

In The Box

The Official Newsletter of The International Miniature Aerobatic Club



In This Issue:

Feature Articles:

Bulletin Board

Trimming Guide - Kim Quenette

Event Coverage

And Much, Much, More!

Regular Columns:

Letter From the President

Letter From the Editor

Secretary's Report

Regional RD Reports

IMAC
Board of Directors

President
Doug Pilcher

Vice President
Alex Dreiling

Secretary
Rick Crow

Treasurer
Jim McCall

NE Regional Director
Dave Dupre

SE Regional Director
Primo Rivera

NC Regional Director
Toby Silhavy

SC Regional Director
Amanda Darling

NW Regional Director
Brian Webb

SW Regional Director
Jacques Telles

Europe Regional Director
Manrico Mincuzzi

Latin America Reg Director
Oliver Soto

Asia-Pacific Reg Director
Michael Hobson



Letter from the Editor

Rich Whitlow

Happy Summer. We are in the heat of the summer in the deep south and we are looking forward to fall. Kids are starting school...and Covid is hanging on.

So much has happened in a short 3 months since the last newsletter.

We have had a successful Nats, dedicated to Mike Karnes. Everyone who attended enjoyed some beautiful weather and endured some bad weather and rain! There was plenty of flying and even ran into issues that caused us to move to alternate sequences.

The BOD has been busy trying to move IMAC forward. Lifetime Memberships are now available (see website for details), new sequences for next year are being discussed and the next World Championship discussion is also going on. Check out mini-iac.org to see the BOD minutes and keep abreast what is going on.

Don't forget that this newsletter is nothing without content. If you go to a contest, PLEASE send me pictures and/or write something up. If you can't write something, I will just put the results.

Send letters to the editor. What do you think about what's going on Internationally and locally.

Building something or have some tips? Write something up! Members want to know!

Next issue we will be wrapping up the season in most areas of the US, so get out and make a contest. Get some flying in and let us know what is going on!

Enjoy the rest of the season.

So, until next time have fun and get out and fly.

See you at the field!

Rich Whitlow
Newsletter Editor
imacinthebox@gmail.com
#IAmIMAC



Letter From The President

Doug Pilcher



From the President: (2021 3rd Quarter)

The Mike Karnes Scale Aerobatic Nationals is a wrap! We had 21 pilots participating this year and as a Muncie bonus, (NOT) we again had some rainouts befall us. But some tight races were still battled. Be sure to check the scores posted both here within the “In The Box” as well as the IMAC Website [Here](#).

I want to welcome Brian Webb to the Board of Directors for the Northwest region. Gale Vasquez stepped down as being part of the board can contain a heavy workload at times. We on the board want to thank Gale for his time and his work for the NW region. Brian stepped into the position running and we believe that he will be a great asset to the NW and board of IMAC.

Our ISC members are hard at work on the 2022 Knowns. Both writing, testing, tweaking, and submitting. The work of the ISC group is amazing and with the writing of the Unknowns for contests nearly 50 weeks a year that get distributed is greatly appreciated by the organization. If you run into any of these guys, then maybe buy them a beverage or a meal and thank them for their diligence and hard work for our club!

CD's and Scorekeepers – REMEMBER to download a NEW copy of Score! as the new 2021 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 March of 2019 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”!

ALSO, and very importantly, please remember the new and Active forums for IMAC are located [HERE!](#) This is where all



club business and discussions are 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/>

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

Douglas.pilcher@gmail.com
903-647-2640



Notes from the Officers



Vice-President
Alex Dreiling

Hope everyone is having a fun and cool summer! The biggest news to come out of the last few months is a new Lifetime Membership option for members in good standing. Three options were proposed and discussed at the BOD meeting on July 19, 2021:

1st option: Member must be in good standing for a minimum of 5 years. At that time they will be eligible to request a lifetime membership for a flat fee of \$750.00

2nd option: Member in good standing may apply for a lifetime membership for a flat fee of \$1000.

3rd option "Senior Option": Member must be 55 Years or Older and in good standing for a minimum of 5 years. At that time they will be eligible to request a lifetime membership for a flat fee of \$400.

Upon discussion, a motion to accept options 1 and 3 were seconded. Further deliberation was held, and the motion passed unanimously. This membership is available to purchase now, please contact your respective regional director or myself with any questions you might have about it.

That's all from me for now! I'm looking forward to heading north to the Chino Valley contest next weekend. Happy flying!

alexdreiling@gmail.com



Treasurer
Jim McCall

None submitted.



Secretary
Rick Crow

It has been a scorcher here in the northwest this summer! We have been averaging daily high s in the 90' since mid-June.

It's my privilege to be your IMAC Secretary and I look forward to helping grow the organization.



Bulletin Board

Nats 2021 SA Mike Karnes Cup



Get Them While They Last at the [Swag Store!](#)

CD's and Scorekeepers

REMEMBER to download a NEW copy of Score! as the new 2021 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 March of 2019 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"!

Forums

ALSO, and very importantly, please remember the new and Active forums for IMAC are located [HERE!](#) This is where all club business and discussions are 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/>

Letters to the Editor

Have an opinion? Have a suggestions? Have kudos or good experience to share?

This is the place to do it. Away from the Trolls and Flamers, you can be read by all IMAC Members.

Take this opportunity to share some experience and make your suggestions. Get yourself printed and read and expose those great ideas and great deeds that you encounter in your IMAC experiences.

Just send me a note to imacinbox@gmail.com.

Cover Photos

Are you a budding photographer?

Did you luck into a great shot?

Want to share something special with everyone?

Send in a photo for a chance to be on the cover of the IMAC InTheBox Newsletter!

Have multiple photos of an event? Send them in and it will be made into an event page.

imacinbox@gmail.com

The Presidents Award “Order of the Diamond”



2020 Order of the Diamond Recipient



2021 Order of the Diamond Recipient

Presidents Awards: “Order of the Diamond”

The Scale Aerobatics Nationals is a time to recognize and award members of IMAC who go above and beyond the call with support to IMAC as a whole. In 2020 with the SA NAT’S canceled due to Covid an award was not presented but was recognized this year. As well as the member recognized this year and both were welcomed to this group of individuals.

Below are the announcements delivered at the banquet on June 18th recognizing these 2 individuals.

An IMAC member automatically becomes a member of the Order of the Diamond once awarded the IMAC President’s Award. IMAC President’s Award is IMAC’s highest honor and is presented to those individuals whose devotion, service, and commitment to the sport of scale aerobatics is judged exceptional. It is awarded at the sole discretion of the current IMAC President and presented annually at the US Scale Aerobatics National Championship.

So, there was not a “Presidents Award” presented in 2020. 2020 threw us many curve balls that had to be adjusted for in IMAC Worldwide. This individual was discussed by Mike Karnes and me at that time and decided that he was indeed deserving of this award. Again with 2020 being what it was, and NAT’S ending up canceled in 2020, it was placed on back burner. So, while I am presenting this award, it is important to note that Mike Karnes had arrived at this conclusion back in 2020.

This individual stepped into the Board of Directors back in 2017 as a Regional Director and hit the ground running. He brought a cohesiveness back to his Region that was needed by its members. He made himself available unconditionally to his region pilots. He brought more growth to his region quickly and gained a deep understanding of the regions needs for that growth. I at that time, in 2017, received many emails and phone calls from this region’s pilots of their approval and satisfaction to have him at the helm of the region. Not only that but he took a continually active role in the BOD’s other duties and offered assistance to many projects that were being developed and worked on including pre-planning for the Worlds 2018 event. And here in our current term of 21-22 he remains at the ready for all the many facets of the club’s needs. So, at this time I am proud to be able to award this well-deserved Presidents Award, “In Mike’s absence”, and welcome Mr. Alex Dreiling to the “Order of the Diamond”. Alex we will make sure this Award finds its way back to you sir and congratulations!

This individual stepped into the Board of Directors back in 2019 as a Regional Director but also was very involved in the growth and assistance with his region as whole well before he became Regional Director. Upon joining the board in 2019, he also made himself available unconditionally to his region pilots. He continued to work ethic among his region to develop even more growth! He offered his assistance to several committees within IMAC and joined the ranks of a regional judging instructor at several Judging Schools. He now is credited with an International Judging Instructor status and sits on the Rules Committee as well. He also saw a need to be fulfilled with a quarterly newsletter, back in 2018 and took it upon himself to design and create a comprehensive newsletter. Which he gets distributed worldwide four times a year. He has worked with me since 2017 here at NAT’S to capture digitally for the added history and posterity of our NAT’S events. This continued on to Worlds 18 as well. He worked as photographer and judge as well for all of these events. And is again with us this year acting as Chief Judge at the 2021 Mike Karnes Scale Aerobatics Nats. His dedication to IMAC never ceases. So, I am also immensely proud to be able to give this this well deserved Presidents Award and welcome Mr. Rich Whitlow also to the “Order of the Diamond”.

THE ORDER OF THE DIAMOND

2005	<i>John Schroder</i>	<i>Florida</i>	2012	<i>Phyllis Youngblood Charles Youngblood</i>	<i>South Carolina</i>
2006	<i>Anna Woods</i>	<i>Arizona</i>	2012	<i>Bill James</i>	<i>Pennsylvania</i>
2009	<i>Phil Vance</i>	<i>North Carolina</i>	2013	<i>Tim Attaway</i>	<i>California</i>
2009	<i>Tom Wheeler</i>	<i>Michigan</i>	2013	<i>Dave Smith</i>	<i>Colorado</i>
2009	<i>Mike Stoner</i>	<i>California</i>	2014	<i>Mike Karnes</i>	<i>Indiana</i>
2009	<i>Fred Johnson</i>	<i>Florida</i>	2016	<i>Steve Stanton Tyone Stanton</i>	<i>Maryland</i>
2010	<i>Roy Barrow</i>	<i>North Carolina</i>	2017	<i>Doug Pilcher</i>	<i>Texas</i>
2011	<i>Mark Jorgenson Cheryl Jorgenson</i>	<i>Kentucky</i>	2018	<i>Ty Lyman</i>	<i>Vermont</i>
2011	<i>Ty Lyman</i>	<i>Virginia</i>	2019	<i>Adi Kochav</i>	<i>Israel</i>
2012	<i>Marian Berninger</i>	<i>Ohio</i>	2020	<i>Alex Dreilling</i>	<i>Arizona</i>
	2021	<i>Rich Whitlow</i>		<i>Louisiana</i>	

Trimming Sheet

Kim Quenette

I wanted to start by saying this system has been years in the making by talking and being lucky enough to be around great pilots as well as flying a lot of good designs, bad designs, good designs that were built poorly, bad designs that I wanted to be good and some planes I simply messed up on. However, all have contributed to everything I now know about airplane trimming and achieving the right feel and consistency.

I have been lucky to be around IMAC long enough to watch an evolution of airframe and equipment all of which improved and took out a lot of guessing from trimming planes.

What is a good plane... my take of a good plane will be a perfect compromise of consistency, workload, maneuver execution, and performance in different air densities. Most of the time a good design built right (by that I mean straight and within an acceptable weight) will do the trick and will save about 50% of the battle and trimming workload. We can talk flying style later as that is a whole other type of conversation....

Please understand that all airframes are a compromise!!! Some will do certain things better than others and some will shine where others don't. For example, composite planes tend to be a little heavier in some cases and don't give you much to play with as far as reducing weight but they don't warp meaning they do not require constant trimming and mixing as often and most likely will stay straight forever.

Wood frames leave a lot of room to play with on weight savings but will warp over time, will require the airframe to be maintained, and over the weeks, months and years will require you to constantly trim and mix over and over again. At

times for the worst and sometimes for the best.

Doing your homework at home saves a lot of time come time going flying.

With that being said here is my step from bench setup all the way to showing up at a contest.

- Prior to servo setup, I wanted to mention wing and stabs incidences.

1. Personally, I prefer 0 incidences on wings and stabs. Some will agree and some will not but here is my theory behind it.

2. With the wings being at 0 the plane will slightly "sag" the tail in order to fly a straight trimmed line and will also sag around the same angle in inverted flight.

3. By doing this I am achieving 2 things! The angle the plane fly's and looks about the same upright and inverted to me and to the judges and the angle the plane starts rotating from upright and inverted is roughly the same.

4. With 0.5 incidences the plane fly's level or tail high however when you rotate to fly inverted it takes much more of the tail to sag for the airfoil to reach the same angle it is flying at and you will end up with the aircraft flying tail low when inverted.

5. This will only increase the workload on point rolls & rolls across the box.

6. Another reason I prefer 0 incidences is for down line and up line mixes. In an up line and down line no lift from the wings is needed and since my plane is already trimmed to fly straight and level upright my plane should be fairly close to straight flight (in all angle of the flights) once you

take the lift out of the equation.

- After everything has been built and secured I start with servo centering and proper servo arm location. It is always best to keep sub trim as low as possible and travel adjustment around 100% and in most cases personally, I prefer 100% and up for many reasons.

- If you picked the right arms and sub trim is as close as possible to 0 then you should have travel adjustment fairly close going both ways. If they are significantly off then you might want to revisit sub trim and pushrods lengths.

- After I matched the deflection on all surfaces on their maximum desired travel I normally go back and check them at the "In Between Points" what I am going after is Elevator is set to 30 degrees up and down on both halves. In some cases, in between 0 – 30 degrees both Elevator half's might not match and this will result in inconstant and uneven pulls and pushes. Most people tend to skip this step and end up chasing this issue in the air. I have seen some people go to "The Extremes" to solve this issue.

What I do is check both Elevator halves at 20% increments and use the servo balance function in the radio to match them up all the way from 0-100% (I use the dual rates switches preset in different output % to speed up this process) or (JR Servo matching synchro works very well here if you are using JR PROPO Servos)

- I repeat this process on the Ailerons deflection as one Ail half moving differently than the other at the in-between points will give you a 50/50 shot of either getting it right or an absolute nightmare getting your plane to roll axial both directions with or without differential.

- Don't get me wrong, some people absolutely get lucky with matching the "In Between Points" and can go the full life of the plane without needing to do this and some people just learned to fly like that and without noticing already pre correct this in the executions.

Field Duties

Center of Gravity. Normally I don't check this prior to going flying and CG really is an opinion of which someone thinks is the best. In my eyes, CG is where the plane feels right to your liking and I will CG a plane on the Tailwheel if that's what makes it feel right to me.

Now we are at the field and it's time to see how straight our plane is flying.

1. Prior to taking off, I recommend changing your trim increments to as low as possible. Most radio's trim increments are set to 4 points and that is just too much. I prefer to go to as low as your radio will let you. You will end up clicking the trim more on the first flight to get to where it is flying straight and level but it will give you the most accurate and fine-tune possible and much needed to get your plane to fly straight.

2. After takeoff, I go through trimming the plane and doing a few passes across the box at different airspeeds to make sure it is flying straight with wings level and that it doesn't dive or climb. (If your planes is rolling either direction in different flying speeds check if your elevators are lined up perfectly)

I also fly towards & away from me to make sure Rudder is trimmed to fly straight and doesn't drift to the right or left.

The Trim of the aircraft should be perfect prior to getting into the next step.

- Now I get a feel for the CG and prior to checking everything else I make sure we are perfect or atleast within range of where we want it to be CG wise before moving forward. If CG adjustment is needed I recommend landing and making the changes needed before continuing

with mixing.

- After I get the right CG or at least close enough for now I move forward to up lines and down lines. By pulling into a vertical and I keep track of what the plane is doing. This at times could get confusing as I am looking for multiple things here.

1. On a vertical if the plane is pulling to the right or the left. If the plane is pulling to the right then you may consider a little less right trust. If the plane is pulling left then you should consider a little more right trust.

2. On a vertical if the plane is pulling to the belly then some up trust will be needed and if it is pulling to the canopy then some down trust will be needed.

Please note this could be mixed out in the radio but will affect you down the road on certain airframes as the plane slows down or speeds up on up lines.

In the dream world no up line mixes should be needed but here we are...

Notes to pay attention to for fine tuning: I like to test my up line mixes by slowing the plane down on the vertical and then accelerating again. I learned this trick from a flying buddy and it has helped pin point some of the issues in my flights.

Example: on the busier sequences you will have 1 or 2 different elements on the up line. A snap on the up line will bleed off speed and making sure your plane accelerates straight on vertical will help the plane recover better from the "stall" and will continue to track on the up line prior to moving into the next element on the line.

3. Downline mixes is actually one of the simplest mixes to do. From the top of the box push/pull into a down line and see if the plane requires a little "touch" of down elevator. (99% of planes will need some form of down line mix)

4. On the ground; go into your mixing and add a Curve mix with the Throttle as the master and Elevator as the slave. Then go to around 20% throttle and add

another point in the mix. Following that add around 2-3% of down Elevator at the bottom of the stick and this will give you that little of down elevator needed to maintain a perfect down line hands off.

5. Proceed to double check the downline mix in the air and adjust as needed +/- until the plane tracks perfect on a downline.

- There are a lot of directions to go from here as far as trimming but personally I like to work on differential here since we got the plane tracking straight up and down.

- On the up line and down line start doing one or two rolls both ways and pay attention to what the plane is doing... if the plane is rolling on a line above the trust line then you probably have too much up ailerons. If the plane is rolling on a line below the trust line then you probably have too much down Ail.

1. Some planes will decelerate on the up line and accelerate on the down lines. If that is one of your planes try to get the plane to roll axial at the air speed you will be rolling in the sequence. In most cases it is best to pull or push into the up line or down line then wait a seconds to let the plane "settle" prior to checking differential.

2. Another good trick to see if your plane is rolling axial is to do 1 ¼ rolls on up line both ways to see if the plane is pushing to the belly or pulling to the canopy.

3. Another thing to pay attention to is making sure you are checking your differential at the roll rate you will be doing your rolls/ point rolls on. Not all planes roll axial at different roll rates! Moving forward in horizontal flight mixing... now that we know the planes is flying straight up and down with no lift its time to get the plane tracking straight across the box.

- Knife Edge mixing is an easy mix to ensure scoring well and reducing your work load in the flight. This is probably the simplest mix to get working perfectly.

1. Put the airplane in a KE (Knife Edge) at the speed you will be doing your rolls and point rolls.

2. Pay attention to what the plane is doing and make notes or have a flying buddy write it down for you. We are looking if the plane is pushing or pulling in KE and we are looking if the plane is rolling to the right or the left in KE. This will need to be done both direction with Rudd to the right and Rudd to the left.

3. In Right Rudd KE if the plane is pushing then we will add some Up Elevator in the KE mixing screen and if the plane is pulling then we will add some Down Elevator. If plane is rolling to the right then we will add some L Ail in the KE mixing screen and if the plane is rolling to the left then we will add some R Ail in the KE mixing screen. (most radios today will have Knife Edge mixing option already set up in the radio and all you will need to do is add the values necessary)

4. Repeat this step for Left Rudd KE.

5. In most cases a few flights will be needed to get it perfect so don't get discouraged if you didn't get it perfect the first time.

- KE mixing for "perfection" is a mix some people do and some pilots probably never heard of it.

We take it a step further in KE mixing as at time we find ourselves buried on the Rudd and most planes are not mixed perfectly for this type of input. This one is a little tough to explain so try to keep up.

1. After we got the first step of KE mixing you will find yourself using around the first 50% of the stick input to do your point rolls. But in some extreme cases you will find you're self-buried on the stick past that first 50% input and that's what we will mix now.

2. The way I like to approach this is by doing 90 degree KE to up line then keep track of what the plane is doing. 99% of the time you will find that the values you had for the first step of KE mixing do apply here and you will most likely double

those values of the end of the stick.

3. My way of fixing this is to create Expo or break away points on the KE mixing. Best way to do this is to find the point on the stick where the plane gets "out of the line" in KE and adjust or add a point in the mix where your numbers will start to increase past the basic KE mix. Pretty much you will have the first 50% range go in a straight line to get you plane to track in KE for the point rolls and such and then past those stick inputs the number will start to curve to the higher values. If your radio lets you do Expo on the KE mixing that works best as you can adjust the value at the end of the stick then play with the KE expo to get the plane to feel neutral and track straight in all the inputs of the Rudd.

4. Now that you got this mix damm near perfect go and try to do your rollers and you'll find the work load just got reduced but a decent amount. You are welcome!

- Expo and flying the plane. Expo is designed to give people the option to tailor the plane to feel natural on the inputs and to avoid twitchiness if you don't have those "surgeon hands" but still want to fly smooth. Personally I like having the maximum rate needed to get through the sequence well and I adjust my expo to the way I fly it.

1. Expo on the wings I mess with until my rolls are consistent, I don't get wing wobbles in the mid stick flying around the box and still having the rate needed at the end of the stick for the snaps. Some people will do stick flights condition but that was never me but if that will work for you then that might be the ticket. Everyone has a different style and ways of how they fly.

2. Expo on the Rudd. I like to have enough expo on the Rudd to make small corrections smoothly but low enough value to make me feel like I am not buried on the stick for point rolls and bottom/top of the loops maneuvers. It's a very fine line to get the right feel in this case and certain type of airplanes do better here than others. (CG will play a huge factor here as well)

3. Elevator Expo. This might be controversial but when it comes to Elevator I believe up and down are completely different setups. I tend to run more Down Elevator and less Expo then the up Elevator. Reason for this is my way of getting a neutral feel on stick inputs when doing rolls and point rolls across the box I like to use my down Elevator as little as possibly to keep a straight line.

4. This is just the way I do it and if that is something that might work for you then by all means I am glad I can help. If that is not your style then I completely understand.

- Next up is Ail to Rudd mix. Some planes will not need this but some planes really do (some lower wing designs will especially benefit here). This mix I started using as a "Work Load assist" for mainly 8 point rolls across the box and 45 up line in most cases.

1. Pull your plane into a 45 up line going away from you then start doing 8 point rolls and pay attention to what the tail is doing as you are feeding inputs.

2. If you find the tail sagging a little behind and you spend a little too much time trying to keep the plane tracking straight try adding 1% of Ail to Rudd mix in the same direction. (very rarely more than 1% will be needed)

3. Proceed to check this mix on the up line and make sure that it doesn't interfere with the plane tracking on the up line.

4. After I make sure it doesn't interfere with the up line I try doing 8 point rolls across the box and see how the work load feels.

- After you get your plane trimmed and flying well I normally do some sequences and some long straight lines to see if anything if changing, lines are drifting or something is changing based of air speed.

Key Points to remember

- If you change CG or weight distribution of some sort on the plane I would recommend rechecking all your mixes

just in case as most likely something changed.

- Don't forget to check if your plane trimmed to fly straight every time you go up prior to starting a sequence. (In most cases seems unnecessary but with wood planes things change...)

- Don't be scared to experiment and get creative with different CG, rates and trust line as flying styles and sequences change and the setup that felt right last year might not be the best for today.

- Remember that most of the planes today are wood and they will change, deform, bend and you will need to recheck your mixes here and there.

- If you change to a different style, size, pitch prop then I recommend checking your mixes.





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
Oliver Soto**



None Submitted

**South Central Region
Amanda Darling**



Hello guys! South Central 2021 contest season is wrapping up really strong with 5 contests still to go! Just a reminder, make sure you sign up in advance to help the club plan for food and judges! South Central's membership numbers are growing, due to new contests being added this year, we picked up 3 new members at the Houston contest this past weekend! Looking to get more members at the San Antonio contest later in the season.

on your maneuvers, making sure your loop is big and round! But this is what the judges are looking for, flat spots, rate change, sound of your prop, wing dips to name a few. In essence with out judging school you are flying with blinders on, just concentrating on the maneuver and getting it done. Once you attend a judging school you see flying in a different way, you now see it both as pilot and as a judge. It can also help increase your flying ability and improve your skills because you no longer have the blinders on! I highly recommend attending a judging school at the beginning of the next season to not only help you but to help out each contest you attend as well!

Amanda Darling
SC Regional Director
District VIII AVP
District VIII Contest Coordinator

**European Regional Director
Manrico Mincuzzi**



None Submitted

Why should you go to judging school? As a new IMAC pilot you think that you lose most of your points during your maneuvers when actually it is also between the maneuvers as well. As a basic pilot you know that every maneuver begins and ends with straight and level flight and that your basic maneuvers are up-lines, down-lines, 5/8 loops and 45's. While flying you are concentrating



Northwest Region Gale Vasquez



Hello IMAC fans, and welcome to another edition of “In the Box” Northwest region style. In the past episode we were just getting out the COVID-19 state mandates for mask in every place conceivable, but now time they are changing once again and not for the better. I do hope we can all take a part in the fight against this horrible disease that is plaguing our planet. Please do your part, even if it’s only masking up when your near others, if not for yourself for them. Thank you.

On a happier note, the Northwest region has had a few contests completed and with a resounding pilot turnout, more than one might expect. It seems that the outdoors makes for great COVID flying weather. It’s been sweltering to say the least, the Othello contest was 104 on Saturday & 108 degrees on Sunday, but we managed to crank it up and get it done. It also looks like others in the region are flying as well, South Dakota, Oregon and Western Canada and Idaho have all held events, and I’m sorry to say no one was allowed to cross the border, maybe next season.

Thank you for a great flying season, to everyone involved in holding contests, without you IMAC as we know it would not be possible. Please keep looking for new blood to bring into the sport of aerobatic flying. I’m out...

-Gale



Northeast Region Dave Dupre



None submitted.

Asia-Pacific Region Michael Hobson



Greetings from Down Under!

Firstly, I should apologise for my tardiness in contributing to previous editions of In the Box. Despite the wonderful work done by Rich in producing our newsletter (and some gentle prodding) time always seems to escape me. I hope to do better in the future.

For those who don’t know much about me, I live in Brisbane on the east coast of Australia. I have been Asia Pacific Regional Director since the role was created in late 2019. Prior to this I was active in IMAC in Australia as President



of the Australian Scale Aerobatics Association (the Australian National Special Interest Group for scale aerobatics flying under the IMAC rules). The ASAA has been organising and promoting IMAC/scale aerobatics in Australia for close to 20 years – although there were certainly scale aerobatics events before this time. I’ll save more details about how we do things in Australia for future editions.

As part of my role as RD I was hoping to engage more with our regional neighbours – New Zealand and Japan both have dedicated groups of flyers. Unfortunately, COVID has put international travel on hold until at least 2022.



Competitions in Australia have continued to be run when permissible under government COVID restrictions. Unfortunately, much of Australia is currently in lockdown (and probably will be for another couple of months). As such, our annual National Championships is looking doubtful for the second year in a row.

On a brighter note, I was very fortunate to be able to run my local club competition – the Tin Can Bay Cup. I always intended to be “a bit special” but was blown away by the initial level of interest – we had over 42 entries for what was really just a “local” event – with entries from as far away as Perth on the west coast of Australia (around a 9,000km round trip for those planning on driving). Once again, COVID and border closures struck in the leadup to the event knocking our final numbers down to mid-20s. Nonetheless, it was a great event with lots of fun and camaraderie – exactly what IMAC should be about.

The highlight was a large group of new competitors and a great group of keen

juniors – some of who will undoubtedly be future champions as they climb through the IMAC ranks

Winners were:

- Unlimited – Josh Bayes
- Advanced – Peter Pennisi
- Intermediate – Michael Haines
- Sportsman – Cody Hoal
- Basic – Tyson Dodd

Until next time, wings level.
Michael Hobson
Regional Director – Asia Pacific

you or your plane are not good enough, YOU ARE WRONG!!!! WE WANT YOU TO COME OUT AND JOIN OUR FAMILY!!!! We have several very talented pilots in our region and we will get one of these individuals to mentor you! We are here to help.



(upon all pilot's approval) to have a small basic primer to show case maneuver presentations and common mistakes new IMAC pilots make and how to correct them. This was very well received. I would like to thank each and every club and their hard working CD's for each contest this year!



North Central Region Toby Silhavy



Hello everyone in the NCFR region. I would like to thank all of our hardworking ARDs, CD's, and Clubs that have gone out of their way to put on some great contests this year! To say the least, this has been a stellar year when it comes to the lower classes. We have seen a large upswing in Basic class participation!!!! We have seen these basic pilots also participate in more than one contest this year. It has been great to get to know so many new people. If you are reading this and you are wanting to try IMAC for the first time and you think

Well, we have had some really good contests so far this year. And yes we have had setbacks due to Covid, we have overcome and we have conquered in the name of NCFR. I'm writing this on the way home from the Burn-it Challenge. The Burn-it challenge has lived up to its name and we did in fact burn it! We had two semi truck loads of pallets to destroy and several IMACers assembled a house out of these and placed it upon the large bonfire pit and it went up!!!! To say it was spectacular would be a monumental understatement. This is always a great contest and Will and Marian are very gracious hosts. I cannot wait until next year's Burn-it adventure.



A couple of weeks have gone by since we had the Mid-Michigan and the Saranac fly-ins. These were very well attended and as always Dave Walter/Mark Schmaltz and Juan Rosa/ Mike Roxberry put on very well organized and fun events. We got in several rounds, and we had so many basic pilots at Saranac we decided

We have three remaining contests (Southern Ohio IMAC BASH, the North Central Regional Warmups contest, and the final North Central Regional Championships). Please see the NC IMAC page for event details.

This last segment has something dear to my heart. I and the NCFR have lost a great and gentle soul with the passing of Gerald Price. Gerald and I have been friends for 20 years thanks to IMAC. He and I would talk to each other several times a week and we would be discussing family or our passion for precision aerobatics. Gerald and I have had a past in pattern and pylon racing over the years and I was lucky enough to spend the Nats with him, my good friend Dennis Waggoner and my son flying and laughing the entire week. We fixed airplanes, talked radios, and equipment and which new plane Silhavy-Aerosports should do next (Gerald was always partial to his extras). Gerald was always gracious and full of love when talking of



his wife LouAnn and his daughter. Never a greater family man has been made. I will miss you Gerald but my life has been enriched by you more than you will ever know. Blue Skies and all 10's my friend!

To all, get your planes charged and lets do some IMAC!!!!

Toby Silhavy, NC Regional Director



Southwest Region Jacques Telles



We are deep into 2021 and the 1st half of the year has been fantastic here in the Southwest District. We completed 12 contests to-date and we're matching toward the Regional Finals in Lake Havasu November 13th and 14th. I'd like to call out the team of Southwest Region CDs Mark Dennis, Mark Huntly, Conrad Nerdahl, Joe De Renzi, AJ Jaffe, Kevin Garland and the SCORE keepers for putting in the work to make these contests happen.

The same group of CDs met earlier this year and we laid down the 2022 calendar of events. The collaboration across the group helped us get Las Vegas and El Centro back on the calendar. We've got 19 contests lined up including the Regional Finals.

That all for now from the Southwest. Hope to see you at the Regional Finals in Lake Havasu on November 13th and 14th.

Jacques Telles



**Southeast Region
Primo Rivera**



Hi YALL! That is hello in the South East if not familiar with that term; there are a few others like oveyonder and youngAns. First, a big thanks to Mr. Whitlow for the amazing job he does with the newsletter, THANK YOU!



So far, we have eight contests in the books with three left and one Clinic in Jacksonville FL being put on by Bill Daniel, we have a commitment from none other than Mr. Jason Shulman to help out, so I encourage anyone to attend, 09/11/2021, 09/12/2021.



I have had the opportunity to travel to Miami and all the way up to Muncie to participate at the NATS and I have to say IMAC spirit is very high considering the pandemic. The NATS; you owe it to yourselves to attend next year, some say it is just another contest but it is far from it. The NATS shows the true spirit of IMAC, tough competition, tough weather conditions, mental stress, the best possible flying you can witness, flying the best you can, of course there is the family and friendship atmosphere, two good friends were able to come with me, Gavin Woodruff and Bill Daniels and boy did Muncie delivered. I could go on and on but I will leave it to you to witness.



The youth Masters; another incredible experience all of us need to be involve in, if you ever attended Joe Nall, then you know tippie tree is the best there is for any rc related event. Youth Masters is the key for continuing to teach precision aerobatics to our young pilots. Will Jenkins, Calvin Brown and Sharik Bose were a joy to be around and nothing but flying and smiles all weekend from each one. Sharik and his Dad drove from New York to be there and are already making plans to attend next year. I know I will do be best to attend again.



NOW! Go out and fly and practice, there is plenty of summer left, cool weather is just around the corner. I want to welcome ALL pilots to come to the South East Regional final, catch a ride with Toby he is planning on being there. I cannot promise that you will win, but I can promise you will fly your tail off.

Take Care Stay safe
#PRIMO
#IMAC = ARTINTHESKY

Upcoming Events

September:

3rd - IMAC Israel September Fest 2021 - Nitzana, South Israel
3rd - Caorle - IMAC Italian Cup - Caorle, Venezia, Italy
10th - Lums Pond IMAC Challenge 2021 - Bear, DE
11th - Granite State Fall IMAC - Concord, NH
11th - 2nd Annual Bill Thomas Memorial IMAC Challenge - Copan, OK
11th - Stampede City - W Canadian IMAC Finals - Calgary, Alberta CA
11th - Salinas IMAC II - Chualar, CA
11th - SE IMAC Clinic - Jacksonville, FL
11th - IMAC Final Helsingborg - Helsingborg, Skane, Lan, Sweden
17th - Queensland State Championships - Dalby, Queensland, Australia
18th - 2021 NE Regionals - Frankfort, NY
18th - North Central Regional Warmupss - Temperance, MI
18th - Normay IMAC #4 - Fyresdal, Norway
24th - NFG IMAC - Cootamundra, New South Wales Australia
25th - 25th Annual Texoma IMAC Challenge!!! - Sherman, TX
25th - Northwest IMAC Regional Final - US - West Richland, WA
25th - Kings Canyon IMAC Challenge - Reedley, CA

October:

2nd - Pegasus Fall IMAC - Hagerstown, MD
2nd - North Central Regional Championships - Temperance, MI
2nd - Northwest IMAC Regional Final - West Richland, WA
2nd - Siena - IMAC Italy National - Siena, Italy
8th - Mocksville Fall Classic - Mocksville, NC
9th - Annual Fall Ocala IMAC Event - Ocala, FL
9th - Alamo City IMAC Challenge - San Antonio, TX
21st - IMAC Israel Championship - Nitzana, South Israel
23rd - 2021 Bayou Bash IMAC
23rd - Oakdale Fall Fest - Farmington, CA
30th - SAAMBR IMAC - Burpengary East, Queensland Australia
30th - Albury IMAC - Ettamogah, New South Wales Australia

November:

5th - 2021 Regionals - Hinesville, GA
12th - ASAA National Championships - Darraweit Guim, Victoria Australia
13th - Southwest Regional Finals - Lake Havasu, AZ

December:

Nothing Scheduled

2021 Mike Karnes Scale Aerobatics National Championships

Muncie, IN

This year IMAC Nats was dedicated to IMAC Legend, Mike Karnes. Mike Karnes passed away earlier this year, just after his retirement from his IMAC Presidency.

The event started off with great weather and light winds. Many rounds were flown in great in these great conditions. The pilots were treated to some great flying.

In the end of the week, the weather changed and the rain came. After such good weather, there were not many complaints.

At the Banquet, slides of Mike Karnes were shown and lots of memories were shared.

On the last day, the awards were given out at AMA Headquarters. Congratulations to all the winners.

Everyone left with eagerness to return for another great event next year. We all look forward to seeing everyone there!



2021 Mike Karnes Scale Aerobatics National Championships Results

Sportsman

1. Guillermo Osses - 1000 pts
2. Rober Ashburn - 975 pts
3. Bill Daniel - 928 pts

Intermediate

1. Nick Amelang - 1000 pts
2. Toby Silhavy - 903 pts
3. James Hugg - 855 pts

Advanced

1. JJ Hedrick - 1000 pts
2. Michael Marcellin - 984 pts
3. Nick Scharping - 950 pts

Unlimited

1. David Moser - 1000 pts
2. Kurt Koelling - 987 pts
3. Ty Lyman - 950 pts

Seniors

1. Michael Marcellin - 1000 pts
2. Bill Daniel - 928 pts
3. Gerald Price - 897 pts

Freestyle

1. Ben Batts - 1000 pts
2. JJ Hedrick - 887 pts
3. Nick Scharping - 872 pts



Bennet Cup Award Winner

David Moser



Schroder Cup Award Winner

Nick Amelang

10th Annual MMRC IMAC Challenge

Byram, MS



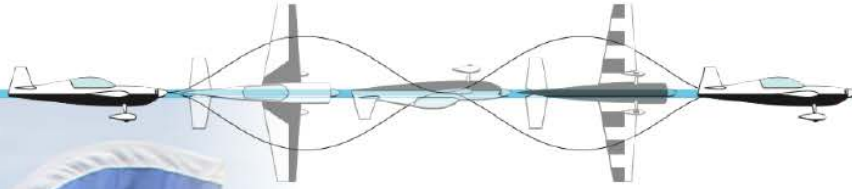
10th Annual MMRC IMAC Challenge

<p>Basic Class</p> <p>1st Place - James Barfield 2nd Place - Bobby Day 3rd Place - Jason Watts</p>	<p>Sportsman Class</p> <p>None</p>
<p>Intermediate Class</p> <p>1st Place - Rich Whitlow</p>	<p>Advanced Class</p> <p>1st Place - Mike Cooper 2nd Place - Mark Thurman</p>
<p>Unlimited</p> <p>1st Place - Hank Cooper</p>	<p>Seniors</p> <p>1st Place - Rich Whitlow 2nd Place - Mark Thurman 3rd Place - Hank Cooper</p>



IMAC SE vs NE SHOOTOUT

May 2021 at Southeastern Modelers Flying Club, Tabor City, NC



15 Pilots flew in a 3-day event over Memorial Day weekend at SMFC in Tabor City NC.

The club was an excellent IMAC host with fantastic facilities. They want to make this one of the premier mid-season events for all pilots.

RESULTS:	Advanced class
	(1) Pablo Cano
Basic class	(2) Skip Messick
(1) David Garceau	(3) Billy Meadows
(2) Nicholas Kerr	
(3) John Kerr	Unlimited class
	(1) Ty Lyman
Sportsman class	(2) Alvaro Yanguas
(1) Rick Huebner	(3) Primo Rivera
Intermediate class	Seniors class
(1) Michael Thomason	(1) Skip Messick
(2) Thomas Medlin	(2) Billy Meadows
(3) Nikolei Zinsli	(3) Steve Sides

The tightest competition was for 1st place in the Intermediate class, with only 38.8 points difference between Michael Thomason and Thomas Medlin.



In addition to the winner's plaques, all contestants got a participant plaque to remember the event (and all the food!).

Make sure you add this event to your 2022 travel plans as soon as it get published!



2021 Wings Over Abilene IMAC Challenge

Abilene, TX



Wings Over Abilene IMAC Challenge

<p>Basic Class</p> <p>1st Place - Brad Ahlfinger 2nd Place - James Barfield 3rd Place - Amanda Darling</p>	<p>Sportsman Class</p> <p>1st Place - Ken Rogers 2nd - Wilton Stewart</p>
<p>Intermediate Class</p> <p>1st Place - Tim Hughes 2nd Place - Rich Whitlow 3rd - Craig Rideout</p>	<p>Advanced Class</p> <p>1st Place - Rudy Voldrich</p>
<p>Unlimited</p> <p>None</p>	<p>Seniors</p> <p>1st Place - Rich Whitlow 2nd Place - Allen Delger 3rd Place - Ken Rogers</p>



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



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