## Servo Chatter

November 2010, Issue #139
Official Newsletter of the SCCMAS "Tomcats"
Located in Morgan Hill, CA

www.sccmas.org
AMA Club Charter #110



<u>Upcoming Event Schedule:</u> December 5, Sunday, Toys-for-Tots

See page 20.

Next meeting: Wednesday, December 1 at 7 PM. Location: Hayes Elementary School, 5035 Poston Drive, San Jose, 95136

Cover photo: Hangar 9 Extra 260. Norio Eda at the controls. Patrick Rose photo.

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Field Weather (automated)	Paul Hasselbach		pwhassel@gmail.com

AMA Intro Pilots (These pilots can fly non-AMA members once, certain restrictions apply.)

Reggie Dell- Aquila, Mike French, Jack Sunzeri.

Next meeting: Wednesday, December 1 at 7 PM. Location: Hayes Elementary School,

5035 Poston Drive, San Jose, 95136.

Future meeting dates: January 20, March 31, and May 19.

**Raffle prizes** will include a 2.4 GHz Aircraft Receiver, a kit, adhesives and lots of other stuff. Remember, the person who wins the receiver can trade for store credit or exchange for another brand of receiver.

**Cover Photo**: The Plane is a 35% Hangar 9 Extra 260. (Wings have been reinforced and recovered. Will eventually re-cover whole plane)

Engine: DLE-111 Prop: Mejzlik 28 x 10

Servos: Hitec 7955 on Ailerons and Elevator, 7950 on Rudder, JR DS821 on Throttle. JR R922 Powersafe Rx running direct 2S lipo. Smart-Fly ignition kill. CG is the recommended.

About the elevator input for harriers: Just hold elevator to get the right AOA and add just enough power to keep it from dropping. More power for more AOA. It is most critical to keep the fuse parallel to the flight path with rudder. Otherwise lift on the wings is not symmetric and the plane will veer off to one side and/or the wings will start to rock.

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In This Issue



#### Flyin' Fast - President's News By Michael Luvara

As the year begins to draw to a

close, so does another year at the SCCMAS facility. We've enjoyed some great weather, events and flying with friends and fellow members. 2010 saw the close of Bayside R/C club in Fremont, and the reduction of EBRC in Livermore to electric only. It is definitely clear that it is becoming more and more difficult to maintain and keep R/C flying sites. This is why we are so adamant about protecting the SCCMAS's facility through diligence. We are essentially at the 25 year mark at the SCCMAS facility now, which is an astounding accomplishment in itself.

In October, a semi truck carrying wax overturned on hwy 101 near the field. This shut down traffic lanes and caused quite a backup. As a result, there were several news helicopters hovering near the SCCMAS facility. This prompted a call from the FAA to me to inquire about our operations, alitudes, etc as the reported aircraft were up at significant altitude. I must reiterate that we are to avoid full scale traffic, which may include ceasing flight operations until the other traffic has cleared the area. Remember that flying is a privilege, not a right. Included in this issue (see page 19) are some guidelines from the AMA on this topic. It seems like I am writing about this topic in every issue, but we ask for your cooperation on this matter.

I certainly want to welcome any new members and those who have joined us from Bayside R/C. Our goal is to welcome you to the SCCMAS and ensure that you have the opportunity to enjoy usage of the facilities. With this will come a time of adjustment, questions about operations, rules, guidelines, etc. Feel free to ask any SCCMAS member your questions, or when in doubt, ask one of the SCCMAS board members.

Renewal packages were mailed in October. If you have not received yours please let us know so that we can send out a replacement. Dues are due on December 31st. In order to renew, you will need to sign BOTH SIDES of the renewal form, make any corrections, include your payment, and a copy of your 2011 AMA card. We ask that you submit your renewal as soon as possible as to allow us to process your card without any delay. Because we are all volunteers, it can take 1-2 weeks to process your card. I do want to thank Tim Jones, who has been hard at work the past few years managing the club card database and cards themselves. Tim's wife, Wendy, has also put in untold hours into the process. We can't thank them enough for the service they provide to the SCCMAS.

Steve Smith has been working on the contest schedule for next year's events and will be publishing it soon. We hope to see increased participation at events, both in participants and volunteers. Remember, we are all volunteers working to make the SCCMAS a cherished facility within the County Park System.

Lastly, we are still working on getting permission to make some physical improvements to the new helicopter area. Currently, there is a temporary pad for use. This area is for helicopter flight. It is bounded by staying South of the pond fence, not over the runway, and not into the grass area of the field. Dave Neves is working with us to help incorporate this area, so if you have any questions, feel free to ask him.

Until next issue (next year!),

Michael o



#### **Preventing Propeller Caused Injuries**

I was lucky to be using an .049 engined plane when I was a young boy. When I stuck my finger in the propeller, there was minimal damage. A band-aid usually took care of the cut. It only took a couple of times for this to happen to me to learn my lesson. Now when I reach over the propeller, I make an exaggerated movement as if my propeller were twice as long.

Now, however, new RC pilots often learn to handle their plane that has a .60 size engine, or the electric equivalent. It has been my experience that "hand meets propeller" when the pilot reaches through the arc of a spinning propeller to grab the fuselage or un-hook the glow-driver. Spinning propellers can be hard to see, especially if the pilot is wearing sun glasses.

One time I had loaned my glow-driver to a fellow modeler. Once the plane's engine was started (engine at idle), he reached through the arc of the propeller from the front of the plane to disconnect the glow-driver. The wound was not serious as he wrapped the injured finger in paper towels or similar, put away his plane and drove himself to the emergency room.

A more serious incident recently occurred in the pits when I was near by. The electric engined plane's propeller started to spin at full speed when the motor battery was con-

## From the Editor By Pat Rose

nected.

The plane was not restrained and lurched forward. The pilot apparently reached through the arc of the propeller to grab the fuselage. The injury was serious. (See Training on page 7.) Luckily there were many experienced people there and one of them called emergency. An electric motor injury can be more serious than from a fuel powered engine as the motor does not stop when the propeller hits something or someone.

For fuel, gasoline and electric powered planes, always tie your plane to the impound area fence when starting/connecting the electric motor battery. Therefore, if you erroneously set the throttle position to full, the plane is still restrained.

Do not connect the electric motor battery while in the pit area. Do as recommended above. Your restraint (rope, belt, etc.) will prevent the plane from lurching forward.

In the case of electric pattern planes, which are carried to the runway, plug in the arming switch with the plane on the runway.

After the gas/fuel engine is started, hesitate and consider what is the safest way to move. Don't rush this step. Move to the rear of the plane to remove the glow-driver, do not reach over the propeller.

In case you need it, one way to **San Jose Medical Center.** Monterey Rd. north to Bernal, left (west) on Bernal, right on Santa Teresa Bl., hospital on your right after a little more than a mile. GPS: 250 Hospital Pkwy, SJ 95119. •



Meeting Date: 10/07/10 Time: 7:15, Attendance 46

#### Officer comments:

Mike Luvara (President)

Introduced new members that came from Bayside club. Wolf Witt Heli Pilot, Dave Neves advocate looking for new field for Bayside replacement, and Pete Kontorinis President.

Mike went over some club details for new members. Mentioned we have a new safety coordinator.

Went over an accident that happened at the field. A member cut his fingers pretty bad on an electric prop. No spin-ups in table area please, use only pit area when arming electrics.

Went over AMA rules as requirement to keep our gold club status.

Talked about a proposed heli area near the entrance (NW) of the club. If you want to get involved, talk to Mike.

Mike French (Training coordinator)
Got two calls in for helicopter training and two new calls for electric plane training.

Steve Smith (Events Coordinator)
Great turn-out at last Electric Fly-in. Also a great turn-out at the last warbird races. Great pattern fly in August.

Reminders: Flea market, Toys-for-Tots, Coyote Creek Classic, 2011 NCRCS schedules are still undergoing conflict resolution. Might possibly have a massive fly-in next year! Also we will bring back the fun-fly next year.

Jim Patrick (Treasurer)

We are doing ok financially. Reminder renewals are coming up. Be sure to get your AMA renewal

#### Secretary's Report on the Members' Meeting By Dean Sala

first. He will know if you have an AMA renewal and can be looked up on the AMA website.

#### Other Comments:

Pete from Bayside mention upcoming Auction

#### **New Club Members:**

Pete Kontorinis, Dave Neves, Wolf Witt

#### **New Solos:**

None to report

#### **Show and Tell:**

Lynsel Miller

3 Seebees Bristol F2B (hope I got that right). Very beautiful WWI biplane. 20lbs, .26cu EVO gasser, 94" wing span, Flies light and slow, bought from Ehab, Everything from 3SeeBees is 1/5 scale, all hand painted, rudder stick moves.

#### Walter Colby

E-Flight Airliner 420 electric motor, he installed the optional retracts. Looked very nice.

#### Babe

Maki C202 warbird racer running a ys120sc engine, Foam wing all painted with metal flake paint, very high performance plane

#### Rick Miada

Brought in a huge Reno Racer called a Tsunami. Did not get the company that makes it. 48lbs, a whopping 290cc 50 horse power twin engine, eats 1 gallon of gas in 5 minutes, goes 240 MPH, Engine specially built, turns a 23x27 prop, Metal flake paint from TCP Global, needs to fly off dry lake beds

#### Paul Hasselbach

Sig 4 star, thunder tiger 60, mentioned to read instructions or you can make mistakes building this one.

Meeting Minutes continued on page 19.

#### Members Meeting photos by Pat Rose.



Above: Tomcat Cake prepared by Don Coulter's daughter Michelle.. Sorry I left off her name in the Sept. Servo Chatter. Ed.



Bayside member Dave Neves joins SCCMAS.



Bayside member joins SCCMAS.



Bayside President Pete Kontorinis and son join SCCMAS.



Babe's latest creation with unusual yellow paint.

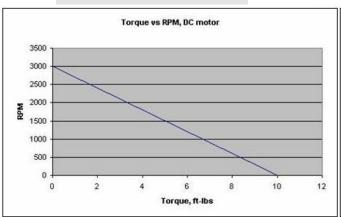


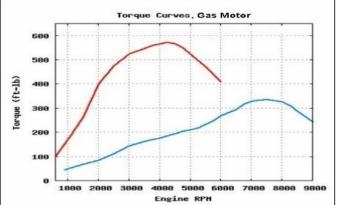
Walter Colby demonstrating his Orbus with functioning retracts.



#### **Training**

By Mike French





Over the past few years we have had the opportunity of comparing the challenges of teaching new students on electric trainers versus gas trainers. People tend to underestimate some of the hazards that concern the operation of electric trainers. It seems appropriate to present a few of these issues to the readers of Servo Chatter.

(1) Electric Motor vs Gas Engine It is important to know just how an electric motor functions in a trainer. When voltage is applied to the motor through the controller, torque is immediately applied to the motor which will accelerate it to its final RPM. Here is the first issue in which electrics differ from gas planes. Above are charts showing the relation of the motor's RPM as a function of the torque being applied in both an electric motor and a gas motor.

The left chart shows that the torque of an electric motor is at its maximum when the motor is not moving. The electric motor has little torque being applied to the motor when it is rotating at its maximum speed. The gas motor relationship on the right shows that the torque is

nearly zero at idle and doesn't reach its maximum until the motor is almost at maximum speed. It is possible to stop a small gas engine, at idle, by carefully squeezing the tip of the spinner (not recommended). This is possible because there is so little torque at idle. This would be impossible on an electric motor which has maximum torque when the prop is motionless.

(2) <u>Rotational</u> <u>Acceleration</u> There is a relationship that is well known to engineering students that pertains to rotating systems: Torque equals Rotational Inertia times rotational acceleration. This means that an electric motor will accelerate to final speed from a standing start many times faster than its gas counterpart because of its high initial torque and low inertia. This also means that if the student is not ready for the propeller to start moving, he could be instantly in trouble. The prop will be at its final speed many times quicker than a gas plane or quicker than a human can react. Preparedness is particularly important with electrics.

(3) Setting Up An Electric Transmitter and Buddy Box It has been common practice to check the control surface servo direction switches on the tables in the pit area. For gas powered planes this is not a problem as there is no way that this motor can start by itself. Gas engines are started in the designated startup area. But for electric planes, this can become a major hazard and so our procedures regarding preflighting electric trainers must be reevaluated. Consider the circumstance wherein the motor battery is inappropriately connected when the servo direction switches have not been previous verified on an attached buddy box. Let all throttles of both main transmitter and buddy box be set at idle. Let the transmitter, buddy box and the plane servo and receiver be switched on in order to check the direction of the control surfaces. The throttle of the main transmitter is at idle with sense set correctly so the motor controller is unarmed. Let the throttle sense switch of the buddy box be set incorrectly unknowingly so that that maximum RPM would be achieved with throttle at idle on the buddy box. Hit the transmitter's training switch twice by accident thus arming the motor controller on the first connection and then on the sec-

ond connection the motor would experience immediate maximum RPM. The rate would be faster than a human could respond. If someone were standing directly in front of the electric plane when the motor accelerates to maximum RPM, disaster would be imminent.

There are items in this story that are in direct violation of all the club and AMA rules. This incident should never occur. But sadly this story is true. The individual standing in front of the plane had his hand severely injured. Fortunately his hand will heal without loss of function.

There are several important lessons to be (re) learned from this tragic event. *First, of course, the motor battery is never to be connected in the pit area or when the plane is unsecured.* Secondly, because an electric motor can accelerate so rapidly as compared to a gas engine, verification of all controls should always be double checked with the plane held solidly before a flight. Presume the worst in control setup. A high price has already been paid for this knowledge. Let's not pay it again.

MF o



Fuel/gas starting table or electric arming table courtesy Bayside club.

A member, who has some trouble with bending over to arm his electric powered plane, requested a table near this location. So this table was drafted into service for a trial at this location.

Note: The SCCMAS always recommends physically holding an aircraft with the use of a helper when using this table.



#### **Contest News**

By Steve Smith

On Sunday December 5<sup>th</sup> the SCCMAS will host the final event of the year – our annual Toys-For-Tots/Bob Whitacre Memorial Fly-in. Breakfast will be served from 8:00 a.m. to 11:00 a.m. The entry fee is any <u>NEW</u> unwrapped toy. Every year the SCCMAS receives overwhelming support from its members at this event as we help less fortunate children in the community during the holiday season. Come out and enjoy breakfast and a day of flying with other club members.

A quick recap since the last newsletter. Saturday November 6<sup>th</sup> brought buyers and sellers to the SCCMAS for the fall R/C swap meet. I arrived at the main gate at 6:00AM. With darkness, I was surprised at the number of bargain hunters waiting at the main park gate to gain entry. Before I could park, the group was standing at my car door asking "what are you selling?" By mid morning the pit area was packed with bargains galore.

On October 2<sup>nd</sup> the Warbird racers were cruising the sky. This was another successful race, with pilots from the SCCMAS and neighboring clubs participating. Several classes where flown, 46 modified, stock 75, 120 and unlimited (some of these planes with the 4 stroke engines where exceeding 155MPH) A special thanks all of the volunteers that helped run the races.

Several event changes are under review for 2011. Over the last several months I have received feedback from the club members. The most common question asked: will there be a Fun-Fly? Yes, the SCCMAS will dust off

its box of wacky tricks, untangle the bowling ball string, and fix the mirror... for this entertaining event in March 2011. Other changes under review are: working with the new members from the Bayside club to host a helicopter Fly-In in May. The SCCMAS hasn't hosted a helicopter event in many years. With the large number of helicopter pilots seen on the weekends at the field, this should be a well attended event. In place of the Warbird Fly-In. we are looking to do something different host a general Fly-In and afternoon BBQ (chicken, ribs, hot dogs, hamburgers and all the trimmings) - of course all inclusive in the cheap landing fee. This will be open to all types of R/C models. Racing has been cut back to one Warbird race in October using the 2010 rules. The annual Airshow is already on the calendar with planning starting in early spring 2011.

The SCCMAS will be participating in several public events next year. In May, the SCCMAS has been asked to return to the San Martin Wings of History Fly-In with a booth, static R/C aircraft display, and a flying demonstration. Last year we were able to put on a short R/C demonstration for the crowds. The lawnmower was the hit! The SCCMAS will also return to the Reid Hillview Airport day in June with a booth and static R/C aircraft display, and a R/C flight demonstration.

### See the Preliminary 2011 Events calendar on page 19.

See you at the field, Steve •

## YOUR FIRST PLANE COULD BE AN ELECTRIC By Pat Rose



Photo courtesy Horizon Hobby

Recommended by SCCMAS member Peter Vogel is the E-flite Apprentice. It is a four channel trainer supplied with everything needed to fly, although you may want to purchase an extra battery to provide more than one flight during a flying session. Total cost should be around \$300. Note that your first plane is sure to get beat up and crashed, sooner or later. Hopefully, you will be able to reuse the radio for your second plane. The Apprentice is probably best flown in calm to light winds to start, as it is powered by a 15-size electric motor and has light wing loading.

I highly recommend that you hitch up with an instructor who will check over your plane and take you up on a buddy box. Free (as in \$) flight instruction is available from the SCCMAS in Morgan Hill, and at most other organized clubs. (See *Training by Mike French* in the Servo Chatter newsletter.) At the SCCMAS, you are required to have AMA membership (normally \$58—gets you insurance) plus membership in the club (normally \$120 per year—gets you a membership card plus the entrance gate combination).

So the minimum cost to get started is about: \$300 + \$58 + \$120 = \$478. Note that locally, the Apprentice is usually available at Aero Micro, RC World of Planes, and Sheldon's (to name a few).

Resist the temptation to fly your first plane without an instructor. If you can't wait to get some stick time, buy a simulator for your PC such as the Hangar 9 F.S. One or Tower Hobbies Real Flight.

See http://www.e-fliterc.com/Airplanes/Trainers/ for the Apprentice.

See http://www.modelaircraft.org/ for the AMA.

See http://www.sccmas.org/ for Tomcat membership.

See http://www.towerhobbies.com/ for Real Flight.

See www.fsone.com for F.S.One.

#### **MUFFLER PRESSURE by Harold Davidson**

Out of a couple of goof-ups sprung a few of good ideas! I had two 2- ounce weights on the front of my Hangar 9 Pulse 40. I put one weight on each side of the bottom of the firewall with wood screws. Then, I added a one ounce weight at middle bottom of the firewall with a pointy wood screw. (We all have a right to be dumb sometimes.)

You guessed it; I punched a hole in the tank, and with the tank pressurized, fuel drained out into the Pulse 40 fuselage. But, here is dumb number two.

When I originally put the plane together I forgot to put drain holes in the bottom of the fuselage under the tank. What a mess!

In discussing the mess with Harvey Thackston, I said that I would have to buy a new fuel tank because there was no way I could repair a tank made of polyethylene. Harvey said he could fix it with hot glue and a soldering iron. This he did and pressure checked the tank to 3 PSI to be sure it held pressure.

With the pressure gauge in hand, here was a great idea out of all this drivel. We decided to see just how much pressure a running engine supplies a fuel tank. We installed a "T" fitting between the muffler and the fuel tank which was attached to a pressure gauge on the following engines. The figures below are in pounds per square inch (PSI).

	At idle	½ throttle	full throttle
Super Tigre 61	0.5	0.50	0.75
Super Tigre 90	(1)	0.50	0.75
OS MAX 46 FX	(1)	0.50	1.00
OS MAX 70 4-Cycle	0.40	0.66	0.90
OS MAX70 4-Cycle FS	0.20	0.50	0.75

(1) indicates that the needle hardly came off the peg.

So, the good ideas out of this are file off the tips of pointy wood screws, plus polyurethane fuel tanks can be repaired, and put drain holes under the fuel tank. •

#### Seen at the Field



#### **PAPER TOWELS**

By Harold Davidson

How many times, at home or at the field, have you have had a roll of paper towels become difficult? What I mean is, a roll rolls off the work bench and unrolls a yard or two of towels. Or, the wind unrolls your towels half way across the pit area. My favorite was when a squirrel grabbed a towel and unrolled 65 feet of paper while heading for his burrow. This can be prevented. On one end of a roll draw a small bead of glue (Elmers, Tite-bond, RC Z 56 or a similar glue) from the inside tube to the outer edge of the roll. Let the glue dry and you have a roll of paper towels that will not unroll, yet it is easy to tear off a sheet or two when needed.



#### **Blue Angels in Formation**

#### By Don Coulter



Above: Don Coulter, Michael Luvara, Tim Jones and Walter Colby

In 2006, while attending the I.M.A.A. Rally of the Giants at Castle AFB, I was walking down the aisles enjoying all the fine models on display and noticed a large box, with a for sale sign on it, in front of one of the guys spot. It was a 100" C-130 ARF and it included the custom retracts for a lot less than the cost of the kit alone. I was very attracted to it but wasn't sure I wanted to spend the money. I returned to my RV and discussed the treasure I had just found with Lynne. Now, I have always been a fan of the Blue Angels but I have really been impressed with the support aircraft C-130 affectionately called "Fat Albert", especially after watching the JATO assist takeoff one year at Reno. It didn't take much convincing before Lynne finally said "Just go get it!" (I think she just got tired of me telling her how cool it would be). I went back and told the guy that my wife said I could have it if he would knock another \$100 off the price. It's called haggling with a sympathy vote. I guess it worked cause I was soon carrying this giant box through the pits with a Cheshire grin on my face.

An old friend of mine and mentor, Ken Willard, worked for Lockheed as an aerospace engineer. He also wrote a column for the now defunct RCM magazine called the Sunday Flyer. Ken was a prolific model builder and designer and would come up with some of the strangest flying contraptions that you'd ever see.

#### Blue Angels continued.

The surprising part was that they all flew, more or less. One of the most popular flying machines he designed in the late 70's was called the Blue Birds. He built four small airplanes that loosely resembled F-86's and linked them together with 1/4" dowels to form a diamond. He powered the front plane with an Enya .10 nitro engine. The other planes were the ailerons and elevator. The whole thing wasn't much bigger than a 24" wingspan but flew extremely well. Ken would bring this plane out for air shows and demos and would always get a round of applause every time he flew it. Sadly, Ken passed away many years ago but you can still see one of his designs show up every now and then

Fast forward to 2009. I saw an ad for an electric ducted fan jet FA-18 done up in the Blue Angels livery and I thought, "That would be a cool plane to take four of and tie them together with carbon fiber rods, much the same way Ken did with his Blue Birds!" This would make an awesome airshow plane. Together with the C-130, (that has been sitting under my pool table for almost four years) we could put on an almost complete miniature Blue Angels program for our annual airshow! There have been several renditions of Ken's Blue Birds but no one had put together four EDF's with power coming from all four planes. I knew there was going to be some serious engineering involved so I decided I would start on the jets first, hoping to have them ready for the airshow coming up.

OK. I know I tend to think outside of the box. A lot! My friends know it and seem to accept it. Many would just shake their heads and say I'm crazy but a surprising few are even willing to get involved with my ideas and help finance them. I'm not sure I should mention their names here (like Walter, Michael, and Tim) but three of them chipped in to purchase four of the jets. I had it all figured out in my head how this thing would be put together and it was just a matter of time before I had a giant "flight of four" ready to roll. Well, it worked in my head. With Michael on the sticks, the first attempt got off to a great start and accelerated briskly down the runway. The

smooth liftoff generated applause from the gallery and I thought sure this was going to work perfectly.

That's when things went horribly wrong. The plane yawed to the right and would not respond to any of the controls Michael was giving it. It made a slow spiral from about 30' and bounced into the weeds. The post crash investigation showed minor damage to the planes, but a couple of the carbon tubes had broken. It was repairable. Tim mentioned, in a prophet like manner, "Well, I wonder how many times we get to say 'well, that didn't work!" At this point the answer is two, maybe three. The second attempt was nearly a carbon copy of the first. The damage was considerably worse but fortunately Walter had it all on HD digital video. You can watch it on YouTube at http://www.youtube.com/watch? v=v0NFYhe8\_KY&feature=youtube\_gdata\_pl ayer.

I think I can repair it again but it won't be pretty. They say the definition of insanity is attempting the same thing over and over, expecting a different result. I think I'll change a few things next time to see if that works. I'm not totally insane, but that's another story.

OK. I'm not going to make the airshow with the "flight of four" but I think I can at least get the C-130 flyable by then. After all, it's an ARF. How long could it take? Apparently about three weeks longer than I had. I've had some bad experiences pushing too hard to get a plane ready and skip the preliminary testing phase. Things never go exactly according to design and time is needed to work the bugs out. Even the extra checks and tests didn't catch the incorrect stab incidence. Full down trim and half more stick was needed to fly her level. Landing involved easing off the down stick some and letting go would pitch her into a snap. See the maiden flight: http://www.youtube.com/watch? v=mX4dJDNYgwg&feature=youtube gdata p layer. It took at least 1/4" down adjusted into the elevators for level flight but now she flies like a dream. (Fat Albert story to follow in the next Servo Chatter issue—Ed) •



## Treasurer's Report

By Jim Patrick

Profit & Loss Cash Basis	
September through October 2010	
September through october 2010	
Ordinary Income/Expense	
Income	
Apparel sales	125.0
Contest entries	640.0
Donations	40.0
Food sales	854.0
Membership dues	245.0
Vending machine	150.0
Total Income	2,054.0
Expense	
Contributions	250.0
Equipment Rental	75.0
Food	534.0
Garbage service	379.3
Postage and Delivery	324.7
Printing and Reproduction	265.4
Repairs and Maintenance	
Equipment Repairs	57.94
Repairs and Maintenance - Other	27.20
Total Repairs and Maintenance	85.1
Sanitation service	1,119.8
Supplies	441.2
Telephone	
Internet	139.90
Telephone - Other	170.75
Total Telephone	310.6
Trophies	265.1
Utilities	
Gas and Electric	564.60
Total Utilities	564.6
Total Expense	4,615.3
Net Ordinary Income	-2,561.3
	-2,561.3

## Pattern at Tomcats One Day Contest 8/21/2010 By Luke Peng

There were 23 pilots, weather was fairly good after 10:30am, with ~10mph wind in the afternoon.

We managed to fly 4 rounds and finished at 5pm, thanks to our co-CD Kevin Sung and score keeper Mark Peng.

John Ribble and Carlos Tripodi of SCCMAS made their first pattern contest. John finished 3rd in Sportsman class, good job John! Thanks club volunteers for preparing the lunch BBQ.

No mis-shape, everyone had a great day!

Here is the final score and standing:

Sportsman	
1st Shawn Berkheimer	2934
2nd Dave Shirley Jr	2799
3rd John Ribble	2264
4th Carlos Tripodi	2043
5th Michael Fan	2000

Intermediate
1st Jacob Boracca 3000
2nd Ron Davies 2841

3rd Maurice Culverwell 4th Joe Alves 5th Chris Belden 6th Daniel Culverwell	2738 2597 2477 2191
Advanced 1st Jon Bruml 2nd Terry Walker	2000 1790
Masters 1st Chris Fitzsimmons 2nd Jon Carter 3rd Luke Peng 4th Bill Sneed 5th Don McCullough	3000 2755 2736 2724 1846
FAI 1st Matt Kimbro 2nd Don Atwood 3rd Jim Kimbro 4th Tom Messer 5th Adrian Wong	3000 2907 2824 2668 2493

Don Atwood is holding "Atair," ready for takeoff. Luke Peng photo.



#### **Pattern at Tomcats**





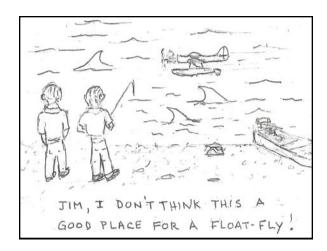
#### "SEE AND AVOID" GUIDANCE

#### A. General:

- 1. The primary means to avoid collisions between all aircraft flying within our National Airspace System (NAS) is "See and Avoid."
- 2. Vigilance must be maintained by each person operating an aircraft (whether model or manned) so as to "see and avoid" other aircraft.
- 3. Model aircraft must avoid manned aircraft. Our privilege to fly model aircraft in the NAS depends on our commitment to remain "well clear" of manned aircraft.
- 4. Simply avoiding an actual collision is not enough. A "near miss" is not acceptable.
- 5. Unless flying at a mixed-use site where manned and model aircraft routinely share airspace through their own site-specific rules, model aircraft must fly sufficiently far away from manned aircraft so as not to create a collision hazard.
- 6. Model aircraft flying must not only be safe, it must be perceived to be safe by the greater manned aviation community. Modelers must continually demonstrate their respect for the safety of manned aircraft by remaining vigilant and well clear.
- 7. Whenever a potential conflict arises between model aircraft and manned aircraft, the pilot of the model aircraft must always give way to the manned aircraft.
- 8. The pilot of a model aircraft must never assume the pilot of a manned aircraft can see the model or will perform any maneuver to avoid the model's flight path.
- 9. Visual Line of Sight is required by the Safety Code. It means that visual contact with the aircraft must be maintained without enhancement other than by corrective lenses prescribed for the model aircraft pilot. All RC flying must remain clear of clouds smoke or any other obstruction to the line of sight.
- 10. Since the model aircraft pilot is exercising control by visual reference from a location on the ground, in general the model aircraft should always descend and turn to pass well below and away from the flight path of the manned aircraft. (Common sense would dictate that if descending endangers other aircraft, persons or property on the ground, other evasive action would be appropriate.)
- 11. A modeler should never place any consideration for the well being of the model aircraft above the safety of manned aircraft. Maneuvering to avoid the conflict may require that the model aircraft be sacrificed.
- 12. Free flight models should not be launched with relatively low altitude manned aircraft in sight and downwind or headed downwind from the launch site. 9/2010

#### B. Spotters:

- 1. Before a flight, the pilot must insure that the spotter understands his/her duties and expectations.
- 2. A spotter should be used to assist in monitoring the surrounding airspace for manned aircraft whenever a flight is expected to exceed 400 feet above the ground and that operation is expected to be in proximity to known manned aircraft traffic such as at a mixed-use facility or within three miles of an airport. The spotter must have sufficient visual acuity and be mature enough to take this responsibility very seriously.
- 3. A spotter should also be prepared to assist his/her pilot in the event that another model aircraft or spectators become endangered or in turn are perceived to be a danger to the pilot or the pilot's model aircraft.
- 4. If a model aircraft pilot experiences what he or she considers a near miss with a manned aircraft, that model aircraft pilot should notify AMA Headquarters with a written report of the incident, including action taken by the model aircraft pilot to avoid the manned aircraft. This report is intended to help the modeler, the club, and the AMA capture as much detail as possible so that it may be used to assist all parties in recalling the particulars of the incident at a later time. Call 1-800-435-9262 (1-800-IFLYAMA) extension 230 or 251 for assistance with this report.



Harold Davidson

Meeting Minutes continued from page 5. Raffle:

Rod Schurtz Receiver **Dumb Thumb:** 

Don Coulter Kyle Alegrete Ball wrench set

Left dumb thumb at home Walter Colby Epoxy, CA Howard Sosbee CA glue

**Dumb Thumb Runner Ups:** Dave Schurtz Fuel Filter

Randy Warkenton Foam Rubber Steve Smith Sean Burkhimer CA glue Folded wing while racing

Roger Pellor Engine mount hole locator Matt Campi Foam Matthew Smith

Augured airliner into ground trying to mimic Wal-Ray Fraser Filter 0

ters flying.

#### **Preliminary 2011 Events calendar**

March 26	Fun Fly	
April 16	Spring R/C Swap Meet	
May 14	South County Wings of History Open House	
May TBD	Helicopter Fly-In	
June 11	Summer Fly-In and BBQ	
June 18	SCCMAS Field Maintenance Day	
June 26	SCCMAS at Reid Hillview Airport	
July 9-10	Annual Airshow	
August 6	Summer R/C Swap Meet	
August 20	Pattern Contest	
September 10	Electric Fly-In	
October 1	Warbird Race	
November 5	Fall R/C Swap Meet	
December 4	Toys-For-Tots	



# SCCMAS Proudly Presents... The Annual... Toys for Tots-Whitacre Fly-In

## Sunday December 5th 9am - 1pm



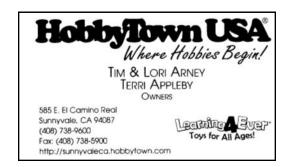
This will be a great finale for the year. Please come help us honor Bob Whitacre's wonderful life, and help the children in our community.

#### Entry Fee is any NEW unwrapped Toy.

This event open to all members and guests with a current AMA status. Bring an unwrapped toy and enjoy a Pancake breakfast and a day of flying with fellow modelers.

For more info visit www.sccmas.org

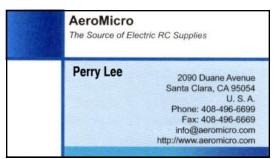
Please help support these companies and organizations as they help to support us:

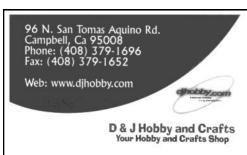


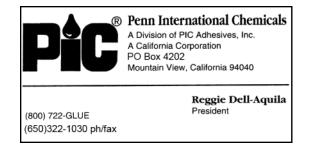
#### **Norred Aero Products**

www.norredaeroproducts.com 408-482-5437















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