

THE SCALE SQUADRON  
OF  
SOUTHERN CALIFORNIA



Founders of the  
US Scale Masters Championships

# SCALE DIMENSION

Official Newsletter of the Scale Squadron of Southern California

**Ed Woodson's  
Giant P-47  
Build  
Page 11**

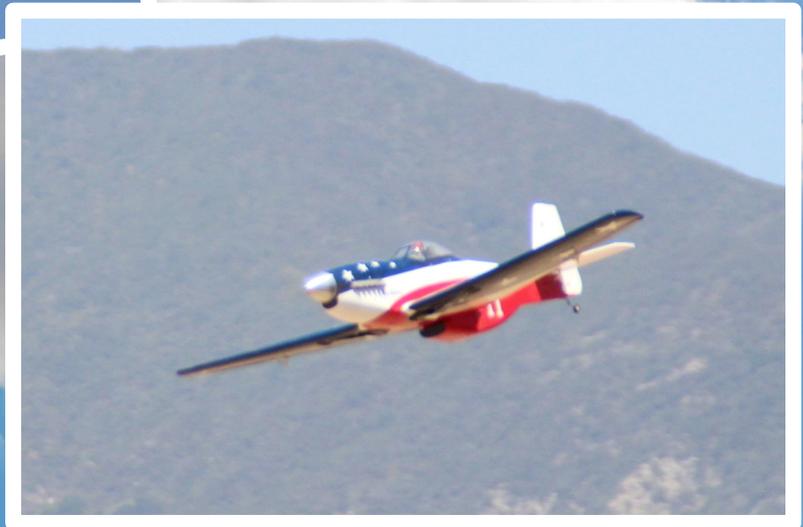


Page 5

**W&C Photo Gallery: Part 2**

Page 14

**Rob Hahn's F-11 Build**



Founders & Proud Supporters of  
The U.S. Scale Masters Championships



## 03 Commander's View

## 04 Editor's Notes

## 05 W&C Gallery: Part 2

## 11 Ed Woodson's P-47 Build

## 14 Rob Hahn's F-11 Build

## 18 July Meeting Notes

## 21 August Meeting Announcement

## 22 Upcoming Events

## 26 Who We Are

## 27 Join Us!

## 28 Membership Application

## The Scale Squadron of Southern California

### 2022 Board of Directors

#### Commander

Mike Greenshields  
mikegreenshields@gmail.com

#### Executive Officer

Eric Puchalski  
roadkill1954@gmail.com

#### Treasurer

Tim Cardin  
Tim.Cardin@CardinWest.Com

#### Secretary

Joni Whitsitt  
whitsittjo@gmail.com

#### Board Members at Large

Larry Wolfe  
copsmom98@aol.com

Gordon Truax  
gltruax@att.net

#### Webmaster

Mike Greenshields  
mikegreenshields@gmail.com

#### OCMA Representative

Mike Greenshields  
mikegreenshields@gmail.com

#### Newsletter Editor

Eric Puchalski  
roadkill1954@gmail.com

#### Mailing Address

PO Box 8074  
Fountain Valley, CA 92728

#### On the Web at:

<https://www.ScaleSquadron.com>

### On the Cover

1. Fokker DR.1 belonging to Phil Bland returning from another dawn patrol.
2. Beautiful Laird-Turner Meteor LTR-14 flown by Jack Bugaren putting on a one-man airshow.
3. Craig Bobrich's unmistakable P-51 "Miss America" on a (very) high-speed pass.



Scale Dimension is published monthly by The Scale Squadron of Southern California. Copyright 2022, all rights reserved. Reproduction in whole or in part of this publication is granted with acknowledgment of the origin of the information. This must include the name of the publication (*Scale Dimension*) and the name of the publishing organization ("The Scale Squadron of Southern California" or "The Scale Squadron"). This newsletter is published approximately one week before the first day of each month. We welcome all editorial submissions but assume no responsibility for the loss or damage of unsolicited material. Contributions and photographic material are welcome but must be accompanied by release of liability for the publication of potentially copyrighted material. TO AUTHORS, PHOTOGRAPHERS, AND PEOPLE FEATURED IN THIS NEWSLETTER: All materials published in *Scale Dimension* become the exclusive property of The Scale Squadron unless prior arrangement is made in writing with The Scale Squadron. SUBSCRIPTIONS: *Scale Dimension* is distributed at no cost to Scale Squadron members and newsletter subscribers. If you are not a member of the Scale Squadron but would like to subscribe to the newsletter, send your subscription request to the editor to get added to the distribution list. Be sure to include your name, email address, and a general outline of your interest in modeling. ADVERTISING: If you are interested in advertising in *Scale Dimension*, contact the editor for information on how to do that. DEADLINE: Contributions to the newsletter must be received before 20<sup>th</sup> of the month in order to be included in the next month's newsletter. DISCLAIMER: While every effort has been made to avoid mistakes, The Scale Squadron is not liable in any way for errors or omissions.



**Mike Greenshields**  
Commander

Squadron:

We mourn the loss of a beloved member of this club and our local modeling community. **Karl Swope**, potentially the most laid back and chill member of this club, lost his life to bladder cancer on July 13, at home while under hospice care. I was provided no other details as of this writing.

Losing our friend Karl, is yet another devastating blow. What's certain is life is short, the friends we make at the club are cherished, and I appreciate every moment we get to share together.

It's yet another member we've lost to cancer. It is a sad time again for this club. My plea: Take care of yourself, don't let things go, and push your doctor to get you the care you need. This cancer thing is just out of control.

Take a moment to remember our lost friends this year **Larry Klingberg, Sam Wright, Ed Woodson**, and now **Karl Swope**. Our condolences and sympathies to their family and friends.

Karl, tailwinds and blue skies... you will be missed.

### **Builder's Wing of Warbirds & Classics**

What's next?: Even more than when we started talking about our next club goal... The time to build and get that favorite project finished is *now*.

I'm inspired and I hope *you* will be, too.

After Warbirds & Classics, I read through the infamous Pilot Airplane Info Sheets. We had the fewest number of scratch or kit built airplanes in our event history. And I thought... **SQUADRON!** *We've got to get motivated!*

I am challenging *you*...all of us really...to have a newly built airplane that *you* finished before the 2023 W&C event.

Let's be the club that leads this charge and puts out the highest number of built planes. And I think this might be easier than we all think. Why? I'll bet every one of us has a project we've started and just needs to be finished. I have faith! *I know you can get it done!*

Now, not that the status of having your new plane finished to show off to your friends isn't enough, but this is going to be a special event, a special operation.

So... Get your plane finished for next year's Warbirds & Classics and you will be made an official member of the exclusive **2023 Builder's Wing of Warbirds & Classics**. There will be an official logo, patch, and recognition.

The basic requirements are that your airplane must be primarily handmade, preferably by you. The model cannot have been flown prior to the previous W&C. In other words, if you flew your model at W&C 2022 or before, it won't be eligible for the 2023 Builder's Wing. See **Page 20** of this newsletter for more specific requirements.

This club is full of talented people who love modeling, Whether your project is a relatively easily built scale kit you build, or the museum quality masterpiece of a lifetime like Larry Wolfe builds, big or small, all scale planes are welcome. All that matters is you built it and more importantly, had a ball doing it.

So, commit to finishing, get the hurdles removed, make a plan, and let's get it going!

We'll see you at the next meeting and thanks for being the best little scale club in the West!

**Mike Greenshields, Commander**  
[Commander@ScaleSquadron.com](mailto:Commander@ScaleSquadron.com)



# EDITOR'S NOTES

## More Warbirds & Classics Action

Check out the photos from **Warbirds & Classics 2022** beginning on **Page 5**. Because there were more photos than we could print in one newsletter, they're being presented over three months and this is the second installment. I hope you see your airplane there!

**A note about the photos:** Some of the photos are a little fuzzy. There are a couple technical reasons for that and I won't trouble you with them here. (If you really care, drop me an email and I'll let you know what's up.) Suffice to say that the original photos are much sharper than they end up being in the final PDF file for the newsletter. If you see something that you'd like in a higher resolution, just let me know and we'll figure out how to get them to you.

Also, we've included some basic information about each model. But you'll notice that many of the details are incomplete. This is primarily due to not having the information supplied by the pilot. If we don't get a Pilot Information Sheet for a model (or if the writing is illegible) then we can't pass on the details.

## Warbirds & Classics Photos Online

We've finally been able to put all of the photos that I took at W&C in June online. Anyone can access the archive and download anything. A couple caveats: These are photos that I took personally. I did my best to get pictures of everyone's airplane but one guy with a camera vs. 150+ airplanes just wasn't a fair fight.

Here's the link:

<https://u.pcloud.link/publink/show?code=kZXjd4VZphzdFFFzrnVwLUfWDorcv4YKHBb7>

There's a **README.TXT** file there that you should take a look at. It includes information about the photos and what you're allowed to do with them (pretty much anything). Take a look and help yourself.

## Member Builds

This month we present not one, but *two* member projects. **Rob Hahn** has been building a **Grumman F-11 Tiger** from an old **Berkeley kit**. Rob is an inveterate tinkerer and you've got to see what he came up with for power! The model isn't complete yet (we'll publish the final result in a later



**Eric Puchalski**  
Newsletter Editor

newsletter) but see **Page 14** for Rob's progress report.

**Tim Cardin** is also working on a labor of love in the form of a beautiful **Republic P-47 Razorback Thunderbolt**. The project was started by **Ed Woodson** shortly before Ed passed away earlier this year and Tim is making sure it takes to the sky. Tim talks about his introduction to the project, his goals, and his progress beginning on **Page 11**.

## Builder's Wing of Warbirds & Classics

In his *Commander's View* column, **Mike Greenshields** introduces a new idea to help stimulate some actual building (as opposed to assembling) of model airplanes. We're calling it the **Builder's Wing of Warbirds & Classics** and *everyone* is encouraged to participate.

I'm personally very excited about this program as it gives me a nice incentive to finish a project or two in time for next year's W&C. Check out Mike's column for an overview and **Page 20** for specific requirements.

Here's a clue to what I'll be working on:



*Eric*

[roadkill1954@gmail.com](mailto:roadkill1954@gmail.com)

# WARBIRDS & CLASSICS GALLERY: PART 2

## Stinson SR-7B Reliant - John Geyer

Power: Saito FG-30B Origin: ARF  
WS: 87" Materials: Built up  
Weight: 18 lbs Finish: Shrink film



## Supermarine Spitfire - Dave Kadonoff

Power: DLE-61 Origin: BARF  
WS: 95" Materials: Built up  
Weight: 26 lbs Finish: Shrink film



## Cessna 208 Caravan - Kenny Rhoads

Power: ? Origin: ARF  
WS: ? Materials: ?  
Weight: ? lbs Finish: ?



## Republic P-47 Thunderbolt - David Hawkinson

Power: DLE-20 Origin: ARF  
WS: 72" Materials: Built up  
Weight: 15 lbs Finish: Shrink film



## Vought F4U Corsair - Eric Moosa

Power: ? Origin: ARF  
WS: 63" Materials: Foam  
Weight: 10 lbs Finish: Paint



## Fokker D.VII - Tim Cardin

Power: ? Origin: ?  
WS: ?" Materials: ?  
Weight: ? Finish: Paint



## 2022 Warbirds & Classics Gallery: Part 2

### Gee Bee Model R Super Sportster - Martin Fair

Power: O.S. 120AX    Origin: ARF  
WS: 56"            Materials: Built up  
Weight: 12.5 lbs    Finish: ?



### General Dynamics F-16 Falcon - Unknown Pilot

Power: ?            Origin: ?  
WS: ?"            Materials: ?  
Weight: ?         Finish: ?



### Messerschmitt Me 163 Komet - Jaime Colley

Power: Electric    Origin: ARF  
WS: 36"            Materials: Foam  
Weight: 1.8 lbs    Finish: Paint



### de Havilland DH.82A Tiger Moth - Eric Puchalski

Power: O.S. 91 4S    Origin: ARF  
WS: 70"            Materials: Built up  
Weight: 9.5 lbs      Finish: Shrink film



### Republic P-47 Thunderbolt - Unknown Pilot

Power: ?            Origin: ?  
WS: ?"            Materials: ?  
Weight: ? lbs      Finish: ?



### Aero L-39 Albatross - Gene Serrano

Power: Electric    Origin: ARF  
WS: 43"            Materials: Foam  
Weight: 7 lbs        Finish: Paint



## 2022 Warbirds & Classics Gallery: Part 2

### SIAI-Marchetti SF.260 - Ruben Zadoyan

Power: ?      Origin: ?  
WS: ?"      Materials: ?  
Weight: ? lbs      Finish: ?



### Republic P-47 Thunderbolt - Peter Zagnoli

Power: Saito 125 4S      Origin: Kit  
WS: 64"      Materials: Built up  
Weight: 11 lbs      Finish: Shrink film



### Laird-Turner Meteor LTR-14 - Jack Bugaren

Power: DA-120      Origin: ARF  
WS: 95"      Materials: Built up  
Weight: 36 lbs      Finish: Shrink film



### Bowers Fly Baby - Phil Bland

Power: DLE-55      Origin: BUSA kit  
WS: 112"      Materials: Built up  
Weight: 24 lbs      Finish: Shrink fabric, paint



### Boeing FA-18 Super Hornet - Craig Bobrich

Power: 80MM EDF      Origin: ARF  
WS: 38"      Materials: Foam  
Weight: ?      Finish: Paint



### Beechcraft T-34 Mentor - Michael Peck

Power: ?      Origin: ARF  
WS: 47"      Materials: Built up  
Weight: 12 lbs      Finish: Shrink film



## 2022 Warbirds & Classics Gallery: Part 2

### WACO YMF-5 - Pat Schreffler

Power: Moki S250/5    Origin: Kit  
WS: 120"            Materials: Built up  
Weight: 70 lbs        Finish: Fabric & paint



### Bücker Bü 181 Bestmann - Anand Patel

Power: ?                    Origin: ?  
WS: ?"                    Materials: ?  
Weight: ?                    Finish: Paint



### Vought F4U Corsair - Berkin Ecevit

Power: Electric        Origin: ARF  
WS: 63"                Materials: Foam  
Weight: ?                Finish: Paint



### Boeing 737 Salmon Thirty Salmon - Tim Cardin

Power: 2x80MM EDF    Origin: ARF  
WS: ?                    Materials: Foam  
Weight: ?                    Finish: Paint



### Junkers Ju 87 Stuka - John Bashore

Power: DA-85            Origin: ?  
WS: 96"                Materials: ?  
Weight: 40 lbs        Finish: Paint



### Fokker DR.1 Triplane - Phil Bland

Power: DLA-116        Origin: Kit  
WS: 94"                Materials: Built up  
Weight: 28 lbs        Finish: Shrink fabric & paint



## 2022 Warbirds & Classics Gallery: Part 2

### Acro Master - Dave Kadonoff

Power: Electric      Origin: BARF  
WS: 42"              Materials: Built up  
Weight: 7 lbs        Finish: Shrink film



### Piper NE-1 Cub - John Bashore

Power: ?              Origin: ?  
WS: ?                Materials: ?  
Weight: ?            Finish: ?



### Bücker Bü 180 Student - Keith Hedge

Power: Saito 150 4S      Origin: Short kit  
WS: 113"                Materials: Built up  
Weight: 23 lbs          Finish: Shrink fabric & paint



### Pilatus PC-21 - Jon Schleif

Power: Electric          Origin: ARF  
WS: 70"                Materials: Built up  
Weight: 20 lbs          Finish: Shrink film & paint



### North American P-51B Mustang - Jaime Colley

Power: Electric          Origin: ARF  
WS: 38"                Materials: Foam  
Weight: 2 lbs            Finish: Paint



### Pitts S-2A - Thomas Williams

Power: Electric          Origin: ARF  
WS: ?                  Materials: Foam  
Weight: ?                Finish: Paint





# ED WOODSON'S P-47 THUNDERBOLT BUILD

by *Tim Cardin*

Seems like life is coming hard and fast these days. We've all lost friends and family to natural and other causes. Ed Woodson's passing was almost unexpected considering all he has been through the past few years. His pride and joy is a **CARF P47 Razorback**, powered by a **Moki 250cc 5-cylinder radial**. We've seen the engine at the meeting, impressive. I had been talking with him on different aspects of building the airplane as he progressed through the build and told him I would help paint it.

With the model nearly complete, Ed went into the hospital for a number of things, kidney stones, loss of appetite, weight loss, etc. I knew it was much more serious when, while in the hospital Ed emailed me asking if I would complete his P47. Dumbfounded I responded it would be my honor, all the while hoping he and I could sit down and go over everything. Unfortunately this was not to happen. While still in the hospital Ed insisted I come and get the P47 and the rest of his models. Ed passed just a few days later, spending end of life in home hospice with family. Ed planned all of this, including all the details of his service, as I found out later.

Now through with our **Sam Wright Memorial Warbirds & Classics** also honoring Larry Klingberg and now Ed Woodson (who passed the week before the event), it was time to clear my head and check stock of the project.

## First Things First

I still have not taken the wings out of the bags but can tell they are complete down to painting inside the gear wells. I also recall Ed describing how difficult it was getting the gear doors to work properly. I have been familiarizing myself with the project and devouring all the info I felt relevant.

In checking everything it was clear that the quality of the CARF kit (**Photo 1**) and the work Ed completed on the build are top notch up to



Photo 1: Here you get an idea of the quality of the CARF kit. This is how the fuselage looked out of the box.



Photo 2: It's hard to tell from this photo but that 5-cylinder Moki is just over 11" diameter.



Photo 3: Back side view of my new test stand showing the batteries, fuel and ignition systems.



Photo 4: Business end of that new test stand.

## Ed Woodson's P-47 Thunderbolt Build

this point. While gathering up the components I found a couple of pilots and a couple of cockpit kits. Both kits were ABS and true kits. Having gone down this road before it was clear a cockpit kit (painted) from **IFlyTallies** is in order. The other item needed is the graphics, hello **Callie Graphics**. Ed had already ordered the nomenclature but not the formal graphics. His choice is "Little Chief" and I promised him it would be completed as such. I like that one too!

### That Beautiful Moki!

I'm a motor head so straight away I needed to familiarize myself with the Moki 250. Everything seems straight forward here and though the CARF manual says breaking in the engine should be done in the air, I am impatient and want to make it run now! I will break it in flying, for now I just want to hear its throaty rumble. First item of business was to make a new engine test stand (**Photos 3 & 4**). Mine has seen years of service and was built to handle up to 50cc. A G62 almost took it apart last time I tried so time for a new one. Built from 1" pine, pinned, glued and glassed it is ready to use. The base is a Black and Decker Work Mate which will be lashed down of course. **Photo 2** shows the Moki installed on the new test stand, ready for a test run. The engine ran as advertised and sounds marvelous.

### Canopy Rails

Now it's time to set the engine aside and get to work on the fuselage. First item of business is to figure out how to use the rails for the sliding canopy (**Photos 5 & 6**). Seems simple enough but never is. The immediate problem is to make attachment points for the canopy that will stand up to 100+ MPH speeds and keep everything in place. I don't want to be hiking about looking for it, but I do want it removable for maintenance. I'm hard to please sometimes. The hold-downs will mount the canopy to the sliders; the sliders will glide in the rails and provide an attachment point for the actuators. With a potential solution and after much brain things, I



Photo 5: Visualizing how I'm going to use the canopy rails.

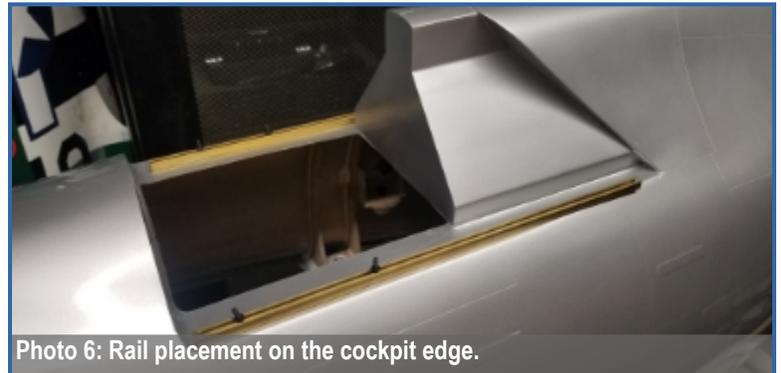


Photo 6: Rail placement on the cockpit edge.



Photo 7: Hold-down jig to keep everything square while in Hysol Jail.



Photo 8: Underside view of the hold-down jig.

## Ed Woodson's P-47 Thunderbolt Build

built a jig to keep the hold-downs square in the canopy while the Hysol cured (**Photos 7 & 8**).

I built the sliders out of 1/2" x .032" brass assuming I might silver solder some of it but ended up bolting it together with Loctite. For actuators, I used a pair of **Actuonix Motion Devices L16 Electric Servo Actuators**. These have a 140mm (5.5") stroke and provide up to 22lbs of force. I ordered them through Amazon. **Photo 11** shows them installed and tested.

One of the last things to do on the canopy was to cut out the window areas and install Plexiglas. This was a pretty delicate job due to the narrow window frames but slow and steady did the trick (**Photo 13**).

Everything looks good and now it's time to use Hysol on the rails and make them part of the airplane.

Until next time,

**Tim Cardin**

Tim.Cardin@CardinWest.com



Photo 9: Test fitting the canopy hold downs and rail placement.



Photo 10: Location and alignment look good.

Photo 11: The Hysol is cured on the actuator mounting. Everything is solid now that there is a support at the business end of the actuators.



Photo 12: Canopy attached to sliders in rails.

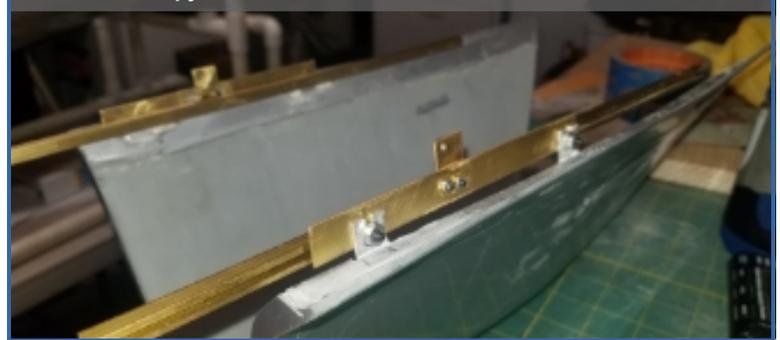


Photo 13: Windows cut from canopy and ready for plexiglass.



*[ed note: This is the first in a multipart series where Tim provides updates on his progress. It's not clear right now how many parts there will be or how frequently the updates will be coming out. If you want to contact Tim directly to see what's up, your best bets are email or catch him most days at OCMA Field.]*



# ROB HAHN'S F-11 TIGER BUILD

by Eric Puchalski

Rob Hahn is always tinkering with something. Sometimes things work out and he ends up with a unique item; sometimes things don't quite line up and he finds himself with some pretty interesting prototypes. Whichever way things go, he's always willing to share both his successes and his dead-ends. It's always interesting and entertaining watching him put his own spin on solving problems for projects.

This time, Rob's interest is a **Grumman F-11F-1 Tiger** that he's building from a 1950's era Berkeley kit. The model will end up at 25.5" long with a 20.5" wingspan. It has a couple interesting features. First among them is that it's a ducted fan designed around a **Cox .020 Pee Wee** engine. The kit came with an aluminum fan but the housing, intakes, and exhaust are built up from balsa and paper. Other construction is traditional and uses sticks, sheeting, and planking, plus the usual assortment of hardware, hinges, formed plastic parts, etc.

Then there's the weight limitations inherent in these older, marginally-powered models. Some of the compromises that were made in the original design to keep weight down resulted in a loss of scale fidelity. Rob is choosing to remedy many of these by using modern lightweight materials.

The model was initially designed for free flight, control line, or "monoline." (You'll have to look that up if you don't know what it is.) When it was designed, R/C was in its infancy and there weren't any systems nearly compact enough to fit such a small model. With the miniature R/C systems available today, remote control seemed like a good choice.

This is the first of a series of articles showing his progress. Rob says he sometimes gets "distracted" so it's not clear how many articles will be in the series or how often an update will be available. But I'm sure they will all be interesting.

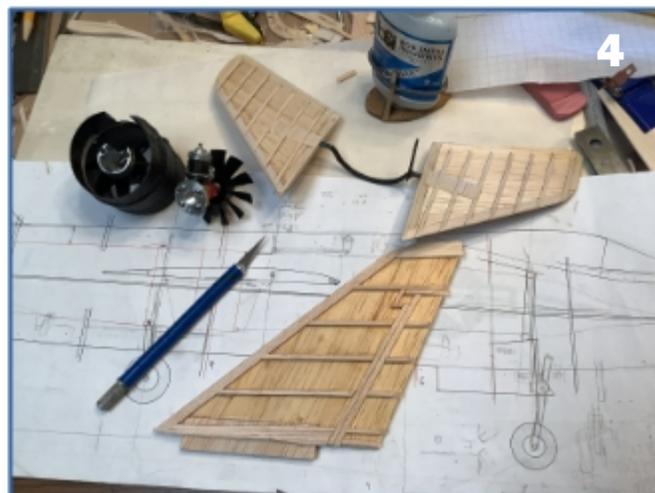
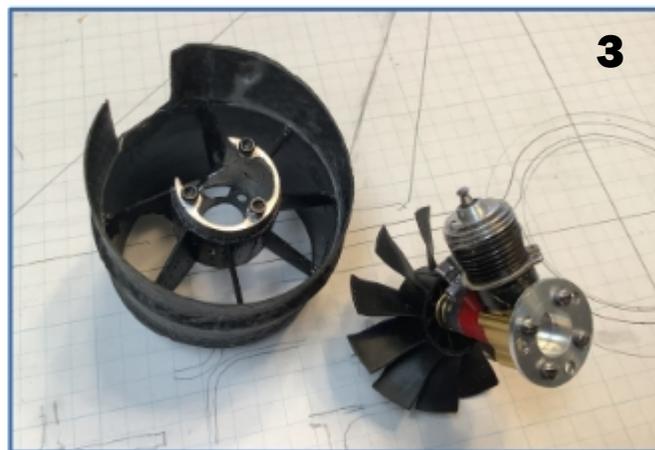
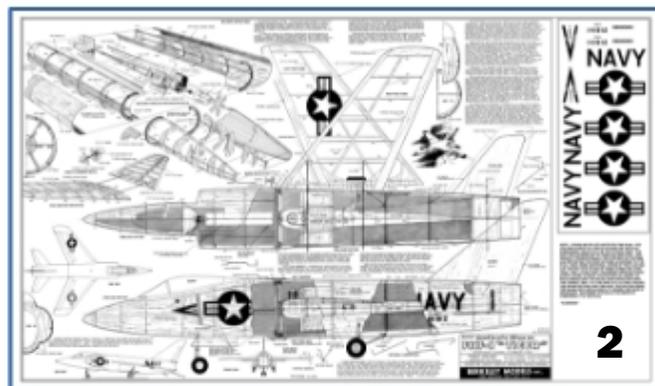
Rob has provided a whole raft of photos and comments so I'll step aside and let him do the talking from here.

**01:** Paint & marking scheme selected for this model. The airplane shown belonged to **USN VA-156 Attack Squadron** which was operational from 11/1950 through 01/1959 when it was redesignated **VF-111 Fighter Squadron**.

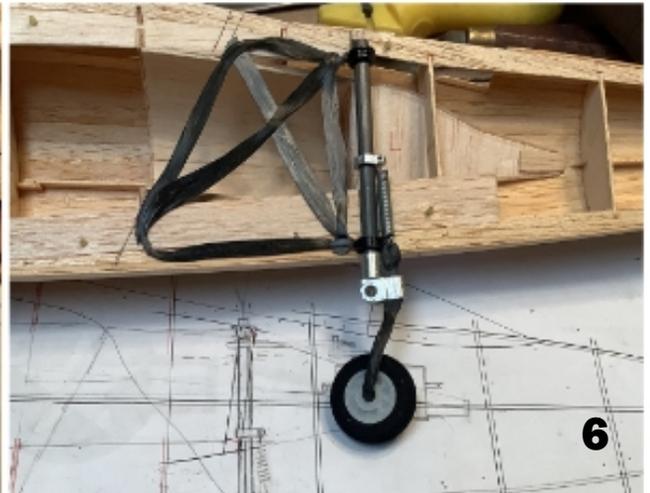
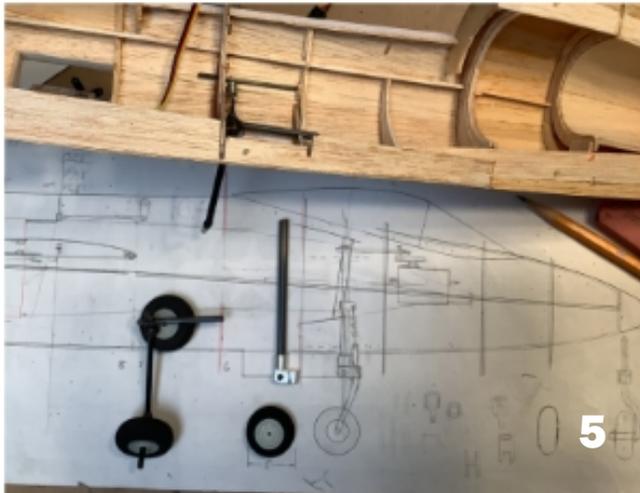
**02:** Plans set that came with the Berkeley kit.

**03:** Fitting a Cox Tee Dee .020 into a modern 50mm fan unit required machining an engine mount & back plate.

**04:** Made a CF shaft for the full flying stab similar to the old Byron F-16 stab. Stab and vertical fin in the kit are 3/32" flat balsa sheet so I am adding ribs to them to give them shape.



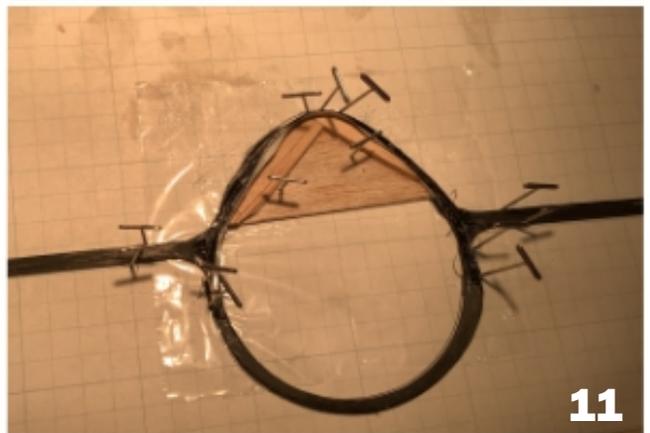
# Rob Hahn's F-11 Tiger Build



**05:** Gear strategy: Keep it light & avoid using steel when CF will do.

**06:** Perhaps over-engineered but just trying to get the most strength from the least amount of weight. The strut is a 5mm CF tube & that truss is 24K CF tow laid up on some balsa sheet & then trimmed away after cure. The two bushings were machined from black Delrin plastic. It all weighs 7.7g which is about 8g more than I'd like.

**07-10:** Had some success fabricating a custom wing mount/spar out of CF. This design will hopefully be strong and light enough while not obstructing the inner duct. The mold is made of ply and balsa finished with CA glue. There is a little Bondo in the bottom of the recess that mirrors the face of the other half. The trick is to get three pieces of resined 24k CF tow to willingly lay side by side in the bottom of the recess before placing the other half on top. The finished spar weighs about 1g and is about .030" thick.



## Rob Hahn's F-11 Tiger Build



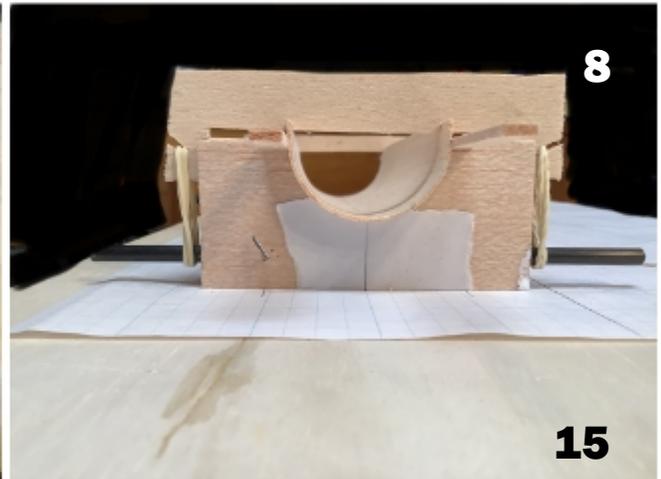
12



13



14

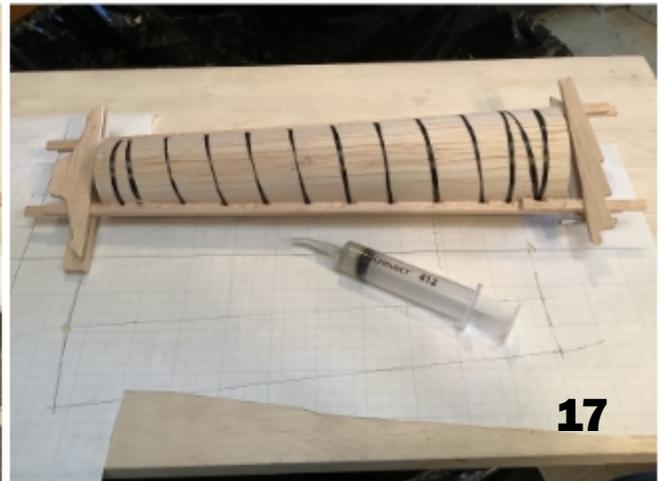


8

15



16



17

**12-13:** Fabricated wing joiner and main spar test fit into the wing.

**14:** Trying to make a fuel-proof and not-too-heavy thrust tube. Making it in two halves using 1/32 light balsa. This is a jig/former that will hopefully hold each piece in a half-circle while having inside fuel-proofed with CF tissue & finishing resin. CF tissue will darken inside of tube, a good thing.

**15:** After spraying one side of the 1/32 piece with 50/50 water/ammonia (a tip I got from Jon at a Scale Squadron meeting), it willingly conformed to the jig. The 1/4 x 3/32 strips get glued to the outside of the tube & removed after the halves are joined—in theory.

**16:** First half done. Didn't turn out like glass but good enough.

**17:** To keep the thin, stressed balsa from cracking, it is wrapped with about 2 meters of 3k CF tow. Using a little laminating resin in a syringe to secure it. Finished weight of the tube is 14.5g.

# Rob Hahn's F-11 Tiger Build



**18:** Improved inlets and liners for mo' betta breathin'.

**19:** Looking forward along the inside of the fuselage halves. Note the non-retracting, spring-loaded main gear.

**20:** Looking forward the length of the fuselage through the area where the thrust tube will be installed. Note the two inlets at the center.

**21:** Port side air inlet showing the thrust tube installed in the rear of the fuselage.

**22:** Decided to add this humpy fairing to the top of the fan unit to accommodate a glow plug clip & help manage the fuel mess. The front of the thrust tube and the main CF spar needed to be changed accordingly.

**23:** To fit the aileron servo, the front hatch needed to be cut out. Need to finish cockpit & glue canopy before cutting the hatch. Fabricating a loose facsimile of cockpit stuff from Internet images.



# JULY 2022 SQUADRON MEETING

The July 2022 Squadron started off as it usually does but quickly morphed into a community back-slapping session as everyone congratulated everyone else for the terrific outcome at **Warbirds & Classics**. The back-slapping was well deserved as the event was a huge success. Mike brought along a number of leftovers including t-shirts, stickers, and Super Glue tape. Mike told everyone to help themselves to whatever they wanted and by the time the meeting was over, the table was empty.

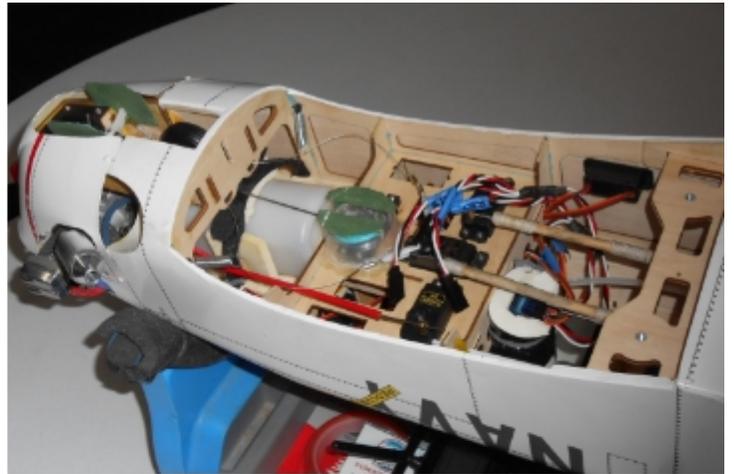
Mike announced a challenge to all Squadron members to actually *build an airplane* for W&C 2023. Details are in Mike's *Commander's View* column in this issue.

Then it was time for **Show & Tell...**

**Rob Hahn** has been making great progress on his **Grumman F-11** project. (See the article elsewhere in this issue.) The model is built from an old Berkeley kit and is powered by a ducted fan of Rob's own design. He started with a 50MM stock fan and modified it to take a Cox .020 Tee Dee glow engine. He's overcome most of the technical issues and is working on cockpit details, covering, detailing. Assuming he doesn't get distracted by some other entertaining project, he expects to be flying this one pretty soon.



**John Perry** brought along his **Beechcraft T-34 Mentor** that he built from a CMPro ARF. He's trying to keep it as close to stock as possible but had some serious problems with the nosewheel going wherever it wanted at anything above a slow taxi. He also spent a fair amount of time getting the CG right. He solved the CG problem by rearranging the equipment in the fuselage and the steering issues by rigging a pull-pull system. The nosewheel rigging was challenging since the wheel retracts and the cable attach points move.



## July 2022 Squadron Meeting

**Tim Cardin** has been working on a **Republic P-47 Thunderbolt** that was started by Ed Woodson shortly before Ed passed away. Tim is finishing the project in Ed's memory and he's been keeping us up to date on his progress. (See the article elsewhere in this issue.) The latest hurdle was installing the cockpit rails. While this seems like a pretty straightforward task, Tim points out that on an airplane that's flying in excess of 100MPH, selection of hardware and installation methods are critical.

Tim went through how he approached this part of the project, including building a couple jigs, temporary equipment installation for testing, and final installation. At this point, the canopy is about ready to go but still needs the windows cut out.

When finished, the Jug will have a 110" wingspan and weigh in at around 50 lbs. Ed had chosen the "Little Chief" color scheme and that's what Tim's going to use.



**Jaime Colley** continues to improve his **Sopwith Camel** rescue project and he talked about some of the challenges he had with the motor mount. After installing the original motor and mount, he wanted to put in a false Clerget 9B rotary engine to cover up that big hole in the cowling. He found some suitable parts on **Thingiverse.com** (Jaime 3D prints his own parts when he needs something special), redesigned the original motor mount, and detailed of the Clerget. The airplane looks great with it's new face.

He also spent some time re-rigging the wings. He discovered that flying and landing wires really do have a purpose on a multiwing airplane. The original rigging was elastic string and was just for show. Jaime saw some photos of the airplane during a flyby and noticing how much the flying surfaces deflect. He replaced the rigging with functional wires using braided fishing line and he says it's *much* more stable now.



Eric Puchalski (hey, that's me!) decided to take up the gauntlet that Mike Greenshields threw down in his *Commander's View* column (**Page 3**) and showed a framed up **RAF B.E.2e** that he will be working on for Warbirds & Classics 2023.

Eric acquired the frame in its current state. The framework is basically complete, with a couple caveats: First, it's been sitting in the rafters in Eric's garage for a number of years and was in less-than-ideal storage for a long time before that. The wood is still in pretty good shape but a few parts have fallen off and been lost and everything will have to be reglued.

The model is built from a set of Roy Scott plans from around 1977 and it's been on Eric's "short list" almost since then.

The top wing is 80" and will be powered by something in the .60 to .90 4S range. All up weight should be in the 8 to 9 lb range.



### Inaugural Builder's Wing of Warbirds & Classics

At the July Squadron meeting, Commander Mike Greenshields floated the idea of some kind of special recognition for pilots who bring handmade models to Warbirds & Classics. That idea has been fleshed out a bit and will be discussed in more detail at the August meeting. We're calling it the **2023 Builder's Wing of Warbirds & Classics** and it's open to anyone who builds a scale model airplane. The purpose here is to get back to the roots of what the Scale Squadron was, and still is: the *building* of scale model airplanes.

Here are the qualifications:

1. It needs to NOT be finished yet. So, an airplane that was NOT finished before the last event but is flying before the 2023 event.
2. It needs to be built from a kit, plans, or scratch.
3. You don't need to have started it, but YOU need to have done the majority of the building and finishing of the plane
4. ARFs or BARFs do not qualify. This needs to be a kit or scratch model. BTW, ARFs that are really not ARFs, like Composite ARF, are just fine. Why? If you've ever built a CARF kit, you will agree that a wood airframe would be easier to build and finish.
5. No Foamies (all foam airframes). Foamies have been part of the hobby for decades but they are not in the spirit of this effort.
6. Buying someone else's built airplane is great, but it does not count here.
7. **The BIG ONE:** We are hoping that you will commit. Put your name down on the official signup sheet (starting at the October meeting) and then bring in your model every month. Share your plane, share your progress, get your fellow club members to help you if you run into a challenge.

Registration for the Builder's Wing will open in October. So dust off a couple of those old projects and get ready to show your stuff.

**See you at Warbirds & Classics 2023!**

*For more information, contact Mike Greenshields.*

# MONTHLY MEETING NIGHT

**Monday**  
**August 8, 2022**  
**7:00pm**

## The August 2022 Meeting is On!

We'll have a number of Show & Tell items and Mike will be talking about the upcoming Builder's Wing at Warbirds & Classics. Be ready to check out what other members are doing and share your own projects.

Keep in mind that visitors are always welcome so don't be shy about bringing someone. And remember that anyone with *anything* for **Show & Tell** will receive a raffle ticket for special prizes to be raffled off at the Squadron Annual Banquet in December.

Meeting location is the **Green Valley Adult Clubhouse**. The address is:

**17250 Los Jardines West**  
**Fountain Valley, CA 92708**

### Directions from the South:

- From I-405 North, exit at Euclid
- Turn **Left** onto **Euclid** at the offramp
- Turn **Left** onto **Slater**
- Go **past Los Jardines East**
- Turn **Right** at the light onto **Los Jardines West**

The Clubhouse is on the right about a half block past the school on the left.

### Directions from the North:

- From I-405 South, exit at **Brookhurst North**
- Merge onto Brookhurst and turn **Right** onto **Slater**
- Turn **Left** onto **Los Jardines West**

The Clubhouse is on the right about a half block past the school on the left.

# UPCOMING EVENTS

## Special Note Regarding Events

A list of upcoming scale events that are easily reachable from Southern California is included here. We encourage everyone to participate in as many of these events as possible in order to show support for clubs that have gone through the same difficulties that the Scale Squadron has experienced recently. Remember that when you attend any of these events, ***you are an ambassador of the Scale Squadron.*** Be sure to mention your affiliation with the Scale Squadron and represent us well! (Also, bring back lots of photos and get them off to **Eric Puchalski** so they can be included in the next newsletter.)

Date	Host & Location	Event & Summary
Oct 19-23	<b>Arizona Model Aviators</b> Superstition Airpark, Mesa CA	<b>2022 US Scale Masters Association Championships</b> Details on this event are a little sparse right now but there should be more information as the event gets closer.
Oct 21-22	<b>Victor Valley R/C Flyers</b> Hesperia, CA	<b>Warbirds Over the High Desert</b> Scale warbirds open to all. \$50 entry fee includes lunch. 500ft. Runway with electricity for chargers.
TBD but Probably Nov 2022	<b>Hemet Model Masters</b> Santa Maria, CA	<b>Scale Masters Clinic</b> Beginners' workshop hosted by US Scale Masters. Bring your own model & learn skills required to be confident & competitive. \$9 landing fee. Includes lunch. Class starts at 8:00am & covers all aspects of model selection, documentation, presentation, briefing judges, flying, etc.



Ladies and gentlemen, this is your captain speaking. If you look out the right side of the aircraft you will notice Flight 195 challenging us to a race. I have turned the fasten your seat belt sign back on because for the next 20 minutes or so, you'll be glad you're wearing it.

## Errors & Omissions:

If you note any errors in any information in this list or the flyers on the following pages, please contact **Eric Puchalski** or any of the members of the Scale Squadron Board of Directors. If your club is hosting a scale-themed event that's not on this list, contact Eric to get the event added to the list. If you have flyers, an informational website, or online registration page we would be happy to include that in this section as well.

# ARIZONA MODEL AVIATORS

PROUDLY PRESENTS

## U.S. SCALE MASTERS ASSOCIATION

41st

# National Championships

Model Aviation's Most Prestigious Annual Event



October 19 - 23

**Spectators  
Welcome!**

LTV A-7 Corsair by Chris Wolfe

**Mesa  
Arizona**



At Superstition Airpark Meridian rd. & Levee dr.

# R/C Scale Contest

Pilot's Compete for Prizes and National Recognition

Tim Dickey - [tdickey2@icloud.com](mailto:tdickey2@icloud.com) | Paul Goldsmith - [pt19nut@aol.com](mailto:pt19nut@aol.com)  
480-540-7553 602-323-7753

[www.uscalemasters.org](http://www.uscalemasters.org)

[www.azmodelaviators.com](http://www.azmodelaviators.com)

# Warbirds over the High Desert!



*\$50 Entry / Free for spectators*

**VICTOR VALLEY  
RC**

6963 Arrowhead Lake Rd,  
Hesperia, CA 92345

**VVRCF.ORG**

**FREE LUNCH WITH ENTRY**

**OCTOBER 21ST-22ND, 2022**

**8:00 AM - 6:00 PM**

**500FT. RUNWAY & ELECTRICITY**

**PREREGISTRATION CONTACT:**

Brian Hueffmeier: 909.229.8943

bhueff@gmail.com

We will prepare you for your first scale contest



Open to all a/c types\*\* and power source

# SCALE OPEN

# SCALE MASTERS CLINIC

HEMET, CA

PLACEMENT ★ PRECISION ★ REALISM

AUG 6, 2022

## IMPROVE SKILLS & CONFIDENCE!

Practice Flying In Front of Judges

Bring your favorite scale model and we will teach you additional skills to be confident & competitive



### What is Static Judging?

# Beginners Workshop

will focus on the entry-level class

Craftsmanship judging available for improving your scores

Landing Fee: 0  
Class Starts at 0800 | Lunch available at 1100

- Most Often Asked Questions & Misconceptions
- Selecting Best Model Based on Skills and Class Entered
- Preparing Documentation for Model of YOUR Choice
- Learn to Brief Flight Judges & Selection of Flight Maneuvers
- Understanding Relationship w/your Caller
- Score Sheets / Judging Your Model / Contest Flying Basics
- Q&A Session w/instructors, judges, coaches

Learn About the Different Classes:

- EXPERT
  - TEAM
  - ADVANCED\*
  - PRO/AM PRO\*
  - PRO/AM SPORTSMAN\* (\*ARFs allowed)
- (\*\*No 3D flying)

AMA Required to fly | Turbines: waiver required

Clinic Run By  
**U.S. SCALE MASTERS**  
[www.uscalemasters.org](http://www.uscalemasters.org)

**C.D./ Contact: Curtis Kitteringham**  
[cak11@cox.net](mailto:cak11@cox.net)  
(760) 807-5519

Hosted by  
**HEMET MODEL MASTERS**  
[www.hemetmodelmasters.net](http://www.hemetmodelmasters.net)

## Advancing & Promoting the Hobby of Remotely Controlled Scale Miniature Aircraft

Many people from all walks of life find it fascinating to produce a miniature working replica of a full-size object, be it a doll house, sailing ship, or operating steam locomotive. In our case it is our passion for flying machines that motivates Scale Squadron members.

Today as scale modelers we pursue nearly every possible aviation subject with the confidence that not only will our project be successful, but that it may well outperform that of its full-scale counterpart.

Squadron members delight in the pursuit of authenticity for scale projects. This requires research and documentation of specific aircraft and their variants.

Many of the flying replicas thus created are of Museum Quality and our members take to the skies with these flying miniatures regularly and successfully.

On the other hand, not everyone wants to make a scale masterpiece. That's OK, too! Whatever pleases you is what counts. Whether you are kitbashing, volunteering at charity aviation events, or making molds from scratch for Scale Masters or AMA National Championship competition scale aircraft, Scale Squadron is a club that embraces all facets of scale aviation R/C modeling and the related community.

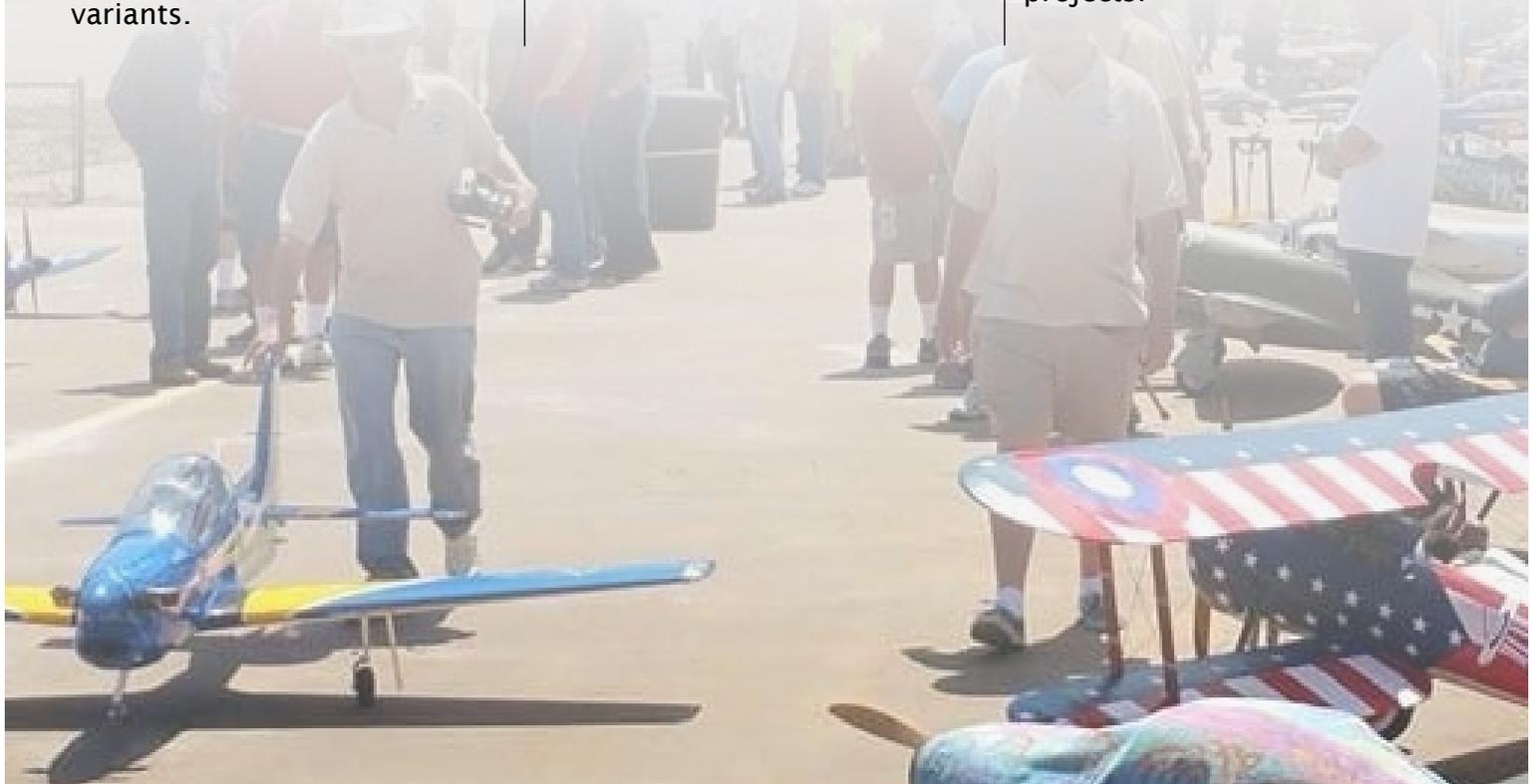
Scale Squadron Club Meetings are held on the

**second Monday of each month at:**

Green Valley Adult Clubhouse  
17215 Los Jardines West  
Fountain Valley, CA.

Meetings start at **7:00PM** and last about 2 hours.

Our meetings throughout the year include the usual club business as well as Member Show & Tell, Modeling How-Tos, Aviation and Industry presentations, and good ol' time social gathering to help enlighten and encourage our membership to push the boundaries in the art of Miniature Aircraft Replication. Visitors are always welcome. All members and visitors alike are encouraged to bring their latest scale models and projects!



# JOIN US!

## Membership Requirements

Membership in the Scale Squadron is open to all Academy of Model Aeronautics (AMA) members who are interested in safe formal and informal flying, including the research, building, and flying of Scale R/C Miniature Aircraft.

Membership Annual Dues are \$30.00 covering January 1 through December 31. Membership begins after verification of your current AMA membership card, your FAA Small UAS Certificate of Registration, and receipt of Scale Squadron membership dues.

The Scale Squadron Board reserves the right to deny or delay new membership approval.

## Membership Benefits

Membership in the Scale Squadron includes:

- ◆ A subscription to the *Scale Dimension* monthly online newsletter.
- ◆ Squadron membership card and name tag.
- ◆ Advance notice of scale aircraft events.
- ◆ Annual Holiday Banquet for members and one guest.

## Membership Meetings

Meetings are the second Monday of each month at 7:00pm. The December meeting includes the Annual Holiday Banquet and raffle drawings for anyone who presented a topic at any of the monthly meetings.

See the *Who We Are* section of this issue for details on the meeting location.

## How to Join

If all this sounds like something you would like to be a part of, you can join us in a couple ways:

1. See the last page of this issue for a membership application. Fill out the form and submit it along with the required supporting documents.
2. Use the [Online Form](#) on the Squadron's website to provide basic information and pay the membership dues. A copy of the online form will be sent to you via email. Print this out and submit it with the required supporting documents.

## How to Submit Your Application

All membership application submissions must include:

- ◆ A hard copy of the membership application form
- ◆ If the membership dues were not paid online then include a check for \$30.00 made payable to "Scale Squadron." Dues are not prorated if you join after January 1.
- ◆ A photocopy of your AMA membership card
- ◆ A photocopy of your FAA Small UAS Certificate of Registration

Mail these to:

**Scale Squadron Membership**  
PO Box 8074  
Fountain Valley, CA 92728

You will receive your membership card and instructions for how to obtain your key to the OCMA field by return mail in about a week.

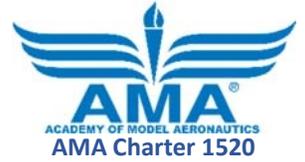


# SCALE SQUADRON OF SOUTHERN CALIFORNIA

THE SCALE SQUADRON  
OF  
SOUTHERN CALIFORNIA



## MEMBERSHIP APPLICATION



Membership in the Scale Squadron is open to all AMA members who are interested in safe, formal, and informal flying, including the research, building and flying of Scale R/C Miniature Aircraft. Membership Annual Dues are \$30.00 covering January 1 through December 31. Membership begins after verification of your current Academy of Model Aeronautics (AMA) Membership Card and receipt of Scale Squadron membership dues. Membership in the Scale Squadron includes a monthly newsletter and Squadron name tag. Meetings are the second Monday of each month at 7:00pm.

NEW  RENEWAL  Recommended by \_\_\_\_\_ DATE \_\_\_\_\_  
Name \_\_\_\_\_ Spouse \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_  
State \_\_\_\_\_ Zip Code \_\_\_\_\_ -- \_\_\_\_\_ Email \_\_\_\_\_ Birthday \_\_\_\_\_  
Home Phone \_\_\_\_\_ Work \_\_\_\_\_ Ext \_\_\_\_\_ Mobile \_\_\_\_\_  
AMA# \_\_\_\_\_ FAA \_\_\_\_\_ USSMA \_\_\_\_\_ FCC/Ham \_\_\_\_\_ EAA \_\_\_\_\_

### MODELING INFORMATION

Years in R/C \_\_\_\_\_ Modeling Level: New  Intermediate  Expert  Need Help

Interest Area: WW1  WWII  Golden Age  Civilian  Vintage  Jets

Private or Commercial Pilots License & Type Rating \_\_\_\_\_

Are you interested in Scale Competition? Yes  No  Would Require Assistance

How did you hear about the Scale Squadron? \_\_\_\_\_

### GENERAL INFORMATION

Meeting Preferences. Check all areas that you would like to see at the monthly meetings

How To  Videos  Guest Speakers  Scale Techniques  Scale Contest Prep

Your Ideas \_\_\_\_\_

Would you be willing to assist at Scale Squadron Events? Yes  No  Maybe with Help

Registration  Gate  Flight Line  Judging  Scoring  Cooking

Comments \_\_\_\_\_

NOTICE: This information is only for the Scale Squadron Data Base and will not be shared or sold to any outside agencies. Your information may be used in a Scale Squadron Membership Guide available only to paid members.