

Microsoft Flight Simulator [v1.14.5.0]

**Complete Controls List
& Default Assignments [v1.0]**

March 10, 2021

In the present version of MSFS there are more than 1200 assignable commands: about 900 for managing the sim and the flight, and near 250 for the cameras.

However, in my opinion, the problem is not the number of possible commands, but the not always logic structure under which they are presented in the selection menu.

In this document you'll find this main structure respected, except in a few cases where I have created some new sub-items, or relocated some commands. You can use the solid PDF version, or edit the MS Word as you like. Both are printable in A5 size, and both include an internal navigation aid (bookmarks in PDF / title navigation tree for Word).

I hope it could be as useful to you as it has been for me to made it.

Feedback always welcome.

Felix Fernandez de Castro (Oviedo, Spain) – felixser@telefonica.net

MSFS Controls [v1.14.5.0]

1. Axes	1
2. Menu	2
3. Miscellaneous	3
4. Instruments & Systems	4
4.1 Flight Instruments	4
4.2 Engine Instruments	7
4.3 Electrics	11
4.4 Fuel	13
4.5 Anti Ice	16
4.6 Hydraulics	16
5. Lights	17
5.1 Exterior Lights	17
5.2 Interior Lights	18
6. Flight Control Surfaces	19
6.1 Primary Control Surfaces	19
6.2 Secondary Control Surfaces	19
6.3 Control Trimming Surfaces	20
7. Power Management	21
7.1 Throttle	21
7.2 Propeller	22
7.3 Mixture	24
8. Landing Gear	25
9. Brakes	25
10. Autopilot	26
10.1 HDG	27
10.2 NAV	27
10.3 ALT	28
10.4 VS	28
10.5 SPD	29
11. Radio	30
11.1 ATC	30
11.2 COMMS	31
11.3 NAV	33
11.4 VOR	34
11.5 OBI	34
11.6 KOLLSMAN	34
11.7 DME	35
11.8 XPNDR	35
11.9 ADF	36
12. VR	38
13. Camera	38
13.1 Camera Mode Switches	38
13.2 Cockpit Camera	39
13.3 Instrument Views	41
13.4 External Camera	42
13.5 Drone Camera	43
13.6 Fixed Camera	45
13.7 User Cameras	46
13.8 Slew Mode	47

1. Axes

Axes	Assignment	Remarks
Aileron		
Elevator		
Rudder		
Elevator Trim		
Aileron Trim		
Rudder Trim		
Flaps		
Spoilers *		
Left Brake		
Right Brake		
Throttle		
Throttle 1 *		
Throttle 2 *		
Throttle 3 *		
Throttle 4 *		
Propeller *		
Propeller 1 *		
Propeller 2 *		
Propeller 3 *		
Propeller 4 *		
Mixture *		
Mixture 1 *		
Mixture 2 *		
Mixture 3 *		
Mixture 4 *		
Cowl Flap 1		
Cowl Flap 2		
Cowl Flap 3		
Cowl Flap 4		

* Repeated with differences in denomination or numeric range.

2. Menu

Menu	Keyboard	Device
Toggle Pause	Esc	
Toggle Active Pause	Pause	
In-Flight UI Panel - Zoom In		
In-Flight UI Panel - Zoom Out		
Toggle Basic Control Panel	Ctrl + C	
Toggle Toolbar		
Clear Search	Del	
Select 1	Alt + F1	
Select 2	Alt + F2	
Select 3	Alt + F3	
Select 4	Alt + F4	
Display Checklist	Shift + C	
Next Toolbar Panel	.	
Previous Toolbar Panel	/	
Back to Main Menu	End	
Close Menu	Backspace	
Fly	Enter	
Change Aircraft	F11	
Liveries	F12	
See Specifications	F10	
Help Menu	Tab	
Restart Free Flight	Home	
Last Waypoint Restart		
Restart Activity	Home	

3. Miscellaneous

Miscellaneous	Keyboard	Device
Cockpit Interaction - Increase		
Cockpit Interaction - Decrease		
Cockpit Interaction - Primary Action		
Cockpit Interaction - Secondary Action		
Cockpit Interaction - Tertiary Action		
Plus	Ctrl + Num +	
Minus	Ctrl + Num -	
Set Pause Off		
Set Pause On		
Display NavLog	N	
Display Map	V	
New UI Window Mode	Alt + Right	
Toggle Delegate Control to Copilot	Ctrl + Alt + X	
Sim Rate	R	
Decrease Sim Rate		
Increase Sim Rate		
Gauge Keystroke		
Trigger Horn		
Set Marker Sound		
Toggle Marker Sound	Ctrl + 3	
Skip RTC [skip flight sim cinematic]	Backspace	
Toggle Pushback	Shift + P	
Repair and Fuel		
Request Fuel	Shift + F	
Increase Steering		
Decrease Steering		
Set Steering		
Toggle Launch Bar Switch		
Set Launch Bar Switch		
Disable Tug		
Tug Heading		
Tug Speed		

4. Instruments & Systems

4.1 Flight Instruments

Instruments & Systems - Flight Instruments	Keyboard	Device
Select Airspeed Bug	Shift + Ctrl + R	
Select Altitude Bug	Shift + Ctrl + Z	
Decrease Attitude Bars Position		
Increase Attitude Bars Position		
Set Attitude Bars Position		
Autorudder Off		
Autorudder On		
Set Autorudder		
Toggle Autorudder	Shift + Ctrl + U	
Avionics Master 1 Off		
Avionics Master 1 On		
Set Avionics Master 1		
Avionics Master 2 Off		
Avionics Master 2 On		
Set Avionics Master 2		
Set Avionics Master		
Set Altimeter	B	
Set Altimeter to MSL Pressure		
Select Heading Bug	Shift + Ctrl + H	
Decrease Heading Bug	Ctrl + Delete	
Increase Heading Bug	Ctrl + Insert	
Set Heading Bug		
Set Heading Indicator	D	
Decrease Heading Indicator Drift		
Increase Heading Indicator Drift		
Set Heading Indicator Drift		
Select VSI Bug		
Toggle Alternate Static	Alt + S	
Set Clock (Hours)		
Set Clock (Minutes)		

Instruments & Systems - Flight Instruments	Keyboard	Device
Toggle GPWS		
Decrease Decision Altitude (MSL)		
Increase Decision Altitude (MSL)		
Decrease Decision Height		
Increase Decision Height		
ELT Off		
ELT On		
Set ELT		
Toggle ELT		
Set External System		
Toggle External System		
Set Freeze Altitude		
Toggle Freeze Altitude		
Set Freeze Attitude		
Toggle Freeze Attitude		
Set Freeze Lat/Long		
Toggle Freeze Lat/Long		
Decrease Inductor Compass Reference		
Increase Inductor Compass Reference		
Set Low Height Warning Gauge		
Set Low Height Warning		
Decrease Climb Rate Pressure		
Increase Climb Rate Pressure		
Set Climb Rate Pressure		
Decrease Altitude Pressure		
Increase Altitude Pressure		
Pressure Dump Switch		
Reset G-Force Indicator		
Toggle Attitude Gauge		
Toggle GPS Drives NAV1		
Toggle Turn Indicator Switch		
Toggle Variometer Switch		

Instruments & Systems - Flight Instruments	Keyboard	Device
Decrease True Airspeed Indicator		
Increase True Airspeed Indicator		
Set True Airspeed Calculator		
Set Zulu Day		
Set Zulu Hours		
Set Zulu Minutes		
Set Zulu Year		

4.2 Engine Instruments

Instruments & Systems - Engine Instruments	Keyboard	Device
Select Engine	E	
Auto Start Engine	Ctrl + E	
Engine Autostop	Shift + Ctrl + E	
Increase Cowl Flap	Shift + Ctrl + V	
Increase Cowl Flap 1		
Increase Cowl Flap 2		
Increase Cowl Flap 3		
Increase Cowl Flap 4		
Decrease Cowl Flap	Shift + Ctrl + C	
Decrease Cowl Flap 1		
Decrease Cowl Flap 2		
Decrease Cowl Flap 3		
Decrease Cowl Flap 4		
Set Engine 1 Cowl Flap		
Set Engine 2 Cowl Flap		
Set Engine 3 Cowl Flap		
Set Engine 4 Cowl Flap		
Toggle Master Ignition Switch	Alt + I	
Magneto	M	
Magnetos Both	Shift + Alt + F	
Increase Magneto		
Decrease Magneto		
Magnetos Left	Shift + Alt + S	
Magnetos Off	Shift + Alt + Q	
Magnetos Right	Shift + Alt + D	
Set Magnetos		
Magnetos Start	Shift + Alt + G	
Magneto 1 Both		
Increase Magneto 1		
Decrease Magneto 1		
Magneto 1 Left		

Instruments & Systems - Engine Instruments	Keyboard	Device
Magneto 1 Off		
Magneto 1 Right		
Set Magneto 1		
Magneto 1 Start		
Magneto 2 Both		
Increase Magneto 2		
Decrease Magneto 2		
Magneto 2 Left		
Magneto 2 Off		
Magneto 2 Right		
Set Magneto 2		
Magneto 2 Start		
Magneto 3 Both		
Increase Magneto 3		
Decrease Magneto 3		
Magneto 3 Left		
Magneto 3 Off		
Magneto 3 Right		
Set Magneto 3		
Magneto 3 Start		
Magneto 4 Both		
Increase Magneto 4		
Decrease Magneto 4		
Magneto 4 Left		
Magneto 4 Off		
Magneto 4 Right		
Set Magneto 4		
Magneto 4 Start		
Set Engine Master		
Toggle Engine Master		
Set Engine Master 1		
Toggle Engine Master 1		

Instruments & Systems - Engine Instruments	Keyboard	Device
Set Engine Master 2		
Toggle Engine Master 2		
Set Engine Master 3		
Toggle Engine Master 3		
Set Engine Master 4		
Toggle Engine Master 4		
Engine Primer		
Set Engine Bleed Air Source		
Decrease Bleed Air Source Control		
Increase Bleed Air Source Control		
Set Bleed Air Control Source		
Toggle Engine Bleed Air Source		
Set APU Bleed Air Source		
Toggle APU Bleed Air Source		
Set APU Bleed to Engine		
Toggle APU Bleed to Engine		
Set Engine Crank Mode		
Set Engine IGN / START Mode		
Set Engine NORM Mode		
EGT		
Increase EGT		
Decrease EGT		
Set EGT		
Increase EGT 1		
Decrease EGT 1		
Set EGT 1		
Increase EGT 2		
Decrease EGT 2		
Set EGT 2		
Increase EGT 3		
Decrease EGT 3		
Set EGT 3		

Instruments & Systems - Engine Instruments	Keyboard	Device
Increase EGT 4		
Decrease EGT 4		
Set EGT 4		
Reset Max RPM Indicator		
Set Starter 1 (Hold)		
Set Starter 2 (Hold)		
Set Starter 3 (Hold)		
Set Starter 4 (Hold)		
Set Starters (Hold)		
Set Starter 1		
Set Starter 2		
Set Starter 3		
Set Starter 4		
Starters Off		
Set Starters		
Starters Start		
Toggle All Starters		
Toggle Master Starter Switch		
Toggle Starter 1		
Toggle Starter 2		
Toggle Starter 3		
Toggle Starter 4		
Set Turbines Ignition Switch		
Set Turbine 1 Ignition Switch		
Set Turbine 2 Ignition Switch		
Set Turbine 3 Ignition Switch		
Set Turbine 4 Ignition Switch		
Toggle Turbine Ignition Switch		

4.3 Electrics

Instruments & Systems - Electrics	Keyboard	Device
Toggle Master Alternator	Alt + A	
Toggle Master Battery	Alt + B	
Toggle Master Battery & Alternator	Shift + M	
Toggle External Power		
Set External Power		
Alternator Off		
Alternator On		
Set Alternator		
Set APU		
Toggle APU		
APU Off		
APU Starter		
Set Battery 1		
Set Battery 2		
Set Battery 3		
Set Battery 4		
Set Cabin Lights Power Setting		
Set Electrical Circuit Power Setting		
Execute Electrical Procedure		
Set Electrical Fuel Pump 1		
Set Electrical Fuel Pump 2		
Set Electrical Fuel Pump 3		
Set Electrical Fuel Pump 4		
Set Glareshield Lights Power Setting		
Master Battery Off		
Master Battery On		
Set Master Battery		
Set Panel Lights Power Setting		
Set Pedestal Lights Power Setting		
Toggle Alternator 1		
Toggle Alternator 2		

Instruments & Systems - Electrics	Keyboard	Device
Toggle Alternator 3		
Toggle Alternator 4		
Toggle Electric Vacuum Pump		
Toggle Electric Fuel Pumps		
Toggle Electric Fuel Pump 1		
Toggle Electric Fuel Pump 2		
Toggle Electric Fuel Pump 3		
Toggle Electric Fuel Pump 4		

4.4 Fuel

Instruments & Systems - Fuel	Keyboard	Device
Add Fuel Quantity		
Cross Feed Left to Right		
Open Cross Feed		
Cross Feed Off		
Cross Feed Right to Left		
Toggle Cross Feed		
Toggle Fuel Pump	Alt + P	
Pump On		
Pump Off		
Set Pump		
Toggle Pump		
Trigger On		
Trigger Off		
Set Trigger		
Toggle Trigger		
Fuel Valve On		
Fuel Valve Off		
Set Fuel Valve		
Toggle Fuel Valve		
Shutoff Valve On		
Shutoff Valve Off		
Toggle Shutoff Valve		
Toggle All Fuel Valves	Alt + V	
Toggle Engine 1 Fuel Valve		
Toggle Engine 2 Fuel Valve		
Toggle Engine 3 Fuel Valve		
Toggle Engine 4 Fuel Valve		
Set Fuel Dump Switch		
Toggle Fuel Dump	Shift + Ctrl + D	
Fuel Selector 1 All	Alt W	
Fuel Selector 1 Off	Ctrl + Alt + W	
Fuel Selector 1 Center		

Instruments & Systems - Fuel	Keyboard	Device
Crossfeed Fuel Selector 1		
Isolate Fuel Selector 1		
Fuel Selector 1 Left		
Fuel Selector 1 Left Aux		
Fuel Selector 1 Left Main		
Fuel Selector 1 Right		
Fuel Selector 1 Right Aux		
Fuel Selector 1 Right Main		
Set Fuel Selector 1		
Fuel Selector 2 All		
Fuel Selector 2 Off		
Fuel Selector 2 Center		
Crossfeed Fuel Selector 2		
Isolate Fuel Selector 2		
Fuel Selector 2 Left		
Fuel Selector 2 Left Aux		
Fuel Selector 2 Left Main		
Fuel Selector 2 Right		
Fuel Selector 2 Right Aux		
Fuel Selector 2 Right Main		
Set Fuel Selector 2		
Fuel Selector 3 All		
Fuel Selector 3 Off		
Fuel Selector 3 Center		
Crossfeed Fuel Selector 3		
Isolate Fuel Selector 3		
Fuel Selector 3 Left		
Fuel Selector 3 Left Aux		
Fuel Selector 3 Left Main		
Fuel Selector 3 Right		
Fuel Selector 3 Right Aux		
Fuel Selector 3 Right Main		
Set Fuel Selector 3		

Instruments & Systems - Fuel	Keyboard	Device
Fuel Selector 4 All		
Fuel Selector 4 Off		
Fuel Selector 4 Center		
Crossfeed Fuel Selector 4		
Isolate Fuel Selector 4		
Fuel Selector 4 Left		
Fuel Selector 4 Left Aux		
Fuel Selector 4 Left Main		
Fuel Selector 4 Right		
Fuel Selector 4 Right Aux		
Fuel Selector 4 Right Main		
Set Fuel Selector 4		
Set Junction		
Toggle Fuel Flow Bug Position 1		
Toggle Fuel Flow Bug Position 2		
Toggle Fuel Flow Bug Position 3		
Toggle Fuel Flow Bug Position 4		
Manual Fuel Pressure Pump		
Manual Fuel Transfer		
Set Fuel Transfer Aft		
Set Fuel Transfer Auto		
Set Fuel Transfer Forward		
Set Fuel Transfer Off		
Toggle Primers		
Toggle Primer 1		
Toggle Primer 2		
Toggle Primer 3		
Toggle Primer 4		
Set Engine 1 Valve		
Set Engine 2 Valve		
Set Engine 3 Valve		
Set Engine 4 Valve		

4.5 Anti Ice

Instruments & Systems - Anti Ice	Keyboard	Device
Toggle Anti Ice	H	
Toggle Engine 1 Anti Ice		
Toggle Engine 2 Anti Ice		
Toggle Engine 3 Anti Ice		
Toggle Engine 4 Anti Ice		
Toggle Pitot Heat	Shift + H	
Pitot Heat Off		
Pitot Heat On		
Set Pitot Heat		
Set Engines Gradual Anti Ice		
Set Engine 1 Gradual Anti Ice		
Set Engine 2 Gradual Anti Ice		
Set Engine 3 Gradual Anti Ice		
Set Engine 4 Gradual Anti Ice		
Set Anti Ice Off		
Set Anti Ice On		
Set Anti Ice		
Set Engine 1 Anti Ice		
Set Engine 2 Anti Ice		
Set Engine 3 Anti Ice		
Set Engine 4 Anti Ice		
Toggle Propeller Deice		
Toggle Structural Deice		
Set Windshield Deice Off		
Set Windshield Deice On		
Set Windshield Deice		
Toggle Windshield Deice		

4.6 Hydraulics

Instruments & Systems - Hydraulics	Keyboard	Device
Toggle Hydraulic Switch		

5. Lights

Lights	Keyboard	Device
Toggle Lights (general)	L	

5.1 Exterior Lights

Lights - Exterior Lights	Keyboard	Device
Toggle Landing Lights	Ctrl + L	
Landing Lights Off		
Landing Lights On		
Set Landing Lights		
Landing Lights Up	Shift + Ctrl + Num 8	
Landing Lights Down	Shift + Ctrl + Num 2	
Landing Lights Left	Shift + Ctrl + Num 4	
Landing Lights Right	Shift + Ctrl + Num 6	
Landing Lights Home	Shift + Ctrl + Num 5	
Toggle Taxi Lights	Alt + J	
Taxi Lights Off		
Taxi Lights On		
Set Taxi Lights		
Toggle Beacon Lights	Alt + H	
Beacon Lights Off		
Beacon Lights On		
Set Beacon Lights		
Toggle Nav Lights	Alt + N	
Nav Lights Off		
Nav Lights On		
Set Nav Lights		
Toggle Strobes	O	
Strobes Off		
Strobes On		
Set Strobes		
Toggle Logo Lights		
Toggle Recognition Lights		
Toggle Wing Lights		

5.2 Interior Lights

Lights - Interior Lights	Keyboard	Device
Toggle Flashlight	Alt + L	
Toggle Cabin Lights		
Cabin Lights Off		
Cabin Lights On		
Set Cabin Lights		
Toggle Glareshield Lights		
Glareshield Lights Off		
Glareshield Lights On		
Set Glareshield Lights		
[Toggle Panel Lights] – (apparently unavailable)		
Panel Lights Off		
Panel Lights On		
Set Panel Lights		
Toggle Pedestal Lights		
Pedestal Lights Off		
Pedestal Lights On		
Set Pedestal Lights		
Decrease Light Potentiometer		
Increase Light Potentiometer		

6. Flight Control Surfaces

6.1 Primary Control Surfaces

Primary Control Surfaces	Keyboard	Device
Center Aileron		
Aileron Left (Roll Left)	Num 4	
Aileron Right (Roll Right)	Num 6	
Center Aileron Rudder	Num 5	
Elevator Down (Pitch Down)	Num 8	
Elevator Up (Pitch Up)	Num 2	
Center Rudder		
Toggle Water Rudder	Ctrl + W	
Rudder Left (Yaw Left)	Num 0	
Rudder Right (Yaw Right)	Enter	

6.2 Secondary Control Surfaces

Secondary Control Surfaces	Keyboard	Device
Increase Flaps	F7	
Extend Flaps	F8	
Decrease Flaps	F6	
Retract Flaps	F5	
Flaps 1		
Flaps 2		
Flaps 3		
Flaps 4		
Increase Flaps (Continuous)		
Decrease Flaps (Continuous)		
Set Flaps (Continuous)		
Flaps Axis (0 to 100%) *		
Toggle Spoilers		
Arm Auto Spoilers		
Disarm Auto Spoilers		
Set Auto Spoilers Arming		
Toggle Arm Spoilers		
Retract Spoilers		
Extend Spoilers		
Spoilers Axis (0 to 100%) *		

6.3 Control Trimming Surfaces

Control Trimming Surfaces	Keyboard	Device
Toggle Elevator Trim		
Elevator Trim Down (Nose Down)	Num 7	
Elevator Trim Up (Nose Up)	Num 1	
Set Elevator Trim		
Elevator Trim Axis (0 to 100%) *		
Toggle Aileron Trim		
Aileron Trim Left	Ctrl + Num 4	
Aileron Trim Right	Ctrl + Num 6	
Set Aileron Trim		
Toggle Rudder Trim		
Rudder Trim Left	Ctrl + Num 0	
Rudder Trim Right	Ctrl + Enter	
Set Rudder Trim		
Reset Rudder Trim		

* I think these Axis are not the same than the section 1 ones, and can not be linked to a device.

7. Power Management

7.1 Throttle

Power Management - Throttle	Keyboard	Device
Increase Throttle	F3	
Increase Throttle (Small)		
[Full Throttle] – (apparently unavailable)	[F4]	
Decrease Throttle	F2	
Throttle Cut	F1	
Hold Throttle Reverse Thrust		
Toggle Throttle Reverse Thrust		
Throttle 1 Increase		
Throttle 1 Increase (Small)		
Full Throttle 1		
Throttle 1 Decrease		
Throttle 1 Cut		
Throttle 2 Increase		
Throttle 2 Increase (Small)		
Full Throttle 2		
Throttle 2 Decrease		
Throttle 2 Cut		
Throttle 3 Increase		
Throttle 3 Increase (Small)		
Full Throttle 3		
Throttle 3 Decrease		
Throttle 3 Cut		
Throttle 4 Increase		
Throttle 4 Increase (Small)		
Full Throttle 4		
Throttle 4 Decrease		
Throttle 4 Cut		
Throttle 10%		
Throttle 20%		
Throttle 30%		
Throttle 40%		
Throttle 50%		
Throttle 60%		
Throttle 70%		
Throttle 80%		
Throttle 90%		

7.2 Propeller

Power Management - Propeller	Keyboard	Device
Increase Propeller Pitch	Ctrl + F3	
Increase Propeller Pitch (Small)		
Decrease Propeller Pitch	Ctrl + F2	
Decrease Propeller Pitch (Small)		
Propeller Pitch HI	Ctrl + F4	
Propeller Pitch LO	Ctrl + F1	
Hold Propeller Reverse Thrust		
Toggle Propeller Reverse Thrust		
Toggle Autofeather Arming		
Toggle Feather Switches		
Toggle Feather Switch 1		
Toggle Feather Switch 2		
Toggle Feather Switch 3		
Toggle Feather Switch 4		
Toggle Propeller Sync		
Increase Propeller 1 Pitch		
Increase Propeller 1 Pitch (Small)		
Decrease Propeller 1 Pitch		
Decrease Propeller 1 Pitch (Small)		
Propeller 1 Pitch HI		
Propeller 1 Pitch LO		
Increase Propeller 2 Pitch		
Increase Propeller 2 Pitch (Small)		
Decrease Propeller 2 Pitch		
Decrease Propeller 2 Pitch (Small)		
Propeller 2 Pitch HI		
Propeller 2 Pitch LO		
Increase Propeller 3 Pitch		
Increase Propeller 3 Pitch (Small)		
Decrease Propeller 3 Pitch		
Decrease Propeller 3 Pitch (Small)		

Power Management - Propeller	Keyboard	Device
Propeller 3 Pitch HI		
Propeller 3 Pitch LO		
Increase Propeller 4 Pitch		
Increase Propeller 4 Pitch (Small)		
Decrease Propeller 4 Pitch		
Decrease Propeller 4 Pitch (Small)		
Propeller 4 Pitch HI		
Propeller 4 Pitch LO		

7.3 Mixture

Power Management - Mixture	Keyboard	Device
Increase Mixture		
Increase Mixture (Small)	Shift + Ctrl + F3	
Decrease Mixture	Shift + Ctrl + F2	
Decrease Mixture (Slow)		
Set Mixture Rich	Shift + Ctrl + F4	
Set Mixture Lean	Shift + Ctrl + F1	
Set Best Mixture		
Increase Mixture1		
Increase Mixture 1 (Small)		
Decrease Mixture 1		
Decrease Mixture 1 (Slow)		
Set Mixture Lean 1		
Set Mixture 1 Rich		
Increase Mixture 2		
Increase Mixture 2 (Small)		
Decrease Mixture 2		
Decrease Mixture 2 (Slow)		
Set Mixture Lean 2		
Set Mixture 2 Rich		
Increase Mixture 3		
Increase Mixture 3 (Small)		
Decrease Mixture 3		
Decrease Mixture 3 (Slow)		
Set Mixture Lean 3		
Set Mixture 3 Rich		
Increase Mixture 4		
Increase Mixture 4 (Small)		
Decrease Mixture 4		
Decrease Mixture 4 (Slow)		
Set Mixture Lean 4		
Set Mixture 4 Rich		

8. Landing Gear

Landing Gear	Keyboard	Device
Toggle Landing Gear	G	
Gear Down	Ctrl + G	
Toggle Gear Emergency Handle		
Set Gear		
Gear Up		
Toggle Tail Wheel Lock	Shift + G	

9. Brakes

Brakes	Keyboard	Device
Brakes	Num Del	
Toggle Parking Brakes	Ctrl + Num Del	
Set Parking Brakes		
Left Brake	Num *	
Right Brake	Num -	
Toggle Anti Skid Brakes		
Increase Autobrake Control		
Decrease Autobrake Control		
Set Autobrake Control		
Set Autobrake LO		
Set Autobrake MED		
Set Autobrake HI		

10. Autopilot

Autopilot	Keyboard	Device
Toggle Autopilot Master	Z	
Autopilot On	Alt + Z	
Autopilot Off	Shift + Alt + Z	
Toggle Autopilot Wing Leveler	Ctrl + V	
Autopilot Wing Leveler On		
Autopilot Wing Leveler Off		
Set Autopilot Disengage		
Toggle Disengage Autopilot		
Toggle Avionics Master	Page Up	
Toggle Flight Director	Ctrl + F	
Increase Autopilot Max Bank		
Decrease Autopilot Max Bank		
Toggle Yaw Damper	Ctrl + D	
Yaw Damper On		
Yaw Damper Off		
Set Yaw Damper		

10.1 HDG

Autopilot - HDG		
Toggle Autopilot Heading Hold	Ctrl + H	
Autopilot Heading Hold On		
Autopilot Heading Hold Off		
Set AP Heading Slot Index		

10.2 NAV

Autopilot - NAV		
Autopilot NAV1 Hold	Ctrl + N	
Autopilot NAV1 Hold On		
Autopilot NAV1 Hold Off		
Set Autopilot NAV Select		
Toggle Autopilot Localizer Hold	Ctrl + O	
Autopilot Localizer Hold On		
Autopilot Localizer Hold Off		
Toggle Autopilot Approach Hold	Ctrl + A	
Autopilot Approach Hold On		
Autopilot Approach Hold Off		
Toggle Autopilot Backcourse Hold		
Autopilot Back Course Hold On		
Autopilot Back Course Hold Off		

10.3 ALT

Autopilot - ALT		
Set AP Altitude Slot Index		
Autopilot Altitude Hold On		
Autopilot Altitude Hold Off		
Toggle Autopilot Altitude Hold	Ctrl + Z	
Increase Autopilot Reference Altitude	Ctrl + Page Up	
Decrease Autopilot Reference Altitude	Ctrl + Page Down	
AP Altitude Reference Imperial		
AP Reference Altitude Metric		
Toggle Autopilot Attitude Hold	Ctrl + T	
Autopilot Attitude Hold On		
Autopilot Attitude Hold Off		
Toggle Autopilot Flight Level Change		
Autopilot Flight Level Change On		
Autopilot Flight Level Change Off		

10.4 VS

Autopilot - VS		
Toggle Autopilot VS Hold		
Autopilot VS Hold On		
Autopilot VS Hold Off		
Set Autopilot VS Hold		
Increase Autopilot Reference VS	Ctrl + Home	
Decrease Autopilot Reference VS	Ctrl + End	
Set AP Current VS		
AP Reference VS Imperial		
AP VS Reference Metric		
Set AP VS Slot Index		
Autopilot Pitch Leveler Hold		
Autopilot Pitch Leveler On		
Autopilot Pitch Leveler Off		
Select AP Pitch Hold Reference		
Increase AP Pitch Hold Reference		
Decrease AP Pitch Hold Reference		
Flight Director Pitch Sync		

10.5 SPD

Autopilot - SPD		
Arm Auto Throttle	Shift + R	
Auto Throttle Disconnect		
Auto Throttle TO GA	Shift + Ctrl + G	
Increase Autopilot Reference Airspeed	Shift + Ctrl + Insert	
Decrease Autopilot Reference Airspeed	Shift + Ctrl + Delete	
Autopilot N1 Hold	Ctrl + S	
Increase Autopilot N1 Reference	Ctrl + Home	
Decrease Autopilot N1 Reference	Ctrl + End	
Set Autopilot N1 Reference		
Autopilot Mach Hold Current		
Autopilot Airspeed Acquire		
Autopilot Airspeed Hold Current		
Autopilot Airspeed Hold		
Autopilot Airspeed Hold On		
Autopilot Airspeed Hold Off		
Set Autopilot Airspeed Hold		
Toggle Autopilot Mach Hold	Ctrl + M	
Autopilot Mach Hold On		
Autopilot Mach Hold Off		
Set Autopilot Mach Hold		
Increase Autopilot Reference Mach		
Decrease Autopilot Reference Mach		
Set Autopilot Mach Reference		
Toggle AP Managed Speed in Mach		
Set AP Managed Speed in Mach On		
Set AP Managed Speed in Mach Off		
Set AP Managed Speed in Mach		
Set AP RPM Slot Index		
AP Reference Airspeed in Knots		
Set AP Speed Slot Index		

11. Radio

Radio	Keyboard	Device
Set Copilot Transmitter		
Frequency Swap	X	
Increase Wheel Speed		
Mute Marker Beacon		
Set Pilot Transmitter		
Toggle Speaker		
Toggle Annunciator Switch		
Annunciator Switch On		
Annunciator Switch Off		

11.1 ATC

Radio - ATC	Keyboard	Device
Display ATC	Scroll Lock	
ATC Panel Choice 0	0	
ATC Panel Choice 1	1	
ATC Panel Choice 2	2	
ATC Panel Choice 3	3	
ATC Panel Choice 4	4	
ATC Panel Choice 5	5	
ATC Panel Choice 6	6	
ATC Panel Choice 7	7	
ATC Panel Choice 8	8	
ATC Panel Choice 9	9	

11.2 COMMS

Radio - COMMS	Keyboard	Device
Com Radio	C	
Set Com Radio		
Set All Com Receive		
Set Com1 Standby	Shift + Alt + X	
Com1 Switch to Standby	Alt + U	
Set Com1		
Com1 Swap		
Increase Com1 (WHOLE)		
Decrease Com1 (WHOLE)		
Select Com1 Receive		
Set Com1 Stored Frequency Index		
Set Com1 Stored Frequency		
Select Com1 Transmit		
Increase Com1 Volume		
Decrease Com1 Volume		
Set Com1 Volume		
Increase Com1 (Fract)		
Increase Com1 Frequency (Fract, Carry)		
Decrease Com1 (Fract)		
Decrease Com1 Frequency (Fract, Carry)		
Increase Com2 Frequency (Fract)		
Increase Com2 Frequency (Fract, Carry)		
Decrease Com2 Frequency (Fract)		
Decrease Com2 Frequency (Fract, Carry)		
Set Com2		
Com2 Swap		
Increase Com2 Frequency (Whole)		
Decrease Com2 Frequency (Whole)		
Select Com2 Recieve		
Set Com2 Standby		
Set Com2 Stored Frequency Index		

Radio - COMMS	Keyboard	Device
Set Com2 Stored Frequency		
Select Com2 Transmit		
Increase Com2 Volume		
Decrease Com2 Volume		
Set Com2 Volume		
Increase Com3 Frequency (Fract)		
Increase Com3 Frequency (Fract, Carry)		
Decrease Com3 Frequency (Fract)		
Decrease Com3 Frequency (Fract, Carry)		
Set Com2		
Com3 Swap		
Increase Com3 Frequency (Whole)		
Decrease Com3 Frequency (Whole)		
Select Com3 Receive		
Set Com2 Standby		
Set Com3 Stored Frequency Index		
Set Com3 Stored Frequency		
Increase Com3 Volume		
Decrease Com3 Volume		
Set Com3 Volume		
Toggle Comm1 Autoswitch		
Toggle Comm2 Autoswitch		
Toggle Comm Nav1 Test		
Toggle Comm Nav2 Test		
Toggle Comm Nav3 Test		

11.3 NAV

Radio - NAV	Keyboard	Device
NAV Radio	N	
NAV1 Swap	Shift + Ctrl + N	
Increase Nav1 (Fract)		
Increase Nav1 Frequency (Fract, Carry)	Shift + Ctrl + Page Up	
Decrease Nav1 (Fract)		
Decrease Nav1 Frequency (Fract, Carry)	Shift + Ctrl + Page Down	
Set Nav1		
Increase Nav1 (Whole)		
Decrease Nav1 (Whole)		
Set Nav1 Standby		
Increase Nav1 Volume		
Decrease Nav1 Volume		
Set Nav1 Volume		
Increase Nav2 (Fract)		
Increase Nav2 Frequency (Fract, Carry)		
Decrease Nav2 (Fract)		
Decrease Nav2 Frequency (Fract, Carry)		
Set Nav2		
Nav2 Swap		
Increase Nav2 (Whole)		
Decrease Nav2 (Whole)		
Set Nav2 Standby		
Increase Nav2 Volume		
Decrease Nav2 Volume		
Set Nav2 Volume		
Toggle Nav1 Autoswitch		
Toggle Nav2 Autoswitch		

11.4 VOR

Radio - VOR	Keyboard	Device
VOR OBS	Shift + V	
Increase VOR1 OBS	Shift + Ctrl + Home	
Decrease VOR1 OBS	Shift + Ctrl + End	
Set VOR1		
Disable VOR1 Identifier		
Enable VOR1 Identifier		
Set VOR1 Identifier		
Toggle VOR1 Identifier		
Increase VOR2 OBS		
Decrease VOR2 OBS		
Set VOR2		
Disable VOR2 Identifier		
Enable VOR2 Identifier		
Set VOR2 Identifier		
Toggle VOR2 Identifier		

11.5 OBI

Radio - OBI	Keyboard	Device
Increase VOR1 OBS (Fast)		
Decrease VOR1 OBS (Fast)		
Increase VOR2 OBS (Fast)		
Decrease VOR2 OBS (Fast)		

11.6 KOLLSMAN

Radio - KOLLSMAN	Keyboard	Device
Set Altimeter		
Increase Altimeter		
Decrease Altimeter		

11.7 DME

Radio - DME	Keyboard	Device
DME	F	
Toggle DME 1		
Toggle DME 2		
Select DME		
Toggle DME		
Disable DME 1 Identifier		
Enable DME 1 Identifier		
Set DME 1 Identifier		
Toggle DME 1 Identifier		
Disable DME 2 Identifier		
Enable DME 2 Identifier		
Set DME 2 Identifier		
Toggle DME 2 Identifier		
Disable DME Identifier		
Enable DME Identifier		
Set DME Identifier		
Toggle DME Identifier		

11.8 XPNDR

Radio - XPNDR	Keyboard	Device
Transponder		
Set Transponder		
Increase Transponder (1000)		
Decrease Transponder (1000)		
Increase Transponder (100)		
Decrease Transponder (100)		
Increase Transponder (10)		
Decrease Transponder (10)		
Increase Transponder (1)		
Decrease Transponder (1)		
Increase Transponder (1,CARRY)		
Decrease Transponder (1,CARRY)		

11.9 ADF

Radio - ADF	Keyboard	Device
ADF	Shift + Ctl + A	
ADF1 Swap		
Increase ADF1 (0.1)		
Decrease ADF1 (0.1)		
Increase ADF2 (100)		
Decrease ADF2 (100)		
Increase ADF2 (10)		
Decrease ADF2 (10)		
Increase ADF2 (1)		
Decrease ADF2 (1)		
Set ADF2 Complete		
Increase ADF2 Frequency (Fract)		
Decrease ADF2 Frequency (Fract)		
ADF2 Swap		
Increase ADF2 (0.1)		
Decrease ADF2 (0.1)		
Increase ADF2 Frequency (Whole)		
Decrease ADF2 Frequency (Whole)		
Increase ADF1 (100)		
Decrease ADF1 (100)		
Increase ADF1 (10)		
Decrease ADF1 (10)		
Increase ADF1 (1)		
Decrease ADF1 (1)		
Increase ADF Card		
Decrease ADF Card		
Set ADF Card		
Set ADF1 Complete		
Increase Adf1 Frequency (Fract, Carry)		
Decrease Adf1 Frequency (Fract, Carry)		
Set ADF Highrange		

Radio - ADF	Keyboard	Device
Set ADF Lowrange		
Set ADF1 Needle		
ADF1 Outside Source		
Set ADF		
Increase ADF Volume		
Decrease ADF Volume		
Set ADF Volume		
Increase ADF1 Frequency (Whole)		
Decrease ADF1 Frequency (Whole)		
Disable ADF2 Identifier		
Enable ADF2 Identifier		
Set ADF2 Identifier		
Toggle ADF2 Identifier		
Disable ADF Identifier		
Enable ADF Identifier		
Set ADF Identifier		
Toggle ADF Identifier		

12. VR

VR	Keyboard	Device
VR - Toolbar Toggle		
VR - Activate / Deactivate VR Mode		
VR - Cockpit Focus		
VR - Camera Reset		

13. Camera

Camera	Keyboard	Device
Toggle Camera Lock		
Camera AI Player	Home + Ctrl	
Select Next POI	Page Up	
Toggle Follow Smartcam Target	Page Down	
Next Smartcam Target	Page Up + Ctrl	
Previous Smartcam Target	Page Down + Ctrl	
Set Custom Smartcam Target	T	
Unset Custom Smartcam Target	Shift + T	
Reset Smartcam	Ctrl + F	

13.1 Camera Mode Switches

Camera - Camera Mode Switches	Keyboard	Device
Cockpit / External View Mode	End	
Toggle Drone	Insert	

13.2 Cockpit Camera

Camera - Cockpit Camera	Keyboard	Device
Toggle IFR Cockpit Mode		
Toggle IFR Cockpit Mode (Hold)		
Reset Home Cockpit Camera		
Save Home Cockpit Camera		
IFR Pilot View Reset		
IFR Pilot View Save		
Landing Pilot View Reset		
Landing Pilot View Save		
VFR Pilot View Reset		
VFR Pilot View Save		
Increase Cockpit View Height	Alt + Down	
Decrease Cockpit View Height	Alt + Up	
Translate Cockpit View Backward	Down	
Translate Cockpit View Forward	Up	
Translate Cockpit View Left	Left	
Translate Cockpit View Right	Right	
Toggle Copilot View		
Toggle Cockpit Focus Mode		
Cockpit View Quickview Cycle	Q	
Reset Cockpit View	Ctrl + Space	
Cockpit View Upper	Space	
Previous Pilot Position		
Next Pilot Position		
Toggle VFR Cockpit Mode (Hold)		
Toggle VFR Cockpit Mode		
Toggle Landing Cockpit Mode (Hold)		
Toggle Landing Cockpit Mode		
Toggle Cockpit View		
Toggle Smart Camera	S	
Zoom Cockpit View	=	
Unzoom Cockpit View	-	

Camera - Cockpit Camera	Keyboard	Device
Cockpit Look Down (Lockable)		
Cockpit Look Down Left (Lockable)		
Cockpit Look Down Right (Lockable)		
Cockpit Look Left (Lockable)		
Cockpit Look Right (Lockable)		
Cockpit Look Up (Lockable)		
Cockpit Look Up Left (Lockable)		
Cockpit Look Up Right (Lockable)		
Cockpit Look Down	Shift + Down	
Cockpit Look Left	Shift + Left	
Cockpit Look Right	Shift + Right	
Cockpit Look Up	Shift + Up	
Cockpit Look Down Left		
Cockpit Look Down Right		
Cockpit Look Up Left		
Cockpit Look Up Right		
Toggle Cockpit Freelook		
Toggle Cockpit View Freelook (Hold)		
Cockpit Quickview Up	Ctrl + Up	
Cockpit Quickview Rear	Ctrl + Down	
Cockpit Quickview Right	Ctrl + Right	
Cockpit Quickview Left	Ctrl + Left	
Cockpit Quickview 45 Left		
Cockpit Quickview 120 Left		
Cockpit Quickview 45 Right		
Cockpit Quickview 120 Right		

13.3 Instrument Views

Camera - Instrument Views	Keyboard	Device
Next Camera View	A	
Previous Camera View	Shift + A	
Toggle Instrument View 10	Ctrl + 0	
Toggle Instrument View 1	Ctrl + 1	
Toggle Instrument View 2	Ctrl + 2	
Toggle Instrument View 3	Ctrl + 3	
Toggle Instrument View 4	Ctrl + 4	
Toggle Instrument View 5	Ctrl + 5	
Toggle Instrument View 6	Ctrl + 6	
Toggle Instrument View 7	Ctrl + 7	
Toggle Instrument View 8	Ctrl + 8	
Toggle Instrument View 9	Ctrl + 9	
Toggle Instrument View Autoselect		
Instrument View Down	Down	
Instrument View Left	Left	
Instrument View Right	Right	
Instrument View Up	Up	
Toggle Instrument View Freelook		
Toggle Instruments View Freelook (Hold)		

13.4 External Camera

Camera - External Camera	Keyboard	Device
Reset External View	Ctrl + Space	
Toggle External View Focus		
Toggle External View		
Zoom External View	=	
Unzoom External View	-	
External View Freelook		
Toggle External View Freelook (Hold)		
External Quickview Left	Ctrl + Left	
External Quickview Rear	Ctrl + Down	
External Quickview Right	Ctrl + Right	
External Quickview Top	Ctrl + Up	
External View Look Down (Lockable)		
External View Look Down Left (Lockable)		
External View Look Down Right (Lockable)		
External View Look Left (Lockable)		
External View Look Right (Lockable)		
External View Look Up (Lockable)		
External View Look Up Left (Lockable)		
External View Look Up Right (Lockable)		
External View Look Down		
External View Look Down Left		
External View Look Down Right		
External View Look Left		
External View Look Right		
External View Look Up Right		
External Quickview 45 Left		
External Quickview 120 Left		
External Quickview 45 Right		
External Quickview 120 Right		

13.5 Drone Camera

Camera - Drone Camera	Keyboard	Device
Toggle Drone Camera	Insert	
Toggle Plane Controls	C	
Toggle Drone Follow Mode	Tab	
Toggle Drone Lock Mode	Ctrl + Tab	
Increase Drone Zoom	Num +	
Decrease Drone Zoom	Num -	
Drone Top Down View	Ctrl + Space	
Translate Drone Forward	W	
Translate Drone Backward	S	
Translate Drone Left	A	
Translate Drone Right	D	
Translate Drone Up	R	
Translate Drone Down	F	
Reset Drone Roll	Space	
Reset Drone Target Offset	Num 5	
Pitch Drone Down	Num 2	
Roll Drone Right	Num 9	
Pitch Drone Up	Num 8	
Yaw Drone Left	Num 4	
Yaw Drone Right	Num 6	
Roll Drone Left	Num 7	
Increase Drone Translation Speed	F2	
Decrease Drone Translation Speed	F1	
Increase Drone Rotation Speed	F2	
Decrease Drone Rotation Speed	F3	
Attach Drone to Next Target	Ctrl + Page Up	
Attach Drone to Previous Target	Ctrl + Page Down	
Lock Drone to Next Target	A	
Lock Drone to Previous Target	Shift + A	

Camera - Drone Camera	Keyboard	Device
Toggle Drone Auto Exposure	Ctrl + F4	
Increase Drone Exposure	Ctrl + F3	
Decrease Drone Exposure	Ctrl + F2	
Toggle Drone Depth of Field	F1	
Toggle Foreground Blur	F5	
Toggle Drone Auto Focus	F4	
Increase Drone Depth of Field	F3	
Decrease Drone Depth Of Field	F2	
Translate Drone Left (Lockable)		
Translate Drone Right (Lockable)		
Translate Drone Down (Lockable)		
Translate Drone Up (Lockable)		
Translate Drone Backward (Lockable)		
Translate Drone Forward (Lockable)		
Drone In / Out Rewind		
Drone In / Out Play		
Pitch Drone Up (Lockable)		
Pitch Drone Down (Lockable)		
Yaw Drone Left (Lockable)		
Yaw Drone Right (Lockable)		
Roll Drone Left (Lockable)		
Roll Drone Right (Lockable)		
Set Drone Bookmark In		
Set Drone Bookmark Out		
Set Drone Target		

13.6 Fixed Camera

Camera - Fixed Camera	Keyboard	Device
Next Fixed Camera	A	
Previous Fixed Camera	Shift + A	
Reset Fixed Camera	F	
Toggle Fixed Camera 10	Ctrl + 0	
Toggle Fixed Camera 1	Ctrl + 1	
Toggle Fixed Camera 2	Ctrl + 2	
Toggle Fixed Camera 3	Ctrl + 3	
Toggle Fixed Camera 4	Ctrl + 4	
Toggle Fixed Camera 5	Ctrl + 5	
Toggle Fixed Camera 6	Ctrl + 6	
Toggle Fixed Camera 7	Ctrl + 7	
Toggle Fixed Camera 8	Ctrl + 8	
Toggle Fixed Camera 9	Ctrl + 9	

13.7 User Cameras

Camera - User Cameras	Keyboard	Device
Load Next Custom Camera	Alt + A	
Load Previous Custom Camera	Alt + Shift + A	
Load Custom Camera 0	Alt + 0	
Load Custom Camera 1	Alt + 1	
Load Custom Camera 2	Alt + 2	
Load Custom Camera 3	Alt + 3	
Load Custom Camera 4	Alt + 4	
Load Custom Camera 5	Alt + 5	
Load Custom Camera 6	Alt + 6	
Load Custom Camera 7	Alt + 7	
Load Custom Camera 8	Alt + 8	
Load Custom Camera 9	Alt + 9	
Save Custom Camera 0	Ctrl + Alt + 0	
Save Custom Camera 1	Ctrl + Alt + 1	
Save Custom Camera 2	Ctrl + Alt + 2	
Save Custom Camera 3	Ctrl + Alt + 3	
Save Custom Camera 4	Ctrl + Alt + 4	
Save Custom Camera 5	Ctrl + Alt + 5	
Save Custom Camera 6	Ctrl + Alt + 6	
Save Custom Camera 7	Ctrl + Alt + 7	
Save Custom Camera 8	Ctrl + Alt + 8	
Save Custom Camera 9	Ctrl + Alt + 9	

13.8 Slew Mode

Camera - Slew Mode	Keyboard	Device
Toggle Slew Mode	Y	
Slew Translate Up (Slow)		
Slew Translate Up (Fast)		
Slew Translate Backward		
Slew Translate Forward		
Slew Translate Down (Fast)		
Slew Translate Down (Slow)		
Slew Y Axis Translation Freeze		
Slew Translate Down		
Slew Translate Up		
Slew Roll Left		
Slew Roll Right		
Slew X Axis Translation Freeze		
Slew Yaw Left		
Slew Yaw Right		
Slew Translate Left		
Set Slew Mode Off		
Set Slew Mode On		
Slew Pitch Down (Fast)		
Slew Pitch Down (Slow)		
Slew Pitch Freeze		
Slew Pitch Down		
Slew Pitch Up		
Slew Pitch Up (Fast)		
Slew Pitch Up (Slow)		
Reset Slew Mode		
Slew Translate Right		