# The Flightline

Volume 31, Issue 11

Newsletter of the Propstoppers RC Club

AMA 1042 November 2001

#### Editorial - Time to Build

One way and another most of us have had a wonderful summer of flying. We have largely overcome the loss of Dallett field and the members, in wildly different forms, have flown a lot of stuff. The best of Pennsylvania weather is Indian summer and we have made the most of it to the end. Now it is time to begin to lay the foundations for an even better summer in 2002.

We enjoy our hobby largely through our relationships with our friends and fellow club members. Indeed, without our club and its fields most of us would have difficulty practicing the hobby at all. So our off-season building plans should include the club.

We are at the point in the calendar where we elect our club officers. Although the current officers have all agreed to run for office again several of them have asked that other members consider taking over their posts. Rusty and Al Gurewicz would like a rest from their Secretary and Treasurer positions and even our stalwart President Mike believes it would be better for the club if new blood took the reigns. So, we are looking for a few new folks to step up and pitch-in. Now is the time.

One way organizations make these jobs more tenable is to support them with committees, which accomplish specific tasks. We haven't been doing this right for a while so one initiative we will reintroduce is the establishment of some committees.

#### November 8<sup>th</sup> Meeting Agenda

- Review of October meeting minutes.
- Membership report Assessment status and 2002 dues.
- Finance report 2002 budget adoption
- Election of officers last minute nominations and voting.
- Field search report Sleighton status and other fields.
- Indoor flying site committee establishment and reports.

**New Business** 

- Date for auction discussion
- Club breakfast interest discussion
- Date for January meeting (not the 1<sup>st</sup>!)
- Meeting speakers solicitation and discussion and chairman appointment.
- Club Banquet
- Other New Business

Show and Tell

We have almost eighty members in our club and our members possess the widest variety of life skills. We need to bring some of these skills to our club activities.

Much work needs to be accomplished if we are to have a new or improved major field next year. Chris Catania has born the brunt of the work in acquiring Sleighton Field after a search of many alternatives. Now the future of that is in question so we need to help Chris in his quest to find new sites while negotiating with the various Sleighton factions for an extension of our current lease. We will ask Chris to identify the kind of help he needs and we will ask for volunteers for those tasks.

We have the opportunity of a year round flying season if we can secure an indoor flying site. Several members have begun the quest for a suitable site but it has been two months since Al Tamburro suggested we do it and time is slipping away. We need to establish a committee for Indoor Flying so we can move the decisions along to acquire one soon.

Our current meeting process certainly allows discussion on club matters but usually with little preparation or advanced notice. In the future we will publish the meeting agenda in Flightline so members may prepare for the discussion of club matters or become advised of a specific briefing planned for that night. Members may request the addition of agenda items by calling or emailing the topic to the editor at least one week before the meeting. Of course, you are still welcome to bring up new items at the meeting.

The third initiative is to get more members to share their skills. If we did a survey I would expect to find about a thousand man-years of experience in almost every facet of the hobby.

So, we plan to have regularly scheduled briefings at our club meetings and we will publish these in the agenda.

Now to prime the pump we are soliciting members to volunteer to make a briefing or two. Don't be bashful, I'll bet everyone has developed at least one particularly effective skill or idea.

What about organization of efficient workshops as a subject? Think how much time you would save if you store all of your epoxy and alphatic glues nozzle-down in a custom rack! See, it's not hard.

The fourth thing we will try is our own club list-serve messaging system for those members with e-mail. This will allow us to communicate more rapidly. We will establish the group and "subscribe" all the members with e-mail. If you don't want to participate you can immediately "unsubscribe".

A fifth proposal comes from a practice of one of the clubs with whom we exchange newsletters. They hold regular club breakfasts for those members who are retired or have work shifts that allow it. We can discuss this idea at the November meeting.

Meanwhile, think about getting involved, making a commitment, your Club officers have.

Dave Harding

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#### **Calendar of Events**

#### Club Meetings III

Thursday 8<sup>th</sup> November 2001 Marple Newtown Library, 7:30 p.m.

Tuesday 4<sup>th</sup> December 2001 Marple Newtown Library, 7:30 p.m.

#### **Events**

Indoors if we can get a site.

10<sup>th</sup> Nov. DELAWARE RC CLUB Auction and Swap Meet. Site: Shue Middle School, 1500 Capitol Trail. Newark, DE For info: Dick Stewart, PH: 302-368-2911. \$10 tables, 50/50 drawing, refreshments. 9:30AM table set up, auction 11AM to 2PM. For table reservations contact Dick e-mail balticply@aol.com Web site http://www.delaware.org

21st Nov. – MID-ATLANTIC MODEL AIRPLANE
PILOTS ASSN Thanksgiving Eve RC Auction.
Site: James J Gallagher Community Center,
Bath Rd. Bristol, PA. For info: Daniel Mathews
PH: 215-323-2795. Registration 6PM, auction
7PM. Donation \$3.

#### **Regular Club Flying**

At Moore and Sleighton Fields

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

# Propstoppers RC Club of Delaware County, Pennsylvania.

#### **Club Officers**

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Propstopper's Web Site;

http://www.propstoppers.org

Check the web site for the newsletter, pictures and the calendar of future events.

Pictures courtesy of Bob Kuhn and Dave Harding

### The President's Message

#### Mike Black

Here we are nearing the end of another flying season for some and just a much cooler outing for others. Electrics and park flyers are just the thing for the cooler weather. Show up at the field with a fully charged plane. Get out of the car, fly, hook up the battery charger and jump back in the car for a cup of warm coffee while the battery tops off and you are ready to go again. It seems like more and more of you are embracing the 'E' end of the hobby. We have the father of electric in our club, Walt Bryan, who got us all started. I'm sure Walt feels a lot of satisfaction in what he has fostered. His smile at the electric fun fly in August said it all. Now we have Dave Harding, Mick Harris, and Dick Bartkowski, affectionately known at the electric guys leading the way. If last months show and tell is any indication, I think we will see a lot of 'E' show and tell this winter. Al Tamburro, Rusty Neithammer, Adam Kraut, Chris Catania, Bob Kuhn, Lee Russell, Eric Hofberg, and Ray Kiker can be seen flying their respective electric machines on a regular basis. There are others of us that are dabbling and trying to get our electric wings. Jump on this ever-growing bandwagon as soon as you get the chance.

Several members are trying to find a suitable spot for several indoor, rubber-band, glider, and electric outings. We are looking for a no cost or low cost site. Mark Berkmeyer, Al Tamburro and myself are actively searching. The old Sun Center is too expensive. Al has located a low cost site. I am trying to get some dates in what I hope will be a no cost site. Hopefully, we will have something to announce by meeting night. For your information in approaching anyone we are a not for profit organization. We can supply a suitable certificate of insurance for an entity owning a site. The ideal would be to acquire the use of the same facility once a month until March. If you have the time and know of a possible location, please make a few inquiries and give me a call.

Chris Catania has informed me that the Sleighton property has been sold to a developer called Pulte Homes for \$16.8 Million. They will evidently be buying the development rights back from the state in the near future. Chris feels that we will probably be able to work something out for the next year or so, but he has already started the search for a new site. Everyone should keep their eyes and ears open as we search for an appropriate open space.

See you at the meeting,

#### Mike



Vice President Dick Seiwell and President Mike Black can't believe Chuck Kulzynski's Roswell really flies, and at the club meeting yet!

## Meeting Minutes October 2<sup>nd</sup> 2001

Vice President Dick Seiwell called the meeting to order at 7:30 PM at the Marple Library. There were 27 members and 2 guests present. The minutes of the September 4, 2001 meeting, as published in the October 2001 newsletter, were approved by the membership. Treasurer Al Gurewicz gave the treasurer's report with income of \$164.00, expenses of \$530.71 and a new balance of \$2888.19 reported.

The next meeting is <u>THURSDAY</u>, November 8, 2001. Note the date adjustment, which is due to the November elections.

#### **Old Business**

Dues assessment to cover the increased costs associated with Sleighton Field was due as of the June 5, 2001 meeting. As of this writing, 61 members have paid the assessment. Any members who have not paid the assessment are denied flying privileges until the assessment is paid. Membership chairman **Ray Wopatek** has attempted to contact members who have not paid their dues assessment, unsuccessfully in most cases.

There are still a few hats available - 6.00 – see Al Gurewicz.

Field News: We have learned that the Rick Slossberg, the farmer, will not have his lease renewed. We do not have any information on our future ability to use the filed. **Chris Catania** has been in contact with the Sleighton management in an attempt to determine our status. There was discussion of relocating the runway to a site along Valley road (runway oriented parallel to Valley Road), which is a more level location than the present one. See details in the October 2001 newsletter.

**Dave Harding** will be working out the logistical details for delivery of future newsletters via the Internet, for those members who have elected to do so.

Thanks to **Bob Kuhn** for getting the new website up and running. **Mike Black** will be providing some additional input for e new home page.

Send classified ads for sale items or items wanted, to newsletter editor **Dave Harding**, for free publication in the newsletter.

Newsletter editor **Dave Harding** asks members to provide him with reports of events they have attended. This can be done in any way that is convenient, including a simple phone call. Pictures are also most welcome.

#### **New Business**

#### Nominations for 2002 board members:

There was a move to re-instate the present board to maintain continuity of the ongoing field effort (the "Giuliani" clause). However, the same result was achieved via individual nominations, as follows:

President: Vice President Secretary Treasurer Mike Black Dick Seiwell Rusty Neithammer Al Gurewicz Nominees may submit "campaign statements" for publication in the November newsletter. Nominations from the floor for additional candidates will be entertained at the November meeting.

Several board members expressed a willingness and/or desire to be replaced, so additional nominations are more than welcome.

#### Proposed 2002 budget:

Treasurer **Al Gurewicz** presented the proposed 2002 budget, summarized as follows:

Income, based on 75 members paying \$75 dues per member, plus previous income sources such as newsletter ads, etc. \$6177.00

Expenses \$4535.00

Estimated expenses, remainder of 2001 \$1190.00

Estimated balance at end 2001 \$1699.19

A budget surplus is forecasted and deemed necessary based on anticipated but as yet unquantified field expenses. If the anticipated field expenses are not incurred, a vote to refund excess dues to the membership can be held at a future date. The proposed balance was approved by the membership.

It was noted that last years dues totaled \$75 per member (\$55 plus the \$20 assessment) if paid by the January meeting, \$80 (\$60 plus the \$20 assessment) if paid after that. The same rates will apply for the year 2002.

The New Jersey WASP's club has invited the Propstoppers to fly at their field on Rt. 9 and Pennsylvania Avenue, Burleigh, NJ on Saturday November 3, 2001, 10:00AM to 3:00 PM. See http://sport.nj.com.sport/planes for directions.

**Al Tamburro** initiated discussion for holding an indoor fun fly. Possible locations are the gymnasiums of the Haverford and Marple High Schools. **Adam Kraut** will check into using the gym at his school in the West Chester district.

The American Helicopter Museum's Rotor Fest will be held October 13 and 14.

An EAA fly-in will be held at New Garden airfield in Toughkenamon PA on October 6 and 7.

#### **Break**

The 50-50 winner was John Tulia.

#### **Show and Tell**

Al Tamburro showed his new Icarus Demoiselle. Al did his usual fine job of assembly despite the fact that the instructions are in German. Although built exactly per the plans, the model was initially tail-heavy until AL moved the battery pack forward. This may have been due to the

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manufacturer's substitution of an aluminum tail boom for what was originally wood. The model gets 20 minute run times with an 8-cell NIMH pack. The model cost 39.95, plus 39.95 for the motor, 39.95 for the battery, etc.



**Chuck Kulzynski** showed his Roswell Flyer, also sold as the X4 or UFO. This model is relatively expensive at \$395, but it includes all motors plus the electronics module, which contains 4 speed controls, 3 gyros, and other circuitry. The user supplies the receiver.

The model flies well, as Chuck expertly demonstrated at the meeting. Flight time is about 4 minutes using the supplied NICD pack. Chuck has been having fun flying the model in his living room while watching TV. Is he an ace, or what?







Vice President Dick Seiwell adjourned the meeting at 8:55 PM.

Rusty



#### **US F5B Team Trials**

Once again I just happened to be in the right place at the right time as a trip to work on my daughter's old house in Pasadena found me in San Diego during the US F5B team trials.

F5B is a competitive event for electric powered sailplanes flown under FAI international rules.



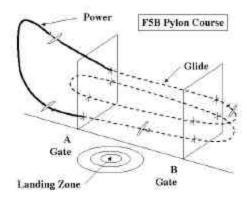
This is Ed Berchtold with his F5B at our 2001 Electric Fun Fly at Moore Field

Countries that participate select a team of three individuals to compete at the World Championships. These events take place every two years and in the off year the country holds a competition to select the team.

The F5B includes three scored elements in each flight;

- A series of laps flown around two "pylons" where the model must glide around after being powered outside the course.
   The model can only be powered up to ten times and the time limit for this task is 220 seconds.
- Following the laps of the pylon course the model is flown for ten minutes. Landing before or after the ten minutes looses points. Points are also lost for the motor-on time during these ten minutes.
- Finally, the model must make a precision landing in a bull's eye. Points are scored by landing in the zones; 30 for the center, 20 and 10 for the outer zones.

Add all this up and you get a score.



The event is flown with seven rounds so you have to be both good and consistent to win.

The models for F5 B are small, maybe 60 inch span, highly powered sailplanes containing a battery pack which weighs up to 1.1 kilograms (about 39 ounces). The latest battery technology allows 27 2000 mah NiCad cells to meet this weight.

The motors are very lightweight versions of commercial brushless motors but with special rare earth magnets. Aveox

makes such motors, as do the German firms of Hacker, Kontronic and Plettenburg. They all include a planetary gearbox, which allows them to turn folding props of up to 18 x 18 inches. With this setup they pull up to 120 amps on the fresh charge (this is why they call them welders, you can weld  $\frac{1}{2}$  inch steel plate with this current!). This is about four kilowatts or 5.4 horsepower, like a racing .60 on nitro. The overall model weight must exceed 2 kg; probably to ensure that super lightweight models don't become too flimsy. When they are climbed to altitude then dived into the course they can exceed 200 mph!

The team trials were hosted by the Silent Electric Flyers of San Dego, SEFSD club, a leading all-electric club with a number of leading electric flight technologists. This club also holds a series of popular electric meets including the Mid Winter Electrics, which I have reported in earlier Flightlines.

Their field is a small open area adjacent to the Sea World parking lot in the Mission Bay area of San Diego, nice spot, dirt field.



There were only eight competitors, most of them from the San Diego club but they are the top guys in the field. Flying took place over the Saturday and Sunday. I was able to attend only on Saturday morning but I did get to see a complete round of competition, in fact I volunteered to help in calling pylon cuts, so I got to see every flight close-up.



Dave at Gate B, this is the way to see them.

The flight is scored by a clever system designed and built by Steve Neu, one of the leading electric flyers and technologists who also writes a column in Silent and Electric modeler magazine. Flights are scored using a timer and two judges at the pylon turns. The timer starts and stops the official clock by pushing a button. A judge pushing a button at the successful turn scores pylon turns. If the model turns short, the judge does not push the button and the lap is not scored.

The scoring device consists of a redundant pair of laptop computers into which the timer and pylon turn buzzers are connected. The computers are programmed to act as the timer and compute the score. How on earth do they score the number of power cycles for the pylon turns and the power-on time for the duration task you ask? This is where clever comes in; each competitor has to supply a second receiver on his channel. This is wired into the computers on the throttle channel, which for F5B is usually a switch rather than the normal throttle stick. Throttle-on and on-time is noted on the computer. Neat eh?

The typical flight starts with a hand launch and climb to altitude followed by a dive into the course at pylon A. The motor must

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be stopped during the flight through the course to and around pylon B and back. It can then be turned back on for a climb and dive to do it again, however, since only ten power-on cycles are allowed the models actually fly two complete laps power off before powering to altitude and diving again. In the time limit of 220 seconds for this part of the flight competitors have made up to 39 laps (a lap is considered A to B and a round trip is two laps!).



Second place Tomas Pils launches for Winner Steve Neu.

At the end of the 220 seconds a buzzer sounds and the model is climbed to altitude for the duration task.

Since motor on-time reduces the score the model is flown as a duration glider, they seek out thermals. Ten minutes at the current model technology level requires thermal assist if the motor is to stay off after the initial climb.

The final task is to end the flight at exactly ten minutes and land within the bull's eye. This seems really tough, as you have to manage the model's flight altitude, distance and speed to match the clock then put it on the ground so it skids into the center of the bull's eye! Sounds impossible to me but this is what they do time and again. This is also used as the end of flight scoring system for the thermal duration towline glider community, so it can be done by mere mortals, but not me.



This spot landing just missed the center bull's eye (model highlighted)

As the turn B judge I was surprised by the lack of precision exhibited by most competitors in making the pylon turns. Few of them anticipated the turn. The better flyers rolled the model to knife edge in preparation but the turn was made after the judge's buzzer. However, these models do turn on a dime and the time lost was small for the better flyers. The costs of cutting the pylon, loss of the lap or time to return are much more significant, so I guess these World Class competitors know what they are doing.

The final scores are shown below. The team is Steve Neu, Tomas Pils, the 1998 World Champion, and Jeff Kessamon, all from San Diego.

Now let's see, I already have an Aveox 1412/2Y and the gearbox. The Hobby Lobby Jerry sorta looks like the kind of airplane but where am I going to put those 27 cells? Al, do you think you can give me a hand with this one?

Dave Harding 🛥



#### Making A Workbench Scale

By Richard Bartkowski

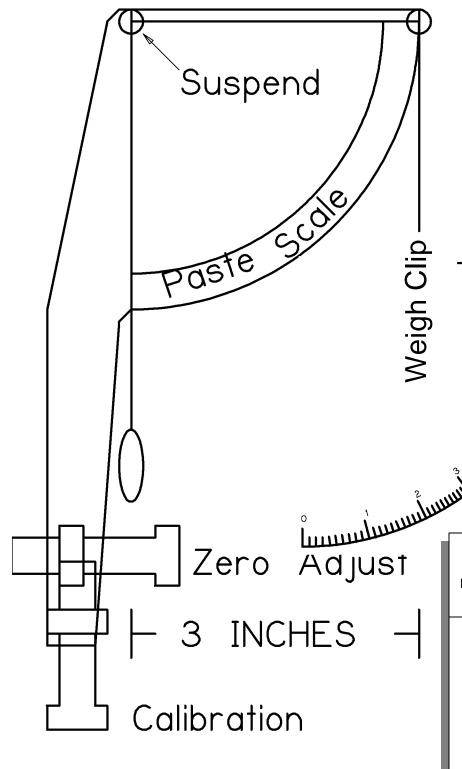
Lightweight in a model can make a difference between a plane that flies okay and one that flies great. Ir order to build light, it is best to have an accurate scale to measure the components that you'll use. The scale shown in the plans here has served me well over the years. I have it hanging from a frame near my workbench and use it frequently.

Once you have the parts you can easily construct it in an afternoon. This scale will easily weigh parts from 1/10 oz to 20 oz. By adjusting the arm length and bolt sizes it can be made to measure 1/10 of these weights or even grams with the same indicator marks. The one shown is the most practical for RC models.

#### Scale construction steps:

- 1. Cut out the scale outline from the plans.
- 2. Drill two holes 1/32 in., 3 in. apart at the suspension and weight point marked on the plans.
- 3. Draw a line on the scale connecting the two holes.
- 4. Glue the two mounting nuts to the frame at the points shown. One is in front the other in the back. You can cut out the holes to make a stronger attachment. Use strong glue such as epoxy and reinforce the attachment with paper or string as a fillet.
- 5. Cut out the scale markings and paste on the scale near the edge making sure to lay the straight line at the end of the scale along the line connecting the two holes. The zero point will take care of itself just make sure it is close to the bottom edge of the scale. The line connecting the two holes is the direction the scale would be f an infinite weight were added to the clip.
- Cover the scale markings from 0 to the end with a single piece of clear plastic tape to protect the marks and allow the pointer to slide freely.
- 6. Screw the two bolts into the nuts.
- Attach the weighing hook; this can be music wire with a light clip or thread with a light clip such as a paper clip, clothespin or other device to hold the material to be weighed.
- Bend a piece of wire and mount the scale with a loop of the thin music wire through the suspension hole.
- Bend another piece of music wire to hang from the suspension point and serve as the pointer by hooking it over the suspending wire. Attach a weight to the other end of this wire so it can hang and indicate the weight. A piece of thread or monofilament should also work.
- Move the zero adjust bolt so the indicator falls on zero. If you use a paper or cloth sack to hold the quarters, zero with this in place. Then at the enc re-zero with your normal hook.
- 11. Add a known weight to the clip [preferably around 3 ounces] and adjust the calibration bolt so that it reads the correct weight. I use a set of quarters. Each quarter weighs 0.1982 ounces. Fifteen quarters weighs 2.973 ounces. 10 quarters weigh 1.982 ounces.
- 12. Repeat the zero and calibration procedures until both lineup correctly.
- 13. You can glue the calibration bolt in place; it will not change.
- 14. The zero will not change unless you change the clip.

Dick



#### Workbench Scale Plans

Drawn by Richard Bartkowski

25<sup>th</sup> October 2001

#### Parts list for scale:

- 2 -- 3/8 in. by 1.5 in. hex head bolts.
- 2 -- 3/8 in. nuts. (Hardware store like Home Depot)
- Music wire -- 0.020 to 0.030 or 1/32 in. GET EXACT SIZE: the weight is critical.
- Plywood sheet 1/16 in. or 1/32 in. doubled along top and edge or plastic sheet about 1/32 in. thick. Need a piece about 5 by 7 in. My piece came from plastic house siding.



# Club Meeting Next Thursday, 8th November

#### Membership Renewal For 2002

Membership renewal for 2002 is now due. You can renew by mail or at the club meetings in November and December.

Dues \$60 plus field assessment of \$20 = \$80. Discount if paid by January meeting \$5

Send a check to Ray Wopatek

1004 Green La. 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** 

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