



RC Flight School Optimized RealFlight 9 Plane & TX Settings - Spektrum Transmitter & wireless Dongle

Updated 3/31/2023

STEP 1 Create a New Folder on your Desktop to store downloaded files. Click on the desired RC Flight School (RCFS) aircraft and transmitter (TX) model memories and Save them to the New Folder.

RCFS TX model memories are .SPM files for DX series radios, .NSPM for NX, or .iSPM for iX

.SPM files will load into all three DX, NX, and iX series radios

RCFS_AV (Aircraft Variants) are .RFX files and will eventually be located in: Documents > RealFlight 9 > RFX

STEP 2 Open the Folder and Save the desired RealFlight (RF) TX models to a **32 GB or less** blank SD card. Insert the SD card into your TX and Import the "RF ---model name--- by RCFS" models individually -or- Import All Models.

STEP 3 Select a new blank model in the TX with everything set to defaults. There is no need to name it or do anything else with it since this model memory will only be used to Calibrate the TX in RealFlight.

STEP 4 Run RealFlight > FLY. Click on Simulation (upper left toolbar) > Select Controller > Receiver Profile > select Spektrum > then click Edit.

☐ Confirm Channel 1 Aileron and Channel 4 Rudder Reverse boxes are checked.

☐ Click on the Input buttons for Channels 1, 2, 3, and 4 to open the Input Detection window and move the associated TX control input to assign the correct control movement to each channel.

☐ Uncheck all the Input boxes along the far right side of the Edit window except 1, 2, 3, 4, 6, 7, and 8. In other words, 1-through-8 except for 5

☐ Click on the Channel 6 Input button and toggle switch **D** to assign it for flap control.

☐ Click on the Channel 7 Input button and toggle switch **A** for retracts.

☐ Click on the Channel 8 Input button and toggle switch **B** for SAFE - Intermediate - Experienced Modes.

☐ **Uncheck Enable Software Radio Mixes and Enable Software Radio Dual Rates and Expo boxes.**

Close and Save. Name the Profile. Example: Spektrum RCFS Planes. These steps only have to be done once, whether flying RCFS or other aircraft, as long as you continue to use the same Spektrum Receiver (TX) Profile you created.

STEP 5 Calibrate the Transmitter/Controller **NOTICE! When calibrating the transmitter, ensure the trims are neutral and all TX settings (Model Type, Travel, D/R, Mixing, etc.) are set to defaults.**

STEP 6 Select the desired RCFS model variant in your TX and Bind it to the USB wireless Dongle plugged into your computer. (Note: A USB extension cord may make Binding and rebinding the Dongle more convenient.)

STEP 7 In RealFlight, click on Simulation > Import > RealFlight Archive > Look in: Locate and Open the file where you saved all the RCFS aircraft > check All > Open to Save/Import them into RealFlight.

STEP 8 Click on Aircraft to bring down the menu > Select Aircraft > open Custom Aircraft > Select the aircraft that matches the model selected in your TX and fly.

As in the real world, you'll need to trim and fine tune rates to match the airplane behavior exactly to your preferences.

Whenever you need to reverse a servo, do so in the transmitter.

When applicable, Dual Rates are controlled by switch **C**. It is recommended that you do not change this due to the interaction of switch **C** with other functions.

When applicable, switch **B** selects SAFE = self correcting with bank and pitch angle limits – Intermediate = conventional control but with bank and pitch angle limits – Experienced = conventional control with no attitude limits. Note that Intermediate Mode is sometimes erratic and may not prove usable.

The following aircraft are listed in order of degree of difficulty and/or performance...



RCFS Variant: [AeroScout by RCFS](#)

TX Model: [RF AeroScout by RCFS](#)

Switch B Modes: Pos 0 = SAFE - Pos 1 = Intermediate - Pos 2 = Experienced

Note that in SAFE Mode throttle affects altitude: High throttle = climb / mid throttle = level / low throttle = descent



RCFS Variant: [Apprentice STS by RCFS](#)

TX Model: [RF Apprentice by RCFS](#)

Switch B Modes: Pos 0 = SAFE - Pos 1 = Intermediate - Pos 2 = Experienced



RCFS Variant: [Timber 1.5m by RCFS](#)

TX Model: [RF Timber by RCFS](#)

Switch B Modes: Pos 0 = SAFE - Pos 1 = Intermediate - Pos 2 = Experienced

Switch D Flaps



RCFS Variant: [XCub 60cc by RCFS](#)

TX Model: [RF XCub by RCFS](#)

Switch C Rates: Pos 2 = Low - Pos 1 = Mid - Pos 0 = 100% High

Switch D Flaps



Orig Aircraft: [H9 eStick 50](#)

RCFS Variant: [Ultra Stick 50 by RCFS](#)

TX Model: [RF ULStick 50 by RCFS](#)

Switch C Rates: Pos 2 = Precision - Pos 1 = Mid - Pos 0 = High

Switch D Flaps



RCFS Variant: [Ultra Stick 30cc by RCFS](#)

TX Model: [RF ULStick 30cc by RCFS](#)

Switch C Rates: Pos 2 = Precision - Pos 1 = Mid Rates - Pos 0 = **Snap roll, **Spin, Hammerhead

Switch D Flaps

** "Accelerating" Snaps and Spins, i.e., reducing or using less elevator during snaps and spins, cuts down on heading deviations, speed loss, and produces a better looking maneuver.



Orig Aircraft: [T-28 Trojan](#)

RCFS Variant: [T-28 by RCFS](#)

TX Model: [RF T-28 by RCFS](#)

Switch B Modes: Pos 2 = Experienced - Pos 1 = Intermediate - Pos 0 = SAFE



RCFS Variant: [Extra 1.3m by RCFS](#)

TX Model: [RF Extra 1.3m by RCFS](#)

Switch B Modes: Pos 2 = Experienced/Precision - Pos 1 = Mid/Snap Rates - Pos 0 = SAFE



RCFS Variant: [Pitts S2B by RCFS](#)

TX Model: [RF Pitts S2B by RCFS](#)

Switch C Rates: Pos 2 = Precision - Pos 1 = **Snap or Spin - Pos 0 = High Hammerhead

** "Accelerating" snaps, i.e., reducing or lessening elevator during the snap produces a better overall maneuver.



RCFS Variant: [Yak-54 Indoor Foamy 3D by RCFS](#)

TX Model: [RF Yak-54 Foamy 3D by RCFS](#)

Switch C Rates: Pos 2 = Precision (slow speed rolling circle trainer☺) - Pos 1 = 3D - Pos 0 = 100%



RCFS Variant: [P-51 1.5m by RCFS](#)

TX Model: [RF P-51 1.5m by RCFS](#)

Switch C Modes: Pos 2 = Precision - Pos 1 = Mid - Pos 0 = SAFE (SAFE ailerons are slightly erratic☺)

Switch A Retracts - Switch D Flaps



RCFS Variant: [A-10 by RCFS](#)

TX Model: [RF A-10 by RCFS](#)

Switch C Rates: Pos 2 = Precision - Pos 1 = Mid - Pos 0 = High - Target speed = $\frac{1}{2}$ - $\frac{3}{4}$ throttle

Switch A Retracts - Switch D Flaps



Note: It is necessary to install the original RealFlight Revo, OREKA, and Oxai Pinnacle pattern planes in order for the RC Flight School variants of them to become available.

Orig Aircraft: [Revo](#)

RCFS Variant: [Revo by RCFS](#)

TX Model: [RF Revo by RCFS](#)

Switch C Rates: Pos 2 = Precision - Pos 1 = Snap - Pos 0 = Spin or Hammerhead / FAI

(Note: Switch C Pos 1 spoken "Spin Rates" was the closest to "snap rates" available in the sound list)



Orig Aircraft: [OREKA F3A](#)

RCFS Variant: [OREKA F3A Real Governor by RCFS](#)

TX Model: [RF OREKA by RCFS](#)

Switch C Rates: Pos 2 = Precision - Pos 1 = Snap/Spin - Pos 0 = 100% Hammerhead / FAI



Orig Aircraft: [Oxai Pinnacle](#)

RCFS Variant: [Oxai Pinnacle by RCFS](#)

TX Model: [RF Pinnacle by RCFS](#)

Switch C Rates: Pos 2 Precision - Pos 1 = **Snap roll. Pos 0 = Spin or Hammerhead / FAI

** "Accelerating" snap rolls, i.e., inputting less elevator produces a better overall maneuver.



RCFS Variant: [Extra 300L by RCFS](#)

TX Model: [RF Extra 300L by RCFS](#)

Switch C Rates: Pos 2 = Precision IMAC - Pos 1 = **Snap/Spin - Pos 0 = Hammerhead

** "Accelerating" snaps and spins produces a better overall maneuver.

RCFS 3D Variant: [Extra 300L 3D by RCFS](#)

TX Model: [RF Extra 300L 3D by RCFS](#)

Switch C Rates: Pos 2 = Precision - Pos 1 = 3D - Pos 0 = High



Orig Aircraft: [Extra 330SC](#)

RCFS Variant: [Extra 330SC by RCFS](#)

TX Model: [RF Ex 330SC by RCFS](#)

Switch C Rates: Pos 2 = Precision IMAC - Pos 1 = **Snap/Spin - Pos 0 = Hammerhead



RCFS Variant: [Viper by RCFS](#)

TX Model: [RF Viper by RCFS](#)

Switch B Modes: Pos 2 = Precision - Pos 1 = Mid - Pos 0 = SAFE (target speed in SAFE = $\frac{1}{2}$ - $\frac{3}{4}$ throttle)

Switch D Flaps Switch A Retracts



RCFS Variant: [F-16 70mm EDF by RCFS](#)

TX Model: [RF F-16 by RCFS](#)

Switch B Modes: Pos 2 = Precision - Pos 1 = Intermediate - Pos 2 = SAFE (target speed in SAFE = $\frac{1}{2}$ - $\frac{3}{4}$ throttle)

Switch A Retracts



RCFS Variant: [Blade Fusion 480 by RCFS](#)

TX Heli: [RF Blade Fusion by RCFS](#)

Switch B Modes: Pos 0 = Normal - Pos 1 = Stunt 1 Low Rates - Pos 2 = Stunt 2 Mid Rates



RCFS Variant: [KDE 700 Heli by RCFS](#)

TX Heli: [RF KDE 700 by RCFS](#)

Switch B Modes: Pos 0 = Normal - Pos 1 = Stunt 1 Low Rates - Pos 2 = Stunt 2 Mid Rates

(Note: Advance the throttle to 1/4, let the rotor spool up, then advance very slowly during Initial liftoff.)



RCFS Variant: [Quadcopter X by RCFS](#)

TX Model: [RF QuadcopterX by RCFS](#)

Switch B Modes: Pos 0 = Stabilize - Pos 1 = Altitude hold - Pos 2 = Loiter

Additional Notes:

If you encounter latency issues displaying RealFlight on a larger second monitor/screen, the solution is to Right click on your desktop > click on Display settings > scroll down to Multiple Displays > open and select: **Show only on 2**

If having problems with the plane becoming too small, press the “Z” key twice to get to Autozoom View setting. Press + or – to zoom in or out. Note that Chase or Onboard Views only work in 3D fields.

Windsock angle/wind equivalent: 15° = 5 mph, 30° = 10 mph, 45° = 15 mph, horizontal windsock = 30+ mph!
Home key controls wind direction. Pg Up - Pg Dn controls wind speed. Press Delete to remove turbulence.

To turn off smoke/exhaust: View > Scenery > uncheck Particles

Due to varied Travel, Dual Rate, and mix settings, the Radio Gadget in RealFlight does not reflect the size of the actual control inputs applied, and therefore shouldn't be interpreted as offering precise feedback on how to fly each maneuver.

Replacing keyboard Spacebar Reset with Reset Button on 8+ channel Spektrum TX...

TX: System Setup > Channel Assign > Aux 3: select “I” (Bind Button) = Gear: A , Aux 1: D, Aux 2: B, Aux 3: I

Sim: Simulation > Select Controller > Edit > scroll down to Reset and click on the Input button > push the Bind button to select it. (Aux 3 will have to be set to “I” on each sim model in your TX that you want to Reset with the “I” button.)

In the rare instance you encounter video issues, it may be necessary to deactivate Rewind in the Sim: Simulation > Settings > Graphics > Enable Rewind = No

NOTICE: In order to capitalize on RCFS sim models, you must 1. Initially calibrate the Controller using a new model memory set to defaults. 2. Match the correct TX model memory to the RealFlight model. 3. Trim the model for straight and level upright flight in all 3 axes.

.SPM transmitter files should load into DX, NX, and iX series radios

All Aircraft

[AeroScout by RCFS](#)
[Apprentice STS by RCFS](#)
[Timber 1.5m by RCFS](#)
[XCub 60cc by RCFS](#)
[Ultra Stick 50](#)
[Ultra Stick 50 by RCFS](#)
[Ultra Stick 30cc by RCFS](#)
[Decathlon by RCFS](#)
[T-28 Trojan](#)
[T-28 by RCFS](#)
[Extra 1.3m by RCFS](#)
[Pitts S2B by RCFS](#)
[Yak-54 Foamy 3D by RCFS](#)
[Crack Yak by RCFS](#)
[P-51 1.5m by RCFS](#)

A-10 by RCFS

[Revo](#)
[Revo by RCFS](#)
[OREKA F3A Real Governor](#)
[OREKA Real Gov by RCFS](#)
[Oxai Pinnacle](#)
[Oxai Pinnacle by RCFS](#)
[Extra 300L by RCFS](#)
[Extra 300L 3D by RCFS](#)
[Extra 330SC](#)
[Extra 330SC by RCFS](#)
[Viper by RCFS](#)
[F-16 70mm EDF](#)
[Blade Fusion 480 by RCFS](#)
[KDE 700 Heli by RCFS](#)
[Quadcopter X by RCFS](#)

All Transmitter

[RF AeroScout by RCFS](#)
[RF Apprentice by RCFS](#)
[RF Timber by RCFS](#)
[RF XCub by RCFS](#)
[RF ULStick 50 by RCFS](#)
[RF ULStick 30cc by RCFS](#)
[RF Decathlon by RCFS](#)
[RF T-28 by RCFS](#)
[RF Extra 1.3m by RCFS](#)
[RF Pitts S2B by RCFS](#)
[RF Yak Foamy 3D by RCFS](#)
[RF Crack Yak by RCFS](#)

RF P-51 1.5m by RCFS

[RF A-10 by RCFS](#)
[RF Revo by RCFS](#)
[RF OREKA by RCFS](#)
[RF Pinnacle by RCFS](#)
[RF Extra 300L by RCFS](#)
[RF Extra 300L 3D by RCFS](#)
[RF Ex 330SC by RCFS](#)
[RF Viper by RCFS](#)
[RF F-16 by RCFS](#)
[RF Blade Fusion by RCFS](#)
[RF KDE 700 by RCFS](#)
[RF QuadcopterX by RCFS](#)

Other Fun Stuff



Orig Aircraft: [B-1B](#)

RCFS Variant: [B-1B by RCFS](#)

TX Model: [RF B-1B by RCFS](#)

Switch B Wing Sweep:

Pos 2 = Fully Extended Landing Mode - Pos 1 = Mid Sweep Cruise Mode - Pos 0 – Fully Swept Speed Mode

Switch A Retracts - Switch D Flaps



Orig Aircraft: [F-104 Starfighter](#)

RCFS Variant: [F-104 by RCFS](#)

TX Model: [RF F104 by RCFS](#)

Switch C Rates: Pos 2 = Precision - Pos 1 = Mid - Pos 2 = High

Switch A Retracts - Switch D Flaps



RCFS Variant: [Harrier by RCFS](#)

TX Model: [RF Harrier by RCFS](#)

Switch B Thrust Nozzle Angle/Mode: Pos 2 = Aft/Normal - Pos 1 = 60° Downward - Pos 0 – 90° Hover

Switch A: Retracts - Switch D: Flaps



Orig Aircraft: [Incom T-65](#)

RCFS Variant: [X-wing Fighter by RCFS](#)

TX Model: [RF X-wing by RCFS](#)

Switch B Wing Configuration: Pos 2 = Closed Lightspeed - Pos 1 = Mid - Pos 0 – Fully open Attack Position

Switch D Modes: Pos 2 = Forward Flight - Pos 1 = Hover - Pos 0 = Hover

Switch A: Retracts



RCFS Variant: [Cub Float Plane by RCFS](#)

TX Model: [RF Cub Float Plane by RCFS](#)

Water site: Environment > Select Airport > Sierra Nevada > Alpine Lake (turn on View > Scenery > Particles)

Switch C Modes: Pos 2 = Low - Pos 1 = Mid - Pos 0 = High

Switch A: Retracts