better, Isn't It?

Well, maybe not better all the time, but sometimes!



The fellow with the SR-71 had no trouble launching this big guy, but the even bigger F-22 needed a landing gear to get off. Come to think of it, the SR-71 was just lofted vertically in a gentle toss and has sufficient thrust to just fly out. So why couldn't you do that with the Giant sized F-22? But wait, my van will take a 4 x 8 foot sheet of ply, and a bit more, but the F-22 is probably six feet wide, so some assembly is required. But you know, I have the 2 kW motor from my SAM contest models and I have a compound gearbox for it that will allow it to turn big props so maybe I should begin to plan one....

34TH ANNUAL Lebanon, PA RC FLEA MARKET. 3/8/2014

Sponsor: CENTRAL PENN AEROMODELERS

Site: Lebanon Expo 80 Rocherty Rd. Lebanon, Pa.

Larry Leiphart CD PH: 717-412-8579 Email: info@cpaa.us. Visit: <u>www.cpaa.us</u>.

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10 degrees, 12 mph wind = - 17 wind chill or 49 degrees of frost. But we had to do it! Grandson Ian with his Gentle Lady following a three day build thrash and the day before he travelled back to grad school. Had to get that trim flight!

As the Brits say "needs must"



Membership renewal for 2013 is now required. You can renew by mail or at the club meeting in February.

Don't loose your club privileges!

Bring cash or check and your AMA card.

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.

Please send a check to;

Ray Wopatek Membership

At the Meeting;

Cash or Check for \$60 AMA Card showing you are paid up.

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