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

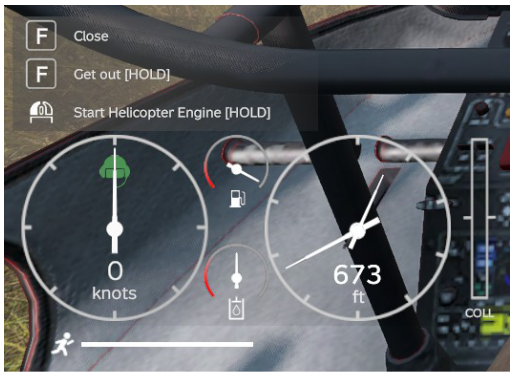
HUD_RequiresPilotHelmet

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
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

Storage_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 is 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_ScatterHeliInventory

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
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