September 2009 Edition

Wine Country Flier

Next meeting: 15 Sept. 2009, 7:30 P.m.
Veterans Memorial Bldg. (Northwest Room) Across from Fairgrounds
Get there early for your free door prize raffle ticket!
www.wcflyers.com
Promoting Model Aviation in Sonoma County

2009 Club Officers:

President:	Adam Clement	(707) 433-4113	adampclement@comcast.net
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Treasurer:	Jeff Penner	(707) 292-4234	sonicjeff@yahoo.com
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2009 Board Members:

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Newsletter Team: Guy Nicholas, Phil Leech
Website: Patrick O'Halloran

Presidents Report

By: Adam Clement

What's up everyone?

Well, as I sit here thinking about what to write for the newsletter I started to think about the club and the members. One of the things I was thinking about was some of the great weather we have had this summer. I know we have had our share of windy days, but over the last couple of months there have been 5-6 great days to fly on the weekend. What baffled me was there where only 3-5 people every time there was a nice day. It made it nice not to have to wait to fly but I started to think, why is there no one flying? We have this great new flying field and no one flies that much. So I started to ask why don't I see you at the field anymore? The most common one was they felt too confined and it was hard for them to make a landing from the north because of the tree lines. The next was my plane is too loud. And third was, I'm flying at the park/Air center because it's closer. Well, I can help out with two of the three issues. Issue one, the tree line to the north. I asked Victor one day if it would be alright if we top the trees at the end of the runway. You know, not all the way just "top" them.

To my surprise he said yes. So, we get to top the trees immediately north of the runway. The Oak will still be there but with the other trees down 10 more feet it will help out a lot. Second issue. Over the last few months we have slowly been making more and more noise at the field trying to get the neighbors used to the noise. We have flown some large gas planes and large nitro. So far we have not received any noise complaints from Victor or the neighbors. I'm not saying you can go run your planes without mufflers but if you had an issue with noise bring it to the field and we can re-evaluate the noise level. As for the third issue I can't tell you where to fly but what I can say is that being at a flying field is safer than being at a park. Also, if there are any other items that anyone wants to discuss Please email me to see if we can work something out.

Now for some sad news. On 9-9-09 I received a phone call from John Lehtio at about 5:00p.m. Now I've been hearing tidbits of info about John having some kind of health issues. I even heard something about his heart and sending him to the ear nose throat people. Hello, they can't help your heart. Anyway, John told me he had just gotten back from the "right" doctor and he has given him 2 weeks to 2 months to live. He was diagnosed with stomach cancer and lesions. To be honest, after he said 2 weeks I couldn't focus so I don't know all the details. Even though John was given that news he still called to say he couldn't do the raffle prizes anymore. He was still worried about the club. That's the kind of guy he is. He bought a new car and his canoe was not going to fit in it and he was worried that the float flyers would not have a way to retrieve their planes. You know what he did? He bought a trailer so he could still haul the canoe!! John loves those float flies. As a matter of fact, the only time I have seen him fly was at the lake.

John also wanted to pass on that he has all his planes for sale and he plans to sell them to get some money for his family. I will try to post everything on the website that will be for sale by the 18th of Sept.

My heart and thoughts go out to John and his family. I can't tell you how important it is to live life to the fullest and treat every one as you want to be treated in return. Life is too short not to have fun at least once a day.

For an update on the pylon races look on the website after the 15th of Sept. Plus check out the new flight line fence we put up. Thanks to Brian Young and his Father for the donation of some peeler cores they did not need anymore. The field is looking great.

Until next month
Adam

Board Meeting Minutes

September 1, 2009

The meeting was brought to order by Guy Nicholas at 6:45 pm., with Officers and Board Members Merle MacGregor, Jeff Penner and me, Phil Leech. Several members were absent with Adam Clement assisting his Dad in a Hospital. Steve Cole arrived about a half hour later to give us a quorom. The meeting was held at Guy Nicholas' Office, Adobe Systems.

• Jeff Penner presented an idea he had been working on. Jeff thought that since we were limited in presenting large scale "Learn To Fly Days" as we had in the past, Jeff proposed that we create "New Member Days" when new members could go to the field with the expectation that an instructor would be there to check out his plane and help him with initial flying lessons. Jeff proposed that we hold these sessions on the third Sunday of each month. After some discussion, it was suggested that we could post this info on the website as well as the newsletter. A vote was taken with unanimous results. Everyone agreed that it was a great idea.

• Steve Cole wanted to clarify the club's position on allowing outside members to participate in the Pylon Races. After much discussion about whether they should pay the normal $5 fee and whether they should be able to share in the season's prize, It was resolved that guests would be welcome for two sessions and that they should pay the $5 fee without expecting to share in end of the season prizes. It was also stipulated that guests must be AMA members. There was some discussion about distribution of the prizes(which could amount to $1000).

It was decided to let the prizes accrue to Pylon Race participants for the 2009 season and to review this distribution for the 2010 season.

• A brief review of the upcoming Slate Nominations was held. Nominations for 2010 should be presented at the October Meeting with voting and Acceptance taking place in the November Meeting as there is no meeting in December. A review of members who might be encouraged to join the Officers and Board Members group was discussed with the thought of expanding participation.

• A review of the upcoming "Larry Frank Scale Fun Fly" was discussed and it looks like the plaques are in place and the format is pretty well prepared. Bob Film is on board with the food and Jon Stychno will be the MC. Adam has plans to complete the safety fence before the event.

Thanks goes to Ian for putting out the fliers for the event a week ago.

• A Float Fly is scheduled for the coming weekend as well as Pylon Races on Sunday.

The meeting was adjourned at 8:25pm.

Report prepared and submitted for Ian Rickard, Secretary by Phil Leech.

General Meeting Minutes

By: Phil Leech
16 June 2009

The meeting was brought to order by Adam Clement at 7:30 pm., with 23 members present.

• The Door Prize of a gallon of fuel was won by Julio Alvarez and he walked off with a smile.

• No new members but we did have guest named Josh Hyde who is a friend of Brian Young

• The Treasurer's Report was presented by Jeff Penner. We have $2384 in our checking account and $6300 plus in our CD. There are 92 paid members..

• The Secretary's Report was as published in the Newsletter.
• For Sick and Injured we had only to look at Chuck Green to tell that all was not well with Chuck who had bandages on his nose and face. Carcinoma is the name for it and its not fun. Been there. Sorry about that Chuck, but you'll survive!
OLD BUSINESS
• Adam brought us up to date about the Pylon Races and that they are a great success with the T-28 class being led by Jon Stychno, Brian Germpne in 2nd and Adam in 3rd place. Warbirds has Jpn in first place again followed by Brian Germone and Adam.
-• Adam told us about an event that was scheduled by a private party at the Rockin H Ranch on Lakeville Hwy. It was a birthday party for Bill O'Keefe and it was catered for300 people. It was a gala affair that we put in a good performance with our air show. Bill paid WCF $1000 and we were all very happy with that.
• Merle McGregor reported on the Aug 8 Float Fly at Sal Lake. A beautiful day with calm water with about 10 guys flying. Nothing bad about that..
• Adam reported on PCAM that was held at a new location at the airport on the north edge of the field. On Saturday our performance was a perfect 45 min show and it was about the same on Sunday although there were a few glitches that were overcome. They even called Adam for a solo 10 minute flight to fill in an opening in their schedule.
Our raffle was a success netting the club a $512 profit.
Jon Stychno did a great job announcing the event and Julio was busy recording everything on video that we will look forward to seeing at the Christmas Party if not before.

NEW BUSINESS
• I gave a rundown on what to expect at the upcoming Larry Frank Fly In scheduled for Sunday, Sept 13. Wayne Frederick has prepared plaques for 4 awards to be given for static scale and scale flying. The annual Neil Taylor Award will also be presented. This is a traditional club event that features a free BBQ at noon. Don't want to miss this one.
• Adam announced that Victor has given us permission to trim the tops of two trees at the north end of the field.
• He also told of plans to cover the Porta Potty with bamboo screening.

• Brian Young stepped up to volunteer help with this project.
• Adam is working on selecting new speakers for the P/A system and is targeting a budget of $300.

THE RAFFLE
• Julio won the big prize, an electric F4U Corsair. Merle McGregor was next up taking a Sukhoi. Brian Young got a charging adaptor and Adam Clement liked the screw driver set. Next was Steve Cohen selecting a switch while Dick Maddock settled for a prop balancer. Dave Mercer took the servo tape and John Lehtio picked the charger leads leaving Josh Hyde with an exhaust extension. Jeff Penner left with a fuel tank and that ended the Raffle!
• The meeting was adjourned at 8:50 pm

Report prepared and submitted for Ian Rickard, Secretary by Phil Leech.

101 Ways Part Deux

by Don Nix, Insider Safety Column Editor

Gee, when I agreed to write this bi-monthly column, I didn't realize some of you readers would practically write it for me. The column in the last issue, "101 Ways to Stop a Spinning Propeller," generated more e-mail than any other to date, nearly all contributing brain lapses of their own, which they gave permission to pass on to readers.

Before I do that, though, I must apologize for the way I described an incident I had witnessed nearly 20 years ago involving John Brodbeck, the "B" of K&B engines. I told of flying in the pit next to John when he reached to tune the needle from the front and ended up with a nasty gash requiring stitches.

An acquaintance of mine and a friend of John's for decades felt I might have done

John a disservice by the way the example was written. Since John died some years ago and was also a friend of mine, I must assure everyone no such negative connotation was intended. My purpose was simply to point out how a momentary lapse in safe practices could reach out and grab a person who had probably been flying since he got out of diapers, but made his living in the industry as well.

My sincere apologies to any who saw my intent in a different light.

Now for a few of the incidents sent in by readers, who gave permission to use their names. Member D. Mock writes:

Accidentally reversed the throttle servo on a 52cc Brison. Started with a heavily gloved hand. Realized the transmitter is directly below the now roaring engine. Notice the tail restraint is giving up under the intense pressure. Freak out and grab the prop with the gloved hand.

"If it weren't for the glove, I wouldn't have a hand (like my friend in a neighboring club). It shattered all my fingers. I wore a cast for five months and missed the whole season. Bummer. BTW, the hand is fine now. Thank God for great medicine."

From J. Low: "I really enjoyed your article about propeller accidents. I was safety officer for a large model club for several years. Every thing you mentioned did happen and will happen again and again.

"I'll bet you could take a safety article written many years ago and print it today and it would be just a current as it was when made up. As new people join our hobby and old ones forget what they have learned, there are the ingredients for the problems.

"Anyway, wanted to tell you I could relate to the article because been there, done that. Fly like you wish everyone else would: 'Safely.'"

Les from Florida sent a very detailed story (with a photo) of an incident that almost cost him a finger. Here's part of his note:

"I am a safety fanatic, and am to the point of being anal about safety stakes, not flying alone, and cringe when I see someone start any size plane without safety stakes, or a person holding the plane.

"That being who I am, I decided to run the fuel out of the engine, and pack it up for the day. I went to a low idle, glow starter on, flipped the prop (with Chicken Stick). As it leaned out because of running dry, the RPMs came up, and the plane started to move forward. Yes, I reached thru the prop to stop it. I had NOT put my safety stakes in!"

The preceding are a just a few examples of propeller injuries that probably happen dozens of times every week among our members. Read 'em and take heed.

My next column will be entitled "An Attitude of Gratitude," and relates courteous flying to safe flying. Ya'll come back, ya' hear? flyerdon@aol.com.

Electronic Speed Controllers (ESC) Explained

From RCMDirect.co.uk

From the Anoka County Radio Control Club, Coon Rapids, Minnesota
Better Performance with Less Noise
by Brian Dorff

With the ongoing debate about the noise our little engines produce, much is being done to preserve our way of life while respecting the rights of others. At first, noise reduction sounds bad for pilots. We think that reduced noise means reduced power, and conventional wisdom supports this. It is not until you fully understand how engines and propellers operate that you will realize the gains that benefit not only our neighbors but our airplanes as well!

There are four contributors to the noise made by models (in no specific order): muffler type, engine speed (rpm), tip speed of the propeller, and vibration.

Muffler
The mufflers provided with today's engines are quite good for the rpm range in which they are designed to run. Mufflers that come with internal baffles should keep the baffles in. Removing them does nothing to boost power,

it increases noise, and makes the engine idle poorly because of lack of back pressure. Pitts-style mufflers shouldn't have more exit area than the stock muffler does, and if it does, one of the ports may have to be partially or completely blocked. Again, this will help idle.

Engine speed

A large contributor of noise made by airplanes is an over-revving engine. Most modelers try to make their engines run as fast as possible, trying to obtain the rpm at which the manufacturer claims the largest brake-horsepower (BHP) number. What they don't realize is the peak efficiency for the engine occurs at peak torque, which is usually about 65%-75% of the peak BHP rpm.

Example 1: A manufacturer of a .46 engine claims 1.5 BHP at 16,000 rpm. After break-in you find that you can turn a 10 x 5 propeller at 15,500 rpm—very close to the peak BHP, but the airplane's performance is mediocre, it is loud, and consumes way too much fuel.

Now you find the engine's peak torque is about 70% of the peak BHP rpm (.70 x 16,000 rpm = 11,200 rpm). You switch to an 11 x 7 propeller and find that the rpm is 11,500. You are much closer to peak torque now, and the airplane flies better and is quieter because the frequency of the engine firing has reduced dramatically. The fuel also lasts longer, and the engine will last longer as well since it is not working as hard. A slower engine also helps in achieving the next goal …

Propeller Tip Speed

The tip speed of the propeller is critical in quieting the airplane. The point where things get noisy is 560-feet per second or about 380 mph. Going more than 400 mph is a big no-no. Even in an airplane that is built for speed, you should be able to choose a quiet propeller.

Example 2: Same setup as the last example, the 10 x 5 propeller is at 15,500 rpm and the 11 x 7 propeller is at 11,500 rpm. The formula for tip speed in miles per hour is: (Diameter in inches)(3.1416)(rpm)/1056. The number 1056 is a constant that converts inches per minute to miles per hour. A 10 x 5 has a tip-speed of 461 mph (a no-no). (10)(3.416)(15500)/1056 = 461.

We want our tip speeds no faster than 400 mph and it should be less than 380 mph if you want to keep your flying site. The 11 x 7 at 11,500 rpm has a tip-speed of 376 mph. (11)(3.1416)(11500)/ 1056 = 376. The tip speed is now down to a moderate level. But how do these propellers compare in performance? You can calculate airspeed by using the propeller pitch and the rpm of the propeller. The pitch of a propeller is the second number in the propeller designation. This is the distance in inches that the propeller will travel through the air in one revolution.

Multiplying the pitch by the rpm and dividing by 1056 will give the calculated speed of the model. 5 x 15,500/1056 = 73 mph; 7 x 11,500/1056 = 76 mph.

So your airplane will actually be traveling slightly faster with the 11 x 7 than with the 10 x 5, while turning 4,000 rpm slower. This reduces engine noise, propeller noise, fuel consumption, wear and tear on the engine, etc., without compromising performance.

Propeller Loading Factor (PLF)

How do you know what to expect switching propellers? Being able to compare propellers before you run them is the key to optimizing your airplane's performance and getting rid of the noise. Say you are happy with the rpm that your engine is turning with the 11 x 7 propeller, but you want to try other propellers to see what you like best for flight performance.

Right now you are at the middle of the road, slightly fast and passable vertical performance, but what if you want more vertical? First we solve the PLF of our existing propeller, and then we compare it to others. PLF=D x D x P (D=diameter, P=pitch)

The 11 x 7s PLF would be 11 x 11 x 7= 847 PFL (compared with the 10 x 5s or l0 x l0 x 5=500 PLF). Now let's see what else is out there. To increase vertical you should either increase diameter, decrease pitch, or both.

To keep a PLF close to the same you will have to do both. If you are trying to raise the rpm, decrease pitch—and if you are trying to slow the motor, increase diameter. I would try the 12 x 6 first and then the 13 x 5. They have close PLFs. This is for comparison only. Switching propeller brands or not balancing a propeller, among other things, can vary your results.

Vibration

How does the vibration of your model relate to the sound it makes in the air? Well, sound is vibration. Imagine your beautiful model—a nice wooden structure covered in drum-tight plastic covering. Think of it as a percussion instrument. The piston is traveling up and down like a drumstick pounding away at your model. And your model echoes every stroke it makes. The same thing happens with an out-of-balance propeller. Noise. It's everywhere! Your new mission: get rid of all vibration.

Start at the Propeller

It moves 300+ mph at the tip—balance it! It will remove noise because all that vibration won't exist in your airframe. Our neighbors will thank you and your receiver crystal, your servo pots, fuel tank, and NiCds will thank you as well. You will be rewarded with much greater reliability and a longer airframe life span. Also consider a high-quality spinner. They are better balanced and look nicer.

Back to the other cause of vibration—the engine. It is not possible to balance an engine dynamically at all speeds, so some vibration will forever be present, especially with four-strokes. The only thing that you can do about it is to isolate the vibration from the aircraft, making less noise in the process. Iso-mounts vary in type and price; from rubber grommets between the firewall and the mount, to specialized mounts for specific engines and airplanes that cost $100 or more. A popular one is made by Dubro and is for any 40-90-size 2c or 4c engine. It sells for $20-$30. Well worth the investment!

While it may not be feasible to make every one of these criteria work on your aircraft, it is important to keep these points in mind when getting your airplane ready to fly. If we all do a little, we can make a big difference. Remember, a 3 dBA difference in sound and the intensity doubles. If you can make your airplane even 3 dBA quieter, you have made a huge cut in the noise that everyone around us has to hear. (Although the sound energy is halved for every 3 dBA drop, it takes a 10 dBA drop for the human ear to perceive the sound being half as loud. A 10 dBA drop results in one-tenth the original sound energy.)

Don't let this happen to you. If you hand crank the prop, make sure the brakes are on, and someone is in the plane.

WCF 2009 EVENTS SCHEDULE

Oct 4	Pylon Races #8
Nov 1	Pylon Races #9
Dec. 6	Pylon Races #10
Decj. 11	Christmas Party

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