

SCALE DIMENSIONS

THE OFFICIAL NEWSLETTER OF THE SCALE SQUADRON OF SOUTHERN CALIFORNIA

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SCALESQUADRON.COM

August 2017



Commander's Corner

By: Mike Greenshields

Where has the time gone.... It's August already!

It's been a couple of busy months for me. My switch in both jobs and industry has made for a very time consuming learning curve. I love working at the new job at Crown Ace Hardware, but wow has it taken a lot of time to adjust!

Still... that's no reason NOT to be out having fun. Just a couple of weeks ago the wife and I visited the Palm Springs Air Museum (this is why we know she's a keeper.. she puts up with all my airplane stuff AND suggested we visit the museum!). Got a chance to sit in the pilot seat of their very impressive F7F Tigercat and view their brand new Vietnam era hangar full of spectacular jets like the F100 and Phantom just to name a couple. If you haven't had a chance to visit lately, you should. It's truly impressive.

They also have a F4U Corsair on display. Took a ton of detail photos of the marking so I can finish out my 50cc Corsair (yes, this is the Corsair my cohort at Hobby People, Craig Kaplan, started working on some time ago). It needs paint, markings and higher quality retracts and it's ready to fly. We're getting close on this beauty.

We're still working on a place/time to go fly Free Flight! Yep, we may not have an indoor facility yet (maybe we'll just do it early on a Sat or Sun at OCMA?) but we are determined to have our annual free flight contest and cookout. Stay tuned for details!

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Event Calendar

National Model Aviaion Day August 13, 2017 OCMA Field, Silverado, CA

Victor Valley Warbird Pylon Race Sept 9, 2017 Victorville, VA

Best In The West Jet Rally Oct 11-15, 2017 Buttonwillow, CA

Corona R/C Club Veterans Day Celebration November 11, 2017 Silverado, CA (OCMA Field)



Commander's Corner Cont'd

Speaking of fun, you MUST come out to OCMA on August 13 (yes Sunday Aug 13, not Sat Aug 12) for Model Aviation Day. (more info on the flyer). This is an inter-club cooperative event designed to be FUN. As a group, we'll be showing off just

about every facet of the hobby to anyone who wants to come check it out. We'll be cooking up grub, donating to charity, and having a fun (hot, but fun) day. Obviously hosted by OCMA, it's a group effort between OCRCC, Harbor Soaring, and the Squadron.

A bit of news for me personally that I'm incredibly excited about: My father John and I have started a new family business (no, I'm not quitting my new day job!!!!). We have brought Magnum Engines back to the USA with full parts support and repair service. It's the start of our own hobby business. It's just in our blood and with the closing of Hobby People, we just felt it had to be done. Our business is online, starting on what used to be my old blog website re-dedicated to Magnum www.mikegoesflying.com There you'll find the Magnum 15, 25, and 52 TWO STROKE and the 52, 91, and also the 1.60twin FOUR STROKE engines.

We have a MOUNTAIN of parts in stock too!

OK, enough about me...That's about it for this month's installment. We'll see you at the meeting and at OCMA on Aug 13 for Model Aviation Day!

Happy Landings!

-Mike Greenshields

2017 Warbirds and Classics Sponsors

E-Flight

John Wayne Licensing

Wings West (they sponsored the pilot numbers! THANKS!) and several club members and guests including:

Mike Greenshields

Sam Wright

Gary Glasband, DDS Gentle Dentistry (562)425-5511

Scott Whyte (he may need some new planes, we think he donated most of his garage!)

Paul Timpano - San Gabriel Valley Flyers







211 West Katella Ave, Orange, CA (714)633-1247

THANK YOU to everyone who made this happen so pilots from all over the southwest could fly and have a great time!

The Spangenberg Aileron Linkage

--by David Andersen, www.mnbigbirds.com

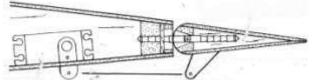


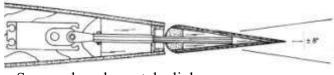


Chris Spangenberg introduced this novel aileron control linkage in his column in *High Flight* Magazine. It has the following advantages over the conventional pushrod linkage:

- --No exposed non-scale parts,
- --High mechanical advantage,
- -- Tight control, the only play is in the servo,
- --Play does not increase with use due to large wearing surfaces,
- --Smooth precise control,
- -- Easily removable ailerons,
- --Simple construction.

Its major disadvantage is control throw is limited by the thickness of the wing. Throw is typically no more than about $\pm 8^{\circ}$. It cannot be used in very thin wings or aircraft with small ailerons or extremely aerobatic aircraft. Also, the wing must be thick enough to contain the aileron servo and its horn. A minor disadvantage is that its neutral position and differential cannot be adjusted mechanically but this is generally not necessary with modern radios.





Conventional pushrod linkage

Spangenberg brass tube linkage

The Spangenberg linkage is most suitable for large warbirds and other large scale semiaerobatic aircraft where smooth, precise control and scale appearance is preferred to extreme maneuverability.

The system consists of two concentric brass tubes and a ball link. The smaller 3/16" brass tube is permanently epoxied to the aileron while the 7/32" brass tube is attached to the servo's control horn with the ball link. The shaft of the ball link is epoxied into the brass tube and secured with a 2-56 x 3/8" bolt and nut. The brass tubes slide within each other as the aileron moves. The large contact surface area provides a long life and very little play. No lubricant is needed. Do not substitute aluminum tubes—they are not strong enough.

Aileron hinging is conventional, typically Robart Hinge Points. Install a hinge close to the Spangenberg linkage to minimize bending of the aileron while under stress.

If Robart Hinge Sockets are used, the aileron is easily removable.

To see a demonstration of the Spangenberg system, go to www.mnbigbirds.com, click on Andersen Designs and click on Mitsubishi Babs flight video. Note the smooth, precise roll control. The slow roll in the video was done with less than 1/4th full deflection. Still smooth after hundreds of flights.





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Pilots must follow all rules and have a fire extinguisher in their pit area. see flyocma for details. NO turbines

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ABOUT THE SCALE SQUADRON

Scale Modeling is the accurate recreation of aircraft in aviation, from the early biplanes to the latest jets of the 21st century. Whether it's built from scratch, a kit or an ARF, scale modeling strives to recreate the airplane as historically accurate as possible. Paint schemes, rivets, windshield glass, and even pilots are faithfully painted and built to exacting specifications. The end result is a flying recreation of the original full size airplane.

Our members all have one common goal - to share their knowledge of aviation, aviation history, and scale

Our monthly meetings are open to everyone, and often feature "how to" seminars on building and flying model aircraft.

Each year the Scale Squadron hosts and participates in numerous events, with the overall goal of bringing together modeling enthusiasts from all over the world. Events our members historically and perpetually attend are:

> Top Gun U.S. Scale Masters Warbirds Over The Rockies Arizona Electric Festival Best In The West Jet Rally One Eighth Air Force Fly-in Battle of the Builders

The Scale Squadron also hosts their own annual event known as The Scale Squadron Warbirds and Classics. This year will be the 8th year running of the Squadron

The Scale Squadron dates back to the early ?O's. Harris Lee, Bert Baker and Bob Olson were the original founders of the Scale Squadron and Members of the Orange Coast RIC Club. Their interest in scale modeling brought them together regularly at Lee's home. The word soon got out and their numbers quickly grew to over 25.

Scale modeling became the hottest new interest within the R/C community. The first official scale modeling club was formed in 1973 with events held at Mile Square Park. Scale modeling was in it's infancy yet immensely popular as attested to by the large participation at each of their events.

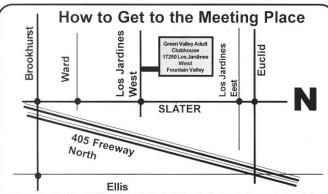
Harris Lee devised a plan for sanctioning a series of local qualifiers around the country and then having a fly-off to determine the national champion. Out of this idea the U.S. Scale Masters was started and is the premier scale competition in the country today. Pat Potaga, of Scale R/C. Modeler Magazine, helped to put this program on the map. His articles and front-page color photos helped fuel the fire of scale modeling.

The modeling world owes these visionaries a debt of gratitude. Thank you Bert Baker, Bob Olson, Jerry Ortega with special thanks to Harris Lee.

MONDAY August 14, 2017 7:00 PM

Show & Tell is for our members to show their scale aircraft project in any stage from plans, or framed up to a completed model. Scale ARFs or full bore scale models are welcome.

Visitors are always welcome.



From the South - 405 North, Exit Euclid, Turn Left at end of ramp, Left on Lite at Slater, Pass Los Jardines East, Turn Right at light on West Los Jardines. Go thru Stop sign with school on left. The Clubhouse will be 1/2 block on your right

From the North - 405 South, Exit Brookhurst North, Turn Right at ramp light to Slater, turn right, Pass Silky Sullivan's on your left, FV Police Station on your right, Pass Ward, Left on West Los Jardines at the light, the Go thru Stop sign with school on your left. Clubhouse will 1/2 block be on your right