



2020 - Volume X

# In The Box

The Official Newsletter of The International Miniature Aerobatic Club



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## Letter from the Editor

**Rich Whitlow**

Well, we got started and then everything came to a screeching halt!

But, now it is time to start thinking about getting back out there and starting to enjoy our hobby again.

We have had one contest in the South Central in June and will have another one at the end of June. The contests are doable and everyone was respectful of the new rules and really enjoyed the opportunity to get out and compete a little.

In spite of the fact we haven't been able to do much, time has been marching on. With that is coming to be time that our officers and Regional Directors will need to be nominated and voted in. This is an important process that directly affects the direction of where IMAC is going.

So, think about some good candidates and be ready for the nomination period. Also, if an elected office is not your desire, but you want to be involved, don't forget about the ever-important committees that are in need of help. If you would like to get involved with a committee, please let your Regional Director know.

Unfortunately, we did not have Nats this year. Although it is certainly a shame, the year is not a total loss. In many areas we will be having contests. Groups are also getting together to practice and share their passion for the sport. We have even had some Aerobatic Fun Days in the South Central that allow pilots to get exposed to Aerobatic Flight, which includes F3A Pattern and IMAC.

I am definitely bullish on this sport (Aerobatics) as a whole. Is it changing some, sure but we can make that change for the best.

One last note, at the Tulsa Glue Dobbbers contest at the beginning of June, we had several youth compete and show us their Freestyle Routines. It shows our hope of the future. At the contest, our own ARD Greg Dial interviews these youth in a great video that you can see of the [IMAC-South Central Facebook Page](#). It is worth checking it out!

So, if you have some interested youth in your area, get them involved.

Now, get out to the field and practice!

Rich Whitlow  
Newsletter Editor  
imacinthebox@gmail.com  
#IAMIMAC





# Letter From The President

Mike Karnes



This season has not been a normal one for IMAC. We were stopped in our tracks by the COVID 19 virus. The year started with only a few contests happening around the world. Now that it's July we are slowly getting to where some regions are able to put on contests, still the virus keeps pilots away.

The NATs pole we held did not turnout with many willing to commit to make the trip. So in the best interest of the organization we chose not to participate this year. We can only hope this will not happen in 2021 due to a virus keeping people shut in their homes for months. Everyone please practice social distancing while you are out practicing or competing at a contest. I realize sometimes it can be difficult to stay totally safe all the time, but do your best to stay healthy.

## Board of Directors Positions

We are only 3 months away from having the nomination of officers. Every position as always is open for nomination. If you would like to volunteer and run for a place on the board, let it be known when nominations open. If you think you have ideas to move IMAC into the future, then you could be that perfect fit to the BOD. So according to the By-Laws the following is the process as written.

## Article IX - Nominations and Elections

### Sec. 1 - Nominations

Nominations for all offices shall take place during September of the election year. To be eligible for nomination, a candidate must be a member in good standing.

### Sec. 2 - Notification

The membership shall be notified of the nominees for the various offices through direct mail, IMAC Website or other form of official IMAC communication.

### Sec. 3 - Elections

The method of voting and the election period shall be determined by the board of directors and announced 30 days in advance of the designated election period. Votes received after midnight of the final day of the election period shall not

be counted.

### Sec. 4 - Certification

The BOD shall designate a voting certification process which shall include reviewing the results of the election and certifying their accuracy.

### Sec. 5 - Installation

Newly elected officers will be installed January 1, following the election or thirty (30) days after the closing of a special election.

Mike Karnes  
#IAmIMAC



# Notes from the Officers



**Vice-President  
Doug Pilcher**

## From the (Virtual) Desk of the Vice President

Well here we are in June of 2020 and finally a few regions have been able to kick off the season! Even here in South Central we have had only a single contest so far. 2020 has been quite the year so far with Covid-19 and the unrest of current affairs. How nice would it be to just have a “Reset Button” and give it a fresh start?

I want to remind everyone that the IMACSWAG Store is Open – Please remember that the IMACSWAG store is a one stop shop for many things’ members have asked for and now made available directly from IMAC. From hats to License Plates to stickers and Redbooks and inserts and stick planes and scoring devices. Both Wheel and Stick



design. To Check it out, go [HERE!](#)

CD’s and Scorekeepers – REMEMBER to download a NEW copy of Score! as the new 2020 sequences and K’s are preloaded in it for you. Please remember that we have available to members a step by step instruction series of downloading and prepping Score! 4.25.2 to one’s computer and assuring that the latest version of Java is installed correctly as well as the prepping of a contest folder for your contest and we have linked the Score! training class given last March to be viewed at any time. These items can be viewed under Downloads/Software and again in a step by step procedure. To Check it out, go [HERE!](#) And click on “Software”!

Online Judging School – Do not forget that in the Education section of IMAC Website we have linked the 2019-2020 PPT presentation of the Judging Seminar. Here you can download the core materials as well as view the 5-part series of the “Online Judging School” hosted by Brad Davy in the NE and follow along with the PPT slideshow and take the “Module Tests” offered at end of each section. These tests are delivered directly the education committee for review. If you were unable to attend a Judging school this year, either by distance or availability, you can now do this online on mini-iac.org. To check it out, go [HERE!](#)

ALSO, and very importantly, please remember the new and Active forums for IMAC are located [HERE!](#) This is where all club business and discussion is happening. We need to get all members and registered users over to the new forums. This does not however integrate with the main website. So, you will need to register on the new forums with your given name so we may verify to the main website. Aliases are unable to be cross referenced in many cases thus the need for proper names. Click highlighted link earlier in

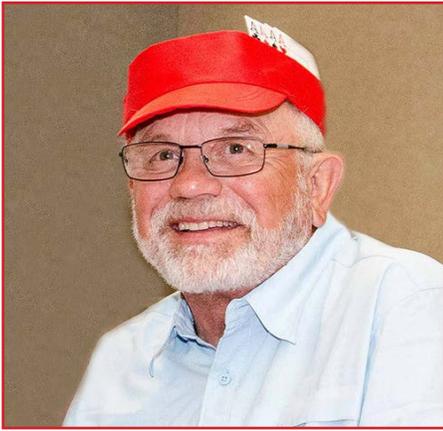
this paragraph or go here. <https://forums.mini-iac.org/>

I also realize this is just June, but it is time to start thinking about the 21-22 officers for IMAC. We will be taking nominations in the early fall and elections as winter rolls in. Please be sure to ask any individuals you are thinking of nominating and for what positions to be sure they are willing and up to the task before nominating them when the nomination process begins. All positions are open for nominations in all regions and includes the executive board of IMAC.

And as always, if you have something you would like to see added or changed, never hesitate to contact me directly at contact information below.

Doug Pilcher  
Vice President  
douglas.pilcher@gmail.com  
(903) 647-2640





**Treasurer  
Phil Vance**

Hello Everyone, I am sure by now, after starting the New Year with great excitement, everyone realizes 2020 has become the most bizarre IMAC year ever!

With the worldwide COVID-19 outbreak, IMAC and most all other aspects of our great hobby have been brought to a "virtual" standstill. Like so many other clubs all over the world, my local club was forced to cancel our Spring IMAC Event and we are not sure if we can even hold our Fall Event. All activity has been reduced 75% at our flying field.

With this being said, there are still positive things happening in IMAC for 2020. Our financial position has remained steady. Though we have had a slight decline in memberships in the USA, we have had an increase in our International memberships.

As all countries begin reopen and are able to hold IMAC events, I feel certain that this will rekindle the passion of competition that we have had in years past.

A reminder: Anyone interested in joining or renewing IMAC can do so by going on the IMAC website or by mailing me a personal check or a money order to the IMAC address.

Until next time.....

Phil Vance  
IMAC Treasurer



**Secretary  
Samantha McKinney**

None submitted.



# Toby's How-To

By: Toby Silhavy



Well guys and gals Covid 19 has really affected our flying season. To be honest, this was my last year flying with my son before he starts his senior year. We were both looking forward to flying before all of the pandemic started. We even bought a new trailer to camp out at the field to get the full camping experience this year. Well, I hope we can salvage the year, and get some flying before winter weather sets in. We have to make the most of what we have, and remember we will get back to a normal flying season as the disease winds down/vaccine options become available. Our first contest of the year is looking to be the KRAM contest in Alto, Michigan (July 18th/19th).

As a medical professional on the front lines of the Covid pandemic we all do things to prevent medical workers, patients, family, and the public in general from spreading the disease. Using soap and water, hand sanitizer, and facial masks (yes, they do help) will all help to curb the spread of Covid. I would ask all CD's to make sure we use proper social distancing and use hand sanitizer at the flight stations, restrooms, etc. I would suggest we keep judges 6' apart and try to only use direct family members for scribes (if necessary). As far as callers I would suggest using masks and socially distance there as well. I know these are big pains in our backsides, but if we prevent one member from becoming

severely ill, I consider this a big win for our district. I would also ask our CD's to monitor local health districts and if disease is becoming increasingly widespread in your area to use that info to make decisions on having the contest or not.

Since we have had to cancel so many contests this year (and possibly more), I want the CD's in our district to know your date for next year is secured based upon what you had scheduled for 2020. Please remember if we cannot have many contests this year, it doesn't mean we can't invite our IMAC buddy to come flying for the day.

Here is an article our good friend and ARD Bill Teeter wrote a couple of years ago, it's great etiquette and I can't wait till we get to see all of our IMAC family. God bless you guys, and I hope everyone stays safe and healthy!

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## *Flight Line Etiquette For A Great Contest*

I have had the privilege of flying and judging in a number of contests over the past few years, and I noticed a few things that we can all do to make our contests run better.

These are things that are not "rules" as such, but the points I will raise here will make you look like a "flight line pro".

Some of the observations are less of a concern with a single flight line contest and become more important with two flight lines. I suggest that we consider them overall in the context of "Flight Line Etiquette" to make contests run smoother and safer!

Take Offs: There is little need in my mind to "blast off" like a rocketship headed for

the moon. Personally, I find it unnerving to have a plane lift off right in front of me when I am trying to fly a sequence in front of judges.

Admittedly, I have also seen a few near misses with planes coming uncomfortably close to another pilot. Experience is a great teacher. Many years ago, I remember taking off much too close to a neighboring pilot. At that moment I made a mental note never to do that again, so now I try hard to take off with controlled throttle input and making sure the plane never comes close to the other pilot station. We all do this for fun and the last thing any of us want is an accident.

We can all manage the throttle to consciously avoid lifting off right in front of the other pilot if at all possible. Even to the point of perhaps angling off away from the flight line as we take off so we are not near the other pilot. It's an easy fix, we can all do this better and safer.

Landings : A similar concept. I think we should try very hard not to land directly in front of the other flight station and pilot. I appreciate that cross wind conditions and other factors make this a challenge sometimes. As a caller I am always trying to watch "incoming aircraft" that are landing towards the pilot I am calling for. Either aim for landing short or longer (before or past the other pilot) if at all possible. An incoming aircraft that is angling towards the flight station fence in front of you can be very distracting and possibly dangerous.

Get In The Air: In a large contest with many pilots in a class, you need to be ready when your turn comes. When the CD says "be three deep in the ready box" they mean to be ready when it is your turn. Also be aware that the person in front of you could suddenly have an engine problem or a radio issue, and may

have to move out of line and you may be “next up”. Be ready!

Pilots should be ready to get in the air before the previous pilot lands. That generally means engine start up on the 6th or 7th maneuver for the pilot in front of you and taking off before the other pilot is out of the box. Again it slows the whole contest down when people don't get into the air until the previous pilot lands.

**Don't Rev The Heck Out Of The Engine:** When starting your engine please be mindful of the pilot flying and the judges trying to do their job. Please avoid revving the daylight out of the engine. A loud engine at full throttle 10 feet away can be very unnerving to the other pilot trying to fly the sequence. Start the engine, let it idle to warm up, and give it a couple of short throttle blips to clear it out if necessary, but avoid full throttle run ups if at all possible.

It is often a good practice to start your engine before the first round of the day and give it a chance to warm up, and verify that it is running to your satisfaction. This generally lets you get the engine started quicker when it is your turn.

**Out Of The Box:** when you finish your sequence and are out of the box and transitioning into the landing pattern, it is good practice to move out from directly in front of the judges, and move to the side such that the next pilot can move into position and get ready to start their sequence.

Once you are out of the box, your caller should guide you with a hand on a shoulder or a hand on your shirt sleeve, so you don't run into fences or trip over flight stands etc. But get the “heck out of the way!”

I have seen too many pilots remain fixed in the same position in front of the judges and land their plane, then move away afterwards. This unnecessarily slows down the contest. Get out of the way and let the next pilot get into position.

**Callers Need to Watch The Other Flight Line During Takeoffs and Landings:** Especially with two active flight lines your caller needs to keep an eye on the other pilots and make sure the field is clear before you taxi out to take off or before you get lined up to land.

Calling means more than just calling maneuvers for your pilot. Callers also need to keep an eye on the other pilot in the air to help their pilot manage “air traffic” before, during and after the pilot flies their sequence. Call out your take-offs and especially landings, so the other flight line is aware of what you are doing.

Your job as a caller does not end until your pilot has their plane back on the ground and it has been safely retrieved and off the active runway.

**You Need Options For A Caller:** We all have our favourites callers we are most comfortable with, but make sure you have options for more than one caller. You never know when suddenly your caller is next up on the other flight line.

The time to figure out who your back up caller will be is before you are “up next”. This is sometimes hard when there are only 2-3 pilots in a class, but those contests are generally not large and there is more time to get the rounds done. Have a “plan B” for another caller if possible.

**Judges Ready? :** It is a matter of good practice to verify with the judges if they are ready. I mean be truly certain they are ready. I have seen situations where a caller asked, “judges ready” and then immediately called the box. It is a simple matter of courtesy for the caller to quickly verify if indeed the judges are ready. Let them verbally indicate they are, or give you the “thumbs up”, before you or your pilot calls the box.

These suggestions are intended as helpful guidance, especially for new pilots. The comments are not only directed at Basic level pilots either. I have seen these issues at all levels. Above all, Safety is the primary concern in dictating “good flight line etiquette”.

Most importantly, if you are new to flying IMAC at contests don't be afraid to ask questions or ask for help! Get an experienced caller, they can help you learn the ropes and increase your comfort level. We all need reminders sometimes. IMAC is fun, but we can all make it safer and help our CD's run better contests!

Bill Teeter  
ARD Ontario

Toby Silhavy  
“Chase the Dream, Not the Competition”



BE PROUD

# IAmIMAC

INTERNATIONAL MINIATURE AEROBATIC CLUB



What does this mean? Where did this come from?

I was enjoying some great live music (Samantha Fish & Johnathon Boogie Long) in downtown Baton Rouge, and I noticed a bumper sticker on the wall of the club that was leftover from a Baton Rouge Downtown marketing campaign. The bumper sticker said #IAmRedStick. This caught my attention and I started to think about what that message means, or could mean. Then an idea was born.

We all see the finger pointing all over the online world exclaiming what is so wrong with IMAC. We do it on Facebook, we do it on the Public Forums and we do it on the IMAC Forum pages. Everyone has an opinion of what *Somebody Else* can do to make IMAC better. When the truth is every face to face IMAC event and IMAC competition is typically a wonderful experience.

What is the disconnect?

I believe that what it boils down to is it is up to each and every one of us to take responsibility and say "I Am IMAC"! If I think something needs to be done, I am the one to make sure it gets done. If I meet someone who is interested in IMAC, I am the one responsible to explain IMAC in such away that they walk away with a positive opinion of IMAC. IMAC and IMAC competition is not for everyone. But, there must be a positive message presented to one who is new to IMAC so that they can determine if IMAC is what they are looking for.

It is imperative, if we want to continue to grow as an organization (and yes I meant to say continue to grow!) that we highlight the positives of IMAC and we not only present them, but we believe in these positive aspects. It is obvious when you are speaking with someone, if you do not believe in what you are saying. Especially when it is something that so many can be passionate about. Every post, conversation and comment can potentially influence someone or change someone's mind about IMAC and what it is about. In just about every little informal survey I have done, the number one thing that pilots say is key to why they continue to fly IMAC, includes the fact that the people are great and they love their IMAC family. So, when someone new is asking about IMAC let's be one of those great people and let's highlight this to them. Its easy.

Lastly, take pride in what IMAC is. This is an International Family of great people, who happen to love RC Aerobatics. That's it. Wear your IMAC shirts with pride, your IMAC hats, your event shirts and take offense when someone is talking down your IMAC. There is a place for constructive criticism, but in the *Outrage Happy* world, it is easy for people to cross the line from constructive and destructive. Ask the person (or yourself) what positive thing will this comment do for IMAC. If no positive aspect can me accounted for, then maybe that comment should be left unsaid or typed.

So, now you know. Tag yourself and others. Raise up those doing positive things for IMAC and question those that are not doing things that will ultimately help our beloved sport.

Rich Whitlow  
#IAmIMAC

# Regional Reports

Latin America Regional Director  
Jorge Guzman



Hello everyone

The question we must ask today is very simple, however, it has great meaning and deep responsibility for all of us involved in the HOBBY of model airplanes.

What can IMAC and FREESTYLE model



airplanes bring to the new generations of children and young people? To answer it, let's break down the idea.

First of all, it is necessary to start from, the aeromodeling develops in young people various skills, both manual and mental. Develop in them the resolution of various difficulties during the construction and adjustment of the models, whatever the type.

One of the most important situations is that it helps them to cope with frustration when they do not achieve the stated goals or as we know when breaking a model



for whatever reason; which in general are 80% of the time pilot errors. That disappointment often becomes very large, since the time dedicated to the model to fly as we want is a lot, not counting



of course, the money invested. Most of the young people overcome that bitter drink and manage to recover to try again repairing the plane or assembling another one in their case.

The manual skills are, the construction and / or repair of the airplanes or simply the adjustment so that your flight is as required depending on the discipline to be practiced. Mental skills to mention some of the most important,

concentration and attention to the smallest details, which leads them to stand out and distinguish themselves from other people. The constant practice of the flights and a good ability means that we can reach a degree close to perfection.

All this leads us to the conclusion that these disciplines help children and young people to develop in a concept of teamwork, a family environment and without a doubt, to raise their performance at the academic level, since it has been shown that they helps to understand physics and mathematics easier.

That is why, it is very important that pilots with experience in model airplanes, support the new generations of young people who, accompanied by technology, strongly push towards the future, as in Mexico with Miguel Alcala Jr, Ricardo Lomeli and Jorge Berra Jr who have already participated in national and international competitions, achieving important personal and obviously team achievements.

IMAC, as a discipline of the Hobby, is without a doubt, one of the fundamental bases to achieve a precision flight and upload our variety of maneuvers with a good understanding of time, space and accuracy.

So we must continue to encourage new riders to participate in the basic and sportman categories with the intention of growing this great family that unites us no matter where in the world we are.

Likewise, freestyle flight, which is very spectacular and requires highly developed skills in the coordination between the brain and the fingers, in addition to the coordination of the flight with music, since it is not only flying, but splicing

them together as if it were an aerial ballet.

JORGE GUZMÁN  
DIR.LATINOAMERICA



European Regional Director  
Manrico Mincuzzi



## IMAC ELECTRONIC SCORING

An Electronic Scoring System is a technology enabling judges to input their scores in a digital format. This electronic data is then collected in real time through a Wi-Fi network and automatically inserted into the scoring software generating rankings and all the relative printouts.

Since we were convinced that this new digital approach could significantly improve and facilitate the organization of our competitions, and especially the big ones, we have been screening and testing all the latest applications that we knew had been developed in different places. During at least the last six years, systems of this sort have been progressively researched and developed in Germany,

by Stephan Vogle, in Spain, by David Delgado, in Australia, by Dan Carroll and in France by Roland Poidevin. This may not be a comprehensive list, but are the ones we have been able to identify and evaluate.

Except for the French application, all the others have been designed to use iPads or smartphones as input keyboards. Instead, Roland, in France, created a keyboard, called Noutamatic, specifically designed for our aerobatic judging purposes. The key difference versus the French application is that if you use iPads and smartphones as keyboards, you will continue to need a scribe to operate them. Otherwise, the judge would be forced to lose sight of the airplane in order to make sure to input each number right. On the contrary, the Noutamatic can easily be operated directly by the judge, without ever losing sight of the airplane. In our view, the possibility to eliminate the role of the scribe is important, as it ends the necessity to find more or less willing volunteers to sit on the chair for many hours in whatever weather condition.

In addition, the Noutamatic has a printer generating a paper copy of all the scores at the end of each flight. This paper support is not just a safety tool, it also enables judges to make pencil changes at the last minute if needed. This keyboard, through an earphone, is also capable of reminding the judge the name of the next maneuver and the input score that he needs to validate in order to proceed to judge the next figure. During the execution of each maneuver, the judge can push a minus button to deduct half a point or press the plus button to increase half point. Each time the keyboard tells the judge the total score he has reached ready to be validated. This way of deducting half point by half point during the execution of the maneuver forces the judge to do a good analytical job, instead of providing a synthetic number at the end of the figure, which, as we know, is not a good scoring practice.

Considering all these up-sides, three years ago, in Italy, we decided to introduce the Noutamatic system in all our competitions in order to initialize a practical

testing process. As a result we found that, while the Noutamatic keyboard confirmed its great upsides, the software developed by the French inventor, called Notauscore, was really not up to the performance level of the keyboard. This is a software that has been created to implement F3A and F3P competitions and therefore is not really designed for our IMAC purposes and, in addition, when we tested it, it was still pretty unstable and creating several problems. For this reason, we launched a new International IMAC software development process. Dan Carroll, from Australia, the developer of our historical Score software, has taken the lead and developed a new version called Score 4.30, combined with an interface called FlightLine, capable to get data from the Noutamatics, compile them in Score language and then send them to the Score 4.30 application. Score 4.30 operates on a PC, while FlightLine works inside of a Raspberry, the piece of hardware that creates the necessary Wi-Fi local network and receives the data from the Noutamatics operated by each judge. While Dan did a formidable job writing endless new lines of code, Fabio Giammarinaro and Alessandro Cherubini, from Italy, progressively tested each new beta release finding bugs and helping to set additional design goals in order to bring the system to the perfect IMAC standards we were looking for.

This new software development process has been going on during the last two years and it is now completed. We can finally say that IMAC owns a proprietary very dependable system, capable to operate with the Noutamatic keyboards. You will be able to find a description of most of the technical details characterizing this system by clicking on the "Rules" and then the "Electronic Scoring" tabs on the IMacEurope.com website.

This effective International software development team is now also in the position to help any Region or Country to introduce the system, providing remote online support.

Another interesting feature of this system is that, at the end of each round, each pilot or spectator will be able to see all

the scores on his smartphone, eliminating the need of printing a lot of sheets and offering a very transparent view of all judgments that have been provided.

In conclusion, we find that this IMAC Electronic Scoring System enables us to achieve the following advantages when organizing our competitions:

1. Continue to use our Score software that we are all familiar with;
2. Stimulate the Judges to subtract scores in 0,5 points increments;
3. Help judges with vocal inputs and reminders;
4. Acquire a printed and modifiable version of the electronic scores;
5. Eliminate the necessity to use scribes;
6. Eliminate the necessity to manually transfer each data into the scoring application, reducing to the bone the amount of personnel required to ensure the scoring process, eliminating potential transcription mistakes and generating rankings almost in real time;
7. Enable Pilots to view their scores on their mobile phones at the end of each flight.
8. Publish all final scores on the central IMAC web site transferring files from Score.4.30 as we have been used to do.

The only negative of this new approach is that the introduction of the system, from scratch and for the first time, requires some good initialization work from the organizer side. It takes the willingness to learn a good amount of new things and the ability to operate this software technology solving possible last minute exceptions that may manifest. For tech-versed people all this may turn out to be very easy, on the contrary, for non computer literate guys it may require some sweat. In both cases, now that we have developed everything, including a manual, the introduction can definitely be done without incurring into potential nightmares, especially if leveraging on

some remote support from the development team.

In conclusion, after having experienced this new technology during several competitions, we can now say that the investment of time and effort has been very appropriate. The organization of our events has never been so smooth and we are no longer in the position, every time, to have to find, and sometimes to pay, a good number of volunteers to do the hard work. All considered, I think I can definitely say that none of us would ever go back to the good old paper days.

Manrico



### Asia-Pacific Regional Director Michael Hobson



None submitted.



### South Central Region Rich Whitlow



You would think with the standstill of contests due to the Corona Virus that there would not be a lot going on. But there is a surprising amount that has gone on and continues to go on in many fronts. Between cancelling and rescheduling contests, dealing with Nats, talking with the BOD on many issues, planning for the future of the IMAC Website, looking at Electronic Scoring, preparing for the elections of all Officers and Regional Directors, reviewing if there will be any Rules Changes this cycle, The InTheBox Newsletter, the IMAC Article for the K-Factor (Pattern Newsletter), oh yeah and practicing the Intermediate IMAC and Advanced Pattern sequences to be ready for upcoming contests! I have kept on my toes.

As you all know, we were able to have our first contest of the year. The Tulsa Gluedobbers successfully migrated their contest to the new field. (With minimal tree incidents...cough cough). The contest was run smoothly and the food was great. There were some special considerations with masks, gloves and social distancing during the meals. But, it did not dampen the fun that everyone had in the contest. It seems that there were a lot of people who were ready to get out a little bit and do some competing. One special note was the excellent turn out from our younger members and the terrific Freestyle event that showcased some very good piloting skills. I have been anxious to get some more participation in the Freestyle Event and it was no disappointment.

As you read this newsletter, there has been an Aerobatic Fun Day held in Kansas by Vincente Bartone. This even allowed pilots to experience both disci-

pline of Aerobatics. Both Pattern and IMAC. Vincente reports that it was well received, and everyone had a good time. Hopefully, we will have more events like this in the future. Also, Rudy Voldrich will have held his “Nats Warm-up”. Or, as the pilots that attended may call it the “Nats Replacement” contest! Let us hope that contest was a great success as well!

AMA Nats was an unfortunate affair. AMA was not able to render a final decision on holding Nats will mid-June. I, as the Nats Event Director and the Board agreed that we could not wait that long to decide. So, it was unanimously voted by the board to cancel our support for Nats. I say “cancel our support”, because AMA officially holds the Nats, though the SIGS (Special Interest Groups) actually take on the responsibility and financial burden of the Nats. In the end AMA supported the individual SIGS decisions on whether or not they would hold a Nats. Hopefully, we will rebound next year with the great event and a large attendance.

On Facebook it was mentioned that there might be some interest in a “Mini-Mac” event. That sounds like it would be a fun thing to try, either inside a contest or a completely separate event. There is no official “Mini-Mac” Class in IMAC, so it would not count as Regional Points. But there is no reason the Score! Program could not be used. I look forward to seeing if this takes on any legs and we get to try an event.

There has been some advancement on electronic scoring. There are 2 main systems out there. There is a system that the NSRCA (Pattern USA) uses that was produced by Peter Vogel and there is a European version, called the Noutamatica. The European Regional Director, Manrico Mincuzzi has been working



with this system to integrate it with the current Score! Program that IMAC uses. This system is the closest system to being ready for use. This will be an interesting topic over the coming months.

As you may know the elections for new officers will be held in the Fall. All Officers, including Regional Directors are up for the vote. I will not be running again for Regional Director. I really enjoy this region and I enjoyed my tenure, but there are many things I want to explore. I still do the Newsletter and I would like to explore some new things, like Electronic Scoring. That, along with flying Pattern, attending Pattern Worlds next summer, practicing my IMAC and other interesting things that may come up, I don't think I would give the Region the time and effort that I would expect myself to give. So, please nominate each other and discuss who would be a good person to come in and continue the Regional Momentum that we have gained. I will be there in a total support role and you will not have to do this blind. Between Doug Pilcher and myself, we can get you up to speed.

So enjoy getting out and participating in some IMAC when you get the chance and contemplate if you are the person to get involved with the IMAC Organization in some capacity.

Rich Whitlow  
SCRD

**Northwest Region**  
**Clark Hymas**




Welcome to the NW Region

The 2020 season is off to a slow start so far we have cancelled 2 contests and rescheduled some other contests so be sure to check the current schedule on the IMAC website for details. The next scheduled contest is the Higgins Field Spring Fling which is scheduled for the 4th and 5th of July in Richland pending Washington state reopening.

This year will certainly be full of surprises and twists and turns so be nimble and stay safe. Practice up and come to a contest when they occur as we sure miss seeing each of you.

Please remember to bring a friend and have them try out IMAC, It's always more fun with more folks there. We look forward to the 2020 season getting underway soon and hope you will all be there to help out and have fun.

**Southwest Region**  
**Alex Dreiling**




Everyone stay safe and we will see you at the end of August.

Alex

## Northeast Region Brad Davy



I received the below contest report from Jim Cyr about the Concord Skyhawks Contest. I thought you would enjoy reading about it.

Brad.

Hello IMAC members.

We've just completed the first contest for Region 1 and its June! Thanks to the Concord Skyhawks for hosting and supporting our competition.

The contest started pretty normal except we were all kinds of spread out observing the New Hampshire safe distancing requirements.

We got two rounds in when we noticed a thunder head coming our way. Earlier in the day we dodged a few bullets as other cells passed just north of us. Well the wind started up and didn't stop. The club's main tent collapsed and two anchored pop up tents were crushed. Thankfully no one was hurt and no planes were damaged.

A lot of paper was blown away, luckily nothing of importance. Some of the Skyhawk's members moved quickly to grab and stash our laptop/ printer and as much judging sheets as they could. We recovered all un-entered score sheets! There were only 3 thanks to Fred and Patty Carrado.

So after about 20 minutes the weather cleared and we continued with round 3. We got the third round in just as a second front moved over us. Everyone was very motivated to get their airplanes in their trailers!

We had two Novice pilots on Saturday fly the basic sequence. They really seemed to enjoy the challenge and hopefully they'll join us in basic at a contest in the near future. Thanks to Daren Hudson and Tyler McCormack for mentoring them.

Sunday brought cooler temps and 13 mph winds and higher gusts! We completed the contest with unknowns and one more round of knowns but not without another gust of wind that again toppled the main tent just as we were getting ready to do the awards.

The Skyhawks members cooked for us both days. What a GREAT club and group of people. The field was perfectly groomed.

Thanks to Daren Hudson for guiding me through my first CD'ing experience, and helping throughout the contest, and Fred and Patty Carrado for help all around.

See you at the next contest

Jim

## Southeast Region Primo Rivera



None submitted.



## North Central Region Toby Silhavy



Well everyone, I've been after my good friend Randy Brunette to do an article about his van slide for about a year and I finally got him to write one. I saw him with this slide at the Saranac Michigan contest and I was totally amazed by the engineering that went into this. For anyone who has back issues or wants a place to easily work on their planes this is the way to go. I can't thank you enough Randy for writing this article! Next time around we will get back into 3D printing and how it will help you be a better IMACer!!!!

Bed Slide, V1.0

### Prelude

I was flying smaller planes including combat in the late 90s and early 2000's, when I stored them for about 10 years as I went racing full size cars and sprint cars. I knew I would start flying again as I loved the RC hobby. When I retired from racing in 2012, I sold my car trailer and dually truck. I started looking for something to haul the planes. I have always liked vans in general and had a mini-van that I used to haul car parts, fenders, roofs, even engines. Mini-vans have more room than you might think.

The only drawback is that it's hard to reach things in the middle. The two side doors work well, but don't quite give enough access, and it's hard to crawl inside, especially when you are carrying a lot of stuff. And I, for one, do not like crawling. I thought it would be great if I could pull everything out where I could just walk around and easily reach everything.

I mentioned the idea to my brother, and he suggested Pinterest. It was a great idea!

Almost immediately I found a posting for a “Cargo Area Bed Platform” that led me to an instructables.com web link, provided here: <https://www.instructables.com/id/Cargo-area-platform-slider-for-SUV-truck-station/>.

While his simple idea was only four feet long to use in the back of his Tahoe, it fit all of my parameters, it was easy to build, easy to find the materials (Menards in my case), and it was cheap. You can find all the instructions, and a detailed materials list in the link. I’ll just cover the modifications I made to fit my needs. When purchasing materials, remember to change the quantities to fit your ending size, for example, 2 sheets of plywood, double the angle brackets and appliance rollers. Total cost for materials was about \$175.

### Modifications

The first thing I changed was the size of the plywood. I needed to be able to easily remove the slide when I needed to carry people instead of planes. Blasphemy I know, but I need to keep my wife happy too. 3/4” thick would be too heavy, so I downsized to 1/2”. The bad part of that is that the table needed reinforcing to prevent sagging. Fortunately, I had some thin wall steel 1 1/2” square tubing that I bolted lengthwise to the bottom of the top panel. No need to support the bottom one since it rests on the van floor.

With the seats all the way forward my van can carry a full 4 x 8 foot sheet of plywood. That is OK for transport, but that is uncomfortably tight for me, especially on longer trips, like going to events. I determined that my final size would be 48” x 88”. That doesn’t sound like enough room for a 40% plane, but the tail fits between the two front seats. I can even fit two large planes inside, including wings and equipment.

I wanted the table to slide almost completely out of the van, so I also purchased a set of folding banquet table legs to support the outer end of the slide. You will only need one, give the other to a friend when he sees your slide and wants to build one of this own.

### Assembly Tips

Now for the assembly tips that I learned while building the slide. The dining table and reinforcing bars bolt to the top sheet, the appliance rollers are screwed to the bottom sheet. I decided to mount the dining table legs about 6” from the end of the table.

Here is the first tip. Start with the bottom sheet and lay the folded dining table leg on the sheet in the position where it would be on the top sheet. Also lay out where the reinforcing bars will be located. Now you can screw the appliance rollers into position, avoiding the legs and bars. Be sure to butt two roller locations tight against the cross member of table legs. This will provide the stop when sliding the top sheet into the van.

Then bolt the dining table legs and reinforcing bars to the top sheet.



Next you will need a stop to hold the top sheet in position when driving. I cut two pieces of 2x4 wood, one for each side, that matched the spacing between the top and bottom sheets. These I screwed to the bottom sheet about 4” from the table end and 3” from each side. Then I drilled a 1/2” hole through the two sheets and wood blocks. Then used a long bolt as a pin to lock the top sheet in place.

To hold the bottom sheet in place (and thereby the whole slide) I located the seat mounts and used two “J” bolts to hold everything in place.

### Using the slide

First, here is a picture of the mini-van, ready to go to a pattern contest, and a list of contents:

- Two complete planes
- Batteries
- Charger
- Transmitter
- 10x10 pop up canopy
- Anti-gravity chair
- 2x4 folding table
- Cooler
- Generator
- Spare gas
- Small tool bag
- Sundot



Position all items on the table to clear the insides of the mini-van as the table is pulled out. I usually hang the wing bags to leave more room on the table. I use some simple 1” tie down straps and hang them from the assist handles and clothing hooks. Make sure you hang them high enough to clear everything as you pull the table out.



To use the slide, pull the two pins and pull the top sheet out about 5/8 of way, just enough so you can fold the table leg down and clear the van. (Mark the position so it is easily repeatable.) The side angles will hold the sheet up while you unfold the dining leg.

Then slightly lift the top sheet and pull it out the rest of way, leaving about 6" left in the tracks.

You now have a large table to work on the planes and make it easy to get at everything you carry.



If you want even more storage, you can also use PVC tubing and build a frame that rests on top of the angle brackets. Lay some 1 1/2" insulating foam on top of the frame to create a shelf. With this shelf in place I have carried more than a dozen planes to an event including the 35%, a 25%, a Radian Pro, and the equipment needed for a weekend.

Note: These pictures are from Version 2 of the slide, I didn't have pictures of V1, but the overall function is the same. V2 has a linear actuator to run the legs down, and will tip down into a ramp to load large and heavy planes. It is about triple the price and much more complicated. It's cool, but I also like the simplicity of V1 described here.



Let me know what you think.  
See you at the field.  
Good luck!

Randy Brunette  
randybrunette@gmail.com



# IMAC's Mindset Method

by: Adi Kochav



## IMAC's MINDSET METHOD

A simple way to understand IMAC criteria

By Adi Kochav



$$\text{Ego} = \frac{1}{\text{KNOWLEDGE}}$$

The more knowledge we have the less ego we need...

IMAC judges are one of the important courses in IMAC's structure. Therefore they have the responsibility in being the connecting link between the IMAC Club and the pilots.

By inheriting a constant and coherent process of judging in every aspect, it will allow the pilots to have a strong base ground, to understand and fly in a proper way.

This will be feasible only by keeping an open mind and understanding the common sense structuring the IMAC Criteria.



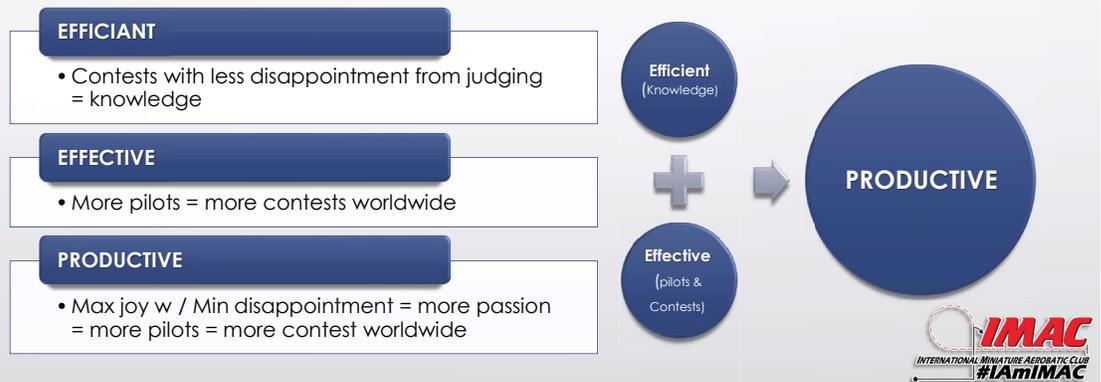
## Bi-directional

The responsibility works in two ways, between the judges and the pilots because of several obvious reasons.

1. IMAC judging method is structured on pilots judging base i.e. pilots should judge in the different contest.
2. Pilots need to know the right and proper way to fly IMAC
3. Pilots need to know how to exploit their knowledge in order to make flying and training more productive in the flying field and out a contest.
4. Dynamic judging



## Productive = Education



## Dynamic Judging

- We judge by watching and anticipating the flight path
- We judge while the plane is flying

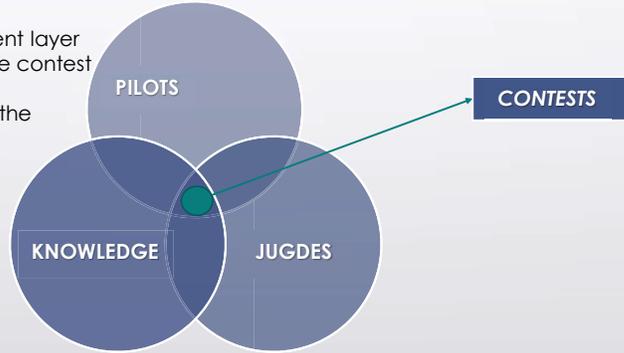
SO, JUDGE IN A LINIER WAY

**NOT** IN A RETROSPECTIVE METHOD



# The Contest's Structure

- Is composed by 3 elements & it's the heart of these three
- Each element is an independent layer but together they construct the contest
- The better they are the better the contest is



## IMAC CRITERIA QUICK REFERENCES

IMAC Judging Criteria Quick Reference: Legal Techniques Figure

344 Loops (Continued)

IMAC Judging Criteria Quick Reference: Mandatory Aerial

344 Loops (Continued)

IMAC Judging Criteria Quick Reference: Mandatory Aerial



# FIXED CLASS REFERENCE

### Official 2019 Unlimited Known Synthetic Guide

Official 2019 Unlimited Known Synthetic Guide

### Official 2019 Sportsman Known Synthetic Guide

Official 2019 Sportsman Known Synthetic Guide



## Mindset samples

- Element in a loop flown on line **-2**  
if its not a line, it's a radii
- Corner radii **>-1**
- Change in radii **-1**
- Not matched loops **-1**

- Adding a line **-2** (except for loops **1-**)
- Missing a line **-1**
- Opposite elements brief pause, if you see an obvious line **-2**

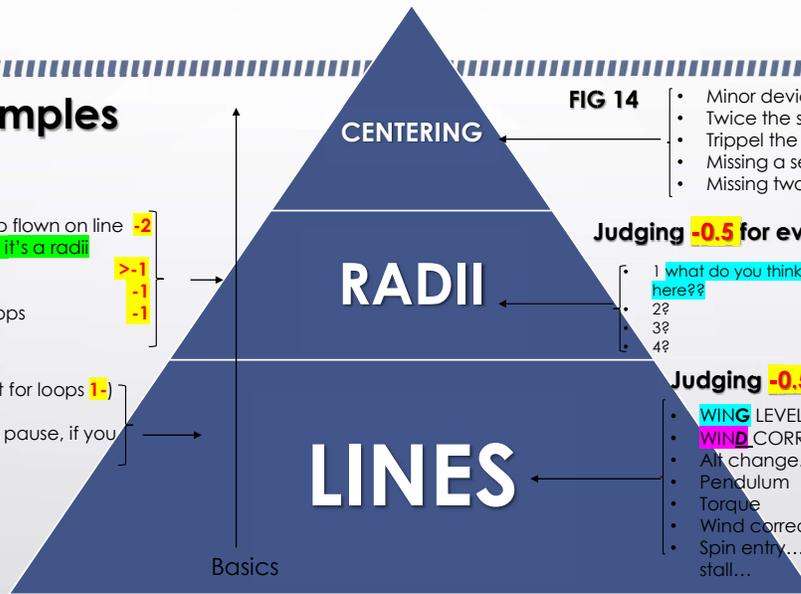


FIG 14

- Minor deviation **-1**
- Twice the size **-2**
- Trippel the size **-3**
- Missing a segment **-4**
- Missing two segments **-2**

Judging **-0.5 for every 5<sup>0</sup>**

- 1 what do you think should be here??
- 2?
- 3?
- 4?

Judging **-0.5 for every 5<sup>0</sup>**

- WING LEVEL in any axes
- WIND CORRECTION
- Alt change... rolling turns
- Pendulum
- Torque
- Wind correct Stall Turn entry
- Spin entry...confusion, late stall...

## CHANGING HABITS vs REACHING GOALS

Don't strive to achieve, strive to improve

### CHANGING HABITS

(Highly recommended)

- It's a Process, like running a marathon
- Development of habits, mind sets, reflexes, training
- Help achieving habits will eventually make getting the goals as a by-product

### REACHEING GOALS

(not recommended)

- obsession with the outcome
- Good, but not excellent results
- Mastering the mistakes
- Loss of passion in the end

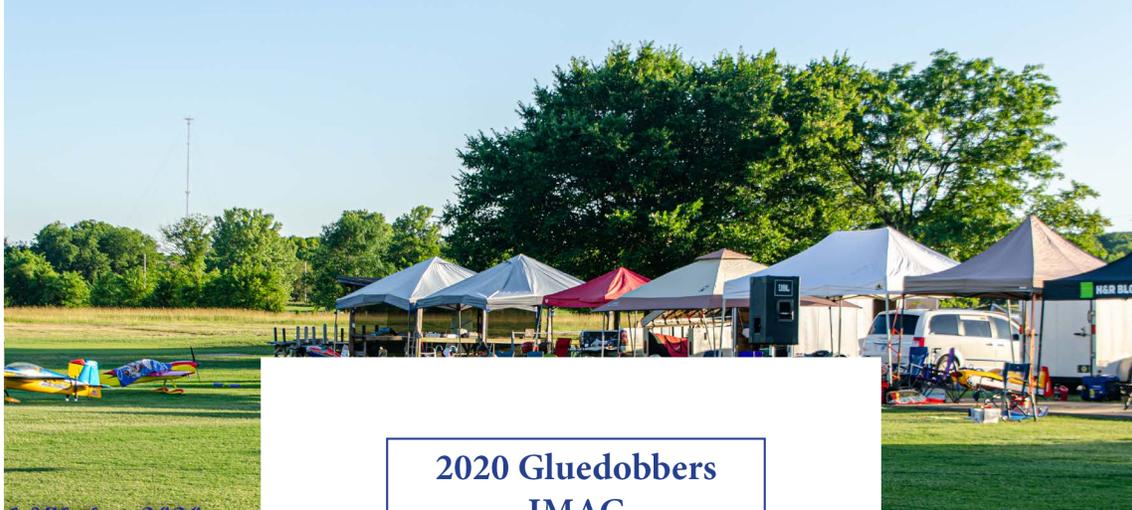
# Clover Creek Judging School

Toone, TN



# Gluedobber's IMAC

Broken Arrow, OK



## 2020 Gluedobbers IMAC

### Basic Class

1st Place - Cooper Eaton  
2nd Place - James Barfield  
3rd Place - Jason Watts

### Sportsman Class

1st Place - Chris Shockley  
2nd Place - Jonathon Chippeaux  
3rd Place - Marc Lorenz

### Intermediate Class

1st Place - Nick Scharping  
2nd Place - Rich Whitlow  
3rd Place - Mark Thurman

### Advanced Class

1st Place - Rhett Lambert  
2nd Place - Greg Dial  
3rd Place - David Herron

### Unlimited Class

### Freestyle Class

1st Place - Jonathan Chippeaux  
2nd Place - Nick Scharping  
3rd Place - Chris Shockley

### Seniors Class

1st Place - Mark Thurman  
2nd Place - Allen Delger  
3rd Place - Jeffrey Dye



# Upcoming Events

## July:

4th - IMAC Beauce 2020 - Saint Jean De La Lande, Quebec  
4th - Holesovska IMAC - Holesov, Zlinsky Kraj Czech Republic  
4th - The London IMAC Slam Down - Watford, Hertfordshire, UK  
11th - Competition IMAC IV Sagueney - St. Jean Vianney, Quebec  
11th - Valley of Hope IMAC - Raven, Alberta  
18th - 2020 Main IMAC Challenge - New Gloucester, ME  
18th - KRAM Grand Rapids IMAC Challenge - Alto, MI  
18th - MOLRA 20th Annual IMAC Challenge - Mollala, OR  
18th - The Gordano Electric IMAC (EMAC) - Cleavdon, Bristol, UK  
25th - 2020 Bayou Bash IMAC - Baton Rouge, LA  
31st - Plum Island IMAC Contest - Newbury, MA  
31st - IMAC Czech Jeti Cup - Bechovice, Hlavni mesto Praha Czech Rep

## August:

1st - Weaver's Field Challenge - Othello, WA  
8th - Cincinnati IMAC Burnit Challenge - Harrison, OH  
8th - Air Capital IMAC - Newton, KS  
8th - The Rhyl IMAC Round Up - Rhyl, Denbighshire, UK  
14th - International Steinlin IMAC Trophy - Glarus, Switzerland  
15th - ESAC Ace Ortley IMAC Challenge - Vienna, MD  
15th - McNair RC Scale Aerobatics Competition - Didsbury, Alberta  
22nd - CMA Southern Ohio IMAC Bash 2020 - Peebles, OH  
22nd - Wing Over Abilene IMAC Challenge - Abilene, TX  
22nd - Silver Hills IMAC - Athol, ID  
28th - IMAC/F3M Hat - Hat, Czech Republic  
29th - Sixth Annual WRCFC IMAC Contest - Woodstock, Ontario  
29th - High Desert Shoot Out in Chino Valley - Chino Valley, AZ  
29th - The British IMAC Nationals - Grantham, Lincolnshire, UK

## September:

5th - Stampede City IMAC - Calgary, Alberta  
5th - Palermo IMAC National - Palermo, Italy  
11th - Granite State Fall IMAC - Concord, NH  
11th - IMAC Israel September Fest 2020 - Nitza'na, South Israel  
11th - MCR F3M Holesov - Holesov, Zlinsky Kraz Czech Republic  
12th - Lums Pond IMAC Challenge 2020 - Bear, DE  
12th - 20th Annual Columbus IMAC Challenge - Galena, OH  
12th - 1st Annual Bill Thomas Memorial IMAC Challenge - Copan, OK  
12th - Salinas IMAC II - Salinas, CA  
19th - Mocksville in the Fall - Mocksville, NC  
19th - Orvieto IMAC National - Orvieto, Terni Italy  
26th - Northwest Regional Final - West Richland, WA  
26th - Kings Canyon Avalanche Challenge - Reedley, CA

## October:

3rd - Northeast Regional Finals - Hagerstown, MD  
3rd - NC IMAC Regional Point Finals - Saranac, MI  
10th - Annual Ocala Flying Models Fall IMAC Event - Belleview, FL  
10th - Cactus Classic - Apache Junction, AZ  
10th - San Giovanni Totondo IMAC National - Foggia, Italy  
17th - 1st Annual SC Kansas Aerobatic Challenge - Cedar Valve, KS  
23rd - IMAC Israel October Fest 2020 - Nit'zana, South Israel  
24th - 24th Annual Texoma IMAC Challenge - Sherman, TX  
24th - Hemet IMAC - Hemet, CA

# 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 classifieds 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)