

Directions to the Club Meeting Location

Where: South St. Paul Municipal Airport, a.k.a. Fleming Field, located on the southern extremity of South St. Paul, south of 1-494, west of Concord Street and East of Highway 52.

If coming from the western Twin Cities going east on 494:

- Exit at the 7th and 5th Avenue exit (Exit No.65)
- Turn right (South) on 7th Ave and go approximately .6 miles to a 4-way Stop sign. This is South Street W. To your left there will be a McDonald's; to your right front there will be a Walgreen's.
- Turn left (East) at the 4-way Stop onto
- South Street W and go approximately .6 miles. Along the way you will encounter three more Stop signs—the third Stop sign (Henry Avenue) will be a "T" intersection. At the "T" intersection on your left will be homes and on your right softball fields.
- Turn right (south) onto Henry Ave. and go approximately .2

- miles toward the Fleming Field airport terminal building.
- If coming from east Twin Cities on westbound 494:**
- Exit at the 7th and 5th Avenue exit (Exit No.65)
 - Turn left (South) on 7th Ave and go approximately .6 miles to a 4-way Stop sign. This is South Street W. To your left front there will be a small strip mall; to your right there will be an Amoco station.
 - Turn left (East) at the 4-way Stop onto
 - South Street W and go approximately .4 miles. Along the way you will encounter two more Stop signs—the third Stop sign (Henry Avenue) will be a "T" intersection. At the "T" intersection on your left will be homes and on your right softball fields.
 - Turn right (south) onto Henry Ave. and go approximately .2 miles toward the Fleming Field airport terminal building
- The terminal is on the right with

Twin City Aero Historian
Rick Schmierer
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Minneapolis, MN 55407

Return address requested

The Aero Historian is published monthly by the Twin City Aero Historians, Inc., a joint chapter of the American Aviation Historical Society and International Plastic Modelers Society/USA, for members and readers as part of their annual dues or fees.

The group is open to aviation enthusiasts from teenagers on up who are interested in aviation modeling, photography, collecting, art and writing. For more information contact Larry Donovan at 651-501-4755.

The Twin Cities Aero Historians (TCAH) meet the second Saturday of every month at 1:00pm.

See above for the new meeting locations and directions.

Mail Newsletter material and address changes to the treasurer.

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the Value range means that he needs to "add a little black" to his light colors, too. (I can hear the guys who worked to get that gull gray project just right cringing). But, not only should our fearless innovator reduce the Value range, he should reduce the Saturation as well (i.e., gray the colors). While the simplest logical approach may be to "add a little gray", a more effective way is to "add a little of the complementary color" (add some red to a green, or some orange/brown to a blue). As an example of what can be achieved by mixing complements, the aluminum skin of the P-38 in the image on Page 7 was painted by mixing a blue and an orange/brown earth tone, and lightening the result with white. Not one drop of a "gray" paint in the entire picture.

Now that I've talked about what causes this effect and how to reproduce it, I must admit that even *I'm* not going to apply this to every model that I make. But I am intrigued by this modeling scenario:

- Build three models of the same plane, each in a different scale;
- Use the same camouflage scheme on all three;
- Apply the aerial perspective effect to the two smaller scale models, heavier on the smallest model;
- Mount the three models together in a vignette, or perhaps a shadow box.

I would like to see if I could fool my depth perception with that arrangement. Hmmm...



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January 2016



Calendar Photo of a Hawker Hurricane
Showing the Effects of Aerial Perspective

Aerial Perspective and Color

by Bob Arko

I want to preface this discussion by stating there is, in my opinion, no "right" or "wrong" color choices for a model. The best color choice is the one that satisfies the model builder, whether it is based on color chips, what bottles are available off the shelf, or a mad scientist approach to mixing paint. All that matters is that the finished model makes its builder smile. So, no argument, just information and opinion.

I have occasionally come across an article where a modeler has described how he "lightened the color" to represent the scale distance from which the aircraft is being viewed. What he is talking about is what artists call "aerial perspective". It's the effect caused by dispersion of light rays due to particles in the air. The particles are most often water droplets, but can also be dust, smog or other pollutants.

The photo on the front page illustrates the effect. The Hurricane is in the foreground, not too

far away from the viewer, and the colors seem relatively clean and vibrant (terms not often used to describe camouflage). The area below the plane is the middle ground, and the colors seem to be washing out. The area above the plane is even further away (the background), and the colors appear to be mostly grays with a little of the "actual" color showing through.

Notice how the plane seems to pop out of the picture, and is clearly some distance closer to us than are the middle ground

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TCAH Officers

President, John R. Ross
Vice-President, Robert Maderich II
Secretary, Marty Agather
Treasurer, Dennis Strand
Historian, Tom Norrbohm

From the Prez
by John R. Ross

From all the officers we hope everyone had a marvelous Holiday Season and a Wonderful new year.

This month is a busy month for us. Starting with our club nominations for awards. The past three club members of the year will need to nominate and select the next club member of the year. The membership as a whole has to select the Modeler of the year as well as the Historian and or writer of the year. We will need to decide if this is one or two awards. So we will need to discuss this and make nominations. Voting will occur in February.

After our discussion on awards we will have our annual Club Contest and Club Challenge. We will need to have registration occur before the meeting to insure a smooth event so please look for the registration booth. We will do contest and challenge registration at the same time. We hope to see lots of great works for the event and we will do the awards after the votes have been tallied.

We are starting to line up speakers and topics for our meetings for the remainder of the year. If you have something you'd like to present or an idea for something you like presented please let Bob Maderich or I know. We are looking to fill this year's calendar to keep things interesting. We'd love to see a great cross section of topics, so please don't be shy.

Finally, I'd like to challenge everyone to think about what inspires you and share that with the club. I am going to start with a brief article this month and I think Bob is going to do next month but we'd love to see at least one article a month from other members about what interests you about doing research, why do you build, how do you select what you build, who influenced you, etc.... I know Bob Arko is always looking for articles to fill the newsletter and I'd love to see more stories from people we don't normally hear about... Give it some consideration and put pen to paper...



Newsletter Info

Article Submission Deadline: 22nd of each month

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Send Change of Address Notice to:
Dennis Strand

TCAH This Month

The monthly meeting will be held Saturday January 9, at Fleming Field, South St. Paul, beginning at 1:00 pm. Vendor baiting will begin about 12:00, so come early.



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while still green, are not very vibrant, while the greens in the background are barely recognizable as green—they appear as shades of greenish-gray. The combination of the graying of the colors (reduced Saturation) and the narrowing of the Value range is the effect of aerial perspective. You should be able to pick up any aviation magazine and find

any number of photos that exhibit this effect.

So, let's apply this to models. The modeler who wants to represent this effect is making a good start by "adding a little white" to the dark colors of his camouflage, but that's not all it takes. As we've seen, the narrowing of

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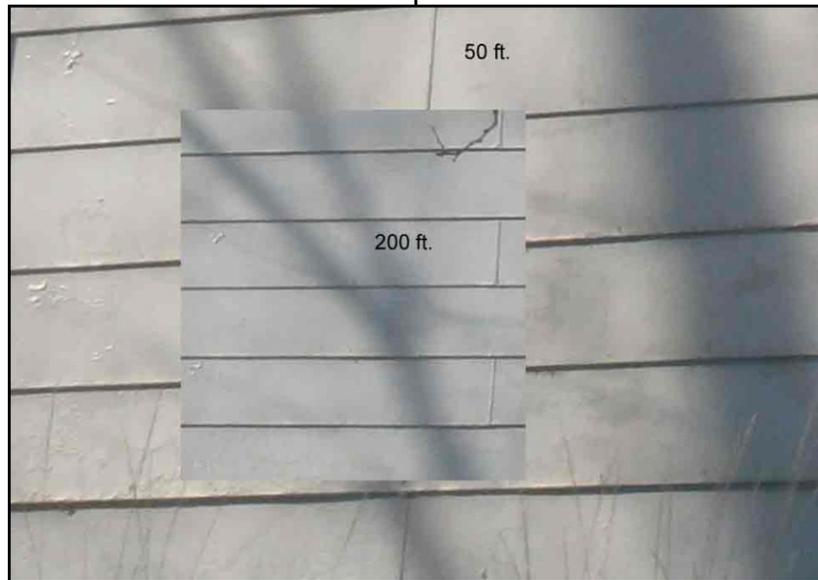


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function of the different amount of sunlight hitting the two sides of the house (I feel a different color discussion coming on, but I'll save that for another article). Here is an explanation of what is going on, from an artist's viewpoint.

There are several systems for describing color, but the most useful in this example is the HSV system for Hue, Saturation, and Value. Hue is the base color, like red or blue. Saturation (also called Chroma) is the purity of the color, usually thought of as "how much gray is in this color?" Value (also called Brightness) is a measure of intensity (how light or dark a color is), and is what we need to discuss next.

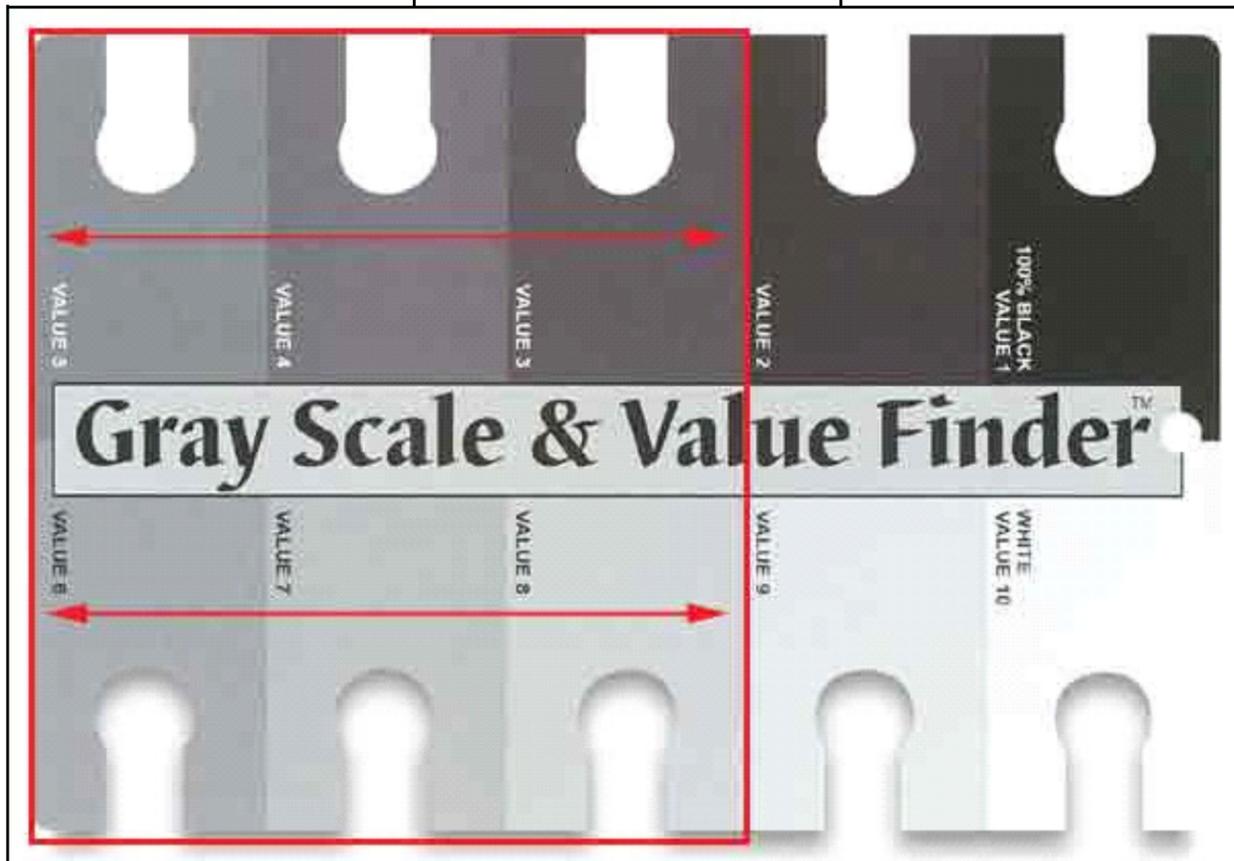
Artists express Value as a



number, with 1 being pure black, 10 being pure white, and 8 shades of gray in between. As an object is moved away from the viewer, the range of Value that the color exhibits becomes

narrower. In the Gray Scale below, an object that is close to the viewer has the full range of values, but an object that is some distance away loses the ex-

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Airline Chatter by Terry Love

EVA Airlines ordered 24 Boeing 787 Dreamliners and 2 Boeing 777-300ERs. Deal is worth \$8 Billion. Presently EVA operates 14 Boeing 777-300ERs, 5 Boeing 777 freighters, and 18 Boeing 787 Dreamliners.

BOC Aviation, a Singapore leasing Company, ordered 22 Boeing 737-800s. BOC stands for Bank Of China.

Cathay Pacific will retire all of their Airbus A-340s next year.

Turkish Airlines ordered 20 more Airbus A-320s bringing their total on order to 92.

Spring Air, a Chinese airline, ordered 60 Airbus A-32-s valued at \$6.3 Billion. This order was placed by the Chinese Communist Government, and they will be built in the new Chinese Airbus factory.

Egypt Air ordered 8 Boeing 737-800s valued at about \$800 million.

Mexico ordered 30 Sukhoi superjet 100s. The Sukhoi is a modern jet airliner holding about 100 passengers in an all coach arrangement. It very closely resembles an Airbus A-319.

Emirates Airlines ordered 20 Airbus A-380s valued at about \$8 Billion and 16 Boeing 777-300ERs valued at about \$5.5 Billion. Emirates will retire 26 aircraft in 2016, and a further 26 in 2017 and 2018. Nine of the soon- to-be retired aircraft in 2016 are 4 older Boeing 777s. Emirates presently operates 244 airliners, but they have a huge 262 new aircraft on order, including 71 Airbus A-380s.

China Southern Airlines and its affiliates Xiammen Airlines ordered 110 Boeing 737-800s. Value of the deal is over \$10 Billion. The Chinese Communist Government placed the order for the airlines.

Boeing's new plant in South Carolina, delivered its 100th Boeing 787 Dreamliner on December 17.



Treasurer's Report by Dennis Strand

At the end of 2015, we find ourselves with a total of \$4977.45 in the bank or in cash. This is \$409.28 more than we had last year at this time. So, we are holding our own.

Expenses for December were only \$35.00 for an IPMS membership and a gift certificate. We had 14 people renew their membership to bring in \$210.00. By the way, if you have not renewed yet, you can still get in on the \$15.00 rate by sending me a check at: Dennis Strand, 833 Manomin Ave., St. Paul, MN 55107 before Jan. 1, 2016.

This has been a good year and I will continue to be your Treasurer for 2016. Here's wishing TCAH continued success in the year ahead.



CAF Display Update by Dennis Strand

With the help of Matt from the CAF, we managed to almost clear out the display case. Matt had some favorite donated models that we decided were appropriate to include in the display. So, we have about 5

1/48 scale models left over from the old display that we will incorporate in the case initially. Up to now, three TCAH modelers have contributed. They are all 1/48 scale, so for now, that is the scale we will use. I you have a 1/48 scale model of a WWII or Korean War aircraft that you would like to put in the CAF display, we would prefer that you bring them to a TCAH meeting first and not just take them to the CAF hangar. This is because we want to get a little information about the model that we could put on a placard, plus we need to know whose model is whose in case it has to be moved or it gets damaged.

I brought two rough drafts of a brochure that could accompany the display. It appears that the one with the TCAH logo and the group shot, on the front, was preferred. Bob Arko, our Editor-in-Chief, has offered to sort things out and fine tune my efforts. We are looking for better photos to use in the brochure. If you have any ideas about what should be included, text or photos, please get them to Bob at boba@arkokraft.com. The more input we have, the better the final outcome.

In talking with two CAF members, Todd Lofquist and Jason, who are involved with the museum portion of the CAF hangar, I found out that they had plans to eventually construct built-in cabinets to display their historical collection. This would hopefully include our models and expand our display area by a large margin. Consider offering the Commemorative Air Forcesome financial assistance in achieving their goals. I think a little encouragement might help both organizations complete the project.



Early Inspirations

by John R. Ross

Like many of you, I'd guess, my first modeling inspirations came from my father. My earliest memories are living in a duplex in North Minneapolis. I would have been 3-4 years old and Dad used to build models in the living room on the floor. Usually on the floor in front of the couch, usually with a sporting event on the TV. Dad had this neat tackle box that all his tools and paints would fit into and after each session it would all go back into that tackle box and the box of the kit he was building. I am sure I kept him from getting as much done as he wanted because of all the questions and hovering I'd do. While Dad focused mainly on aircraft, he built just about anything. He did sailing ships, and I'd talk to him about his bird while doing rigging on it.... Cars, and he'd branch out to RC cars & planes but he'd always come back to plastic models.

As I got older and we moved into our own home, Dad finally got some dedicated work space so he didn't have to close things up after each session. Plus the bench was taller so I couldn't watch as much, but that didn't

keep me from starting myself. One of my first kits I remember building was a Boeing 707 kit I got for my birthday, and yes it was a glue bomb because I wouldn't wait for Dad to get home and help me.... To help fund my addiction, I learned to cut the neighbors lawns, rack their leaves or shovel their sidewalks and driveways. At one point I was even desperate enough to go out and sell Cards and Stationery products advertised in the back of comic books or Boys Life.

Like Dad, my interests started out with aircraft primarily, but then I started watching Star Trek reruns and some of that changed. Yes I went over to the dark side and started building Sci-Fi, but did dabble in armor, ships and even cars. Don't get me started on all the trouble I used to get into with Model Rockets. It didn't help that I got my first job in a hobby store. Many of you might recall Moeller Hobby Center in Robinsdale. I started working there when I was 15 and I was lucky most weeks to come home with a paycheck. It's not a good thing to give a kid a credit account at a place like that. Luckily, I could earn more money by building store samples

and displays. After working there a couple of years I migrated over to Gager's in Brookdale.

As happens to many of us, we get busy in High School and Post High School education and starting families. I was no different, and returned to the hobby after a few years. Time marches on as time will do, but Dad continue to inspire me to build and build better. During that time, Dad had done his normal ebb and flow of hobbies but returned to plastics after his health took a slight turn. Dad had Macular Degeneration, and probably the best way I can describe this is to look ahead and imagine a bowling ball sitting in front of both eyes so all you really have is your peripheral vision. On top of that one of his eyes is worse than the other so he also lost his depth of perception. According to the State, Dad is legally blind. While he is legally blind I am still amazed at both the volume and quantity of work he puts out. I am always proud to look at his work and I am still working to improve my skills so I can build as well as he does.

Thanks Dad!



(Continued from page 1)

and background. Many artists try to reproduce this effect by modifying paint colors in the three areas. When done right, this is one way to develop an illusion of three dimensions on a two dimensional canvas.

The table at the right shows the scale distance that you are from the model when viewing it at a real distance of 1 ft. to 5 ft. Of course it depends on the scale, but if you stick your nose within a foot of the model, you are still viewing it from about 30 to 150 scale feet away. At 3 ft. away from the model (a comfortable casual viewing distance) you are about 100 to 400 scale feet from the model.

So what? There are obviously thousands of feet between the Hurricane and the background in the calendar photo. How much effect can a couple of hundred feet have compared to that?

Viewing Distance (Real)						
Scale	1 Real ft	1	2	3	4	5
1/32	32	32	64	96	128	160
1/48	48	48	96	144	192	240
1/72	72	72	144	216	288	360
1/144	144	144	288	432	576	720
Scale Distance (ft) When Viewing Common Scales						

As an experiment, I took some pictures of my house at distances of 50, 100, and 200 ft. The image below is a composite from those three photos showing how the camera "saw" the color at those distances. I used Photoshop to composite the same area of the house into one graphic, keeping the resolution and color information the same for each.

At a distance of 50 ft., my house appears as a medium blue gray, a little on the dark side. At 100 ft., there is a slight but noticeable change to a lighter blue. At 200 ft. the blue is just noticeably lighter than at 100 ft., but the difference between the blues at

50 ft. vs. 200 ft. is quite noticeable (you don't even have to squint).

This doesn't only affect the dark colors. On the next page is a composite from the side of the house in the sunlight, which appears to be much lighter (but it's the same blue paint). Compare the 50 and 200 ft. shots, which are overlaid to make comparison easy. Now the blue looks darker at 200 ft. than at 50 ft. What gives?

First off, even though this is the same blue paint as on the shaded side of the house, it appears much lighter. That's a

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