

# FARM Newsletter

AMA Charter 1654

May 2020

## MEMBER-AT-LARGE CORNER

Charlie Koustenis



What a year 2020 has given us. We start off with the worst spring weather that i can remember. Trying to fly our RC planes has been a disaster. Rain, wind and cold. Next we get the covid-19 and everything stopped. Guidelines, restrictions, and precautions are put in place daily. This is not to say we can't continue to participate in the hobby we enjoy. As club members we must be attentive in practicing preventative measures. A good part of our membership falls within the vulnerable age category.

And now the FAA wants us to use remote ID on our planes. What's next??? We could start building RC boats and use the pond at the field.

This break has given us a lot of time to build something or check over and repair planes that get overlooked when the weather is good for flying. It will be nice when we can have a meeting and see what everyone has been doing. Keep checking the weather and the club site for anyone signing up to fly

and come to the field. We have had a couple good days with a small number of flyers. Stay safe.

*Charlie Koustenis*

## EDITOR'S NOTES – Upcoming Events

Jeff Killen

1. (Cancelled), Club Meeting, at Warrenton Community Center, 7:00 PM, 5/26/2020
2. (Cancelled), Fun Fly at the field, all day, 6/7/2020

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## SECRETARY'S REPORT

Jeff Killen

Again, the club meeting in April did not happen. So I don't really have anything to report. Nic has already sent you a revised schedule for the events this spring. I hope you are well; keeping building on those winter projects !

## PROGRAMMING THE SPECTRUM TRANSMITTERs

Don Szczur

(Editor's Note: Somehow the picture count did not work out right. Hopefully, you can connect the pictures to Don's discussion. Jeff)

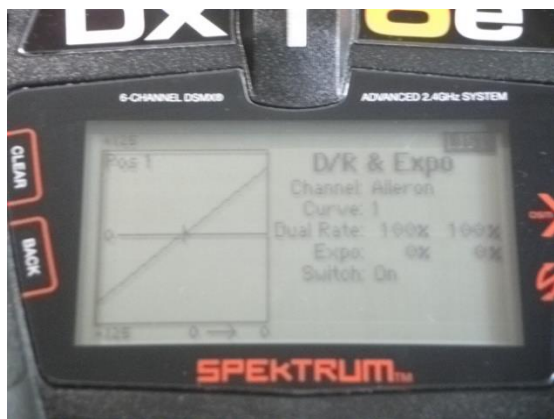
Several have asked about how to set up dual rates, expo and function curves on Spektrum transmitters. Here is how to do this for setting up a plane with these setups on one switch.

In this example, I used a Spektrum DX-6e, with switch G since it is a three position switch. I set up position 0 as standard flight conditions, switch position 1 for snap rolls, and switch position 2 for spins.

Picture 1 is DX 6e transmitter display within the basic menu item for setting up dual rates and expo. A few things to point out. The screen shows channel (aileron), curve (1), rate (default 100), expo (default 0) and switch (default on).

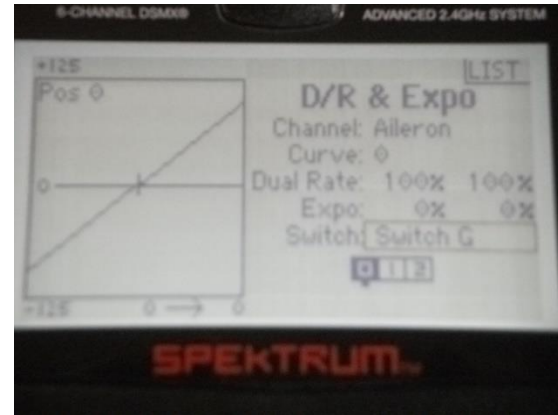


Picture 2. Scroll down to switch and select the switch you want to use to set up your dual rate. I selected switch G because it is a three position switch and I want a single switch to access my snap and spin conditions. With the physical switch position in 0, you notice the 0 is highlighted and the 1 and 2 are not. It also shows curve 0. This is the default.

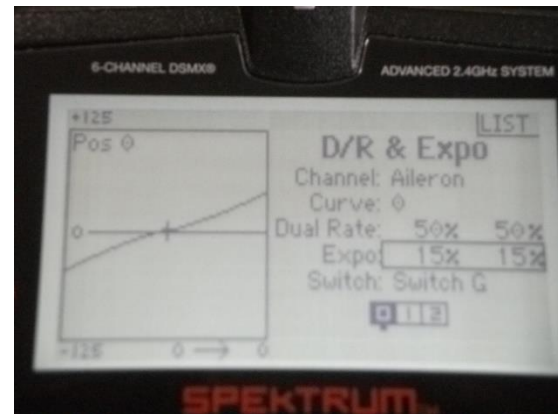


Picture 3. Scroll to the dual rate and expo settings and adjust. I prefer my plane to be mechanically set

up so that I have about 15 degrees to 18 degrees of aileron throw at 100 percent, and my normal flying at 50% and an expo of 15%. Adjust to your preference. A key test is the amount of roll to cleanly execute a half roll at the top of an immelman turn, for example.

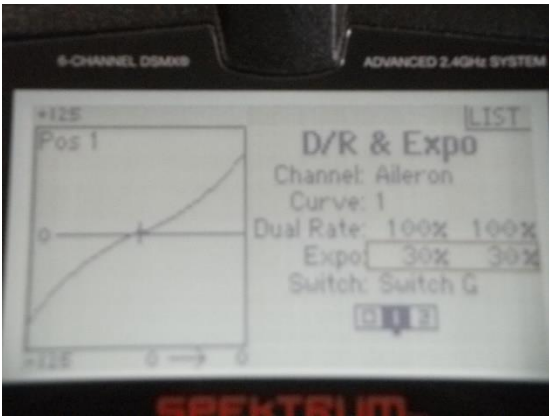


Picture 4. Next, physically move the switch to position 1 (center) and the screen should look as shown. The center position 1 should be highlighted and curve 1. This is snap roll rate, for me. I normally use more aileron to snap roll. Also notice the increase in expo to correspond with the extra throw. This allows the plane to feel the same around neutral stick when flying, with most extra control reserved for the snap roll maneuver itself.

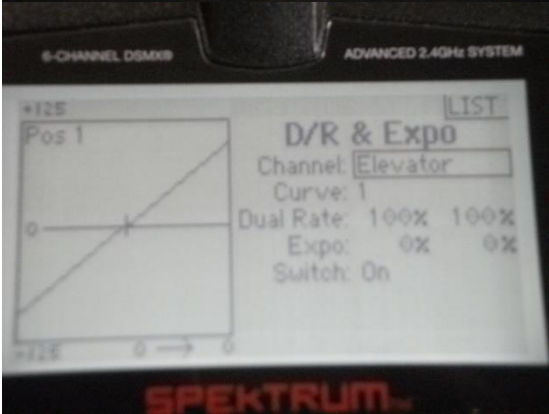
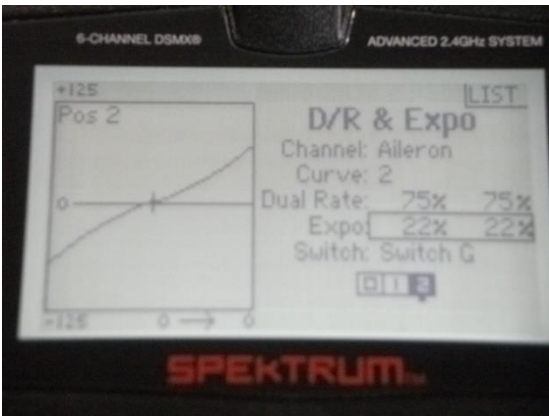
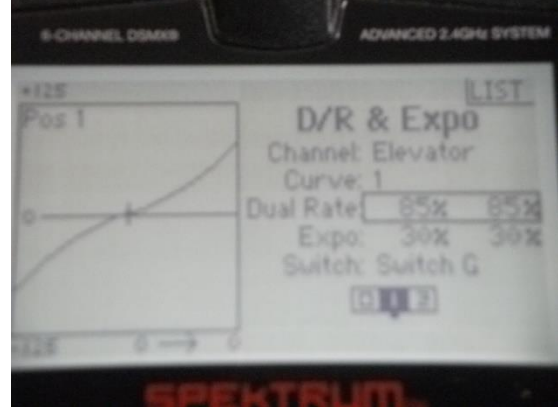
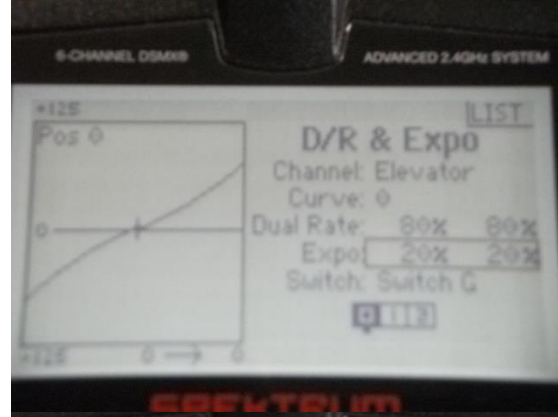
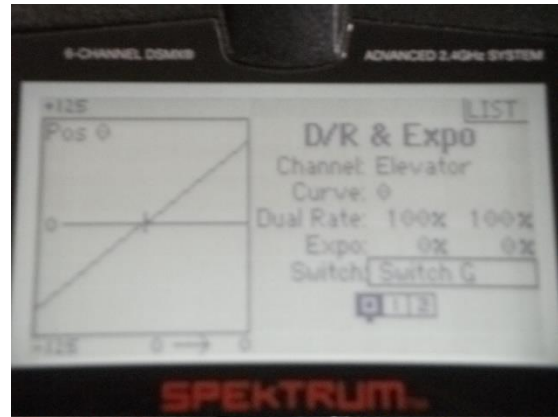


Picture 5. Next, physically move the switch to position 2, and the screen should look as shown. The position 2 should be highlighted and curve 2 displayed. This is my spin rate. I normally use slightly less or the same aileron for a spin, but it depends on the model.

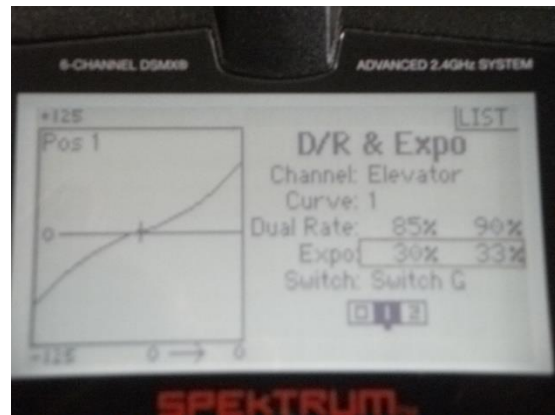
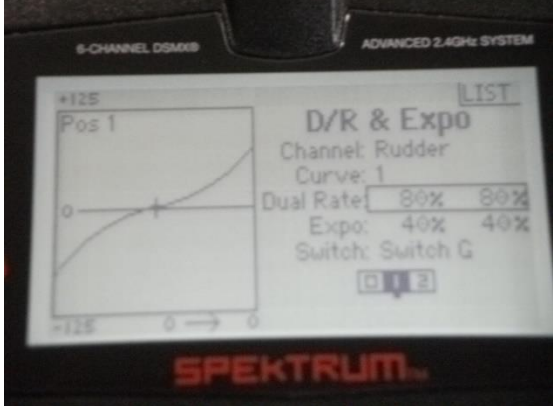
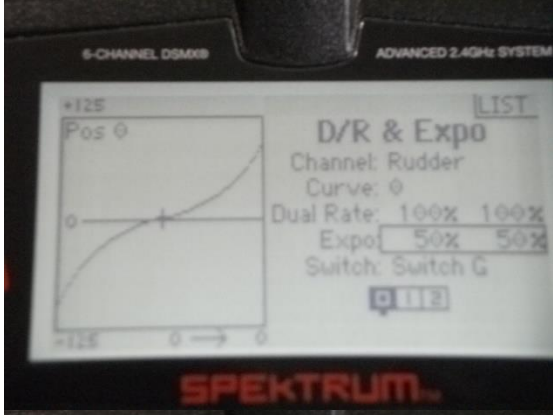
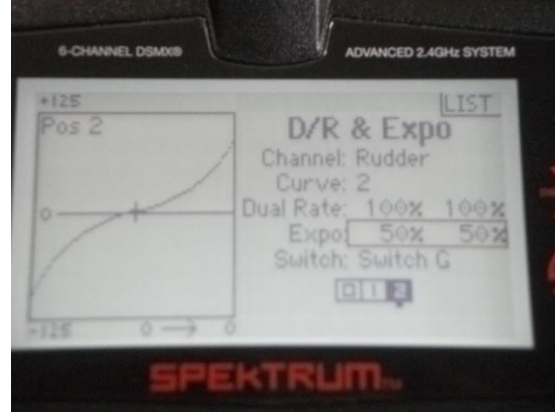
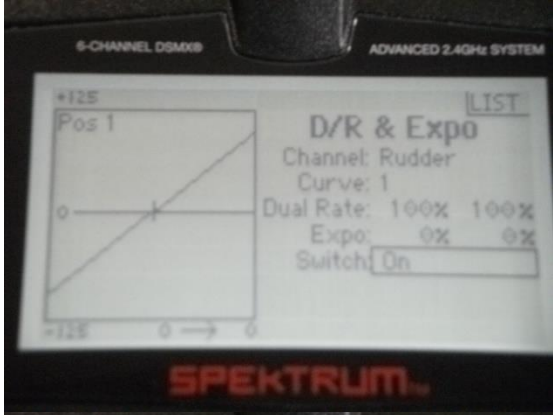
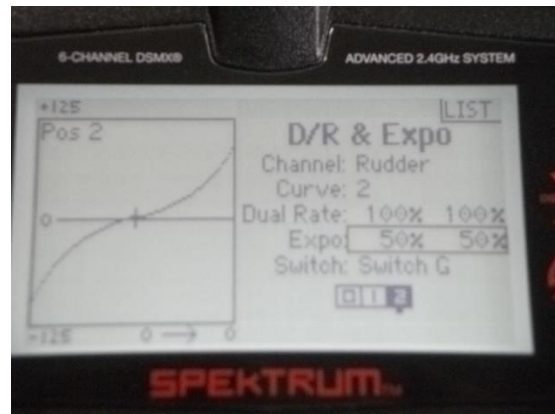
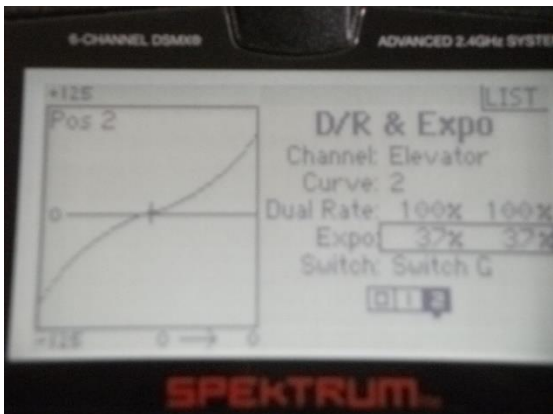




Picture 6 through 10. Next, physically move the switch back to position 0, scroll up to select aileron and change to elevator. Do the exact same procedures as above to set up your elevator rates. In my case I use less elevator for snap condition and more elevator for spin condition.



Picture 11 through 14. Next, physically move the switch back to position 0, scroll up to select elevator and change to rudder. Do the exact same procedures as above to set up your rudder rates. In my case I use less rudder for snap condition and more rudder for spin condition. I also use significantly more expo on rudder than I do on elevator or aileron. The reason I do this is to more smoothly blend in rudder during point rolls and wind correction, while leaving extra throw for stall turns and spin entries.



Finally, picture 15 shows a practical example of adjusting directions to reflect each condition unique to your airplane preferences. In this instance, I added more down elevator to be able to snap more cleanly in position 1 (snap rate) for negative snaps. My plane snaps cleanly with the amount for positive but needs additional down elevator for negative snaps. Also notice the corresponding increase in expo for this condition, so the stick feel around neutral feels the same at all three rates, whether I be getting ready for a snap entry, easing in to a spin entry, or making slight rudder corrections at the top of a loop prior to moving the switch for a snap in the avalanche.

The above guidelines should be useful for setting up your airplane. Good luck!

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The FARM Newsletter is published monthly by the Fauquier Aero Recreation Modelers, AMA charter #1654. It is mailed to FARM members and to other clubs on an exchange basis. Articles related to all types of aviation are welcome. Opinions expressed in the newsletter are those of the individual author and do not necessarily reflect those of FARM Inc. Publishing deadline is the 2<sup>nd</sup> Tuesday of the month. Please mail all input to:

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