



EVA Exhaust Systems

The Newsletter of the East Valley Aviators

FEBRUARY 2014

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**The East Valley Aviators R/C
Club**

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Corporation

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Eric M. Gagnon Photography

PRESIDENT'S PODIUM

Submitted By *Dave Byrne*



We've had many discussions on the situation with our entrance to the field from Ironwood. After numerous phone calls to the Pinal County office, I finally reached someone who seemed to know what was going on with our entrance. He said they have had numerous discussions in the county office and they are very concerned with the accidents that have occurred and the overall safety with the stretch of Ironwood from Baseline south to Ocotillo. They are also very aware of the lawsuit stemming from a tragic accident that occurred along the road that left a child handicapped. They noticed by examining the road that certain signs were missing from the original design and made a determination that the signs needed to be reinstalled. Thus the signs near our entrance.

I expressed our club's concern for the safety of our members both entering and exiting our flying field. With the narrow apron for the northbound traffic entering the field and the south bound traffic entering across the "rough" median, it is already inherently dangerous. With the signs now in place, it makes for an obstacle course for the southbound traffic. The county official said they could not do anything at this point.

I next asked if they could add gravel to the median strip to make it a smoother, safer transition and move the signs farther apart for the southbound traffic. He said they could not do that at this time. I then asked if they would put in a northbound turning lane and he said the county does not have the money for that.

He basically suggested that we enter the field from only the south and when leaving the field, exit to the north and then turn around somewhere up the road to later head south. He recognizes that this is not very convenient but he could not

offer any better solution at this time. When asked if we could continue to cross the median, he said they would prefer we don't, but they could not stop us from doing it.

He also mentioned that the state is planning on doing a safety study of this stretch of road which appears to be why the county is reluctant to do anything until the study is completed. Also, to help improve the safety, they plan to cut in rumble strips on the side of the road, add more presence with county troopers to slow drivers down, as well as use aircraft to catch speeders. So be very aware as you drive on Ironwood.

The BOD decided that since we are in good shape financially (from last year's membership renewals and club activities) we decided to go ahead with repairing our runway and build up the entrance drive to the field. It took a great deal of work and coordination to find a place that had screened dirt that we could afford that could be delivered and a truck to water down our runway, as well as the water to fill the truck to help compact the

March 2014 General Membership Meeting

**Valle del Oro RV Resort
Wednesday, March 19, 2010
7:00 pm
1452 S. Ellsworth, Mesa**

Directions: North Side of Highway 60 at Ellsworth. Valle Del Oro RV Resort is on the west side of Ellsworth. Tell the guard at the gate that you are going to the RC Club meeting and they will direct you to the meeting room. You can't miss it.

EVA EXHAUST SYSTEMS

screened dirt. We also found an inexpensive place to get quarter minus for the entrance road. Many thanks to **Verlin Boeder** for finding and arranging all of this for the club.

We had over thirty club members show up on Saturday, February 22nd, to help spread the dirt and quarter minus, pull weeds and trim the bushes south of the field entrance. Thank you very much for all your efforts to help improve our field and keep the field in tip-top shape that we can be proud of. I also want to think Jim Waterman for bringing out his end loader tractor...this was a huge help spreading the dirt and quarter minus. Also, thanks to **Jim Sluga** for putting together the lunch, doing all the cooking and bringing out his famous baked beans. Not sure how famous they are, but everyone thought they sure were great!

We've recently had 2 club members step up to help the board. **John Pomroy** has agreed to take over the Membership responsibilities from **Verlin Boeder** who will continue as Treasurer. And **Mickey Ohland** has agreed to take over the Newsletter duties from **Mike Jeffries** who will continue as Secretary. A BIG thank you goes out to John & Mickey for volunteering to help our club. And also a BIG thank you for Mike & Verlin for all the work they've done in the past. All of you really help make this club "hum" and run like a fine Swiss watch.

At the last General Membership meeting we covered a number of items, but the best part was an extremely interesting presentation by our Secretary, **Mike Jeffries**. He works for Orbital Sciences and did a slide presentation of their Pegasus program and also brought the original solid metal scale model for display of the Pegasus used in the wind tunnel test. The model was about 36 inches long and it felt like it weighed "50 Pounds"! Thanks for your time, Mike, for putting together the presentation. Many members expressed how much they enjoyed it.

The Superstition Challenge was once again a great success. We had 34 pilots and made over \$800 for the club. Thanks to our club member volunteers who helped make it a success.

It seems this month's newsletter is one big thank you column. But it gives me great pleasure to be able to say thank you to so many people who help make this great club what it is. I can't tell you enough how proud I am to be a part of a great group of guys, the camaraderie, and the love we share for our modeling!

See you on the flight line,
Dave

REMINDER

To limit the "wash-boarding" and dust on our entrance road and parking lot, PLEASE remember that the speed limit is 10 MPH.





TREASURERS REPORT

Submitted by *Verlin Boeder*

Financially EVA is in very good shape. At this date in February and with 2014 member renewals essentially complete, we have \$27,218.00 cash on hand. Our reserve fund for the State was capped at \$24,000.00 in December 2013 and will remain at that level from now on. The willingness of

our membership to pay an extra \$10.00 per year has given us a very stable financial base - Thank you. This will allow us to maintain and improve our flying site.

As in past years, a financial statement is prepared for the previous year. This financial statement is made public to our membership and available to the Arizona Corporation Commission. It is included on a separate page of this newsletter. If you have any questions or comments contact me at 602 803-6852.

FYI:

The Arizona State Land Department has revised their process and procedures slightly. The new special land use permit for our flying site has been received. Very little has changed in the legalese of the document. The change - in a good way - that effects us is our lease duration. In the past our lease was for 5 years now it is for 10 years. Our next renewal date is **2022** and our yearly lease payment is set at \$3,600.00 per year. Also, our acreage is set at 10.9 acres plus the road into the flying site. If we plan any expansion we will have to renegotiate the lease.

IMPORTANT!!

EVA has always structured the elected position of Treasurer to include the function of membership renewals and new member application processing. In an effort to upgrade the renewal and application process the EVA Board has decided to appoint an assistant for the Treasurer for membership responsibilities. **John Pomroy** has the job and will be handling all new applications and renewals. The intent is to make all membership functions accessible

2014 MEMBERSHIP RENEWAL

Dues for the 2014 flying season can be paid anytime.

Please send check to:

East Valley Aviators, Inc.

11343 East Elmhurst Drive

Chandler, AZ 85249

c/o John Pomroy, Membership Officer

from our web site. All questions and correspondence should be directed to him.

EVA c/o John Pomroy

11343 E. Elmhurst Dr.

Chandler, AZ 85249

Ph: 623 255-9966

email: pomroy.john@netzero.com

If you are the last person to leave our flying field in the evening, **be sure to lock the gate!!!!**

Happy flying and smooth landings, lets all enjoy a great hobby.

Verlin



EVA EXHAUST SYSTEMS



SECRETARY'S REPORT

Submitted by *Mike Jeffries*

General Membership Meeting - 2/13/14

Attendance: 61 members

Programs:

Mike Jeffries gave a talk on the Orbital Sciences' Pegasus Rocket

John Pomroy showed off the HobbyKing Flybeam Night Flyer.

Jerry Dudeck presented the Babcock Escapement Free Fight System

President Notes

Superstition Challenge IMAC, We had 34 pilots. Club netted about \$800.

Ironwood Road Situation

We are working with the county. New signs erected are supposed to be have been planned all along. Board is in contact with the county. Stand by for more. Please do not touch or damage the signs. Please notify BOD if there is any situation with the signs. County would like members to make U-turns at the lights north and south of the field entrance. The state has a planned safety study for Ironwood likely this fall.

T28 Racing

Email went out to see who would be interested in T-28 racing. We had a dozen responses in favor. Five of the board members will race. Contacted Roy at Sun Lakes to get the rules used down at that club. Dave will work on organizing the race.

Field Maintenance

Scheduled for Feb 22. We found a source of screened dirt for the runway. Plan is to rent a roller and water truck. Overall the cost will be around \$2,500. **Jim Waterman** will bring out

his tractor to fix the entrance and berm along the north side of the runway. **Joe Sluga** will me making his legendary beans and franks for lunch after the work is complete.

Upcoming Events:

Pattern contest on March 1 hosted by **John Bentley**.

Treasurer Report:

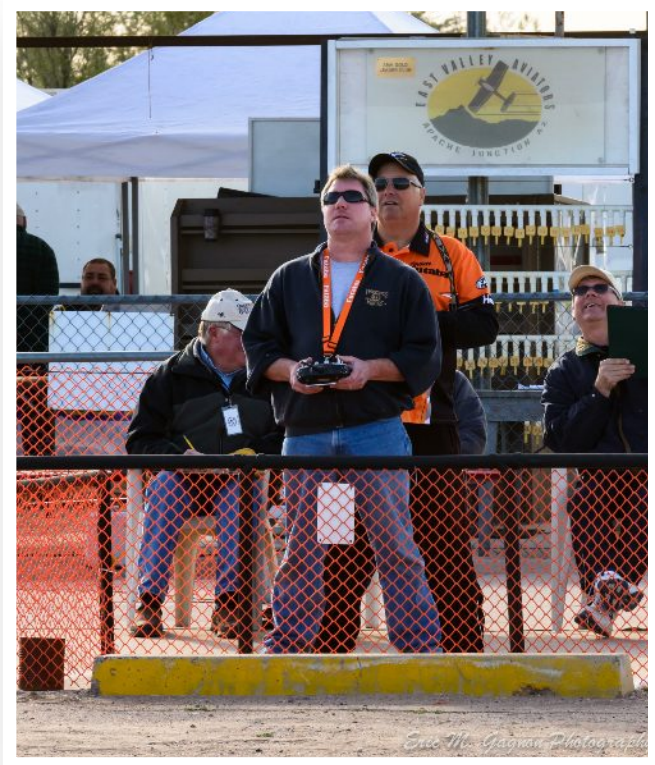
We have \$26,809 in the bank in addition to the \$24,000 we keep for the state. Club is in very good financial situation.

Membership.

John Pomroy (Former President) is taking over membership duties. BOD has decided to separate these duties from Treasurer.

John and **Mike Jeffries** plan to work a membership renewal online on the website over the summer.

Meeting Adjourned.





SAFETY REPORT

Submitted by *Lin Andresen*

Hello fellow EVA flyers.

I would like to thank everyone who helped with the field workday on Saturday February 22nd. Much needed repairs were made to the main runway, pit areas, parking lot, electric area, helicopter site, and the ever-so-

popular car/truck/buggy track compound. The flying site entrance road also received much needed attention with the addition of quarter-minus rock and machine and manual labor. A clean, smooth runway and uncluttered pit, parking, and flight areas make our facility safer and more enjoyable to all.

In a related note, please keep your speed down to 10 mph on the entrance road to the flying field, going too fast creates dust, makes ruts, and can lead to an accident. I also would like to remind everyone to be very careful when turning into our entrance road from Ironwood. There have been many serious wrecks on Ironwood near the flying field lately. Extreme caution and patience must be exercised when leaving or entering the facility.

I have included some safety tips below that may help to remind you that safety in no accident.

- Inspect your airplane before you fly.
- Ensure your prop is not damaged.
- Verify your controls are working and in the correct direction.
- Perform a simple "tug test" on your control surfaces to make sure they aren't going to depart from your plane in-flight
- Check your transmitter battery voltage, if possible check your receiver battery voltage, there are a number of gizmos out there that allow you to do this without having to disconnect your battery.

- Do a sanity check on your servos, are any of the screws loose, control connections loose or wiring or other parts of the plane in danger of interfering with the required motion of the servos?
- Is the CG correct?
- Is your hardware for the wing/landing gear correct and secured?

Once you have your plane started, verify that you can shut the engine off from the transmitter, this is a good time to make sure the fuel tank really is full.

Perform a pre-flight checklist before taxiing out onto the field, just to be sure of the controls working in the correct directions and that you have control of the throttle by "blipping" the throttle slightly and seeing, or hearing, that it not only raises the rpm, but also comes back to idle

Well, that's all folks! Happy flying and be safe.

Lin Andresen,





SAFETY REPORT

Submitted by *Mike Wyman*

What If.

My column this month mixes safety with an editorial.

What if the club had no safety rules to follow?

We would have chaos at the flying field. Things like multiple people at the flight stations flying at the same time. Engines started in the ramada area instead of the flight stations. Rogue non AMA members flying at our field with no regard to the membership who created the flying sight.

What if the club didn't have liability insurance?

Simply stated we wouldn't have a flying field because the state would never authorize and accept the liability for a group to operate on their land.

What if there wasn't anyone around to fix the road into the field or maintain the runway?

The road would become wash boarded and rutted. The entrance would be washed out by water from rain and monsoon. There would be no rain lock to prevent the road from being torn up or worse yet people getting stuck at the field. The runway would be pitted and cause potential breakage of airplanes rendering the flight line useless.

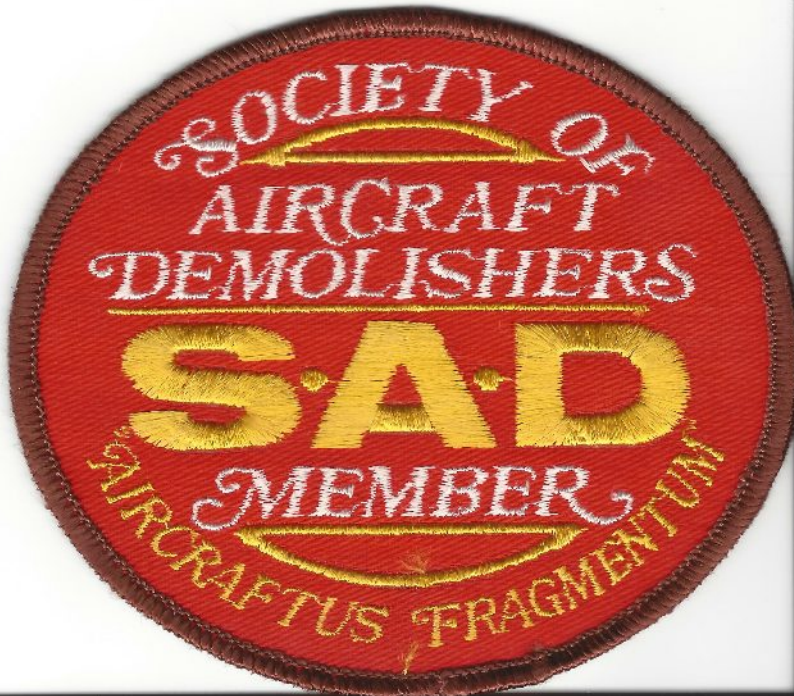
What if there wasn't any fry and fly or farewell to winter visitors brunch or First day fly in out at the field?

Quite frankly the club would be boring. The social aspect of the hobby would be missing. Gratitude for the membership would be nonexistent. People would be paying dues only for the privilege of using the runway. Oh but I forgot the second *What if. . .* If the runway is pitted and un-flyable then there wouldn't be a reason to join the club.

What if we got some minimal contribution from the club members in support of the club?

The club would be a safe place to participate in our favorite hobby, flying model aircraft. Common sense would dominate and adherence to the rules would happen without question. Participation would be high (not just the 25 or so out of 325 members who always seem to be handling the club tasks). Safety would be considered high on the participation list for those at the field and every one would congenially help each other out. All of the membership would contribute in some way to the growth and benefit of the club's welfare. We would all police ourselves and make the flying experience more enjoyable for all. We can make it happen . . .

Remember, Safe flying is NO ACCIDENT!!





NEWSLETTER EDITOR REPORT

Submitted by *Mickey Ohland*

After a hiatus of serving on the EVA Board as President or Vice-President for 5 years and serving as the Newsletter Editor from 2006-11, **I'M BACK!!!!**

As you know **Mike Jeffries** was elected and has been serving as the club's Secretary since December 2012. Because the club did not have a Newsletter Editor during this time, Mike also accepted and took on the responsibilities for the newsletter.

As our club has grown over the years, the responsibilities of each of the Board members has increased as well. Like **John Pomroy** recently did with regards to taking on the club's membership duties, I saw an opportunity help out as well. I felt it was unfair for Mike to have to continue the task of filling two positions, so I approached our club President and offered to become the Newsletter Editor. I must have caught Dave at a weak moment because he accepted my offer.

I would like to thank Mike for all of his hard work over the past 3 years as the Exhaust Systems Editor. It has been awesome. Now I have to live up the standards he set.

As any designer would do, I had to put my mark on the project. I hope everybody enjoys the new format. With your help, my goal as the Newsletter Editor is to work together to make the newsletter even better than it is today. I want to continue to keep it relevant and provide the membership with information regarding our club and the hobby we all love. And yes, I will be including information/pictures on the lighter side as well. If anyone has any suggestions or content, please let me know.

Hope to see you at the field,
Mickey





what's it all about?

With the 2014 flying season under way, you may to ask yourself, what do you want to do for this season? Will it be the same old thing like every year, or do you want to try something more challenging, new and different? Maybe you're happy with your flying progress and don't feel the need to improve your flying skills. Or perhaps you don't really have a desire to fly in competition, that is perfectly fine.



IMAC or Pattern does take a certain amount of time and dedication to see the results of your efforts. But for those pilots that are just tired of flying around and need a boost in their flying skills, then maybe Scale Aerobatics (IMAC) or Pattern is something you may want to give a try.

The first question you may ask is: "What is IMAC and what do I do and need to even get started?"

The whole intent of IMAC is to emulate full-scale aerobatics in the form of flying geometry to the best way you can to a set of judges. Although there are five different classes, each one more challenging than the first, most pilots will start with the Basic class.



Basic class is the introductory level to the IMAC experience. The Aresti diagram of 10 maneuvers looks and sounds easy, but try flying a 90-degree up line, a 45-degree down or vertical up line. Throw in a loop that doesn't look like an egg, or a 1-1/2 positive spin. That's the challenge of competition. Now you're having fun and improving your flying skills at the same time. Anyone, regardless of age, can compete in the Basic class with pretty much any plane they have. Your plane does not have to be an aerobatic plane such as an Extra, Yak or Edge, but your chances of scoring and performing better will be in your favor. Try not to be intimidated by some of the bigger planes you may see flying. Do the bigger planes fly better than smaller ones? I have to say yes, but you still don't need a 25, 35 or 40% plane to fly in the Basic class. As I said earlier, the Basic class is an introduction to IMAC. If you're not having some fun you won't enjoy it. What you do from there is up to you.

If you like it and get the bug you can always move up to the next class the following year.

Most all contests in our region are two-day contests. The first regional IMAC contest of the year is held at our field in January. Contests are held monthly throughout the year culminating with the Southwest Regional Championships. You can find the schedule for our Southwest region by visiting the IMAC website at www.mini-iac.com. This website has tons of valuable information.

Most contests will start Saturday morning and end early afternoon on Sunday. There are two flight lines flying and each flight is judged throughout the day. The order in which you fly will be randomly picked and pinned on a board. It's up to you and your caller to be up and ready to fly when the pilot before you is on his last sequence. You will have two minutes to get

your plane started. If you can't get the plane started the next pilot should be ready and fly. Most Contest Directors (CD) will allow you to move down in the flight order so you have time to get your problem resolved.

Each pilot will fly one round, which consists of two sequences. After you fly your first sequence of the known 10 maneuvers you will immediately set up to fly your second sequence. When you have completed the two sequences you will land your plane so the next pilot can fly. There are no criteria for how long you should fly your sequences. Most Basic pilots will rush through the sequence which will hurt their score. Basic pilots usually fly two rounds of their Knowns, as they do not have to fly an Unknown sequence. At the end of Saturday's competition, most contests have a four-minute Freestyle to music for those pilots

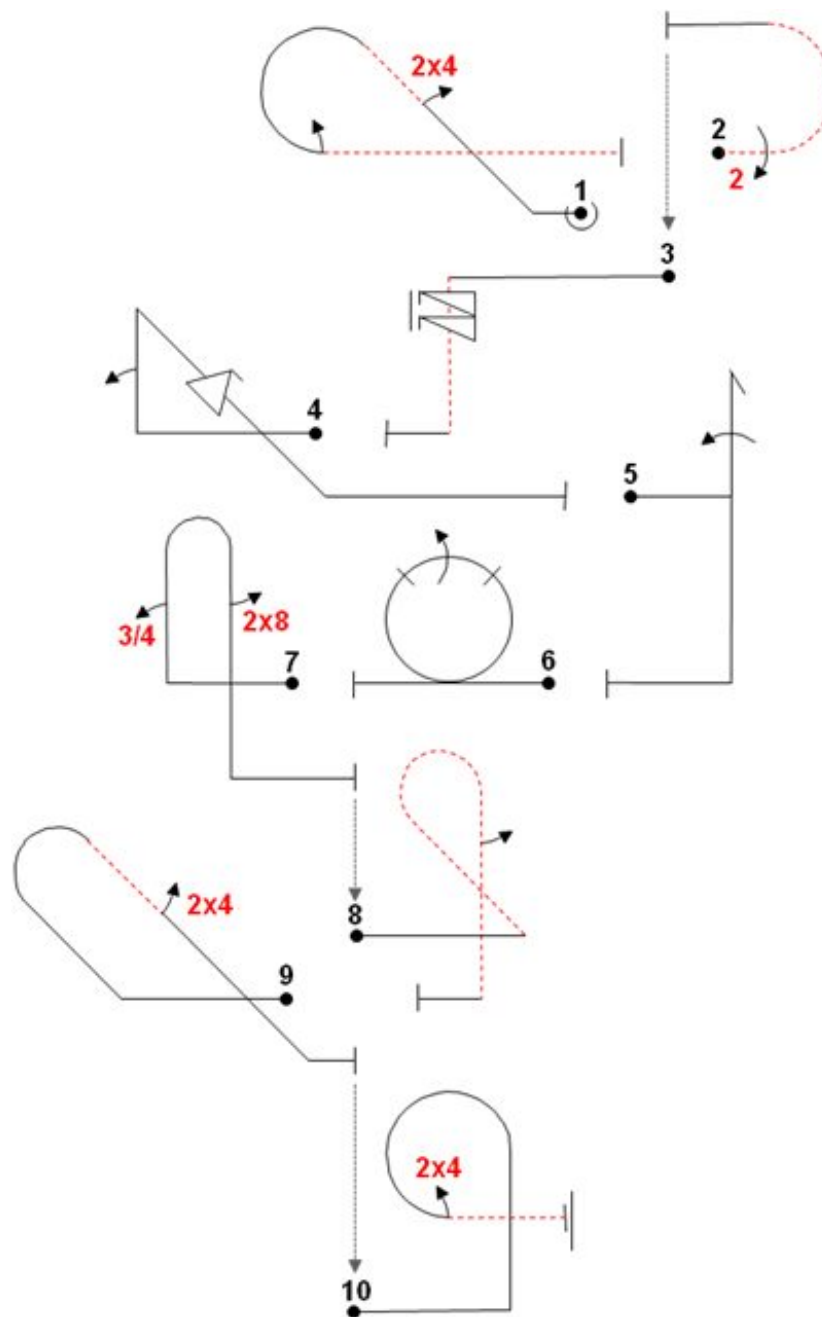
who have the 3-D skills to show their stuff. The Freestyle is judged as well and an award will go to the first-place flyer.

On Sunday, after the last class and all Pilots have flown, the scores are tallied and awards will be presented for all 5 classes. The scores are usually close for the top four pilots and you might say to yourself, *"Damn!, if only I didn't get that zero I could have won."* At the end of the contest you may have not won an award but I can honestly say you probably had fun and met a lot of interesting people. You will have also learned a lot and walked away knowing you are now a better pilot today than you were last week.



Let's cover some preparation for your first IMAC competition. Each day of the contest you need to give yourself PLENTY of time to prepare for the day. If you have a tent or E-Z Up for shade you need to get that up first. Put your plane together and don't forget to fuel up your plane. Then you need to register for the contest. A valid AMA card is a must to fly in IMAC contests. After registration, if you don't have a caller or helper, now is the time to get yourself one. There will be plenty of other pilots willing to call for you. You may be asked to call for a fellow pilot as well. The best callers are usually fellow competitors, because no one knows the sequence better than them. The pilot's meeting will be the final preparation before the contest begins. If you have any questions, now is the time to bring them up. As the day goes on, food is generally available at most contests, including ours. In the southwest, the weather is usually hot. Drink plenty of water or Gatorade. If you're not used to being outside all day you will probably get dehydrated and that's not good. Also, pay attention to the classes and flight order so you are ready to fly your next rounds. The pace of the contest is all up to you, the pilots and their callers. One more piece of advice: your caller is also your spotter when landing and will retrieve your plane upon landing. If you have any questions you can always ask one of the weekend guys at the field. Our club is

very lucky to have some of the top rated pilots in the country. Better yet, they are all willing to help fellow pilots.

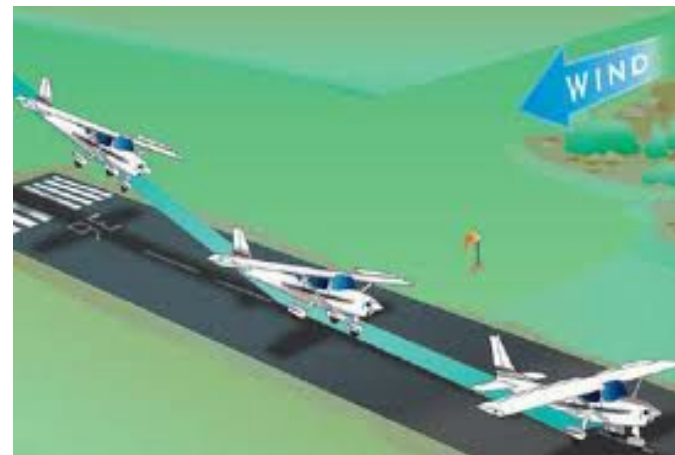
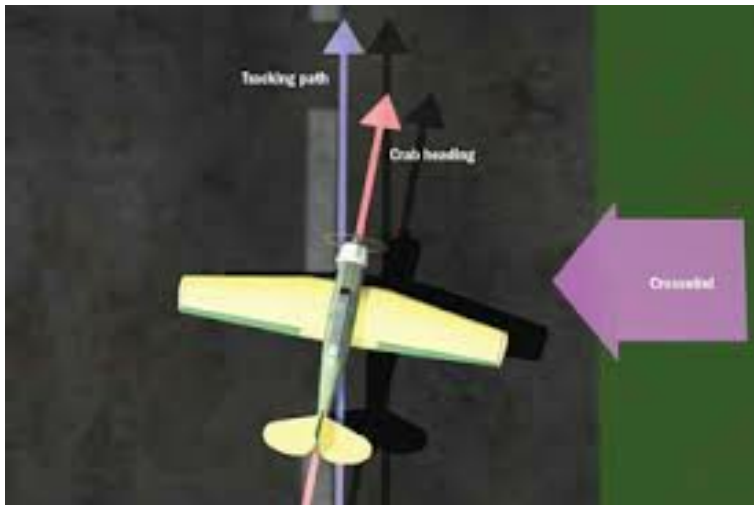


CROSSWIND LANDINGS

Crosswind landings are one of the most difficult situations for novice and experienced pilots. Regardless of the wind conditions, the key to any landing is a good approach. If you're not happy with your landing approach, call it off and come around again. Consistently following a rectangle pattern every time you land your plane will improve your odds of a good approach. It is good practice to keep your approach speed a little above what you would normally use, especially in gusty winds, in order to maintain better control. When landing with a crosswind, the plane will have a tracking path. This will be the direction the plane is traveling. By using a technique called crabbing, the plane will also have a heading direction, which is the direction that the plane's nose is pointed. The strength and direction of the crosswind will determine how much crab angle you will need to keep the plane on a straight track down the center of the runway. For example, a 15 mph wind coming



across the runway at a 5 degree angle will make little difference to your landing approach. However, a 15 mph wind coming across the runway at a 45 degree angle will require some compensation on your part during landing. But, a 15 mph wind coming across the runway at 90 degrees will require total concentration on landing. Establish a natural crab angle so that the plane tracks parallel down the runway with the fuselage slightly angled into the wind (the angle will be dictated by the crosswind). Use the rudder to turn the nose into the wind and the ailerons to keep the wings level. If you have too much or too little crab at this slow speed it could cause a spin, which is the last thing you want. After a bit of practice you'll never need to fear crosswind landings again.



Meet the members



Mike Wyman

ES: How long have you been involved in the hobby?

Mike: 45 years

ES: How long have you been a member of EVA?

Mike: Over 15 years

ES: Please give a history of your RC Aviation past.

Mike: I have been flying since I was 14 years old. I built my first radio control from Heathkit and graduated to Kraft radios. I flew in 4 National competitions with the AMA and at my best place was 17th in the country in D pattern. I currently am flying IMAC pattern as it satisfies my urge to fly a full scale airplane in aerobatics. I placed 1st in Sportsman aerobatics at the last (2013) Southwest Regional Championships in Las Vegas. I have moved up to Intermediate Aerobatics for IMAC and plan to continue on with competition.

ES: Are you involved with full-scale aviation? If so, please elaborate?

Mike: I am a full scale Sailplane pilot with about 320 hours PIC

ES: Are you forced to work to pay for this hobby? If so, what is your occupation?

Mike: I am a test engineer for Black Diamond Advanced Technology LLC. I am an electronics engineer with background in Radio Frequency (RF)

ES: Are you married? Have any children?

Mike: I am married almost 30 years to my wife Jacque and have two kids Philip and Rachel.

ES: What are you flying currently?.

Mike: I am currently flying a 42% to scale Extra 260.

ES: Do you have any current or planned aircraft projects?

Mike: I am working on a scale electric Rockwell Aero Commander I am also considering an Extreme Flight Extra 300.

ES: What is/was your favorite model aircraft?

Mike: I would say the Dirty Birdy. This airplane was a Bridi design



BEAT THE CLOCK — Michael Wyman runs for scorers table with radio and plane during the Reno event yesterday. (William C. Curtis photos)

ES: What is your favorite full-scale aircraft?

Mike: By far the Rockwell Aero Commander but I wouldn't turn down a Beech A36.

ES: Is there a dream project for you in radio control?

Mike: I would like to build a 35% Decathlon.

ES: Is there anyone that you look up to in the radio control hobby?

Mike: The person who taught me how to fly, the late Walter

Stephenson. Phil Kraft and

Joe Bridi also had a significant influence on my radio control career

ES: Are there any facets of the hobby that you would like to try? (eg. a certain power system type, different type of aircraft, competitive flying)

Mike: I have tried most everything. I would like to fly a UAV sometime. It's radio control but commercial.

ES: Are there any embarrassing moments at the field you would like to forget—but are now remembering because I asked?

Mike: Well there was a time when I hooked the Ailerons on my pattern ship up reversed. I did save the airplane but had to land inverted . . . :-)

ES: What are your interests beyond model aircraft?

Mike: I am an avid Amateur Radio Operator callsign WIDRY and have a world class station set up in my home. I also like to go fly fishing to relax and get out in this beautiful country. I also like to socialize with members of the model club and compete with some of them

ES: What radio control system have you used in the past?

Currently?

Mike: I have flown Testors galloping ghost, Heathkit GD-19, Kraft Sport Series, Kraft Signature Series, Pro Line Competition 6, RS systems, JR, FrSky. I currently am flying a JR 12X radio on 2.4 GHz.



TIP of the Month

Throttle Stick Disable Function for Electric Planes

Submitted by *John Pomroy*

While working on my latest electric airplane, the Hobbyking Flybeam night flyer, I was posting my build and initial flight report to www.rcgroups.com (BTW, what a great resource for information!). The thread path is <http://www.rcgroups.com/forums/showthread.php?t=2079546>

While there, others walked me through how to set up a Tx switch to act as a throttle stick disable function and thought I'd share this with our membership. It's a great safety feature and I'm embarrassed to admit I've been doing electric planes for +5 years and never knew this. My hope is others may not know either, hence this article. Needless to say, I'm adding this to all my electric planes; not just the Flybeam.

Purpose – To provide a safety inhibit to bumping the throttle stick after plugging in your Lipo and ESC arming.

This only works if you have a computer radio with PMIX functions. You'll need one unused PMIX to make this work.

Programming Procedure:

- 1) Select an unused PMIX and enable it
- 2) Set Master = Throttle
- 3) Set Slave = Throttle
- 4) Set low end percentage = -100%
- 5) Set high end percentage = -100%
- 6) Select a switch position that provides good physical separation between the throttle stick and the switch. I used what most radios consider the 'idle down' or

'throttle cut' switch which is on the front, top, right side of the Tx. The key thing is to put it on the opposite side from the throttle stick (Mode 2, switch on right side) or (Mode 1, switch on left side)

Airplane power up procedure/expected behavior

- 1) Set kill switch to 'on' position (i.e. the position that enables this PMIX). This is the throttle disable switch position.
- 2) Plug in your Lipo. ESC should arm as before
- 3) Holding plane, verify complete range of throttle stick movement doesn't spin the prop
- 4) Pull throttle all the way down
- 5) Flip kill switch to 'off' position (i.e. throttle stick enable position)
- 6) Verify throttle is active
- 7) Flip kill switch back to 'on' position
- 8) Carry plane to flight line and put down
- 9) Flip kill switch to 'off' position and takeoff/fly as normal
- 10) Same procedure before picking up the airplane





On March 1-2 at our field we will be hosting our first pattern contest, the Dessert Pattern Challenge Contest. This issue of the *EVA Exhaust Systems* features part one of a five part series regarding pattern flying competition. Parts four thru five will be highlighted in future issues. Enjoy.

Introduction to Pattern – Part 1 of 5

Past to Present

R/C Aerobatics is an Academy of Model Aeronautics (AMA) competition rulebook event commonly referred to as Pattern. Pattern flying is a demanding precision flying activity following an invisible path in the sky resembling geometric elements. Prior to 1992 pattern flying consisted of flying back and forth with a judged maneuver in the center. Referencing a mid-80's rulebook, the aircraft was judged on how well the pilot was able to fly the airplane through the required maneuver paying close attention to Precision, Positioning, Size and Smoothness. Judges assigned a number from 0 to 10 for each maneuver corresponding to how well the criteria was met, which was then multiplied by a K-Factor from 1 to 5 adding value to maneuvers perceived to be more difficult. Even experienced accomplished RC pilots find the highest skill class challenging. Periodically the maneuvers in the competition classes are changed to broaden a competitor's skill and prevent boredom flying the same set of maneuvers. This broadening of a pilot's ability prepares them



for advancement to a more challenging class. This changing of maneuvers to more complex geometry continues to increase difficulty making pattern a competition event that is never truly mastered.

In the mid-80's the (FAI) which is the world governing body for air sports including R/C aerobatics identified as F3A adopted Turnaround style where a continuous string of maneuvers are flown within a restricted airspace. This Turnaround style included prescribed and judged maneuvers to be flown between each center maneuver further increasing the challenge and level of difficulty. AMA pattern began adopting turnaround style in 1990 with a single test class, (expert turnaround). In 1992 all classes except the entry-level class were changed to turnaround and in 1994 it was also changed to an interrupted turnaround sequence.

Here in the US four AMA competition classes of increasing difficulty are flown which are somewhat compatible with an R/C pilot's skill level and experience, allowing for advancement. There is growing interest in pattern flying using period aircraft and maneuver sequences. Senior Pattern Association (SPA), which presently limits aircraft designed prior to 1976, and the Classic Pattern Organization (CPO) flying pre-turnaround aircraft and competition classes based on the 1980-81 AMA Competition Regulations. This period based pattern competition is not included in current AMA competition regulations but information can be obtained from the dedicated organizations.

The National Society of Radio Control Aerobatics (NSRCA), an AMA special interest group, has actively maintained national unity since the mid 70's and is actively involved in competition regulation changes. The organization is structured with eight districts and one for Canada with informative discussion lists and links to pattern related sites and

suppliers. Being subjectively judged, pattern benefits from trained and knowledgeable judges. The NSRCA authored and updates judging standards for both FAI and AMA R/C aerobatics. National judging standards are promoted through a training and recertification program each rule change cycle. Visit the NSRCA website for membership information, access to competition class aerobatic sequences and maneuver descriptions. This information helps a pilot in understanding how the maneuvers are to be flown and point out common errors to be downgraded by the judges. Looking to the future, indoor R/C aerobatic competition is growing in popularity and will initially consist of two AMA classes, a non-turnaround entry level and a full turnaround intermediate class, as well as the international F3P class.

Academy of Model Aeronautics (AMA)

<http://www.modelaircraft.org/>

National Society of Radio Control Aerobatics

<http://nsrca.us/>

Federation Aeronautique Internationale

<http://www.fai.org/aeromodelling/>

Senior Pattern Association (SPA)

<http://www.seniorpattern.com/>

Classic Pattern Organization (CPA)

<http://www.classicpatternassociation.com/>

Jim Hiller



Just for the FUN of it...

Jim decided to tie the knot with his long time girlfriend. One evening, after the honeymoon, he was cleaning his planes.

His wife was standing there watching him.

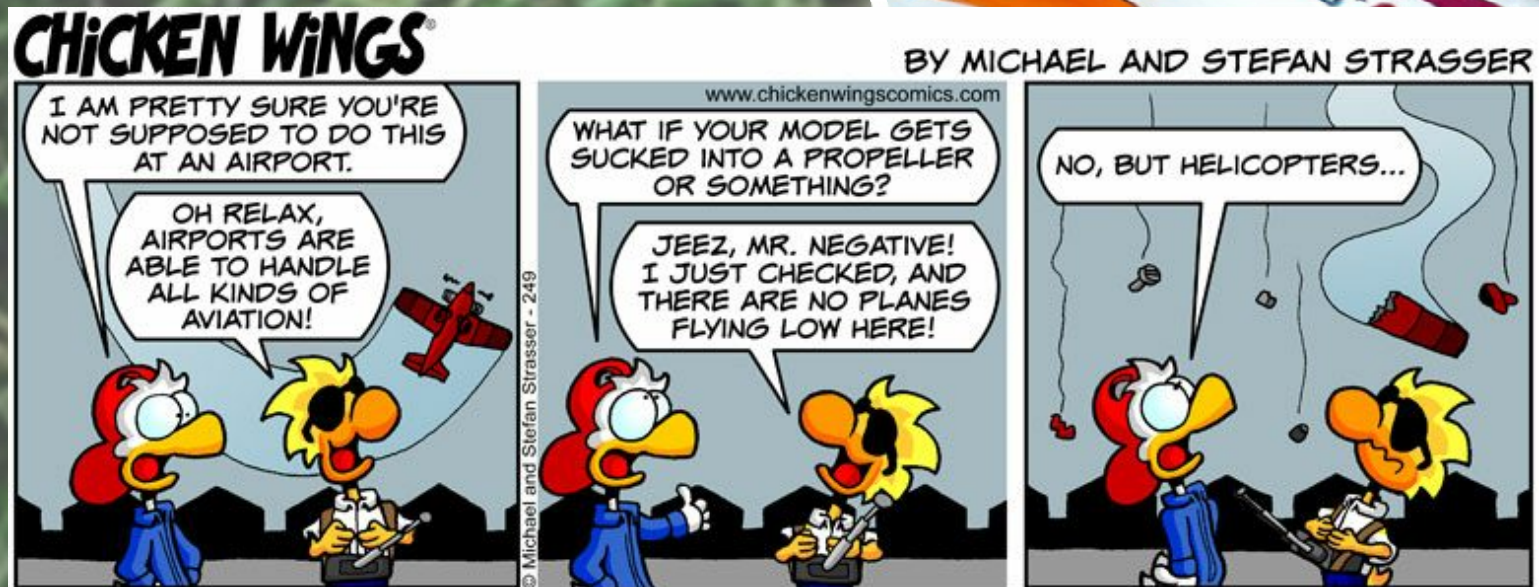
After a long period of silence she finally speaks. "Honey, I've been thinking, now that we are married I think it's time you quit RC planes. Maybe you should sell your planes."

Jim gets this horrified look on his face.

She says, "Darling, what's wrong?"

"There for a minute you were sounding like my ex-wife." "Ex wife!" she screams, "I didn't know you were married before!"

"I wasn't!"



A practical example of how the human mind works

Analysis of this picture can tell us a lot about how different people think.

For young men, it's a picture of a lady with a nice derriere but only the most observant will notice that she is crossing a street.

The really observant will notice that she is wearing a thong.

For older men, she appears to be a respectable woman - with a nice tush - on her way to work.

The perverts among them will imagine her naked.

Wiser men will ponder the presence of the mind of the photographer to take the shot in the face of such beauty and be grateful that they shared it.

For half of the women, this is an ordinary woman who should not have left home dressed that way.

The other half will think she is a slut but wonder where she bought that blouse

Older women will imagine the misery that the woman's curves will cause by the time she reaches 50.



But only children, the extremely intelligent and the celibate will notice that the taxi is being driven by a dog.

EVA Calendar of Events

March 1-2	Desert Pattern Challenge Contest FIELD CLOSED FOR CONTEST	EVA Field
March 15-16	Cactus Classic IMAC Contest FIELD CLOSED FOR CONTEST	EVA Field
March 19	General Membership Meeting	VDO
March 22	EVA Swap Meet Winter Guest Farewell .25 Races	EVA Field
April 19	.25 Races	EVA Field
May 3	General Membership Meeting	EVA Field @ 8:00 am

EVENTS

SHOTS FROM THE FIELD



EVA Exhaust Systems



SHOTS FROM THE FIELD



SHOTS FROM THE FIELD

SHOTS FROM THE FIELD



That's all Folks!!



EAST VALLEY AVIATORS, Inc.

2013 Financial Statement

January 1, 2013 thru December 31, 2013

line item	<u>BUDGET</u>	<u>INCOME</u>	<u>ACTUAL</u>
1	\$14014.80		\$14014.80
2	\$ 5,500.00		\$ 6,101.00
3	\$ 850.00		\$ 733.00
4	\$ 500.00		\$ 165.00
5	\$ 750.00		\$ 131.00
6	\$ 3,400.00		\$ 3,581.00
7	\$ 600.00		\$ 701.00
	<u>\$25614.80</u>		<u>\$25426.80</u>

line item	<u>BUDGET</u>	<u>EXPENSES</u>	<u>ACTUAL</u>
8	\$ 3,100.00		\$ 3,400.06
9	\$ 2,000.00		\$ 2,034.97
10	\$ 1,500.00		\$ 445.09
11	\$ 100.00		\$ 100.00
12	\$ 100.00		\$ 100.00
13	\$ 200.00		\$ 32.83
14	\$ 1,000.00		\$ 430.94
15	\$ 500.00		\$ 403.70
16	\$ 1,200.00		\$ 1,243.24
17	\$ 200.00		\$ -
18	\$ 2,500.00		\$ 1,072.29
19	\$ 1,000.00		\$ 691.00
20	\$ 2,000.00		\$ 2,000.00
	<u>\$15400.00</u>		<u>\$11954.12</u>

Cash Balance Forward for 2012

\$13472.68

BANK RECONCILIATION

2013 Cash Balance	\$13472.68
Reserve Fund	\$24000.00
Prepaid 2014 Dues and fees	\$ 9,890.00
	\$47362.68

Checking account balance @
12/31/12

\$47362.68

Petty Cash on hand @ 12/31/12

\$ -

Total Cash @ 12/31/12 -----

\$47362.68