

# Servo Chatter

November 2004 - Issue # 107

Official newsletter of the SCCMAS "Tomcats"

AMA club charter #110

Editor: Chris Luvara

<http://www.sccmas.org>



**Next Meeting:** Friday, December 3rd, 2004 @ 7:30pm

**Location:** Hayes Elementary School, Poston Drive in San Jose. See page 3 for map.

**Future Meeting dates:**

**Meeting Program:** Raffle prizes will include the usual - a radio, an engine, a kit, glues, and lots of other neat stuff! Bring your latest creation for show and tell and receive a free raffle ticket. Coffee and Donuts during the break.

**Cover Photo:** Bud Kanemoto brings his Edge 540 back to the pits after a flight  
(Photo by Jim Patrick)

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## From the Editor

by Chris Luvara



By the time you read this it will be Thanksgiving time, and before you know it Christmas will be here! We're usually set for a November meeting, but the only available dates for Hayes school were in December, thus the change.

There's plenty of neat stuff in this issue. Mike French has provided us a great overview of inspecting ARF aircraft before the first flight. This should be helpful for those just starting out.

I decided to reprint an article that we printed back in 1996. It is probably one of the best, most informative articles printed in Servo Chatter. The late Bob Whitacre wrote it on the usage of tuned pipes. Give it a read, because you are bound to learn stuff you never knew about tuned pipes.

Also included is the 2005 Contest Survey. Please fill it out and send it in, or even hand it to Rich. This is very important to us, your answers determine the contest schedule for next year.

I would also like to take the time to welcome Tim Jones as the new Safety Coordinator. He's got some good words on safety in his first column, so go check it out. Welcome aboard Tim!

Fly Safe, Chris



Paul Steiner and his GeeBee-Y (Photo by Jim Patrick)

### Send submissions to:

#### Servo Chatter

1365 Buchanan Dr.  
Santa Clara, CA 95051-3950  
408-246-3857  
servochatter@sccmas.org



## Flyin Fast - VP News

by Michael Luvara



I'd like to start this month off by welcoming Tim Jones on as a board member of the SCCMAS. Tim will be filling the vacant Safety Coordinator position. Having been very active within the SCCMAS over the past few years, he is always willing to lend a hand wherever it is needed and understands the operations. Between weekends, Tim's daily job puts him in contact with managing others and machinery. With this in mind, he will be able to put his experience to use in helping promote safety and risk management at the SCCMAS. Welcome aboard Tim!

The last meeting in October at Reid Hillview was a great time for those in attendance. We enjoyed sitting in an open hangar on a beautiful evening, surrounded by full scale airplanes and many show and tell models. Thanks again to Mark Kadrich of the Reid Hillview Airport association who was gracious enough to lend the use of his hangar for the evening. We have been extended the offer to use the hangar again in the future. This would be great for a meeting in the spring as we are now heading into the colder months.

A huge thanks goes out to Richard Groen for coordinating the resurfacing of the field. Due to unfortunate weather, the work was spread out over several weeks. In the end, repairs were completed on the 18th of November and the field looks fantastic. With this in mind, please use an overflow bottle or pan to catch your fuel drippings. This will help preserve the freshly surfaced area.

Renewal forms will be mailed shortly for the 2005 flying season. Please ensure that your AMA insurance is up to date if you will be flying come January 1st, 2005. The AMA has a deadline coming up, so I urge to you get your renewal processed as soon as possible.

Lastly, please fill out the contest survey in this newsletter. This survey helps guide what events that the SCCMAS puts on each year. Rich Groen looks over the trends from each year and the success of events to plan the coming year's schedule. Our general SCCMAS survey will be included with your personalized renewal package.

Michael

## Training Vouchers

Contact  
Mike French  
for more  
information



# From the Secretary's Building Board



by Rich Luvara

Club Meeting Notes- October 14th, 2004

Members Present: 61

**New Members:**

- Jim Pasco
- Mike Legget
- Carl Quinn
- John Sanders
- Javier Fuentes
- Abbas Raissi
- Dan Gurgan

**New Solos :**

- John Zaucha

## Show and Tell

**Lynsel Miller** - Fokker D-8. Ron Weise design. Still uncovered, was framed up by Jim Thompson, powered by a Quadra 75, 30lbs.

**Don Loughridge** - 4-Star 160. Nice laser cut kit, guided by a Futaba 7UAP. 9 3/4 pounds dry, 10 1/2 with floats.

**Tom Uhlendorf** - Icarus Shockflyer. Electric powered 3D foamy, just six ounces. Uses micro equipment and lithium batteries.

**Mike Luvara** - 42% Sundowner Formula 1 racer. As seen at previous meetings. Brought to show progress. On its gear, wing mounted, motor is now in too.

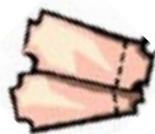
**Vernon Bollesen** - Balsa leaf. Brought back from trip to Costa Rica. Interesting to actually see where all this wood we use comes from!



## Dumb Thumb

Winner:  
Mike French

Mike took his eye off his student's airplane to watch out for someone else, and when he turned back he locked on to an identical looking trainer. His student's airplane ended up meeting terra firma.



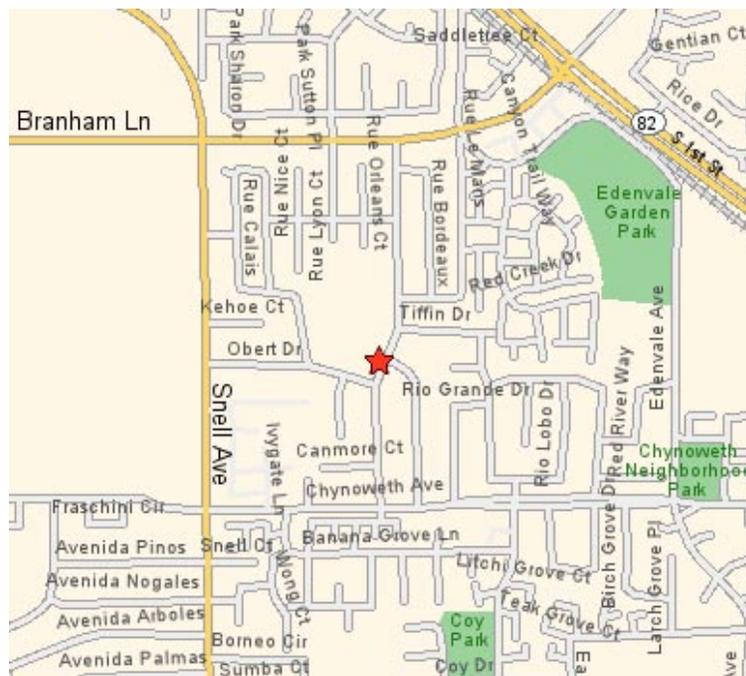
# Raffle

Rich Luvara	Radio
Bervin Britt	Z-bend pliers
Lynzel Miller	Tubes
John Zaucha	Hardware
Steve Smith	Hardware
Dick Gardner	Hardware
Bill Moore	Hardware
Matt Campi	Hardware   Heat Gun
Todd Vender	Hardware

Ed note: Sorry if we missed your name, the Secretary actually won this month, and missed those while he was picking up his prize.

This month, we have to thank R/C World of Planes and RCAT Systems for their help with our raffle. Without contributions from sources like this, our raffle would in no way be possible. Please support all of our local hobby shops that are listed on the back cover of the newsletter. Remember, the local shops are the ones that donate to our club. The mailorder ones do not.

## Meeting Location Map



Hayes Elementary School, 5035 Poston Drive, San Jose, 95136

## Treasurer's Report



by Jim Patrick



### SCCMAS Profit & Loss 9/10/04-11/9/04

#### Income

Apparel Sales	14.00
Contest Entries	70.00
Food Sales	73.00
Membership Dues	409.50
Raffle	243.00
Student Vouchers	25.00
Vending Machine	310.00

**Total Income** **\$1,144.50**

#### Expenses

Contributions	250.00
Contributions	75.00
Food	315.32
Garbage Service	333.43
Postage and Delivery	306.54
Printing and Reproduction	285.78
Raffle Supplies	332.14
Repairs and Maintenance	17.41
Janitorial Exp	50.00
Sanitation Service	593.69
Supplies	182.36
Telephone	282.92
Trophies	285.26
Gas and Electric	480.38

**Total Expenses** **\$3,790.23**

**Net Ordinary Income** **\$-2,645.72**

**Net Income** **\$-2,645.72**

## Contest Corner

by Rich Groen



The year is about down to the end. It has been a thrill a second as my first full year as Contest Coordinator. I honestly must say... it is definitely a handful to get everything done. I went back through the list of helpers for various events; it took over 100 people to do everything we did this year. THANK YOU to all who made all the SCCMAS events a success this year. A special thanks as I also noticed the same names coming up over and over again. THANKS... THANKS... THANKS !!!! None of the events could have been done without helpers, including those that keep our field well manicured. If you missed out on helping out this year ... never fear 2005 is near !!!

Just 2 more events left this year. Flea Market December 4th and the 2nd Annual Bob Whitaker Toys 4 Tots Drive December 12th.... Bring a toy, fly for free, and eat for free too !!! This is the time of year we need to eat what's left of the shack !!!! Last year was an incredible event... let's fill 4 barrels this year !

I have included the event survey earlier this year. Please take a moment and review this and mail ASAP to the address listed on the form. The 2005 season is already in the planning stages and I want to get a jumpstart on the year. Your input is absolutely essential in order for me to plan accordingly. Last year your responses doubled previous years.... I would like to double that average again. Thanks in advance for your input.

Richard Groen  
Contest Coordinator  
(408) 281-7288 home  
(408) 832-7432 mbl.  
contests@sccmas.org



Rick Maida Taxiis out his Cessna (Photo by Jim Patrick)

# Safety

by Tim Jones



Hello Tomcats!

As the newly appointed Safety coordinator for the SCCMAS, let me start off by expressing my thanks to the board members for considering me in their efforts in filling this position. I do greatly enjoy helping wherever I can and working with the members wherever there may be a need. I look forward to making every reasonable and possible effort to help keep this club and flying site a safe and enjoyable experience for all. On the announcement of my appointment and accepting of this position at the October club meeting, I felt immediately welcomed by all. Several suggestions and concerns were also brought to my attention. I am looking over these suggestions and concerns and I assure you that I will bring these up for discussion at the board meeting.

I have received a couple of reports, though secondhand, of immediate issues at the flying site. One is the concern of flying in the area of the bike path, at the south end of the flying field. Please keep in mind that the bike path is the southern boundary of the field. Please make every effort to avoid landing approaches, which include a flight path parallel to the path. Many times while watching the plane on its descending turn approach, we may not see the people on the path. A plane coming over your head at these lower altitudes is to say the least an uncomfortable feeling. If you do happen to stray outside the southern boundary, it would be best to cross this path at as near a right angle as possible and at a safer higher altitude before descending into your landing. I would like to take this opportunity to ask that the more experienced pilots offer to help others with a few pointers and tips in avoiding the path in landing approaches.

The second issue to be brought up is part safety and part policy with the skypark, the AMA and the county parks offices. This issue is drinking alcohol at the field. The AMA has a written policy on the use of alcohol and the operation of radio control aircraft. Violation of this policy may invalidate your AMA insurance should an accident investigation reveal the operation of a model while under the influence of alcohol or a controlled substance. There is a sign at the park entrance stating that alcoholic beverages are not allowed. In maintaining our continued relationship with the parks department and the use of the land for our club use, we cannot violate this rule. Please keep this in mind as we have a terrific flying site and for the safety of all, along with maintaining the privilege of the use of county parks lands we must enforce this rule. Please keep in mind that the enforcement of this issue may have to involve the County Sheriff.

I would like to be notified of any safety-related incidents at the field. I am not asking for tattle tale type of notification, but incidents such as runaway aircraft, falls, or prop incidents such as the one I've heard of involving a member getting "Bitten" by an electric prop resulting in a visit to the emergency room

with the reward or 18 stitches. (I don't have official information on this incident, so there may be error.) If I can be notified of these types of incidents, I would like to bring them to the board meeting to evaluate what we as a club might do to prevent future injury or property damage.

Finally a few suggestions for the cooler flying season. As we are fortunate to have a flying field in the county with the best weather in the world, we have the opportunity to fly in the cooler months coming our way. With flying in cooler weather comes the use of bulky, sometimes loose clothing. Use extra care around unguarded moving machinery (read "props"). Also this heavier clothing often makes it a bit more difficult to move, so have someone help by holding your plane during startup.

A bit long, but I felt I had a few things to say. Again, thank you to all and I look forward to any comments or suggestions on the issues of safety and any other issue I may be able to help with in the club.

Keep challenging gravity, but do it safely,  
Tim



**Sunday December 12th 9am - 2pm**  
**SCCMAS Field, Morgan Hill**

Come join the Tomcats in Morgan Hill, SCCMAS field, as we Continue to honor Bob Whitacre and his contributions to RC Flying.

Bring an unwrapped toy and join the Fly-In. Toys will be donated to local children, in honor of Bob Whitacre.

SCCMAS will provide free BBQ to all pilots and participants.

For Questions Please contact: Richard Groen @ 408-832-7432 or Richdutch@sbcglobal.net

Directions ?? See website @ SCCMAS.ORG



# The First Inspection of ARF Trainers

When a new student comes for the first time to the SCCMAS field with his virgin ARF trainer, SCCMAS offers to inspect his plane to prevent accidents caused by the many and consistent faults that are found with every new ARF trainer on the market. Some of these problems stem from improper construction by the inexperienced student. Some problems come from the fact that manufacturers produce these kits under minimum cost constraints not caring about notions of durability. Most trainers that come from the box are flimsy at best. I usually email a list of 25 items of inspection to students who will be undergoing the first orientation session prior to regular instruction by our staff. There is not enough room available in this single page to discuss them all but I would like to present a few of the major problems that are found in each plane we inspect.

Put antenna inside fuselage. This aids in securing the A/C to the fence during startup.

Be sure there are thin fuel line bands around the clevis pins linking control horns of tail surfaces to prevent them from releasing inadvertently.

Bring out the battery charging connector through a port to make that battery voltage available without removing the wings.

Make a wire mixture control extender and insert with Loctite to secure linkage

Be sure that the fuel tank and battery are DIRECTLY secured to fuselage.

Minimize exposed wires. Don't let cables interfere with servos or push rods.

All electronics must be directly secured to the fuselage. No floating receivers please!

Every aircraft must have a label identifying the owner, his address, his phone number and his AMA number.

Servos and servo rack must be securely mounted to the fuselage. Use 440 or 256 bolts with blind nuts rather than wood screws.

Aim muffler exhaust port to vent over the top of the wing to minimize oil entering the radio compartment

Check to see that the engine mounts are secure. Engine should be bolted DIRECTLY to the engine mount. Engine clamps are unreliable.

Add a fueling port. Some people swear by them, some swear at them. It makes fueling easier.

Add thin slice of fuel tube between wheel and collar to provide drag on the nose wheel to prevent rolling during idle.

Loctite the brass collars on the landing gears to prevent separation during a hard landing with attendant wheel loss.

Keep fuel lines at minimum length. Be sure fuel line is proper diameter. Excessively large fuel lines induce engine failure.

Be sure to have the Channel Number on your antenna

Put your name, address, telephone number and AMA number on a label on the back side of your transmitter

Ch 34

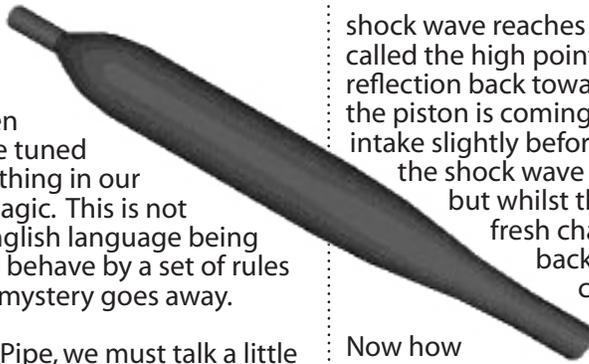
John Jones  
123 First St.  
San Jose, CA  
95132  
408-251-9999 cel  
AMA # 12345678

The list of items shown are not exhaustive. For those of you who wish to have the full inspection list, please send me an email to french913@aol.com and I will email you back a copy.

# Piped Two-Stroke Operation

By Bob Whitacre

Reprint from 1996 Servo Chatter



Over the years that I have been involved in model airplanes I have seen more confusion about the use of the tuned exhaust or pipe as I have any single thing in our hobby. They are treated almost as magic. This is not true, like all, well most things (the English language being an exception I can think of right off) behave by a set of rules and if you understand the rules the mystery goes away.

Before we can talk about the Tuned Pipe, we must talk a little about our engines. I am not going to get into a lengthy discussion of engine operation; you will have to look elsewhere for that. We do however need to look at a couple of things. First if you look in the exhaust port of your engine as you rotate the crankshaft, you will see that as the piston moves up and down it opens and closes both the intake and the exhaust ports. You should also note that as the piston is moving up, it closed the intake port slightly before the exhaust port. Some of the things that you need to know for an exhaustive (pun intended) analysis of pipe operation, are exhaust duration and the overlap between the closing of the intake and closing of the exhaust. For our approximations we will assume an exhaust duration of 160 degrees crankshaft rotation and simply some overlap between intake closing and exhaust closing, trust me this will be close enough.

Now how does the Tuned Pipe work? Well here goes. If you look at a Tuned Pipe, it will have a section which is cone shaped, with the large end of the cone away from the exhaust, this is called the Divergence Cone. Now if you think back to your physics classes, you should remember that as a gas expands it cools, and as it cools it occupies less volume. OK, now as the exhaust opens, hot exhaust gases start down the pipe and encounter this expanding cone. This creates a situation of expanding volume and cooling gases which occupy less volume as they cool, all of which combine to create a negative pressure at the exhaust, and sucks exhaust gases out of the combustion chamber better than a straight pipe, open exhaust, or muffler can achieve.

This is half of the magic since if we can draw the exhaust out better; we can fill the cylinder better with a fresh charge. In fact we actually want to do better than that, by drawing some of the fresh charge clear through the cylinder and out the exhaust. At the same time as the exhaust port opened, a shock wave was created. Now the second half of the magic. This is also where the tuning or pipe length comes into play. You remember I hope, the Divergence Cone we talked about, well at some point it quits diverging which causes a discontinuity and consequently a reflection, if you don't understand this don't worry just accept it, it works.

Now let's run through this up to this point. The exhaust opens which causes a shock wave which starts down the pipe, the Divergence Cone creates an expanding volume and cooling gases, which combine to draw the exhaust gases out of the engine exhaust as well as drawing some of the fresh air charge through the cylinder and into the exhaust. When the

shock wave reaches the end of the Divergence Cone, (this is called the high point of the pipe) the discontinuity causes a reflection back towards the exhaust port. At the same time, the piston is coming up and will at some point close the intake slightly before the exhaust port. Now if we can time the shock wave to reach the exhaust as the intake closes, but whilst the exhaust is still open, we can push the fresh charge which we drew out into the exhaust back into the cylinder, thus providing better cylinder filling and more horsepower.

Now how do we do this? Well father physics comes to our rescue here. For this discussion we are going to have to accept some things. We are going to talk a lot about RPM and I will use specific numbers. Remember in the real world you will be dealing with a range, usually 500 1000rpm. The shock wave moves at the speed of sound. We are going to use 1120 ft per second for the speed of sound. The end of the Divergence Cone will cause a reflection. There will also be either a baffle or a re-convergence cone, which will cause a latter reflection.

Now lets go through this thing again and try to put some numbers to it. Let's assume an engine speed of 10,000rpm. At 10,000rpm or  $10,000/60 = 166.667$  Revolutions per second, one revolution will take  $1/166.667$  or .0059 seconds. Remember the exhaust is only open 160 degrees, so the exhaust is open  $160/360$  or .00267 seconds each revolution. We want the shock wave (for an engine turning 10,000 RPM) to travel to the end of the Divergence Cone and back and arrive just as the intake is closing and before the exhaust closes.

Since we are working with approximations let's assume the .00267 is a good number. All we need now is to know how far the shock wave (sound) will travel in .00267 which will be  $.00267 * 1120 = 2.99$ ft or 35.88 inches. This then is how far the shock wave will travel in one revolution. Since this is a two-way trip, we want the end of the Divergence Cone (high point) to be  $35.88/2$  or 17.94 inches from the center of the combustion chamber (the glow plug in most engines). Now we need to remember that this is the entire exhaust cycle and we want the shock wave to arrive back slightly sooner while the intake is closed, but the exhaust is open, here a good guess is the best I can do for you.

I would set the pipe at 17.1/2 inches and see what happens, you'll be close. Those of you who know me, know that I fly pattern and that we are running .60 size two strokes around 10,000rpm, and that I am always telling people to set the pipe at 17.1/2 inches with a 12-10 prop. Now it should be at least somewhat obvious that there is some logic to this. The engines we are running will easily turn a 12-10 prop at 10,000rpm, and 17.1/2 inches is a good length for 10,000rpm. If you have been paying attention, 17.1/2 inches is only good for 10,000rpm (approximately) so if you change props, engines, fuel or anything which changes the RPM significantly, you will need to change the pipe length (you have heard that before right).

Now pay attention and I will make these changes a little

(Continued on page 8)

easier. As RPM goes up pipe length goes down (gets shorter) as RPM goes down pipe length goes up (gets longer), however the relationship is linear. This means that if you are planning to turn the engine at say 12,000rpm, then the length will be  $(10,000/12,000) \times 17.5$  or 14.58 inches. If you are planning to turn 8,000rpm, then the pipe length will be  $(10,000/8,000) \times 17.5$  or 21.88 inches. Play with the numbers; it works.

Now for a few of the common questions and myths. The displacement of the engine has nothing to do with the pipe length; it's strictly a time/distance relationship. The size of the engine does however lead to an optimum pipe volume, thus the different pipe sizes for different displacement engines. The pipe length should be measured following the same path that the exhaust gases will take (follow the curve).

Always err on the long side for two reasons: (1) It is easier to shorten the header and; (2) If you are too short, the shock wave will arrive back whilst the intake is still open, and this will blow the fresh charge back into the crankcase. This really screws up engine performance. The symptoms of a short pipe are too sensitive a needle; if you are too short you will never get on the pipe and it will drive you nuts, trust me on this one.

One of the problems I see over and over is that the length of the quote, "pre tuned pipe header combinations" on the market, were arrived at with small props on short stroke engines turning quite high RPM. This is not necessarily incorrect, but it is not typically what we are running now, so the common error is to assume that combination is tuned and people are led astray. When you pick up one of these "pre tuned" pipe setups, remember that all that means is it is pre-tuned for one RPM range. If you attempt to run a different RPM range with that set up, it will not be tuned for that RPM. Remember any length is tuned to some RPM, if you say it is pre tuned, but don't give an RPM range, you have said nothing about the tuning.

#### Sample RPM & Lengths

10,000 / 17,000rpm x 17.5 = 10.29 inches
10,000 / 16,500rpm x 17.5 = 10.60 inches
10,000 / 16,000rpm x 17.5 = 10.94 inches
10,000 / 15,500rpm x 17.5 = 11.29 inches
10,000 / 15,000rpm x 17.5 = 11.67 inches
10,000 / 14,500rpm x 17.5 = 12.00 inches
10,000 / 14,000rpm x 17.5 = 12.50 inches
10,000 / 13,500rpm x 17.5 = 12.96 inches
10,000 / 13,000rpm x 17.5 = 13.50 inches
10,000 / 12,500rpm x 17.5 = 14.00 inches
10,000 / 12,000rpm x 17.5 = 14.60 inches
10,000 / 11,500rpm x 17.5 = 15.22 inches
10,000 / 11,000rpm x 17.5 = 15.90 inches
10,000 / 10,500rpm x 17.5 = 16.70 inches
10,000 / 10,000rpm x 17.5 = 17.50 inches
10,000 / 9,500rpm x 17.5 = 18.42 inches
10,000 / 9,000rpm x 17.5 = 19.44 inches
10,000 / 8,500rpm x 17.5 = 20.59 inches
10,000 / 8,000rpm x 17.5 = 21.88 inches

# Hints & Tips

## Holes for wing dowels

A standard scenario for installing holding dowels in the leading edge of the wing is to put the wing in place on the fuselage, mark it through the pre-drilled holes, remove it, and drill for the dowels. The problem is when you drill, the drill bit "wanders" slightly and the alignment is off. Solution? Use a piece of brass tubing as a hole saw. Cut teeth in one end and glue into a piece of hardwood for a handle. Now you can start the hold with the wing in place. Pushing and twisting the tubing allows you to cut right through balsa and even light plywood with little effort. Put a small piece of dowel in your first hole so the alignment stays accurate for the second hole. Note: A longer piece of brass tubing, with teeth on the end, can cut nice holes in the aft fuselage for nyrod exits.

from Plane Talk  
Aerobatic Aces  
Bob Van Singel, editor  
Three Rivers MI

## Fixing longerons

from Gerald Sullivan  
We have all broken a longeron or small spar on a model from time to time. A neat way to fix them is to first poke a couple of holes in the tissue to allow CyA to penetrate. Then, use a needle and thread to poke through the paper in line with the break and get the thread just behind the break. Have a helper hold the model and gently pull the thread to bring the break back in line. A drop of CyA will penetrate and fix the break. A great advantage is you can pull the thread at an angle and tighten both panels of tissue at once. On heavier longerons, two threads can be used by actually poking a small needle through the longeron on each side of the break.

from Brainbuster Newsletter  
Brainbuster Free Flight Club  
Ambram Van Dover, editor  
Newport News VA



# SCCMAS 2005 Event Survey

## SCCMAS Members:

We are looking for your input into the **2005** series of contests and events to be held at the SCCMAS field. Below you will find a listing of potential events. Please circle your interest in the listed events. We value your input on this survey, and appreciate your time.

Event	Interest ???			
Inter Club Fun Fly	Participant	Helper	Spectator	Shack
Flea Market	Participant	Helper	Spectator	Shack
Electric Fly In	Participant	Helper	Spectator	Shack
Giant Scale Fly In	Participant	Helper	Spectator	Shack
Junk Yard Airplane War	Participant	Helper	Spectator	Shack
Quickee / QM40 Races	Participant	Helper	Spectator	Shack
Annual Air Show	Participant	Helper	Spectator	Shack
Warbird Races	Participant	Helper	Spectator	Shack
IMAC Contest	Participant	Helper	Spectator	Shack
T-34 Races	Participant	Helper	Spectator	Shack
T-34 Triangle Series	Participant	Helper	Spectator	Shack
Pattern Contest	Participant	Helper	Spectator	Shack
Helicopter Fly In	Participant	Helper	Spectator	Shack

All events will be one day events. The only exception will be the Annual Air Show. If you would like to see one event run more times than once in the year please add comments below. (i.e.: 2 or 3 Flea Markets? What Warbird race format? How many fun flies? ) Thanks again, for helping us with planning your club.

Comments, Questions, Other Events ???.... \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

**Please Mail To: Richard Groen – 241 Blossom Hill Rd. #8 San Jose, Ca. 95123**

# R/C Flea Market

*Presented by the Santa Clara County Model Aircraft Skypark*

*Morgan Hill, CA*

A facility of the Santa Clara County Parks and Recreation Dept.

## Saturday, December 4th

### 8:00am - 1:00pm

By popular demand, we have added another Radio Controlled Hobby Flea Market. Come join us at the SCCMAS field. Buy or sell your R/C related items. **No pre-registration necessary.** Our table space is limited, and is on a first-come, first-served basis, so be prepared to bring your own table. SCCMAS field will remain open for flying during the event and radios being sold must either have their module or battery removed. Our snack shack will be open serving food and refreshments.

## Space rental \$10.00

For more info, contact Richard Groen at (408) 832-7432

SCCMAS website: <http://www.sccmas.org>

[contests@sccmas.org](mailto:contests@sccmas.org)

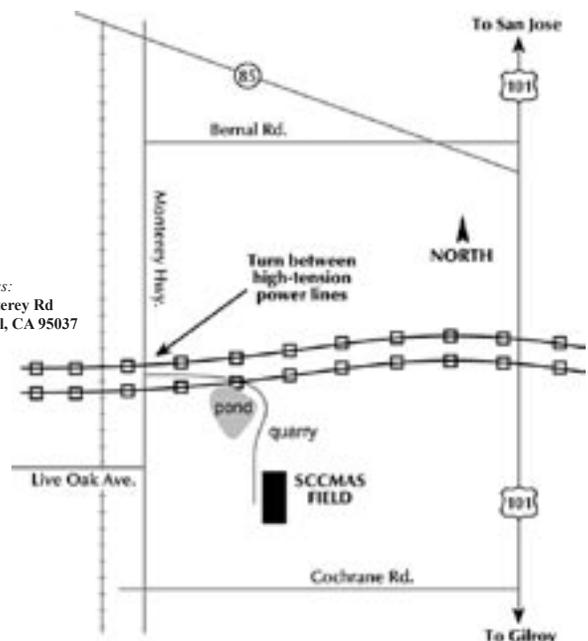
### From Hwy 101 heading North:

Exit on Cochrane Road heading west. Proceed to Monterey Hwy (approx 0.6 of a mile). Turn right on Monterey Hwy and head north for approximately 2.6 miles. Just after you pass Live Oak, you'll see some high tension power lines and an 8 x 10 sign for the SCCMAS. Turn right at the power lines and proceed straight down the paved, private road to enter the SCCMAS. Speed limit is 15 mph.

### From Hwy 101 or 85 heading South:

Exit on Bernal Avenue heading west. Proceed to Monterey Hwy (approx 0.5 of a mile). Turn left on Monterey Hwy heading south. Proceed south for approx 6 miles until you reach Live Oak Avenue. You must make a turnaround on Live Oak Ave. U-turns are not permitted at this intersection on Monterey Hwy. You should be heading North on Monterey Hwy now. Turn right at the high tension power lines where you see an 8 x 10 sign for the SCCMAS. Proceed straight down the paved, private road to enter the SCCMAS. Speed limit is 15 mph.

Field Address:  
10250 Monterey Rd  
Morgan Hill, CA 95037



**Please note- While on the private entrance road, use caution and obey the 15 mph speed limit. Stop at all stop signs and yield the right of way when a bicyclist is present! Thanks, the SCCMAS.**

## Current Governing Board Members of the S.C.C.M.A.S. "Tomcats"

<b>General Manager</b>	Brian Nelson	408-463-0604	<i>nelson711@aol.com</i>
<b>Vice President</b>	Michael Luvara	408-292-1212	<i>mike@sccmas.org</i>
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<b>Contest Coordinator</b>	Richard Groen	408-832-7432	<i>richdutch@sbcglobal.net</i>
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<b>Webmaster</b>	Steve Snell	831-438-7624	<i>webmaster@sccmas.org</i>
<b>Field Weather &amp; Information (AUTOMATED)</b>		408-776-0101	
<b>On site Field Telephone</b>		408-776-6844	
<b>SCCMAS Business Office</b>		408-292-1212	
<b>SCCMAS WWW address:</b>		<i>http://www.sccmas.org</i>	

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*SCCMAS members enjoy the hangar hospitality of Mark Kadrach during the October meeting at Reid Hillview Airport  
(Photo by Jim Patrick)*

The Servo Chatter is published bi-monthly by the SCCMAS "Tomcats" radio control club located in Morgan Hill, CA. For info E-mail: [servochatter@sccmas.org](mailto:servochatter@sccmas.org). Views expressed in the Servo Chatter are those of the writers. They do not necessarily represent the views of the club, its members, or officers. The SCCMAS is a non profit organization. The Servo Chatter welcomes all letters and comments. Permission is granted to reproduce anything printed in Servo Chatter as long as the source and author are credited.



Servo Chatter c/o SCCMAS  
1365 Buchanan Dr.  
Santa Clara, CA 95051-3950



*Next meeting: Friday, December 3rd, 2004 @ 7:30pm  
Location: Hayes Elementary  
(see page 3 for a map)*