OFFICIAL NEWSLETTER OF
SANDERSON FIELD R.C. FLYERS
SHELTON, WA

JANUARY 2006
VOLUME 9 ISSUE 1

SANDERSON FIELD R.C. NEWS

Happy New Year!

AMA
CHARTER NO. 3079

CLUB MEETING

This months meeting will be held on Thursday January 12th at 7:00 p.m.

at PUD #3

At 3rd & Cota

By all accounts the Christmas party went well and was well attended. The last meeting was the 2006 officer election, all previous officers are still there with the exception of new board member Dave Southwick and alternate board member Bob Mason.

We also have a new member so join me in welcoming Dave Fisher to the club.

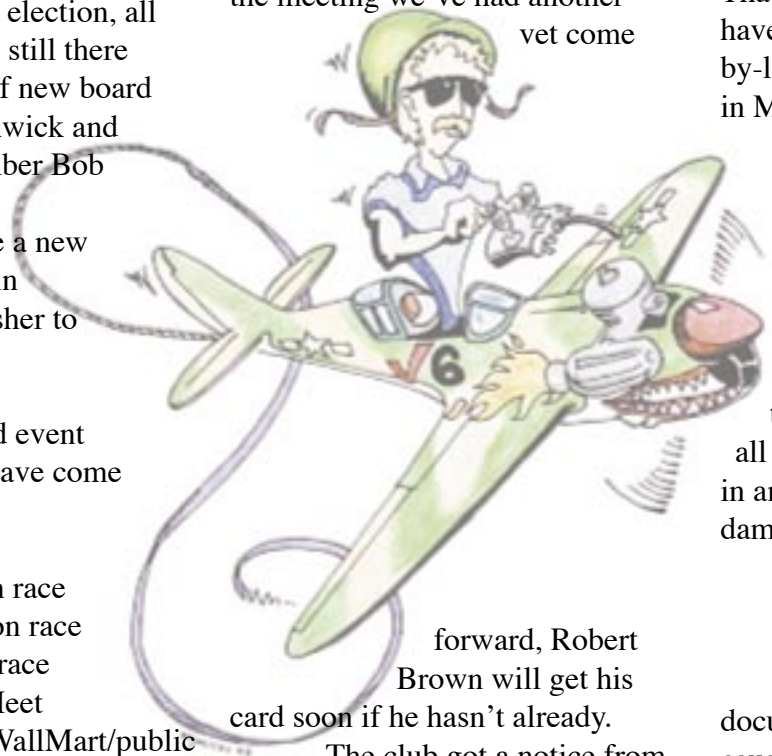
We discussed event dates for 2006 and have come up with these dates:

January 15th - Pylon race
February 12th - Pylon race
March 12th - Pylon race
April 15th - Swap Meet
June 10th & 11th - WallMart/public
July 15th - Fly in w/ novice fun fly
August 19th - Scale Fly in w/ novice fun fly
September 16th - Fly in

We also talked about the 2 day Pylon race on August 12th & 13th but that hasn't been finalized.

I let Jo Anderson at the Port we would be glad to host the kids again this year. She said they didn't have anything planned at this time.

Joe Lewis was presented his lifetime membership card (for being a WWII vet) and since the meeting we've had another vet come forward, Robert Brown will get his card soon if he hasn't already.



The club got a notice from the Expo people that clubs get free tables to promote their club. You must maintain a presence during the entire show which would me at the very least 5 or 6 people. If you are interested let one of the officers know.

In case you didn't catch the reason why the Monthly meeting and Christmas party happened the way they did, we decided to have the Christmas Party in Olympia at Lee's Buffet because the casino was no longer available at a reasonable rate and Lee's was free. That, however, meant we had to have the meeting at the PUD as our by-laws state the meeting must be in Mason County.

The first fly of the year was pretty short. Bob Andrew and Dick Robb had a pretty good flight but Stacy Myers, Joe Lewis and I flew in the rain and wind. We got to the field at about 11:30, just in time for the rain and wind to start. We all managed to get a quick flight in and get back down with out damage.

RADIO GLITCH: A documented electronic occurrence, causing immediate and irreparable loss of control. The source of ant crash when there is a possibility of someone else's radio in the close proximity to the plane.

Color Theory for Models

from www.ultimatecharger.com

Color Theory for Models: Choosing the Right Color

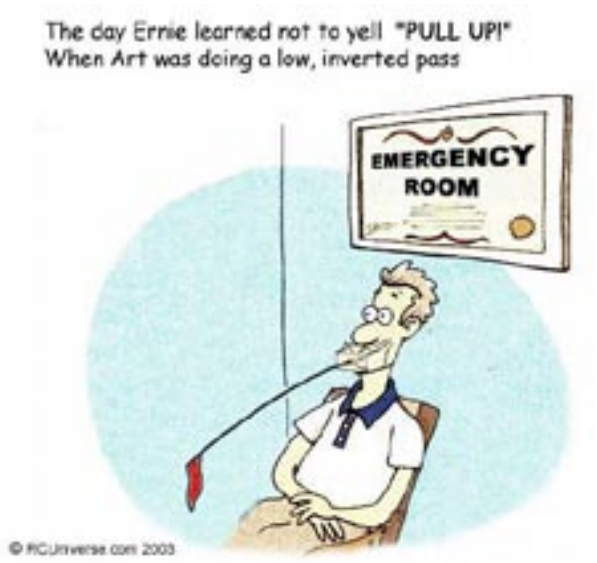
by Dr. Robert Suding

All RC fliers have gotten that "I can't tell which way it's going" feeling when learning to fly RC. Several simple color trimming steps can help you fly your airplane better, whether you are a beginner or top dog in Pattern. Most airplanes, especially ARFs, are covered or painted to look good in the store. But in the air it's a different story. The situation is very simple—if you can't see it, you can't fly it.

To successfully fly an RC aircraft, the pilot must have good orientation and distance perception. The eyes estimate aircraft orientation based on the perceived position of the model's outer edges, and the relationship of these outer edges to the edges of any discernible trim markings on the airplane's wings or fuselage. Distance perception, in turn, depends on a combination of one's perception of the aircraft's outside edges and its estimated orientation. After you have located your airplane and estimated how far away it is, you must immediately recognize several attitude orientations:

- Is it flying toward me or away from me?
- Is it upright or inverted?
- Are the wings flat, vertical, or tipped?
- Is it flying horizontal, upward, or downward?
- Is it flying parallel to the runway or vectored?
- Is it flying perfectly vertical or skewed sideways or fore/aft?

The following suggestions will help you with distance and attitude perception. Visual acuity and contrast perception diminish with age, but by using correct color concepts, even senior fliers will find that visual orientation of their aircraft can be consistently and reliably achieved. Solid-Colored Aircraft RC airplanes are flown in all kinds of weather and background conditions. A solid-colored aircraft will sooner or later fly into a condition where it blends into the background. This will result in a complete loss of location and orientation since no edges can be perceived. The absolute worst, in my opinion, is a silver Mustang in a heavily overcast sky. Yellow Cubs are tough to see when back lit by the sun. I had a dark green airplane that would disappear when I landed with a background of green trees. Red Stiks and dark blue airplanes go invisible in late evening and storm conditions. A solid-colored airplane is easier to cover, but it won't do you any favors up in the sky. Wing and Horizontal Stabilizer Shades The top of the wing and horizontal stabilizer is normally lit by sunlight. The bottom of the wing and horizontal stabilizer is shadowed. Coloring the top lighter and the bottom darker keeps this same relationship even in changing lighting conditions.



ARFs are classic blunders in coloring. Either they have identical top and bottom wing colors, or they put some token color on the top of the wings and leave them white underneath. They look good in the store, but don't help the beginner at all.

I always recommend that beginners cover the bottom of the wing and the bottom of the horizontal stabilizer with dark-blue contact

COLOR THEORY (CONT)

paper before flight.

When flying at a distance of 500 feet or more (depending on the size of the model and lighting conditions) you can't see colors, because the cones of your eyes that perceive color are 2,000 times less sensitive than the rods, which perceive illumination.

In these circumstances, your gray-scale vision (your perception of lightness and darkness in a black-and-white image) provides your orientation and depth perception, not color. Any series of adjacent colors on your aircraft that are intended to facilitate orientation should therefore be gray-scale opposites. For example, a series of bands consisting of red, yellow, blue, and then white is desirable. Don't assume a series of "color opposites" such as red, green, blue and black will be effective. These all have the same dark gray-scale shade and will show an equal tendency to disappear in a deep blue or heavily overcast sky.

If you use the wrong series of color bands, you won't know how far away your aircraft is, and you won't even know which way it's heading to bring it pack. Also, don't rely on intricate patterns. They blend together to form edgeless fuzz approximately 100 feet away. You can test potential color schemes for gray-scale perceptibility by video taping and playing back alternative color schemes on a black-and-white television or on a color television with the color control turned down. Actual Patterns to Use The best color scheme for beginners that I have found is a combination of large starburst patterns on top of the wing and horizontal stabilizer, and a solid dark color underneath the wing and horizontal stabilizer.

Beginners consistently become perceptually disorientated when flying at a distance, especially when the airplane flies at a 45° angle away or toward the pilot, since the aircraft silhouette is identical. With the starburst pattern, all the beginner has to do is slightly roll the wings towards him, and the starburst pattern becomes an arrowhead, pointing in or out, the direction of flight.

Start by covering the bottom of the wing and horizontal stabilizer with any dark color. The exact color could be black, deep red, dark blue, or green, it doesn't matter; they will be the same gray-scale color at a distance. Then put a 2-inch strip of some light color along the leading edge of the bottom. Do the same for the bottom of the horizontal stabilizer, and make the light strip roughly 1 inch wide. The base color of the top of the wing must be a very light color such as white, yellow, or some other very light color The starburst pattern starts out at the center of the wing, from 3/8 inch under the wing's leading edge to roughly 1 inch back from the leading edge at the top. Then it is a large "pie slice" to the wing tip, where it extends from 3/8 inch under the wing leading edge to the trailing edge on the top. A second pie slice of a different dark color extends from the center of the wing to points one third and

Club Officers

President	Jody Diaz	(360)427-6102
Vice President	Dick Robb	(360)427-4521
Treasurer	Charles Kentfield	(360)866-9473
Secretary	Bob Beatty	(360)426-5601
Field Marshall	Charles Kentfield	(360)866-9473
Safety Officer	John Tupper	(360)426-6383

Board Members

Board Member	Jody Diaz	(360)427-6102
Board Member	Dick Robb	(360)427-4521
Board Member	Stacy Myers	(360)426-9367
Board Member	Bob Beatty	(360)426-5601
Board Member	Dave Southwick	(360)426-2869
Alt Board Member	Bob Mason	
Alt Board Member	Chuck Kentfield	(360)866-9473

COLOR THEORY (CONT)

two thirds out on the wing. Both sides of the wing are colored like this as is the top of the horizontal stabilizer. Landing Considerations Landing requires keeping your wings flat and knowing where you are in the landing approach. You are generally close to the airplane during the later stages of the landing approach, so your color perception is improved, but the wings will be edge-on to your line of sight. The leading edges should be very prominent against any background such as blue sky, white clouds, dark overcast, distant mountains, or green trees. All of these items have spectral lines toward the higher frequency blue or green region, so a very simple solution would be to have a low frequency color such as red or orange on your wing and horizontal stabilizer leading edge.

At the field where I fly in Colorado, ARFs with blue wing edges are almost invisible when a low approach from the West dips the airplane visually below the mountains, resulting in very klutzy landings by beginners.

The leading edge red or orange pie slice is wrapped around the leading edge so that it has the maximum area of visibility when edge on. The 2-inch strip of white on the bottom of the wing near the leading edge will become visible during the landing flare, aiding in precision landings.

I prefer a white background on the top of the wing and horizontal stabilizer, with a bright red leading edge pie slice and a metallic blue inner pie slice on trainer airplanes. The same metallic blue under the wing looks nice, but any dark color works fine Fuselage and Rudder Coloring The same coloring rules apply to the fuselage. Keep the top of the fuselage light, and the bottom dark.

The sides of the fuselage should aid you in flying horizontal passes. A solid color fuselage is very difficult to keep straight and level because all of the aircraft reference lines are curved. Light blue-and-white fuselages (a favorite ARF color scheme) blend in with the sky and clouds too well, and will become invisible under some lighting conditions.

Draw a line along the thrust line of your aircraft, roughly splitting the top and bottom of the sides in half.

If you haven't paid your dues yet it's after January 1st now and Dues are $40.

If you pay by mail send your dues, proof of 2006 AMA membership and a self addressed stamped envelope to the Treasurer:

Chuck Kentfield
6843 Gallagher Cove Rd NW
Olympia WA 98502

Make the top half of your fuselage sides a light color. Make the bottom half a dark color, usually one of the wing pie slice colors.

Analyze how you fly. Beginners and experts, who fly inverted much of the time, should make the fuselage line color demarcation exactly follow the thrust line. Beginners fly airplanes with lifting, flat-bottom wings, so the aircraft fuselage side flies a straight line.

The expert flies an airplane with symmetrical wings, so he flies at a slightly raised altitude to maintain level flight, whether upright or inverted. Therefore he should also have the fuselage line color demarcation exactly following the thrust line. When doing a horizontal pass, he should maintain an equal rising thrust line sight picture whether upright or inverted.

The interesting situation is the beginning aerobatic pilot. His routines do not include horizontal, inverted passes, but his maneuvers do include many horizontal flight components. He will usually be flying an aircraft with symmetrical airfoil wings, so the aircraft will be moving through the air with a slight upward orientation. He should offset the fuselage side color demarcation upward at the tail of the aircraft by roughly an inch. Now he can practice his horizontal passes by keeping the fuselage side lines parallel with flat ground. The vertical stabilizer and rudder should have very wide

horizontal bands of color. Make the top of the horizontal stabilizer the same color as the wing tips. Then put a light-colored band, and below this a dark-colored band, usually the same color as the inner pie slice on the top of the wing. The base color of the vertical stabilizer and rudder should be the same light color of the wing.

Another variant for the vertical stabilizer and rudder that works well on trainers with very big tails—such as the Kadet series—is a starburst pattern on the top of the wing. This aids the beginner in determining the direction of travel when flying at a distance. The tail's starburst pattern becomes an arrowhead pointing out the direction of flight.

Looping -Consider what the usual looping problem always is for the beginning aerobatic pilot. The pilot does not begin the loop with his wings flat. He usually corkscrews in or out. Proper coloring of his low-wing or mid-wing airplane can be a major help.

Make the wing tips stand out. I usually make the outer 2 inches of each wing and 1 inch of each horizontal stabilizer the same bright red that I color the leading edge. If you follow my advice above on the wing bottom and the fuselage sides, the wing tip can be visually correctly placed for a perfect loop. If the wing tip is too high, resulting in a corkscrew out, the pilot will see the dark wing bottom. If the wing tip is too low, resulting in a corkscrew in, the pilot will find that the wing tip blends too well with the bottom of fuselage side. The correct sight picture will be the wingtip cleanly placed against the upper lightly colored fuselage side. Look at the International Miniature Acrobatic Club or Pattern airplane pictures in RC magazines.

They always have a dark color on the top half of the fuselage side into which the wing tip blends, causing looping problems. Geometric Shapes Humans can recognize different geometric shapes 1/10 of a second faster than colors.

Continued next Month...

Below are the scheduled events for 2006

Club Scheduled Events for 2006

January 1st.....Annual 1st fly of the year
January 15th.....Pylon Race
February 12th.....Pylon Race
March 12th .....Pylon Race
April 15th .....Sanderson Field RC flyers annual swap meet 9:00 to 12:00 SHS Sub
May .....
June 10th.....Display at Walmart
June 11th.....Public Fly-In
July 15th.....fly-in with novice fun fly - 9:00 a.m. to ?????
August 12th & 13th .Pylon Race (tentative)
August 19th.....Scale fly-in with novice fun fly - 9:00 a.m. to ????
September .....Fly-In 9:00 a.m. to ????
October .....
November.....
December .....

It's time for 2006 dues, dues are $40.00

Check out our web site at http://sfrcf.quintex.com