

## Virtual cockpit keyboard layout for FS2002.

The release of the FS keyboard layout by Gary Geoghegan recently prompted me to finally do a re-work of the entire keyboard assignments more suited to virtual cockpit fliers such as myself. I have also included a 2D cockpit users version as well for those who like to fly heavies or planes without virtual cockpits.

This is an entire re-work of the default assignments. If you choose to use it you will basically need to re-learn all the keyboard shortcuts. And this layout is only for users who have a joystick or yoke with rudders. I have removed the keyboard flight surface commands as they are no longer needed on the keyboard. I can't remember the last time I needed to use the yaw, roll or pitch commands on the keypad.

So, why have I felt it necessary to play around with the default settings to such an extent? Because for a long time now I have felt that the default assignments have been haphazard and to a large extent not very user-friendly. For instance to alter the throttle, prop and mixture settings involved difficult combinations of keys. Frequently used commands often required the use of key combinations when one key would have been better.

Failures												PRsCR			ScrLk			Esc, Pause					
Reg	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12												
Shift	Fail eng 2	Fail eng 3	Fail eng 4	Fail elec	Fail hydr	Fail pitot	Fail static	Fail vac	Fail L brk	Fail R brk	Fail brks				Open exit			Pause					
Control																							
Cat1+Sht																		Abort					
Panels and views																							
Reg	3	4	5	6	7	8	9	U	-	+ =	BSsp												
Shift	Panel 3	Panel 4	Panel 5	Panel 6	Panel 7	Panel 8	Panel 9	Cyc view+	Dec slight	Inc slight	Zoom 1:1												
Control	Select 3	Select 4		Snap2fixed	Tog chase	Pan on/off	Inst. panel	Cyc view-	Decrease	Increase	Whole fuel												
Cat1+Sht	Starter 3	Starter 4	All starters								Max view												
	Eng 1 fuel	Eng 1 fuel	All fuel vlv																				
Autopilot																							
Reg	E	R	T	Y	U	I	O	P	[	]	Alt												
Shift	Sel engine	Carb heat	TIME	Autopilot	AP Armed	AP Alt	AP Appr	AP Headg	AP Nav1	AP Loc	APB ck-err												
Control	Autostart	Fuel pmp	SLEW	Flt Dir	A/spd hold	Alt bug	VSI bug	Hdg bug	AP Navrd		AP Attitude												
Cat1+Sht	Autostart	Fuel pmp	JOYSTICK	FltDirSync	Mach hold	Dec Ht +		Hdg bug-		Wing level	Yaw damp												
Radio																							
Reg	D	F	G	H	J	K	L	:	;	'	Enter												
Shift	Cowl flap-	Fueltrf rate	Gear	Sel Com	Sel Nav	Sel DME	Sel ADF	Sel OBS	Chat wdw	Switch chat focus													
Control	Cowl flap-	Fueltrf rate	Pump gear	Freq swp	VOR1 ID	DME1 ID	ADF ID	Sel Xpdr	Full auto	Cycle players													
Cat1+Sht		Fueltrf back		Avionics	VOR2 ID	DME2 ID		Cyc rad +		Observer mode													
		Fueltrf off		Nw/GPS				Cyc Rad -		Track mode													
Instruments																							
Reg	X	C	Y	B	N	M	<	>	?	Shift													
Shift	Mix rich	Pitot heat	Reset Alt	Reset hdg	Save flight	Master sw	Brakes L	Brakes R	Brakes R														
Control	Max rich	Autostart	Dec Ht +	Att bars +	Reset flt	Gen/alt	Pushback	Autobrk-	Autobrk-														
Cat1+Sht	Sel EGT	EXIT SIM	Dec Ht -	Att bars -	Stop video	Master bat full	Water rad	De-ice															
			Pitot block	Static block																			
Brakes																							
Reg	S	P	A	C	E	R-Alt	Win	R-Clk	Cntl														
Shift			Eyept Reset	Pan view reset																			
Control				Centre ailerons/rudder																			
Cat1+Sht																							

The various functions were scattered around the keyboard, with radio and autopilot commands mixed together with engine and flight control commands. My first priority was to allocate definite areas of the keyboard to specific functions. Once learnt this layout is much more user friendly.

The view keys are now grouped along the first row of keys under the Function keys, and also the number pad keys. Engine and prop commands are grouped at the left where they can easily be accessed. Autopilot commands are grouped together, as are the radio commands on the line below. Brakes have been made more accessible.

Commands that would normally be accessed as part of a start-up sequence or during less demanding parts of a flight, such as starters, fuel commands, autopilot settings, radio settings, trim settings, and minor view commands have been allocated key combinations.

The Function keys have been entirely allocated to failures, so that all you need to do is hit an F# key at random and have a failure. Every so often I intend to change the allocation of the failures.

## USE OF THE LAYOUT.

This configuration is designed to be used ONLY with the Num Lock function OFF!

The first thing you will notice is that the panel views, engine commands and eyepoint keys have priority. No longer do you need to press shift+number to get a panel. Simply press the single number key along the top row and there's the panel window.

Panels and views								
1	2	3	4	5	6	7	8	9
Panel 1	Panel 2	Panel 3	Panel 4	Panel 5	Panel 6	Panel 7	Panel 8	Panel 9
Select 1	Select 2	Select 3	Select 4		Snap2fixd	Tog chase	Pan on/off	Instr p on/off

The power, prop and mixture settings are logically arranged where the left hand can increase or decrease the three functions with just six keys. It allows you to rest your left hand in a much more relaxed situation while giving instant logical access to the primary engine functions.

engine and prop		
Q	W	
Throttle-	Throttle+	Sel
Cut throttle	Max throttle	
	Afterburn	Auto
TOGA	Auto throt	Auto st
A	S	
Prop -	Prop +	Cowl flap
Prop min	Prop max	Cowl flap-
Autofeather		
Prop de-ice	Prop sync	
Z	X	
Mix lean	Mix rich	
Lean cutoff	Max rich	
	SeLEGT	
Smoke		

The eyepoint setting keys have been allocated to the numberpad and are instantly accessible. This was done to make circuits much more realistic. In the real world if a strut or pillar gets in the way you simply lean forward or sideways to compensate. Now with the 8, 4, 5, 6, and 2 keys combined with the spacebar, instant movement inside the cabin is available.

View and trim		
7 Hm	8	9 PgUp
vw fwdL	Eyepnt fwd	vw fwd R
vw L		vw R
vw back L	Land lt dn	vw back R
vw up	vw ahead	vw down
4	5	6
Eyepnt L	Eyepnt up	Eyepnt R
	Eyepnt down	
Land lt L	Land lt	Land lt R
1 End	2	3 PgDn
vw fwdL up	Eyepnt back	vw fwdR up
vw L up		vw R up
vw bckL up	Land lt up	vw bckR up

The other major change I made was to reverse the increase/decrease and increase slightly/decrease slightly keys. I have found that I rarely used the full increase/decrease functions, so it seemed logical to make the 'slightly' keys the priority function.

	-	+	=
Dec slight		Incr slight	
Decrease		Increase	

1 End	2	3 PgDn
vw fwdL up	Eyepnt back	vw fwdR up
vw L up	Elev trim bk	vw R up
vw bckL up	Land lt up	vw bckR up

2D views are still available through the numberpad 7,9,1 and 3 keys with varying combinations. You will note that the look ahead key isn't easy to use, that's because the space bar does the same job.

view and trim		
7 Hm	8	9 PgUp
vw fwdL	Eyepnt fwd	vw fwd R
vw L	Elev trim dn	vw R
vw back L	Land lt dn	vw back R
vw up	vw ahead	vw down

Flaps and spoilers have been moved to the top right.

Flaps/spoilers	
Flaps -	Flaps +
Flaps min	Flaps max
Conc nose+	Spoilers
Conc nose-	Autosplrs
rim	Lights

Lights and landing light functions are all on the number keypad.

7 Hm	8	9 PgUp	+
vw fwd L	Eyept fwd	vw fwd R	Lights
vw L	Elev trim dn	vw R	Land lts
vw back L	Land lt dn	vw back R	Panel lts
vw up	vw ahead	vw down	Strobe lts
4	5	6	
Eyept L	Eyept up	Eyept R	
Alt trim L	Elev trim up	Alt trim R	
Land lt L	Land lt ctr	Land lt R	
1 End	2	3 PgDn	
wdL up	Eyept back	vw fwd	
ip	Elev trim bk	vw	
	Land lt up		

The Top Down, Map,coords and a/c labels are also over on the number keypad.

Enter
Top down
Map view
Coords
a/c labels

Instruments and gauge functions are grouped near the bottom.

instruments			
X	C	V	B
Pitot heat	Reset Alt	Reset hdg	Sav
Backup pump	Dec Ht +	Att bars +	Re
Alt stat sroe	Dec Ht -	Att bars -	Stoj
EXIT SIM	Pitot block	Static block	

Fuel, carb, cowl flaps and startup etc are all grouped around the primary engine function keys.

Engine and prop				
Tab	Q	W	E	R
Sel mags	Throttle-	Throttle+	Sel engine	Carb heat
Sel jet strt	Cut throttle	Max throttle		Primer
	TOGA	Afterburn	Autostart	Fuel pmp
		Auto throt	Auto shutdn	
apsLk	A	S	D	F
	Prop -	Prop +	Cowl flap+	Fuel tfr auto
	Prop min	Prop max	Cowl flap-	Fuel tfr fwd
	Autofeather			Fuel tfr back
	Prop de-ice	Prop sync		Fuel tfr off
	Z	X		
	Mix lean	Mix rich	Pitot h	
	Lean cutoff	Max rich	Back	
		Sel EGT	Alt	
	Smoke			

The simulation rate, slew, sound and joystick toggles now occupy the T key.

Cycle views is now on the 0 (zero) key.

Chat functions are grouped around the enter key.

The exit simulator function is Control+shift+C.

The Pause key is now the pause function!

Gear still occupies the G key!

Aileron trim, elevator trim and rudder trim are over on the right hand number keypad.