



Issue #278

Jan–Mar 2013

SOCIETY OF ANTIQUE MODELERS CHAPTER 27

# ANTIQUE FLYER

## A Rose by Any Other Name



*Bob Rose visits Bob's Rose at the SAM 27 Field*

Perfect weather greeted us at the field on this beautiful March day as over a dozen planes took to the sky to take advantage of this great occasion.

Everyone was looking forward to a special visit from long-time member Bob Rose, who last year relocated to the other side of the Mississippi. As the moment of Bob's arrival approached, a large crowd of miscreants took to the runway to await the formal announcement of Bob's voice over a bullhorn telling us to 'Get Off The Runway!', which was received with good humor and applause.

Stories were swapped and there was much catching up as Bob brought everyone up to date on his adventures.

At noon we were treated to a terrific Bar-B-Que hosted by Bob Film and President-Emeritus Chip Buss with drinks, snacks, and a great pulled-pork sandwich. What a great day at the SAM field.

### Calendar

Date	Event	Location
Apr 6 8am	Sierra Champs FF & OT	Waegell Field Sacramento
Apr 17 7pm	SAM 27 Meeting	Atherton Ave. Firehouse
Apr 18	Speed 400 Practice	TOFFF
Apr 27- 28	Nor-Cal Free Flight Nor-Cal Champs	Waegell Field Sacramento
Apr 28 9am	Wine Country Float Fly	Sal Lake
May 15 7pm	SAM 27 Meeting	Atherton Ave. Firehouse
May 27 9am	Wine Country Float Fly	Sal Lake
Jun 22 8am	Alameda Aeronuts Swap Meet & Collecto	Doolittle Dr. at Harbor Bay Pkwy, Alameda
Sep 27- 29	Crash & Bash	Elk Grove, CA
Oct 6 - 11	SAM Champs	Boulder City, NV

# Presidents Message

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Greetings from Your President

Andrew Tickle

Your Success is Guaranteed!



We need more builders and flyers of antique models. This year, 2013, is the ideal time to get involved. Build, fly, have fun, compete, succeed – your success is guaranteed!

**1) Building** Aric Wilmunder has launched the building sessions at HobbyTown USA. These have been a big success, with great camaraderie and useful progress – especially as an alternate to a cold wet and windy field on Thursday mornings. Around a dozen builders attended. Now the good weather is returning we need to find another time...

**2) Maiden Flights** There is now an extensive SAM 27 Preflight Checklist and a team of Test Pilots. – Don Bekins, Ed Hamler, Andrew Tickle, Mike Clancy and Chip Buss. Don describes this as a “awesome responsibility”, but each member of this group has done this job many times before and is willing to do it again.

**3) Instructor Program** The first instructors will be from the Test Pilot Team. We need flight simulators. You can tell people how to ride a bike but it doesn't mean a thing till you try it. Similarly the basic reactions and responses can be learned on a flight simulator without ever endangering a model.. Similarly buddy boxes can be used to save planes from bad landing approaches and unusual attitudes, etc.

As Mike Clancy has pointed out, the RC flyers lose more models than the free flight guys. So there is obviously more to learn than just takeoff and landing.

**4) Electronic Guru.** Mike Sidwell has taken over this role. It includes everything from programming and testing electronic speed controls and transmitters to data logging models to make sure they are ready for contest flying. A much needed service.

**5) 1/2 A Texaco (Cox 0.049) Postal** SAM 27 has been a past winner. Mike Clancy will attempt to lead another winning team this year.

**6) Speed 400 Postal Team** -- Mike Sidwell will lead a team to challenge the Europeans who follow this event with a fanatic zeal. Informal contests will be held the Thursday after the regular monthly meeting to get planes and pilots tuned up.

**7) Old Timer Limited Altitude** Now we have proven rules There will be a warm-up plus four meets. You don't need to have eagle vision or be a thermal king to enjoy this snappy event with 5 exciting mass take-offs, and the longest flight of 7 minutes.

**8) Barbecue Event** Bob Film will organize a barbecue or two, and a relaxed flying event at the field later in the year – probably at the end of the season when the wind is more likely to be calm enough to fly all day.

So if you are not yet involved in Old Timer building and flying then now is the time. Your success is guaranteed by our support team.

**Andrew**

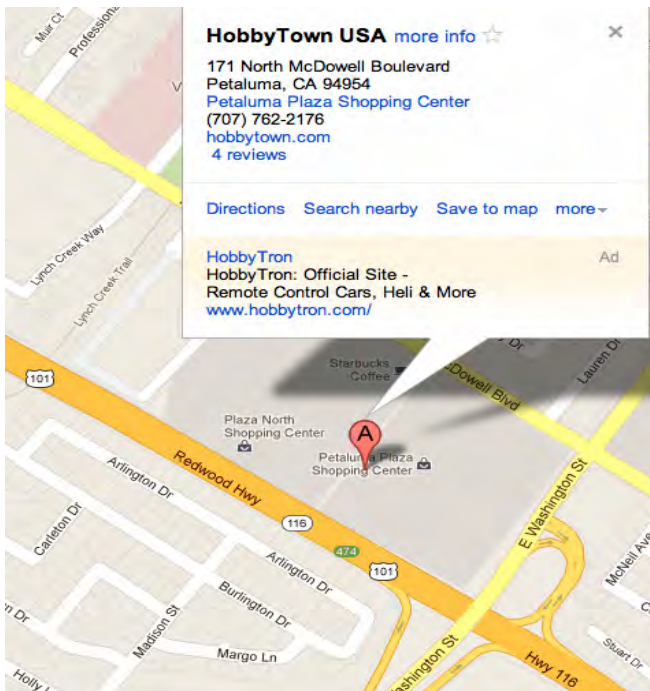


## Around The Field

It may not rain in in California, but the light drizzles that we do get can turn our flying field into a muddy and sticky mess. Last week I stopped by our field for some practice and when I got back to my car I was two inches taller with all the adobe clay that had stuck to the bottoms of my shoes.

Rather than missing out on the camaraderie of our fellow pilots, as many as a dozen SAM 27 members have been meeting at the Petaluma HobbyTown USA for build days. Just pack a project that has been lingering and if the TOFFF weather doesn't seem to be cooperating, come and enjoy the large well lit workspace just down the road in Petaluma.

Build days are the perfect opportunity to get input from others on construction techniques, radio and equipment setups, get a little help trimming your aircraft, repair a fuselage, or bring a wing and work on covering it.



HobbyTown - Just up the road in Petaluma

Owner Steve Elliot (left) surrounded by a variety of SAM aircraft

# Meeting Minutes

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**January 16th, 2013**

Novato Atherton Fire Station

The meeting was brought to order at 7:00 by Vice President Mike Sidwell. Twenty seven members in attendance, no guests.

## OLD BUSINESS

Jay Beasley and Bob Film reported on member Ed Solenberger's health. He is back in a convalescence facility again and hoping to be home soon but the going is slow.

The bylaws are now posted on the SAM27 web site for review.

Jay Beasley reviewed the last meeting held during the day and the problems and benefits of having them during the day.

## NEW BUSINESS

The annual Treasurer's report was given by Jay Beasley and approved by the membership.

It was noted that Paul Stober's health was deteriorating.

Ed Hamler informed the board meeting that member Dick Vaubel had passed away suddenly. Dick had the club flight simulator and his widow was going to check it out and see if she could find it. That was the only reason Ed had discovered Dick's passing.

Andrew Tickle Has volunteered to finish Chip Buss's term as president .

Mike Clancy gave an oration on the spirit of SAM and the direction that the club is going in relation to National SAM. He felt that Andy could steer the club in a positive direction.

Ed Hamler (President of National SAM) gave a promotional oration in favor of Andy's Presidency.

Andrew Tickle was nominated for the presidency of SAM 27, the nomination was seconded and a voice vote was unanimous in his favor.

Andrew assumed his post and relieved VP Mike Sidwell.

A brief discussion of the AMA chapter renewal and insurance was conducted by Jay Beasley.

Ed Hamler brought up the point that for those that wanted to acquire an old time model there were planes for sale or for donation. There is no builder of the model rule in SAM R/C.

Aric Wilmunder brought up the subject of using the back of the local HobbyTown USA to work on a communal build project and was going to follow up on how workable it would be with the owner of HobbyTown USA.

# Meeting Minutes

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## February 26th, 2013

The meeting was held at a different location at 7025 Redwood Blvd. Novato, CA in a very nice conference room above the fire station.

The meeting started at 7:10 PM with Jay Beasley showing a U-Tube video of 'Gross Nanchangs'. Jay got a ride in one of 3 Nanchang CJ-6's and was in the video.

President Andrew welcomed members at 7:20 – Sal Tabi's death was mentioned.

**VP's Report:** A revision of the Bylaws was brought up. A vote by membership on any expenditure over \$100 was added to the Bylaws. The wording was discussed and approved by the members present. There was also a discussion on raising the limit to \$150 but that was voted down by the members present.

The club has several DVD's available for loan to members and a list was passed around. A list was given to each officer. It was also discussed as to how they could best be made available to the members. Work in progress.

**Secretary's Report:** There was no Secretary's Report as our Secretary was probably still sunning himself in Hawaii and was not present.

**Treasurer's Report:** Finances are O.K. The club has 135 members 11 of which have not paid their 2013 dues. It was mentioned that George Benson is recovering from an operation and is doing well. There was an update of Paul Stober and Ed Solenberger's condition.

**Old Business:** Taken care of in the above reports.

**New Business:** Andrew made a pitch for the club to buy a laptop computer for the club's Webmaster and website. The cost would be around \$250. After discussion Jay Beasley said he would donate his retired computer to the club for the use of the Webmaster. Cost \$0.00.

Andrew reported on the HobbyTown Building Day's. Days when it is unflyable at Lakeville members meet at HobbyTown Petaluma for a building session. HobbyTown's owner was approached by Aric Wilmunder to arrange this. Sessions have been attended by several members.

Andrew then discussed a Test Pilot Program and check list for maiden flights. He also discussed an Instructor Program with simulators and buddy box flying.

Andrew then announced a new club position – Electronics Guru. Mike Sidwell has been assigned this position. Mike mentioned the software and tools he has available to help club members should they need help in these areas.

Mike Clancy gave a report on getting ready for the 1/2A Texaco Postal event. The dates are not available yet as the winner from last year has not sent out the information.

Andrew announced another position – Speed 400 Team Leader. Mike Sidwell will be coordinating the club's Speed 400 efforts. We are looking into using brushless motors for practice to preserve our supply of Speed 400 motors. From the back of the room came the chant, build the planes, build the planes. We are looking to have practice meets on the day following the club meetings.

# Meeting Minutes

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Andrew will continue running our Old Timer Limited Altitude events this year.

Bob Film will be doing one or two Barbecue's this year, dates to be announced.

Bob Rose will be visiting on March 14<sup>th</sup> and it was suggested to have a lunch then.

John Trumbull purchased and planted a rose bush at the Lakeville field. The Bob Rose rose. (What color is it?) The \$40 expenditure was voted on and approved.

Ed Hamler mentioned that there will be four new special event awards at the SAM Champs this year. It costs \$100 to sponsor one of these awards and Ed proposed the club sponsor the Olsen 23 event in Ed Solenberger's name. Ed was the originator of the event. Voted on and approved.

Chip Buss mentioned that Aric had suggested that club members get together for things other than TOFFF or contests, visits to museums etc. More discussion to follow.

The meeting was closed at 8:30 PM

**Raffle:** Mike Clancy won a \$35 gift card at Jakes, and Mike Sidwell won a Harbor Freight flashlight.

**Show and Tell:** Paul Kramosil showed an Earl Stahl 1938 Hurricane rubber powered model. He also showed a small rubber biplane. Loren Kramer showed an Ethy fuselage he is working on.

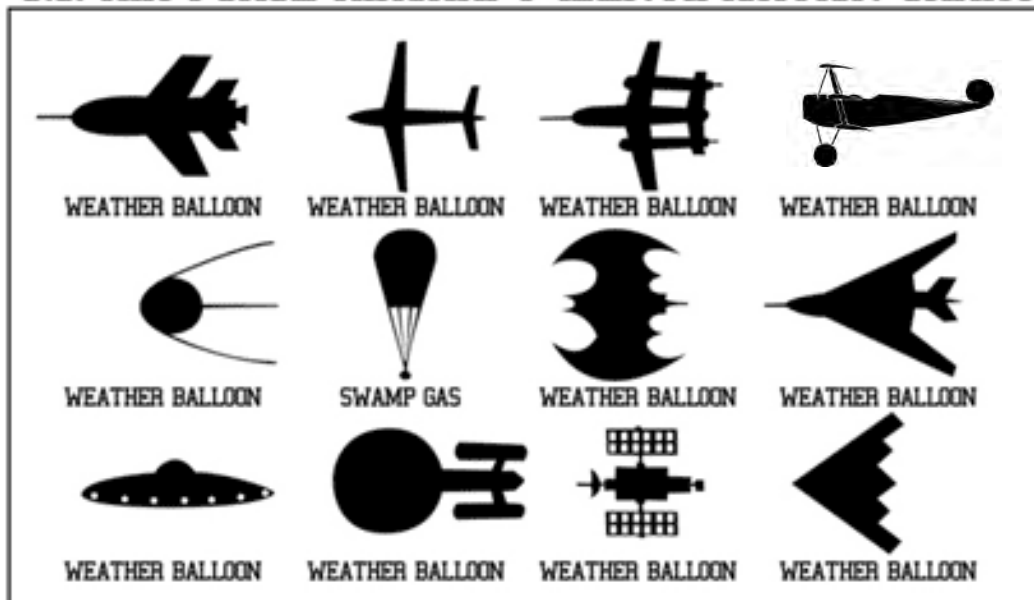
Aric Wilmunder arrived at around 8:40 and briefly talked about the HobbyTown building days. (Editor note: Aric was returning from Cupertino but did not bring a note)

Greg Huffman showed a Dallaire he designed for a flight simulator program. Some members tried flying it in the flight simulator.

Thus endith the minutes.

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## U.S. AIR FORCE AIRCRAFT IDENTIFICATION CHART





# Meeting Minutes

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## March 20th, 2013

The Quarterly Pizza meeting was called to order at 7:00 PM by VP Mike Sidwell. The Treasurers report was given by Jay Beasley- "We got lotsa money!!"

### Old Business

Mike Clancy reported that Ed Solenberger was over his pneumonia and was to have a pacemaker installed.

Mike Sidwell reviewed a minor change in the bylaws which was then approved by the members in attendance.

Bob Film and Chip Buss gave a report on the successful "Bob Rose Welcome back" Luncheon at the TOFF on 3/14/2013. Bob felt that the next one would be better if we had it in conjunction with an event.

### New Business

Mike Clancy reminded the membership that the Special Rubber meet was scheduled for July 22, 2013. The Jimmy Allen Postal event date has yet to be picked and the same applies to the 1/2A Texaco Postal, no date picked.

Jim Temple Noted that Hobbytown in Petaluma was leaving the Hobbytown franchise and the name would be changed to Elliott Hobbies. The change would be taking place in June.

Mike Sidwell showed some hand gliders that Rich Minnick had made that were going on the market. These were donated to the auction.

Chip Buss brought up a problem that had been identified in the programing of the Spektrum 7 transmitters that could pose a safety problem.

Victor Barbieri wanted to show recognition for the fine tribute to Sal Talbi that was written by Ned Nevels.

Andrew Tickle reported that the ALES contests at the TOFF would be starting up using the same rules as last year. This brought up a member discussion of the rules and some objections to them, the object of having the ALES contests and their effect on the TOFF fly day . Ed Hamler President of national SAM announced that national SAM was working on rules for an ALES contest.

The meeting was adjourned at 8:35 PM

### Show and Tell

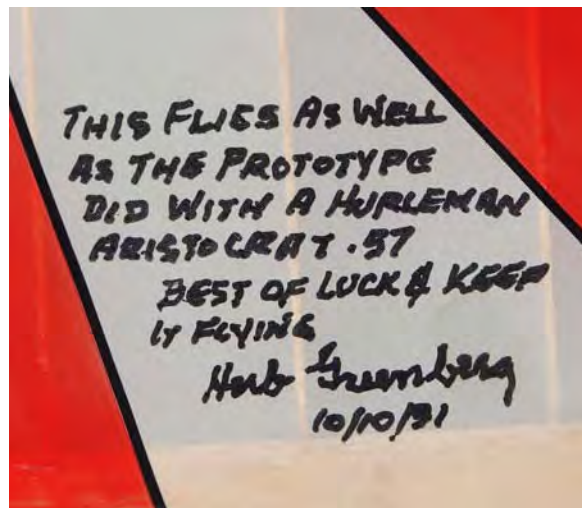
Ed Hamler showed a "Winged Shadow" altitude limiter and gave a demo of it's operation. He informed the members that there would be an ALES event this coming weekend at the meet at the Taft field and national Sam was planning an event at the Nationals this year.



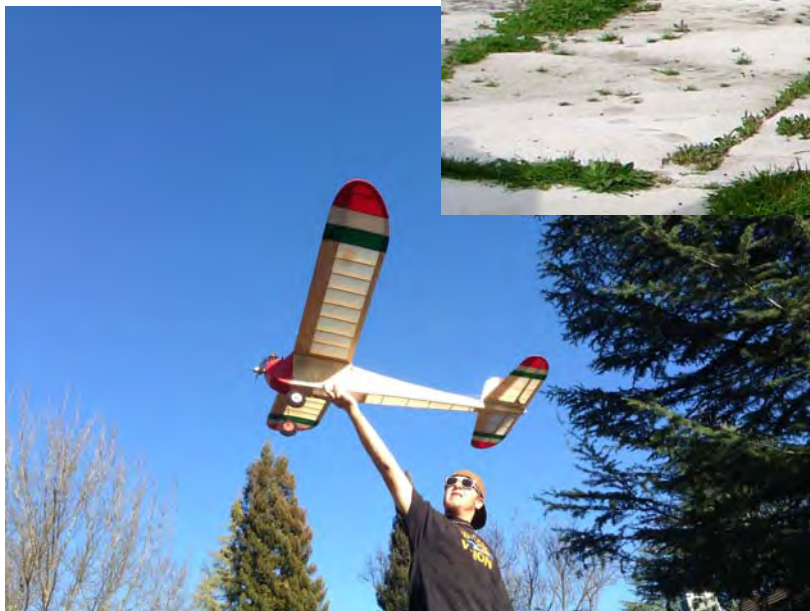
## Photo Ops



Ed Hamler poses next to his Red Zephyr autographed by Herb Greenberg.



Jim Temple brought out this beautiful Playboy Sr. Originally built by Tom Smith of Pioneer, CA. Jim won it at Crash & Bash and last year converted it to electric. The original craftsmanship shows. It flies as great as it looks and it really doesn't want to come down.



Kevin holds Ed's Benny Boxcar during a photo-shoot organized by Mike Clancy. What you can't see is that in order to get the shot Mike wanted, Kevin is standing on top of my SUV.



## Photo Ops



Dick Irwin flying his Westerner makes a perfect low pass over the runway.

Chip serves as everyone waits enthusiastically for 2013's first BBQ at the field. Perfect weather and Bob's visit made this a great occasion.



Another view of the great facility at HobbyTown USA in Petaluma. Andrew Tickle works covering a wing, Ed Hamler sands a fuselage, and Loren is building a wing. Bob Film brought in a micro-heli to trim and Paul Masterman was setting up a free-flight computer



## Photo Ops



Bob and his chauffeur arrive at the SAM field on a perfect day. He's happy to see that we have reserved his regular parking space...



Bob's flying style looks a little more relaxed.... Any more relaxed and he would be falling out of that chair.



Bob isn't looking too happy to see that the club field safety standards have dropped precipitously since he has been away. It is bad enough to have one person on the runway, but the entire TOFFF attendance? **"GET OFF THE RUNWAY!"**

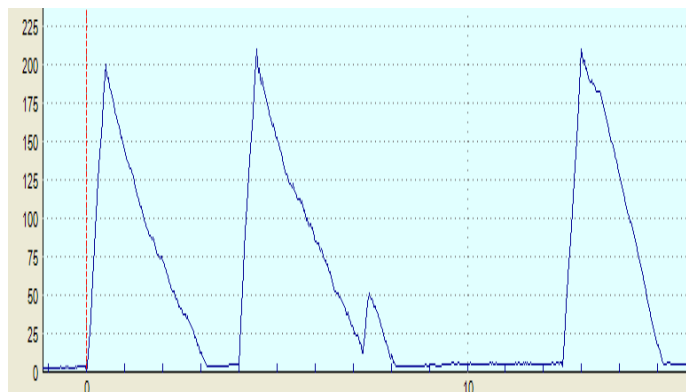


# Nuts & Bolts

## Viking Weight Loss Program — Aric Wilmunder

They say that life is a journey, and for the little 1939 Cleveland Viking that I have been flying it has been an interesting one. I don't know when the plane was built or who built it. I found it the back of a storage container at a flying field in Davis covered with dirt and cobwebs. They fly sailplanes at the Davis club so this was a bit of an anomaly and none of those I asked knew where it had come from and eventually I got permission to take it home and fix it up.

My first task was to swap out the brushed power system and made some structural fixes and I found that it flew pretty well under power but it sank steadily as soon as the motor cut out. Here are some of the early altitude plots displaying aircraft altitude in meters on the left over time in minutes on the bottom. I would launch to 200 meters, and be down pretty consistently in 3 minutes. Not very encouraging, but it was a cute plane with nothing wrong aerodynamically, but I thought it was far heavier than it needed to be so I decided to tackle the weight problem and see how things would improve.



The first weigh-in, the plane topped the scales at 22 ounces including the battery. I wanted to determine the wing loading and found that the wing was about 288 sq. in. and since I wanted to compare it to my big 3.5-meter sailplane, I set up a spreadsheet and found that the Viking was 11oz. per square foot. As a comparison my Oly II has a loading of 7.1 and my Xplorer is at 9.9, so for a small balsa airframe there was certainly plenty of room for improvement.

I then proceeded to strip everything out of the plane and weigh each item separately. Battery, servos, wheels, pushrods, receiver, ESC, ballast, etc. The first thing to get my attention was a one ounce lead weight on the nose, and this was required even before I installed a much lighter outrunner motor, so I needed to remove weight but be very mindful of the resulting CG. There was a heavy wire skid at the tail that looked like unnecessary weight and all the way at the tip of the tail was the worse place to have it.

This was an easy decision. Gone. Next I went through all of my servos and found a pair that were lighter and was able to save .6oz. The current servos were under the center of the wing and I wanted to move weight towards the nose so I made new mounts and moved them forward almost 3 inches. The pushrods were metal and again all that weight was in the tail so I built new ones using carbon fiber.

These flexed a bit, so I added a simple guide and this change saved another .35oz. The wheels weighed .3oz. alone and I again went through my supplies and found a set that was thinner and lighter. Less drag, less weight. Plastic case on the RX? Gone. Finally I moved the battery as far forward as possible and this allowed me to remove the ounce of ballast and keep the CG where it should be.

After all of the changes, I had a new AUW of 18oz. or about a 15% savings. Flights were getting longer, but that big prop in the nose really bothered me because of the drag. I had started with a 10x4.7 since that is what I would use for my foam park flyers.

That propeller immediately turned into 10 inches of drag as soon as the motor stopped.





## Nuts & Bolts (continued)

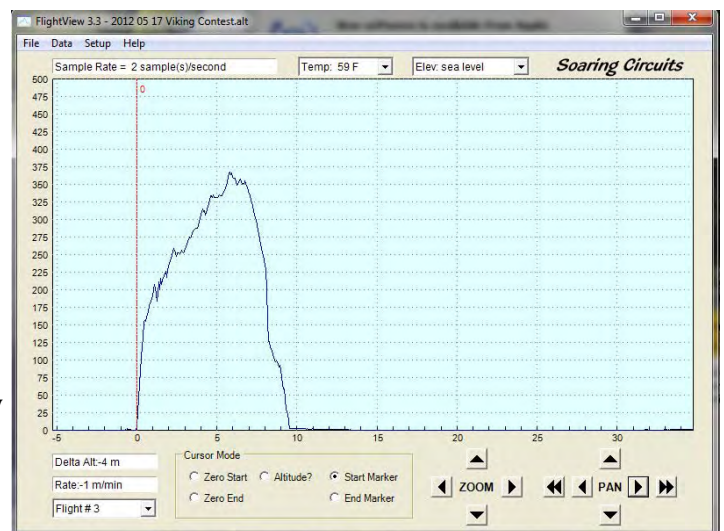
On a plane twice this size, you might get away with a 12 or 14-inch prop, so the drag from the prop is proportionally smaller. There is also the additional factor that with an ALES plane you need to be able to reach 200 meters in 30 seconds, so I wanted to decrease prop size and maintain the thrust. Fortunately, propellers are inexpensive, so I picked up a number of them from the hobby shop and armed with my altitude data logger I went to the field to give each of these a try.

The one word to describe the results was, "bad". I had started with a 10x4.7 prop and tried a 9x4.7, 9x3.8, and an 8x6 and when reviewing the logs I found that I lost between 25 meters and 50 meters of launch altitude with each of them. While discouraging, I decided to play with a little math to see why this might be the case. I created a simple spreadsheet and took the diameter of the prop and converted that to the area that the propeller travels when it makes one full rotation. I subtracted the area of the center of the prop, and multiplied the resulting area by the pitch to get an approximation of the volume of air (thrust) that the propeller would move. What I found was that a simple reduction of the propeller size by 1 inch with the same pitch dropped the thrust by nearly 25%. Using this approach I was able to determine that if I could find a 9" propeller with a 6" pitch, I should be able to match the performance of the larger propeller. After a short drive to pick one up, I was able to test this theory and sure enough I could reach 200 meters again and I was able to trim one inch of drag from the tip of each blade. Based on my spreadsheet I may even be able to switch to an 8x8 with equivalent thrust, so there is still opportunity for improvement.

With everything ready, I flew the Viking in the club's first ALES trial and came in first. There were a number of factors, possibly the most critical that my plane can reach 200 meters within the 30-second limit, so while my plane still wasn't a great floater, the altitude gave me longer flights and more time to look for lift. Winds were pretty high as well and I decided to stay upwind and land at the upwind end of the runway. This let me avoid congestion as well as the risk of landing short and with a smaller plane I could easily make tight circles during descents and make a spot landing. The second event went equally well and I was leading into the last round when in my quest to find lift to make a 9-minute flight I flew too far away and lost sight of the plane and as a result of losing the plane I ended up in last place.

What made me chuckle was that when I did recover the plane two days later, well actually just the fuselage, the wing was lost, I had my data logger onboard and when I downloaded the flight I found that I had flown almost exactly 9 minutes after motor cutoff. From this plot you can also see that flight characteristics had improved significantly since the first tests.

So now I had my plane back, but the wing was gone. I had one month until the next contest to get the plane back in the air. The problem was that I had no plans to use to build a new wing and I didn't know if I could find a kit. Fortunately, after some research online, I found that the wing for the Cleveland Viking is essentially identical to the wing for the Playboy. Same designer, same square inches, same number of ribs, and I had a short kit for the Playboy so I was able to quickly build a replacement wing. There was an addi-



## Nuts & Bolts

tional benefit, my new wing weighed .6oz. less than the original.

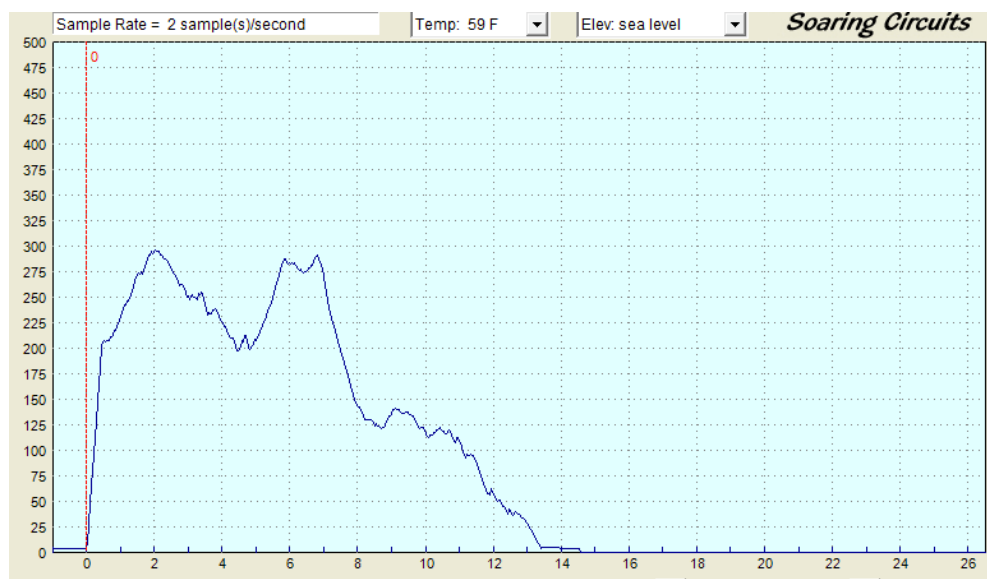
Flight tests went well, and the plane flew well enough to take first place at the June contest, but there was still an issue that I was unhappy with. I had covered the wing with a solid white covering to match the original color scheme. When at altitude, the solid white wing would absorb just enough sunlight to turn into a gray color that became nearly invisible against the sky. On a number of occasions while flying, I would mark my location in the sky and look away just for a moment and then spend agonizing seconds trying to reacquire the plane. I had found the perfect camouflage for a small plane.

I had always admired Ed Hamler's planes because they always flew so well. The semi-transparent red, white, and blue color scheme was patriotic and I could always look skyward and spot his planes immediately and determine the orientation just as quickly. With Ed's planes as my inspiration, I decided to strip all of the covering from my new wing and see how a new scheme would change the visibility.

So with new lighter coverings at hand, I started the process of removing the old coverings and in less than a day had the new coverings applied. Recovering the wing saved .7 ounces, and that inspired me to recover the fuselage and tail saving another .6 ounces. Much of the fuselage weight was removed from the tail surfaces and with this weight gone, I was able to make another huge weight savings. I swapped out my heavier 1300mAh battery for a 900mAh battery and as a result I ended with another 1.5 ounces of savings. I had now removed a total of 5.9 ounces from the plane, over 27%, for a new AUW of 16.08 ounces and a wing loading of 8oz/sq foot. The lighter battery also improves performance and I now arrive at 200 meters 3-4 seconds sooner. I have only had a couple of test flights with this new configuration and so far all indications are really positive.

Here is the plot from the first test flight with the new setup. Quite a difference from the original flights.

So what is next? I had wanted to use red and green transparent for the wingtips to match the port and starboard lights used on ships and aircraft. They didn't have the green covering so I went with the yellow and after my initial flights I found that this color doesn't provide enough contrast next to the transparent white and does not provide the visibility that I want. I have a transparent purple but may wait until I can pick up some green. The 8x8 prop sounds like it would be good to evaluate, but APC doesn't make that size and pitch in a slow-flyer propeller so I might need to try a different brand or try a propeller designed for a different purpose. The drag on the landing gear is another area I want to examine. I watched a video on airfoils that showed that a wire could have as much drag as a wing, so my landing gear might be an area for improvement. The great thing about this project is that as I fly, I have time to think about other options to try and as you can probably tell, I am enjoying the challenge. Maybe a bit too much.



## Last Month's Mystery Plane



Put on your scarves, goggles, and leather helmet for last month's Mystery Plane. I found a close match to the profile, but needed a hint from Jimmy to narrow this one down. The tip was right there on the side of the plane. The ES is for Estonia, and the plane was the PON-1, one of a series of tandem-cockpit trainer biplanes built in Estonia by the Kai aircraft company between 1934 and 1936. The photo above is the PON-1, and there was also a later version called the KOD-1 which was built in Latvia under license.

Originally designated the ÕGL-1 'Kai' in 1934 after Õhu- ja Gaasikaitse Liit (Air & Aircraft Workshop, Tallinn), the name was changed in 1936 to PON-1A based on the surnames of the three original designers, Voldemar Post, Otto Org, and Rein Neudorf, who later changed his name to Tooma.

Only four of the PON-1A were built, so this is clearly a difficult one to track down. The image on the right is believed to be a KOD-1 (Kara Ostas Darbnica) with Latvian National Guard markings of the Auseklis Cross or Rising Star on a white circle.





# L'Avion Mystere



Powered by two steam engines (lower right) this bat-winged craft was financed by the French War Office between 1892 and 1897. While the builder claimed it flew 100 meters, other witnesses stated that it taxied around a circular track and crashed immediately without leaving the ground. The French military discontinued funding after the demonstration.

During a visit to Paris in 2009, I saw the restored plane hanging from the ceiling at the Musée des Arts et Métiers.



# SAM 27 — AMA Chapter 108 Club Officers and Directors

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## Club Meetings

Monthly Meetings are normally held on the third Wednesday at 7:00PM at the Novato Fire Department Training Room on Atherton Avenue between highway 101 and Highway 37. The dates may vary; a reminder is always sent out before each meeting. The training room is located behind the fire station. Ample parking is available.

Occasionally there is a meeting is held at Round Table Pizza in Novato so please contact someone above if you have a question about the venue for that month.

## Membership

Membership dues are based on the class of membership. The **full membership** includes flying privileges at the Lakeville site and voting rights for \$50 the first year, and \$25 for subsequent years.

An **associate membership** includes the newsletter and meetings for only \$15 yearly. Associate members will not be allowed to fly at the Lakeville site.

Dues are payable to the treasurer/secretary as shown above and require proof of current AMA membership if you fly at Lakeville.