THE SCALE SOUADRON
OF
SOUTHERN CALIFORNIA

Founders of the
US Scale Masters Championships

# SCALE DIMENSION

Official Newsletter of the Scale Squadron of Southern California



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





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- Joe Trama's recently completed Pitts S-2B Special on it's first flig

**Special** on it's first flight, doing what S-2B's do.

SCALE DIMENSION

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## **COMMANDER'S VIEW**



Mike Greenshields Commander

#### **Happy New Year!**

Hello Fellow Scale Modeling enthusiasts and welcome to a brand new year. There's so much fun to be had, so many great modeling and flying opportunities. I'm anxious to get started.

Before we do, just remember we came off a year that was tough in many ways and yet your participation and good spirits made the Squadron end up having a fun and rewarding year. THANK YOU.

#### So, Getting Started...

We're working on a presentation schedule for each meeting in 2024. To get us started we're hoping we to have **Larry Wolfe** demonstrate some exercises in real rib stitching. While not necessary in every situation, Larry will be showing us how to stitch a wing like he's working on with his current WWI project which has an undercambered airfoil. Stitching solves the entire "covering sticking to the ribs" challenge while providing a true-scale element.

#### **New Management**

Just to review, the Squadron Board stays the same except now we have Joe Trama on the board replacing Gordy Truax. Gordy has that long history and experience we're going to miss, but Joe brings large scale modeling experience to the Board. We're looking forward to Joe and his insights.

#### Warbirds & Classics

Warbirds & Classics 2024 is sanctioned and we're already working on the details! Thank you **Tim Cardin** and **Randy Wilbur** for JUMPING on this. It's the last weekend in June (**June 28-30, 2024**) and it's already on the calendar. Next up is **Eric Puchalski** working with his artist friend to make a new logo and flier so we can get some momentum going.

#### **Builders Wing**

Have you committed to a project? Making Progress? My Partenavia P-68 Victor is getting rounder by the day! Let's see those new projects and hopefully by June you'll be showing off with a new model.

#### **Squadron Flying Day**

Are you flying? Practicing? Getting stick time? You should be! Let's go flying at least once a month on the **Squadron Flying Day**. Just reserve it now. The Sunday after each Squadron meeting. Even if it's an RTF, ARF, Foamy, trainer, etc.—get *something* flying so you can stay salty while finishing your next masterpiece.

#### **OCMA Renewal**

Speaking of OCMA, I hope you renewed. Be sure to get to one of the safety meetings so you get your key and badge and be ready to go! Safety meetings start at 9:00am on Sunday, January 7 or the following Saturday, January 13. (See <a href="https://www.flyocma.com">www.flyocma.com</a> for details.)

#### **Back to Competition**

New planes, new members, renewed enthusiasm—now is the time: Reserve November 2, 2024. We are having a Scale Competition related event. Maybe a one-day qualifier, maybe an "uncontest" scale competition, practice, and training event? I'm not sure what we can pull off, but what I am sure of is that we have an approval for a second event at OCMA this year and we're going to put that to good use. I'm darned excited about it and I hope you are too.

It's time to consider other events (like so many of us used to do regularly). From our various friends like the One Eighth Air Force in

#### **Commander's View**

AZ to the local clubs PVMAC, Hemet, Valley Flyers (Sepulveda), Victor Valley, Palomar RC Flyers, and so many more all have Scale events of some sort or another. Let's get more involved. Keep April 19-20 open for the PVMAC "Wings Over Chino" scale fun fly.

#### **Get Involved**

If you don't do anything else, come on down to the January meeting, get to know your fellow Squadron members, bring a project or take a look at the projects shown, have a cup of coffee and get a handle on, and contribute to, the Squadron's intentions for 2024

Welcome to the new year. See you at the flying field.

Mike Greenshields, Commander Commander@ScaleSquadron.com



#### **Safety Notes**

#### by Dave Kadonoff

#### **All Quiet on the Black Star Front!**

We have successfully closed out 2023 and look forward to a safe and fun 2024. I am very happy about the way things are going. People are having a great time and we continue to see a wide variety of aircraft The Heli area is busier than ever and we're seeing more and more VTOL models. New members are joining and flying, and I don't recall there being any serious safety incidents at the field this past year. (But I could be wrong.)

We recently had our runway resurfaced—twice (although that wasn't the plan). Unlike this time in 2023, the weather has been very good to us.

Please continue the great safety record by being vigilant about your

aircraft, and what other aircraft are doing at the field. Don't ever turn your back to aircraft that are in the air. Call out your intentions and listen carefully for the callouts of other pilots.

Stay alert and stay healthy!

Dave Kadonoff, OCMA Safety Officer kadonoffd@yahoo.com





- Dad, why are there always 2 pilots?
- One has to prevent the other from doing stupid things.
- Which one is doing the stupid things?

## **LEADING EDGE**

#### Happy New Year, everyone!

It seems like the older I get, the more often New Year's Day comes around. When I was a kid, a year was a long time. These days it seems like a week after we get the Christmas lights down it's time to put them up again. I guess that's what they mean by "time flies when you're having fun."

Well, one thing's for sure: this year there's going to be plenty of fun to go around and I hope everyone can be a part of it.

#### **Upcoming Scale Events**

One of the best parts about living in SoCal is that we can fly pretty much year-round. In assembling the list of upcoming events, we scale folks have four scale events coming up—and that's only through the middle of February! I encourage everyone to take a look at the *Upcoming Events* section on **Page 24** and pick one or two where you can represent the Scale Squadron. Heck, maybe we can even carpool. (And don't forget to bring back pictures!)

#### **Squadron Field Trips**

As I mentioned last month, I've been working on some itineraries for some field trips over the next few months. Here's a starter list:

- Miniature Engineering Craftsmanship Museum in Carlsbad is only open Thursday through Saturday.
- ◆ Flabob Airport in Riverside. Third Saturday of every month is Display Day.
- ◆ Lyon Air Museum at Orange County Airport
- **◆ March Air Field Museum in Riverside**

I've been collecting information on all of these (and a few others) and I'll have a report for you at the meeting.

#### 2023 Squadron Christmas Party

If you were there, you'll know what a great time we had. If you missed it, I hope you can make it next year. In either case, you'll find some photos starting on **Page 7**.

#### **EAA Aviation Museum**

Last summer I had a chance to visit the EAA Aviation Museum at Oshkosh, WI. I hadn't been there in a number of years and I was *very* impressed with the expansions, improvements, and size of the collection. If you haven't seen it in person, or you haven't been for a few years, you



#### Eric Puchalski Newsletter Editor

should make sure to add it to your itinerary if you're ever in the area. Oh, and plan on several hours because there's way more to see than it looks like from the outside

#### **Documentation: Aeronca 7AC Champion**

The subject I chose do provide some documentation on this month has a lot going for it. The Aeronca 7AC Champion was designed and built as a direct competitor to the Piper J-3 Cub. And from all appearances, Aeronca built a winner. The airframe was in production from 1945 through 2015 (with a couple gaps where manufacturers went out of business and new ones picked up the production line). In that time, over 8,000 airplanes were built and thousands of them are still in service world-wide. It's primarily a civilian aircraft but the USAAC, U.S. Navy, and militaries around the world put them to good use in liaison roles and as primary trainers.

All that means that it's a terrific subject for scale modelers since there are so many variants, color schemes, applications, mods, upgrades, etc. to choose from.

It's worth a look starting on Page 20.

I hope you had a terrific holiday season and a Happy New Year!





## MONTHLY MEETING NIGHT

## Monday January 8, 2024 7:00pm

# The January 2024 Meeting is On!

The first Squadron meeting of 2024 is good to go! We'll be covering a lot of territory this month. We have an updated Board, a date for Warbirds & Classics 2024, and a special presentation by our own AMA Hall of Famer, Larry Wolfe who's going to show us all how to install rib stitching old school style. You won't want to miss this one!

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.

## **SQUADRON HOLIDAY PARTY 2023**

#### By Eric Puchalski

In keeping with Squadron tradition, the December 2023 Squadron meeting was set aside for the annual **Scale Squadron Holiday Party**. This year, 30+

Squadron members and their guests spent an evening hanging out, talking to friends old and new, meeting spouses and significant others, enjoying some *great* BBQ from **Stonefire Grill**, and of course the annual **Show & Tell Raffle**.

Joni Whitsitt and Randy Wilbur organized most of the evening, including, setup, decorations, cleanup, and take down. Cyndy Wolfe was also indispensable keeping things moving along smoothly. The dinner menu

included something for everyone: brisket, chicken, ribs, and all the usual sides, bread, and salads. When it was all over, there were plenty of leftovers for anyone who wanted to take some home.

Gordy Truax and Larry Wolfe demonstrated that they "still got it" when it comes to setting up a very nice bar. They included the typical soft drink options as well as a full range of adult beverages. Susan Swope provided some of her world-famous eggnog (spiked, of course). Needless to say, the evening was still young when that had been finished off. There's nothing like a very complete (and open) bar to help ring out the old and ring in the new!

Commander Mike Greenshields made sure the raffle prize table was full of great stuff for the guys. Prizes included tools, modeling supplies, and for the second year in a row, some beer. (Could this be the start of a new Squadron tradition?)

As always, the ladies in attendance weren't ignored (as if they *could* be). Each of the ladies received a ticket for their own separate raffle that included items that didn't have so much to do with model airplanes. The baskets were themed with prizes that were a little more interesting to the ladies.

**01:** Over 30 Squadron members and their guests were on hand to enjoy Squadron hospitality and a terrific evening with friends.

**02:** Cyndy Wolfe & Joni Whitsitt getting ready to serve up some Stonefire Grill deliciousness.

**03:** Bartenders **Gordy Truax** & **Larry Wolfe** pulled out all the stops (literally) to make sure everyone had a wide selection of adult and soft beverages to choose from.

**04:** Commander Mike Greenshields outdid himself in obtaining prizes for the Show & Tell raffle. Mike & his wife, **Lisa**, also went to great lengths to make sure there was plenty to choose from in the Ladies' Raffle.









#### **Squadron Holiday Party 2023**

A great big *thank you* is in order to **Lisa and Mike Greenshields** for making the Ladies' Baskets this year. A lot of thought and care went into these and they were all appreciated by the raffle winners.

In Commander Mike Greenshields address to the assembly he remembered some good times, presented a recap of Squadron activities for the past year, and talked about some ideas and hopes for the coming year.

There was also a nice slide show running in the background that showed photos of people, airplanes, and events from throughout 2023. This was accompanied by a peppy Christmas music soundtrack to make sure everyone stayed in the mood.

All in all, it was a terrific evening and everyone had a great time. As always, Squadron members weren't shy about chipping in to help with setup and take down. Tables, chairs, and decorations appeared and disappeared as if by magic. With all those moving parts, it was nice to see it come off flawlessly.

#### Happy Holidays, Everyone!





















**05:** Commander Mike Greenshields kicked off the festivities with his with reflections on the past year & plans for the year ahead.

**06:** The evening's organizers, **Joni Whitsitt** & **Randy Wilbur** enjoying a moment of quiet time.

**07:** The traditional Squadron Christmas Cake.

**08:** A high point of the evening came when Mike recognized **Gordy Truax** for his *decades* of service to the Squadron. Gordy was one of the original founding members in 1977 and he served in one capacity or another through 2023. Mike presented him with a plaque and a new name tag indicating his new status as a **Lifetime Member** of the Squadron.

**09:** The food line was expertly staffed and there was plenty for seconds.

**10:** Mike Greenshields was everywhere—literally!



## A DAY AT THE FIELD

On a cold, rainy day, **Jason Brennan** brought out his **Aero L-39 Albatros** & put it through its paces. Jason has had the model for about a year & he says it's an easy flyer with no bad habits. The model is from Freewing, has a 42" wingspan, and weighs in at just under 5 lb. Flights are about four minutes with an 80 mm fan. Jason flies the model just as it came out of the box with no upgrades.







One of Harry Middleton's favorite flyers is his **Curtiss P-40 Warhawk**. This is a Top Flite ARF that he's been flying for 5+ years. The 86" wingspan model weighs about 24 lb. ready to fly. Harry invested in a few upgrades including Sierra Giant Scale pneumatic retracts and a Pappy Boyington pilot figure. He has 32 flights on it and says landing is a challenge but "it's a keeper!"







#### A Day at the Field

Joe Trama brought out his Pitts S-2B Special for its first flight. Joe has had the model for just over a year and has been taking his time finishing the assembly. The Hangar 9 ARF has a 72" wingspan and is powered by a DLE-60 Twin. Joe had a little help from Brian Young to make sure the first flight went OK. There were a couple tense moments during takeoff until the trims were dialed in.







Khoi Tran put a few more flights on his Supermarine Spitfire that he built from a Pica kit. Khoi has been flying the model for 5+ years and it's one of his favorites. Power comes from a DLE-55 with a rear exhaust. He says it's fun to fly but the narrow landing gear makes ground handling challenging. He doesn't recommend it for someone with less than advanced skills.







#### A Day at the Field

Mike Greenshields has been flying his Bowers Fly Baby for over 12 years and still enjoys it a lot. It started as a VQ Models ARF and Mike says "it's been repaired a couple times." He also added the engine detail, a functioning bomb drop, and redesigned flying wires to allow access to the batteries. The model was designed for .46 2S glow but he converted to electric and is happy with 5-to 7-minute flights.







At the 2022 Squadron Christmas Party, Mike Greenshields took home a VQ Models Douglas SBD Dauntless that had been donated from Karl . Swope's collection. The model was designed for .46 2S glow but has been converted to electric. Mike finished the model and tried it out. The model has an impressive amount of detail as well as working speed brakes, flaps, and retracts.







## FIELD TRIP: EAA AVIATION MUSEUM

#### by Eric Puchalski

Early in 2023, my wife and I planned a trip to Appleton, Wisconsin to visit our three grandchildren (oh yeah, and our son and is wife, too). To save you the trouble of getting out your AAA Wisconsin road map, Appleton is about 30 miles from Oshkosh. If that doesn't ring any bells yet, here's the punch line: Oshkosh is home to EAA AirVenture and the EAA Aviation Museum. Our travel plans would have us in Appleton about 10 days before AirVenture 2023 but that didn't mean we couldn't visit the museum. My infinitely-patient (more or less) wife agreed that if we could squeeze in a few hours during our family visit, we could check out the museum. Fortunately, our grandkids are still pretty young and as things turned out we had a few hours to kill during nap times. So one day, off we headed for Oshkosh.

#### The Gift Shop

The museum sports a *very* snazzy gift shop, **The Barnstormer Boutique** (**Photo 3**). The place is *huge* and has everything any aviation fan could ever wish for. That's probably to be expected since the 2023 EAA AirVenture was happening the week after we were there. In 2022 AirVenture brought 650,000 pilots and spectators and more than 10,000 airplanes of all kinds to Wittman Regional Airport. Stocking up for an event like that takes a while and I'm sure the gift shop staff was kept hopping making sure were are plenty of items available.

#### The Museum

From the moment we entered the front doors and saw the formation of **Christian Eagles** suspended in the atrium we knew this was a special place (**Photo 2**).

I'd been to this museum a couple times in the past (most recently, about five years ago) and don't recall coming away very impressed. Oh, there were lots of interesting aircraft and displays but nothing extraordinary in the way of aviation museums and I never felt like I needed to go back. Well, it looks like that's all changed with some pretty amazing

**01:** If you haven't been to the EAA Museum in a while, you might not recognize the fancy new buildings and entrance.

**02:** When you walk in the front door and look straight up, this is what you'll see: four Christian Eagles dressed out in **Avemco Flying Team** colors.

**03:** The Barnstormer Boutique, with its own personal Pitts S2A flying by, is located just inside the main building entrance.

improvements over the past five years. First and foremost, the museum completed a new two-story, 30,000 square foot expansion that opened in 2022.

I love the way the space is organized. There are over 125 aircraft on display which could lead to a pretty crowded floor. There are a few separate galleries and in each, the aircraft are arranged around the perimeter of the space with a large open area in









the middle and an another open area behind the aircraft. So when you enter a gallery and stand in the middle, you can see all the aircraft in the gallery arranged around you. But you can also walk around behind, which provides another viewpoint. This arrangement practically eliminates the problem of having too many aircraft and not enough floor space where airplanes are jammed in so closely to each other that it's impossible to completely appreciate any single one.

But the pièce de résistance (pretty cool, the way I throw my mastery of the French language around, right?) is the second story of the building. This houses offices and displays on the perimeter but the center area was left open. This provides a mezzanine that allows you to walk around the entire collection and view it from above. There are also a number of aircraft suspended from the ceiling that hang roughly at eye level (Photo 4). The effect is amazing! Everywhere you turn there is what at first glance appears to be a crowd of aircraft. But you quickly notice that one or two of them stand out. If you shift a few feet to the left or right, something different becomes the center of attention. It's a little hard to describe the effect but it's pretty cool when you experience it.

#### **The Collection**

The collection focuses on Vintage, Golden Age, WWII, and of course, homebuilts and experimentals. You'll find a few replicas but the majority of the aircraft are originals. With the exception of two replicas (a Nieuport 17 and a Fokker DR.1, both built to 7:8 scale, Photo 6 & 7), there are no WWI aircraft and only a couple jets of any kind. (They do have an original 1918 Thomas-Morse S-4C Scout that might technically be considered WWI but since it was only used for training during the last few months of the war, I consider it more Golden Age.)

As with the gift shop, all of the airplanes and other displays were in perfect order. Everything was buffed out and dust-free in order to make the best possible impression on the thousands of visitors that were expected the next weekend. All of the exhibits were working and all display cases were clean and unscratched.

**04:** One view from the mezzanine. You can walk around the entire museum at this level and look down on all the exhibit areas. In addition, the area in front of you is filled with aircraft of all kinds suspended from the ceiling.

**05:** A map of the U.S. showing the location of EAA Chapters and patches issued by each chapter. Inset shows the patch issued by **EAA Chapter 1** (the founding chapter) which is based at our own **Flabob Airport** in Riverside, CA.

**06 & 07:** Representing pretty much all there is to see from the WWI era are a **Fokker DR.1** and **Nieuport 11.** Both are replicas built to 7:8 scale.









#### **Scale Models**

There are a number of scale models of all types and sizes scattered throughout the museum. Some of them look like R/C models but most appear to be either static display or maybe electric powered. As with most full-scale aviation museums, the scale models wouldn't be a good reason on their own to visit the museum. But the quality of the building and apparent fidelity to scale looks very good and they do a nice job of filling in empty spaces (**Photo 8 & 9**).

#### **Spirit of St. Louis**

The museum has an entire area dedicated to Charles Lindbergh and the *Spirit of St. Louis* (**Photo 10**). The centerpiece of the display is a full-size replica of the *Spirit*. This is surrounded by a great collection of Lindbergh memorabilia. It turns out the EAA has constructed two *Spirit of St. Louis* replica aircraft. The first was built in 1977 to commemorate the 50th anniversary of Lindbergh's flight from New York to Paris. Over the next decade, that aircraft accumulated more than 1,300 hours of flight time. In 1987, that replica was retired to the EAA museum and hasn't flown since.

The second replica was built to satisfy continuing requests for the EAA to show (and fly) the first replica, even after it had been retired. That led to the construction of the second replica that has been flying since 1991. When not on tour, the second *Spirit* replica is on display at EAA's Pioneer Airport.

#### **Rutan Collection**

The museum houses a huge collection of aircraft designed and produced by Burt Rutan and his Scaled Composites organization (**Photo 11**). Items range from the original prototype of his first *VariViggen* (1972) and *VariEze* (1975) to full-size replicas of the *White Knight* and *SpaceShipOne*. It's pretty amazing to see the number of aircraft and the directions Rutan's imagination took while designing this extensive series of airplanes. We're always hearing about Rutan's projects but seeing them all in one place like this is fascinating (and a little overwhelming).

**08:** One example of how scale models are used to represent full-scale aircraft that are not actually in the collection. Models mostly look like they are flyable and all & very well built and detailed.

**09:** There are several display cases throughout the museum showing plastic models of all types and scales. All are well-displayed and lighted.

**10:** The centerpiece of the **Lindbergh Exhibit** is a flyable (but not currently being flown) replica of **NYP** *The Spirit of St. Louis*. The *Spirit* is surrounded by a great display of Lindbergh memorabilia.

**11:** I didn't have a wide enough angle lens to capture the entire **Rutan Collection**. Aircraft in this area go back to Rutan's early days in the 1960s & 1970s.









#### **Golden Age Racers**

I'm a huge fan of Golden Age aviation of all kinds. The years between WWI and WWII saw an incredible advance in engineering, aeronautics, and everything associated with pretty much anything that flew. The really cool part is that most of this research and application of the research was not government-sponsored—it was primarily people working in their garages and shops, experimenting, improving, and doing things no one had thought to do before. In other words, it was pretty much a bunch of guys like us who loved aviation and thought they had a better idea for getting something into the air. The difference, of course, is that we don't actually climb into our models and risk life and limb to prove that we had a good idea.

The Golden Age was driven by air races and record-setting runs. Air racing in particular became a proving ground for new ideas. The museum's **Air Racing Gallery** displays an *outstanding* collection of classic air racers (**Photo 12**). I'm afraid I may have embarrassed my wife with my slack-jawed admiration of the **Church Midwing**, **Chester Jeep**, **Wittman Bonzo**, **Laird Super Solution**, the sleek and sexy **Bugatti Model 100** and lots more.

I could have spent an entire day in just that one gallery. (I probably will on my next visit.)

#### Conclusion

I could go on and on but I'm limited by space. The photos here cover only a fraction of what there is to see. The bad news is that we only had one day to spend at the EAA Aviation Museum. The good news is that now that our grandchildren have relocated to the area, we'll be heading to Oshkosh, uhh..., I mean *Appleton*, once or twice a year so I'll have plenty of opportunity to do more exploring.

I'll keep you posted.

- **12:** Several Golden Age racers suspended from the ceiling and arranged to look like they're rounding a pylon in a very close race. This shot was from the mezzanine that overlooks the main floor.
- **13:** Full-size replica of the 1931 Laird LC-DW300 Super Solution. The replica was built in 1974 by two groups who obtained the remains of the original Super Solution from the National Air & Space Museum where it had been stored since 1948. The group's initial goal was a full restoration, but it quickly became apparent that restoring the airplane would be impossible. So they decided to build a replica instead.
- **14:** The all-metal **Crosby CR-4** has a 16' wingspan and was designed to be powered by a 420 hp Ranger V-12 engine. The airplane first flew in 1938 & averaged 245 mph in the Thompson race. It was was later unofficially clocked at 386 mph. As often happens, the airplane disappeared after that and was rediscovered 40 years later in a barn in North Carolina
- **15:** Construction on the **Bugatti Model 100** began in the loft of a furniture factory in Paris in 1938. In 1940 with German forces threatening, the airframe was hidden in the French countryside where it remained until 1970. It found its way to the Air Force Museum Foundation and ultimately to EAA where it was finally completed and put on display in 1997. It has never been flown.



















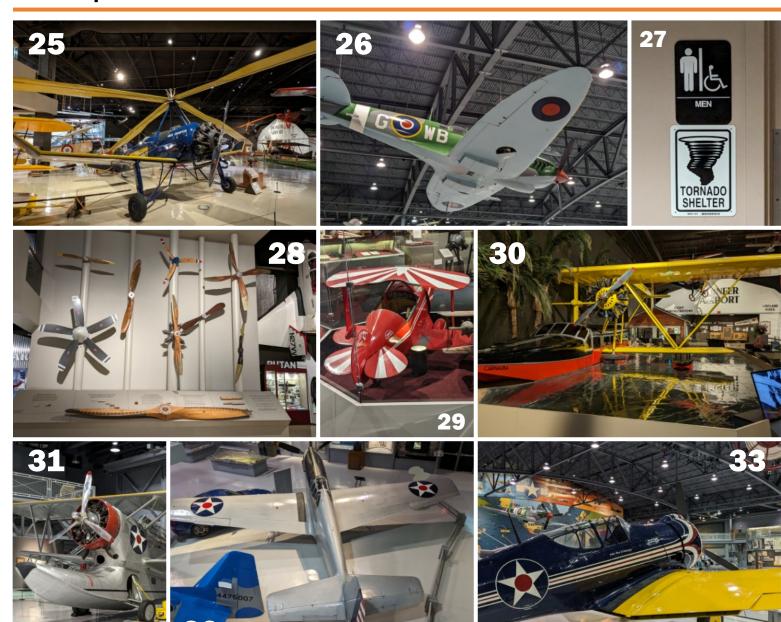








- **16:** The museum houses a few motor vehicles & goes out of its way to show them in interesting displays. This Jeep with a couple of lost GIs is a good example.
- **17:** One of the many display cases located throughout the museum. All are clean, well lighted & include helpful information about the artifacts.
- **18:** The museum's 1956 **Aerocar I** is one of only four remaining. It was restored and has been in the collection since 1991.
- **19:** The prototype for the Pitts Special is another one-of-a-kind airplane in the collection.
- **20:** Power plant lovers will find a small selection of engines that look ready to run. Like this 8-cylinder **Lycoming IO-720**, engines are mostly those used in civil aviation but there are a few military examples.
- **20:** No pioneer aircraft collection would be complete without a **Wright 1903 Flyer** replica & EAA is no exception. This full-size replica was built as a collaboration between EAA & students at the Blackhawk Technical Institute & took 10 years to complete. It is not a flying replica.
- **22-23:** This beautiful **Fairchild FC-2** saw regular airline service in 1927-29 and operated as a transport until 1939. It ended up in a shed for the next 30 years before it was rescued, restored, and put on display.
- **24:** Although not its primary focus, the museum does house a few WWII warbirds. This **Vought F4U-4 Corsair** is a great example.



**25:** This **Pitcairn PCA-2 Autogyro** nicknamed *Miss Champion* is one of only two remaining in the world. This one was built in 1929 and led a long & storied life before being put into storage and forgotten for 50 years. When rescued by the son of the original builder, it was restored & flown at Oshkosh in 1986. It was active until 2005 when it was put on permanent display at the museum.

**26:** Displayed in dramatic fashion this **Supermarine Spitfire Mk. IX** appears to be flying CAP for the main display floor.

**27:** Here's something you don't see very often near restrooms in SoCal.

**28:** Part of the museum's extensive collection of propellers that were used from the very beginning of powered flight through the modern day.

**29:** One of several pedal-cars located throughout the museum. This one looks like someone spent a lot of time making sure there was no mistaking what airplane the lucky owner was driving.

**30:** This beautiful **Sikorsky S-38** *Carnauba* mockup was built in 1998 & it represents an aircraft that was used by Johnson Wax in the 1930s on trips to Brazil to search for carnauba palms for the family's wax business. It was built for the EAA to be used as an educational display.

**31:** The museum's **Grumman J2F-6 Duck**, saw military duty during WWII aboard the USS Franklin (CV13). It then passed through several owners before being restored & put on display in the museum when it opened in 1983.

**32:** This **XP-51 Mustang** is unique. It was the first of 4 prototypes built & the only one remaining. Interestingly, during its 1975 restoration, workers found a lot of **AT-6 Texan** parts & a lot that were handmade. Not too surprising since the first prototype was delivered only 100 days after signing a contract with the USAAF.

**33:** Check out the paint scheme on this **P-64**. Only 6 were built in 1941 and this is the last of those in existence.

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## SOME RANDOM TIPS FROM R/C REPORT

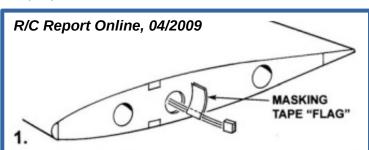
#### Collected by Eric Puchalski

I don't think it's any secret that I love to spend my "down time" (such as it is) prowling through old model airplane magazines and club newsletters. This has gotten easier over the past couple decades as more of this material is being put online—both current stuff and scanned versions of the older material.

The other day I was flipping through some copies of *R/C Report* and was reminded how I always started with the "Here's How" pages where Sean Curry, Ron Hayward, Walt Wilson, and others presented clever ideas for solving some nagging problems.

Knowing that there are tons of new modelers who weren't around when these magazines were being published and may not have had the advantage of seeing them first-hand, I thought I'd share some of my favorites.

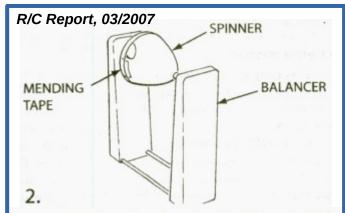
I hope you find some of this useful.



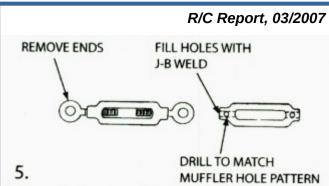
 From Mark Klein, of New Hyde Park, NY: Mark had a problem with the disconnected servo leads falling back into the wings and forcing him to fish them out at the field. A simple addition of a masking tape "flag" to the leads now prevents them from falling into the wing and the tape may be rolled to fit inside the fuselage when installing the wings and connecting the ailerons.

#### R/C Report, 06/2006

10. (No illustration) Dick Anthony, of Breese, IL, attaches self-adhesive sandpaper to old credit cards to make thin, flexible sanding pads to get into tight places. They can be cut to smaller shapes and sizes if needed, with different grits on each side. Tongue depressors can be used much the same way. Great Planes Easy-Touch Sandpaper works well for this. Just be sure to sand-off the card's raised numbers first.

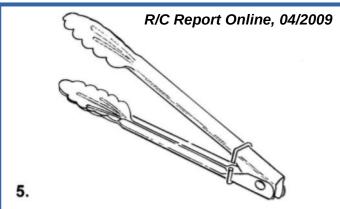


2. From Bobby Patterson, of Point Pleasant, WV: Sometimes metal spinners need to be balanced. Assemble the spinner and back plate using Scotch tape. Using a prop balancer (Top Flite Power Point Balancer shown) slide the balancing shaft through the spinner assembly just as though it was a prop. Make sure the balancing cones are tight front and rear. The spinner's heavy side will fall to the bottom. Mark the light side using a marker to show where to add weight. Then use a Dremel tool or a piece of sandpaper to sand the inside of the spinner cone a bit where weight will be added. Add some J-B Weld epoxy and check the balance again. Support the spinner so it won't turn while the epoxy cures. Then add or grind away the epoxy until the balance is perfect. J-B Weld epoxy is so thick it doesn't run like thinner epoxy. It works very well on metal, but may not hold firmly on a plastic spinner.

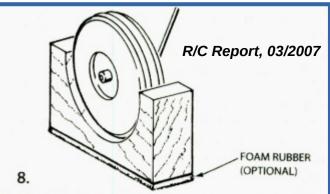


5. James E. Waugh, of West Ossipee, NH, has developed his own way of making muffler extensions for many .40-.60 size 2C engines. Using an aluminum turnbuckle from your favorite hardware store, remove the threaded ends and fill the holes with J-B Weld epoxy. Then drill new holes to match your muffler. If a longer extension is needed, J-B Weld two turnbuckles together before drilling. The use of gaskets of high-temp sealant is a matter of personal preference.

#### **Some Random Tips from R/C Report**

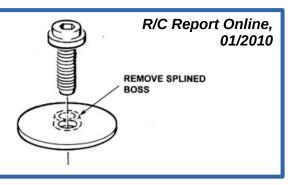


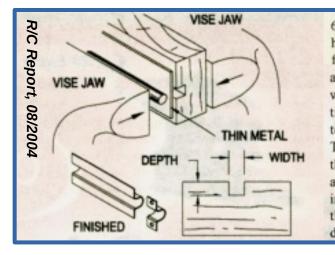
5. Peter Stapleton, of Prior Lake, MN, was repairing a giant scale Corsair and needed to clamp some sheeting in the center of the wing. He didn't have a clamp that would reach in far enough and couldn't find anything that would work at the local home improvement store. Looking through the kitchen drawers, he found his wife's cooking/salad tongs. They have a plastic ring that slides along to collapse them for storage. The tongs will reach almost a foot into the center of the wing. Just slide the ring until it's tight and it will hold a piece of wood in place. (Walt's note: If your tongs don't have a plastic ring, rubber bands will do the job. It may also be desirable to use a protective material between the tongs and wing surface.)



8. Alex Blodgett, of St. Charles, MO, had a problem with his plane rolling around in the back of the SUV when transporting it to the field. A pair of chocks can be easily made from scraps of 2x4 lumber as shown in the illustration. The radius can be cut to match the diameter of the tires. If the plane is to be hauled in a pickup truck with a bed liner or metal floor, 1/4" foam rubber can be glued to the bottom with CA to prevent sliding around. The chocks are very effective in keeping a plane from rolling in a vehicle or on a starting table. They are not sufficient, however, to restrain the plane when starting the engine. (Editor's Note: Ever since someone suggested it years ago, I've been using a pair of old sneakers. Just drop the main gear wheels into the shoes. One size fits all!)

1. Washers for Wing Hold-Downs: From Edwin Hawk, of Smithville, OH. There are two sizes of Futuba, or other brands, round servo wheels that can make ideal nylon washers. Carefully grind off the splined center boss, drill a 1/4" or other desired size hole, and you have a strong, light weight washer. That's better than leaving them laying in a drawer and never using them. Also, a small rubber o-ring on the bottom side will hold the bolt and washer in place so they are not lost.





6. Here's how Jerry Kinney, of Jackson, MN, makes his own formed hold-downs for landing gear wires, float gear, cabine strut wires, etc. He cuts a groove in a piece of hardwood with his table saw. The groove's width is equal to the music wire diameter plus two times the metal thickness. The groove's depth is equal to the music wire diameter plus one metal thickness. Then he positions a piece of aluminum, soft brass, or thin steel, and a piece of music wire over the groove and holds it in place with masking tape. He places this in a vise, tightens it, forcing the wire and metal into the groove. After forming, the hold-downs are cut to desired lengths and drilled for screws.



## DOCUMENTATION: AERONCA 7AC CHAMPION

The Aeronca Model 7 Champion, commonly known as the "Champ," or "Airknocker," is a single-engine light airplane with a high wing and is generally configured with fixed conventional landing gear and tandem seating for two occupants.

The Champ was designed for flight training and personal use—and was specifically developed to compete with the popular **Piper J-3 Cub**. It entered production in 1945, spawning one of the most popular, and longest-produced, light airplane models in the world.

In addition to the Champ's largevolume production by Aeronca Aircraft, it was revived in variations by the Champion Aircraft Company

in the 1950s and 1960s, and then again in further variants by Bellanca in the 1960s and 1970s, and by American Champion Aircraft in the early 2000s.

To take advantage of the new light-sport aircraft category created by the FAA, the Champion was returned to production in 2007 but was discontinued by mid-2019.

In total, more than 8,000 Champions were sold with about 7,200 of them being the 7AC model. Some of these Champ variants were acquired by the USAAF and the USAF. They were designated L-16 and were used as observation and liaison aircraft primarily as replacements for the Piper L-4 variant of the Piper Cub.

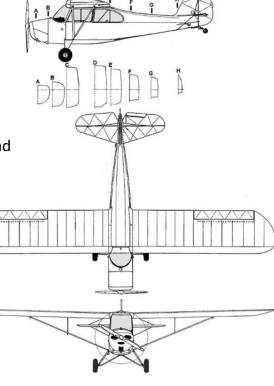
What's not to love about this airplane? It offers a rich variety of variants and color schemes. Although initially designed as a civilian aircraft, it led an active military career as well. And the best part is that with so many of them being built over such a long period of time, there are still thousands of them in service and being refurbished. That makes it easy to get documentation on all kinds of scale details. There is also a lot of information (historical and technical) available on the Web.

Flight characteristics are very like the Piper J-3. Both the 7AC and J-3 are light aircraft that are not designed for advanced aerobatics. Simple maneuvers like gentle turns, climbs, and descents are well within its capabilities but loops, rolls, or inverted flight are not recommended due to its structural constraints.

If you're ready to get started on a build, I was able to locate about 20 sets of plans for Champs ranging in size from 12" Peanut scale rubber-powered models through 1:3 scale 12 foot wingspan behemoths. There's bound to be something there that will fit your building board.

Let the Editor know if you'd like more details.







## **Documentation: Aeronca 7AC Champion**





Aeronca L-3C, named *Junior*, was flown by an unidentified USAAF unit in 1943. The shark mouth on the engine cowling is unusual for a liaison aircraft.













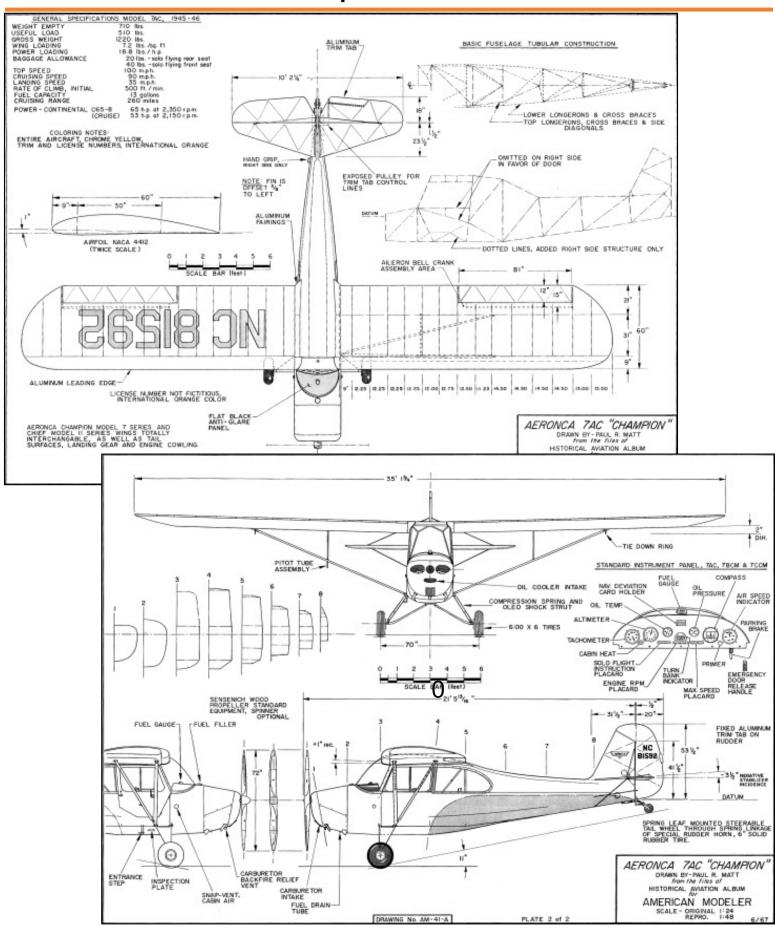








#### **Documentation: Aeronca 7AC Champion**



## **Documentation: Aeronca 7AC Champion**





























## **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		
Jan 7, Jan 13, Feb 3 2024	Orange County Modeler s Association	Mandatory Safety Meeting & Key Swap All OCMA members must a 2024 badge & attend one of the mandatory safety meetings in order to receive a key to the field. Your key from 2023 will not work after 02/01/2024. Meetings begin at 9:00am sharp and last about an hour. See website for more details: www.flyocma.com.		
Jan 21, 2024	Coachella Valley R/C Cl ub Thermal, CA	12th Annual Desert Warbirds Event open to all warbirds and Golden Age aircraft, including turbine jets with waiver. \$30 pilot fee (includes both days). Awards on Saturday, open flying on Sunday. Proceeds help benefit our wounded veterans. Grab your warbirds and join us!		
Jan 25-27, 2024	Sun Valley Fliers Cave Creek, AZ	Winter Warbirds 12 Warbirds of all eras in military schemes will be flown. WWI to modern jets, static & performance awards for all eras.		
Feb 3, 2024	Palomar RC Flyers Fallbrook, CA	Palomar RC Flyers Dawn Patrol & Golden Age Fly-In Dawn Patrol & Golden Age scale R/C airplanes. Dawn Patrol Definition: Any aircraft that ether flew or was designed between 1903-1920. Golden Age Definition: Any aircraft designed or flown between 1920 and 1939, BUT NO HEAVY METAL/Warbirds. Prizes awarded.		
Feb 15-17, 2024	Coachella Valley R/C Cl ub Thermal, CA	Coachella Jet Jam Help our Vets at the Coachella Jet Jam. Great Pilots drawing & raffle. Pilots fee \$75, includes lunch Fri & Sat until 12/01/2023, \$85 after that date. Free RV Camping, no hookups, no fires. Visit website for directions. Bring Jet raffle item for free t-shirt. Must have turbine waiver and all over weight permits. LTMA etc.		

#### **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 scalethemed 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.

Jet fighter pilot enjoying his vacation



# THE SUN VALLEY FLIERS

PHOENIX ARIZONA PRESENTS THE THE ANNUAL

SUN VALLEY FLIERS RC FLYING FIELD



This is the premier WINTER Warbird event in the West!!

Registration will open in November.
Pre-registered pilots will receive a Winter Warbirds
coffee mug at check-in!!

For more information, please contact the Event Directerr: John Gerhardt at winterwarbirds24@gmail.com

## Palomar R/C Flyers

**Presents** 

## Dawn Patrol & Golden Age Fly-In!!!!



Palomar R/C Flyers Dawn Patrol & Golden Age Fly-In !!!!!!!!!
Categories:

- 1.) Dawn Patrol: All full size aircraft upon which the entered model is based must have either flown in WWI or designs from 1903-1920 must be documented to have been designed prior to 1920!)
- 2.) Golden Age: All full size aircraft upon which the model is based must have been designed between 1920-1939! (No Heavy Metal or WWII models.)

Date: February 3, 2024

Time: 8:00 a.m. to 4:00 p.m.

Where: End of Pankey Road,

(Take I-15 to 76 East, to Panky)

\$20 Fly-in Fee

(Per Model)

(Includes Lunch & Two Pilot's Raffle Tickets)

Pilot's Raffle & Spectator's Raffle (w/TicketPurchase)

# 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!



#### **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* secion 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:

- See the last page of this issue for a membership application. Fill out the form and submit it along with the required supporting documents.
- 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 amail. 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



#### **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	5 1		DATE			
Name	1/61/1/6	Spouse				
Address	min	City				
State Zip Code	_ Email	Birthday				
Home PhoneWork _		Ext Mobile				
AMA#FAAU	SSMA	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.