

# The Flightline



Volume 39, Issue 1

Newsletter of the Propstoppers <u>RC Club</u>

AMA 1042 January 2009

### President's Message

I hope everyone had a wonderful Christmas and a good New Year and maybe some new toys to bring to the meeting or the field.

Talking about fields all the paper work is in, were just waiting for a reply from Sleighton. I would hope to have this by the January meeting. In the mean time if the Christian Academy field is too wet, we can fly at Chester Park. For those how haven't been there, this field is Large with only two trees to catch your planes or helicopters. There is one Fox who will help get your plane; he is fast.

Don't forget Fri. Jan 9th indoor flying.

Well if you have any show and tell please bring them to the meeting, or if you have a trick for covering, cutting foam, or anything which helps in the building or repairing the planes we fly, bring it in and let's share your ideas.

See you at the Meeting Dick Seiwell

Agenda for January 13<sup>th</sup> Meeting At the Middletown Library; Doors open 7pm, Meeting 7:30pm.

- 1. Approval of December Meeting Minutes
- 2. Membership Report
- 3. Finance Report
- 4. Flying Field Situation
- 5. Indoor Flying
- 6. Show and Tell

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#### *Minutes of the Monthly Meeting* December 9th, 2008 at the Middletown library

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

Roll-call by membership chair Ray Wopatek showed 19 members and 1 guest present

Minutes as published in the newsletter were accepted by the membership

Treasurer's report was given by Pete Oetinger and accepted

#### Old Business:

President Seiwell led a discussion about insurance for guests particularly children at our indoor flying events. Several members will investigate what options are available.

#### New Business:

Eric Hofberg invited the club to his open house model train display to be held over the holidays.

Dick Seiwell noted that several club members met this morning, Tuesday, for breakfast at the Tom Jones restaurant in Brookhaven. They then proceeded to Chester Park to fly in a beautiful open field. He said we will continue to do this until our new field becomes available.

#### Show and Tell:

Ed Goretzka showed a Berryloid old timer built from scratch.



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# **Calendar of Events**

#### **Club Meetings**

Monthly Meetings at the Middletown Library (behind Weather's Dodge on Rt. 452) Second Tuesday of the month. Doors open 7 pm, Meeting 7:30

13<sup>th</sup> January

Tuesday Breakfast Meeting The Country Deli, Rt. 352 Glenn Mills 9 till 10 am. Just show up. Flying after at Sleighton Field 10 am.

#### **Indoor Flying**

Friday evenings at Tinicum School 6:30 till 9:30 pm

> 9<sup>th</sup> January 6<sup>th</sup> February 6<sup>th</sup> March

#### **Regular Club Flying**

At Christian Academy; Electric Only Monday through Friday after school till dusk Saturday 10 am till dusk Sunday, after Church; 12 pm till dusk

# Special Club Flying

Saturday mornings 10 am Tuesday mornings 10 am weather permitting after breakfast.

Beginners using due caution and respecting club rules may fly GWS Slow Stick or similar models without instructors.

Propstoppers RC Club of Delaware County, Pennsylvania.			
Club O President Dick Seiwell (610) 566-2698 Vice President Dave Bevan	reslawns@verizon.nef		
(610)-566-9152 Secretary Richard Bartkow (610) 566-3950 Treasurer Pete Oetinger	oldave@icdc.com ski rbartkwoski@comcast.net		
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(610)-872-1457 Propstoppers Web Site; www.propstoppers.org			
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Ed. powered it with an old-time Brown D gas spark ignition motor. The neat cowl was made from a wrapped sheet of 1/64 inch plywood.



Eric Hofberg showed a foam ARF Parkzone T-42 in Navy markings. It has a brushless electric motor and LiPo power. He said it flies amazingly well. He also showed an R.C. electric car wall climber that amazed the group.



Dave Harding showed his scratch built foam Hurricane aerobat trainer model that had crashed that morning. He showed how he plans to fix it to fly again.

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The model was spray painted with Krylon Plastic paint which is available in a range of colors which approximate the true camouflage scheme. The markings were printed from a computer on plain paper and glued to the surface with thinned white wood glue.



Adjournment took place at 8:45 p.m.

#### Dick Bartkowski, Secretary

#### \_Foam Hurricane Developments

Developments of my foam Hurricane aerobatic trainer continued with a couple of "interesting" flight trials. The initial problem with this model was ultra sensitive roll response and possible roll instability. For the first flight at Christian Academy field I had used quite large aileron travel and no exponential in roll; I didn't know my 2.4 GHz Futaba had that feature. So I reduced the roll control travel and prior to the last monthly meeting we made a second flight in Chester Park. We have begun to fly there after our Tuesday breakfast, which we now hold in the Tom Jones restaurant in Brookhaven, five minutes from the park. This time I had "good hands" Brian Williams fly the model, but the roll control was still problematic and after a few passes when trying to gather it up Brian encountered a spin from which it could not be recovered. It went in vertically in a 100 foot descent. The model suffered structural damage to the nose and wing mounting but was otherwise unhurt; all the systems still worked.

Over the next week or so I slowly fixed the structure, one glue joint at a time. Here you can see the nose damage fix with foam added in place of crushed parts and balsa repaired with a small insert.







Here the wing damage to the center line joint was repaired and strengthened with brown paper applied wet and glued with 50% thinned white glue.

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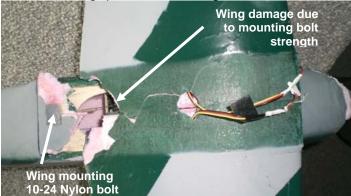
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Thinking through the results of the flight my conclusions were that it was still stable in pitch, as it did not diverge throughout either flight but the roll axis was not stable. Even a small input produced a large roll response and over travel. I thought that if I further reduced the roll travel I might be able to control it. But in the meantime I redid the CG location calculations. I had been balancing the model on the wing aerodynamic center, a location that should be stable but I decided to move the CG forward for the next flight and so added a couple of wheel weights to the nose area; actually lashed around the motor!



Subsequently I discovered that the exponential control feature is available in the Futaba, but it is buried behind another menu item! So with the model repaired and the roll control travels reduced even further and exponential added to the roll axis I was ready to try again. After Tuesday breakfast we again proceeded to Chester Park and I made another "flight". This one lasted just a few seconds with a repeat of the roll problem. It descended and arrived in a slight dive with the left wing low, again resulting in some damage to the fuselage and wing.

In terms what I am trying to do with this model the crashes and subsequent damage is rather encouraging as each repair has been rather easy to execute; a design criteria for an aerobatic trainer. In both arrivals the wing mounting exacerbated the damage. The wind is mounted via a single dowel at the leading edge and a 10-24 Nylon bolt at the trailing edge. The theory of the Nylon bolt mounting is the bolt fails before the airframe, but in this model the wing and fuselage failed each time. I could switch to a 6-32 bolt, and it would be adequate but maybe I will swallow my pride and install some good old dowels and rubber band it in place. It doesn't look so good but should be more tolerant of landing upsets in this low wing model.



I have decided that what this model needs is some roll stability and the way to get that is increase the dihedral. So while fixing the wing damage from the last landing I will break it some more and crank in some dihedral. Watch this space. Meanwhile follow along with my blog; <u>www.dhaerotech.com/foam-hurricane.htm</u>

# Propstoppers Newsletter Index of Technical Articles

There have been many technical articles published in the newsletter over the years. Some of them have become obsolete as the technology has developed but others remain pertinent and correct. So here is the list from which you can go to our website (I assume that you didn't save and bind your old copies) and download the issue that contains the article of interest. www.propstoppers.org/newsletters.htm

Year	Month	Title
2000	January	How To; Replacing Hinges
2000	January	Stall Speed is a Misnomer
2000	February	Sound Levels
2000	February	All About Glow Plugs
2000	April	Tech Note; Lift Part 1
2000	May	Tech Note; Lift Part 2
2000	June	Fuel Tech; Castor Oil
2000	June	Milli Ammeter
2000	July	Tech Note; Lift Part 3
2000	August	What is a Lomchevak
2000	September	Battery Health and Fitness
2000	September	Tech Note; Reynolds Number
2000	September	Heat Treating Music Wire
2000	November	Tech Note; Drag, It's All Behind You
2000	December	About Cross Wind Flying
2001	March	Tuned Pipes and Home Made Fuel
2001	June	Black Wire Syndrome
2001	July	Reversed Controls, A Sure Crash
2002	February	Tech Note; The P Factor
2002	March	Tech Note; Lithium Batteries
2002	April	Tech Note; Lift, Laws and Legends
2002	May	Soldering, The Necessary Art
2002	October	The Joy of Stick Building
2002	November	Tech Note; Heat Engines Part 1
2002	December	Tech Note; Heat Engines Part 2
2003	January	Tech Note; Stability, Slaying the Big Lie
2003	March	Facts About Balsa
2003	April	Tech Note; Flaperons and Pitcherons
2003	June	Taming the Carburetor on Glow Fuel
2003	June	Engine Break-in Procedure
2003	July	Carbs and Break-in, a Rebuttal
2003	July	Covering with Mylar
2003	November	Tech Note; Scaling Laws Rudder or Ailerons, a Discussion of
2004	January	Alternatives.
2004	April	Propeller Balancing
2004	May	Prop Pitch Speed
2004	Luce a	Task Nata The Dask's Otata stills Ast
2004	June	Tech Note; The Radio State of the Art
2004 2004	June July	Tech Note; The Radio State of the Art Tech Note; Drag, Speed and Power
		Tech Note; Drag, Speed and Power Contra Rotating Propellers
2004	July	Tech Note; Drag, Speed and Power Contra Rotating Propellers Thick or Thin, CA That Is
2004 2004	July December	Tech Note; Drag, Speed and Power Contra Rotating Propellers Thick or Thin, CA That Is Workshop and Other Matters; Balsa airplane
2004 2004 2004	July December December	Tech Note; Drag, Speed and Power Contra Rotating Propellers Thick or Thin, CA That Is
2004 2004 2004 2005	July December December January	Tech Note; Drag, Speed and Power Contra Rotating Propellers Thick or Thin, CA That Is Workshop and Other Matters; Balsa airplane repair
2004 2004 2004 2005 2005	July December December January February	Tech Note; Drag, Speed and Power Contra Rotating Propellers Thick or Thin, CA That Is Workshop and Other Matters; Balsa airplane repair Tech Note; Structural Morsels

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2005	June	Cell Phone Interference; Is it real?
2005	July	Electric Basics for the Modeler
2005	September	Crossed Controls; a Sure Crash
2005	September	Using the Supernova Battery Charger
2005	October	Lateral Directional Stability and Control
2006	January	Protection of Electric System Limits
2006	August	Temperature Problems with Modern Materials
2006	August	Two vs. Three Bladed Propellers
2006	September	Push Rods
2006	September	Creating Insignia and Markings
2006	October	Lithium Technology for Big Planes
2006	November	Initial Experience with A123 Batteries
2006	December	Heat Treating Music Wire
2006	December	Dave's Boehle Giant Build Blog
2007	January	Covering Redux
2007	February	Old Timer Scratch Building Project
2007	Мау	Electric Motors, Little Known Facts
2007	July	Some Information on A123 Battery Cells
2007	August	Battery Temperature Measurement
2008	January	Wing Joiner Construction
2008	January	Innovation in Southern California
2008	March	Picking Motors, A Black Art
2008	April	Pulse Jets
2008	Мау	Tool Boxes
2008	May	A New Speed 400 Model for Europe
2008	August	Build a Cowl
2008	September	Run What Ya Brung; Ignitions Engines
2008	September	Learning to Scratch Build
2008	September	Building a Uniflow Fuel Tank
2008	November	LiPo Battery Troubles

## Bill, Draftsman Extraordinaire, Tomasco's Plans List and Related Story

I had been working for Vertol Helicopters, a division of the Boeing Company, for several years as a draftsman-designer when I joined the Boeing Balsa Choppers model airplane club (mid 60's Ed.). There I met our own Dave Harding a fellow modeler. He was acquainted with Bill Northrop the RC editor of Model Airplane News magazine and in the course of their friendship Bill mentioned he was looking for a draftsman to ink construction drawings for him. Dave asked me if I was interested and if so, to contact Bill to see what we could work out. At the time Bill was living in Newark, Delaware and when I visited him I got my first assignment.

The first model was an RC pattern plan called the Bar Fly designed by Phil Kraft and featured in the August 1968 issue of M.A.N. Apparently they liked my work and I inked several other models for them. Some of the original drawings that I had to ink were really crude and it was not a straight tracing and inking. I had to redraw them so the formers, ribs etc. fit together properly.

Bill Northrop eventually left M.A.N. and started his own magazine Model Builder out west. I then worked for Walt Schroder the editor of M.A.N., and in my personal opinion he was not the easiest person to work with.

I forget the exact circumstances but I started working for Ed Sweeney and Bill Winters of American Aircraft Modeler magazine. Working for them was a pleasant experience but eventually the magazine folded. From what I recall, it may have had something to do with American Aircraft Modeler including Model Aviation for A.M.A. publication, to which the other model magazines objected. My last inked plan, Jonathan Livingston Sailplane was published in the inaugural issue of the short lived RC Sportsman magazine.

In the near future I intend to retire after 44 plus years with Boeing Helicopters and have thought about contacting the current magazines but have reservations. In the past each magazine published at least three construction articles per edition, but in this day and age of ARFs we are lucky to see one construction article in each issue. Flying Models magazine is about the only one for the model builder. Some that do appear are computer generated and lack the character of hand drawn plans.

I have an extensive collection of plans that I will share with the club members. Those I penned are highlighted in the lists below.

Bill Tomasco

TYPE	NAME PLAN SOURCE POWER /		
		/	COMMENTS
CL	1/2A MAGICIAN	FM 1-00 CONSTR ART	.049
RCS	AERO ELECTRIC	MIDWEST	SPEED 400
RCP	BAR-FLI	DRAWN M.A.N.	.60
RCS	BIG PUNKIN BIPLANE	MA 3-05 CONSTR. ART.	ELECTRIC
CLS	BP SPECIAL	FM 4-06 CONSTR. ART.	ELECTRIC
RCP	CARDINAL	DRAWN A,A.M.	.60
RCS	CORKY II	KUSTOM KIT	.049
RCS	CUPCAKE	M.A.N.	.010
RCS	DAS FRANTIQUE	DRAWN M.A.N.	.1940
CL	DOUGLAS A6 SKYRAIDER	AM ARTICLE 9-05	ELECTRIC FOAM
CLS	DRAGONFLY	DRAWN M.A.N.	.19
RCS	DRAKE II	MODEL AVIATION	.15 SEAPLANE
RCG	ECLIPSE	DRAWN M.A.N.	
RCS	FRANTIQUE	DRAWN A,A.M.	.19-40
RCS	ISLANDER	R.C.M.	.10 SEAPLANE
RCG	JOHNATHAN LIVINGSTON SAILPLANE	DRAWN RC S.	
CLC	KILLER	DRAWN A,A.M.	.35
CLS	MACCHI C.202	DRAWN M.A.N.	.1523
FF	MINNOW R.O.G.	LLOYD SHALES	RUBBER
FF	MR. MALCOM	FM FULL SIZE	RUBBER
RCS	NAVIGATOR	JETCO	.049099 SEAPLANE
RCP	NEW ORLEANIANS JR	DRAWN M.A.N.	.19
CLS	JR PEE WEE PUP	FM 11-03 CONSTR. ART.	.049
FF	PRAIRE BIRD	PECK-POLYMERS	RUBBER
RCS	PRIVATEER	BERKELEY	.049 SEAPLANE
RCS	PRIVATEER 15	BERKELEY	.15 SEAPLANE
RCS	QUAKER FLASH	FLYLINE MODELS	.020
RCS	QUASIMOTO	DRAWN A.A.M.	1935
RCS	RADIO RODGER	HOBBY HELPERS	.075 DIESEL
CLS	SILENCER STUNT	MA 3-05 CONSTR. ART.	ELECTRIC

#### Sport Model Plan List

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BOAT	SKIPPER	DRAWN M.A.N.	.19
RCS	SKY BUG MICRO RC	M.A. ARTICLE 7- 06	ELECTRIC
RCG	THERMUS	DRAWN M.A.N.	.09
RCS	TWIN LIZZIE 2	FM 4-06 CONSTR. ART.	2 .049074
RCS	T'WINGER	DRAWN M.A.N.	.58
CLST	ZILCH 20	BERKELEY	.049

#### Scale Model Plan List

TYPE	NAME	PLAN SOURCE	POWER/COMMENTS
RC	AERONCA 7AC CHAMPION	M.A.N	GEARED 280
FF	AERONCA C-3	BERKELEY	.049
FF,RC	AERONCA C-3	BERKELEY	.0915
RC	AERONCA C-3 COLLEGIAN	FSM MAG ARTICALE 1- 07	1-1.20 CU GAS
FF	AERONCA CA-65 CHIEF	FM MAG ARTICLE 12- 99	RUBBER
FF	AERONCA DEFENDER	WALT MOONEY	RUBBER
FF	AERONCA K	FLYING MODELS	RUBBER
RC	AERONCA MODEL L	F.M. MAG ARTICLE 10- 74	.60
FF	AERONCA SEDAN	BERKELEY	.049
FF	AERONCA SEDAN	BERKELEY	.020 REDUCED 1/2
RC	ALBATROS DIII	FSM MAG ARTICALE 2- 07	30CC MOKI 180
FF	AMERICAN EAGLE	FLYING MODELS	RUBBER REDUCED 81/2x11
FF	ARADO Ar 96B	AM MAG ARTICLE 12- 05	RUBBER

RC	AUSTER J5 ADVENTURER	FLYING SCALE MODELS	ELECTRIC
RC	AVRO 504	FLYING SCALE MODELS	ELECTRIC
RC	AVRO 504	PETER RAKE	ELECTRIC
FF	AVRO 536-C	WALT MOONEY	RUBBER
RC	PERCIVAL PROVOST	DRAWN M.A.N.	.60
CL	SUPERMARINE S-6B	DRAWN M.A.N.	.1935

This is a partial list of Bill's scale plans. The entire listing of Bill's plans can be found on our website; www.propstoppers.org/plans.htm



Latest status of Bill Fili's B-24 construction. He has started to apply the Monocoat while waiting for delivery of the Neu motors.



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#### The Comet Model Airplane Company

From a Time Magazine article circa: Monday, Aug. 07, 1939

Capital of the original Comet model airplane company was \$5. One day a solemn, blond boy, Samuel A. Goldenberg left the workroom back of old man Bibichkow's tailor shop on Chicago's West Side with \$2 and came back with a bundle of balsa wood, twine and glue. Jolly, dark-haired, young Bill Bibichkow took the rest of the capital and came back with a scroll saw. Working after classes at Crane Technical High School they began to turn out model airplane kits, sold the first one for 43¢. For the first month of their partnership .October, 1929.their books showed: gross business, \$5.59; expenses, \$3.35; balance \$2.24.

Last week, Partners Goldenberg and Bibichkow made an announcement: for the 1940 model year (which begins next month) Comet Model Airplane & Supply Co., Inc. will double its 1939 output, will bundle up 10,000,000 model sets to be put together and flown by youngsters and hobby minded oldsters.

In 1938, business was good, Comet grossed "closer to \$1,000,000 than \$500,000," expects to pass the \$1,000,000 mark for 1939. Today Sam and Bill and Louis Kapp, a young laundry worker who was their first salesman, have 225 employees; by next month's end will have 300 working three shifts. Over the boards, six draftsmen and eight designers wield pen and T square turning out drawings for scale models of most U.S. military and commercial airplanes in the air today, as well as many a foreign models. Comet has 6,000 dealers, 20 full-time salesmen, a branch and salesroom in Manhattan. Its models, ranging from the Dawn Patrol Fleet (retail price: five for 5¢) to the Comet Clipper (\$6.50, less motor), are sold all over the world. Louis Kapp is president, looks after the sales of Comets, edits the Comet catalogue  $(5\phi)$ , is proud of Comet's line which, besides modern tricycle landing gears, includes accessories, model engines (\$9.95 to \$21.50), propellers (Comet produces 90% of the props used by the U.S. model business). Sam Goldenberg is vice president, directs the factory. Bill Bibichkow is treasurer and directs model design. He is proudest of Comet's crack designer, 26-year-old Carl Goldberg, who won five of the six first places in the National Aeronautic Association model contest at Detroit last month. brought three cases full of trophies along with him when he gave up his amateur standing and went to work as a professional model builder.

#### http://www.time.com/time/magazine/ article/0,9171,848104,00.html

#### How to shut up a loudmouth

by ERCOUPE ED (Found on rcgroups.com) . Chad, I'll relate a neat story from Oshkosh, this happened maybe ten years ago, maybe less? Anyway I was near Darryl Benjamin's booth--he had the Gee Bee R2 replica he flew in air shows for several years. Anyway some guy was spouting off about the Gee Bee airplanes and how they were known as killers; Kind of a "knowit-all" kind of guy. This one lady was standing right there listening, and then she spoke and said "Sir, they weren't "killer airplanes" as you describe. They were good airplanes, and many of the pilots who flew them simply weren't as experienced as many of today's pilots are who now build and fly replicas. Father was one of the designer-builders of the Gee Bees and I worked in the hangar doing all sorts of odd jobs for my Dad and my Uncles while they built these airplanes.

Norma Granville was at Oshkosh as a guest of the Benjamin family to watch the R2 replica fly.

He said. "Well mam, how would you know this?" She just smiled , held out her hand and said, .I'm Norma Granville, my father was one of the designer-builders of the Gee Bees and I worked in the hangar doing all sorts of odd jobs for my Dad and my Uncles while they built these airplanes.

Norma Granville was at Oshkosh as a guest of the Benjamin family to watch the R2 replica fly.



#### AMA Introductory Pilot Program

We have a steady trickle of prospective new members show up at our fields or at the indoor meets. Often they are people who have a passion for aviation and think they want to fly RC models. We insist on AMA membership to ensure we are all protected by insurance. But what if the prospective member isn't so sure he/she wants to pay before he/she knows if this is really what they want to do. Well, there is an AMA program that allows us to let these people fly under our close supervision without becoming an AMA member.

The Introductory Pilot Program provides for us to register our club members as instructors and supervise the prospective member in flying their or our planes for a period of 60 days. If the non-AMA member's model is used, it should be carefully checked and the Intro Pilot Instructor should fly it until familiar with it. High performance aircraft should not be used for training. For radio control clubs, if the non-members radio is "buddy-box" ready, its use is recommended. All record keeping is the responsibility of the chartered club using forms provided by AMA, The Intro Pilot Instructor must instruct the non-AMA member in club-related site safety rules. Each non-AMA member must be given a copy of the AMA National Model Aircraft Safety Code, and a copy of the Introductory Pilot Program document along with any other introductory material the club feels is appropriate.

So, what do you think? Should we adopt this program?

Dave Harding

Dave Harding – Editor 4948 Jefferson Drive Brookhaven, Pa. 19015 610-872-1457

# **Propstoppers R.C. M.A.C**





Chuck Kime launches his new Parkzone FW-190 in Chester Park after a club Tuesday breakfast

*Up and Coming Activities Indoor Flying Friday 9<sup>th</sup> January 6:30 – 9:30 pm at Tinicum School* 

Monthly Meeting Tue 13<sup>th</sup> January. The club meeting will be at the Middletown Library. (Behind Weather's Dodge on 452) Doors open at 7 meeting at 7:30

# **Membership Renewal For 2009**

Membership renewal for 2009 is now available. You can renew by mail or at the club meeting in January

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. Ray Wopatek Membership Chairman