

THE SLOW ROLL

A PUBLICATION OF THE SUN VALLEY FLIERS

Editor- Brian McKelvey

WWW.SUNVALLEYFLIERS.COM

December 2005

President- Norm Goodnuff

Vice President- Charlie Beverson

Treasurer- Gene Peterson

Secretary- Dr. Paul Steinberg

THE PRESIDENTS CHANNEL

Norm Goodnuff



I hope everyone enjoyed Thanksgiving; we all look forward to the great home cook meals. Coming next is Christmas with another great meal and hopefully under the Christmas tree there will be a nice RC present. Sun Valley Fliers wishes all its Members a very merry Christmas and a Happy New Year.

SAFETY: The SVF Board always has a discussion about the safety at your field (yes as a member it is your field) and all members are responsible for safety. The Club as a whole has done a pretty good job in adhering to the safety rules. In 2006 we need to step it up a little more so that the rules are followed to a 100% level. Some members say this will never happen but each member shows by example this could happen. So lets all do our part to make it happen,

RUNWAY: The runway will be crack sealed in January of 2006. This will take one weekend or maybe one day each weekend. A notice will be posted at the field two weeks before the work to be done. Help will be needed to do the job and a sign up sheet will be at the January Meeting,

Fly Safe and land on the centerline

**Next Meeting:
Tuesday, December 6th
January Meeting
Tuesday, January 3rd**

Sun Valley Fliers Club Meeting Tuesday Nov 1, 2005

The meeting was called to order at 7:30 pm by President Norm Goodnuff. There were 36 members in attendance.

Norm welcomed everyone and introduced the Club Officers and Board of Directors.

Guests: Steve Miller

New Members: Lucky Mitchell, New Mexico

New Solo Pilots: James Goessling

Secretary's Report: The minutes from the October meeting were not available and will be tabled until the next meeting

Treasurer's Report: Gene Peterson read the treasurer's report. He reported the balances in all the accounts and as there was no discussion the treasurer's report was approved with no nays. Gene reported that SVF now had a paid membership of 335 members! Gene also commented on the fact that notices for the 2006 have been mailed out and fees are coming in. If any member has not received their dues notice, they were encouraged to contact Gene as soon as possible.

Safety Officer Report: Bob Frey

1. **Bob** will publish suggested guidelines for callers in the Slow Roll. Bob reminded everyone that the ceiling at SVF is 400 feet and he urged callers to note this.
2. Radiofrequency control pins need to be careful when taking them from the frequency board and make sure that you have the correct pin. A recent inadvertent error with a wrong pin pull caused a member's plane to be shot down and a total loss. **Bob** will re-publish the procedure for pulling frequency pins
3. Jet caught fire recently and no fire extinguisher was immediately available on the flight deck, we were reminded that this is essential.



Hats & Caps: Paul Steinberg displayed the new Adams Sun block hats being sold for \$30.00. These hats cut the UV Rays by over 40% and are a must for flying in the desert. If interested in one, please see Paul at the meetings or at the field or e-mail him!

Old Business:

City of Phoenix Master Plan: nothing new to report

Signage Issue: A new sign will soon be installed close the main gate to the park once we have final City approval.

Hangar Sale: Have some "stuff" that is collecting dust, but don't have the heart to toss it in the bin or patience to place a classified ad? Need some cash, or just want to give that plane that you so carefully and proudly built years ago, but have now grown out of...a new home? Then bring that stuff to the next SVF meeting. There will be tables set up at the back, and plenty of time before and after the meeting for folks to peruse your goods. And remember, all proceeds from the **Hangar Sale** are yours to keep!

New Club Jackets: Paul Steinberg demonstrated the new WinnerMate SVF jackets / windbreakers. These beautiful jackets are available by special order only and are \$71.00 with your name exquisitely & expertly embroidered in the front. Size 2XL is \$73.50 and 3XL and larger is \$75.00 with name embroidered. If you're interested in joining the 12 SVF members who are already proud owners of these fine jackets, please see or contact Paul.

US Scalemaster Event October 13, 14, 15, 16th 2005 at Cave Buttes Model Aircraft Field, Hosted by Sun Valley Fliers: Mike expressed his thanks to many key individuals who worked very hard to make this event a success. **Kenny Rhoads, Kathy Power, Bob Purdy, Rick Power, Bruce Bretschneider, Dan Crum, Ron Thomas, Bob Frey, Gener Petersen, Walt Freese, Jerry Wright, Rob Olsen, Tony Quist, Jay Steward, Anthony Pugh, Charlie Beverson, and Norm Good-nuff.**

Valued local Sponsors were: **Kevin Marks, Vinnie Di-Fabbio, John Warner, PV Bikes, Frank Moskowitz, Bruce Bretschneider, Charlie Beverson, Ron Thomas, Frank's Hobby House and the AMA, AMPS and ARCS Flying clubs.** These generous sponsors will also be noted in the SVF Newsletter by Mike.

Mike Peck provided the following information regarding the event:

- 1 Medical event but no fatalities
- 44 registered pilots

- 4 no-shows
- 1 Phantom entry
- Static Judging was recognized for their excellence
- Flight judging was very consistent
- Local Sponsor Arizona Model Aircrafters donated 4-25 size "Wright Flyer" models for the kids auction B-17 (Sentimental Journey) did an amazing fly-by over the field on Friday organized by Jaime Johnson of Arizona Model Aircrafters.

Electric Turkey Fly & Swap Meet, November 12th

Bob Purdy is the CD. This will be an open fly, no competition but lots of prizes and AL proceeds going to Phoenix Children's Hospital, Camp Rainbow. Registration fee will be \$15.00 and parking \$3.00 per car. **Bob** asked for help with the gate, kitchen and registration and circulated a sign-up sheet.

Tucson Aerobatic Shootout October 5-9th

SVF Members performed exceptionally well. **Dean Bird** took a first in Intermediate, **Tony Holden** 5th in Advanced, **Tony Quist** 3rd in advanced and **Mark Doan** 5th in expert.

CAMAC Calendar

Tony Quist explained to members the nature and purpose of CAMAC, mainly this group, representatives from the AMA and all major clubs and sections meet to coordinate major flying and non-flying RC events in AZ. Major events at SVF coming up: **1/8 Air Force Scale Fly-In** (at AMPS) Oct 22, 23
IMAC Feb 18-19, 2006
Helicopter Fun Fly March 10-12

New Business:

Bob Frey informed members of a scale meet in Indio, CA this coming week-end

Other Business: None

Door Prizes: there were many tonight, fuel, decals, shirts and if you were **Ken Melbye, Ron Thomas, Jay Steward, Steve Miller, Bruce Bretschneider, and Jerry Despres** you were a lucky winner....and if your name was "**Lucky**" you won the 50/50 and collected \$68.00!

50/50 Draw: \$68.00 Lucky Mitchell

Meeting adjourned at 9:03 pm

Next Meeting December 6, 2005 7:30pm

Paul Steinberg, Secretary



Treasurers Report

Thanks to all who have sent in your renewal for 2006. We are currently up 174 of our 343 members on the roster.

Hope you filled in any missing blanks on the renewal form. Lots of missing info like birth date and AMA numbers. Mr. Purdy is unable to recognize your birthday in the newsletter if we don't have a date.... How we going to know when you turn Senior and can get a discount.....?

Gene Peterson
Treasurer

There will not be a Slow Roll published for January. Don't forget the Janaury Meeting, January 3rd, 2006

Call for Instructors

With over 300 members we have a lot of talent. We also have a lot of pilots that would like to advance their flying skills.

We generally monitor a student until he/she passes the solo exam then cut'em loose. There are pilots that want to go further but need help from an instructor.

We need a few good pilots to step up and help by becoming a instructor for intermediate, advanced, and sport levels. There would be an exam for each level and I'll have the proposed exams at the next meeting.

Please let me know your thoughts on how we could implement a instructor base using this proposal.

Frank Moskowitz

**Next Meeting:
Tuesday, December 6th**

**January Meeting
Tuesday, January 3rd**

The 2005 Electric Turkey Fly In

By Bob Purdy

What a beautiful day and turnout it was with 39 pilots registering for this event.

All kinds of electric aircraft, Autogiro's to WW1, WW2, Jets, electric gliders, hot liners and a helicopter were flying throughout the day. All sizes of aircraft from 12-inch wing-span to 80 inch.

Awards were given out to the youngest, the oldest, the biggest, the smallest, and you name it, we probably gave it out! 12 years old to 84 young years old. Boy, did Ryan Archer the 12-year-old fly, he needs a sponsor! I'm sure his dad, Randy help a lot. Randy is a multi time World Champ F1C flier and a member of the U.S.FF team.

The noon time show was exciting to watch Yuri Higucci, Hacker demo pilot flying a Dave Patrick Extra 330 doing a knife edge close to the ground along with other great maneuvers. While Yuri was giving us a good show, Sean Plummer was at the mike giving us info on what is in that aircraft.

The swap meet (our first one) was scatter throughout the area and had the pilots selling and buying items. We had Insane Foamies, Hobby Source, and Aero-Model Inc. (Hacker Motors) selling their wares. Again we want to thank those vendors in providing pilot prizes for this event. Those prizes were to many to list here and we thank those Mfgs., distributors in donating them.

The Phoenix Children Hospital, Camp Rainbow, will be presented with a check for \$2000.00 that came from the registration fee, parking fees. We had several companies; people that went way down in their pockets (Hearts) to give a whole bunch more. Our SVF club helped. The children will love all those that attended this event.

I hope that the SVF's will continue this event and whoever the CD will be to make it even better. Being the CD for this one I can see that a swap meet area should be assign at the field to keep from being scatter over the field. And maybe invite the local vendors out. And this is a must! Have plenty of PIZZA available!

This event could not happen if it wasn't for the people that volunteer to help to put this together. My thanks go out to Fred H., Tony Q., Frank M., Lucky M., Don H., Jack S., Howard K., Norm G., And to those who helped in other ways.

Bob Purdy

SVF MEETING AT
7:30 P.M..

DECEMBER/JANUARY

EVENTS-BIRTHDAY EDITOR BOB PURDY

SVF MEETING @ 7:30 P.M. American Legion Hall

	DECEMBER	JANUARY	EVENTS
1		TERRY JENKINS DAVE MARCON	TRY OUR WEB SITE—WWW.
2		DENNIS THOMASON	SUNVALLEYFLIERS.COM
3		SVF MEETING	DEC./ TOYS FOR TOTS @ ADOBE MTN.
4	BIRTHDAY GREETINGS		
5			
6	SVF MEETING	KEN MELBYE	
7		MIKE STANKOVIC	
8			
9	LOU BENNET		
10	KEVIN ARQUETTE		
11			
12	JIM BRIDGEWATER		
13	BOB MORRIS JACK JASPERSON	KENT STORY	
14		KEN GIEN	
15	BERNIE FRANK JERRY WRIGHT		
16	BRAD SCHRIMMSHER	KEN BODNAR DAVE NICKOLSON	
17	GRAIG DESPRES JASON KRAUSE		
18	RICK POWER RODRIGO MORENO		
19	DAN BOTT RON TOPEL		
20		ANDREW RUNKLE	
21			
22	JOEL LIEBERMAN	GARY HAYS	
23			
24			
25	R.KINTZ W.FREDRICK N.NACHOR	DENNIS MYRICK	
26		BILL REITZ	
27			
28	JASON FABRETTI		
29	GARY SCHLEGEL		
30	DON HILL		
31			

Know noise regulations to avoid sound problems

by Bob Hoff

Andy Kane, editor

Technical note: I am completely aware that one you cannot measure noise, as you can sound, but the author was making a point that I think is very important so his article is reprinted as he wrote it.

Sound from RC models powered by internal combustion engines, along with real estate development is one of the major causes of the loss of flying fields. We lost our field because of noise complaints, even though we were not violating county noise limits. The tipping point was when pattern contestants practiced too early in the morning and flew too near housing.

The Science of Noise

Noise can range from a single tone to a complex spectrum made up of many tones or frequencies of different magnitudes. Model aircraft noise is closer to white noise than it is to a single tone, so many of the physical laws that apply to white noise can be used to reach useful conclusions about model aircraft noise.

White noise contains components at all frequencies. Noise from RC aircraft is composed of four components, engine intake, engine exhaust, airframe vibration, and propeller sound. Engine exhaust and propeller noise are the most important contributors.

The magnitude of noise is usually measured and expressed as sound pressure level (SPL) in decibels (dB) (on the A-scale of the sound meter) relative to 20 micronewtons per square meter. Meter frequency response on the A-scale approximates the human ear.

The physics and math of the situation dictates that an increase of 6 dB represents a doubling of sound pressure level. In theory knowing the SPL at one distance, the SPL at any other distance can be calculated. In practice it provides an inexact, but useful estimate.

The dominant components of exhaust and intake sound of two-cycle engines are at a fundamental frequency equal to the rpm of the engine and its harmonics or overtones (multiples of rpm). For four-cycle engines the fundamental frequency is half the engine rpm. Exhaust sound is normally reduced by using mufflers.

A research project at N.C. State University, sponsored by AMA, concluded in December 1989 that, "Noise generated by the propeller is the dominant source of model aircraft noise if reasonable efforts are made to reduce exhaust noise."

For many years factory mufflers for many engines allowed levels of noise did not meet the criterion of "reasonable" efforts. Today some factory mufflers are better and after-market mufflers like the Davis Diesel Soundmaster can provide up to 6 dB reduction over a factory muffler. I had a .40-powered airplane fitted with a Davis muffler, and it was sometimes hard to tell if the engine was running when the airplane was high and at a distance.

Propeller noise can be reduced by selection of a propeller design with low noise characteristics and by keeping propeller tip speed below Mach 0.5. In his "Sound Advice" column in the February 1999 issue of Model Aviation Ian MacLaughlin said that keeping the product of rpm in thousands and propeller diameter in inches below 120 will keep propeller noise below 90 dBA, as measured at a distance of nine feet. At a product of 120 this is approximately Mach 0.45. A three-bladed propeller is sometimes used to provide the desired thrust while keeping tip speed down. Airframe vibration noise depends on engine vibration, mounting, and on airframe rigidity. It can be reduced by engine shock mounting with the additional benefit that wear and tear on the airplane is reduced.

In searching the literature I find very little about levels of and suppression of engine intake noise. I suspect that one of the reasons is that it is difficult to separate it from the other sources so it can be measured. There are after-market intake air filters that might reduce intake noise somewhat, but this is not likely to make a noticeable improvement.

David Gierke reported in an article in the December 1995 Model Airplane News that, with a good muffler, he was able to determine that propeller noise was 92 dBA, engine exhaust noise was 91 dBA, and intake noise was 89 dBA. The total noise was 95.5 dBA.

You will note that the total noise is not the sum of the individual sources. If two uncorrelated sound sources are combined on an energy basis, the largest increase that can result is 3 dB in sound power. Combining two unequal noise sources will result in an increase of less than 1 dB in power. For example, a chart in the General Radio Handbook of Noise Measurement shows that if two sources differ in power by 6 dB, the combined level will be increased by only 1 dB above the loudest of the two. Remember this is sound power we are talking about, not sound pressure level that we measure with a sound meter. A 3 dB sound power increase results in a 6 dB sound pressure level increase.