

RedFalcon Flight System Heliz JSON configuration files can be found in the **<game>\Profile\RFFSHeli** folder. It is important to note that the default versions of these JSON configuration files are only generated when the helicopters are spawned into game. If you just installed the mod, don't be concerned if you can't find the folder or files, you'll need to log into your server and spawn all of the helicopter models to generate the default JSON configuration files.

This behavior is a by-product of the feature that allows JSON configuration file updates to take effect immediately the next time that you spawn a helicopter into the server. This allows for easy config tunings (trying a series of changes to get it 'just right' for you) without having to do a server restart every time.

There are 2 types of JSON configuration files, one is called **MasterConfig.json** and settings here affect all helicopters in the mod. The other JSON configuration files are for each helicopter model (notice per model, not per retexture). They follow this naming convention: **{helicopter class name}\_Config.json** such as **RFFSHeli\_Apache\_Config.json**.

## **MasterConfig.json settings:**

### **Master\_ConfigVersion**

This is used by the mod itself to track the configuration schema being used (so that if I add new settings, the mod will know to update your config files). **DO NOT ALTER THIS SETTING.**

### **HUD\_ForceMetric**

*Valid settings: 1 or 0*

*Default: 0*

Forces all measurements on the HUD to use the metric system as opposed to what is defined for the individual helicopter models

### **HUD\_ForceImperial**

*Valid settings: 1 or 0*

*Default: 0*

Forces all measurements on the HUD to use the imperial system as opposed to what is defined for the individual helicopter models

### **HUD\_Allow1PP**

*Valid settings: 1 or 0*

*Default: 1*

Allow the HUD to be displayed in the 1st Person Point of view

### **HUD\_Allow3PP**

*Valid settings: 1 or 0*

*Default: 1*

Allow the HUD to be displayed in the 3rd Person Point of view

### **HUD\_RequiresPilotHelmet**

*Valid settings: 1 or 0*

*Default: 0*

Requires a pilot/co-pilot to be wearing a Pilot Helmet (either the one from the mod or a vanilla pilot helmet) in order to be able to see the HUD

### **Control\_AllowTakeCommand**

*Valid settings: 1 or 0*

*Default: 0*

Enables “one pilot at a time” using the “\” (default) to toggle between being in control of the helicopter or not. This prevents situations like the co-pilot looking at a map, scrolling around,

and affecting flight controls, for example. On the HUD a green helmet icon appears when the player is in control of the helicopter and a red 'x-ed out' helmet icon when they are not.



### Control\_SimpleCollective

*Valid settings: 1 or 0*

*Default: 0*

Enables/disables the Simple Collective system. When enabled, it disables the variable collective controls and collective indicator on the HUD. Makes the collective control similar to the throttle on a car, push & hold. Still uses the **Shift (up)** and **Z (down)** keys to control the collective but it is either on or off. This is for players that are having a hard time dealing with the variable collective controls.

### Control-AllowRecoveryMode

*Valid settings: 1 or 0*

*Default: 0*

Enables/disables the Flight Recovery Mod (auto-hover/auto-pilot) which, when the appropriate key is pressed (and held) returns the helicopter to a stable flight attitude and stops all movement.

### Damage-AllowWeaponDamage

*Valid settings: 1 or 0*

*Default: 1*

Enables/disables the ability for a helicopter to get damaged by having weapons fired at it

### **Damage\_AllowCollisionDamage**

*Valid settings: 1 or 0*

*Default: 1*

Enables/disables the ability for a helicopter to get damaged by colliding with the ground or other objects in game

### **Damage\_Collision2DamageCoeff**

*Valid settings: Percentage (IE: 50.0 = 50% of default)*

*Default: 100.0*

Sets the coefficient of collision velocity to collision damage that is applied to a helicopter when it runs into something. A higher number will cause more damage and a lower number will cause less. There is no maximum limit, except that if set too high, a helicopter will be ruined by the slightest touch

### **Damage\_AllowHydraulicDamage**

*Valid settings: 1 or 0*

*Default: 0*

Enables/disables the effects of low/no hydraulic fluid pressure on Cyclic and Anti-Torque controls. When enabled and hydraulic fluid pressure is less than 40%, Cyclic and Anti-Torque controls become less responsive. If hydraulic fluid pressure drops to zero, the controls will be ineffective.

### **Storage\_AllowRemovalofFlightCase**

*Valid settings: 1 or 0*

*Default: 1*

Enables/disables the ability for players to remove an attached Flight Case from a helicopter. This is useful if a server admin wants to allow the additional storage on helicopters but doesn't want players to exploit the Flight Cases as base storage containers.

### **Storage\_DisplayInventoryCategory**

*Valid settings: 1 or 0*

*Default: 1*

Enable/disable the ability for players to see the inventory category that shows the Flight Case slot when looking at the helicopter inventory. This would be used where a server admin doesn't want to use Flight Cases at all and wants to avoid having players think that they can attach other types of storage containers to helicopters

### **Crashsite\_CreateOnHeliRuined**

*Valid settings: 1 or 0*

*Default: 1*

Enable/disable the creation of a Helicopter Crash Site when a helicopter reaches a **Ruined** state

### **Crashsite\_ScatterHelilInventory**

*Valid settings: 1 or 0*

*Default: 1*

Enable/disable the scattering of the inventory in a helicopter when a Helicopter Crash Site is created. If this is disable, all of the inventory is just deleted when the Helicopter Crash Site is created

### **Crashsite\_DamageScatteredInventory**

*Valid settings: 1 or 0*

*Default: 1*

Enable/disable random damage being applied to scattered inventory when a Helicopter Crash Site is created

### **Crashsite\_SpawnZombies**

*Valid settings: 1 or 0*

*Default: 1*

Enable/disable the spawning of zombies (infected) when a Helicopter Crash Site is created

### **Crashsite\_ZombieDistance**

*Valid settings: distance in meters*

*Default: 12.0*

The maximum radius distance that zombies (infected) will be spawned from a Helicopter Crash Site

### **Crashsite\_ZombieMax**

*Valid settings: a whole number*

*Default: 8*

The maximum number of zombies (infected) that will be spawned at a Helicopter Crash Site

### **Crashsite\_ZombieMin**

*Valid settings: a whole number*

*Default: 2*

The minimum number of zombies (infected) that will be spawned at a Helicopter Crash Site

### **Crashsite\_LootDistance**

*Valid settings: distance in meters*

*Default: 4.0*

The maximum radius distance that scattered inventory will be placed from a Helicopter Crash Site

### **Crashsite\_LootMinDamage**

*Valid settings: a whole number*

*Default: 0*

The minimum damage (hit points) that could be applied to scattered inventory at a Helicopter Crash Site

### **Crashsite\_LootMaxDamage**

*Valid settings: a whole number*

*Default: 100*

The minimum damage (hit points) that could be applied to scattered inventory at a Helicopter Crash Site

### **Crashsite\_Zombies**

*Valid settings: an array of creature classes*

*Default: a list of creature classes formatted in a JSON array*

The list zombie (or other creatures) classes to be selected from when spawning zombies (infected) at a Helicopter Crash Site. Note that animals could be included as well, such as wolves, bears, etc.

## **{helicopter class name}\_Config.json config settings**

### **Heli\_ConfigVersion**

This is used by the mod itself to track the configuration schema being used (so that if I add new settings, the mod will know to update your config files). **DO NOT ALTER THIS SETTING.**

### **Heli\_FuelCapacity**

*Valid settings: liters*

Total fuel capacity of a helicopter in liters

### **Heli\_FuelConsumptionRate**

*Valid settings: liters per minute*

The amount of fuel that a helicopter uses while the engine is running, in liters per minute

### **Heli\_TrainerMode**

*Valid settings: 0 or 1*

Enables “Training Mode” for the helicopter, which limits the amount of pitch and roll to a maximum of 35°, and maximum descent rate of 8 meters per second. This is useful for players that are just learning how to fly helicopters or on servers where the admin wants to make the helicopters easier to fly. This is set to ‘1’ by default only for the Robinson R22 helicopter model.

### **Heli\_HasHydraulics**

*Valid settings: 0 or 1*

Enables/Disables the hydraulic system and related parts for the helicopter.

### **Heli\_SimpleCollective**

*Valid settings: 1 or 0*

*Default: 0*

Enables/Disables the Simple Collective system. When Enabled, it Disables the variable collective controls and collective indicator on the HUD for this specific heli model. Makes the collective control similar to the throttle on a car, push & hold. Still uses the **Shift (up)** and **Z (down)** keys to control the collective but it is either on or off. This is for players that are having a hard time dealing with the variable collective controls.

### **Flight\_MaximumAirspeed**

*Valid settings: airspeed in kilometers per hour*

Limits the maximum airspeed that a helicopter can fly. It is important to interpret this as “can’t fly faster than” rather than “can fly up to this speed” as this is a governor, not thrust control. You will find that setting this higher doesn’t necessarily mean that the helicopter can fly faster, it just means that the helicopter is prevented from flying faster.

## **Flight\_MaximumAltitude**

*Valid settings: altitude in meters*

Limits the maximum altitude that a helicopter can climb to

## **Flight\_MaximumClimbRate**

*Valid settings: speed in meters per minute*

Limits the maximum climb rate that a helicopter can perform. It is important to interpret this as “can’t fly climb than” rather than “can climb up to this speed” as this is a governor, not thrust control. You will find that setting this higher doesn’t necessarily mean that the helicopter can climb faster, it just means that the helicopter is prevented from climbing faster.

## **Flight\_AerodynamicDrag**

*Valid settings: percentage*

Sets the amount of aerodynamic drag applied to a helicopter while in flight, causing it to gradually slow down. This is a percentage of what is defined in the mod for a particular helicopter model

## **Flight\_BankTurnCoeff**

*Valid settings: percentage*

Sets the coefficient used to calculate how much ‘turn’ is applied to a helicopter based on the amount of bank and the speed of the helicopter during forward flight. The higher the percentage, the tighter the helicopter turns.

## **Controls\_AntiTorqueThrustRate**

*Valid settings: percentage*

Sets the amount of thrust that is applied when the anti-torque (tail rotor) pedals are pressed. The higher the percentage, the faster the helicopter will spin when anti-torque is applied

## **Controls\_CyclicThrustRate**

*Valid settings: percentage*

Sets the amount of thrust that is applied when the cyclic controls (forward/back/left/right) are applied. The higher the percentage, the faster the helicopter will pitch or roll. One of the three settings used to manage tightness/softness of cyclic controls

## **Controls\_CollectiveThrustRate**

*Valid settings: percentage*

Sets the maximum amount of thrust that is applied as a result of the collective control. The higher the percentage, the more lift that the helicopter will generate when the collective control is used. It is important to note that changing this setting will affect the ‘calibration’ of the collective control gauge on the HUD, altering where the neutral position is.



### **Controls\_MaximumRotationalRate**

*Valid settings: percentage*

Sets the maximum momentum that can be applied via cyclic controls. Think of this as “how fast can the heli pitch/roll if cyclic control was constantly applied”. One of the three settings used to manage tightness/softness of cyclic controls

### **Controls\_CyclicDampeningRate**

*Valid settings: percentage*

Sets how quickly or slowly momentum is reduced when cyclic controls are applied. This is the ‘downward side’ of the cyclic control thrust slope. One of the three settings used to manage tightness/softness of cyclic controls