



# BASS NEWS

The Baltimore Area Soaring Society Newsletter

Year XXV, Vol.V, No. 1

"Information Provider to the Glider Guider"

January 2005

## 2005 Officers:

### **President**

Kevin Sharbonda  
(410) 560-6675

### **Past President**

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(410) 256-3220

### **Vice President**

Erich Schlitzkus  
(717) 993-3950

### **Treasurer**

Don Vetter  
(410) 256-3220

### **Secretary**

Randy Kleinert  
(410) 931-2611

## Appointments:

### **At-Large Director**

Russell Bennett  
(410) 744-2093

### **Contest Director**

Al DeRenzis  
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### **Field Marshall**

John Appling  
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### **Field Safety Officer**

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## MIKE MIECZNIKOSKI

BASS must say good-bye to long-time member and former BASS President Mike Miecznikoski, who passed away earlier this month. Mike joined BASS in the early 1980's shortly after it was formed. Mike was a Mechanical Engineer and fine wood craftsman who put his skills to work making planes which were the envy of us all. Although health problems hampered his flying activities in recent years, Mike and his wife Jeanne were frequently at the Wednesday afternoon flying sessions, a presence which will be missed. BASS offers its sincere appreciation for Mike's contributions and deep sympathy for Mike's wife and family.

## BASS Minutes January, 2005

The meeting was called to order at 7:35 PM by President Kevin Sharbonda. There were 12 members and 1 guest were present.

The minutes of the December meeting were reviewed and accepted.

### **OLD BUSINESS:**

Kevin Sharbonda finalized the club officer arrangements for the upcoming year by appointing the following:

At-Large Director: Russ Bennett

League of Silent Flight Coordinator: Chris Kuhn

Field Marshall: John Appling

Safety Officer: Randy Kleinert

### **ECHLC**

The East Coast Handlaunch Classic has been re-scheduled for May 14 and 15th. The request for exclusive use of Villa Maria is confirmed. Contest Managers will be Erich

*Continued on page 5*

BASS NEWS is a membership newsletter published 6 times each year by the Baltimore Area Soaring Society, a Gold Leader chartered club (#492) of the Academy of Model Aeronautics. Subscriptions are available via first class mail to non-members. Newsletter editors are welcome to reprint any article or portion of this newsletter provided that credit is given the author and BASS News. Article submissions are encouraged and should be submitted no later than the 15th of the month. We prefer submissions in either ASCII or Microsoft Word format, however other formats including printed or typed material are welcome. We reserve the right to edit any submission.

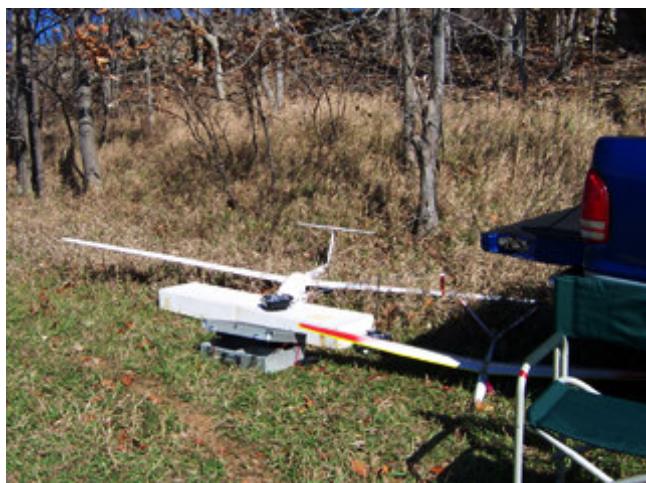
The Baltimore Area Soaring Society is on the web at [www.soarmd.org](http://www.soarmd.org). Check us out!

*Erich Schlitzkus sent along these thoughts and pictures from the Cumberland Slope Session this Fall.*

*Thanks Erich looks like a great time for everyone.*

I thought I would share some pictures and memories from this year's Cumberland soaring trip. It has been 5 years since I have been up to Cumberland for some slope soaring and almost forgot how beautiful a place it is. As the weekend approaches you start looking at the weather to see if the wind will be in the right direction. It seems like the wind and weather on this weekend only come together every 5 years or so. This year the forecast could not have been any better. Time to pack every plane that will slope. I was really looking forward to having the chance to try my 1/4 scale DG202 on the mountain, in a big sky, where the plane looks at home. For the people who do not know, there is a full scale glider port on the other side of the mountain. In years past you may see a full scale glider use the same slope that we use. So my scale plane should be right at home. As you can see from the pictures the day could not have been any better. Blue skies, not to cold and a light wind from the west. I was happy to see a large number of BASS members there as well. I got my feet wet on the slope in the morning with my two meter then stepped up to the DG202. I stepped up to the winch and had Russ Bennett launch the plane while I ran the winch pedal. (The fuse is so big you need two hands to throw it). It was a short winch line so the plane quickly punched out over the ridge line into the valley. As far as a scale plane goes my DG is very light ( 7 pounds ) because the wings and tail feathers are built from scratch using Kevlar over foam with a carbon spar. This makes the plane almost feel like a unlimited plane in normal flying, but if you push the nose over the plane will speed up much faster than any other glider that I've ever owned. After searching some bubbles I found a larger thermal to carry the weight of my plane. Lift was filling in rather nicely for early morning which showed promise for the rest of the day. The hardest part of flying the DG is landing. I built it with spoilers and ailerons but no flaps. Spoilers will make the plane sink but will also speed the plane up, unlike flaps on an unlimited plane which bring it to a crawl. After making an approach I was able to safely land the plane some distance away, but it is better to walk a little then to crash or have a hard landing. I had many other great flights that day with the plane and am very pleased with the way it flew. After flying some other planes and sharing some good times with other BASS members and some friends I haven't seen for years I headed back home thinking about the trip next year.





## MORE ON THE SUBJECT OF MODEL BALANCE

### Al Flesher

The last issue of BASS News (November-December 2004) had a sketch for a nifty device to accurately determine the balance point of a model. This follow-up article will provide some theory about where its location should be. For purposes of this discussion we will define the balance point as the location of the center of gravity (c.g.) along the longitudinal axis of the airplane.

Location of the c.g. of an airplane is critical not only for its flyability, but also for its longitudinal stability. We all know that if the c.g. is too far forward, the plane will dive and not fly. We also know if the c.g. is too far aft, the plane will stall and not fly. The present discussion considers only what happens between these two states.

The familiar term **aerodynamic center** (a.c.) of a wing is defined as *the point about which the pitching moment does not change with varying angles of attack*. For normal airfoils, the a.c. is typically located approximately 25% from the leading edge of the wing, although its location can only be determined accurately through wind tunnel tests. But a complete airplane consists of more than a wing, so there must also be an aerodynamic center for the entire aircraft that accounts for all the other surfaces. To differentiate from the wing a.c., this is typically called the **neutral point** (n.p.).

Figure 1 defines the geometry of a.c., c.g., and n.p. for tail-aft-of-wing aircraft. Canard configurations have the c.g. and n.p. forward of the wing a.c. Note the standard sign convention for distance along the wing chord; positive distances progress toward the trailing edge. The ratio  $x/c$  is called the **static margin** and is the distance from the n.p. to the c.g. divided by the wing chord length,  $c$ . The degree of longitudinal stability of an aircraft is directly proportional to the *static margin* and it must have a negative value for stability. This means that if the c.g. is forward of the n.p., the aircraft will be stable and if the c.g. is aft of the n.p., the aircraft will be unstable.

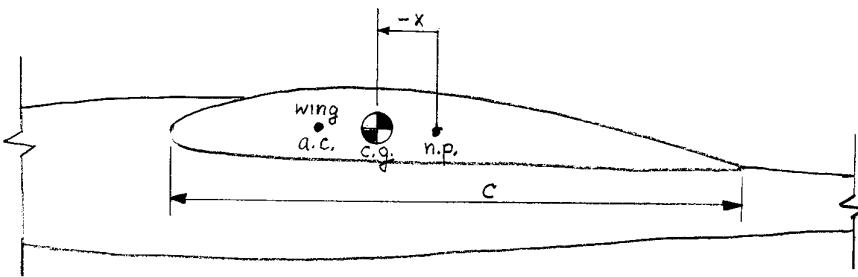


Figure 1

Probably the most famous example of instability is the 1903 Wright Flyer. Wind tunnel tests of this canard aircraft have shown that its n.p. is 5% behind the wing leading edge, but the c.g. was located at 30%. This means the aircraft had a static margin of plus 25%! Is it any wonder the Wrights had a hard time flying it?

Unfortunately, no modeler has a wind tunnel capable of testing our two and three-meter gliders, so precise locations of our neutral points will remain of academic

interest. The objective of model balancing should be to locate the c.g. forward enough from the n.p. to achieve sufficient longitudinal stability, but close enough to it that the model will "sniff" for updrafts. It therefore becomes a "trial-and-error" exercise to find the sweet spot forward of the n.p. where the model is sensitive to disturbances, but not too insensitive to control inputs. A model with the c.g. too close to the n.p.

p. will be sluggish to turn and will stall easily.

After the optimum balance point is found, it is a good practice to mark its location on the model so it can be duplicated after repairs are made or equipment is changed. Also keep in mind that incidence angles of the wing and empennage should never be changed once the optimum balance point is found. Increasing this angular difference will move the n.p. forward, which is not a good thing. Conversely, decreasing the angular difference will move the n.p. aft, but then rebalancing will be required.

### **BASS Minutes, January, 2005** **Continued**

Schlitzkus, Don Vetter and Kevin Sharbonda. There was a discussion about the benefit of including a javelin throw category in the contest this year to encourage involvement by participants of prior contests who are not flying discus events.

**Tentative Flying Schedule:** Al DeRenzis presented a Flying Schedule for 2005, which appears on page 6 of the newsletter. There was much discussion about the format for club contests and possible ways to permit simultaneous flying of unlimited and woodie type tasks on the same flying day. While no final arrangement was decided upon, it appears it will be possible to do so. There was strong belief expressed in the value of contest flying to hone skills.

Several dates for the Woodie contest were discussed. A date will be finalized at the February meeting. Preferred dates seem to be July 15th or June 25th. We will also schedule another club picnic and fun-fly for this year.

**Banquet Plans:** Don and Phyllis Vetter will host an Awards Buffet. It will be held at the Vetter's house on February 5th, 1:00 PM till 6:00. Please contact Don for directions and to arrange to bring food dishes.

**Demonstrations:** So far there have been no volunteers to present demonstrations. Please contact Kevin to offer to present a demo, or else he will contact you.

#### **NEW BUSINESS:**

Kevin distributed a flyer about the Lebanon, PA, swap meet.

**Support Equipment:** There was a discussion about the availability of club equipment. Al DeRenzis will arrange for equipment for contests. Someone else will have to make arrangements for other flying. We discussed the relative advantages of keeping the retrieval pole with the other equipment (our current practice), or leaving it at someone's house. The decision was to keep the pole with the other equipment and work on the issue of overall availability of all the equipment.

**ADJOURNMENT:** The meeting was adjourned at 8:50 PM.

**SHOW AND TELL:** Don Vetter brought a CD-Rom Outrunner Motor and discussed its operation.

**Here is the tentative 2005 Flying Schedule presented at the January meeting**

Date	BASS Functions		Other Functions
1-3			Toledo Show
	16 Club Contest	Villa Maria	
May			
	1 Club Fun Fly	Villa Maria	
	14-15 ECHLC	Villa Maria	
	21 Club Contest	Polo Field	
June	5 Club Contest	Villa Maria	
	5 Club Fun Fly	Villa Maria	
	11-12		SKSS Open
	18-19		Polecat HLG
	25-26		LISF I
July			
	3 Club Fun Fly	Villa Maria	
	9-10		DBSF Open
	18-19		CRRC HL
	22-29		AMA Nats
	31 Club Contest	Villa Maria	
August	7 Club Fun Fly	Villa Maria	
	6-7		LASS Woodie
	13 Club Contest	Polo Field	
	13-14		CRRC Open
	20-21		CASA HL
	27-28		S. Jersey Open
September			
	4 Club Fun Fly	Villa Maria	
	10-11		CASA HL
	17-18		S Jersey HL
	24 Club Contest	Polo Field	
	24-25		LISF II
October	2 Club Fun Fly	Villa Maria	
	8-9		ESL Year End
	22-23		Down East HL
November			
	6 Club Fun Fly	Villa Maria	
	6-7		Cumberland ??

## 2004 AWARDS BANQUET

This year's BASS Awards Banquet is going to be a Buffet. Many thanks to Don and Phyllis Vetter for hosting this year's awards program. The Buffet is open to all BASS members and spouses, dates, significant other's, etc. the date is February 5th, 1:00 to 6:00 PM.

The Vetter's and other BASS party animals can be found at:

11624 Jerome Avenue, White Marsh, Maryland. Call Don at (410) 256-3220 for directions and to volunteer to bring goodies for the buffet.

### Polo Field Reminder

BASS is very fortunate to have access to the Maryland Polo Field for contest and sport flying. BASS members are reminded that the posts should not be moved. Also, be sure to keep the entrance gate locked.

### Club Flying Opportunities

Wednesdays, 1:00 PM, Villa Maria, weather permitting, The BASS "Bald Eagles" gather at Villa Maria to fly gliders and electrics. Contact Bill Cavanaugh for details: BillCavan@aol.com (443) 535-0220.

Thursdays, around 4:30 PM., there is flying at the Polo Field.

Anytime the spirit moves us. Check <http://groups.yahoo.com/group/BASSrc> to see if anyone has posted a message about flying.

### Buy and Sell

Craft Air Step Two kit. 77" span, \$25.00 call Ken Hands (410) 795-2060

JR 652 Transmitter and 600 Receiver. Wall charger and instruction book \$100.00.

STRATOS Glider kit: 3200 mm (10 + foot) span sheeted foam surfaces, molded fuselage.

Randy Kleinert (410) 931-0094 or [hroncall@compuserve.com](mailto:hroncall@compuserve.com). Make offer

## Newsletter Contributions

Don't call the IRS, BASS is not trying to raise money. But what we need is for members to share information and their wisdom about this great hobby of ours.

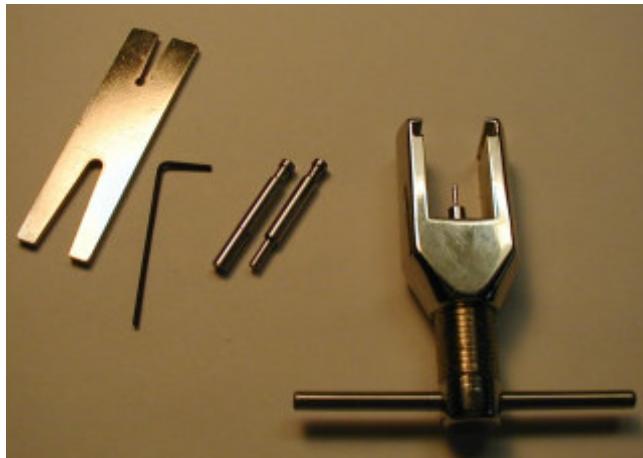
Many thanks to Erich Schlitzkus and Al Flesher for their contributions this month.

## New Tools

Randy Kleinert

Two new tools have hit my bench recently. Both came from Stevens Aero, but they are available on many of the hobby websites. This is not a product review like the ones which fill our previously esteemed magazines, so I'm not going to tell you about the fancy boxes they came in (which they didn't by the way) and whether they were subject to damage in shipping, so lets get right to it: The first is a gear puller with 1, 2 and 3 mm pins. If you have ever tried to pull a pinion gear from a motor without one of these tools,... well enough said. You insert the pin into the driving screw (my terms not theirs) and catch it with a set screw. Next, slide the steel plate between the pinion and the motor and insert the plate into the grooves in the base of the unit. Then turn the screw down through the pinion. Piece of cake. Well, you will probably have to make a few extra plates with varying thickness to be able to get between pinions and motor bodies, but the alternative is to hold the motor with your left hand, while carefully lowering the drill press chuck with your home-made pin down into the pinion with your right hand while holding the pinion steady with your third hand.

Cutter-stripper. This tool says it snips and strips wire from 14 to 26 gauge. The snipper works very well, but so do diagonal cutters and other tools. But the stripper works great on small diameter wire, which few strippers do. As you squeeze the handles, the outside grips grab the wire, then the strippers come together, cut and pull off the insulation. Wow! The tool works fine on larger diameter wire too, but again so do other strippers. I'll bring them to the meeting so you can try them out. If you haven't paid your dues yet, we'll try them on your fingernails.



*Gear Puller*



*Wire Cutter Stripper*

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# Baltimore Area Soaring Society

## 2005 Membership Application

Full memberships are \$30.00. Junior memberships are \$12.00, and associate memberships are \$18.00. If you would like to join BASS, or have not renewed, please take a moment today to write out a check and send it in along with a copy of this application. Please complete all information.

2005 promises to be another award-winning year for BASS. Be part of it!

### *Personal Information*

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

PHONE (WORK): \_\_\_\_\_ PHONE (HOME): \_\_\_\_\_

AMA NUMBER : \_\_\_\_\_ (Valid AMA Membership is required)

LEAGUE OF SILENT FLIGHT & LEVEL (if applicable): \_\_\_\_\_

PRIMARY RADIO FREQUENCIES \_\_\_\_\_

PRIMARY PLANES \_\_\_\_\_

NAME OF SPOUSE OR SIGNIFICANT OTHER: \_\_\_\_\_

E-MAIL ADDRESS (IF AVAILABLE): \_\_\_\_\_

Signature: \_\_\_\_\_

In what areas of the club would you  
be interested in becoming involved? \_\_\_\_\_

How can BASS help you? \_\_\_\_\_

Please return this application with a check or money order payable to BASS.

SEND  
TO: 

Mr. Don Vetter  
11624 Jerome Avenue  
White Marsh, MD 21162

## **BASS EVENTS**

Feb 3	BASS Meeting, Ridgley Middle School
Feb 5	BASS Banquet (see page 7 for details)
Mar 3	BASS Meeting, Ridgley Middle School
Mar 19	Club Contest, Villa Maria
Apr 7	BASS Meeting, Ridgley Middle School
Apr 16	Club Contest, Villa Maria
May 1	Club Contest, Villa Maria
May 5	BASS Meeting, Ridgley Middle School
May 21	Club Contest, Polo Field
Jun 2	BASS Meeting, Ridgley Middle School
Jun 5	Club Contest and Fun Fly, Villa Maria

BASS Meetings during the summer are held at Villa Maria with flying before the meeting, weather permitting. Other times at Ridgley Middle School

BASS Contests start at 10:00 AM unless otherwise noted. All skill levels are encouraged to attend. Be at the field 1 hour early to help set up contest. Fun flying after events. Spectators and beginners welcome.

## **SOARING SCENE**

February 5	Westminster Aero Modelers Flea Market, VFW Hall, Westminster
February 25-27	WRAM Show, White Plains, NY
March 6	Indoor flying at the National Building Museum, Washington, DC
March 12	Lebanon Flea Market, Lebanon, PA
May 14-15	BASS Hand Launched Classic
June 11-12	SKSS
June 18-19	Polecat Hand Launch Contest, Carlisle, PA
June 25-26	LISF I
July 9-10	DBSF Open
July 30-Aug 7	AMA NATS (Tentative)

NOTE: ESL schedule is tentative and subject to change.



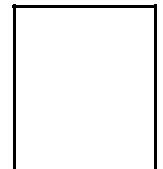
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**First Class Mail**