

# **SILANTRO FLIGHT SIMULATOR**

## SCRIPT DOCUMENTATION

© Oyedoyin Dada, 2019

Thank you for purchasing this asset, please don't forget to rate it on the asset store. This document will guide you on the inner functions of each component and how to call them.

## CALL METHOD

The functions can all be called with the get component feature e.g.

`gameObject.GetComponent<SilantroHealth>().DestoryComponent();` will cause the health in view to activate its destruction sequence

or

`gameObject.GetComponent<SilantroController>().TurnOnEngines();` will start the engines attached to the controller

## **SILANTROAEROFOIL.CS**

### **ToggleTCS**

Sets the state of the aerofoil. Aileron TCS mode i.e. determines if the ailerons will be deflected with the flaps to generate more lift during takeoff. Note; it is automatically deactivated once the gear is retracted.

### **Lower Flap**

Increases the target flap angle to the next item on the predefined angle list.

### **Raise Flap**

Reduces the target flap angle to the next item on the predefined angle list.

### **Actuate Slat**

Extends or retracts the aerofoil slats based on its current state

### **Actuate Spoilers**

Raises or Lowers the specified spoiler

### **SetTrimAngle (float angle)**

Sets the aerofoil trim angle to the specified input angle

## **SILANTROWINGACTUATOR.CS**

### **Swing Wings**

Increases the wing sweep angle to the maximum preset angle

### **Extend Wings**

Brings the wing back to its default sweep angle

### **SetWingAngle (float angle)**

Sets the wing sweep angle to the specified input angle

## **SILANTRORADAR.CS**

### **Select Upper Target**

Selects the object above the current selection on the filtered objects list

### **Select Lower Target**

Selects the object below the current selection on the filtered objects list

### **Select Target at Position (int position)**

Selects the object at the specified position on the filtered objects list

### **Lock Selected Target**

Locks onto the current object selected on the radar list

### **Release Selected Target**

Release locked target

## **SILANTROCAMERA.CS**

### **Activate Interior Camera**

Activates the interior camera while disabling the exterior camera

### **Activate Exterior Camera**

Activates the exterior camera while disabling the interior camera

### **Activate and Set Exterior Camera (int mode)**

Activates the exterior camera and sets it to a predetermined mode i.e Free or Orbit camera mode.

#### **SILANTROHEALTH.CS**

##### **Silantro Damage (float input)**

Applies the selected damage value to the health component

##### **DestroyComponent**

Activates the destruction sequence for the selected health component.

#### **SILANTROCONTROLLER.CS**

##### **Set Control State (bool state)**

Selects if the aircraft is controllable or not i.e the aircraft control state is set to the specified bool value

##### **TurnOn Engines**

Starts the attached engines

##### **TurnOff Engines**

Stops the attached engines

##### **Start Aircraft**

Positions the aircraft and start the engines for a hot start process

##### **Reset Scene**

Reloads the current aircraft scene

##### **VTOL Transition**

Transitions the aircraft to its VTOL mode if the function is supported and enabled

##### **STOL Transition**

Transitions the aircraft to its STOL mode if the function is supported and enabled

##### **VTOL Transition**

Returns the aircraft back to its normal mode if the STOVL function is supported and enabled

#### **SILANTROGEARSYSTEM.CS**

##### **Toggle Brake**

Activates or deactivates the gear system parking brake

##### **Activate Brake**

Activates the parking brake

##### **Deactivate Brake**

Deactivates the parking brake

##### **Toggle Gear**

Raises or lowers the specified landing gear

##### **Lower Gear**

##### **Raise Brake**

#### **SILANTROSPEEDBRAKES.CS**

##### **Toggle Speed Brake**

Activates or deactivates the speed brake

##### **Engage Brake**

Activates the speed brake

##### **Disengage Brake**

Deactivates the speed brake

#### **SILANTROHYDRAULICSYSTEM.CS**

##### **Engage Actuator**

Activates the specified hydraulic actuator

##### **Disengage Actuator**

Deactivates the specified hydraulic actuator

#### **SILANTRO ENGINES (TURBOFAN, TURBOJET, TURBOSHAFT, PEGASUS, PISTON)**

##### **Start Engine**

##### **Stop Engine**

##### **Set Engine Throttle (float input)**

Sets the engine throttle value to the specified input value

#### **SILANTROARMAMENT.CS**

##### **Change Weapon**

Cycles through the available weapons attached to the controller

##### **Count Ordnance**

Collects and counts all munitions attached to the weapon stores

##### **Drop Bomb**

##### **Fire Missile**

##### **Fire Gun**

##### **Fire Rocket**

#### **SILANTROMUNITION.CS**

##### **Release Munition**

Releases and drops the selected munition from its hang point. Note: Should only be used for bombs and unguided rockets

##### **Fire Bullet (float muzzleVelocity, Vector3 parentVelocity)**

Releases and fires a bullet based on the preset values i.e aircraft velocity vector and the gun muzzle velocity.

### Fire Munition (Transform markedTarget, string ID, int mode)

Releases and fires a missile based on the preset values

1. Market Target: Locked target from the radar
2. ID: assigned id string used to keep track of the target movement and behavior
3. Mode; determines the firing mode of the missile
  - a. Mode 1: Drop Launch
  - b. Mode 2: Tube Launch
  - c. Mode 3: Left Trapeze Launch
  - d. Mode 4: Right Trapeze Launch