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

APRIL 2020
VOLUME III ISSUE IV

SANDERSON FIELD R.C. NEWS

AMA
CHARTER NO. 3079

No meeting in April or May

CLUB MEETING

The PUD has closed the meeting room access for April and May due to COVID-19

Treasurers report was read an accepted as read.

It was noted that the scholarship fund has $2700 and that we should maybe give either more or bigger scholarships this year to reduce that amount.

might not be the best time for club trips. The state is going to take $300,000,000 from Paul Allen's estate.

The Scale season opener in Othello, Wa. May 15, 16, and 17.

Hunter Farms opener will be April 18th, weather permitting.

WBC is May 30th

Warbirds over Shelton is May 31st.

WRAF Swap meet in Cashmere is April 4th and 5th.

Crabwich sales at the Ridge - Not much info yet.

Meeting adjourned 7:25

Turning with Proficiency

By Dave Scott

Dave Scott is a champion full-scale aerobatics competitor, air show pilot, aviation author, and operates the 1st U.S. R/C Flight School. His manuals and articles feature the specialized training techniques that he has developed—instructing more than 1,700 RC pilots of all skill levels and setting up and test-flying more than 1,000 airplanes at his school. More information about Dave's books and his flight school can be found at www.rcflightschool.com.

If you have followed my previous articles addressing common bad flying habits, you'll recall that the chief consequence of bad habits is a higher pilot workload compared with when tasks are performed optimally. Many pilots prematurely plateau because they exhaust all of their "brain bytes" correcting the consequences of their bad habits.

The solution to steady advancement is often not more stick time (e.g., continuing to repeat the same mistakes and hoping for better results), but identifying and correcting the bad habits that often prevent pilots from continuing to improve their flying, conquering wind, diagnosing needed setup changes, and more.

I'll address the granddaddy of all bad habits, which is constantly fiddling with the ailerons during turns. Roughly 97% of pilots in the sport suffer from this bad habit in the form of unintentional altitude changes during turns, inconsistent positioning and

landing setups, struggling to fly in wind, and/or blaming the wind for the fact that no two turns ever work out the same, among other inconsistencies.

The habit of needlessly fiddling with the ailerons during turns goes back to the first turns made by every new pilot. Before the first training flight, a typical instructor's advice to a new pilot is to keep the turns level and don't overcontrol.
Without detailed turning instructions, new pilots are on their own, learning through trial-and-error and reacting to what the airplane does. Consequently, every new pilot goes into his or her first turn holding in a small amount of left or right aileron and watching to see what happens next. As the bank continues to steepen and the airplane starts to lose altitude, the instructor will call for the student to pull up-elevator in an attempt to arrest the descent. With attention now focused on the elevator, both student and instructor are likely oblivious to the fact that the student is continuing to hold in the aileron. The result is an ever-steepening bank, an increasingly tighter spiral, and confusion about why the airplane is dropping, despite the student obeying the instructor's commands to pull more up-elevator! This scenario is repeated several more times, and along the way, the focus of the turns becomes what to do when the airplane starts dropping. New pilots at this stage begin to associate descending turns with too steep of a bank and respond by trying to shallow the bank with opposite aileron at the first sign of losing altitude. Shallowing the bank widens the turn, of course, and it often becomes necessary to put some pro-turn aileron back in … and on it goes.

Compounding this activity is the fact that every time the bank angle changes, a different amount of elevator is required to keep the turn level. Steeper banks require more elevator, whereas shallower banks require very little. The ever-changing bank angles make it nearly impossible to keep up with all of the needed elevator adjustments, and as a result, altitude changes during turns become the norm. Additionally, each altitude change causes an alteration in airspeed and results in other unintended, negative consequences, such as porpoising after a turn (usually attributed to wind).

Most pilots are too busy making adjustments to give any thought to changing their techniques. They continue to make constant adjustments during turns (whether they're needed or not).
This pattern flies in the face of most other activities. Typically, when we become proficient at something, fewer adjustments are needed because we're more inclined to do the right thing in the first place. When properly executed, turning a model airplane is no different.

If your turns require constant adjustments, it's a clear indication that you're doing something wrong!

The turn procedure used by proficient pilots—the ones who make it look easy—starts with a smooth, yet brief, aileron input to "set the bank" angle. Note that the aileron input is promptly neutralized to prevent the bank from becoming too steep. Up-elevator is then applied and held in to pull the nose into the turn. The elevator is adjusted as needed to keep the turn level throughout.
In the event of an altitude change during a turn, the appropriate response is to adjust the elevator (not the aileron)! Of course, with only the elevator to be concerned about, keeping turns level is easy, and therefore all of the negative consequences of climbing and descending turns simply vanish.

Proficient pilots understand that the size of the aileron input determines the degree of bank and the size of the turn, as well as how much elevator will be needed to keep the turn level. Proficient pilots proactively input a smaller

aileron input, and subsequently pull less elevator to affect a level, wide turn, or they add a larger aileron input and then pull more elevator to affect a level, tight turn.

They make it look easy because they determine the aileron input that produces the degree of bank (rate of turn) that they are comfortable with 98% of the time. As a result, they are quickly able to determine the amount of elevator to pull each time to keep those turns level, often without needing any additional elevator adjustments.

This procedure entails much more than simply trying to find a comfortable bank angle and maintain level turns. It starts with recognizing that the neutral stick position provides a distinct point from which to gauge the size of each of your control inputs.

If your initial turns are either too wide or too tight, you should aim to increase or decrease the size of your initial aileron input relative to neutral. Or, if you initially pull too much elevator and affect a climbing turn, aim to pull less elevator relative to neutral next time.

In the event that a turn needs to be tightened, restarted, or widened, the correct procedure is to smoothly apply a single small bump of aileron (in-out) to slightly steepen or shallow the bank angle while continuing to hold in the elevator.

To avoid overcontrolling (or worse), the aileron input needs to be brief and not held in!

Note that needing to bump the aileron during the turn should be fairly rare. If you consistently need to bump the aileron during turns, you should try changing the size of your initial bank input instead.

Proficient pilots don't endeavor to get better at making corrections. Just like a good driver, proficient pilots apply good control inputs that reduce the need for corrections altogether.

Consider that when your turn inputs are made correctly, the need for additional corrections might not exist. That is when you will be free to think ahead of the airplane, conquer wind, and take on new challenges with greater ease.

Dues are $75 if paid before Jan 1st, $100 Thereafter.

If you pay by mail send your dues, proof of 2020 AMA membership and a self addressed stamped envelope to the Treasurer:

Mark Pentony
180 E Vuecrest Dr.
Union WA 98592
Make checks payable to SFRCF

Club Officers

President	Dave Windom	(406)283-1916
Vice President	Jody Diaz	(360)427-6102
Treasurer	Mark Pentony	(360)490-4742
Secretary	Bob Beatty	(360)229-3408
Safety Officer	Todd Pepin	(352)232-4283

Board Members

Board Member	Dave Windom	(406)283-1916
Board Member	Jody Diaz	(360)427-6102
Board Member	Bob Beatty	(360)229-3408
Board Member	Mark Pentony	(360)490-4742
Board Member	Todd Pepin	(352)232-4283
Alt Board Member	Dick Robb	(360)427-4521
Alt Board Member	Jeff Sterba	(360)490-5800
Alt Board Member	Paul Fleming	(253)225-0780
Alt Board Member	Aaron Cleveland	(360)490-2189

April 2020

STAY HOME
STAY SAFE

Training nights are ALWAYS weather permitting, check the weather at the field before leaving
Sold days can change, check out the website before heading to the field.
http://sfrcf.quintex.com/event/events.html

Club Scheduled Events for 2019

Event dates in black are scheduled. Events in gray are complete.

January 1st ..... First fly of the year - Sanderson Field - 10:00am
May 30th..... Winter build challenge
May 31st..... Warbirds - Sanderson Field
July 4th..... Club Fly-in - Sanderson Field - 9:00 am
July 18th..... To be determined - Sanderson Field
July 19th..... To be determined - Sanderson Field

dues $75 before January 1st and $100 on or after

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