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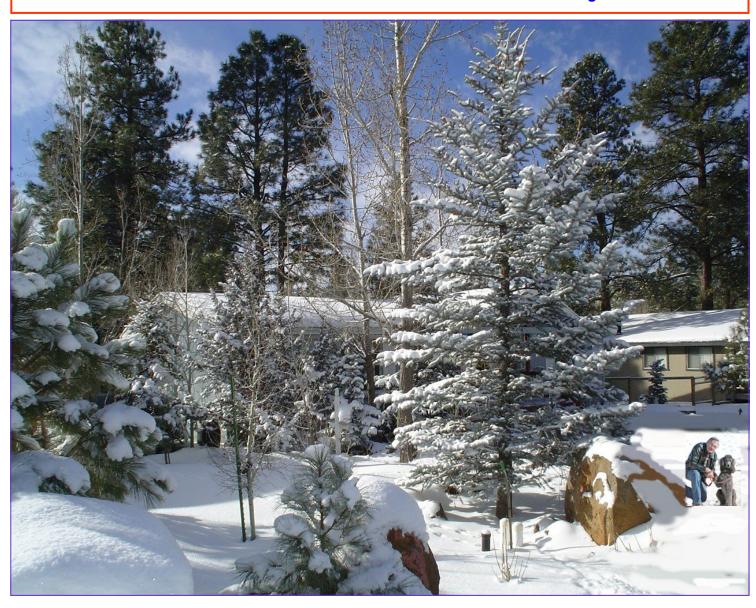
The Slow Roll is published by the Sun Valley Fliers By and for its membership to all others interested in the building of radio control aircraft





Inside this issue

Cactus Classic 02-10/11...Pattern Contest 02-24/25...Scale Project...SVF Members Photos.. Free Sim ?? Arizona Electric Fest...AMA Convention Photos...CAMAC Info You Need...Pizza Night...Electric Basic



THE PRESIDENTS CHANNEL

Norm Goodnuff

Happy New Year everyone, I hope everyone had a safe holiday. As I write this I am wishing I was flying. We have not had good flying weather this year, but I believe this is about to change.



The 2007 SVF events are about to begin. Starting with the IMAC contest held Feb 10-11, SVF Pattern Championships Feb 24-25, and Helicopter fly in March 9-11. Your help is need for these events.

If you would like to fly in the IMAC contest pre registration is required. You can email **Tony Holden** at **ttphx@cox.net** with your information.

We will need club members for man the gate, impound, and help in the Kitchen. I know that the CD's will appreciate your help.

This year we will be addressing the Helicopter flying area. We have sent out a radio frequency survey to all club members. It is very important that everyone returns this as soon as possible. I hope the letter helps explain the truth. There were some wild rumors going around and we thought they needed to be addressed.

In the long the new helicopter site will help make us a stronger club. There is power in numbers and active members. I have been very impressed with the group of helicopter pilots.

We will have PIZZA night at the next club meeting, Feb 6. I have not decided which brand yet.











INSTRUCTOR PROGRAM with Frank Moskowitz

We have a new pilot. His name is John Sikita (AMA# 861317).

Howard Kennedy was his instructor. I have a certificate for John.







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Sun Valley Fliers Club Meeting Minutes

December 5, 2006 and January 2, 2007

The meeting was called to order at 7:33 pm by President Norm Goodnuff. There were 38 members in attendance.

Guests: There were no guests in attendance.

New Members: There were no new members in attendance.

New Solo Pilot: There were no new solo pilot certificates awarded.

President Norm reminded club members that all approved SVF Instructors were listed by name on our website, and that members should point out our excellent pilot instructors to newcomers to that inquire about help, or just show up at the field.

Secretary's Report: Rusty Fried - Rusty was not available to attend the meeting due to medical reasons and Mike Peck was asked to take the minutes in his place. The November club meeting minutes were approved by acclamation as published on the website. Editor note: Rusty looks like he is doing very well.

Treasurer's Report: Gene Peterson - Gene reported that 200 members had already renewed their dues for 2007. In addition to regular dues, the club has received \$1485 to date in funds donated to the field maintenance account from various members who wanted to contribute as they were not able to personally assist with field maintenance work. Gene also pointed out that the hanger sale at the back of the hall had some great deals on transmitters and that members should take the time to check the hanger sale items out before they leave the meeting.

Safety Officer Report: Bob Frey – There was nothing new in the safety arena to report.

Old Business:

President Norm advised the club that the contract had been signed for the Phoenix Helicopter Fly-In with the Arizona Rotary Modelers with the same co-hosting terms as last year.

President Norm also mentioned that there were still instances of where both members and non-members were observed raising too much dust while driving down the access road to the field. The road has been freshly graded and our speed limit signs have been changed to 10 MPH to encourage everyone to slow down and not raise dust. Norm asked that if you notice one of our members driving down the road raising dust, wait until that person has finished parking their vehicle and has had time to get out comfortably, and then remind the driver nicely that we all have to be concerned that we could lose the use of the field if the City or the County is fined by the State Environmental Protection Agency. Norm asked that if club members see non-member individuals raising dust that they record the date, time, and license number of the vehicle and turn that in to a Board member, instead of confronting strangers who may not know what the dust control issue is all about. Bob Frey said he had gotten a report of a club member using bad language to a non-member about a dust control issue, and while that is not acceptable, the fine for a dust infraction could be very large which does necessitate speaking to the non-members who are raising dust if that is practical. Yelling at them while they are driving by, or giving them a one-finger salute, is not a practical or reasonable solution. Charlie Beverson mentioned that EPA fines could be thousands of dollars if more than one vehicle is involved, based on his experience in the construction business. Paul Steinberg addressed the club officers and related that there had been several incidents lately where members were trying to address the problem as they had been asked to by the club officers. In one of those situations with a non-member, one of our club members was actually physically pushed, and knocked to the ground. Paul said that the Board of Directors need to figure out how to control the speed of vehicles on the road, and asking club members to become directly involved with trying to correct non-members' driving was no longer a good option, as this could lead to someone being seriously harmed. The Board needs to look into what has happened at their next meeting, determine how to resolve the issue, and then advise the club members of what is to be done in our newsletter.

New Business:

President Norm reminded everyone that the next Board of Directors meeting was scheduled for Monday, December 11, 2006 at 7:00 PM in Barro's Pizza meeting room on 7th Street just North of Coral Gables Drive.

President Norm reminded club members that the Phoenix Helicopter Fly-In event will be co-hosted at the SVF field on March 9, 10, & 11, 2007 and that we need members to sign-up to volunteer to work the gate, the kitchen, and for general help.

Club member **George Henzel** donated an Extra 300 model aircraft to the club, which included a YS-91 motor and 5 servos in the aircraft. The airframe needed a little repair work and it was auctioned off "as is" at the meeting. **Charlie Beverson** was the high bidder & bought it for \$100. Thank you George for your generous donation.



Continued.....

Door Prize Winners: The club gave out a large quantity of door prizes for the Christmas meeting including several gallons of fuel, assorted battery packs, little airplane kits, kneepads, caps, subscriptions to R/C Report magazine, pies & assorted deserts. There were too many recipients to list.

50/50 Drawing Winner: The 50/50 drawing came to \$60 and was won by Ron Petteric. Merry Christmas, Ron. **Show & Tell:** Rick Powers representing the Hobby Bench gave an excellent presentation on the new Real Flight G3.5 Flight Simulator and the new Horizon Hobby Spektrum DX-7 radio system. The Real Flight G3.5 sells for \$199 and folks who bought the last G3 version can get the 3.5 update off the internet. The Hobby Bench also has the FS-1 Flight Simulator and the G3.5 Flight Simulator set-up side by side at the Bell road store so that customers can try them out and decide which they like the best before buying. Rick also gave a great presentation on Horizon's Spektrum DX-7 spread spectrum radio system which sells for \$350. This one is not just for park flyers and can be used on all R/C models from the trainers to the giant size aircraft. System range is not an issue with this new radio, it is interference free, and it does not require a fixed frequency pin. It has some great new features including model matching which makes it impossible to operate the wrong model on the transmitter if you have more than one aircraft on the radio system. Thanks Rick for an informative presentation.

President Norm wished all members of the Sun Valley Fliers a Merry Christmas and a Happy New Year, and thanked Charlie Beverson and the others who had made the free dessert bar possible for the club meeting. **The meeting was adjourned at 8:21 PM**

Respectfully submitted, Michael Peck, for Rusty Fried, Secretary

SUN VALLEY FLIERS CLUB MEETING MINUTES

Rusty Fried, Secretary

JANUARY 2, 2007

BOARD & OFFICERS IN ATTENDANCE:, NORM GOODNUFF-PRESIDENT, TONY QUIST-V.P., GENE PETERSON-TREASURER, RUSTY FRIED-SECRETARY, RON THOMAS-BOARD, BOB PURDY-BOARD, MIKE PECK-BOARD, HOWARD KENNEDY-BOARD, FRANK MOSKO-WITZ-BOARD, DAN JACOBSON-BOARD, CHARLIE BEVERSON-BOARD



MEETING OPENED 7:31PM

NEW MEMBER: LANCE SENNETT AND HIS SON AS HIS GUEST.

DECEMBER GENERAL CLUB MINUTES WILL BE IN JANUARY'S NEWS LETTER. Editor note: February

TREASURER'S REPORT:

WE RAISED AN ADDITIONAL \$1740.00 FROM CLUB DUES DONATIONS FOR FIELD MAINTANCE. AS OF DECEMBER 31 WE HAVE 222 PAID RENEWALS.

NEXT BOARD MEETING 1-8-2007.

OLD BUSINESS:

RON THOMAS AGREED TO DO THE FOOD AT THE FEB24& 25 PATTERN CONTEST. HE WILL NEED SOME HELP. PLEASE CONTACT RON TO VOLUNTEER

OUR FIELD WILL BE CLOSED FOR ONLY 9 DAYS IN 2007 FOR EVENTS.

THE FIRST WILL BE THE IMAC CONTEST 2-10 & 11 2007, THE NEXT WILL BE THE 26 ANNUAL PATTERN CONTEST 2-23 & 25, 2007.

RON THOMAS WILL DO THE KITCHEN FOR BOTH EVENTS. MANY THANKS RON.

EARLY FEB WE WILL DO A SHED CLEAN UP.

FRANK MOSKOWITZ GAVE ALL PERSONS PRESENT AT THE MEETING A DUST CONTROL HAND OUT PLEASE READ IT AND WHEN YOU HAVE FINISHED GIVE IT TO A FRIEND. THE PHOENIX METRO AREA FACES A DEADLINE FROM THE FEDS TO CLEAN UP PARTICULATES, AND OUR INTAKE ROAD IS PART OF THE POLLUTION. PLEASE DRIVE AT A DUST FREE SPEED!

THE HELI DEAL: MIKE PECK HAD COMMUNICATIONS WITH CITY OF PHOENIX AND COUNTY. THEY AGREE IN PRINCIPAL WITH THE PROJECT, HOWEVER THEY WANT TO PUT IT ON THE BACK BURNER FOR A WHILE. THE GOVERNMENTS STATED THEY RECENTLY TURNED DOWN THE BALLOON PEOPLE FOR A USE PERMIT AND WANT THINGS TO COOL OFF BEFORE DEALING WITH US. MIKE PECK AND BOB FREY WILL BE SENDING A LETTER TO THE MEMBERSHIP ON WHAT IS ACTUALLY HAPPENING WITH THIS PROJECT. AS OF THIS PRINTING NOTHING OTHER THAN A FEW LETTERS BEING MAILED HAS HAPPENED.

NEW BUSINESS: AS OF THIS DATE THE **PATTERN CONTEST** IS ON TRACK.

FRANK MOSKOWITZ BROUGHT A SLIMLINE FIELD CADDY TO RAFFLE OFF, THE PRODUCT WAS DONATED BY SLIMLINE. ALL PROCEEDS WILL GO TO THE CLUB. CHARLES BRVERSON HAD THE TOP BID.

AMA REQUIRES AT THE ANNUAL MEETING WE READ ALL SAFETY RULES BOTH CLUB AND AMA RULES. WE TABLED THE READING TILL THE FEBRUARY MEETING. THIS WAS VOTED AND PASSED BY THE GENERAL MEMBERSHIP.

DON'T FORGET ALL GAS POWERED AIRCRAFT ARE REQUIRED TO HAVE A WORKING FAIL SAFE.

DOOR PRIZE WINNERS: FRANK MOSKOWITZ - FUEL, OHN WARNNER - FUEL, JAY STEWARD - FUEL

KEITH KOSMANN – FUEL,

50/50 RAFFLE: WON BY TONY QUIST, A \$35.00 BOUNTY.

SHOW & TELL: DAN JACOBSEN BROUGHT A 50CC SIZE ULTRA RC YAK ARF. DAN SAID IT WAS APPROXIMATELY A \$2500.00 INVESTMENT READY TO FLY. HE PURCHASED THE KIT FROM FRANKS HOBBY HOUSE. HE IS USING A SMART-FLY OPTICAL KILL SYSTEM. THE KIT INCLUDES ALL NEEDED HARDWARE. THE KIT ALONE WAS \$670.00. THE WEIGHT WILL COME AROUND 15LB @ 1450 sq in.

DEAN BIRD BROUGHT A PROFILE PARK FLIER WITH A SPREAD SPECTRUM RADIO.

WAYNE LAYNE BROUGHT A JET HANGER A-7, IT CAN BE FLOWN EITHER TURBINE OR ELECTRIC. VERY NICE MODEL. LOOKED GOOD.

MEET ADJOURNED 8:17PM, VOTED AND PASSED.

FIELD IMPROVEMENT FUND MEETING WAS CALLED TO ORDER BY NORMAN GOODNUFF AT 8:18 PM. THERE BEING NO BUSINESS TO DISCUSS, **MEETING ADJOURNED AT 8:22PM**



\$ TREASURERS REPORT \$ with Gene Peterson

Well, we're moving right along on the membership drive. 274 Members renewed so far. Club shows 324 Total Members as of the end of January. Thanks for getting yours in if you have, and if you haven't, "Lets get it done". If you want to check, email me at pvbikes@cox.net or call me during the day at (602) 788-0808 if you like.

We will typically lose 40-50 members each year, because of lots of reasons, moving, etc so we're pretty close to "usual"

Members not renewed list will be out in next newsletter.

Been a little cold for flying, but seems to be warming up a little. Maybe get some more flying done in February......

One last thing, please mail back the Frequency update page that was in the recent letter from the Board of Directors. Thanks if you already have.

Regards

Gene Peterson, Treasurer SVF

SVF MEMBERS FEBRUARY BIRTHDAYS

First name, Last name, Member type, Dob

Michael Peck	Regular	02/02/1948	Scott Theobald	Regular	02/16/1958
Matt Jacobson	Regular	02/03/1986	Samuel Johnson	Regular	02/17/1944
Edward Schaber	Senior	02/06/1934	August Antognet	ti Senior	02/21/1929
Jordan Bruno	Junior	02/06/1995	Mark Doan	Regular	02/21/1959
Walter Tessier	Senior	02/08/1936	Dan Crum	Regular	02/22/1945
Thomas Minick	Senior	02/10/1941	Jim De Veuve	Senior	02/23/1922
Ollie Smidt	Senior	02/10/1939	Joe Wydronek	Regular	02/23/1973
Robert Smith	Senior	02/10/1931	Greg Frohreich	Regular	02/24/1950
Richard Shogren	Senior	02/13/1934	Len Clements	Regular	02/25/1958
Kurt Sowle	Regular	02/13/1967	Richard Clark	Senior	02/26/1929
Josh Fivecoat	Regular	02/15/0980	Tom Guca	Regular	02/26/1942
			Eric Stevens	Regular	02/27/1969



Sun Valley Fliers

presents

Cactus Classic 07

February 10,11 2007

Classes flown;

Basic, Sportsman, Intermediate, Advanced, & Unlimited Unknowns Sunday morning for all classes but basic.

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Early Swept Wing Fighter Flying. (Attn: Scale Modelers)

By Bob Morris

In 1945, NACA sent Robert T. Jones's compressibility effects study to US aircraft manufactures. The result was sensational! For example, North American Aviation's first jet fighter design, the FJ-1, was redesigned with a swept wing. The USN stayed with the straight wing version, and the USAF bought the swept wing F-86. Good call. Jones's credibility was bolstered when it was later found that the Germans had independently developed the identical aerodynamics.

The first swept wing fighter I flew was the Republic F-84F (originally YF-96A). It was not a true supersonic fighter in that it couldn't go supersonic in level flight. However, F- 84F didn't have a Mach limit and that was super important during air combat maneuvering. Straight down, full throttle? No problem! It was a joy to fly.

Next, I flew the North American F-100C. It goes supersonic in level flight with all the cannons loaded and was a hoot to fly. Designed an hour after the dawn of supersonic flight, the aerodynamics had to be optimized for Mach 1. Thus the small thin wing, swept back 45°: a wing loading about 70 lb. / ft², an engine air intake that worked badly at takeoff angle of attack, and the biggest afterburner possible. In aviation, optimize means compromising something else. In this case the takeoff and landing techniques where unique. Scale Masters flight judges need to understand these unique operations to score them correctly.

To takeoff the F-100, the pilot clamps down on the brakes, runs up the engine to 100% RPM, checks the engine instruments, jumps off the breaks and simultaneously engages the afterburner. That's when the fun starts. The airplane doesn't accelerate as fast as the noise would suggest, but you really felt the power. Control of the afterburner is an all on or off thing. Sometimes the afterburner would light about a half second after the fuel started gushing. Ignition sounded like a cannon shot. Occasionally fuel would flow into the afterburner for more than a second before it lit. The resulting explosion was such that one wondered if the aft section survived. It did. Near the end of the runway, at an exact airspeed (160 knots if I remember right) the aircraft is rotated to a precise nose up attitude — and the engine thrust decays. Thrust is lost because the air intake was not pointed in the same direction that the aircraft is going, causing a reduction in airflow. But the fighter is still accelerating and lift off comes shortly after. Gear up, accelerate to 240 Kts and come out of after burner. At anything above 240 Kts she behaves like a flawless fighter.

Landing is not as dramatic as takeoff unless the drag chute failed. There is, in any case, only one way to land without adding considerable amount of adrenalin.

With the speed brakes out and gear down, 80% RPM and 180 Kts, start a stabilized approach. (The F-100C and earlier didn't have flaps.) At a half mile from the threshold the exact touchdown point becomes apparent, so commit to a landing or go around. There is no flair – touchdown is at the same attitude as the approach. Squawk. Quickly go to idle and pop the drag chute. Mild braking may be needed. Turn off the end of the runway, drop the chute and open the canopy.

If the drag chute fails, start breaking immediately, at first testing to verify that the anti-skid is working, then hard on. Park the aircraft at the hot brake area at the end of the runway, shut down the engine, open the canopy and insert the ejection seat and canopy safety pins. The tower will have launched a fire truck. The firemen place a heavy cage over the main wheels to contain the shrapnel if the wheels should blow up.

I never saw or heard of an F-100 takeoff without afterburner or intentionally land without a drag chute.

This operational detail is important to RC scale contestants. Example: for fun, we can fly a P-51 with fixed landing gear and no flaps. But flying the same model in the Scale Masters will engender serious realism points deductions. To be fair and accurate, flying an F-100 without demonstrating the afterburner and drag chute must be given the same deductions.



Basics of Electric Flight Part 1 by Pat Tritle

I really enjoy getting together with clubs and speaking to the group about the basics of electric power. However, because there is so much information that needs to be passed along, it would be difficult, if not impossible, for those attending to remember much of the pertinent information. For that reason, it's better to write up the basic guidelines so that those who are interested in getting into electrics would have the information available for reference at a later date.

Here goes. I'll keep the numbers as simple as possible to avoid unnecessary confusion.

OK, here's how it all shakes out. The basic power required to fly an electric model is as follows:

Direct Drive Systems 60 watts/pound
Gear Drive Systems 50 watts/pound
Mild aerobatic performance 70-80 watts/pound
For all-out aerobatics 100-110 watts/pound
3-D performance 150 watts/pound or more

The above numbers are based on models with wing loadings from 8-16 oz/square foot. As with gas models, higher wing loadings require more power since they must fly faster to support the added weight. By the same token, a lightly-loaded model with a wing loading in the 3-5 oz/square foot range will fly very well at 25 -30 watts/pound.

What's a 'watt'; and where can I get some?

Wattage is the term used in electric flight to relate the level of power that an electric drive system will produce. To relate it to terms we're familiar with, 746 watts = 1 horsepower. To calculate the wattage delivered by a given system looks like this: amps x volts = watts. So where do these numbers come from and how do I know how many volts and amps are needed to fly a given model?

Okay, let's say you want a mildly aerobatic sport model with a 14 oz/square foot wing loading that will weigh in at 2 pounds. We already know that the power requirement for a model like this is about 70 watts/pound, so we're going to need to generate about 140 watts. Let's assume that you are going to use an eight-cell Ni-Cad battery. At 1.2 volts per cell, eight cells will deliver 9.6 volts. To arrive at the necessary current draw to achieve 140 watts, simply divide 140 (watts) by 9.6 (volts) and you arrive at 14.58 amps.

Now, let's assume that you have a three-cell Li-Poly battery for the model, which is rated at 11.1 volts. The formula is the same; 140 (watts) divided by 11.1 (volts) = 12.6 amps. As you can see, as the available voltage increases, the lower the current draw needs to be to deliver the necessary wattage.

Now here's something to consider when selecting your system: the higher the current draw, the shorter the flight duration on any given battery. Therefore, the ideal setup would be to use a higher-voltage battery with lower current draw for maximum duration. On the downside, when using Ni-Cad and NiMH batteries, as the cell count goes up, the weight will increase significantly as well. It works that way with Lithium too, but Lithium batteries are dramatically lighter then the old "round" cells.

Okay, let's say we're going to use an 11.1 volt Li-Poly battery. All we need to do now is select a motor that will swing enough propeller at 12.6 amps to fly the model at a top speed of around 40-45 mph and we're in business. Now that you know the parameters, visit your local hobby shop and select a motor that fits that description.

Part 2 Gear Drive vs. Direct Drive in March SR



THE 26th ANNUAL

SUN VALLEY R/C **CHAMPIONSHIP**

AT **CAVE BUTTES DAM FLYING SITE** N. CAVE CREEK RD. & E. JOMAX RD. PHOENIX, ARIZONA

For directions to site go to: WWW.sunvalleyfliers.com, and click on "Map to flying site"

FEBRUARY 24 & 25, 2007

F3A-P07, 2007 AMA RULES & PATTERN, ENTRY FEE: SPORTSMAN, INTERMEDI-SPORTSMAN MAY USE ANY TYPE OF AIRPLANE, UP TO 15 LBS, AMA LEGAL

ATE, ADVANCED, MASTERS, F3A \$35.00. MAKE CHECK PAYABLE TO: SUN VALLEY FLIERS C/O RUSTY FRIED.

Registration 7:30 to 8:00 AM Pilots meeting 8:00 to 8:15 AM Flying starts 8:30 AM

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For a place to stay see below.

Days Inn, 21636 N. 26 Ave., Phx. Az. 623-434-5500 Desert Sands RV Park, 22036 N. 27 Ave., Phx. Az. 623-869-8186, Country Inn & Suite Deer Valley, 20221 N. 29 Ave. Phx. Az. 623-879-9000 Many others to choose from.

Detailing with Monokote or UltraCote by Bob Frey

Page 1 of 3 Photos on page 3

I've been experimenting for the last couple years with various techniques to help add realism to an iron on Monokote or similar finish. There's been some degree of success so I thought I would make a step by step list of the procedure. This sounds like a lot of work, but it's still much easier than glassing, sanding, priming, sanding and then painting.

Here's the step by step procedure I used for the wing shown in the picture.

- 1. Tighten up the Ultracoat. Nice and tight. I use a heat gun and a soft cloth to rub it down after blowing over it. I usually seal any bare wood/Ultracoat edges with thin zap, like around the wing root rib.
- 2. Now rub the whole wing with medium (brown) Scotchbrite so the paint will have some adhesion. No need to rub hard or long. Just so you know, I tested painting MonoKote without this step and still had good adhesion without pulling up the paint with tape.
- 3. Now layout all the panel lines. I usually use a fine line black sharpie pen. Once this is done lay down the graphics tape over that. This is 1/64 and 1/32 Letraset graphics tape. Chart Pak makes it too. I get it at the Artist supply store. If you have trouble finding it, I can get you numbers. It's not as popular as it used to be because so much graphic stuff is computerized these days. Just put this down right over the lines you scribed with the sharpie. I use the 1/64 tape for regular panel lines, and the 1/32 for panels that are opened frequently like gun bays and ammo bays, or anything that appears a bit more visible on your three view.
- **4.** Access panels. I use MonoKote trim sheet material to make these, the stuff that is sticky backed. But there are a variety of different material you can use, particularly if you are painting the model. Add these now.
- **5.** Now rub everything down with denatured alcohol. This will clean the surface for paint, and also get rid of any mess ups you may have had with the Sharpie.
- **6.** Now you can spray the whole wing with the Krylon Chrome Aluminum. I hit it with a tack rag just before I spray it. I use one fairly light coat, just enough to pretty much cover it, followed by a heavier final coat about 5 minutes later. It goes on and covers great and will be dry in about 15 minutes.
- 7. After it's been drying for about 10 minutes, get a good sharp Exacto and start peeling up the graphic panel line tapes. It might work OK after it's dried longer, but I've never tried that. Once the tape is pulled off and the paint has dried, you'll have a little ridged panel line where the tape was that you should be able to feel. The black from the sharpie will show where the tape was which gives a little desirable contrast too.
- **8.** I usually wait a couple hours before this step. Get some blue low tack painters masking tape. I get mine at Ace Hardware. Lay that along the edge of the panel lines so that you have a single panel surrounded. Then rub the panel with Scotchbrite in one direction. You will only need to make a few passes, just enough to make it look even. There are three grades of scotchbrite available at Ace Hardware. Green (high abrasive), brown (medium abrasive), and white (low abrasive). Use these varieties to arbitrarily rub the panels in different directions. Some I leave alone. You can also use steel wool, but I haven't had too much luck with fine sandpaper. Surround each panel with masking tape as you go. I use the same pieces of masking tape over and over. You don't have to get it perfectly sealed or exactly on the panel line. It's just there to avoid your rubbing from going over into the next panel. Sounds like a lot of masking, but it actually goes real fast, and is much better than trying to carefully rub up against the panel line without going over it. That would ruin the panel line, and perhaps leave wrong way scratches in the adjoining panel.
- **9.** Now you can lay out any markings, in your case invasion stripes with your sharpie. I my case it was just black stripes. I'd do the whole area in white first. Mask with the blue low tack tape and newspapers. Before you paint go over the panel lines with your sharpie again and lay down the 1/64th or 1/32 graphic tape. Once it's down rub very gently with denatured alcohol. The alcohol will get to the Krylon if you rub too hard. Now spray with the white Krylon. They make a semi flat that is nice, but any sheen will do, since you're going to clear coat everything in the end anyway.

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Same routine on number of coats and drying time, and same routine on removing the graphics tape.

- **10.** Now do the same thing with the black invasion stripes. But this time, once you've got them masked, go over the panel lines with a silver Sharpie pen. Unfortunately, they don't make a fine line silver pen as far as I can tell, but it doesn't matter, since you again put the graphic tape down over that, and whatever isn't under the tape will get painted.
- 11. Spray the black now, again with Krylon and again pull the graphic tape up starting about ten minutes into the drying time. If you did everything right the panel lines should show up clearly on the whole wing, and you should be able to feel them too. So far I've had zero problems with the blue low tack tape pulling any of the Krylon up. Just go slowly and pull the tape back over itself when removing it. I even used some regular white masking tape in a couple of areas with no problem.
- 12. Stars and Bars. The ones that come on the plane are terrible. On the one I'm doing now, I'm using a set made for the Yellow P-47, which just happens to be 'Bonnie'. For Little Chief, I ordered a set of Top Flight giant scale P-51 decals and they're pretty good. You can get them from Tower Hobbies. You need to sand down the panel lines you made where the decals go. I assume you know about putting these on wet with Windex so you can locate them better and then smooth them out. Once they're down good, scribe the panel lines. Dark areas with the silver Sharpie and white areas with black. Don't put the graphic tape on until just before you clear coat.
- 13. Now it's time for rivets. You can do as many or as few as you like. I've been putting a medium amount on these models, probably about 1/4 or 1/3 of the amount you might find on a Masters quality model, but certainly enough to be very visible and present. First scribe all of the rivets you want with the trusty fine line Sharpie. Top Flite makes a rivet stencil, and that's what I use to lay them out and keep them even. Over Black or dark painted areas, use the silver Sharpie, but just put a 'dot' in the middle of the stencil holes, don't try to make a circle in them like you are able to do with the fine line black.
- 14. Assuming you've made the brass tubing tools for making rivets, load the appropriate size into the MonoKote Trim Seal Tool. 3/16th brass tubing fits the tool chuck, and you telescope down from there with tubing to the size you want. I wound up with several sizes and one or two that has a screw slot maker soldered to the 3/16th chuck piece. You have to run the tool on low, or risk the chance of melting the solder in the bits that you made.
- 15. To make a perfect rivet, you need a guide. What I use is an old sprocket about three inches in diameter that has convenient size teeth for guiding the tip of the MonoKote tool. The one I have is steel and quite heavy and this is a plus. Something similar will do as long as you can put it down on the surface to guide you. No need to push hard but you need to be square with the surface, and I usually give it a little twist before pulling away. Pressure will need to be adjusted slightly depending on whether the balsa underneath is soft or hard. A little experimenting will help and before you know it, you'll running off a long line of rivets in a minute or two. Treat the decals just like anything else. On areas where you're going over fiberglass, it's better to use a regular 30 or 40 watt straight tip soldering iron, with the brass tubing wheel collared on the tip. The trim sealing tool just isn't hot enough. But basically the same procedure. I use larger rivets around the gun bays and access panels, and along the trail edge, etc. Use your artistic imagination. On some of the larger ones you can go back and put screw slots in them.
- 16. Your basically at the point I am on the wing I'm working on. At this point, I would ding up the lead edge by spattering some very thinned black paint from the front to replicate stone bruises on the aluminum and white areas, and silver on the black stripes. Do this by loading a brush with the thinned paint, and then whisking your finger across it while holding it near the lead edge. A little experimenting here is in order. Stone bruises were much more predominant near the root of the wing and tapered down to nothing toward the tips. The stab and fin had this effect too. You can use most any kind of paint for this, as long as it will hold up until you clear coat. Once that's done, I'd add the machine guns and pitot. Lots of P-47 pictures show black machine guns, but I assure you all the blast tubes were silver.

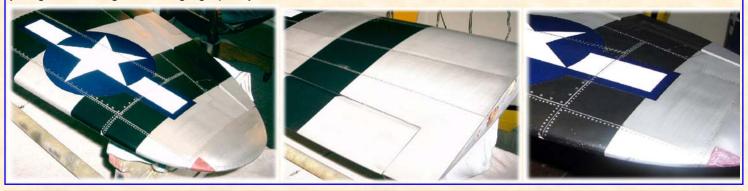
I also add oil leaks and smoke smudges here and there, but you need an airbrush for that. For oil leaks, I load up a brush with well thinned back paint and put a dot at the origin spot of the leak, then quickly blow it with the airbrush in the direction I want the oil to run. Usually it's down and back on the fuse, and just back on the wings. It's wise to use a little piece of masking tape along

Page 3 of 3

the panel to keep it from accidentally going the wrong way. Gun smoke smudges are just done lightly with the airbrush and thinned paint. I also add some smudging aft of the hinge access panels on the ailerons and flaps with the airbrush. All the oil leaks and smudging needs to be done very conservatively. Less is more so to speak.

Once all the details are done you can clear coat the whole thing. Once again, I highly recommend the Klass Kote epoxy, but it does need to shot with at least a trim spray gun. I recommend it because it seems to really stabilize the covering so it resists wrinkling a great deal. Also it is absolutely fuel proof if you intend to run a glow engine. I nice touch would be to go back and mask off the aluminum and shoot all the markings with dead flat, but of course that's a lot more work.

Now I know this sounds like a lot of work, but I think if I really went after it, I could do all of this to one wing panel in one day. That includes rivets, but probably not clear coating. My problem is I take too many 'breaks'. I also understand, that I wouldn't really need to refer to instructions and that does take time too, but after a while and you get the hang of it, things go pretty fast. Good luck. Bob



News flash SVF The radio police were at the field and arrested Mike Peck for flying an old Airtronics radio. He left the field in disgrace to bring a more up to date Orbit radio back. Bob this is news worthy.

SVF MEMBERS PAGE





SPOT THE SVF MEMBER IN THE BAND







ARIZONA ELECTRIC FESTIVAL Friday January 26, 2007 Hosted by Arizona Model Aviators



Many electrics, tiny, small, medium, and BIG!



Many vendors were represented, to buy your electric items







UFO



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AMA CONVENTION at ONTARIO, CA











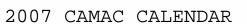














EVENT	LOCATION HO	STED BY	DATES
SOARING CONTEST	COLDWATER PARK	CASL	JAN 13
S.W. REGIONALS: FF, FAI FF, RC Oldtimers	ELOY	SWRMA	JAN 13,14,15
LAKE PLEASANT FLOAT FLY	LAKE PLEASANT	KFERC	JAN 20
WINTERFEST	SPEED WORLD	SWRCF	JAN 20,21
IMAC CONTEST	SUPERSTITION FIELD	EVA	JAN 20,21
ELECTRIC FESTIVAL	SUPERSTITION AIR PARK	AMA	JAN 25,26,27
S.W. REGIONALS: Control Line	TUCSON C. COLUMBUS PARK		JAN 27, 28
SPEED WORLD DESERT JET STORM	SPEED WORLD	SWRCF	FEB 9,10,11
SOUTHWEST CLASSIC 2007	SCHNEPH FARMS	CASL	FEB 10,11
ED SOUTHWICK MEMORIAL CL STUNT Contes			FEB 10,11
CACTUS CLASSIC IMAC CONTEST	CAVE BUTTES	SVF	FEB 10,11
PRESIDENTS CUP (free flight)	ELOY	PMAC	FEB 24
SVF PATTERN CHAMPIONSHIPS	CAVE BUTTES	SVF	FEB 24,25
PHOENIX QUARTER MIDGET PYLON RACE	SPEED WORLD	SWRCF	FEB 24,25
GUN SMOKE/SCALE MASTERS QUALIFIER	SUPERSTITION AIR PARK	AMA	FEB 23,24,25
AMA SPRING AUCTION	VIEWPOINT COUNTRY CLUB	AMA	MAR 3 (8:00 AM)
PHOENIX HELICOPTER FLY-IN	CAVE BUTTES PARK	SVF	,
			MAR 9,10,11
SOARING CONTEST	COLDWATER PARK	CASL	MAR 10
SWAP MEET	SPEED WORLD	SWRCF	MAR 10
ARIZONA COMBAT CHALLENGE	ESTABAN PARK	CACLC	MAR 10,11,12
VINTAGE STUNT CHAMPIONSHIP (Control Line			MAR 14,15,16,17
TUCSON JET RALLY	TUCSON MODELPLEX PARK	TIMPA	MAR 16,17,18
LAKE PLEASANT FLOAT FLY	LAKE PLEASANT	KFERC	MAR 17
SPRING BREAK (free flight)	ELOY	PMAC	MAR 18
1/8 AIR FORCE SCALE FLÝ-IN	SUPERSTITION AIR PARK	1/8 AF	MAR 24,25
CABIN FEVER	TUCSON C. COLUMBUS PARK		MAR 24,25
WINGS OVER THE DESERT FLY-IN	TUCSON (TRCC)	TRCC	MAR 31, APRIL 1
SOARING CONTEST	COLDWATER PARK	CASL	APRIL 14
I-10 CHALLENGE (free flight)	ELOY	PMAC	APRIL 21
IMAC CONTEST	TUCSON (TRCC)	TRCC	APRIL 21,22
SVF ANNUAL RC AUCTION	CAVE BUTTES PARK	SVF	MAY 6 (9:00 AM)
LAKE PLEASANT FLOAT FLY	LAKE PLEASANT	KFERC	MAY 19
SOARING CONTEST	COLDWATER PARK	CASL	MAY 19
HOTT STUFF (free flight)	ELOY	PMAC	MAY 20
SOARING CONTEST	COLDWATER PARK	CASL	JUNE 9
SOARING CONTEST	COLDWATER PARK	CASL	JULY 14
BEAT THE HEAT FUN FLY	FLAGSTAFF (on Leupp Rd.)	FF	JULY 27, 28,29
SOARING CONTEST	COLDWATER PARK	CASL	AUG 11
SOARING IN THE PINES GLIDER FLY	FLAGSTAFF (on Mountainaire R		AUG 26
SOARING CONTEST	COLDWATER PARK	CASL	SEPT 8
FALL KICK OFF (free flight)	ELOY	PMAC	SEPT 15
KARL MARSCHINKE MEMORIAL	TUCSON C. COLUMBUS PARK	CACLC	SEPT 22,23
TUCSON AEROBATIC SHOOT OUT	TUCSON MODELPLEX PARK	TIMPA	OCT 3,4,5,6,7
FALL ELECTRIC AIRCRAFT RENDEVOUS	MUSTANG FIELD	ARCS & KFERC	OCT 6,7
AMA FALL AUCTION	VIEWPOINT COUNTRY CLUB	AMA	OCT 20 (8:00 AM)
1/8 AIR FORCE SCALE FLY-IN	ADOBE MOUNTAIN PARK	1/8 AF	OCT 20,21
GHOST RIDERS (free flight)	ELOY	PMAC	OCT 21
CARRIER PLUS X	AVONDALE FRIENDSHIP PARK	CACLC	OCT 27,28
RED FLAG COMBAT	ESTABAN PARK	CACLC	NOV 2,3,4
WESTERN PYLON FINALS	SPEED WORLD	SWRCF	NOV 3,4
SVF ELECTRIC FUN FLY	CAVE BUTTES PARK	SVF	NOV 10
SOARING CONTEST	COLDWATER PARK	CASL	NOV 10
19 TH ANNUAL ARIZONA JET RALLY	SUPERSTITION AIR PARK	AMA	NOV 16,17,18
TURKEY SHOOT (free flight)	ELOY	PMAC	NOV 17
TUCSON WINTER SCALE CLASSIC	TUCSON (TRCC)	TRCC	NOV 24,25
TOYS FOR TOTS	COLDWATER PARK	CASL	DEC 8
ARIZONA FF CHAMPS (free flight)	ELOY	PMAC	DEC 8,9
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Latest updates of this CAMAC Calendar and other Arizona aeromodeling activities may be found at: www.flycamac.com See flying site location descriptions and host club contact information below on next page or at: www.flycamac.com





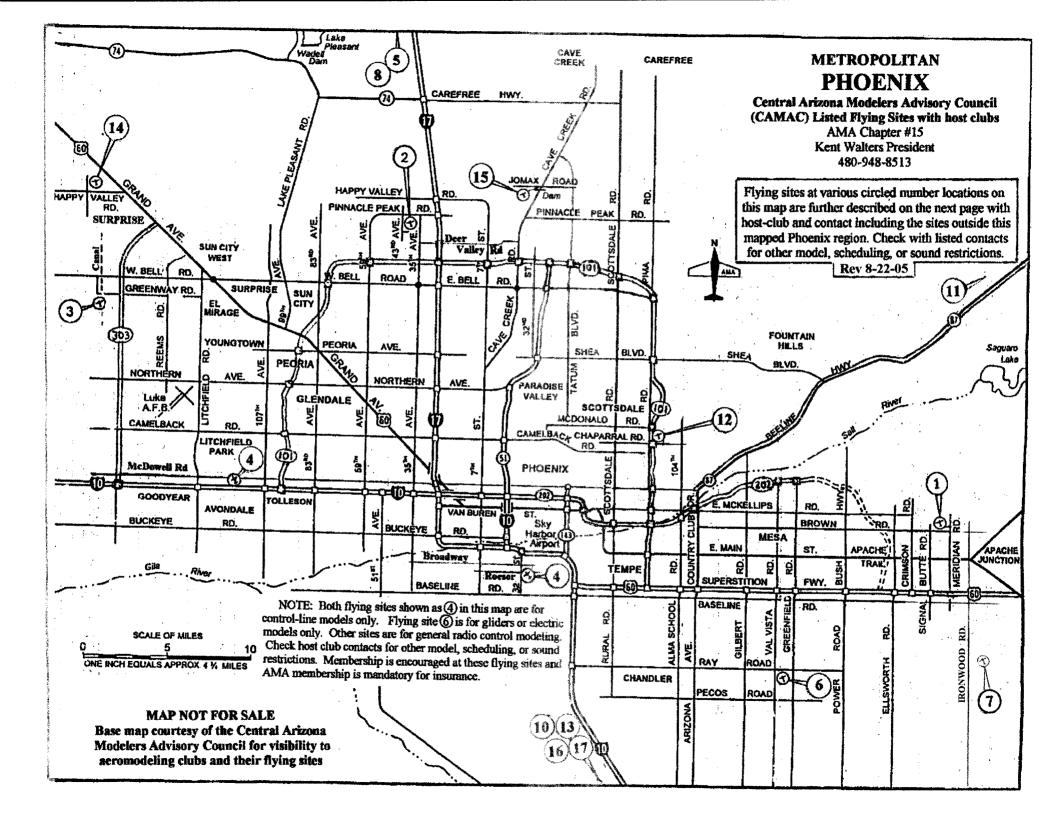


2007 CAMAC CALENDAR OF EVENT INFORMATION FOR FLYING SITE LOCATIONS & HOST CLUB CONTACTS

FLYING SITE LOCATIONS (phx. area): Adobe Mtn. Park is south of the Water Park on 43rd Ave. & Pinnacle Peak Rd.; Avondale Friendship Park (control line only) is on McDowell Rd between 115th Ave. & Dysart, Cave Buttes Park is just west of Cave Creek Rd & Jomax Rd; Coldwater Park is ¾ mile east of the intersection of Dysart and Riley in Avondale (gliders only); Estaban Park (control line only) is at 36th St & Roeser, Mustang Field is approx 7 miles west of Grand Ave on Bell Rd, turn left (south) after crossing McMicken dam, go 1.2 miles to Bell Rd and left again to entree sign; Rodeo Park is at Ray Rd. & Val Vista (gliders only); Superstition Air Park is entered ½ mile north of Brown Rd on Meridian Rd. (1 mile east of Signal Butte Rd); Superstition Field is just off Ironwood Rd 3.25 miles south of Baseline Rd; Speed World is 7 miles northwest of Bell Rd on Grand Ave to Happy Valley Rd., then turn left 1.4 miles west to sign entrance.

<u>HOST CLUB INFORMATION:</u> AMA (Arizona Model Aviators) ph 480-835-5546; AMPS (Arizona Model Pilots Society) ph 623-551-3997; ARCS (Arizona Radio Control Society) ph 623-878-9140; CACLC (Central Arizona Control Line Club) ph 623-877-8968; CAM (Central Arizona Modelers) ph 928-282-4366; CASL (Central Arizona Soaring League) ph 602-301-9578; EVA (East Valley Aviators) ph 602-803-6852; FF (Flagstaff Flyers) ph 520-526-0039; KFERC (Knight Flyers Electric RC Club) ph 602-903-9130; 1/8 AF (One Eighth Air Force) ph 480-948-8513; PMAC (Phoenix Model Airplane Club) ph 480-460-1366; SWRCF (Speed World RC Flyers) ph 623-910-1988; SWRMA (Southwest Regional Modelers Assoc) ph 480-839-8154; SVF (Sun Valley Flyers) ph 623-261-1291; TIMPA (Tucson International Modelplex Park Assoc) ph 520-299-0593; CAMAC ph 480-948-8513









CAMAC Represented Clubs and Flying Site Descriptions Rev D (3-04-06)

(Site number below corresponds to circled number location on Map)

- 1. Arizona Model Aviators, AMA#1600; East Mesa: Superstition Air Park flying site is 0.5 mile north of Brown Rd on Meridian Rd. (1 mile east of Signal Butte Rd). Site includes 800 ft paved runway, ramada, parking, toilets, starting tables, spectator seating area, and safety fencing. Contact Robert Franklin at 480-835-5546 or www.arizonamodelaviators.com
- **2.** Arizona Model Pilots Society, AMA# 1546; Northwest Phoenix: Adobe Mountain Park flying site is 1 mile south of Pinnacle Peak Rd and 43rd Ave. Site includes a paved 700 ft runway, ramada, parking, toilets, water, power, safety fencing, and concession stand. Contact Ed Curtis at 623-551-3997 or www.ampsrc.com
- **3.** Arizona Radio Control Society, AMA#773; Surprise, AZ: *Mustang Field* flying site is 7 miles west of Grand Avenue on Bell Rd. Then turn south just after crossing McMiken Dam and canal. Continue south 1.2 miles to Greenway Rd (no sign). Then turn left (east) and go 0.2 miles and turn right into flying site at posted sign. Improvements include a paved 600 ft runway, ramada, parking and toilets. Contact Jack Knuth at 623-878-9140 or www.arcsl.com
- **4. Central Arizona Control Line Club,** AMA#4116; Phoenix and Avondale (2 flying sites for control line only): In Phoenix at *Estaban Park* at 36th St and Roeser Rd any time, but most flying on weekends. In Avondale at *Friendship Park* on McDowell Rd west of 115th Av restricted times. Contact Mark Smith at 623-877-8968 or www.controline.org
- **5.** Central Arizona Modelers, AMA#898; Cottonwood: From junction of AZ 260 and US89A, travel north on US89A 9.2 miles. Turn left 0.3 miles past milepost #364. Stay on dirt road 0.3 miles, bear left, 0.7 miles to site. Site includes oiled dirt strip, ramada, toilets, locked gate, and safety fencing. Contact Joe Murphy at 928-282-4366.
- **6.** Central Arizona Soaring League, AMA#2133; Gilbert: The Rodeo Park flying site is at Ray Rd and Val Vista for gliders or electric with *quiet flight* only. Contact George Joy at 480-558-1996 or www.CASL.com
- 7. East Valley Aviators, AMA#4098, Apache Junction: The Superstition Field flying site is on Ironwood Rd 3.25 miles south of stop light at Baseline Rd and Ironwood Rd. Turn east at field sign and go ½ mile on dirt road. Site includes east-west 750 ft hard-packed runway, shelter, large pit area, 5 pilot stations, safety fences, parking, and porta toilets. Also separate fenced area for helicopters and separate fenced area for Electric fly only. Contact Verlin Boeder at 602-803-6852 or www.eastvalleyaviators.com
- **8. Flagstaff Flyers,** AMA#2456; Flagstaff: The flying site is east on I-40 then at exit 207 proceed on Townsend-Wynona Rd to Luepp Rd. to mile post 433. The site is on left side. Contact Rick Magnan at 520-526-0039.
- **9. One Eighth Air Force,** AMA#373; See other flying sites (1, 2 and 15). Contact Kent Walters 480-948-8513.

- **10. Phoenix Model Airplane Club,** AMA#760; Phoenix area: Various flying sites including Southwest Regionals in Eloy (see item 13). Contact Elmer Nelson at 480-460-1366.
- 11. Rim Country Flyers, AMA#3100; Payson and Rye (two flying sites): In Payson area one mile east of Star Valley on Highway 260, turn left onto Gila County Maintenance yard Road. Flying site includes 350 foot runway with trees at both ends. In Rye, it is on the west side of Highway 87 just before climbing hill to Payson from Phoenix. A 700 foot runway is on private land with permission of owner. Contact Tom Curtiss at 928-472-7576.
- **12. Scottsdale Model Flyers,** AMA#1961; East Scottsdale: Flying site is NE side of Scottsdale Community College on Jack Rabbit Rd. Flying site has hard pact 700 ft dirt runway. Contact Jack Joseph at 480-970-8464.
- 13. Southwest Regional Modelers Assoc., AMA#33; Eloy: Accessed from I-10 and Exit 203. Site is south on Toltek Rd. 5 miles to large open field on right (west). This site hosts the annual Southwest Regionals in January, plus frequent/monthly FF & RC OT contests sponsored by PMAC and others. From June to August, Dawn Patrol test flying sessions are held on weekends from 5AM until about 9AM. Contact Al Lidberg 480-839-8154 or www.aalmps.com/2005swr.htm
- **14. Speed World RC Flyers,** AMA#3933; Northwest of Sun City: From Bell Rd and Grand Ave, travel northwest on Grand Ave 7 miles and turn west on Happy Valley Rd. Then go 1.4 miles and turn right at sign through gate, 0.2 miles to site. Contact Jim Lime at 623-451-4872 or www.speedworldrcf.com
- **15. Sun Valley Flyers,** AMA#921; North Phoenix: The *Cave Buttes* Flying Site is north on Cave Creek Rd. Then turn left on Jomax Rd and again immediate left onto gravel road 0.5 miles into flying site. Site includes 700 foot paved runway, ramada, parking, toilets, safety fencing, and concession stand. Contact Tony Quist at 623-261-1291 or www.sunvalleyfliers.com
- **16. Tucson International Modelplex Park Assoc.**, AMA# 3137; West Tucson: The Tucson Modelplex Park is located off of I-10 on exit 242 northwest of Tucson and proceeding west for 5.2 miles on Avra Valley Rd. Turn left on Sandaro Rd. and proceed south 7.5 miles to Manville Rd and turn right. Continue west for 3.5 miles and then turn left on Reservation Rd. Proceed 2 miles south to the TIMPA gate on left. Improvements include 750 ft paved runway, ramada, concession stand, safety fencing, and parking. Contact Mike Cummins at 520-299-0593 or www.TIMPA.org
- 17. Tucson Radio Control Club, AMA#112. East Tucson: The TRCC flying site is located just east of Houghton Rd & Valencia 5 miles north of the Houghton Rd Exit from I-10. Site includes 700 ft paved runway, ramada, toilets, safety fencing, and parking. Contact Chuck Brooks at 520-298-9439 or www.flytrcc.com

Other information: Flying sites require pilots to have **current AMA membership** in the Academy of Model Aeronautics for insurance and comply with AMA and local club safety regulations. Authorized daily-flight fees to nonmembers for field maintenance is a host club option. Membership is encouraged!

AMA website at: http://www.modelaircraft.org

dodelaircraft.org Local district 10 AMA website at: http://www.AMA10.org

Kent Walters, President 480-948-8513

CENTRAL ARIZONA MODELERS ADVISORY COUNCIL



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Share with us your event flyer and we'll be glad to place it here in the Slow Roll. Just give us the proper time to place your event.



ARIZONA MODEL AVIATORS R/C AUCTION

R/C KITS, ENGINES, AIRPLANES, BOATS, CARS, TOOLS, RADIOS, ETC.

SATURDAY MARCH 3, 2007 VIEWPOINT RV RESORT 8700 E. UNIVERSITY AVE. MESA ARIZONA

REGISTRATION AT 7:00 AM - STARTING TIME 8:00 AM ADMISSION \$3.00 CLUB RETAINS 10% OF SALE PROCEEDS

MINIMUM BID - \$35

SALE TABLE AVAILABLE FOR ITEMS UNDER \$35

<u>Note:</u> This Auction brings a different format than previous auctions. All auction items will be picked randomly instead of selling all a persons items at one time. This will allow us to present the best possible program to both buyers and sellers.

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4240 West Bell Rd.

602-547-1828 Glendale

M-F 9:30-9PM, SAT 9:30-6PM, SUN 11-5PM

Next Month Issue

We hope to have photos and maybe an article for the 2 contests that will take place in February.

Part 2 on Basic Electric.

Photos and articles are always welcome.

Hope you will enjoy it Bob rcbobsvf@aol.com

SVF MEETING FEB. 6....don't forget survey!

This Month Issue

The front cover was taken in Munds Park by a friend.

Bob Frey has a good article for you scale guys.

Bob Morris also has an article for all. INTERESTING!

Members, AMA convention, AZ Electric photos.

Don't forget the next Meeting.....PIZZA night.

Remember to **ZOOM** the **PDF** page to see



THE SLOW ROLL

Club Officers Norm Goodnuff, President

Tony Quist, Vice President

Gene Peterson, Treasurer

Rusty Fried, Secretary

Walt Freese, **Website Supervisor**

Please check your Membership list for Phone numbers.



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