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Southern Alameda County Radio Controllers

President: Bob Freshwater (510) 657-2847

Secretary: Jim Newman

Vice President: Rico Dalmau

Treasurer: Jim Utley (510) 352-3150

Minutes of the June 11th General Membership meeting by Jim Newman

Minutes

Accepted as published.

New Members/Prospects

Gary Yu and Efren Cortez were voted into the club as new members.

Treasury Report

Accepted as read.

Secretaries Report

None.

Field Report

Bob Freshwater thanked Art Vargas and Brady Deltrick for taking care of the weeds at the club's flying field.

Bob Freshwater reported that new cranks have been installed on the framework that holds up the awnings over the pit area of the flying field. The awnings connect to metal cabling and the cranks

are used to tighten the cabling and hence, hold the awnings taut. Bob stated that the awnings will be installed within the next couple of weeks.

Safety Report

There was an incident at the flying field where a large aircraft came into the pits, flew over the heads of several flyers, and struck the inside of the fencing behind the glow starting area. Bob Dutra was seen diving to the deck next to the fencing along the flying stations. Bob's safety recommendation in such a situation is to "DUCK!". Luckily, no one was hurt. But the same can not be said about Art's Cessna Wind Sock. It was completely destroyed.

Old Business

Bob Freshwater stated that the Club's Swap Meet that was held on June 4th was a bust because of the rain. He suggested holding a second Swap Meet later in the year, possible in September. Several other members went along with the suggestion. The next time, Bob would like to see better advertis-

Again this month....General Membership Meetings will be held

At the Field July 9th.

Meeting time will be 11AM followed by a free BBQ

ing and flyers for the swap meet and is looking for anyone in the club who can help generate the literature. He also suggested that we have better directions to the club house.

New Business

Bob made a proposal to increase the club's annual dues from \$60.00 to \$65.00. He proposed that the additional \$5.00 from each member would be used as a donation to the Viola Blythe Fund. After a brief discussion, Jim Solar made a motion to increase the club's annual dues to \$65.00 with the additional \$5.00 being used as a donation to the Viola Blythe Fund and that if anyone objects to the additional \$5.00, that that individual could opt-out. The motion was seconded and passed by voice vote.

Announcements

Jeff Whitney stated that his annual Waldo Pepper's Flying Circus Fly-In would be held this year on September 24th and 25th. This year, the event will be open to WWI aircraft along with Golden Age aircraft that were first flown up to 1935. Please see the club's web site for more information at www.sacrc.org.

Dummy of the Month

Carter Furr was nominated for this award for planting his Strega aircraft into the parking lot. Tim Stingle was also nominated for having a mid-air with Art's Cessna wind sock. By popular vote, Carter won the award.

Show and Tell

Scott Clinton displayed a Blitz RC Works P51. The aircraft has a wingspan of 63" and the construction is foam-injected.

Walter Humphrey brought an Alpha Jet from Hobby Lobby. The aircraft is powered by an EDF setup with the motor nacelle slung below the rear of the aircraft.



ON THE SAFE SIDE

Odds & Ends

By Jim Tiller, Insider Safety Column Editor contact Jim at

jtiller@hotmail.com

If you are in the market for new sunglasses for this flying season, I strongly recommend you get safety glasses. Safety glasses no longer look like the ones you wore in high school chemistry class. There are many styles and varieties. There are even bifocal offerings for those of you, like me, with aging eyesight.

There are many local and online sources with prices from \$10 to \$100. Regardless of the price, they must meet the American National Standards Institute (ANSI) requirements to have the label. Just make sure that the glasses you purchase meet the ANSI Z87.1 standard. This safety standard requires the frames and lenses have been tested to withstand a 150-foot-per-pound impact with a steel ball.

The Only Truth

---by Klotz the Kat



I know a modeler who folded a paper airplane while traveling on a Northwest Airlines flight. Then he launched the plane down the aisle. Now he claims to have built a model airplane that flew 600 mph at 35,000 feet. We can also say that the airplane flew only 10 mph at an altitude of 5 feet. Please note that both claims are completely and equally true!

Please remember this example when someone presents an idea that they insist is the one and only truth.

People Behaving Badly



Well things have been kinda quiet lately - maybe winter is over, people have been doing real good on safety issues. Remember the rules are in place to protect all the flyers, not just a few.....one thing: the high speed passes down the runway should be done at the edge of the pickle weed. Things can happen real fast if you are in the middle of the runway. Just ask me about it—if you have ever seen a 40 lb plane coming at you throttled up. I laid down behind the fence, it went over my head and then took out the little plane weather vane we had on the fence post. It was a good pilot that it happened to, too. Things happen fast - just be careful

(Bob Dutra, Safety Officer)

Upcoming Events for June/July 2011

25th & 26th	Pattern @ Radio Control Flyers Unlimited, Woodward Res. Dick Belden richardbelden@volcano.net
25th & 26th	US Scale Masters Qualifier @ Ukiah Prop Busters Dan Sciacca dsciacca@mgmbrakes.com
July 2&3	4th of July IMAA Fun Fly @ Woodward Reservoir Jose Macias hiflyerjr@scbglobal.net
July 9&10	Airshow @ SCCMAS Mike Luvara contests@sccmas.org
July 16	21st Annual Memorial Fun Fly @ Salinas Area Modelers Jim St. John tigger1000@att.net

The complete NCRCS schedule is posted on the SACRC's website and at
<http://www.ncrcs.com/index.php/listeventsyear>

Cooling

---by Klotz the Kat



There's an urban legend going around that says the ratio of cooling outlet area to cooling inlet area for cowled model engines should be 3:1. Is it true? Maybe.

I ask you to look at the cowls of the Nieuport 28, AT-6, B-29, P-47, Pitts Special, FW 190, GeeBee, Cessna 152, Zero, Extra 300, Sukoi 31, or any full-sized air-cooled airplane of your choice. You won't find this ratio or anything even close to it. In many cases, the exit is less than the inlet. Haven't the designers of these air-

planes read the chat rooms?

To be fair, under certain very specific conditions, the 3:1 rule sorta works. But those who spread this legend don't tell you all you need to know. Here's the rest of the story.

The 3:1 rule applies only to cowls ...

1. without baffles or any other internal air direction,
2. whose internal volume is much larger than the volume of the cylinder(s) and
3. in which the incoming air travels straight to the cylinder without any change of direction.

Under these conditions, the 3:1 rule approximates the airflow of an uncowed engine. It is an attempt to get the air to flow around the engine as if the cowl weren't there! The location and shape of the inlet and outlet must be carefully adjusted to accomplish this. For example, if the inlet hole is too big or improperly positioned, air will flow *around* the cooling fins instead of *thru* them. For this type of cowl to work, the inlet hole must squirt air directly on the engine, especially the cylinder head.

It is an inefficient and unreliable method, requiring a lot of tinkering to get it working right. It may not work at some airspeeds and some attitudes. It is uncalculable. It's a kludge. That's why it is never found in full-sized aircraft. And the holes make it useless for scale models and draggy for racers. A much better method is to follow full-size methods—use a baffle, duct or other airflow direction methods.

A baffle directs all incoming airflow thru the cooling fins of the engine. It has nowhere else to go. The volume of air flowing thru the cooling fins (the only air that is useful for cooling) is proportional to the pressure difference between the front and back of the engine times the area of the space between the cooling fins. As long as the intakes and outlets are at least as big as the area between the cooling fins, airflow will be at least as great as an uncowed engine. If either is made larger, the airflow will be even greater. A cowl of this type is known as a "pressure cowl" because of the large amount of compressed air inside. So why aren't baffle patterns included in engine user manuals? Because we modelers don't ask. And what about the fact that heated air expands? How much bigger should the outlet be to accommodate the increase in volume due to heat? By actual measurement of the exiting air of a cowed and baffled OS 108 2-cycle engine in flight at full throttle in ambient air of 90 degrees F, we have observed an increase in temperature of 30 degrees F. Using Charles Law ($V/T = k$), we calculate the increase in volume to be only 6 %.

See ya at the field. Bring really cool sandwiches.

(Editor's note: Last time I accidentally left off the last couple of paragraphs of this article. Sorry if it caused any confusion. Further note: Klotz the Kat is the creation of noted scale airplane designer David Anderson and is used by permission)

SACRC Swap Meet

By Jeff Whitney

The swap meet was scheduled for June 4 and went ahead as planned, despite the rain. The rain probably kept a lot of people away but there were still several sellers and buyers in attendance. I took a few photos to give you an idea:



Whitney photos



President Bob doing his thing
Changing out the old winches for new



Scott Clinton and his new baby
Blitz RC P-51



Gregg Wilson and his UAV Predator



The remains of Art Vargas' weather vane
Sorry Tim . . .

All photos courtesy Jim Utley

TIPS & TRICKS

Trick to using Robart pin hinges

I was installing Robart pin hinges on my T-34 Mentor. I can never get both sides perfect ... no matter how carefully I measure, so I came up with a neat trick to make them perfect.

On the stabilizer (in this case three hinges on each side) I mark out where I want the holes, then I clipped off 1/4 inch of T-Pin tip and, using pliers, push the short pin into the stabilizer where I marked. I left about 1/8 inch or less sticking out (either end works, but I pushed the pointed end into the stabilizer).

Next I made sure the elevator was perfectly aligned with the stabilizer then pressed the two together. The pins left a mark on the elevator (or rudder) where to drill the holes. I guess you could use the same method with CA hinges.

—Dave Raczka, Brauer's Aviators, Pendelton, New York

Southern Alameda County Radio Controllers

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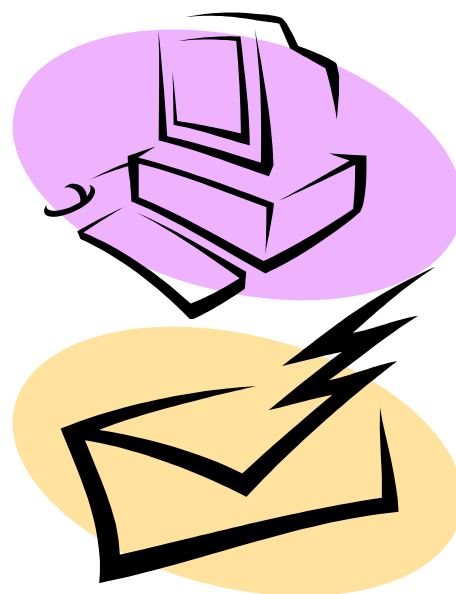
SACRC "SacRats"

Visit our website @ www.sacrc.org



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11AM at the Field



Jim Utley, Editor