

# In The Box

The Official Newsletter of The International Miniature Aerobatic Club

John Schroder  
1946 -2018



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Tribute to John Schroder

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Building Sun Dots

Much, Much More!

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## Letter from the Editor

**Rich Whitlow**

Welcome to the next volume of the IMAC "In The Box" Newsletter. I hope everyone enjoyed reading and got some useful information from the last issue. This is meant to be an outlet for us to get information and to submit things that we think other IMAC members may be interested in. A new plane, an event, some news, some ideas, really anything. Just send the information to me.

We have quite a range of the seasons going on right now, some of us are just starting our contest season, others have been flying through the holidays and across the globe, others are wrapping up their seasons. So, there should always be something going on for anyone who wanted to submit their contests and have them show up in the newsletter. With just a couple of pics and maybe a short write-up, I can take it from their and post the results.

Also, don't forget we have a big year this year. We will have Nats and Worlds. So, make sure you support these contests by competing and fundraising efforts. Everyone is needed to promote these premier events. Check the website, [www.mini-iac.org](http://www.mini-iac.org) for more information.

Lastly, I wanted to mention an experience that I had over the past weekend at the inaugural El Paso (SC-SW Smackdown). We gave a boot camp on Friday and the question of size and type of aircraft was brought up. When I explained anything could fly in basic and there were no rules that require a minimum size airplane for other classes, it was met with genuine surprise!

We all know that a lot of us strive to get to the larger aircraft and like to fly them, but we need to be careful in how we present the perception of what is truly required to fly. We can all argue about being competitive and such, but the truth of the matter is there is no minimum size and it is OUR RESPONSIBILITY to explain that to new members.

We need to promote IMAC with facts and Rules and not a perception or our idea of what is needed to be competitive. That is an opinion and that is not fair to the perspective member who might turn away from our great sport, because of an imaginary barrier.

Let me hear your feedback and send me pics from your contests. Send me the originals, copies from Facebook and such are not high enough quality to use. Send anything you would like to contribute to [imacinthebox@gmail.com](mailto:imacinthebox@gmail.com).

Rich Whitlow  
Newsletter Editor  
[imacinthebox@gmail.com](mailto:imacinthebox@gmail.com)



# Letter From The President

Mike Karnes

## April Showers bring May Winds?

May, hard to believe this year is almost half over. The flying for most of us in the north has just begun. The weather in the north has not favored flying airplanes much up to now. Flying kites would be the better choice. March winds came late and just will not move on and let us get to the field and get those needed practice flights in. So, for most of us in the North our first flight may be at the first contest. Oh well, no 10's for me for a while.

## Scale Aerobatic Nationals

The NAT's being only a few weeks away is coming fast. The Event Director has changed up the normal contest layout and made it a 4-day IMAC-like contest. There are several after-hours festivities planned this year in hopes to draw a few extra competitors. If you are thinking about going, call Yolanda at the AMA and get signed up. It's an event not to miss.

## The IMAC World Championship

The Event staff has been working hard to get all the pieces in place for the 2nd IMAC World Championship in Muncie. Things are coming together nicely and look like it is going to be a huge success. The competitors from all around the world are making arrangements and booking their reservations to flock to the IAC in September. If you would like to help support the event, buy a sponsor ad on the Worlds website. Go to [www.imacworlds.com/banner-sales](http://www.imacworlds.com/banner-sales) for details.

## RCP's

The Rule Change Proposals for 2019-20 that were



submitted to the AMA back in March have all passed the initial vote and ready to receive any cross proposals. Once the final vote happens in later this year, the new rules will be added to the RedBook and be on sale after the first of 2019.

## International Judging School

Plans are underway for the 2019 IJS to be held by the Southwest Region. When all the arrangements have made we will get them posted on the IMAC website.

Good Luck to ALL IMAC Competitors and Safe Landings

Mike Karnes



# Notes from the Officers



**Vice-President  
Gil Major**



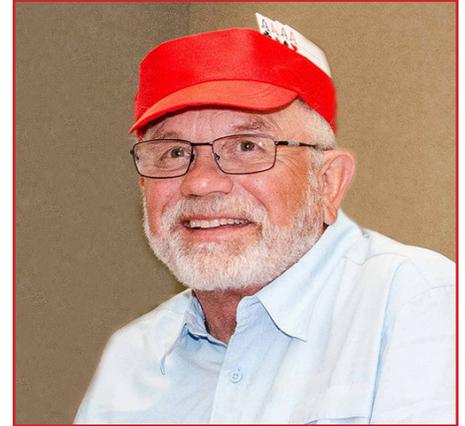
**Secretary  
Samantha McKinney**

The 2018 IMAC Season has begun!!! I love seeing all the pictures posted of the contests in the different regions, along with the International. The North Central region is beginning, and I will be making the first trip of four to Muncie, Indiana this coming weekend! As always, my family are always the ones that show up at dark-thirty!

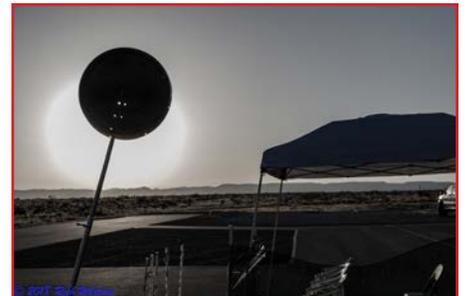
The second trip will be for the 2018 AMA Scale Aerobatic National Championship. This is being held June 26 – 29th. There will be different events happening throughout the week, along with the new format being implemented that was voted on by the membership. This is a great week of flying, food, and fellowship! I hope to see you there!

The 2018 IMAC World Championships are being held at Muncie September 4th – 8th. The event staff has been working hard over the past several months in preparation for the event. For the 2018 Worlds, clubs, families, and businesses can purchase personalized ads to wish pilots, regions, or teams good luck. Contact your Regional Director or any member of the Board of Directors to purchase. These ads will be added to the World Website. Our last trip to Muncie is for the North Central Regional Championship. This trip is always bittersweet because it is the last contest of the season. Granted this is the contest for final points and regional trophies, but it reminds us that the IMAC season has come to a close and we won't see everyone until the following year. There is always a great turnout, along with a great meal that is served. What makes this weekend great, is the memories that are shared and the memories that are created.

I would like to wish all the IMAC pilots and their families a great 2018 season. I pray for safe travels, good health, new friendships to be formed, and old friendships renewed!



**Treasurer  
Phil Vance**



# John Schroder

10/30/1946 - 06/05/2018



Today for the world, and the world of IMAC and Scale Aerobatics, and for the Remote-Control community as a whole marks a day of great loss and sorrow. Today we lost from our “plane” to a different “plane” a great ground-breaker, forward thinker and man in John Schroder. John was a leader and an example and a mentor to so many, both the young and the “not so young” over a vast amount of years with the RC community. We grieve his loss but cherish his memory. We mourn his passing, but revel in having known him.

The IMAC family extends its deepest condolences to Tina, David and Ashley and the entire Schroder family, which is a large one, both by blood and by friendships. Our hearts break with you, but we will remember the joy that John brought to this family of ours.

Growing up the son of Walt Schroder, one cannot be surprised that John Schroder would inherit the passion and vision for RC that he exhibited. John not only continued his father’s zeal and love for RC aviation, but carried on the tradition of giving back to the RC community in much the same tradition established by his father and Bill Bennett before him. John tirelessly devoted his time and personal resources to the advancement of our hobby. He concentrated on the youth of the hobby and offered support to

anyone he could. John was instrumental in helping the International Miniature Aircraft Club (IMAC) achieve the status it holds today. When John retired in 2007, his desire for the ToC to live on became a driving focus of his life. He and his wife Tina began to search for a location that could support such an endeavor.

If you have never heard of Toone, Tennessee, you’re not alone. It was unknown to the vast majority of the model aviation world until John moved to town and went straight to work on his new 200-plus acre sod farm. Much as Bill Bennett did for



the ToC, a few short months after putting down roots, it was ready. John christened his slice of paradise by continuing a custom he established in Florida with the “IMAC Summer School and NATS warm-up”. Each summer John and Tina opened their doors for students on summer break to come and engage in some intense IMAC practice and coaching. In return the students learned some real-life skills by working the farm to help with upkeep.

In 2008, just like his father Walt and Bill Bennett, John invited the world’s best pilots to an international aerobatics championship that rekindled the spirit of the ToC. The inaugural Clover Creek

Invitational set a new standard in the world of RC Aerobatics. John opened his private residence for nothing more than the enjoyment of his fellow RC enthusiasts. His desire was to promote the art of precision aerobatics to its fullest, share his passion for model aviation, and see competitors from around the world unite and compete for the love of the sport itself.

He created and ignited the Clover Creek Invitational and continued the tradition with the world’s best to battle for \$50,000 worth of prize money! In another selfless act that reflects his father and Bill Bennett, John had once again funded the \$50,000 prize list from his personal resources. The Clover Creek Aerodrome and the Clover Creek Invitationals are just a few of the selfless acts made to the RC community by John Schroder.

John continued strong and focused on that prize and to the youth specifically and continually. Hosting the summer camps and his involvement with IMAC and the betterment of the organization. Bringing more and more talented kids to productive and responsible futures with a passion and love for toy airplanes. Sounds so simple, yet so selfless a task and all by this man known by many names.

If you did not have the pleasure of meeting John, the stories shared by the people who have will enlighten you to a man who had given more to the hobby than can be measured or described in these few paragraphs. John carried forward the traditions established by Bill Bennett, Art Schroeder, and Walt Schroder before him.

John Schroder – RIP our friend, our brother, our father and for all of us, a great example.



# John Schroder Tributes Revealed

AMA and Representative Keith Sessions, of AMA would like to announce the tributes awarded for John Schroder for a lifetime of RC involvement in many SIGS!

John has been honored with the **AMA Lifetime Achievement Award** for his many many years of involvement and growth and promotion of the sport of RC especially with our kids in the sport of Scale Aerobatics. John's participation in the different SIGS of AMA includes Scale Aerobatics, Soaring, Free Flight, control line and more.

AMA has also renamed the 2018 SA NATS to “**The John Schroder Scale Aerobatics National Championships 2018**” There will be a participant plaque given to all pilots competing at the NATS to include John's picture and the name change for 2018 NATS! These are being provided by International Miniature Aerobatic Club.

And with that, adding to this tribute, John Bradley is making and donating the “The Schroder Cup” going forward beginning in 2018, which will be awarded to the Junior or Senior AMA member who has the highest Raw points of perfection and displayed as a perpetual trophy with the “Bennett Cup” in the AMA Museum.



# An Interview With Professional Builder Carlos “Tuny” Sylva



**InTheBox:** Where are you originally from?

**Tuny:** Born and raised in Caracas, Venezuela.

**InTheBox:** When did you come to the US?

**Tuny:** I moved to the US in 2014, the bad situation in my home country made me leave everything behind and start a new life, I feel very grateful that I found a new home here.

**InTheBox:** Where did you get the “Tuny” nickname?

**Tuny:** My father gave me that nickname when I was just a baby, he doesn't remember how he came up with that, it just stayed with me my entire life.

**InTheBox:** How did you get into RC?

**Tuny:** My father was and still is an active modeler, I've been around model airplanes since the day I was born, he shared his passion with me and it gave us a bond that is hard to find in anything else in life.

**InTheBox:** How did you get into IMAC?

**Tuny:** Aerobatics is what I like the most about model airplanes, sequence flying and competition is something that I've

been around all my life. I've been active in competition flying for more than 15 years, flying in 4 F3A world championships, 5 F3A South American championships, and this year I'm going to fly in my first IMAC world championship in Muncie. F3A and scale aerobatics have a beauty to them like no other discipline, they are very demanding and bring back a huge satisfaction after each flight. Pushing the pilot to improve and search for perfection in his performance and in the aircraft.

**InTheBox:** Who were your biggest influences in RC and IMAC?

**Tuny:** First my father, he is the one that got me into RC, and he is the one that always pushed me into being the best you can be in everything I do, we share a passion for aerobatics that fuel that passion in RC into that direction. Also, by being involved in aerobatics, I've met some of my best friends. It's really amazing to find people with the same passion for perfection. Jason Shulman is one of those friends who always wants something better from an airplane and always pushes for improvement, he has guided me a lot during this endeavor, both in building and flying.

**InTheBox:** What do you like best about IMAC?

**Tuny:** First, the people. It's just one big group of friends sharing a big passion, in any contest you'll find camaraderie all day long. Second, the sequence flying, that's why we do all this, during those 10 – 15 minutes of the flight all the problems in life just disappear, you are just there enjoying the beauty of that flight.

**InTheBox:** How did you get into building?

**Tuny:** Back when I started in this hobby if you wanted to fly something, first

you needed to build it. And I believe it's also a great part of the hobby. To create something on your own gets you to know every detail of your airplane. Ever since I can remember I was building something with my father.

**InTheBox:** How did you develop your building skills?

**Tuny:** F3A is the discipline that pushes the most for building, and to be competitive you need good equipment, so from the very beginning of an airplane, everything needs to be perfectly planned to meet the weight limits and keep a strong and straight airplane. This helped me to push the limits in every step of a build, applying all that knowledge into IMAC, the results are better flying airplanes that really help the pilot perform the best.

**InTheBox:** What are your current favorite builds?

**Tuny:** That could be a very long list, I like them all, but some of them stand out. My own design Ultimate, after many years flying biplanes in pattern I wanted to make one for IMAC, for me biplanes have an extra beauty so that pushed me to go on this project, it took a long time to design and work on every piece of the airplane, all done from scratch, but all that effort payed off, the final product flies wonderful and looks amazing.

My Radiowave Giles 202, I know how much effort and planning went into designing this airplane, and after flying them I was hooked, it is without a doubt the best flying kit in the market today, so I wanted one for myself, I wanted it to look different from the schemes I did before so I went outside the box for this one, and the result was amazing.

Jason's Epic biplane, This started out as a crazy project after some pictures of an

Epic monoplane with some biplane wings just sitting there, from that we started going, to get an airplane that big to meet the weight limits was the first challenge, and then to make it fly the way it is, an absolute F3A monster, also its hard to find a better flying airplane for F3A out there, not only for the first build. Before the 2016 team trials the airplane had a crash and had to be re-built, in 8 days! It ended up even better than before.

My Super Diaguita: lots of crazy things went into this build, it was meant to be an electric airplane so it had to be completely modified to fit glow power, and also I wanted to use retracts on this one, so it became a big challenge to get all that done and still make it light.

**InTheBox:** Who are some of the pilots and manufacturers you have built for?

**Tuny:** Also this is a very long list, all of them get the same attention to detail and precision, but on that list you'll find:

Jason Shulman: the Epic biplane that he has already used in 2 world championships and team trials. That airplane got 3rd place in the last world championships in Argentina.

Andrew Jesky: an outstanding Japanese kit, the Ascent. Impressive quality on this kit

David Moser: his new airplane, a Carden Aircraft 126 extra it's almost ready with a lot great features, make sure to check this out at the Nats this year.

Brett Wickyzer: A great flying pattern biplane, the Verrari, he made the team for the F3A world championships in 2016 with this airplane

Kal Reifsneyder / Dalton Aviation: already made 2 airplanes for him and more on the works. The talent he has flying this airplanes is truly amazing. Those will be his rides for the IMAC worlds this year

Jtec Radiowave: we've done a lot of work together, one of the first MX2 prototypes took second place in the Toledo show, the current G202 that Jason flew for the win at the Tucson Aerobatic Shootout with, and many more to come.

**InTheBox:** What is the one biggest thing that contributed to your success?

**Tuny:** Passion, I do everything with the same passion and attention to detail, it takes a long time, hard work and never giving up when things are difficult, always work harder and push the limits. The results are truly rewarding.

**InTheBox:** What does a day in the life of Tuny entail?

**Tuny:** Spending as much time as I can with my family, my better half Agata and my daughter Klara are my motivation to get everything done. I'm in my shop almost every day, if not at the shop you'll find me at the fling field

**InTheBox:** What interests do you have outside the hobby?

**Tuny:** Sailing, it's something I share with my family and being on a boat with nothing but the wind it's an amazing feeling.

**InTheBox:** If you could do one thing for the rest of your life, what would it be?

**Tuny:** I'm doing it. I really hope I can keep doing it and get better at it every day.

**InTheBox:** Anything you would like to add.

**Tuny:** I couldn't do any of this without the support of my family and the support of my sponsors, take some time and explore their products, they offer the absolute best available in the hobby today.

- FUTABA
- Jtec Radiowave
- YS Engines
- Morgan Fuels



# Reach Out To Outreach

By: Daren Hudson

What does that mean? It means “outreach” doesn’t just happen. We have to reach out to people if we want to grow as an organization and help grow the hobby in general. The days of interested hobbyists simply “finding us” is gone. We need to get out of our comfort zones and beyond the boundaries of our often-hidden flying sites, our club websites and Facebook pages and groups. Out into the greater modeling community, to neighboring clubs, searching for new friends and new venues. We need to become ambassadors for Scale Aerobatics and the benefits being part of the IMAC community. We all know the benefits: camaraderie, improved flying skills in all disciplines, meeting people from all over the world, competition as tame or as intense as you choose to make it. We need to do a better job at getting that message outside our roughly 1% of the modeling population. How? I hope to give you a few ideas, some may be outside “the box” but they may just be the thing in your area that will capture what I call the “fencer”, the pilot who very much wants to improve their flying or try something new or even compete but doesn’t know the next step. The pilot looking for someone to help them, to welcome them, to “reach out”.

The same old same old certainly is not the answer. Listing a contest again this year in the same manner to the same people usually does one thing, allows us to see the same people year in year out. That doesn’t increase interest, excitement or membership. We need some new ideas, different ideas that won’t change the essence of what IMAC is but may change the way IMAC is perceived. Some easy steps include slight modifications in our behavior. CD’s, when you list an event think of it as being presented to someone who is brand new to precision flying and doesn’t know what IMAC is, “sell it” to that person. If it’s a Primer or Intro or

Basic only (whatever you want to call it) make it enticing and welcoming to the average sport pilot wanting a little more out of his or her hobby experience. Go easy on the regimen rules and competition. Most “fencers” are not comfortable flying in front of people, especially new people and mostly those they perceive are much more skilled than they are. Tell them to come with whatever they fly. If it flies 7-9 minutes, can spin and do basic aerobatics it’s good to go. No caller, no problem, we’ll help you out. If it’s a contest that’s run for 20+ years you don’t have to sell it to the 20 pilots that have been coming for 20+ years, you do have to sell it to the 21st- ? number of pilots that have never been. Tell people about the area in case they “need” to bring family that do not want to hang out at the flying field all day. Give hotel suggestions, food choices, attractions, etc. Put a nice flier or at least a nice photo on the “flier” tab. Give a complete picture of this great event that you are spending a lot of time and energy to put on. Avoid leaving blank pages, nothing says “not welcome” like a dead or blank internet link. Once the event is registered at [mini-iac.org](http://mini-iac.org) take a few more minutes to copy and paste the info to the Regional Facebook Group (all the regions have them) using the Facebook “Event” listing where it can be linked back for registration with a clear note and the CD contact info. That contest now can take on a life of its own via social media. Sharing to other pages, groups, personal pages, getting feedback and dialogue through comments and tracking those “interested or “going”... You all remember the old shampoo commercial- “I told two friends and so on and so on...!” It’s very powerful.

In my opinion, to make this all a bit easier there are some changes to the website that could and should take place. The event registration process should be able to be edited once listed without going

through the RD. Sometimes CDs want to get an event up and running, that’s OK but they should be able to come back later and easily edit or add a flyer or photo. A standard format or required information that includes the host club or field full name (new people don’t know the abbreviations of the clubs) and location, nearby accommodations (a default could be “contact CD for more info”), dining options and any other prominent attractions or highlights. The event listings should resemble an advertisement not a reminder.

Another great outreach activity is physically going to other club meetings, flying events and cultivating interest in IMAC. It may take several visits to convince a club to entertain the idea. A great negotiating compromise which becomes a win-win for the club and IMAC, offer up a free one day “Intro to IMAC and Precision flying. Round up a few pilots and judges, arrange a day where club members can come out and get to know the welcoming accessible and mentoring side of IMAC. Offer a brief review of Aresti, rules and the Basic sequence. Then do a short clinic on plane setup and techniques for “practicing with purpose” to give the club members something tangible they can take away from your visit. Do some flying, show them a typical footprint of a sequence, demo the calling and judging at the same time. Let them get some coached practice with basics; fly a straight and level pass, slow rolls, inverted passes. Teach them slips and keep it informal and fun. You may not get a 3 day event out of it but you have shared time and talents, passed it forward, given some valuable learning tools that will be beneficial to your hosts and you have made some friends and hopefully supporters of IMAC. It’s a start. Case in point- Granite State IMAC is back after over 2 years of cultivation and a fall intro day with the help of over 100 years of IMAC experi-

ence for those who attended- priceless! Huge thanks to our great NE region pilots and special surprise guest Mark Leseberg. With a few changes to registering events and more concentration on “reaching out to outreach” our events will become

welcome mats for new entrants instead of a reminder for the same old crowd and we will be attracting new faces and new members. Change is never an easy concept but if we start by every pilot taking a role in some way to be not only

a competitor in IMAC but an advocate, a mentor and a PR representative we may be able to turn the tide on our membership numbers and more importantly the overall image of IMAC in the modeling community. “Out of the Box”

# The F-Factor Confronting Fear In Competition

By: Greg Hladky

There have been only a few times in my life that I experienced real fear, the kind that raises the hair on the back of your neck, gets the adrenaline and heart pumping, and fills you with dread. There was that bully in fifth grade, the time I lost my grip and almost fell out of a tree, and my first solo cross country flight, when clouds and a low ceiling blocked my return home, leaving me few options as a VFR pilot. Fear is a physiological response to a real or imagined threat. Heart rate goes up, blood flow increases, knees wobble, palms sweat and thumbs shake. Just as the K factor amplifies our raw scores, the fear factor amplifies our nerves. In severe cases it can have the opposite effect and make us freeze, sapping confidence and our ability to concentrate. It's a real concern for any RC pilot, but especially for the pilot attempting to fly precision aerobatics.

Like mythological dragons emerging from the deep to devour the hapless knight, fear can really hinder our performance. The good news is that we can do something about it. We can start by naming the fears we have. As a new IMAC pilot, here are some of the fears I faced going into my first competition:

- \* What if I fail to score well?
- \* What if my plane is not good enough to be competitive?
- \* What if I'm not good enough to earn or keep the respect of my peers?
- \* What if I forget my sequence or the maneuvers in a figure?
- \* What if I ask a stupid question or don't get the help I need?
- \* What if I drive my plane into the ground or lose control to dumb thumbs?
- \* What if I collide with another plane in mid-air?
- \* What if the loss of my plane prevents me from competing further?

\* What if I have to spend too much money, or practice too many hours to be any good?

\* What if preparation to get competitive becomes work rather than fun?

I suspect I'm not alone in experiencing these fears. We all have them to some degree or other, and in that sense they are perfectly normal. If we let them get out of hand, though, they can become irrational fears, bigger in our heads than they are in reality. So what do we do about them? We go out there and fly and stare down the fears that try to hold us back. We know from hours of practice that we can do it. We know these fears are just worse-case scenarios we imagine to avoid risk. You can answer any of the above “what ifs” by responding, “So what?” So I get a bad score, forget a maneuver, or ask a stupid question. I went out there and accomplished something I had never done before. And yes, I almost crashed my plane – twice! - performing a simple roll. It was scary, I got some zeros, but I survived the experience. I made new friends and discovered a new passion. Flying repeatedly in the face of fear eventually forces our limbic system to accept the new normal, reducing the level of stress it once induced.

The prefrontal cortex plays a powerful role in controlling fear. We can talk ourselves out of unreasonable fears by recognizing observable facts. After witnessing a mid-air collision between two accomplished pilots at my second contest, I was ready to quit IMAC. The fear of losing my new plane, my first giant scale purchased just for competition, was overwhelming. Fortunately for me, more experienced pilots like Matt Komar pointed out how rare mid-air collisions are, and that fact eased my fear considerably. I also resolved to have a spotter for every flight, so I could concentrate

on my plane and not worry about flying into someone else.

Fear may never completely leave even experienced pilots, so we accept that and use coping mechanisms that can help mitigate the fear. Personally, in addition to flying, I prepare for every contest as if it were a 5K race. Running can help relieve stress and sharpen cognitive function. If you can't run, get out and walk, or ride a bike. And get plenty of rest! Even a small deficit can hinder performance, the equivalent to flying under the influence of alcohol. Meditation, deep breathing, and listening to inspirational or relaxing music before you fly can also help calm nerves. Staying healthy will help you handle fear better. Fuel your body with the same care you fuel your plane. Use the best nutrition to keep your body at its best.

Finally, the best check against fear is to replace it with a more powerful emotion:

the passion you have for flying. It's a simple technique that experienced pilots know. Remembering how much you love to fly when it's your turn in front of the judges is much better than thinking about all the ways you might fail. This is the heart of IMAC and what draws so many pilots to come back to contests year after year. They view contests as a gathering of friends who share the same passion for scale aerobatics. Do that, and you will find your fear in chains, if not slain altogether.

In the next issue I'll talk about striving for excellence. It's what we do in IMAC. Until then, stay tuned and fly right! (Or left, if Schedule C. :-))



## 2018 Scale Aerobatic National Championship

Tuesday, 06/26/2018 - Friday, 06/29/2018

ACADEMY OF MODEL AERONAUTICS  
5161 E. Memorial Dr.  
Muncie, IN 47302

### Attention IMAC Pilots

With World's 18 so close to NAT's we realize that headcount will be affected by the World's qualifiers not able to attend both. What does this mean for you? A chance to come grab the prize and get the experience of a lifetime. We have a new plan and design for NAT's 18 and extra fun planned for all! Please go here and sign up for your chance to grab the trophies! Refer to post on signing up via AMA here as well, and on the IMAC Website in the 2018 NATs forum for more information.

### Schedule of Events

**Monday 06/25th 2018**— Pilots Meeting /Roll Call—5:00 PM. Brief Judging Refresher. (Old School Pilot Pin Draw/De-Conflict) First set of Unknowns distributed.

**Tuesday 26th—Friday 29th** Competition

**Wednesday Evening after flying**—Party on the Tarmac (BYOB and chairs for Music and Fireworks at Dark)

**Thursday Evening Banquet** and final Unknowns handed out. (Caterer change is in process)

**Friday** is final flights and Freestyle and Trophies and Awards Presentations

Site 3 is available for practice on June 25th 2018

Contestant Judging will be in place.

Foamies/night flyers are allowed in the evenings.

Reminder—Standard 4 Day event with Normal Drops and IRPS Points.

# Aircraft Set Up Basics

Bill Adams

This article is aimed mostly at the pilot that has either made the jump into flying their first IMAC contest or has flown in a contest and is frustrated that they are not scoring as well as they would like.

This article will focus on the basics of aircraft set up, and a little bit of how to practice to take advantage of the setup. However, before setting up your aircraft properly, you will need to know what it is you are trying to accomplish. The rule book states that the standard that is being judged, is “perfection”. You will need to know what that standard looks like, before you can duplicate it with your aircraft.

In addition to following along, and getting your aircraft properly set up, it is best if you attend a judging school and/or go on-line to the IMAC website and utilize the on-line classes. This will give you an idea and a sight picture of what you want to see your aircraft do.

Why should you first study the rules? Most new IMAC pilots will find it hard to believe that most of the points the judges are deducting, are not always in the maneuver itself, but in between the actual maneuvers.

Every maneuver begins and ends with strait and level flight. You also need to know that the maneuver you are currently in, the judging for that maneuver began after you exited the prior maneuver and completed one fuselage length. Did you start that maneuver with a 10? If you did not fly strait, level and parallel to the runway from the end of the last maneuver, to the start of the present one, the judge likely started his/her deductions when you pulled into that maneuver at something less than a 10.

How does this relate to setting up your airplane? Before you can fly the maneuvers well, you first have to learn to fly straight, level and parallel to the runway in between every maneuver.

The key to all of this? Prepare your plane to work for you, and not against you.

What is the Goal?

Typically, a pilot will take the plane they have been boring holes in the sky with and

start trying to fly the basic sequence. The pilot workload to fly a strait, level, and parallel line will likely be very high. Most beginner pilots won't notice the high workload because they are only concentrating on flying the maneuvers themselves.

The initial set up goal is to have your plane fly “hands off” strait and level, and also hold an up line and a down line with very little input from the pilot.

## First Step, Trim Steps

You will first trim your plane the best that you can for strait and level flight. If you have a radio that is capable of it, change the electronic trims to the finest setting the radio is capable of. Typically, 1 is the finest setting. 4 is usually the default. What this means is that at trim step 4, one click of trim moves a relatively large amount. When set to 1, you would need to click 4 times to equal the movement when it was set at 4. When we are going for absolutely “hands off” flying, this fine adjustment of trim is important.

You will want to pick a very calm day to set up your plane. It is also best to start the set-up process with a clean slate as far as mixes. We will add in a down-line mix later in the article. Trim your plane initially as well as you can to fly hands off strait and level. It is important to understand that you will not be able to trim for every aspect of flight at all throttle settings and all situations. Our goal is to trim for what we will be doing most of the time in our flight. There could be a whole article written on throttle management for IMAC. What we want to do here is start with a consistent and repeatable strait and level “cross box” throttle setting. (typically, near half throttle)

At your “cross-box” throttle setting, fly either strait away from you, or strait towards you. (If this is uncomfortable to do, ask a more experienced pilot to do it while you observe) You want to watch the track of the plane over the ground. Adjust the rudder so it is not skidding one way or the other and tracking absolutely strait. You may have to re-trim the aileron trim as you adjust the rudder trim. Now you should have a plane that is hands off wings level, not climbing or diving, and tracking strait

across the ground with no skidding. Notice that when you now fly back and forth on your IMAC line, you are mostly watching it fly. That is the plane doing the work for you.

## Second Step

Again, fly either strait away from you or strait in towards you at your “cross box” throttle setting. You will then smoothly add throttle (“up-line throttle setting”) while still strait and level, and then smoothly pull to a vertical up line. Once you are on the vertical up-line, make sure you are not accidentally giving any control inputs. Watch if the nose pulls left or right. Do this test a few times to be sure of the results. If the nose is pulling left or right from the vertical line, you will need to shim the engine the opposite way it is pulling off the line.

Yes, shimming the engine is not one of my favorite things to do. The good news is before we remove the cowl and loosen the engine bolts, we can first check the up/down line thrust. We can then make the adjustment on both while we have the cowl off and the engine loose.

## Third Step, Up/Down Thrust Line

Now you will fly your strait, level, and parallel line to the runway. Smoothly add throttle, and then pull a vertical up-line directly in front of you. Again, get the vertical up line, and then let go of the sticks. Watch to see if your aircraft pulls towards the canopy, or the gear, or remains on the vertical line. It won't hold it forever, but depending on the performance of your plane, you want it to hold it at least for the length of the typical up-line you want to fly in your sequence. If it is pulling towards the canopy, it will need down thrust. If pulling towards the gear, it will need up thrust. Again, do this test many times to be sure of the trend it is showing.

Once you know the thrust changes needed, you can insert the required shims for both the up/down, left/right thrust. This will be the most time-consuming step, but it is really worth taking the time to get correct. As far as how many shims to use. It is hit or miss until you get a feel for it, but I will say that it typically takes double the amount of thrust change (shims) when it needs down thrust

-vs- up thrust.

#### Fourth Step

There is one mix that every IMAC plane I have ever set up needed. This is a low throttle to down elevator mix. When you think about it, it makes sense. You trim for strait and level flight, you take away gravity (a down-line) it will climb. (pulls towards the canopy) I set my down-line mix with a "point mix". This means that I have a "point" just off of full down throttle that will add the down elevator to keep the plane from pulling towards the canopy. (typically, the mix is only 1.5 to 3%. Set your mix to say 3%. Test fly on your down lines and adjust until you can pull onto a down-line at low throttle, and the plane holds that perfect vertical line all the way down until you want to pull to level.

#### Let's Put the Plane to Work

At this point you should be very efficient at pulling your cowl on and off and loosening the motor bolts to slide in a shim. Yes, it is a pain, and yes, it is worth the effort.

Now let's tie it all together. We now have an aircraft that we can set a moderate throttle amount and fly a strait, level, and parallel line, without much input on the controls. We can also smoothly add throttle and then pull to an up-line, and the plane holds that up-line, again without much input from us. The plane is doing most of the work, most of the time.

Let's think about how we can put this plane that wants to do most of the work for us, to good use. Our goal will be to fly back and forth strait and level and parallel to the runway. We will do only half reverse Cuban Eights on each end. Why half reverse? This gives us a nice long line in between the maneuvers to practice keeping a consistent line (keeping the wind from pushing the plane in or out, not climbing or diving, and keeping the wings level) We do need to talk a little about throttle control here. Remember we trimmed our plane at that "cross box" throttle setting. We also need to practice consistently hitting that throttle setting when we enter onto that "cross box" line, and arriving at the "up-line" throttle right before we pull to the up-line.

#### Practice with a Purpose is Hard Work

Here is what your practice session should look like. Take off, start your maneuvers on the line that gives you a good view of the plane. Not too close, but not too far out that you can't see it. The key will be to hold that same line regardless of wind or other factors. Fly this line back and forth with half reverse

Cuban eights on each end. Your throttle will be at your "cross box" setting when you are strait and level. Right before you pull onto the 45 up-line, smoothly add your "up-line" throttle. Your goal is to arrive at that up-line throttle setting, right before you pull to the 45 up-line. You will center the half roll on the 45-up line, you then smoothly pull the 5/8ths loop, keep the throttle on until you get "over the hump" of the loop, then smoothly reduce the throttle to idle. Start smoothly adding the throttle back to your "cross box" throttle setting, and time hitting your throttle setting just before you arrive at your strait and level line. Keep repeating this doing half reverse Cuban eights on each end.

This sounds very busy, but this exercise does quite a few good things for you and your plane. When you keep a constant speed on your plane (arriving at the throttle settings at the correct time) you keep your plane in the same speed and flight envelope where you know your plane flies its best. If you consistently add power right before you pull to an up-line, it keeps the prop loaded and your sound score improves. If you let the plane get slower than your "cross box" throttle setting because you were late on the throttle, it will be out of trim, and sluggish.

#### Where Do We Go From Here?

The great thing is that all of that work you put in concentrating on just flying each maneuver didn't go to waste. Now you just combine your practice sessions flying your strait, level, and parallel lines, with adding in the maneuvers.

Once you can consistently hold that line flying the half reverse Cuban eights on each end, it is just a matter of doing the same thing during each maneuver in your sequence. Arrive at your "cross box" throttle setting as you exit each maneuver to strait and level. Arrive at your "up-line" throttle setting right before you pull to the up-line, keep a constant speed, keep the prop loaded, your percentage of starting the maneuver with a 10 will go up, and your sound scores will be higher. Now that your plane is doing more of the work, and the throttle settings become more automatic, you can spend more brain cells on centering elements, keeping the radii constant, and knowing that when you nail that up-line/down-line, it will hold that line until you want to change it.

#### What's Next?

You may have guessed, to set up a plane for the upper classes is a very complex process and would likely require a book rather than an article. There are many other aspects including

Center of Gravity, aileron differential, and knife edge mixing to be considered, but this article will give you a good base to get started on flying more consistently and help you to improve.

For additional set up information and ideas, do a search on line for the very excellent Peter Goldsmith set up guide.

Damn this guy is Long Winded

Believe it or not, this is the condensed version.

I hope this article has been interesting and helps improve the new IMAC pilots flying and makes their practice more useful. At the next IMAC contest, watch the top-level pilots in each class. You will notice that each one is a master of the throttle, and they are letting their plane do most of the work. Practice to be that top-level pilot.

I will leave you with this.

I stole, paraphrased, and then claimed a quote from a pro athlete as my own.

"They pay me to practice; I fly the contests for free"

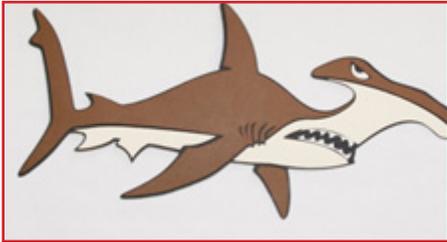
-Bill



# Red Book Review

## Hammerheads

By: Ty Lyman  
Education Committee



**Hammerheads**, - no, the other ones - also known as “Stall Turns,” can be some of the most graceful figures flown in aerobatics flight. As beautiful as they are when performed well, hammerheads present a complex challenge to pilots and judges alike. Moreover, with their relatively high K factor, and the fact that they appear in virtually every sequence, hammerheads are one of those figures that can make or break a flight. Due to the somewhat disproportional importance of the figure, I thought it appropriate to take a closer look at the finer aspects of the scoring criteria.

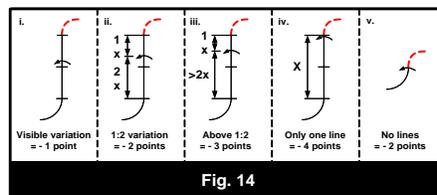
Stall turns (5.2.1.1 -5.4.4.4 in the Aresti catalog) draw upon much of the same criteria we use in several of the Aresti families. However, due to the unique nature of the figure, they also have some criteria that are specific only to these family 5 figures. After couple of general review points I'll jump right into the specifics. As with any other judged aerobatic figure, hammerheads begin and end in horizontal flight. Judging of the entry line begins the moment the preceding figure is complete, and in your mind you should already be hearing that little voice saying: “the maneuver is complete after the aircraft returns to horizontal flight and establishes a line of one fuselage length,” that way I don't have to type it all out. The only exception to that standard is a case where the hammerhead is the first figure of the sequence. In these instances, the figure still begins with a horizontal line, but judging does not begin until the aircraft breaks horizontal flight and begins the first part loop of the figure.

Speaking of part-loops, hammerheads contain two, three, or four part-loops, each of which is judged individually and in its entirety by - now's a good time for that little voice - part-loop rules. So, what do we know about part-loops? Their tracks must be wind corrected - meaning the cg of the aircraft describes the

proper radius regardless of the plane's pitch or yaw attitude - and they must be of a smooth and uninterrupted radius. In hammerheads, unlike some other figures, the part-loops contained within the figure do not have to be of equal radii. Naturally, the aircraft is also required to maintain a wings-level attitude throughout any part-loops. Errors in the part-loops are deducted as follows:

- Track errors: ½ point per 5 degrees of error.
- Radius changes: 1 Point per instance.
- Flat spots: 1 point per instance for any visible flat spot.
- Roll error: ½ point per 5 degrees for any deviation from wings-level.

Hammerheads initiate with either a 1/8 part loop or a ¼ part-loop depending on particular type of figure drawn, again, there may be two, three, or four part-loops in these figures. Regardless, following completion of the entry part-loop, there will either a 45 degree or vertical line segment. Like part-loop criteria, line criterion is the same as it is for many other figures. The lines drawn within a hammerhead are interior lines - lines within a figure which are preceded and followed by part-loops - and each interior line may contain roll elements. This is where things start getting busy; why



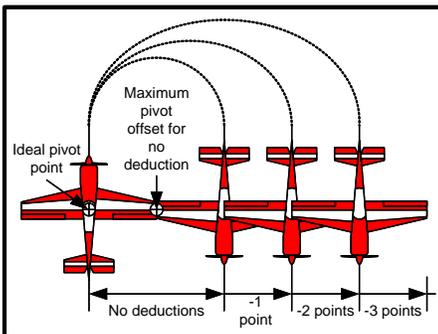
judges get paid the big bucks, and have scores of beautiful people and paparazzi stalking them whenever they venture out in public. We'll tackle lines first, paparazzi later. Like part-loops, lines must be wind corrected. This means the cg of the aircraft scribes a true 45 degree, or true vertical line, irrespective of the aircraft's attitude in pitch or yaw. It goes without saying, but I'm going to say it anyway, the roll attitude must remain in a wings-level state. Of course, that is, until the aircraft reaches a roll element. Roll elements may appear on any of the two, three, or four interior lines in hammerheads, and may be of any type, well, except spins. The specifics of the roll element criteria are the subject for another diatribe, so

other than the obvious requirements that they be of the correct type, and start and stop in the correct position, we'll stay focused on how the rolls impact the lines on which they are placed. Like interior lines in any other figure, when a line in a hammerhead contains a roll, or rolls, the roll element must bisect the line. In other words - your inner judge's conscience should be screaming “Figure 14” by now - there must be an equal amount of line before and after the roll element. It is critically important when judging line lengths to judge the actual visual length of the segment of one line as compared to the other. Using a counting method whereby you count the time it takes to complete the comparable lengths can never be accurate due to the inability to adequately account for changes in aircraft velocity. One last point regarding lines, none of the possible ascending or descending lines in hammerheads are required to match one another.

So, to recap line criteria:

- Track errors: ½ point per 5 degrees of error.
- Roll error: ½ point per 5 degrees for any deviation from wings-level.
- Centering when rolls are present:
  - 1 point for a visible deviation.
  - 2 points for a 2:1 / 1:2 deviation.
  - 3 points for greater than 2:1 / 1:2 deviation.
  - 4 points for no line before or after the roll element.
  - 2 points for no line before and after the roll element.

With part-loops and lines out of the way, we can now dive into the unique aspect of hammerheads that sets them apart from any them apart from any other figure: the pivot. In reality, there are three stages to the pivot portion of hammerheads: the transition from vertical flight to a stalled condition, the actual pivot itself, and a transition back to vertical flight. As already established in line criteria, the vertical up-line must be a true wind corrected vertical. This remains true up until the point when the aircraft is stalled and ready to perform the pivot portion of the maneuver. Once the aircraft is in a stalled condition, wind induced drift is no longer downgraded. At this point the aircraft is in the transition phase. There



**Fig. 22**

*Deduct 1 point per 1/2 wingspan over the maximum offset point.*

will be little, if any, continued upward track; if the vertical line required wind correction in the pitch axis, any such correction is removed and the aircraft is returned to a pure vertical attitude in the pitch axis. It's pivot time! A well executed hammerhead is a thing of beauty and the pivot is where the wheat gets separated from the chaff. As already mentioned, the pivot must take place in the vertical plane (in the pitch axis), additionally, the wings must remain in their proper plane. Any roll deviation (torque induce roll is

common) must be downgraded. In perfection-world the aircraft pivots perfectly around its center of gravity; in reality the aircraft has one complete wingspan in which to execute the pivot with no downgrade. Beyond one wingspan it becomes a bridged pivot and must be downgraded. A bridged pivot greater than 4 wing-spans is characterized as a fly-over and earns a zero. However, be careful about pulling that zero-trigger for a fly-over though, four wing-spans is quite a long way. Such a figure looks more like a knife-edge humpty bump and often may be characterized by significant continued upward movement. Also, make certain that you do not downgrade for wind-drift as opposed to extended bridging or a fly-over. The specific downgrades associated with errors in the pivot are as follows:

- Errors in pitch (aircraft not vertical):  
½ point per 5 degrees of error.
- Wings not in the proper plane (roll / torquing error): ½ point per 5 degrees.
- Pivot offset greater than 1 full wing span: 1 point for each additional ½ wingspan.

- Pendulum movement after the pivot (tail wagging): ½ point per 5 degrees for each instance.
- Any visible backwards movement prior to the pivot zeros the figure.

With the pivot complete, the aircraft now transitions back into a flying state and establishes a vertical down-line, wind corrected, of course. A delay in wind correction input results a downward track that is not true vertical and must be downgraded. Naturally, all previously mentioned line, roll, and part loop criteria apply to the down-line or down-lines and the part loops needed to transition back to horizontal flight.

That pretty much wraps up our little jaunt through the heady world of hammerheads. Of course, if you didn't get enough, pick up your 2017 - 2018 Scale Aerobatics rulebook and give pages SCA-38 through SCA-40 a perusal, and if you happen take in few of the pages before and after those you might just stumble across some other cool judging and flying tidbits, too.

## Facebook Event Promotion

By: Daren Hudson  
Marketing Committee

### **Attention Contest Directors! Event Promotion on Facebook- It's Free!**

For those who don't know I am part of the IMAC Marketing Committee as well as an AMA AVP. Our issues with membership and outreach mirror those of AMA. I started using a new catch phrase this year- "Reach out to OUTREACH", Why? Because we must reach out with all means possible for effective outreach. Facebook "Events" is just one additional way to get the word out beyond the "core" membership who visit our website and the cost is \$0! By taking 5 extra minutes after creating an event listing at the IMAC site to create a Facebook "EVENT" in the Regional Facebook Groups you now open your contest or event up to a much greater audience with easy "shares". By cross linking the IMAC site in your Facebook event listing you bring interested enthusiasts back through the mini-iac.

org website, it's a Win Win!

The Process:

>"Schedule your event" at mini-iac.org

>Open Regional Facebook Group and go to "Events" then "Create Event".

>Open your IMAC Events on a separate tab (to switch back and forth). Copy and Paste all info and include a photo of something IMAC.

>If there is a Google map link to the location include it.

>Be sure to copy CD name and number along with event description in the description box, include link to IMAC event url in description.

- Important- Once "created" go to the first

comment box with a note "To Register and for more Details: "link to event URL" (from mini-iac.org) This ensures the note is seen by anyone using either the "ABOUT" or "DISCUSSION" tabs.

See the events I have added on the Northeast Region Group. Yes, this is added work but the ability to get much more exposure and "share" to other pages and groups is extremely valuable as the SW Region has experienced. "Reach out to Outreach!" <https://www.facebook.com...s/454980317908067/about/>

Thanks, I hope you find this helpful and it brings in more new faces. Have a great 2018 season.

Daren Hudson  
Marketing Committee

# Aileron Control Horns

By: Cam Shahrदार

Something I learned from Bossier Rob, the aileron is thinner as you go from root to tip.

When gluing in the control horns, if you do not pay attention to this detail, the holes on the horn will not be equidistant to the hinge line, when comparing the inner servo to the outer most servo.

This results in un-equal mechanical geometry.

We want the least amount of binding, and this all starts with mechanical geometry 1st, then we can fine tune with the radio.

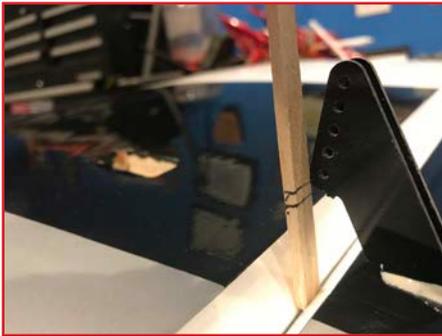
The way to do this is to measure the distance from the hinge line to a specific hole on the horn, this can be arbitrary, but whichever one you choose, it has to be the same one on both the inner and the outer set of horns you use as a reference.

For me, it was the hole closest to the surface of the aileron.

Once I marked this distance on a balsa stick, I then went to the inner most horn, which is where the aileron is thicker, and I know I want to insert the horn in deeper.

SO, i marked the distance, measured it, and then removed this material using my small hobby band saw.

After this, it was just a matter of gluing it in using Aeropoxy.



# Two Approaches to Block the Sun

By: Toby Silhavy & Dan Powell

Dan Powell and I have been given the green light on two approaches on how to block the sun from your eyes while flying and competing. Dans approach is a very easy to make fixture that can be left at the flying field or stored in your airplane trailer, while mine is a small portable unit that can be thrown under the seat of your car and taken with you to the field or to a contest. These devices have really helped us over the years in protecting our eyes and our aircraft. Here we go.

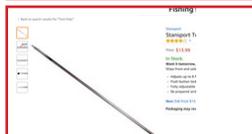
Ingredients:



Harbor Freight Roller Stand  
\$16



Home Depot Bucket Lid  
\$1.68



Amazon Telescoping Tent Pole #13.99

Miscellaneous:

Nuts, Bolts, Fender Washers, Zip-ties, Non Transparent Silicone, Spray Paint, Tent Stakes, and Miscellaneous tools

Instructions:

Remove Roller and using existing hole drill through lower tent pole and reattach bolt



Drill Hole through Lid and upper tent pole attach with fender washers and bolt use zip-ties below bolt, you may have to notch the lid to get the pole to set flush.



Drill holes in feet for staking down in wind



Note it stores flat on wall of trailer:



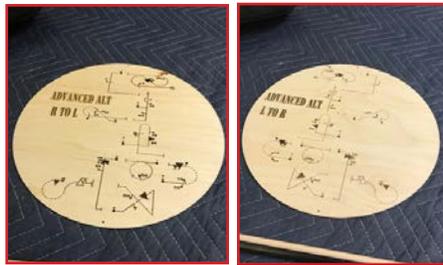
Assemble and enjoy:



As you can see, Dan's approach is something every club could put into motion with little cash outlay to help club member's protect their vision and aircraft.

## The Geeked-Out Sun Blocker 2018

I've been lucky the last few years in being able to attend several Iac contests in different states and have seen all types of fields and flying conditions. About 5 years ago I embarked on a mission to make myself a portable sun blocker. Now, add into the equation I have an attention span of about 5 seconds I decided to integrate my sunblock with my 2018 advanced Aresti schedule. I first started by drawing the Aresti schedule in TurboCad and laser engrave the image on 1/8" Baltic birch plywood. I decided to use a cheap camera tripod that I got from Amazon for \$20, a 1m x10mm round piece of carbon fiber tube from Aloft Hobbies, one piece of 5/16' x 3' dowel rod, hitch pin, and a piece of string. One note about working with carbon fiber; and that is, to always wear rubber gloves and respiratory gear as the particles are very dangerous to your health.

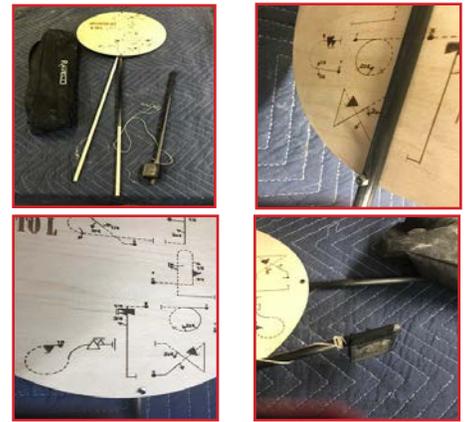


Next, I begin disassembly of the camera tripod stand. There is a removable plate that comes with each tripod. My plan was to remove all hardware on that plate then backfill the plate with epoxy mixed with milled fiberglass so that I could eventually drill it and mount the 1 meter carbon fiber pole to.



Here, the backplate is filled with epoxy and is set aside on my jigsaw. If you run the jigsaw all of the epoxy bubbles with float to the top of the piece and the epoxy is clear inside without bubbles.

Next we need to integrate the extension pole into the sunblock and the tripod. I start by cutting the 10mm carbon fiber tube in half (to make it portable) with my jigsaw and inserting a 3' dowel rod inside the upper half of the carbon fiber tube. The dowel rod is used to connect the two cf tubes and for a hitch pin to be used to attach the two pieces together.



Once, the mounted plate has hardened I drill it out for 4-40 mounting hardware. I drill the carbon fiber tube with a small piece of dowel rod inserted and CA glued into the bottom of the tube. I tap and drill the plate/rod and use 4-40 socket head bolts to attach them together. Your bottom section is complete. The top section of the sun dot is bolted together using 4-40 bolts, carbon fiber rod, and dowel rod.

Once the two sections are complete you will want to attach them together so they don't weather-vane in windy conditions. I drill a 3/32" hole on one end with both sections attached together so that I can make a guide hole for the hitch pin.



At this point, when I know all parts align well. I will then shoot some thin CA where the dowel inserts into the upper carbon fiber rod. I will do this on top where the sun dot goes, and on the bottom where the two carbon rods join. I use a piece of 2' string and attach one end to the base of the mounting plate and the other end to the hitch pin so that it cannot be misplaced.

I've used this type of sun dot before and I've found integrating it into my sequence I can give a quick glance at the Aresti if I'm by myself flying. I've also found if you take the bottom feet of the tripod off and fill the bottom of the legs full of epoxy mixed with buckshot you can have a very robust and wind resistant sun block. All in all, the parts (except for the actual dot) fit inside the very small camera tripod bag and I'm ready for the next contest. Judges, I'm entering the box!



# A Trip to Tuny's

## Rich Whitlow



When a friend of mine, Drew Rousseau wanted to go pick up his new Tuny-built Carden Pro Extra in Miami, I couldn't pass up the opportunity to go see the shop and fly in Miami.

We left on a Thursday evening and stayed the night around Tallahassee. On Friday we took the opportunity to stop by the source of my favorite radio, Esprit Model. The visit was quite a treat and all of the people we met there were quite welcoming.



Another friend, Larry Feiss met us there and we had a great time looking at products, talking tech and RC Airplanes and even purchasing a few items.

We got to see a couple of the new DS-24's (rumor has it one might have been purchased!) and they even told us about the coming DS-12 radio that is going to be an entry level radio that brings lots of added features and security.



A big thank you to Esprit Model for their Hospitality. Thank you James and ZB for taking time out of your busy schedule to spend with us on our little trip

The next stop was to Tuny's Shop Friday night to see Drew's new airplane.

One thing we did not plan on was spending almost as much time in Miami traffic, as we did driving from Esprit!

What we found was truly a treat.



The shop was fun to browse and look at all of the projects in their various stages of progress. Also, getting look at Tuny's planes and the fantastic Ultimate Biplane that he competes with himself.

Drew's plane was more than he could have imagined. The scheme came out beautifully and setup was immaculate. The wiring, the radio setup, the power-box were all done with precision and real beauty.

It is a treat to behold.



Our last little side trip before we left for home, was to visit Tuny's home field. The AMPS Members were friendly and accommodating and allowed both of us to fly as their guests. A special thanks to the AMPS Club for their hospitality.

The trip was a lot of fun, and hopefully we will find reason to do it again!



# Regional Reports



## International Region Adi Kochav

The International scene is growing every day we speak.

We have now more than 24 countries that fly IMAC and about 90 members in the International region more will come and sign as members.

Our latest countries to join our club are France with Alain Datry, India with Viedra Mane, Spain with David Delgado and Turkey with Burak Suel all had their boot camp with Manrico Mincuzzi that is the ARD for Europe and Primo Rivera that traveled all the way to India.

We now wait for Czech Republic to do their first ever IMAC contest.

As the IMAC Worlds is getting closer, we now can see that more countries want to join the IMAC club and fly the Scale Aerobatic according the IMAC criteria.

IMAC is free and open to everyone and so we want it to grow and flourish among the pilots worldwide.

As mentioned before we have 3 ARD that traveling the World, including myself, to know and teach better our growing IMAC

communities, if its Luiz from our Latin America ARD traveling to Latin America countries to guide and practice, Manrico our Europe ARD that travel all over European countries for boot camps and to open a new IMAC branch in a European country on daily basis or Dan Carrol from down under Australia our Asia ARD that goes all the way to the UK for comps and events. I go to the US and Europe to participate in contest and events and very happy to see how are community grow.

Our major improvement comes from the European and Latin America scenes where in Europe after seeing the last ITALIAN OPEN



CUP 2018 im glad to say that Manrico is going to do the first ever European contest in 2020 in San Giovanni air field that can accommodate 4 flight lines, which is by definition a world class event like the Italian Open we just had. Luiz is making the Latin America more available to pilots and the latest news are that Mexico joined IMAC in full force and now stands with 7 members.

The main goal for the International Region is to make as many Boot Camps and judging schools as many as we can have so we could make the standardization of IMAC in a way no matter where you travel Worldwide the system will be the same and pilots could have a fair and accessible contest.

See you all soon in the IMAC Worlds 2018 friends.

Until then,  
Safe flying and Happy landings.

Cheers

Adi Kochav





**South Central Region  
Doug Pilcher**

South Central got off to a soggy start with Wrightsville getting washed out and re-scheduled to July 14th and 15th. But Wrightsville "Lost Squadron IMAC" is a staple contest and will remain on schedule if Mother Nature cooperates with us with the re-schedule.

This brought our SC - SW Smackdown contest in El Paso as our season opener. It was a fantastic collection of pilots from both sides of the SC SW border. A lot of fun was had, and we incorporated a "Points Race" element to the Border Inaugural contest which the trophy was indeed awarded to the SW for 2018. We will have a rematch come 2019 and bring that trophy back to SC. I want to thank again Alex Drieling for helping me bring this idea to fruition and all the South West guys for coming on over to make this a fantastic contest. Not only in the flying portion but the making of new friends and putting faces to the names we interact with on the forums and such. Just a fantastic time. With that in mind and the success of this contest, I think other regions should promote some "Border Contests" to their regions. It defines what IMAC is truly about, and that is bringing together pilots who love the sport of "Scale Aerobatics" and the growth of friendships and ideas to grow IMAC as a whole!

We then moved onto also a new contest in South Central with the first annual "Bayou Bash IMAC" in Baton Rouge Louisiana. This event was brainstormed by our own Rich Whitlow who is Area Regional Director of Louisiana. It was a great success with an added bonus of a "Crawfish Boil" and gathering of everyone on Saturday night glutton fest with some music provided by some people

on guitars and what a treat and change to a standard IMAC weekend. Great Job Rich!

South Central continues with the 8th Annual Mid MS RC Club IMAC Challenge in Byram Mississippi on the 26th of May. Bobby Folsom and gang have put on a great contest for their 8th year this year.

The season continues and the growth of contests in South Central has grown a great deal over the last 5 years. We were lucky to have 6 or 7 contests on the schedule and now in 18 we have 12 contests on the schedule and reaching back into areas that have lost contests and interest and the trend is pilots wanting to come back to the IMAC fold. And of course, this does not include the 2018 NATS and IWC World's Championship, last week of June and first week of September respectively. The new contests this year include the SC - SW Smackdown in El Paso, Bayou Bash IMAC in Baton Rouge, Hillsdale adding a second summer contest "Barnstormers Hot IMAC Throw Down" on July 28th and 29th. And another new one in corner panhandle area of Pampa Texas with the "Pampa IMAC" on October 27th and 28th. This contest is being run by a new South Central addition of Amanda Coke, not only President of her club, but also District VIII AMA contest coordinator. She has over a half dozen pilots in nearby Amarillo Texas wanting to return the fold.

So, as you see the schedule is full right into November with the "22nd Annual Texoma IMAC Challenge" on November 10th and 11th which is also our RPS finish this year.



**Northwest Region  
Clark Hymas**

Spring in the northwest has been a bit different this year. It seems that every weekend the wind blows and it is calm during the week. Our first scheduled contest was no different. This was the first contest that anyone who flies IMAC in the northwest can remember being canceled due to weather. Experiencing the weather that weekend, we made the right call.

Our first contest ended up being at Higgins Field in Richland. Friday was a great practice day with a pot-luck that evening. The wind picked up about 6 and those who camped at the field getting 50+ winds most of the evening.



The Boise contest was rained out Sunday but we managed to get 3 rounds in Saturday. Tim Cooper smoked up a brisket and invited all the pilots to his house for a BBQ. We had pilots from Grants Pass Oregon; Seattle, Spokane, and Kennewick Washington; Nampa, Boise, Twin Falls, and Grace Idaho; Missoula Montana; and Salt Lake City Utah in attendance. In total contestants drove 3800 miles one way to come together for this event.

Check the schedule, there are several contests coming up shortly.



**Southwest Region  
Alex Dreiling**

We have had a large number of people come together in our region and have really pumped our region up! I want to personally thank all of you that have contributed and participated it is truly an amazing thing to witness and see.

If everyone could please double check and update their contact information on their IMAC accounts I would greatly appreciate it.

The Southwest has taken home the inaugural SC-SW Smackdown trophy. Thank you to everyone that participated and made the long drives. I have had nothing but major props from both regions and everyone is looking forward to next year!



Colorado is now on the books for 2018 with the 2018 Mile Hi IMAC Challenge the weekend of the August 4th. It would be cool if we could get some guys headed up their way to support their contests as well as get some of the CO guys down in the southern part of the region. There is also going to be the Judging School coming up in Northglenn, Colorado the weekend of May 19th.

The IMAC Worlds are coming up September 4-8 in Muncie, IN. We are still looking for a couple people from our region that can head that direction to help judge. If you feel like you are up for it there is monetary compensation for your time. If you could please email me alexdreiling@gmail.com if you are interested I would greatly appreciate it.

I have asked the CD's to help with documenting their contests. So if you are a CD and are putting a contest on in the future try to think of some cool things that would go well in the newsletter! I have also decided to have an article each newsletter from our region to help out those other contestants that are first getting into IMAC. Many people have asked about how to properly setup a plane. This month Bill Adams is going to be giving all of



his secrets with a "short" write up on Aircraft Setup Basics.

Thank you all and I will see you at the field!!



# SC/SW Smackdown

## Horizon City, TX



Sprung from an idea between our SW Regional Director (Alex Dreiling) and our SC Regional Director (Doug Pilcher), a contest was born. The Horizon City RC Flyers hosted and offered a great opportunity for 2 regions to meet, compete and enjoy hanging out at the field.

Though the SW Region took the inaugural trophy, SC is already making plans for next year!

### SC/SW Smackdown Results

#### Basic Class

1st Place - Danny Sander  
2nd Place - Michael Sjulín  
3rd Place - Joe Adame

#### Sportsman Class

1st Place - Rhett Lambert  
2nd Place - Mel Nipkow  
3rd Place - Ed Hooper

#### Intermediate Class

1st Place - Michael Marcelin  
2nd Place - David Herron  
3rd Place - Jason Neves

#### Advanced Class

1st Place - Randy Wegner  
2nd Place - Cam Shahrdar

#### Unlimited Class

1st Place - Bill Adams  
2nd Place - Brad Hooper

#### Seniors Class

1st Place - Bill Adams  
2nd Place - Michael Marcelin  
3rd Place - Ed Hooper

#### Freestyle Class

1st Place - Rhett Lambert  
2nd Place - Joe Adame



# Sun Valley Cactus Classic

Phoenix, AZ

by: Randy Wegner

The Cactus Classic was held March 24th at the Sun Valley Flyers RC Club in North Phoenix (<http://sunvalleyfliers.com/>). Overall, there were 41 pilots flying in the 2018 Cactus Classic contest. Each bracket flew 6 known sequences (3 rounds) and 1 unknown round for a grand total of 563 judged sequences across the two event.

Contest organizers under Brad Beedy's leadership, put together an amazing contest.



The event included two separate raffles that covered a PAU 35% Extra/DA120 combo and a Full Scale Aerobatic Plane Ride AND a Banquet at a local hanger complete with full scale aerobatic planes.



Jennifer May (the score keeper for the contest) won the full scale ride and Micah Stark won the PAU Extra/DA120 combo. Micah was scheduled to compete in his 1st IMAC contest at the Cactus however mechanical issues with his plane prevented him from competing.



Pilots from across the Southwest District converge at the Sun Valley RC Flyers field to kick off open practice on Friday.

Tony Watkins won the Basic class with a borrowed 115" AJ Laser230 (belonging to Bernard Liskov). The winning order was: (1) Tony Watkins, (2) Bernard Liskov, (3) Keith Rush. There were a total of 5 pilots in Basic. The scores ranged from a low of 761.4 to a high of 1,000 (a range of 238.6 points).

David Bruce, flying a Bill Hempel Extra 260, won the Sportsman class. The winning order was: (1) David Bruce, (2) Steve Clark and (3) Ed Hooper. There were a total of 6 pilots and the scores ranged from a low of 778.3 to a high of 1,000 (a range of 221.7 points).

Michael Marcellin battled for 1st place against district point's leader, Cayden Bruce. Michael won three sequences and the unknown. Cayden won 2 sequences and was a mere 0.9 points lower in the unknown! At the end of Sunday, Michael won the Intermediate class with his Hangar 9 Sukhoi. The winning

order was: (1) Michael Marcellin, (2) Cayden Bruce and (3) Ernie Mack. There were a total of 10 pilots in Intermediate. The scores ranged from a low of 804.6 to a high of 1,000 (a range of 195.4 points).

Jason Benson won the Advanced class over Randy Dreyer. Jason and Randy split known sequence wins (3 and 3), however Jason won the unknown Sunday morning. There was only a 41.1 point spread from 1st to 3rd. The winning order was: (1) Jason Benson, (2) Randy Dreyer and (3) Jim McCall. There were a total of 9 pilots in Advanced.

Bryant Mack and Spencer Nordquist battled for 1st place. Bryant took the overall win in the Unlimited class with a solid win in the unknown Sunday morning leaving a mere 5.3 point spread between the two pilots. The winning order was: (1) Bryant Mack, (2) Spencer Nordquist and (3) Santiago Perez. There were a total of 11 pilots in Unlimited. The scores ranged from a low of 633.6 to a high of 1,000 (a range of 366.4 points).

Michael Marcellin won the Seniors class. There were 14 pilots in Seniors. The winning order was: (1) Michael Marcellin, (2) Bill Adams, (3) Paul Bohardt,

Spencer Nordquist won the Freestyle class. There were 5 pilots in Freestyle. The winning order was: (1) Spencer Nordquist, (2) Santiago Perez, (3) Bryant Mack, (4) Kim Quenette and (5) Dominic Grasso.

The tightest competition over the weekend was for 8th place in the Unlimited class, with only 0.1 points difference between Dean Bird and Alex Dreiling.

The whole weekend was an amazing opportunity to meet up with friends, make new friends, do some precision flying and have tons of fun!



# Bayou Bash IMAC

## Baton Rouge, LA

South Louisiana has had it's first IMAC contest in many years. To all of the pilots that attended, it was a great success.

There was plenty of flying and good food.

To cap everything off, there was a "Louisiana Saturday Night" Crawfish Boil and party. Including an open Guitar Jam.

Lots of fun and fellowship was enjoyed. We look forward to the second annual event!



### Bayou Bash IMAC Results

#### Basic Class

1st Place - Jason Watts  
2nd Place - James Barfield

#### Sportsman Class

1st Place - Guy Alon  
2nd Place - Drew Rousseau

#### Intermediate Class

1st Place - Phillip Knight  
2nd Place - Dan Powell  
3rd Place - Rich Whitlow

#### Advanced Class

1st Place - Hank Cooper  
2nd Place - Cam Shahrदार

#### Seniors Class

1st Place - Phillip Knight  
2nd Place - Hank Cooper

#### Freestyle Class

1st Place - Drew Rousseau

# Coachella

## Coachella, CA

by: Jacques Telles

The 3rd round IMAC contest for the Southwest District was held March 3rd in Thermal CA at the Coachella Valley Radio Control Club field (<http://civrclub.com>). The contest pulled in 34 pilots from across California, Nevada and Arizona. These pilots flew a grand total of 480 judged sequences.

Friday was an open practice day and many pilots took advantage of the sunny sky to get flights in and sort out setups. The wind picked up in the afternoon and would be a hint of what to expect Saturday afternoon!



Saturday's pilot meeting kicked off at the crack of dawn in slightly chilly weather. Topics covered in the pilot's meeting included safety, the deadline, 1st time pilots and THE WEATHER!



Saturday's rounds were cut short for the lower brackets as winds picked up to 25 Mph+ and lots of dirt in the air. Unlimited pilots elected to fly their 2nd round regardless and put on an amazing show of skill, precision and guts! We saw at least one snapped landing gear as a result of the cross winds on Saturday.



Sunday, the contest was able to resume with pilots flying Unknowns across all brackets and pilots in lower brackets being able to fly missed rounds from Saturday. As Bryant Mack and Cayden Bruce put on an amazing freestyle show, scores for known and unknown rounds were tabulated.

1st time IMAC pilot, Jamis Malone won the Basic class flying his 35% PAU Viper ST. There were 5 pilots in Basic. The winning order was: (1) Jamis Malone, (2) Claude Aragon, (3) Richard Felkins, (4) Keith Rush and (5) Jerry Unruh.



Brian Marquett, moved up to Sportsman for the Coachella contest and won the class flying his Krill Sukhoi. There were 6 pilots in Sportsman. The winning order was: (1) Brian Marquett, (2) David Bruce, (3) Danny Diaz, (4) Gene Mason, (5) Richard Crutchfield and (6) Morris Fruit.

Cayden Bruce won the Intermediate class with his 41% CARF Extra330SC. There were 8 pilots in Intermediate. The winning order was: (1) Cayden Bruce, (2) Michael Marcellin, (3) Jacques Telles, (4) Ernie Mack, (5) Ryan Crutchfield, (6) Sharaud Baldwin, (7) Greg Frazier and (8) George Silva.

David White won the Advanced class flying

a Dalton Extra ML. There were 8 pilots in Advanced. The winning order was: (1) David White, (2) Jason Benson, (3) Jim McCall, (4) Darrell Morgan, (5) A.J. Jaffe, (6) Brad Beedy, (7) Howard Pilcher and (8) Randy Wegner.

They flew 6 known sequences (3 rounds) and 1 unknown round. The scores ranged from a low of 4,064.1 to a high of 4,946.3 (a range of 882.3 points).

Bryant Mack won the Unlimited class flying a Dalton ML. There were 7 pilots in Unlimited. The winning order was: (1) Bryant Mack, (2) Santiago Perez, (3) Bill Adams, (4) Kim Quenette, (5) Alex Dreiling, (6) Curtis Pilcher and (7) Kevin Garland. They flew 6 known sequences (3 rounds) and 1 unknown round. The scores ranged from a low of 4,057.5 to a high of 5,000 (a range of 942.5 points).

Michael Marcellin won the Seniors class. There were 9 pilots in Seniors. The winning order was: (1) Michael Marcellin, (2) Jacques Telles, (3) Bill Adams, (4) Danny Diaz, (5) Gene Mason, (6) George Silva, (7) Jim McCall, (8) Howard Pilcher and (9) Randy Wegner.

Bryant Mack won the Freestyle class. There were 2 pilots in Freestyle. The winning order was: (1) Bryant Mack and (2) Cayden Bruce. They flew 1 freestyle round. Both pilots picked up Desert Aircraft gift certificates for their amazing freestyle routines.

The tightest competition was for 3rd place in the Unlimited class, with only 13.1 points difference between Bill Adams and Kim Quenette.



A big thank you to the Coachella Valley RC Club for hosting the contest and a thank you to the sponsors who contributed to the prizes and giveaways. The sponsors includes: Desert Aircraft, Thunder Power, Graph Tech & Rise Up Hobbies

# The Hemet IMAC Classic

Hemet, CA  
by: Jacques Telles

Round 6 of the 2018 Southwest District IMAC schedule was held March 7th and 8th in Hemet California. Overall, there were 26 pilots flying in the contest.

Friday afternoon provided an excellent opportunity for pilots to practice and get early registration out of the way. The weather was near perfect on Friday as pilots alternated their practice flights.

The pilot's meeting kicked off at 7:30am on Saturday morning and wheels were up by 8am sharp. Two flight lines were established in an effort to get all 26 pilots through 2 known



rounds before the forecasted high winds hit. Unfortunately, by the 2nd round, Intermediate and Unlimited pilots ended up battling 15 mph+ winds and a constant push into the flight line.



On Sunday, pilots were greeted by a caravan of hot air balloonists, and cloudy skies. While the balloonists' setup their hot air balloons behind the airpark, the pilots meeting was held and wheels up was delayed till 8:15am to allow the hot air balloons to get airborne and out of the way.



With the balloons out of the way and blue skies peeking through the clouds, day 2 of the competition got under way. By the time all brackets had finished their Unknowns the skies were clear and sunny for the final round of Knowns.

1st year IMAC pilot, Jamis Malone won the Basic class with his Precision Aerobatics Unlimited Viper. This is Jamis' 2nd win of the season in Basic. Keep your eye on this young pilot! The winning order was: (1) Jamis Malone, (2) Keith Rush and (3) Scott Annan. With a total of 6 pilots in the bracket. The scores ranged from a low of 771.8 to a high of 1,000 (a range



of 228.2 points).

Brian Marquart won the Sportsman class with his Krill Sukhoi. There were 7 pilots in Sportsman. The winning order was: (1) Brian Marquart, (2) David Bruce, (3) Jeffrey Diaz, Father and son team, Danny Diaz and Jeffrey Diaz shared their one Dalton Extra300ML throughout the weekend of competition. The scores ranged from a low of 788.1 to a high of 1,000 (a range of 211.9 points).

Cayden Bruce took his 5th district win in the Intermediate class with his CARF Extra330SC. The winning order was: (1) Cayden Bruce, (2) Jacques Telles, (3) Sharaud Baldwin. Overall

there were 5 pilots in Intermediate. The scores ranged from a low of 820.6 to a high of 1,000 (a range of 179.4 points).

Randal Dreyer took his second win of the season by winning in the Advanced class. There were 5 pilots in Advanced. The winning order was: (1) Randal Dreyer, (2) Jim Mccall, and (3) Darrell Morgan. The scores ranged from a low of 853.8 to a high of 1,000 (a range of 146.2 points).

Santiago Perez won the Unlimited class. There were 3 pilots in Unlimited. The winning order was: (1) Santiago Perez, (2) Curtis Pilcher and (3) Dean Bird. The scores ranged from a low of 887.2 to a high of 1,000 (a range of 112.8 points).

Jacques Telles won the Seniors class. There were 8 pilots in Seniors. The winning order was: (1) Jacques Telles, (2) Jim Mccall and (3) Danny Diaz. The scores ranged from a low of 773.719 to a high of 1,000.000 (a range of 226.281 points).

The tightest competition across the 2 days of competition was for 1st place in the Sportsman class, with only 1.089 points difference between Brian Marquart and David Bruce.



# Central Indiana IMAC Challenge

Muncie, IN

by: Greg Hladky

North Central's first contest of the season took place in Muncie at the IAC, Site 4, on May 19-20. Pilots had to dodge rain Friday and Saturday, and a long line of thunderstorms passing through the area Saturday afternoon forced a temporary suspension of flight ops. Low ceilings at times meant flying through the clouds or calling avoidance. With little practice going into this first event, the winners - at least in Sportsman class - were the guys with the least number of zeroed figures. But pilots had a good time flying, enjoyed the fire pit in the evenings, and met a new Basic pilot, Perry,



and his wife and caller, Debbie. From the surplus entrance fees CD Mike Karnes paid for dinner for all the pilots at "BDub" (Buffalo Wild Wings) on Saturday night. Thanks, Mike! An extra \$300 will also be going to support



the 2018 Worlds event. There were new planes competing for the first time, including Jim DeYoung's own design and scratch-built 43% Extra in Sportsman, my 30% Extreme Flight electric-only Extra 330SC, sporting the NC logo on its tail, and Ray Morton's 43% Kam-Aero Extra 300 in Unlimited.

## Central Indiana IMAC Challenge Results

### Basic Class

1st Place - Perry VanMeter

### Sportsman Class

1st Place - Bert Garrison  
2nd Place - Greg Hladky  
3rd Place - Guy McIntire, Jr.

### Intermediate Class

1st Place - Mike Duggan  
2nd Place - Nick McKinney  
3rd Place - Robert Willis

### Advanced Class

1st Place - Gary Hunt  
2nd Place - Mike Karnes

### Unlimited Class

1st Place - Kurt Koelling  
2nd Place - Will Berninger  
3rd Place - Ray Morton

### Seniors Class

1st Place - Ray Morton  
2nd Place - Bert Garrison  
3rd Place - Greg Hladky



# MMRCC IMAC

Byram, MS

by: Greg Hladky

In Byram, for the second year in a row, Mother Nature imposed her will.

Last year, she washed out Sunday. This year the severe predictions were happening all week. It affected the turnout a good bit. But those who were there got some flying time on Friday for practice.

On Saturday 2 rounds were completed. Unknowns were studied, then the rain began. It rained for long enough to call it a day for Saturday, and with the forecast for Sunday looking grim; the contest was called.

In spite of the shortened flying the pilots enjoyed the contest and the good food (including the famous "Baked Beans").

We will be looking forward to Beautiful weather next year!



## Mid-Mississippi RC Results

### Basic Class

1st Place - Tim Hughes  
2nd Place - Jason Watts  
3rd Place - Jim Barfield

### Sportsman Class

1st Place - Mike Cooper

### Intermediate Class

1st Place - Danny Powell  
2nd Place - Rich Whitlow  
3rd Place - Phillip Knight

### Advanced Class

1st Place - Cambize Shahrदार  
2nd Place - Hank Cooper

### Seniors Class

1st Place - Hank Cooper  
2nd Place - Phillip Knight

# IMAC Italian Cup 2018

Caorle, Italy  
by: Manrico Mincuzzi

Three days of intense competition, from the 1st to the 3rd of June, at Caorle, near Venice, on an 800 mt. grass runway made available by Alicaorle. This has been the largest IMAC competition in Europe for the year 2018: 55 pilots from 16 Countries were present, including representations from IMAC Turkey, India and Israel.

We have been flying on two simultaneous flight lines, a distance of about 500 mt. has been placed between the two juries stands. In three days 330 flights have been concluded by 11 pilots in Sportsman, 19 Intermediate, 11 Advanced and 14 Unlimited, of which 18 have also flown Freestyle. Each precision pilot has flown four known flights with one drop and two unknown flights with one drop. The Freestyle pilots made two flights of which one was dropped.

The most important innovation of this competition has been the introduction of Noutamatic, an innovative technology enabling the judge to score each flight maneuver by pressing a button on a box connected in WiFi to the central scoring system. With his eyes always focused on the airplane, the judge can deduct half a point or add half a point by pressing the dedicated buttons. When satisfied with the score, he has to press another button to validate. At this point, through an earphone system, the box describes to the judge the next maneuver on schedule. This system eliminates the job of the scribe and also the very annoying job of imputing the data manually; in addition, no paper is necessary to write and communicate information.

In Europe IMAC has been positioned as an Aerobatic Flight School, organizing competitions to enable each pilot to assess his competence and make plans for improvement.



This learning culture contributes creating a very friendly atmosphere among pilots during competitions and a sense of family among all the participants including friends and relatives.

In the end, we had a ruffle that has been highly appreciated by everybody, especially because of the presence, among other very interesting objects, of three DA engines generously donated by Desert Aircraft, the producer of the most desired airplane engines in the world.



In general, we assisted to a significantly high level of precision flight quality and this has made the event quite interesting for anyone who loves this practice.

In Europe, IMAC has become the category of reference for all the semi-scale pilots, overcoming the importance of F3M and the European Acro Cup. During 2018, new stand-alone IMAC organizations have been created in Spain, France, Czech Republic, Turkey, and India. In 2019 Switzerland and probably Germany will be initialized. At that point, we will be able to say that IMAC flies from the UK to India and from Finland to Israel or maybe South Africa. Our concept of Europe is much broader and inclusive than the current political idea of Europe.



At the end of the competition, the date of the first IMAC Europe Championship has been announced. This will take place from the 26th to the 29th of August 2020 at San Giovanni Rotondo, in Italy. This four days of competition, called the "EUROPEANS", will involve 120 pilots. It will take place on four simultaneous flight lines designed on a huge plain in front of the Gargano Mountains, two hours south of Rome and fifteen minutes from the Adriatic sea.

You are all invited,

Manrico



# Upcoming Events

## June:

8th - Granite State IMAC - Concorde, NH  
8th - Australia NQ IMAC Challenge - Townsville, Queensland  
9th - House Mountain IMAC - Corryton, TN  
9th - Flying Cardinals IMAC Challenge - Hebron, KY  
9th - Australia-Parkes Pow Wow - Parkes, New South Wales  
9th - Grizzley Bear @ TCRCM Revisited - Richland, WA  
9th - West Coast Aerobatic Challenge - Walnut Grove, CA  
10th - Tercera Fecha IMAC Chile 2018 - Santiago, Chile  
16th - ESAC Jack Stoval IMAC Challenge - Hurlock, MD  
16th - 4th Annual WRCFC IMAC Contest - Woodstock, Ontario  
16th - Smokey Hill RC 2nd Annual NATS Warmup - Salina, KS  
16th - CRAMS Spring IMAC - Irricana, Alberta  
16th - IMAC Denmark 2 2018 - Brande, Denmark  
16th - IMAC Brannebrona - Gotene, Sweden  
16th - The Wrexham IMAC Wrap Up - Ruthin, UK  
23rd - IMAC Quebec 2018 - Levis, Quebec  
23rd - 5th Annual NATS Warmup - Ashley, OH  
23rd - Weavers IMAC Challenge - Othello, WA  
26th - 2018 IMAC Nats - Muncie, IN  
29th - Starmoen - Hedmark, Norway  
29th - Ktziot IMAC Challenge Hot Summer Day - Ktziot, South Israel  
30th - IMAC Helsingborg - Helsingborg, Sweden



## July:

6th - 2 Fecha IMAC Argentina - Camilo Aldao, Cordoba Argentina  
7th - IMAC Beauce - Saint-Georges, Quebec  
7th - Airmasters IMAC Basic Primer - Cincinnati, OH  
7th - Grapple Over the Grapes - Zillah, WA  
7th - Orvieto - IMAC Italia National Competition - Orvieto, Terni Italy  
7th - Gunnadah Bash - Gunnadah, New South Wales Australia  
14th - 2018 Maine IMAC Challenge - New Gloucester, ME  
14th - KRAM Grand Rapids IMAC Challenge - Alto, MI  
14th = Lost Squadron IMAC - Wrightsville, AR  
14th - Dakota Thunder IMAC - Rapid City, SD  
14th - Lamar Steen Commemorative Challenge - Brighton, Ontario  
21st - Competition IMAC Saguenay 2018 - St-Jean-Vianney, Quebec  
21st - Mid Summer IMAC = Andersonville, GA  
21st - Northeast Wisconsin IMAC Challenge - Hilbert, WI  
21st - Molalla Aerial Rodeo - Molalla, OR  
21st - Cooloola Classic - Tin Can Bay, Queensland Australia  
21st - IMAC Manresa - Cabrianes, Barcelona Spain  
28th - Northern Ontario IMAC Challenge "NOIC" - Garson, Ontario  
28th - Barnstormer's HOT IMAC Throw Down - Hillsdale, KS  
28th - Fox Field IMAC - Northam, Western Australia Australia



## August:

3rd - Plum Islan IMAC - Newbury, MA  
4th - 2018 Mile HI IMAC Challenge - Strasburg, CO  
4th - Strangnas Modelflygares IMAC 2018  
4th - The Bristol IMAC Bash Up - Bristol Bath/North East Somerset UK  
11th - Central Carolina IMAC - Randleman, NC  
11th - The Cincinnati IMAC Burnit Challenge - Harrison, OH  
11th - Stetson Flyers IMAC Weekend - Ottawa, Ontario  
11th - mcNair RC Scale Aerobatics Competition - Didbury, Alberta  
11th - Ward Hendricks IMAC Shootout = Oakdale, CA  
17th - QLD State Championships - Maryborough, Queensland Australia  
18th - ESAC Ace Ortleay IMAC Challenge - Hurlock, MD  
18th - Mid-Michigan IMAC Contest - Jackson, MI  
18th - Wings Over Abilene - Abilene, TX  
18th - Silver Hills IMAC - Athol, ID  
25th - 2018 North Central Regional Championships - Muncie, IN  
25th - Wagga IMAC - Wagga Wagga, New South Wales Australia  
25th - IMAC Nationals 2018 - Grantham, Lincolnshire UK  
25th - Starmoen 2 - Hedmark, Norway

## September:

8th - American Turf Flyers Fall IMAC - Broken Arrow, OK  
8th - Salinas IMAC II - Salinas, CA  
15th - CMJ Hobbies Late Summer IMAC - Roberta, GA  
15th - Viva Las Vegas IMAC - Las Vegas, NV  
15th - Modena - IMAC Italia National Competition - Sassuolo, Modena  
22nd - Black Dirt Northeast Regional Finals - Goshen, NY  
22nd - Sharks Club 4th Annual IMAC Challenge - Shreveport, LA  
22nd - Northwest IMAC Regional Final - West Richland, WA  
22nd - Fyresdal 2 - Vestfold, Norway  
22nd - Victoria State Championships - Newbridge, Victoria Australia  
29th - Mocksville Fall Classic - Mocksville, NC  
29th = Toowoomba Spring Rumble - Westbrook, Queensland Australia

# Why Join IMAC?

The International Miniature Aerobatic Club (IMAC) is an organization dedicated to sport of radio controlled Scale Aerobatic competition. IMAC operates under the auspices of the USA's Academy of Model Aeronautics (AMA) with a designation as the Special Interest Group (SIG) for R/C Scale Aerobatics. While it's origin is American, the scope of IMAC operations now extends to over 15 countries throughout the world and continues to grow daily.

IMAC members are people just like yourself that love to fly scale aerobatic planes. Like any worthwhile endeavor it takes focus, energy and passion to succeed in this sport. As a pilot, you spend hours learning sequences, tuning your plane, or learning how to do the "perfect" spin entry. You pack up and head out to a contest all ready to compete head to head with your fellow pilots. It's great so far but think about it...what is going on behind the scenes?

- \* Who organizes this stuff?
- \* Who sets the standards so that all events operate on the same level playing field?
- \* Who helps write and maintain the rules that we all fly by?
- \* Who develops the judging schools and training programs?
- \* Who actually writes, refines, and publishes the known sequences you so diligently practice?

## It's IMAC – International Miniature Aerobatic CLUB

Yes a CLUB...people like yourself all contributing to the sport with their time, resources, and passion. If you are serious about flying scale aerobatics, IMAC membership is your way of giving back to the sport.

Yes...you get benefits like discounts off entry fees at every event and the ability to compete with other pilots in your class across your IMAC region for annual bragging rights. You get access to the full IMAC website including contest calendars, buy/sell classifies at no charge, and a full forum for sharing information with your fellow pilots

Without an international organization like IMAC, the sport of scale aerobatics as we know it may disappear! All of the activities of the organization are focused on making the sport better whether through national judging schools, holding monthly phone conferences, working with the website, working with vendors that contribute to IMAC and these activities cost money. As a not-for-profit organization, IMAC depends on it's members. Regardless if you are in the US/Canada or somewhere in the rest of the world, the sport needs you to be part of the CLUB



Joe Thibodeau & his father David

## Join with the rest of us and support scale aerobatics!

If you fly even a few events throughout the year, you get your money back through event entry fee discounts but more importantly - you support the sport. It doesn't get any better than that!

[www.mini-iac.org](http://www.mini-iac.org)