BMS Callbacks

The purpose of this document is to list ALL BMS callbacks and provide proper documentation for them.
Falcon is 12 years old and it is no surprise that along the years the management of those callbacks went a little bit weird.

The last reference document about it was the BMS2.0 technical manual which was used as the backbone of this document. BMS4.0 added a few more to the list and this document should be the definitive list for callbacks for the latest release of BMS.

Here is a short explanation on how the document is structured:

- The list is structured cockpit panel by cockpit panel
- Black coloured callbacks are BMS2.0 callbacks
- Green coloured callbacks are BMS 4.0 added callbacks
- Red background coloured callbacks are outdated ones that I wouln't advise you to use. They were not removed from the code because of the obvious usual risks of such a move.

Most "cockpit"callbacks fall into one of three categories:

1. Toggles callbacks
2. All switch states callbacks
3. Pushbuttons or momentary switch position.

1. toggles callbacks

Toggles obviously move a switch up or down and initially those were the only callbacks present in Falcon.
But with the cockpit building trend, it became quickly obvious that toggles were not suited for physical switches. Indeed toggles create synchronisation problems when the physical cockpit is not checked and perfectly synchronized to the default states of the switches in the Falcon 3D pit. That is why a new breed of callback was created, implementing all switch state to avoid those synchronisation problem.But before I explain the all switch state concept, let me add that there are actually two kind of toggles callbacks:

The toggles that go only up or down
And the toggles that go round (I call them full toggle) they revert back to initial position when they reach their maximum position.
For instance let's consider the Fuel Knob on the center pedestal.
A simple toggle up would go from NORM to RSVR to INT WING to EXT WING and to EXT CTR and would stay there. To move the knob down, the toggle down would need to be used.
If the full toggle were used, the knob would go from NORM to RSVR to INT WING to EXT WING and to EXT CTR then would snap to TEST then up again to NORM etc etc.
You will find both kind in the below list.
Toggles are more suited for Hotas or pushbutton programming.

2. All switch states callbacks

The gear is a two position lever: UP and DOWN.
Using the callback toggle gear - If your gear handle in your cockpit is up and you enter falcon at taxi where the gear handle is down, you will never be able to set the cockpit handle in sync with the 3D cockpit handle. They always will be inversed.
If on the other hand you use the all switch state callbacks (that is gear down and gear up) getting in 3D with a physical handle disynchronized will not create problem at all. Indeed your first move will synchronise both handles, sending a callback with no effect (gear down has no effect when the gear is already down.
That explains perfectly why all switch states callbacks were required.
All cockpit switches (except the canopy) in the BMS 3D cockpit have each of their position callback implemented.

3. Pushbuttons or Momentary switch position

Obviously those are suitable for both toggles and all states philosophy.
Some pushbuttons needed code support with press and release to allow correct mouse behaviour to be implemented in the 3D cockpit but let's not detail that here; it goes outside the scope of this document.
What is important to know is that by definition pushbuttons & momentaries actions are limited in time and thus don't require a full state callback. Usually, it's a single callback.

There are a number of callbacks that don't refer specifically to the cockpit. Those are obviously the ones for the views and the readio communication system as well as those specific to test or to aircraft other than the F-16 (dual engine, no automatic flaps etc etc) You will find those at the end of the tables hopefully correctly structured but they may be less documented.

This document is not finished the way I wanted it to be finished but it's the best I can do for now with the current constraint imposed on callbacks management.

This version is up to date with RC9 HF19
April 19th, 2011

Red Dog

Callback	Description	Comment
TEST PANEL		
SimOverHeat	Pushbutton on TEST panel to test Overheat caution lights - (new in BMS4.0)	Momentary or Pushbutton - suitable for both
SimOBOGSBit	Momentary switch in Up position for testing Oxygen QTY (new in BMS4.0)	Momentary or Pushbutton - suitable for both
SimMalIndLights	Pushbutton depress action. When depressed, all VMS sounds and cockpit lights are ON and remain On as long as the button is depressed.	
SimMalIndLightsOFF	Pushbutton release action. Mal&ind press to test btn (BMS 4.0)	
SimProbeHeat	Needs more info, that was not implemented in BMS2.0 and has been replaced by the two state callback below. IMHO, can be deleted	**Outdated - don't use**
SimProbeHeatMoveUp	Moves Probe heat switch UP (BMS 4.0)	toggle
SimProbeHeatMoveDown	Moves Probe heat switch Down (BMS 4.0)	toggle
SimProbeHeatOn	Place Probe heat switch on test panel to ON - upper position (new in BMS4.0)	All states for pitbuilders
SimProbeHeatOff	Place Probe heat switch on test panel to OFF - middle position (new in BMS4.0)	All states for pitbuilders
SimProbeHeatTest	Test Probe heat continuity while depressed (down position) (new in BMS4.0). MOMENTARY position	All states for pitbuilders
SimEPUGEN	Not implemented. OLD BMS 2.0 entry	**Outdated - don't use**
SimEpuGenTest	Momentary switch on TEST panel to test EPU - (new in BMS4.0)	Momentary or Pushbutton - suitable for both
SimTestSwitch	Not implemented.	**Outdated - don't use**
SimFlcsPowerTest	MOMENTARY up position of the FLCS TEST switch on the TEST panel. Depressed when in RAMP to test the 4 branches of the FLCS (when depressed the CADB indicator on the TEST panel should light up, you should also see some light changes on ELEC panel. Please refer to the checklists for further information. (New in BMS 4.0) Please Note the MAINT position is not implemented	Momentary or Pushbutton - suitable for both
FLCS PANEL		
SimDigitalBUP	Upper position (DIGITAL BACKUP) of the DBU toggle switch. Newly implemented in BMS 4.0 but was in BMS2.0 as not implemented	All states for pitbuilders
SimDigitalBUPOff	Lower position (OFF) of the DBU toggle switch. New in BMS 4.0	All states for pitbuilders
SimAltFlaps	TOGGLE ALT FLAPS UP & DOWN **(relevant to F-16)** Toggle command. Manually extends the trailing edge flaps and sets the flight control gain settings to the landing mode values. A second operation of the command releases the TEFs to FLCS control. NB: presuming no faults, the TEFs will retract by themselves at above 370 knots CAS although they will extend again if speed then decays below 370 knots and the switch is still in the EXTEND position. (SP3)	Toggle

SimAltFlapsExtend	Refers to the ALT FLAPS switch in the FLT CONTROL panel. This command places the switch in the EXTEND position. Manually extends the trailing edge flaps and sets the flight control gain settings to the landing mode values. NB: presuming no faults, the TEFs will retract by themselves at above 370 knots CAS although they will extend again if speed then decays below 370 knots and the switch is still in the EXTEND position. This command only operates if realistic avionics are selected.	All states for pitbuilders
SimAltFlapsNorm	Refers to the ALT FLAPS switch in the FLT CONTROL panel. This command places the switch in the NORM position. Operation of the command releases the TEFs to FLCS control.	All states for pitbuilders
SimManualFlyup	Old BMS 2.0 - Not implemented - replaced by two states callback below	**Outdated - don't use**
SimManualFlyupDisable	Upper position (manual TF FLYUP DISABLE) of the MANUAL TF FLYUP toggle switch - NEW in BMS 4.0	All states for pitbuilders
SimManualFlyupEnable	Lower position (manual TF FLYUP ENABLE of the MANUAL TF FLYUP toggle switch - NEW in BMS 4.0	All states for pitbuilders
SimLEFLockSwitch	TOGGLE for LEF (LOCK/AUTO) **relevant to F-16** Locks the leading edge flaps in current position and illuminates the "LE FLAPS" caution indicator. This command is a toggle so operating it again releases the LEFs to FLCS control and clears the caution panel light. (SP3)	
SimLEFLock	Refers to the LE Flaps switch on the FLT CONTROL panel. The command places the switch in the LOCK position. LE Flaps are locked into their current position.	All states for pitbuilders
SimLEFAuto	Refers to the LE Flaps switch on the FLT CONTROL panel. The command places the switch in the AUTO position. LE Flaps are unlocked from their current position and control is returned to the FLCS.	All states for pitbuilders
SimFLCSReset	Upper position of the FLCS Reset momentary switch. (Was listed in BMS 2.0 as not implemented and implemented in BMS 4.0)	
SimFLTBIT	FLCS BIT switch (magnetic) upper position is magnetically held while the BIT is performed. At the end of the BIT, the switch snaps back into the OFF position. (Was in BMS2.0 as not implemented, newly implemented in BMS4.0)	
MANUAL TRIM PANEL		
SimTrimAPDISC	Refers to the AP DISC switch in the MANUAL TRIM panel. This command places the switch in the DISC position. Disables manual HOTAS trim hat controls and prevents autopilot engagement. Manual trim controls on this panel are still active however. NOTE: please be careful with the name of this one when you add it to the .key file – last four letters are upper case and that *is* significant!	

SimTrimAPNORM	Refers to the AP DISC switch in the MANUAL TRIM panel. This command places the switch in the NORM position. Enables manual HOTAS trim hat controls and allows autopilot engagement. Manual trim controls on this panel are active also.	
SimTrimNoseUp	The MAN TRIM wheels can be implemented both with keystrokes or analogue values. When implemented with keystrokes, this callbacks refers to the left part (NOSE UP) of the bottom right trim wheels for PITCH axis trim. Please note, HOTAS trims have their own callbacks.	
SimTrimNoseDown	The MAN TRIM wheels can be implemented both with keystrokes or analogue values. When implemented with keystrokes, this callbacks refers to the right part (NOSE DOWN) of the bottom right trim wheels for PITCH axis trim. Please note, HOTAS trims have their own callbacks.	
SimTrimRollLeft	The MAN TRIM wheels can be implemented both with keystrokes or analogue values. When implemented with keystrokes, this callbacks refers to the upper position (L WING DN) of the top left trim wheels for AILERON trim. Please note, HOTAS trims have their own callbacks.	
SimTrimRollRight	The MAN TRIM wheels can be implemented both with keystrokes or analogue values. When implemented with keystrokes, this callbacks refers to the lower position (R WING DN) of the top left trim wheels for AILERON trim. Please note, HOTAS trims have their own callbacks.	
SimTrimYawLeft	The MAN TRIM wheels can be implemented both with keystrokes or analogue values. When implemented with keystrokes, this callbacks refers to the upper position (YAW TRIM L) of the bottom left trim knob for RUDDER trim. Please note, there is no RUDDER HOTAS trims	
SimTrimYawRight	The MAN TRIM wheels can be implemented both with keystrokes or analogue values. When implemented with keystrokes, this callbacks refers to the lower position (YAW TRIM R) of the bottom left trim knob for RUDDER trim. Please note, there is no RUDDER HOTAS trims	
FUEL PANEL		
SimToggleMasterFuel	Toggle (ON/OFF) command for Master Fuel switch (SP3)	toggle
SimMasterFuelOn	Refers to the MASTER switch on the FUEL panel. This command places the switch in the ON position. This enables fuel to flow to the engine.	All states for pitbuilders
SimMasterFuelOff	Refers to the MASTER switch on the FUEL panel. This command places the switch in the OFF position. This prevents fuel from flowing to the engine.	All states for pitbuilders
SimIncFuelPump	Toggle UP through all Fuel pump knob position (OFF/NORM/AFT/FWD) (SP3)	Toggle
SimDecFuelPump	Toggle DOWN through all Fuel pump knob position (OFF/NORM/AFT/FWD) (SP3)	Toggle

SimFuelPumpOff	Refers to the engine feed control knob on the FUEL panel. This command places the knob in the OFF position. The fuel pump operation is terminated.	All states for pitbuilders
SimFuelPumpNorm	Refers to the engine feed control knob on the FUEL panel. This command places the knob in the NORM position. The fuel pump operation delivers fuel from the AFT and FWD reservoirs.	All states for pitbuilders
SimFuelPumpAft	Refers to the engine feed control knob on the FUEL panel. This command places the knob in the AFT position. The fuel pump operation delivers fuel only from the AFT reservoir.	All states for pitbuilders
SimFuelPumpFwd	Refers to the engine feed control knob on the FUEL panel. This command places the knob in the OFF position. The fuel pump operation delivers fuel only from the FWD reservoir.	All states for pitbuilders
SimFuelDoorToggle	Toggle (ON/OFF) for Air Refuel door (SP3)	Toggle
SimFuelDoorOpen	Refers to the air refuel switch on the FUEL panel. The commands places the switch in the OPEN position and opens the fuel door with the commensurate side effects (e.g. suspension of autopilot if engaged, FLCS landing gains engaged).	All states for pitbuilders
SimFuelDoorClose	Refers to the air refuel switch on the FUEL panel. The command places the switch in the CLOSE position and opens the fuel door with the commensurate side effects (e.g. normal FLCS gains restored).	All states for pitbuilders
AUXCOMMS PANEL		
SimToggleAuxComMaster	Toggle CNI switch from CNI to backup and back (SP3)	Toggle
SimAuxComBackup	Refers to the BACKUP position of the CNI knob. In this position, BACKUP panels are active	All states for pitbuilders
SimAuxComUFC	Refers to the UFC position of the CNI knob. In this position the UFC (Up Front Controller) is the primary system and all BACKUP panels are ineffective.	All states for pitbuilders
SimDecLeftAuxComDigit	Cycle DOWN left digit on the aux comms thumbwheel (SP3)	SIMDEC = cycle down
SimDecCenterAuxComDigit	Cycle DOWN center digit on the aux comms thumbwheel (SP3)	SIMDEC = cycle down
SimDecRightAuxComDigit	Cycle DOWN right digit on the aux comms thumbwheel (SP3)	SIMDEC = cycle down
SimCycleLeftAuxComDigit	Cycle UP left digit from 0 to 9 on the aux comms thumbwheel	SIMCYCLE= increase
SimCycleCenterAuxComDigit	Cycle UP center digit from 0 to 9 on the aux comms thumbwheel	SIMCYCLE= increase
SimCycleRightAuxComDigit	Cycle UP right digit from 0 to 9 on the aux comms thumbwheel	SIMCYCLE= increase
SimCycleBandAuxComDigit	Cycle UP band from X to Y to X on the aux comms thumbwheel, please note, there's no decrease for this one as it's a two states.	SIMCYCLE= increase Please note, there's no need for a SIMDEC in this case, as it's only two bands: X &Y
SimToggleAuxComAATR	Toggle AUX COMM TACAN switch AA to AATR and back (SP3)	Toggle

SimTACANTR	Refers to the TACAN domain selection switch on the AUX COMM panel. This command places the switch in the TR position. TACAN channels refer to ground stations only. Note that the game only implements two positions for this switch; there is no separate functionality for the REC (receive only) position.	All states for pitbuilders
SimTACANAATR	Refers to the TACAN domain selection switch on the AUX COMM panel. This command places the switch in the AATR position. TACAN channels refer to air stations only. Note that the game only implements two positions for this switch; there is no separate functionality for the REC (receive only) position.	All states for pitbuilders
EXT LIGHT PANEL		
SimExtlPower	Toggle master light NORM/OFF (SP2)	Toggle
SimExtlMasterNorm	Refers to the MASTER switch on the EXT LIGHTING panel. This command places the switch in the NORM position and enables the operation of the external lights.	All states for pitbuilders
SimExtlMasterOff	Refers to the MASTER switch on the EXT LIGHTING panel. This command places the switch in the OFF position and disables the operation of the external lights.	All states for pitbuilders
SimExtlAntiColl	Toggle Anti Collision light ON/OFF (SP2)	Toggle
SimAntiCollOn	Refers to the ANTI-COLLISION switch on the EXT LIGHTING panel. This command places the switch in the up (i.e. on) position and turns on the anti-collision beacon light (provided the master is in the NORM position).	All states for pitbuilders
SimAntiCollOff	Refers to the ANTI-COLLISION switch on the EXT LIGHTING panel. This command places the switch in the off position and turns off the anti-collision beacon light.	All states for pitbuilders
SimExtlSteady	Toggle Ext light STEADY / FLASH (SP2)	Toggle
SimLightsSteady	Refers to the position light mode switch on the EXT LIGHTING panel. This command places the switch in the STEADY position and causes the external wing and tail position lights to be on constantly (provided the master is in the NORM position and the Wing/Fuselage switch is in the BRT position – see below).	All states for pitbuilders
SimLightsFlash	Refers to the position light mode switch on the EXT LIGHTING panel. This command places the switch in the FLASH position and causes the external wing and tail position lights to flash alternating between on and off (provided the master is in the NORM position and the Wing/Fuselage switch is in the BRT position – see below).	All states for pitbuilders
SimExtlWing	Toggles Ext wing lights BRT/OFF (SP2)	
SimToggleExtLights	Toggle ALL external lights ON/OFF. There is no corresponding 3D cockpit switch for this callback.	**Outdated - don't use**

SimWingLightBrt	Refers to the position light brightness switches on the EXT LIGHTING panel. Note there is only one switch throw implemented in the game for what should be two physical switches (wing and fuselage) This command places the switches in the BRT position which turns on the position lights in bright mode.	All states for pitbuilders
SimWingLightOff	Refers to the position light brightness switches on the EXT LIGHTING panel. Note there is only one switch throw implemented in the game for what should be two physical switches (wing and fuselage) This command places the switches in the OFF position which turns off the position lights.	All states for pitbuilders
AVTR panel		
SimAVTRToggle	Toggles AVTR switch between ON/AUTO/OFF	**Outdated - don't use**
SimAVTRSwitch	Toggle AVTR switch to all three positions including going from OFF to ON again (SP2)	
SimAVTRSwitchOff	Refers to the flight recorder mode switch on the AVTR panel. This command places the switch in the OFF (down) position. The AVTR recorder will not run.	All states for pitbuilders
SimAVTRSwitchAuto	Refers to the flight recorder mode switch on the AVTR panel. This command places the switch in the AUTO (middle) position. The AVTR recorder will automatically when the first detent of the HOTAS stick trigger or HOTAS pickle switch are operated. Recording continues for 30 seconds unless manually terminated or the trigger/pickle are operated again (which resets the 30 second countdown).	All states for pitbuilders
SimAVTRSwitchOn	Refers to the flight recorder mode switch on the AVTR panel. This command places the switch in the ON (down) position. The AVTR recorder is turned on and will run until the switch is turned to OFF or until 30 seconds after the switch is turned to AUTO, providing no trigger or pickle events reset the 30 second countdown.	All states for pitbuilders
SimAutoAVTR	OLD SP3 command. Do not use	**Outdated - don't use**
SimAVTRSwitchDown	Moves the AVTR switch down (does NOT jump from full down to full up) BMS 4.0	
SimAVTRSwitchUp	Moves the AVTR switch up (does NOT jump from full up to full down) BMS 4.0	
ECM Panel		
SimECMOn	Toggle ECM Power ON/OFF	It's a badly named toggle for ECM, it should best be renamed to SimECMtoggle
SimEcmPowerOn	Refers to the up position (i.e. OPR) of the ECM toggle switch of the ECM panel. Normally that switch is a 3 states switch but in BMS the center STBY position is not implemented.	All states for pitbuilders
SimEcmPowerOff	Refers to the down position (i.e. OFF) of the ECM toggle switch of the ECM panel. Normally that switch is a 3 states switch but in BMS the center STBY position is not implemented.	All states for pitbuilders
ELEC Panel		

SimMainPowerOff	Refers to the electrical power switch in the ELEC panel. This command places the switch in the OFF (down) position. Power is removed from all electrical buses.	All states for pitbuilders
SimMainPowerBatt	Refers to the electrical power switch in the ELEC panel. This command places the switch in the BATT (middle) position. Power is applied from the battery to the electrical system. Generators will not run with the switch in this position.	All states for pitbuilders
SimMainPowerMain	Refers to the electrical power switch in the ELEC panel. This command places the switch in the OFF (down) position. Power is applied to all electrical buses and the generators are enabled.	All states for pitbuilders
SimMainPowerInc	Toggle Main Power Switch UP	Toggle
SimMainPowerDec	Toggle Main Power Switch Down	Toggle
SimElecReset	Refers to the white pushbutton on the ELEC panel. When the ELEC SYS caution light comes ON, this is normally the only way to reset it. (BMS4.0)	Momentary or Pushbutton - suitable for both
EPU Panel		
SimEpuToggle	Toggle EPU switch from OFF to NORM to ON. (SP3)	Toggle
SimEpuOff	Refers to the EPU mode control on the EPU panel. This command places the switch in the OFF (down) position. Prevents the EPU from running or terminates EPU if running.	All states for pitbuilders
SimEpuAuto	Refers to the EPU mode control on the EPU panel. This command places the switch in the AUTO (middle) position. The EPU is normally off but it will run automatically provided there is EPU fuel on hand and if the main and standby generators go offline and the jet is in the air (NB: these are the only conditions checked in the game as implemented today), making normal sources of power unavailable.	All states for pitbuilders
SimEpuOn	Refers to the EPU mode control on the EPU panel. This command places the switch in the ON (up) position. The EPU will start running if EPU fuel is still available.	All states for pitbuilders
AUDIO 2 Panel		
SimILSOn	Refers to the power switch on the ILS volume rotary knob in the AUDIO2 panel. This command turns on the ILS radio receiver; ILS will not function unless the receiver is turned on (NOTE: the receiver is on at startup by default).	All states for pitbuilders
SimILSOff	Refers to the power switch on the ILS volume rotary knob in the AUDIO2 panel. This command turns off the ILS radio receiver; ILS will not provide steering cues when the receiver is turned off (NOTE: the receiver is on at startup by default).	All states for pitbuilders
SimStepIntercomVolumeUp	Adjust Intercom volume up - Intercom manages all sounds normally heard through helmet. This can also be assigned to an analogue axis.	Intercom is badly named here - consider this as a general volume increase level
SimStepIntercomVolumeUp	Adjust Intercom volume down - Intercom manages all sounds normally heard through helmet. This can also be assigned to an analogue axis.	Intercom is badly named here - consider this as a general volume decrease level

AUDIO 1 Panel		
SimStepComm1VolumeUp	COM1 volume can be implemented with an analogue device (pot) or keystrokes. When using keys, you need to use this callback for increasing COM1 volume. Corresponds to moving the COM1 volume clockwise in 8 steps. (SP2)	Toggle
SimStepComm1VolumeDown	COM1 volume can be implemented with an analogue device (pot) or keystrokes. When using keys, you need to use this callback for decreasing COM1 volume. Corresponds to moving the COM1 volume counterclockwise in 8 steps. (SP2)	Toggle
SimComm1PowerOn	The COM1 volume knob features a ON/OFF button on the fully counterclockwise position. This callback turns the COM1 radio ON. When using an analogue axis for COM1 volume, this only callback is required to turn the radio ON before increasing its volume with the analogue device. (BMS4.0)	Initial ON needed when you program COM1 as an analogue value
SimComm1PowerOff	The COM1 volume knob features a ON/OFF button on the fully counterclockwise position. This callback turns the COM1 radio OFF When using an analogue axis for COM1 volume, this only callback is required to turn the radio OFF after decreasing its volume with the analogue device. (BMS4.0)	Initial OFF needed when you program COM1 as an analogue value
SimStepComm2VolumeUp	COM2 volume can be implemented with an analogue device (pot) or keystrokes. When using keys, you need to use this callback for increasing COM2 volume. Corresponds to moving the COM2 volume clockwise in 8 steps. (SP2)	Toggle
SimStepComm2VolumeDown	COM2 volume can be implemented with an analogue device (pot) or keystrokes. When using keys, you need to use this callback for decreasing COM2 volume. Corresponds to moving the COM2 volume counterclockwise in 8 steps. (SP2)	Toggle
SimComm2PowerOn	The COM2 volume knob features a ON/OFF button on the fully counterclockwise position. This callback turns the COM2 radio ON. When using an analogue axis for COM2 volume, this only callback is required to turn the radio ON before increasing its volume with the analogue device. (BMS4.0)	Initial ON needed when you program HCOm2MS as an analogue value
SimComm2PowerOff	The COM2 volume knob features a ON/OFF button on the fully counterclockwise position. This callback turns the COM2 radio OFF When using an analogue axis for COM2 volume, this only callback is required to turn the radio OFF after decreasing it's volume with the analogue device. (BMS4.0)	Initial OFF needed when you program COM2 as an analogue value
SimStepMissileVolumeUp	Refers to the MSL volume of the AUDIO1 panel. This knob can be implemented with an analogue device or keystrokes. Please note: unlike COM1&2 volumes, there is no ON/OFF switch at the full CCW position. Use this callback to increase MSL volume in 8 steps, moving the MSL knob clockwise (SP2)	Toggle

SimStepMissileVolumeDown	Refers to the MSL volume of the AUDIO1 panel. This knob can be implemented with an analogue device or keystrokes. Please note: unlike COM1&2 volumes, there is no ON/OFF switch at the full CCW position. Use this callback to decrease MSL volume in 8 steps, moving the MSL knob counterclockwise (SP2)	Toggle
SimStepThreatVolumeUp	Refers to the THREAT volume of the AUDIO1 panel. This knob can be implemented with an analogue device or keystrokes. Please note: unlike COM1&2 volumes, there is no ON/OFF switch at the full CCW position. Use this callback to increase THREAT volume in 8 steps, moving the THREAT knob clockwise (SP2)	Toggle
SimStepThreatVolumeDown	Refers to the THREAT volume of the AUDIO1 panel. This knob can be implemented with an analogue device or keystrokes. Please note: unlike COM1&2 volumes, there is no ON/OFF switch at the full CCW position. Use this callback to decrease THREAT volume in 8 steps, moving the THREAT knob counter clockwise (SP2)	Toggle
SimAud1Com1Sql	Refers to the SQL position of the COM1 Mode knob (under COM1 volume) on AUDIO 1 panel. Used for normal radio operations (BMS4.0)	All states for pitbuilders
SimAud1Com1Gd	Refers to the GD position of the COM1 Mode knob (under COM1 volume) on AUDIO 1 panel. In this mode, COM1 is tuned to GUARD if the CNI switch is in UFC (BMS4.0)	All states for pitbuilders
SimAud1Com2Sql	Refers to the SQL position of the COM2 Mode knob (under COM2 volume) on AUDIO 1 panel. Used for normal radio operations (BMS4.0)	All states for pitbuilders
SimAud1Com2Gd	Refers to the GD position of the COM2 Mode knob (under COM2 volume) on AUDIO 1 panel. In this mode, COM2 is tuned to GUARD if the CNI switch is in UFC (BMS4.0)	All states for pitbuilders
ENG & JET START Panel		
SimJfsStart	Toggle JFS switch but since the JFS shuts down automatically, it can be considered as JFS to START. (Unless you want to abort JFS start which is not a good idea!) Note: this command should be used to map to the action of putting the switch in the START2 position; do not also map it to the movement of the switch back to center/off position (in other words, treat it more like a push button). This accounts for the fact that the real jet uses a magnetically captured switch that holds the bat in the START2 position until the engine comes alive (55% RPM during normal ground start) at which point the JFS engine is powered down and this switch self-centers to off. (SP3)	Toggle
SimEngContPri	Refers to the PRI (PRIMARY) position of the ENG CONT switch on the ENG & JET START panel. Place the engine in PRIMARY mode which is the normal operating mode. (BMS4.0)	All states for pitbuilders

SimEngContSec	Refers to the SEC Secondary position of the ENG CONT switch on the ENG & JET START panel. Place the engine in SECONDARY mode which inhibits AB (BMS4.0)	All states for pitbuilders
BACKUP UHF Panel		
SimCycleRadioChannel	This command has maps to the UHF preset channel selector knob on the UHF panel. This command has bee updated to match correct behavior. In this version of the game, this command will change only the UHF channel and then if and only if the CNI switch on the AUX COMM panel is in the backup position. There is no backup control for changing VHF radio channel so if the ICP is not working you are out of luck on that one.	Toggle
SimDecRadioChannel	Can be used to map to the radio preset channel selector encoder knob on the UHF. This command does the inverse of the SimCycleRadioChannel command which is to say it changes the channel but cycling through the 8 choices in reverse order. This command will change only the UHF channel and then if and only if the CNI switch on the AUX COMM panel is in the backup position. There is no backup control for changing VHF radio channel so if the ICP is not working you are out of luck on that one. This command only operates with realistic avionics selected.	Toggle
SimBupUhfOff	Refers to the OFF position of the function knob of the backup UHF panel. Please note this panel is functional only when the CNI switch is in BACKUP. In this position, the backup UHF radio is OFF and inoperative (BMS4.0)	All states for pitbuilders
SimBupUhfMain	Refers to the MAIN position of the function knob of the backup UHF panel. In this position, the backup UHF radio operates on the selected preset channel (displayed on the 2 digit above) as long as the COMM1 power switch on the AUDIO1 panel is ON. (BMS4.0)	All states for pitbuilders
SimBupUhfBoth	Refers to the BOTH position of the function knob of the backup UHF panel. In this position, the backup UHF radio operates normally as in MAIN but receive GUARD as well. (BMS4.0)	All states for pitbuilders
SimBupUhfFuncDec	Moves the BUP UHF Function knob CCW (BMS 4.0)	Toggle
SimBupUhfFuncInc	Moves the BUP UHF Function knob CW (BMS 4.0)	Toggle
SimBupUhfPreset	Refers to the PRESET position of the mode knob of the backup UHF panel. Please note this panel is functional only when the CNI switch is in BACKUP. In this position, the backup UHF operates according to the set channel displayed above as a two digit channel (BMS4.0)	All states for pitbuilders
SimBupUhfGuard	Refers to the GUARD position of the mode knob of the backup UHF panel. Please note this panel is functional only when the CNI switch is in BACKUP. In this position, the backup UHF send and receives on UHF Guard frequency. (BMS 4.0)	All states for pitbuilders
SimBupUhfModeDec	Moves the BUP UHF Mode knob CCW (BMS 4.0)	Toggle
SimBupUhfModeInc	Moves the BUP UHF Mode knob CW (BMS 4.0)	Toggle

OTWBalanceIVCvsAIUp	Balances AI volume against IVC volume (to be mapped to the small volume UHF knob) (BMS 4.0)	MP specific when AI volumes might be too loud compared to IVC volume.
OTWBalanceIVCvsAIDown	Balances AI volume against IVC volume (to be mapped to the small volume UHF knob) (BMS 4.0)	MP specific when AI volumes might be too loud compared to IVC volume.
MPO panel		
SimMPOToggle	Note: in reality, the physical switch for this control is a momentary spring-loaded action. This means it should be held in the OVRD position to be effective. The SimMPOToggle command does not work this way and should be considered as a simulation workaround for non cockpit builder. Cockpit builders with actual switches should use the one below.	Toggle -Used for simulation sake - keeping the switch depressed with the mouse or the keyboard is not simple when one has no cockpit
SimMPO	Refers to the manual pitch override switch on the manual pitch panel. This command is a momentary that must be held to keep the switch in the OVRD position. When the key for this command is held, normal FLCS limiter values are suspended. Once the key is released, the switch snaps back to the NORM position and normal FLCS limiters once more apply. Specific to pitbuilders, non pit builders should use the one above.	
LEFT SIDE WALL		
AFCanopyToggle	Toggles canopy up and down. At this time we do not have two positions callbacks for the canopy. The canopy switch is actually placed under the yellow spider in the left sidewall. The spider is the switch guard. In BMS cockpit, the yellow spider is the switch. Closing the spider actually actions the switch. (SP2)	Toggle - cockpit builders beware, there is no full state for the canopy handle
SimSlapSwitch	Refers to the countermeasure release pushbutton located above the throttle rail. This button when depressed release EWS PRGM #5 as set in the DTC or UFC (BMS4.0)	
SEAT		
SimSeatArm	Toggle seat arming ON/OFF. (SP3)	Toggle
SimSeatOn	Refers to the ACES II seat arming level on the left side of the ejection seat. This command places the lever in the down or ARMED position. The ejection seat is enabled.	All states for pitbuilders
SimSeatOff	Refers to the ACES II seat arming level on the left side of the ejection seat. This command places the lever in the up or SAFE position. The ejection seat is disabled.	All states for pitbuilders
SimEject	Initiates Ejection sequence - must be held a couple seconds to be effective	
THROTTLE		
SimTransmitCom1	PTT for COMM1 (UHF) on throttle radio switch (down) (SP2)	Cougar T3
SimTransmitCom2	PTT for COMM2 (VHF) on throttle radio switch (up) (SP2)	Cougar T2
SimCursorEnable	Refers to the button (T1) on the radar cursor of the throttle (SP2)	Cougar T1

SimToggleMissileCage	Refers to the button (T6) on the RNG axis of the throttle	Cougar T6
SimSelectSRMOverride	Refers to the Dogfight master mode switch on the throttle	Cougar T7
SimSelectMRMOverride	Refers to the Missile master mode switch on the throttle	Cougar T8
SimDeselectOverride	Refers to the central position cancelling dogfight/missile mode on the throttle	Cougar center position between T7 & T8
AFBrakesOut	Extends speebrakes (T9)	Cougar T9
AFBrakesIn	Retracts speedbrakes (T10)	Cougar T10
AFBrakesToggle	Toggle speedbrakes IN /OUT	Toggle for T9-T10
SimCommsSwitchLeft	Refers to left radio switch of the throttle (IDM AA & IFFOUT))	Cougar T5
SimCommsSwitchRight	Refers to right radio switch of the throttle (IDM AG & IFF IN)	Cougar T4
SimRadarCursorZero	Reset cursors for Ground radar only, works as CZ on OSB #9	No Cougar assignation, rather MFD button
SimCursorUp	Radar cursors can be implemented with an analogue device or with keystrokes. This callbacks moves the cursor UP	Cougar microstick up
SimCursorDown	Radar cursors can be implemented with an analogue device or with keystrokes. This callbacks moves the cursor Down	Cougar microstick down
SimCursorLeft	Radar cursors can be implemented with an analogue device or with keystrokes. This callbacks moves the cursor Left	Cougar microstick left
SimCursorRight	Radar cursors can be implemented with an analogue device or with keystrokes. This callbacks moves the cursor Right	Cougar microstick right
SimThrottleIdleDetent	Badly named after the CUTOFF release. This callback was created to overcome the lack of physical cutoff range on the throttle course. Depending on using the CUTOFF idle code in BMS config, this key should be used to simulating moving the throttle out of OFF to IDLE at engine start. (SP3)	No Cougar assignation as the cutoff lever is not implemented.
SimRangeKnobUp	Increase Range knob value when the RNG knob is not declared as an analogue axis (SP3)	Cougar Range CW
SimRangeKnobDown	Decrease Range knob value when the RNG knob is not declared as an analogue axis (SP3)	Cougar Range CCW
SimRadarElevationDown	Decrease antenna knob value when the ANT knob is not declared as an analogue axis (SP3)	Cougar Antenna CCW
SimRadarElevationUp	Increase antenna knob value when the ANT knob is not declared as an analogue axis (SP3)	Cougar Antenna CW
SimRadarElevationCenter	Center antenna knob value when the ANT knob is not declared as an analogue axis (SP3)	Cougar Antenna Center
ALT GEAR		
AFAlternateGear	refers to the ALT GEAR handle on the left aux console - extends the gear pneumatically when hydraulic failed.	
AFAlternateGearReset	refers to the white pushbutton on top of the ALT GEAR handle which allows to retract the gear after an alternate extension, if hydraulic pressure is available	
TWA		

SimRWRSetGroundPriority	Refers to the pushbutton/indicator labeled LOW ALTITUDE on the threat warning AUX on the left AUX console. Alow Low altitude threat to be prioritized on RWR (SP3)	
SimRWRSetSearch	Refers to the pushbutton/indicator labeled SEARCH on the threat warning AUX on the left AUX console. Allows Search Symbol to be displayed on RWR (SP3)	
SimRwrPower	Refers to the pushbutton/indicator labeled POWER on the threat warning AUX on the left AUX console. It powers the RWR (SP3)	
HMCS		
SimHmsSymWheelUp	The HMCS knob can be implemented with an analogue axis or keystrokes. When implemented with keystrokes this callback increases the brightness of the HMCS, corresponds to turning the HMCS knob clockwise. (new BMS4.0)	Can be mapped to analogue pot
SimHmsSymWheelDn	The HMCS knob can be implemented with an analogue axis or keystrokes. When implemented with keystrokes this callback decreases the brightness of the HMCS, corresponds to turning the HMCS knob counterclockwise. (new BMS4.0)	Can be mapped to analogue pot
SimHmsOn	The real HMCS knob features and ON/OFF switch at the full CCW position and this callback refers to that button when moved out of the full CCW position. It powers up the HMCS (new BMS4.0)	Initial ON needed when you program HMS as an analogue value
SimHmsOff	The real HMCS knob features and ON/OFF switch at the full CCW position and this callback refers to that button when moved to the fullest CCW position. It powers down the HMCS (new BMS4.0)	Initial OFF needed when you program HMS as an analogue value
CMDS		
SimEWSRWRPower	Toggles RWR switch ON/OFF on the CMDS panel (SP3)	Toggle
SimEWSRWROn	Refers to the RWR switch on the CMDS panel. This command places the switch in the ON position and enables the RWR system to provide inputs to the CMDS. See also SimEWSModeAuto.	All states for pitbuilders
SimEWSRWROff	Refers to the RWR switch on the CMDS panel. This command places the switch in the OFF position and prevents the RWR system from providing inputs to the CMDS. See also SimEWSModeAuto.	All states for pitbuilders
SimEWSJammerPower	Toggle the Jammer switch ON/OFF on the CMDS panel (SP3)	Toggle
SimEWSJammerOn	Refers to the JAMMER switch on the CMDS panel. This command places the switch in the ON position and allows the CMDS system to power on the ECM system if the CMS mode is in SEMI or AUTO modes (see also SimEWSModeSemi and SimEWSModeAuto). Note this command is not a power on for the ECM transmitter so you can enable ECM manually with the HOTAS controls even if this switch is OFF.	All states for pitbuilders

SimEWSJammerOff	Refers to the JAMMER switch on the CMDS panel. This command places the switch in the OFF position and prevents the CMDS system from powering on the ECM system if the CMS mode is in SEMI or AUTO modes (see also SimEWSModeSemi and SimEWSModeAuto). Note this command is not a power off for the ECM transmitter so you can enable ECM manually with the HOTAS controls even if this switch is OFF.	All states for pitbuilders
SimEWSChaffPower	Toggles the Chaff power switch ON/OFF on the CMDS panel. (SP3)	Toggle
SimEWSChaffOn	Refers to the CH switch on the CMDS panel. This command places the switch in the ON position and enables the use of chaff as part of the countermeasures dispense program.	All states for pitbuilders
SimEWSChaffOff	Refers to the CH switch on the CMDS panel. This command places the switch in the OFF position and disables the use of chaff as part of the countermeasures dispense program.	All states for pitbuilders
SimEWSFlarePower	Toggles the Flare power switch ON/OFF on the CMDS panel. (SP3)	Toggle
SimEWSFlareOn	Refers to the FL switch on the CMDS panel. This command places the switch in the ON position and enables the use of flares as part of the countermeasures dispense program.	All states for pitbuilders
SimEWSFlareOff	Refers to the FL switch on the CMDS panel. This command places the switch in the OFF position and disables the use of flares as part of the countermeasures dispense program.	All states for pitbuilders
SimEWSPGMInc	Move the mode knob CW - (SP3)	Toggle
SimEWSPGMDec	Move the mode knob CCW - (SP3)	Toggle
SimEWSModeOff	Refers to the countermeasures mode knob on the CMDS panel. This command places the knob in the OFF position. The countermeasures system is disabled.	All states for pitbuilders
SimEWSModeStby	Refers to the countermeasures mode knob on the CMDS panel. This command places the knob in the STBY position. The countermeasures system is set to standby condition but dispense programs will not run.	All states for pitbuilders
SimEWSModeMan	Refers to the countermeasures mode knob on the CMDS panel. This command places the knob in the MAN position. The countermeasures dispense system is armed but the selected program will only run by pilot command (see SimDropProgrammed).	All states for pitbuilders
SimEWSModeSemi	Refers to the countermeasures mode knob on the CMDS panel. This command places the knob in the SEMI position. The countermeasures system is armed. When the RWR detects a paint, the VMS will prompt the pilot to activate ECM (if fitted) with the "Jammer" message. If the RWR detects a missile launch event, the selected countermeasures program is run. The RWR switch on this panel must be in the ON position for the CMDS to receive input from the RWR system.	All states for pitbuilders

SimEWSModeAuto	Refers to the countermeasures mode knob on the CMDS panel. This command places the knob in the OFF position. The countermeasures system is enabled. When the RWR detects a paint, system will activate ECM (if fitted) unless the REQJAM option is explicitly set to "off" via the ICP. If the RWR detects a missile launch event, the selected countermeasures program is run. The RWR switch on this panel must be in the ON position for the CMDS to receive input from the RWR system.	All states for pitbuilders
SimEWSModeByp	Refers to the countermeasures mode knob on the CMDS panel. This command places the knob in the BYP (BYPASS) position. This mode allows the pilot to release one chaff and one flare for each action on the CMS forward. It is a backup mode used when the EWS fails. (new BMS4.0)	All states for pitbuilders
SimEWSProgInc	Move the program knob CW. (SP3)	Toggle
SimEWSProgDec	Move the program knob CCW. (SP3)	Toggle
SimEWSProgOne	Refers to the countermeasures program selection knob on the CMDS panel. The command places the knob in the "1" position. Program one is active.	All states for pitbuilders
SimEWSProgTwo	Refers to the countermeasures program selection knob on the CMDS panel. The command places the knob in the "2" position. Program two is active.	All states for pitbuilders
SimEWSProgThree	Refers to the countermeasures program selection knob on the CMDS panel. The command places the knob in the "3" position. Program three is active.	All states for pitbuilders
SimEWSProgFour	Refers to the countermeasures program selection knob on the CMDS panel. The command places the knob in the "4" position. Program four is active.	All states for pitbuilders
SimEwsJett	Refers to the JETT position of the JETT switch of the CMDS, when moved to JETT, all remaining flares are jettisoned at once. (BMS4.0)	All states for pitbuilders
SimEwsJettOff	Refers to the OFF position of the JETT switch of the CMDS, (BMS4.0)	All states for pitbuilders
GEAR Panel		
SimGndJettEnable	Toggle the ground Jett switch ON/OFF on the gear panel (SP2)	Toggle
SimGndJettOn	Refers to the GND JETT switch on the landing gear panel. This command places the switch in the ENABLE position which allows stores to be jettisoned while on the ground. This commands also allows the ECM pod to emit (this is normally disabled on the ground). This command only operates if realistic avionics are selected.	All states for pitbuilders
SimGndJettOff	Refers to the GND JETT switch on the landing gear panel. This command places the switch in the OFF position which prevents stores from being jettisoned while on the ground. This command also prevents the ECM pod from emitting. This command only operates if realistic avionics are selected.	All states for pitbuilders
SimCATSwitch	Toggle CAT switch on Gear panel	toggle

SimCATI	Refers to the STORES CONFIG switch in the landing gear panel. This command places the switch in the CAT I position. This command only operates if realistic avionics are selected.	All states for pitbuilders
SimCATIII	Refers to the STORES CONFIG switch in the landing gear panel. This command places the switch in the CAT III position. This command only operates if realistic avionics are selected.	All states for pitbuilders
SimSilenceHorn	Refers to the Horn silencer pushbutton on the gear panel.	Momentary or Pushbutton - suitable for both
SimLandingLightToggle	Toggle landing light ON/OFF - (SP3)	Toggle
SimLandingLightOn	Refers to the LIGHTS switch on the landing gear panel. This command places the switch in the LANDING position which turns on the light. NB: the game only implements two positions for this control not three as in the real jet. This command only operates if realistic avionics are selected.	All states for pitbuilders
SimLandingLightOff	Refers to the LIGHTS switch on the landing gear panel. This command places the switch in the OFF position which turns off the light. NB: the game only implements two positions for this control not three as in the real jet. This command only operates if realistic avionics are selected.	All states for pitbuilders
SimParkingBrakeToggle	Toggle parking brake ON/OFF - (SP3)	Toggle
SimParkingBrakeOn	Refers to the PARKING BRAKE switch on the landing gear panel. This command places the switch in the up or on position which engages the parking brake. The command does nothing if the jet is moving. NB: the game only implements two positions for this control not three as in the real jet. This command only operates if realistic avionics are selected.	All states for pitbuilders
SimParkingBrakeOff	Refers to the PARKING BRAKE switch on the landing gear panel. This command places the switch in the down or OFF position which disengages the parking brake. NB: the game only implements two positions for this control not three as in the real jet. This command only operates if realistic avionics are selected.	All states for pitbuilders
AFGearToggle	Toggle gear up/down. (Sp2)	Toggle
AFGearUp	Refers to the landing gear control handle This command places the handle in the "up" position. If the gear is not already up and there are no landing gear faults, the gear is stowed. This command only operates with Realistic Avionics selected in the game.	All states for pitbuilders
AFGearDown	Refers to the landing gear control handle This command places the handle in the "down" position. If the gear is not already down and locked and there are no landing gear faults, the gear is lowered. This command only operates with Realistic Avionics selected in the game.	All states for pitbuilders
SimEmergencyJettison	Refers to the Emergency Jettison pushbutton on the Gear panel.	Momentary or Pushbutton - suitable for both
SimSelectiveJettison	outdated and replaced by SMS MFD & pickle	Outdated - don't use
SimHookToggle	Toggle Hook up/down - (SP3)	Toggle

SimHookUp	This command refers to the HOOK switch on the landing gear panel. This command places the switch in the UP position. The hook on the aircraft is raised to the stowed position. This will also clear the hook caution panel light and master caution light. This command will only operate if realistic avionics are selected.	All states for pitbuilders
SimHookDown	This command refers to the HOOK switch on the landing gear panel. This command places the switch in the DOWN position. The hook on the aircraft is lowered to the deployed position. This will also set the hook caution panel light and master caution light will come on as a result also. This command will only operate if realistic avionics are selected.	All states for pitbuilders
MISC panel		
SimLaserArmToggle	toggle Laser switch ARM/OFF - (SP3)	Toggle
SimLaserArmOn	Refers to the LASER switch on the MISC panel. This command places the switch in the ARM position. Provided that the MASTER ARM switch is in the ARM position, the command makes the laser designator ready to fire on command from the fire control computer.	All states for pitbuilders
SimLaserArmOff	Refers to the LASER switch on the MISC panel. This command places the switch in the ARM position. Regardless of the MASTER ARM switch position, the command prevents the laser designator from firing.	All states for pitbuilders
SimRightAPSwitch	Full toggle for Right AP switch - this one toggles past the final position back to the other position. (SP3)	Full Toggle
SimLeftAPSwitch	Full toggle for Left AP switch - this one toggles past the final position back to the other position. (SP3)	Full toggle
SimLeftAPUp	Refers to the leftmost roll mode autopilot control switch on the MISC panel. This command places the switch in the HDG SEL (up) position. If the autopilot is engaged, the jet will turn to match the heading selected in the HSI.	All states for pitbuilders
SimLeftAPMid	Refers to the leftmost roll mode autopilot control switch on the MISC panel. This command places the switch in the ATT HLD (middle) position. If the autopilot is engaged, the jet will hold the bank angle being commanded by the flight controls at the time when the autopilot was engaged.	All states for pitbuilders
SimLeftAPDown	Refers to the leftmost roll mode autopilot control switch on the MISC panel. This command places the switch in the STRG SEL (down) position. If the autopilot is engaged, the jet will turn to a heading that leads towards the currently selected waypoint.	All states for pitbuilders
SimLeftAPInc	Toggle - Moves LEFT AP switch UP and once there don't toggle back to down	Toggle
SimLeftAPDec	Toggle - Moves LEFT AP switch Down and once there doesn't toggle back to up	Toggle

SimRightAPUp	Refers to the rightmost pitch mode autopilot control switch on the MISC panel. This command places the switch in the ALT HOLD (up) position. This command engages the autopilot and causes the autopilot to maintain the altitude commanded by the flight controls at the time the autopilot was engaged.	All states for pitbuilders
SimRightAPMid	Refers to the rightmost pitch mode autopilot control switch on the MISC panel. This command places the switch in the A/P OFF (middle) position. This command disengages the autopilot.	All states for pitbuilders
SimRightAPDown	Refers to the rightmost pitch mode autopilot control switch on the MISC panel. This command places the switch in the ATT HOLD (up) position. This command engages the autopilot and causes the autopilot to maintain the pitch attitude commanded by the flight controls at the time the autopilot was engaged. This command only operates if realistic avionics are selected. NB: in the actual F-16 the physical switch for this control is spring-loaded to center and is magnetically held to the up or down position. When the autopilot encounters conditions that prevent its continued operation (excessive pitch or roll that exceed its limits for example), releasing the magnetic hold on this switch centers it and disengages the autopilot. With the current Falcon4 implementation, it would appear that the pitch ATT HOLD position can only be selected if the roll mode switch is in the center position. With the roll mode switch in any other position the pitch mode switch will appear not to go into the down position but in fact it is merely centering again instantly. This may not be correct relative to how the real jet operates. This is under investigation with "authoritative sources" ;-)	All states for pitbuilders
SimRightAPInc	Toggle - Moves RIGHT AP switch UP and once there doesn't toggle back down	Toggle
SimRightAPInc	Toggle - Moves RIGHT AP switch Down and once there doesn't toggle back UP	Toggle
SimToggleAutopilot	No effect with 3-axis AP, but Combat AP and Steerpoint AP are toggled ON/OFF with this one.	Toggle
AFDragChute	Refers to some version of the F-16 featuring a drag chute (MLU) this callbacks refers then to the guarded chute switch on the MISC panel and deploy the Para brake - (SP2)	for MLU only, no para brake on block 50-52 aircraft
SimToggleTFR	Refers to the pushbutton/indicator labeled ADV mode (Active/STBY) which is believed to place TFR in Active mode when depressed and if TFR is set correctly on the Mfds. - To be confirmed. Added in eRazor executables.	Momentary or Pushbutton - suitable for both
SimStepMasterArm	Toggle master arm switch state round and round (SP2)	Full toggle
SimArmMasterArm	Place the Master Arm switch on the MISC panel to ARM	All states for pitbuilders
SimSafeMasterArm	Place the Master Arm switch on the MISC panel to Safe	All states for pitbuilders
SimSimMasterArm	Place the Master Arm switch on the MISC panel to SIM	All states for pitbuilders

SimMasterArmDown	Moves master arm switch down and once there doesn't toggle back to UP (BMS 4.0)	Toggle down
SimMasterArmUp	Moves master arm switch up and once there doesn't toggle back to DOWN (BMS 4.0)	Toggle up
SimPickle	Normally refers to the stick pickle button, but duplicated here as it is also suitable for the ALT REL pushbutton on the MISC panel.	pushbutton
SimRFSwitch	Toggle RF switch state back and forth (SP3)	Full Toggle
SimRFSwitchUp	Moves RF switch UP (BMS 4.0)	Toggle up
SimRFSwitchDown	Moves RF switch Down (BMS 4.0)	Toggle down
SimRFNorm	Refers to the RF switch on the MISC panel. This command places the switch in the NORM (up) position. RF transmissions from systems that are emitters and that are active are enabled.	All states for pitbuilders
SimRFQuiet	Refers to the RF switch on the MISC panel. This command places the switch in the QUIET (middle) position. RF transmissions from systems that are emitters and that are active are reduced. In particular, the main APG-68 radar set does not transmit in this mode.	All states for pitbuilders
SimRFSilent	Refers to the RF switch on the MISC panel. This command places the switch in the SILENT (down) position. All RF transmissions suppressed including APG-68, CARA and TFR transmitters.	All states for pitbuilders
LEFT EYEBROW		
SimICPFAck	Left eyebrow F-ACK (Fault acknowledge) pushbutton. When depressed, display fault on PFD screen. NO FAULTS, ALL SYS OK is displayed when there's no failure detected.	badly named, nothing to do with ICP
ExtinguishMasterCaution	Refers to the MASTER CAUTION reset (pushbutton/indicator) on the left eyebrow.	pushbutton
TWP		
SimRWRSetPriority	Refers to the pushbutton/indicator labeled PRI on the TWP (threat warning Prime)	pushbutton
SimRWRSetTargetSep	Refers to the pushbutton/indicator labeled TGT SEP on the TWP (threat warning Prime)	pushbutton
SimRWRSetUnknowns	Refers to the pushbutton/indicator labeled UNK on the TWP (threat warning Prime)	pushbutton
SimRWRSetNaval	Refers to the pushbutton/indicator labeled NAVAL on the TWP (threat warning Prime)	pushbutton
SimRWRHandoff	Refers to the pushbutton/indicator labeled HANDOFF on the TWP (threat warning Prime)	pushbutton
LEFT MFD		
SimCBEOSB_1L	OSB pushbuttons, left MFDs 1 to 20	
SimCBEOSB_2L		
SimCBEOSB_3L		
SimCBEOSB_4L		
SimCBEOSB_5L		
SimCBEOSB_6L		
SimCBEOSB_7L		
SimCBEOSB_8L		
SimCBEOSB_9L		
SimCBEOSB_10L		

SimCBEOSB_11L		
SimCBEOSB_12L		
SimCBEOSB_13L		
SimCBEOSB_14L		
SimCBEOSB_15L		
SimCBEOSB_16L		
SimCBEOSB_17L		
SimCBEOSB_18L		
SimCBEOSB_19L		
SimCBEOSB_20L		
SimCBEOSB_BRTUP_L	Adjust LEFT MFD brightness UP	Renamed since BMS 2.0
SimCBEOSB_BRTDOWN_L	Adjust LEFT MFD brightness DOWN	Renamed since BMS 2.0
ICP		
SimICPTILS	push button #1 - T-ILS (tacan-ILS) sub page on ICP	
SimICPALOW	push button #2 - ALOW (ALTITUDE LOW) subpage on ICP	
SimICPPrevious	pushbutton arrow down (PREVIOUS) on ICP (left of DCS)	
SimICPNext	pushbutton arrow up (NEXT) on ICP (left of DCS)	
SimICPLink		Outdated - don't use
SimStepSMSRight	ICP Dlink they say? See above and which one is correct?	Outdated - don't use
SimICPCrus	push button #5 - CRUS (CRUISE) subpage on ICP	
SimICPStpt	push button #4 - STPT (steerpoint) subpage on ICP	
SimICPMark	push button #7 - MARK subpage on ICP	
SimICPEnter	push button ENTER on ICP	
SimICPCom1	push button override Mode COM1 on ICP	
SimICPCom2	push button override Mode COM2 on ICP	
SimICPNav	push button Master Mode NAV on ICP	
SimICPAA	push button Master Mode AA on ICP	
SimICPAG	push button Master Mode AG on ICP	
SimICPIFF	push button override Mode IFF on ICP	
SimICPLIST	push button override Mode LIST on ICP	
SimICPTHREE	push button #3 on ICP	
SimICPSIX	push button #6 (TIME) subpage on ICP	
SimICPEIGHT	push button #8 FIX subpage on ICP	
SimICPNINE	push button #9 A-Cal subpage on ICP	
SimICPZERO	push button #0 - M-SEL (Mode SELECT) subpage on ICP	
SimICPResetDED	ICP DCS switch LEFT to RTN (4 way switch)	badly named should be DCS iso DED
SimICPDEDUP	ICP DCS switch UP (4 way switch)	badly named should be DCS iso DED
SimICPDEDDOWN	ICP DCS switch DOWN (4 way switch)	badly named should be DCS iso DED
SimICPDEDSEQ	ICP DCS switch RIGHT to SEQ (4 way switch)	badly named should be DCS iso DED
SimICPCLEAR	push button RCL on ICP	
SimDriftCO	Latching side of the DRIFT CO toggle switch on ICP (UP position)	Toggle for the next two

SimDriftCOOn	Refers to the upper throw of the drift cut off/warning reset switch. In the real ICP, this switch is a (on)-off-on configuration, i.e. momentary to one side which in this case is the warn reset throw. This command places the switch in the ON position. The pitch ladder and flight path marker are centered in azimuth in the HUD.	All states for pitbuilder
SimDriftCOOff	Refers to the upper throw of the drift cut off/warning reset switch. In the real ICP, this switch is a (on)-off-on configuration, i.e. momentary to one side which in this case is the warn reset throw. This command places the switch in the NORM position. The pitch ladder and flight path marker are displayed normally in the HUD.	All states for pitbuilder
SimWarnReset	ICP Warn reset (bottom part of the drift/CO - warn reset switch) MOMENTARY	Momentary or Pushbutton - suitable for both
SimSymWheelUp	This command is for the Brightness control on the left side of the ICP. It can also be assigned to an analogue axis. This key function is equivalent to a left mouse click on the thumb wheel and it increases the brightness of the color used for the various elements of HUD symbology (see also the SimHUDBrt* commands for multiplier effect). There are 6 levels of brightness. The lowest level is basically going to blank all the symbology. In previous versions of Falcon4, at the lowest level brightness the HUD was powered off for you. This is not true in BMS: the Sym Wheel commands merely set level. Use the SimHUDPower* commands to turn the HUD on an off. (SP3)	HUD BRIGHTNESS
SimSymWheelDn	This command is for the Brightness control on the left side of the ICP.It can also be assigned to an analogue axis. This key function is equivalent to a right mouse click on the thumb wheel and it decreases the brightness of the color used for the various elements of HUD symbology (see also the SimHUDBrt* commands for multiplier effect). There are 6 levels of brightness. The lowest level is basically going to blank all the symbology. In previous versions of Falcon4, at the lowest level brightness the HUD was powered off for you. This is not true in BMS: the Sym Wheel commands merely set level. Use the SimHUDPower* commands to turn the HUD on an off. (SP3)	HUD BRIGHTNESS
SimHUDPower	Initial Toggle ON/OFF of the HUD. Refers to the lowest position of the BRT left bottom wheel on the ICP. Before being able to set brightness of the HUD, it has to be turned ON. Real wheels have a switch at the beginning of the course. When using an analogue control (pot) for HUD brightness, the SIMHUDPower has to be used and programmed on the pot switch.	Toggle for the next two

SimHUDOn	Refers to the on/off switch that is part of the thumb wheel control for HUD brightness on the ICP. If you roll the thumb wheel downwards, there is an on/off switch at the end of travel in that direction. Clicking past this switch in the upwards direction turns on the HUD power enabling the unit to display HUD symbology. Remainder of the thumbwheel's travel controls symbology brightness. This command is only for the ON part of the button	INITIAL HUD ON - to be used when the HUD Brightness is assigned to an analogue axis
SimHUDOff	Refers to the on/off switch that is part of the thumb wheel control for HUD brightness on the ICP. If you roll the thumb wheel downwards, there is an on/off switch at the end of travel in that direction. Clicking past this switch in the downwards direction turns off the HUD power preventing the unit from displaying HUD symbology. This command is only for the OFF part of the button.	INITIAL HUD OFF - to be used when the HUD Brightness is assigned to an analogue axis
SimRetUp	Refers to the DEPR RET wheel on the top right of the ICP. Increase the backup RETICLE for Manual bombing	
SimRetDn	Refers to the DEPR RET wheel on the top right of the ICP. decrease the backup RETICLE for Manual bombing	
MAIN INSTRUMENT (CP)		
SimHsiCourseInc	Refers to the HSI CRS knob. This callback turns the knob clockwise in 5° increment	
SimHsiCrsIncBy1	Same as above but in 1° increment (BMS 4.0)	
SimHsiCourseDec	Refers to the HSI CRS knob. This callback turns the knob counterclockwise in 5° increment	
SimHsiCrsDecBy1	Same as above but in 1° increment (BMS 4.0)	
SimHsiHeadingInc	Refers to the HSI HDG knob. This callback turns the knob clockwise in 5° increment	
SimHsiHdgIncBy1	Same as above but in 1° increment (BMS 4.0)	
SimHsiHeadingDec	Refers to the HSI HDG knob. This callback turns the knob counterclockwise in 5° increment	
SimHsiHdgDecBy1	Same as above but in 1° increment (BMS 4.0)	
SimAltPressInc	Refers to the pressure knob on the altimeter. This callbacks turns the knob clockwise in 1mb or 0.01 in of Hg depending on the option (mb or inHg) in the BMSconfig (New BMS4.0)	
SimAltPressDec	Refers to the pressure knob on the altimeter. This callbacks turns the knob counterclockwise in 1mb or 0.01 in of Hg depending on the option (mb or inHg) in the BMSconfig (New BMS4.0)	
INSTR MODE Panel		
SimStepHSIMode	Full toggle for the HSI mode knob. Toggles to all positions and back to initial	Full Toggle
SimHSIIlsTcn	This command refers to the HSI modes knob on the INSTR panel. It places the knob in the ILS/TCN position directly.	All states for pitbuilders
SimHSITcn	This command refers to the HSI modes knob on the INSTR panel. It places the knob in the TCN position directly.	All states for pitbuilders

SimHSINav	This command refers to the HSI modes knob on the INSTR panel. It places the knob in the NAV position directly.	All states for pitbuilders
SimHSIIlsNav	This command refers to the HSI modes knob on the INSTR panel. It places the knob in the ILS/NAV position directly.	All states for pitbuilders
SimHSIModeInc	callback to turn HSI mode knob clockwise and stop at the last position	Toggle
SimHSIModeDec	callback to turn HSI mode knob Counterclockwise and stop at the last position	Toggle
FUEL QTY Panel		
SimExtFuelTrans	Refers to the fuel transfer mode control switch on the FUEL QTY SEL panel. This command toggles placement of the switch.	Toggle
SimFuelTransNorm	Refers to the fuel transfer mode control switch on the FUEL QTY SEL panel. This command places the switch in the NORM position. In this position the fuel system will empty a centerline external tank before external wing tanks if both tank types are present and have fuel in them.	All states for pitbuilders
SimFuelTransWing	Refers to the fuel transfer mode control switch on the FUEL QTY SEL panel. This command places the switch in the NORM position. In this position the fuel system will empty a centerline external tank after external wing tanks if both tank types are present and have fuel in them.	All states for pitbuilders
SimIncFuelSwitch	turns the FUEL QTY SEL knob 1 step clockwise (SP3)	Toggle
SimDecFuelSwitch	turns the FUEL QTY SEL knob 1 step counterclockwise (SP3)	Toggle
SimFuelSwitchTest	Refers to the fuel totalizer control knob on the FUEL QTY SEL panel. This command places the knob in the TEST position. In this position the totalizer digits will read "6000" and the two pointers will both read "2000" on the analog card.	All states for pitbuilders
SimFuelSwitchNorm	Refers to the fuel totalizer control knob on the FUEL QTY SEL panel. This command places the knob in the NORM position. In this position the totalizer digits will display the total internal fuel available. The two pointers will show the values for the F/R and A/L fuel systems on the analog card.	All states for pitbuilders
SimFuelSwitchResv	Refers to the fuel totalizer control knob on the FUEL QTY SEL panel. This command places the knob in the RESV position. In this position the totalizer digits will display the total fuel in the forward and aft reservoirs and the two pointers will both show the amount of fuel in each of these reservoirs on the analog card.	All states for pitbuilders
SimFuelSwitchWingInt	Refers to the fuel totalizer control knob on the FUEL QTY SEL panel. This command places the knob in the INT WING position. In this position the totalizer digits will show the total fuel in the left and right internal wing tanks and the two pointers will show the quantity of fuel in the left and right tanks separately on the analog card.	All states for pitbuilders

SimFuelSwitchWingExt	Refers to the fuel totalizer control knob on the FUEL QTY SEL panel. This command places the knob in the EXT WING position. In this position the totalizer digits will show the total fuel in the left and right external wing tanks and the two pointers will show the quantity of fuel in the left and right tanks separately on the analog card.	All states for pitbuilders
SimFuelSwitchCenterExt	Refers to the fuel totalizer control knob on the FUEL QTY SEL panel. This command places the knob in the TEST position. In this position the totalizer digits will show the quantity of fuel in the centerline external fuel tank.	All states for pitbuilders
RIGHT MFD		
SimCBEOSB_1R	OSB pushbuttons, right MFDs 1 to 20	
SimCBEOSB_2R		
SimCBEOSB_3R		
SimCBEOSB_4R		
SimCBEOSB_5R		
SimCBEOSB_6R		
SimCBEOSB_7R		
SimCBEOSB_8R		
SimCBEOSB_9R		
SimCBEOSB_10R		
SimCBEOSB_11R		
SimCBEOSB_12R		
SimCBEOSB_13R		
SimCBEOSB_14R		
SimCBEOSB_15R		
SimCBEOSB_16R		
SimCBEOSB_17R		
SimCBEOSB_18R		
SimCBEOSB_19R		
SimCBEOSB_20R		
SimCBEOSB_BRTUP_R	Adjust RIGHT MFD brightness UP	Renamed since BMS 2.0
SimCBEOSB_BRTDOWN_R	Adjust RIGHT MFD brightness DOWN	Renamed since BMS 2.0
SENSOR Panel		
SimLeftHptPower	Toggle Left hard point power ON/OFF (SP3)	Toggle
SimLeftHptOn	Refers to the LEFT HDPT switch on the SNSR PWR panel. This command places the switch in the up or ON position and enables the power to the left hand fuselage hard point.	All states for pitbuilders
SimLeftHptOff	Refers to the LEFT HDPT switch on the SNSR PWR panel. This command places the switch in the down or OFF position and disables the power to the left hand fuselage hard point. .	All states for pitbuilders
SimRightHptPower	Toggle Right hard point power ON/OFF (SP3)	Toggle
SimRightHptOn	Refers to the RIGHT HDPT switch on the SNSR PWR panel. This command places the switch in the up or ON position and enables the power to the right hand fuselage hard point. In particular, the laser designator will not function if the control is not in the ON position.	All states for pitbuilders

SimRightHptOff	Refers to the RIGHT HDPT switch on the SNSR PWR panel. This command places the switch in the down or OFF position and enables the power to the right hand fuselage hard point. In particular, the laser designator will not function if the control is not in the ON position.	All states for pitbuilders
SimFCRPower	Toggle FCR switch ON/OFF (SP3)	Toggle
SimFCROn	Refers to the FCR switch on the SNSR PWR panel. This command places the switch in the up or ON position and enables power for the fire control radar which is required for it to operate.	All states for pitbuilders
SimFCROff	Refers to the FCR switch on the SNSR PWR panel. This command places the switch in the down or OFF position and disables power for the fire control radar which prevents it from operating.	All states for pitbuilders
SimRALTSTDBY	Moves the RALT switch to STBY (SP3)	All states for pitbuilders
SimRALTON	Moves the RALT switch to ON (SP3)	All states for pitbuilders
SimRALTOFF	Moves the RALT switch to OFF (SP3)	All states for pitbuilders
SimRALTUp	Toggle UP the RALT switch	Toggle Up
SimRALTDown	Toggle DOWN the RALT switch	Toggle Down
HUD Panel		
SimHUDVelocityCAS	Refers to the velocity display control on the HUD panel. This command places the control in the CAS (up) position. The speed shown in the HUD display will be calibrated airspeed.	All states for pitbuilders
SimHUDVelocityTAS	Refers to the velocity display control on the HUD panel. This command places the control in the TAS (middle) position. The speed shown in the HUD display will be true airspeed.	All states for pitbuilders
SimHUDVelocityGND	Refers to the velocity display control on the HUD panel. This command places the control in the GND SPD (down) position. The speed shown in the HUD display will be ground speed.	All states for pitbuilders
SimHUDVelocity	Toggle The HUD velocity back and forth to all position and back	Full toggle
SimHUDVelocityUp	Toggle HUD velocity switch UP and once there doesn't toggle back to down	Toggle Up
SimHUDVelocityDown	Toggle HUD velocity switch Down and once there doesn't toggle back to Up	Toggle Down
SimHUDAltRadar	Refers to the altimeter display control on the HUD panel. This command places the control in the RADAR (up) position. The altitude shown in the HUD display will be fed from the radar altimeter.	All states for pitbuilders
SimHUDAltBaro	Refers to the altimeter display control on the HUD panel. This command places the control in the BARO (middle) position. The altitude shown in the HUD display will be fed from the barometric altimeter.	All states for pitbuilders

SimHUDAltAuto	Refers to the altimeter display control on the HUD panel. This command places the control in the AUTO (down) position. The altitude shown in the HUD display will be fed from the radar altimeter or the barometric altimeter. If either jet altitude is at/below 1500' AGL and the jet is ascending or if the altitude is at/below 1200' AGL and the jet is descending, then altitude AGL is displayed, otherwise barometric altitude is used.	All states for pitbuilders
SimHUDRadar	Full toggle of the HUD RADAR Altitude switch. It toggles back and forth to all position continuously	Full Toggle
SimHUDAltUp	Toggle HUD Radar ALT switch UP	Toggle Up
SimHUDAltDown	Toggle HUD Radar ALT switch Down	Toggle Down
SimHUDBrtDay	Refers to the brightness control on the HUD panel. This command places the switch in the DAY (up) position. HUD display is in the brightest configuration. In effect this uses the largest multiplier with the SYM wheel position to calculate the brightness.	All states for pitbuilders
SimHUDBrtAuto	Refers to the brightness control on the HUD panel. This command places the switch in the AUTO (middle) position. HUD display is in the brightest configuration. In effect this uses a medium multiplier with the SYM wheel position to calculate the brightness.	All states for pitbuilders
SimHUDBrtNight	Refers to the brightness control on the HUD panel. This command places the switch in the NIGHT (up) position. HUD display is in the brightest configuration. In effect this uses the smallest multiplier with the SYM wheel position to calculate the brightness.	All states for pitbuilders
SimHUDBrightness	Full toggle (back and forth) for HUD brightness (BMS 2.0)	Full toggle
SimHUDBrightnessUp	Toggle HUD brightness Up (BMS 2.0)	Toggle Up
SimHUDBrightnessDown	Toggle HUD brightness down (BMS 2.0)	Toggle Down
SimReticleSwitch	Full toggle (back and forth) for the reticle switch	Full toggle
SimReticleSwitchUp	Moves the DEPR RET switch UP	Toggle Up
SimReticleSwitchDown	Moves the DEPR RET switch DOWN	Toggle down
SimReticlePri	Refers to the depressible reticle control on the HUD panel. This command places the switch in the PRI (middle) position. The primary depressible reticle used for manual bomb delivery is displayed in the HUD.	All states for pitbuilders
SimReticleStby	Refers to the depressible reticle control on the HUD panel. This command places the switch in the STBY (up) position. The standby depressible reticle used for manual bomb delivery is displayed in the HUD.	All states for pitbuilders
SimReticleOff	Refers to the depressible reticle control on the HUD panel. This command places the switch in the OFF (bottom) position. The primary and standby depressible reticles used for manual bomb delivery are not displayed in the HUD.	All states for pitbuilders
OTWTogglePitchLadder		Outdated - don't use
SimHUDFPM	Full toggle for the Pitch ladder switch. Toggle all three positions and back to initial.	Full toggle

SimPitchLadderOff	Refers to the FPM switch on the HUD control panel, right side console. This command places the switch in the "off" position. In this position the HUD is decluttered by removal of the flight path marker and the pitch ladder.	All states for pitbuilders
SimPitchLadderFPM	Refers to the FPM switch on the HUD control panel, right side console. This command places the switch in the "FPM" position. In this position the HUD is decluttered by removal of the pitch ladder.	All states for pitbuilders
SimPitchLadderATTFPM	Refers to the FPM switch on the HUD control panel, right side console. This command places the switch in the "ATT/FPM" position. In this position the HUD displays both the flight path marker and the pitch ladder.	All states for pitbuilders
SimPitchLadderUp	Toggle Up the pitch ladder switch and once there doesn't toggle back	Toggle Up
SimPitchLadderDown	Toggle Down the pitch ladder switch and once there doesn't toggle back	Toggle Down
SimScalesVVVAH	Moves the scale switch to VV/VAH	All states for pitbuilders
SimScalesVAH	Moves the scale switch to VAH	All states for pitbuilders
SimScalesOff	Moves the scale switch to Off	All states for pitbuilders
SimHUDScales	Full toggle back and forth for the HUD scale switch	Full toggle
SimHUDScalesDown	Moves the scale switch (VV/VAH) down (BMS4.0)	Toggle Down
SimHUDScalesUp	Moves the scale switch (VV/VAH) up (BMS4.0)	Toggle Up
SimHUDDEDDED	Moves the DED/PFL switch to DED: the DED is displayed in the bottom of the HUD	All states for pitbuilders
SimHUDDEDPFL	Moves the DED/PFL switch to PFL: the PFL is displayed in the bottom of the HUD	All states for pitbuilders
SimHUDDEDOff	Moves the DED/PFL switch to OFF: None of the DED or PFL is displayed in the bottom of the HUD	All states for pitbuilders
SimHUDDED	Full toggle back and forth for the DED/PFL switch	Full toggle
SimHUDDEDDown	Moves the DED/PFL switch down and doesn't toggle back (BMS4.0)	Toggle down
SimHUDDEDUp	Moves the ded/pfl switch up and doesn't toggle back (BMS4.0)	Toggle up
rem: TEST STEP ON OFF not implemented		
VMS PANEL		
SimInhibitVMS	Toggle the VMS switch ON/OFF (SP3)	Toggle
SimVMSOn	Refers to the VOICE MESSAGE SWITCH on the ZEROISE PANEL (right console). This command places the switch in the up or ON position enabling the VMS to play audio cue messages (aka "Bitchin' Betty").	All states for pitbuilders
SimVMSOFF	Refers to the VOICE MESSAGE SWITCH on the ZEROISE PANEL (right console). This command places the switch in the down or INHIBIT position preventing the VMS from playing audio cue messages (aka "Bitchin' Betty").	All states for pitbuilders
ZEROIZE PANEL		
rem: ZEROIZE not implemented		
NUCLEAR PANEL		
rem: Nuclear panel not implemented		
INT LIGHT PANEL		
SimInteriorLight	Toggle back and forth for Interior light knob (SP3)	Full toggle

SimInteriorLightCW	Turns the INT LIGHT knob clockwise. IE turning Interior light ON	Toggle CW
SimInteriorLightCCW	Turns the INT LIGHT knob counterclockwise. IE turning the Interior light OFF	Toggle CCW
SimInstrumentLight	Toggle back and forth for Instrument light knob (SP3)	Full toggle
SimInstrumentLightCW	Turns the INSTRUMENT Light knob clockwise. IE turning Instrument backlight ON	Toggle CW
SimInstrumentLightCCW	Turns the INSTRUMENT Light knob counterclockwise. IE turning the Instrument backlight OFF	Toggle CCW
SimSpotLight	Toggle Spot lights ON/OFF	Toggle
AIR SOURCE PANEL		
SimIncAirSource	Turns the AirSource knob CW	Toggle
SimDecAirSource	Turns the AirSource knob CCW	Toggle
SimAirSourceOff	Refers to the air source selection control knob on the AIR COND panel. This command places the knob in the OFF position. Engine bleed air valves close. Cabin pressurization is disabled and the CABIN PRESS caution will illuminate if cockpit pressure altitude exceeds 27,000 feet (NB: in previous versions of Falcon4, the caution was lit at 10,000 feet; changed to 27,000 per the dash one for this version). Also, external fuel tanks are not pressurized which prevents fuel transferring from these tanks.	All states for pitbuilders
SimAirSourceNorm	Refers to the air source selection control knob on the AIR COND panel. This command places the knob in the NORM position. The environmental control system functions normally including maintaining cockpit pressurization at 8,000 feet MSL and pressurizing external fuel tanks to ensure proper fuel transfer.	All states for pitbuilders
SimAirSourceDump	Refers to the air source selection control knob on the AIR COND panel. This command places the knob in the DUMP position. Cabin pressurization is terminated and the cabin is vented to outside air pressure. This means cockpit pressure altitude will increase above 8,000 feet MSL. The CABIN PRESS caution will illuminate if cockpit pressure altitude exceeds 27,000 feet (NB: in previous versions of Falcon4, the caution was lit at 10,000 feet; changed to 27,000 per the dash one for this version). All other ECS functions such as external fuel tank pressurization are unaffected. T	All states for pitbuilders

SimAirSourceRam	Refers to the air source selection control knob on the AIR COND panel. This command places the knob in the RAM position. Engine bleed air valves close. Cabin pressurization is terminated and the cabin is vented to outside air pressure. This means cockpit pressure altitude will increase above 8,000 feet MSL. The CABIN PRESS caution will illuminate if cockpit pressure altitude exceeds 27,000 feet (NB: in previous versions of Falcon4, the caution was lit at 10,000 feet; changed to 27,000 per the dash one for this version). RAM air valves are opened to ventilate the cockpit and avionics. All other ECS functions such as external fuel tank pressurization are disabled.	All states for pitbuilders
rem: AIR COND knob not implemented		
KY58 PANEL		
rem: KY58 panel not implemented		
ANTI ICE PANEL		
rem: ANTI ICE panel not implemented		
AVIONIC POWER PANEL		
SimINSInc	Turns the INS knob CW (SP2)	Toggle
SimINSDec	Turns the INS knob CCW (SP2)	Toggle
SimINSOff	Refers to the INS mode knob on the AVIONIC POWER panel. This command places the knob in the OFF position. The INS function is terminated.	All states for pitbuilders
SimINSNorm	Refers to the INS mode knob on the AVIONIC POWER panel. This command places the knob in the NORM position. The INS system performs a normal alignment. The INS is usable after 90 seconds but maximum reliability is only achieved after eight minutes of alignment.	All states for pitbuilders
SimINSNav	Refers to the INS mode knob on the AVIONIC POWER panel. This command places the knob in the NORM position. The INS provides location information to the navigation system.	All states for pitbuilders
SimINSInFlt	Refers to the INS mode knob on the AVIONIC POWER panel. This command places the knob in the IN FLT ALIGN position. The INS is realigned based on the GPS sensor as the source of position information.	All states for pitbuilders
SimSMSPower	Toggle the SMS power switch ON/OFF (SP3)	Toggle
SimSMSOn	Refers to the SMS power switch in the AVIONICS POWER panel. This command places the switch in the up or ON position and enables power to the stores management system.	All states for pitbuilders
SimSMSOff	Refers to the SMS power switch in the AVIONICS POWER panel. This command places the switch in the down or OFF position and disables power to the stores management system.	All states for pitbuilders
SimFCCPower	Toggle the FCC power switch ON/OFF (SP3)	Toggle
SimFCCOn	Refers to the FCC power switch in the AVIONICS POWER panel. This command places the switch in the up or ON position and enables power to the fire control computer.	All states for pitbuilders

SimFCCOff	Refers to the FCC power switch in the AVIONICS POWER panel. This command places the switch in the down or OFF position and disables power to the fire control computer.	All states for pitbuilders
SimMFDPower	Toggle the MFD power switch ON/OFF (SP3)	Toggle
SimMFDOn	Refers to the MFD power switch in the AVIONICS POWER panel. This command places the switch in the up or ON position and enables power to the multifunction displays.	All states for pitbuilders
SimMFDOff	Refers to the MFD power switch in the AVIONICS POWER panel. This command places the switch in the down or OFF position and disables power to the multifunction displays.	All states for pitbuilders
SimUFCPower	Toggle the UFC power switch ON/OFF (SP3)	Toggle
SimUFCOn	Refers to the UFC power switch in the AVIONICS POWER panel. This command places the switch in the up or ON position and enables power to the up front controls (including ICP).	All states for pitbuilders
SimUFCOff	Refers to the UFC power switch in the AVIONICS POWER panel. This command places the switch in the down or OFF position and disables power to the up front controls (including ICP).	All states for pitbuilders
SimGPSPower	Toggle the GPS power switch ON/OFF (SP3)	Toggle
SimGPSOn	Refers to the GPS power switch in the AVIONICS POWER panel. This command places the switch in the up or ON position and enables power to the GPS receiver.	All states for pitbuilders
SimGPSOff	Refers to the GPS power switch in the AVIONICS POWER panel. This command places the switch in the down or OFF position and disables power to the GPS receiver.	All states for pitbuilders
SimDLPower	Toggle the Data link power switch ON/OFF (SP3)	Toggle
SimDLOn	Refers to the DL power switch in the AVIONICS POWER panel. This command places the switch in the up or ON position and enables power to the data link receiver.	All states for pitbuilders
SimDLOff	Refers to the DL power switch in the AVIONICS POWER panel. This command places the switch in the down or OFF position and disables power to the data link receiver.	All states for pitbuilders
SimMAPPower	Toggle the MAP power switch ON/OFF (SP3). Please note this function is not implemented in the current F16 block in BMS	Toggle
SimMAPOn	Refers to the MAP power switch in the AVIONICS POWER panel. This command places the switch in the up or ON position. The MAP function is inoperative in the block 50/52 F-16 jets.	All states for pitbuilders
SimMAPOff	Refers to the MAP power switch in the AVIONICS POWER panel. This command places the switch in the down or OFF position. The MAP function is inoperative in the block 50/52 F-16 jets.	All states for pitbuilders
OXYGEN PANEL		
SimOxySupplyToggle	Toggle breathing sounds ON/OFF. This is a workaround to replace an old config line in BMS config. Breathing sounds can now be activated within the cockpit.	toggle for the next two

SimOxySupplyOn	Set breathing sound ON	All states for pitbuilders
SimOxySupplyOff	Set breathing sound OFF	All states for pitbuilders
FLIGHT STICK		
SimTMSUp	Refers to the TMS UP position of the flight stick - H2up on the Cougar (SP3)	Cougar H2U
SimTMSLeft	Refers to the TMS Left position of the flight stick - H2left on the Cougar (SP3)	Cougar H2L
SimTMSDown	Refers to the TMS Down position of the flight stick - H2down on the Cougar (SP3)	Cougar H2D
SimTMSRight	Refers to the TMS Right position of the flight stick - H2right on the Cougar (SP3)	Cougar H2R
SimDropProgrammed	Should be used to map to the CMS hat switch on the control switch. Probably matches the "up" (TM syntax: H4U) position. This command runs the selected countermeasures program.(SP3)	Cougar H4U
SimECMStandby	Refers to the right throw of the HOTAS CMS switch. This command places the ECM transmitter in standby mode so that it makes no emissions.	Cougar H4R
SimECMConsent	Refers to the down throw of the HOTAS CMS switch (i.e. towards the pilot). This command enables the ECM transmitter to begin transmitting.	Cougar H4D
SimCMSLeft	Refers to the left throw of the HOTAS CMS switch. This commands release program 6	Cougar H4L
SimCMSUp	shortcut to SimDropProgrammed - this is meant to simplify the naming but the original one was not removed and still works.	Cougar H4U
SimCMSLeft	shortcut to SimCmsLeft - this is meant to simplify the naming but the original one was not removed and still works.	Cougar H4L
SimCMSDown	shortcut to SimECMConsent - this is meant to simplify the naming but the original one was not removed and still works.	Cougar H4D
SimCMSRight	shortcut to SimECMStandby - this is meant to simplify the naming but the original one was not removed and still works.	Cougar H4R
SimPinkySwitch	Refers to the pinky switch on the flight Stick (S3) - to be used with keystrokes, not with DX shifting	Cougar S3
SimHotasPinkyShift	For DirectX shifting use. Only if you use DX shifting, it will replace SimPinkySwitch. Without shifting, SimPinkySwitch is still valid. Suggest taking a look at the corresponding article on the BMS page.	For Cougar shifting with DX
SimDMSUp	Refers to the DMS UP position of the flight stick - H3up on the Cougar (SP2)	Cougar H3U
SimDMSLeft	Refers to the DMS Left position of the flight stick - H3left on the Cougar (SP2)	Cougar H3L
SimDMSDown	Refers to the DMS Down position of the flight stick - H3down on the Cougar (SP2)	Cougar H3D
SimDMSRight	Refers to the DMS Right position of the flight stick - H3right on the Cougar (SP2)	Cougar H3R
SimAPOverride	Refers HOTAS control stick paddle switch (S4) that commands the AP override	Cougar S4
SimTriggerFirstDetent	Refers to the first stage of the trigger switch on the flight stick (SP2)	Cougar TG1

SimTriggerSecondDetent	Refers to the second stage of the trigger switch on the flight stick (SP2)	Cougar TG2
SimTrigger	Outdated, replaced by first and second trigger	**Outdated - don't use**
SimMissileStep	Refers to the MSL step button on the flight stick (S1)	Cougar S1
SimDesignate	Outdated, replaced by TMS up	**Outdated - don't use**
SimDropTrack	Outdated, replaced by TMS down	**Outdated - don't use**
SimPickle	Refers to the Pickle button on the flight stick (S2)	Cougar S2
SimDropChaff	In Realistic Avionics mode, this command runs the selected countermeasures program. old & outdated, replaced by SIMDROPPROGRAMMED	**Outdated - don't use**
SimDropFlare	In Realistic Avionics mode, this command runs the selected countermeasures program. old & outdated, replaced by SIMDROPPROGRAMMED	**Outdated - don't use**
AFRudderTrimLeft	Added in eRazor executables. NB: this command does nothing when the Trim AP Disc switch is in the DISC position. Technically, this control doesn't exist in the jet (see instead the SimTrimYawLeft which should be mapped to the manual trim panel).	**Outdated - don't use**
AFRudderTrimRight	Added in eRazor executables. NB: this command does nothing when the Trim AP Disc switch is in the DISC position. Technically, this control doesn't exist in the jet (see instead the SimTrimYawRight which should be mapped to the manual trim panel).	**Outdated - don't use**
AFAileronTrimLeft	This command is for mapping to the HOTAS trim hat left throw position. NB: this command does nothing when the Trim AP Disc switch is in the DISC position.	Cougar H1L
AFAileronTrimRight	This command is for mapping to the HOTAS trim hat right throw position. NB: this command does nothing when the Trim AP Disc switch is in the DISC position.	Cougar H1R
AFElevatorTrimUp	This command is for mapping to the HOTAS trim hat down throw position. NB: this command does nothing when the Trim AP Disc switch is in the DISC position.	Cougar H1D
AFElevatorTrimDown	This command is for mapping to the HOTAS trim hat up throw position. NB: this command does nothing when the Trim AP Disc switch is in the DISC position.	Cougar H1U
AFResetTrim	NB: there appears to be no real control for this in the actual jet; trim AP Disc zeros out any input commanded from the HOTAS trim hat. Added probably for simulation purposes to reset all trims easily.	for simulation purposes (no default Cougar mapping)
FLIGHT CONTROLS KEY CALLBACKS		
AFElevatorUp	used only when no stick axes declared (elevator key control)	
AFElevatorDown	used only when no stick axes declared (elevator key control)	
AFAileronLeft	used only when no stick axes declared aileron key control)	
AFAileronRight	used only when no stick axes declared (aileron key control)	

AFThrottleUp	used only when no stick axes declared (throttle key control)
AFThrottleDown	used only when no stick axes declared (throttle key control)
AFRudderRight	used only when no stick axes declared (rudder key control)
AFRudderLeft	used only when no stick axes declared (rudder key control)
AFCoarseThrottleUp	used only when no stick axes declared (throttle key control)
AFCoarseThrottleDown	used only when no stick axes declared (throttle key control)
AFABOn	used only when no stick axes declared (Enter AB zone)
AFIdle	used only when no stick axes declared (go Idle)
AFABFull	used only when no stick axes declared (go full AB)
SimWheelBrakes	used only when no stick axes declared for toe brakes. No differential brakes, both wheel brakes are applied
RADIO COMMS	
OTWRadioMenuStep	
RadioMessageSend	
OTWRadioMenuStepBack	
OTWRadioMenuClear	
SimToggleRadioVolume	
RadioTankerCommand	Displays the Tanker radio page
RadioTowerCommand	Displays the Tower radio page
RadioAWACSCommand	Displays the Awacs radio page
RadioWingCommand	Displays the Wingman radio page
RadioElementCommand	Displays the Element radio page
RadioFlightCommand	Displays the Flight radio page
RadioMenuOne	
RadioMenuTwo	
RadioMenuThree	
RadioMenuFour	
RadioMenuFive	
RadioMenuSix	
RadioMenuSeven	
RadioMenuHeight	
RadioMenuNine	
WingmanClearSix	Instruct wingman to clear your six
ElementClearSix	Instruct element to clear your six
FlightClearSix	Instruct your whole flight to clear your six
WingmanCheckSix	Instruct wingman to clear his six
ElementCheckSix	Instruct element to clear their six
FlightCheckSix	Instruct the whole flight to clear his six
WingmanBreakLeft	Instruct wingman to break left
ElementBreakLeft	Instruct element to break left
FlightBreakLeft	Instruct flight to break left
WingmanBreakRight	Instruct wingman to break right

ElementBreakRight	Instruct element to break right
FlightBreakRight	Instruct flight to break right
WingmanPince	Instruct wingman to execute a pince maneuver
ElementPince	Instruct element to execute a pince maneuver
FlightPince	Instruct flight to execute a pince maneuver
WingmanPosthole	Instruct wingman to execute a posthole maneuver
ElementPosthole	Instruct element to execute a posthole maneuver
FlightPosthole	Instruct flight to execute a posthole maneuver
WingmanChainsaw	Instruct wingman to execute a Chainsaw maneuver
ElementChainsaw	Instruct element to execute a Chainsaw maneuver
FlightChainsaw	Instruct flight to execute a Chainsaw maneuver
WingmanFlex	Instruct wingman to execute a flex maneuver
ElementFlex	Instruct element to execute a flex maneuver
FlightFlex	Instruct flight to execute a flex maneuver
WingmanGoShooterMode	Instruct wingman to go shooter
ElementGoShooterMode	Instruct element to go shooter
FlightGoShooterMode	Instruct flight to go shooter
WingmanGoCoverMode	Instruct wingman to go cover
ElementGoCoverMode	Instruct element to go cover
FlightGoCoverMode	Instruct flight to go cover
WingmanSearchGround	Instruct wingman to search in AG mode
ElementSearchGround	Instruct element to search in AG mode
FlightSearchGround	Instruct flight to search in AG mode
WingmanSearchAir	Instruct wingman to search in AA mode
ElementSearchAir	Instruct element to search in AA mode
FlightSearchAir	Instruct flight to search in AA mode
WingmanResumeNormal	instruct Wingman to resume normal navigation
ElementResumeNormal	instruct Element to resume normal navigation
FlightResumeNormal	instruct Flight to resume normal navigation
WingmanRejoin	Instruct wingman to rejoin formation
ElementRejoin	Instruct element to rejoin formation
FlightRejoin	Instruct flight to rejoin formation
WingmanDesignateTarget	Instruct wingman to designate target
ElementDesignateTarget	Instruct element to designate target
FlightDesignateTarget	Instruct flight to designate target
WingmanDesignateGroup	Instruct wingman to designate group
ElementDesignateGroup	Instruct element to designate group
FlightDesignateGroup	Instruct flight to designate group
WingmanWeaponsHold	Instruct wingman to hold
ElementWeaponsHold	Instruct element to hold
FlightWeaponsHold	Instruct flight to hold
WingmanWeaponsFree	Instruct wingman to go weapon free
ElementWeaponsFree	Instruct element to go weapon free
FlightWeaponsFree	Instruct flight to go weapon free
WingmanWedge	Instruct wingman to go wedge formation
ElementWedge	Instruct element to go wedge formation
FlightWedge	Instruct flight to go wedge formation
WingmanTrail	Instruct wingman to go trail formation
ElementTrail	Instruct element to go trail formation

FlightTrail	Instruct flight to go trail formation
WingmanResCell	Instruct wingman to go res cell formation
ElementResCell	Instruct element to go res cell formation
FlightResCell	Instruct flight to go res cell formation
WingmanBox	Instruct wingman to go box formation
ElementBox	Instruct element to go box formation
FlightBox	Instruct flight to go box formation
WingmanArrow	Instruct wingman to go arrow formation
ElementArrow	Instruct element to go arrow formation
FlightArrow	Instruct flight to go arrow formation
WingmanKickout	Instruct wingman to kick out
ElementKickout	Instruct element to kick out
FlightKickout	Instruct flight to kick out
WingmanCloseup	Instruct wingman to closeup formation
ElementCloseup	Instruct element to closeup formation
FlightCloseup	Instruct flight to closeup formation
WingmanToggleSide	Instruct wingman to switch side
ElementToggleSide	Instruct element to switch side
FlightToggleSide	Instruct flight to switch side
WingmanIncreaseRelAlt	Instruct wingman to increase release altitude
ElementIncreaseRelAlt	Instruct element to increase release altitude
FlightIncreaseRelAlt	Instruct flight to increase release altitude
WingmanDecreaseRelAlt	Instruct wingman to decrease release altitude
ElementDecreaseRelAlt	Instruct element to decrease release altitude
FlightDecreaseRelAlt	Instruct flight to decrease release altitude
WingmanGiveBra	Instruct wingman to give bearing and range to target
ElementGiveBra	Instruct element to give bearing and range to target
FlightGiveBra	Instruct flight to give bearing and range to target
WingmanGiveStatus	Instruct wingman to report current status
ElementGiveStatus	Instruct element to report current status
FlightGiveStatus	Instruct flight to report current status
WingmanGiveDamageReport	Instruct wingman to report damage
ElementGiveDamageReport	Instruct element to report damage
FlightGiveDamageReport	Instruct flight to report damage
WingmanGiveFuelState	Instruct wingman to give current fuel state
ElementGiveFuelState	Instruct element to give current fuel state
FlightGiveFuelState	Instruct flight to give current fuel state
WingmanGiveWeaponsCheck	Instruct wingman to give current weapon state
ElementGiveWeaponsCheck	Instruct element to give current weapon state
FlightGiveWeaponsCheck	Instruct flight to give current weapon state
WingmanRTB	Instruct wingman to return to base
ElementRTB	Instruct element to return to base
FlightRTB	Instruct flight to return to base
ATCRequestClearance	Request clearance to ATC
ATCRequestEmergencyClearance	Request emergency landing to ATC
ATCRequestTakeoff	Request takeoff to ATC
ATCRequestTaxi	request taxi to ATC

ATCTaxiing	report taxiing to ATC
ATCReadyToGo	Report ready to ATC
ATCRotate	Report rotate to ATC
ATCGearUp	Report Gear up to ATC
ATCGearDown	Report Gear down to ATC
ATCBrake	report brake to ATC
ATCAbortApproach	Signal abort approach to ATC
FACCheckIn	Check in with Forward Air Controller
FACWilco	Confirm complying with FAC instructions
FACUnable	Report Unable to carry out FAC instructions
FACReady	Report Ready to FAC
FACIn	Report In to FAC
FACOut	Report Out to FAC
FACRequestMark	Request FAC to mark the target
FACRequestTarget	Request target to FAC
FACRequestBDA	Request Bomb damage assessment from FAC
FACRequestLocation	Request location from FAC
FACRequestTACAN	Request Tacan from FAC
TankerRequestFuel	Request Fuel to Tanker
TankerReadyForGas	Report ready to take fuel to Tanker
TankerDoneRefueling	report refueling complete to tanker (important to ensure that the code clears the next on in)
TankerBreakaway	Initiate breakaway maneuver to tanker
AWACSRequestPicture	Request Picture to Awacs
AWACSRequestTanker	Request vectors to tanker to Awacs
AWACSWilco	Confirm complying with AWACS instructions
AWACSUnable	Report Unable to carry out AWACS instructions
AWACSRequestHelp	Request help to Awacs
AWACSRequestRelief	Request replacement to Awacs (cap, cas, fac, etc etc)
WingmanSpread	Instruct wingman to go spread formation
ElementSpread	Instruct element to go spread formation
FlightSpread	Instruct flight to go spread formation
WingmanStack	Instruct wingman to stack
ElementStack	Instruct element to stack
FlightStack	Instruct flight to stack
WingmanLadder	Instruct wingman to go ladder
ElementLadder	Instruct element to go ladder
FlightLadder	Instruct flight to go ladder
WingmanFluid	Instruct wingman to go fluid four formation
ElementFluid	Instruct element to go fluid four formation
FlightFluid	Instruct flight to go fluid four formation
AWACSRequestCarrier	Request vectors to carrier to Awacs (SP3)
WingmanDropStores	Instruct wingman to drop stores
ElementDropStores	Instruct element to drop stores
FlightDropStores	Instruct flight to drop stores
WingmanVic	Instruct wingman to go Vic formation
ElementVic	Instruct element to go Vic formation
FlightVic	Instruct flight to go Vic formation

WingmanFinger4	Instruct wingman to go finger formation
ElementFinger4	Instruct element to go finger formation
FlightFinger4	Instruct flight to go finger formation
WingmanEchelon	Instruct wingman to go echelon formation
ElementEchelon	Instruct element to go echelon formation
FlightEchelon	Instruct flight to go echelon formation
WingmanForm1	
ElementForm1	
FlightForm1	
WingmanForm2	
ElementForm2	
FlightForm2	
WingmanForm3	
ElementForm3	
FlightForm3	
WingmanForm4	
ElementForm4	
FlightForm4	
NON COCKPIT CALLBACK for TESTING, DEBUG ….	
TimeAccelerate	Accelerate time to 2x
TimeAccelerateMaxToggle	Accelerate time to Max value (normally 4x)
TimeAccelerateInc	Increase accelerate time in steps
TimeAccelerateDec	Decrease accelerate time in steps
SimCycleDebugLabels	toggle debug labels
BreakToggle	Not implemented.	**Outdated - don't use**
SimToggleDropPattern	
SaveCockpitDefaults	Save cockpit defaults (was used before having the DTC)
LoadCockpitDefaults	Load cockpit defaults (was used before having the DTC)
SimOpenChatBox	Opent MP chat box to send text message in a MP environment
SimToggleChatMode	
KneeboardTogglePage	
SimSetBubbleSize	(SP3)
OTWToggleFrameRate	Key Combo to display FPS in the top left corner of the main F4 screen
SimMotionFreeze	Freeze game (times continue to run)
SimTogglePaused	pause game
ScreenShot	Allows to take a screenshot which will be stored in the picture subfolder of your falcon root directory
PrettyScreenShot	
PrettyFilm	
SimRandomError	The callback introduces a random error right away. while the config line simply states the probability of a random error to occur (without user interaction).
SimEndFlight	Used to exit mission
OTWTimeOfDayStep	Step time of day
SoundOff	Set all sounds OFF

SimSpeedyGonzalesUp	This command artificially multiplies aircraft velocity by ¼ per invocation of the command up to a maximum of 32X.
SimSpeedyGonzalesDown	This command artificially reduces aircraft velocity that was previously inflated via the SimSpeedyGonzalesUp command. The velocity is divided by a factor of 1.25 for each invocation of the command. Repeated use of this command will reduce a previously inflated speed to the default 1.0X, i.e the original intended velocity.
SimToggleRealisticAvionics	SP3 command.
SimRegen	SP3 command.
WinAmpNextTrack	Select WinAMP next track
WinAmpPreviousTrack	Select WinAMP previous track
WinAmpStopPlayback	Stop WinAMP play
WinAmpStartPlayback	Start WinAMP play
WinAmpTogglePlayback	
WinAmpVolumeUp	Increase WinAMP volume
WinAmpVolumeDown	Decrease WinAMP volume
SimToggleInvincible	Self explanatory
ToggleClickablePitMode	
OTWToggleNames	
OTWToggleCampNames	
OTWToggleGLOC	Self explanatory
OTWToggleBilinearFilter	Self explanatory
OTWToggleShading	Self explanatory
OTWToggleHaze	Self explanatory
OTWToggleLocationDisplay	Self explanatory
OTWToggleScales	
OTWShowTestVersion	
OTWShowVersion	
OTWToggleRoof	
OTWScaleDown	
OTWScaleUp	
OTWSetObjDetail	
OTWObjDetailDown	Decrease object details settings (normally set in UI)
OTWObjDetailUp	Increase object details settings (normally set in UI)
OTWTextureIncrease	Increase texture settings (normally set in UI)
OTWTextureDecrease	Decrease texture settings (normally set in UI)
OTWToggleClouds	Toggle Clouds ON/OFF
OTWToggleAeroDisplay	(SP2)
OTWToggleFlapDisplay	BMS command. Adds a text display to the OTW view for the position of both the TEF and LEF flicht control surfaces. Mostly useful for aircraft other than the F-16.
OTWToggleEyeFly	
OTWEnterPosition	
OTWToggleAutoScale	
OTWSetScale	
OTWStateStep	

CommandsSetKeyCombo	
KevinsFistOfGod	This command manually requests the Air Tasking Manager to give the flight a different mission (Request Divert).
SuperCruise	This command artificially boosts engine thrust by a factor of 1.5X. The command is a toggle so a second invocation returns the aircraft to its properly calculated velocity.
OTWToggleAlpha	
OTWToggleEngineDisplay	Display engine data
OTWToggleWindDisplay	Displays Winds
SimDoNothing	
RecenterTrackIR	
SelectNonSticky3dPitSnapViews	
SelectSticky3dPitSnapViews	
ToggleSticky3dPitSnapViews	
Select3DPitSnapGuidedMode	
Select3DPitGlanceMode	
Select3DPitSnapRelMode	
Select3DPitSnapAbsMode	
Select3DPitPanMode	
Cycle3DPitPanMode	
ToggleInfoBar	Self explanatory
ToggleSubTitles	Self explanatory
Profiler_HistoryFwdFast	
Profiler_HistoryBackFast	
Profiler_HistoryFwd	
Profiler_HistoryBack	
ToggleProfiler	
ToggleProfilerDisplay	
Profiler_Self	
Profiler_Hier	
Profiler_Select	
Profiler_Parent	
Profiler_CursorUp	
Profiler_CursorDown	
OTWBalanceIVCvsAIUp	Offset modifier up to be able to balance IVC volumes against AI volumes
OTWBalanceIVCvsAIDown	Offset modifier down to be able to balance IVC volumes against AI volumes
OTWToggleOnlinePlayersDisplay	This will show a list of players which are online in your session (top left overlay)
OTWToggle3DEmptyShell	Toggle only - display 3d pit or empty shell for pitbuilders
CampaignQuickSave	Save campaign for Host in 3D. It is only available on a campaign *host* (SP or MP) and basically saves the campaign to an automatically generated filename. Prevents restarting from scratch when the 3D hosts crashes.
NON PANEL CALLBACK but COCKPIT RELEVANT	

ToggleNVGMode	Toggles NVG ON/OFF (no panel for that) it is normally done on the googles
ToggleSmoke	Toggles visual Smoke ON/OFF
BombRippleIncrement	Increment bomb ripple - Used before having the SMS CNTL page implemented (SP3)
BombIntervalIncrement	Increment bomb interval - Used before having the SMS CNTL page implemented (SP3)
BombRippleDecrement	decrement bomb ripple - Used before having the SMS CNTL page implemented (SP3)
BombIntervalDecrement	Decrement bomb interval - Used before having the SMS CNTL page implemented (SP3)
BombPairRelease	Set bomb release to pairs - Used before having the SMS CNTL page implemented (SP3)
BombSGLRelease	Set bomb release to single - Used before having the SMS CNTL page implemented (SP3)
BombBurstIncrement	Increment CBU burst opening - Used before having the SMS CNTL page implemented (SP3)
BombBurstDecrement	Decrement CBU burst opening - Used before having the SMS CNTL page implemented (SP3)
FOVToggle	This command toggles the out-the-window (OTW) view field toggles between 60 degrees (normal) and 20 degrees (narrow).
FOVDecrease	This command increases the OTW view field by an increment that may be specified in the .cfg file.
FOVIncrease	This command decreases the OTW view field by an increment that may be specified in the .cfg file.
FOVDefault	This command returns the OTW view field to the default value set in the config file
OTWStepHudColor	Changes HUD color to overcome viewability problems
Non F-16 COCKPIT CONTROLS	
AFFullFlap	Sets Full flaps for non F16 aircraft
AFNoFlap	Sets Flaps fully retracted for non F16 aircraft
AFIncFlap	Increases flaps settings for non F-16 aircraft
AFDecFlap	Decreases flaps settings for non F-16 aircraft
AFFullLEF	Sets Full leading edge flaps for non F16 aircraft
AFNoLEF	Sets Leading edge flaps fully retracted for non F16 aircraft
AFIncLEF	Increases leading edge flaps settings for non F-16 aircraft
AFDecLEF	Decreases leading edge flaps settings for non F-16 aircraft
SimFuelDump	Although the F-16 has no fuel dump, this commands allows dumping fuel (SP3)
CycleEngine	Self explanatory
selectLeftEngine	Self explanatory
selectRightEngine	Self explanatory
selectBothEngines	Self explanatory
AFTriggerCatapult	BMS 4.0 Launch catapult for carrier operations
EXTRA MFD 1	
SimCBEOSB_1T	OSB pushbuttons, extra MFDs1 : 1 to 20
SimCBEOSB_2T	
SimCBEOSB_3T	

SimCBEOSB_4T		
SimCBEOSB_5T		
SimCBEOSB_6T		
SimCBEOSB_7T		
SimCBEOSB_8T		
SimCBEOSB_9T		
SimCBEOSB_10T		
SimCBEOSB_11T		
SimCBEOSB_12T		
SimCBEOSB_13T		
SimCBEOSB_14T		
SimCBEOSB_15T		
SimCBEOSB_16T		
SimCBEOSB_17T		
SimCBEOSB_18T		
SimCBEOSB_19T		
SimCBEOSB_20T		
SimCBEOSB_BRTUP_T	Adjust Brightness up	Renamed since BMS 2.0
SimCBEOSB_BRTDOWN_T	Adjust Brightness down	Renamed since BMS 2.0
EXTRA MFD 2		
SimCBEOSB_1F	OSB pushbuttons, extra MFDs2 : 1 to 20	
SimCBEOSB_2F		
SimCBEOSB_3F		
SimCBEOSB_4F		
SimCBEOSB_5F		
SimCBEOSB_6F		
SimCBEOSB_7F		
SimCBEOSB_8F		
SimCBEOSB_9F		
SimCBEOSB_10F		
SimCBEOSB_11F		
SimCBEOSB_12F		
SimCBEOSB_13F		
SimCBEOSB_14F		
SimCBEOSB_15F		
SimCBEOSB_16F		
SimCBEOSB_17F		
SimCBEOSB_18F		
SimCBEOSB_19F		
SimCBEOSB_20F		
SimCBEOSB_BRTUP_F	Adjust Brightness up	Renamed since BMS 2.0
SimCBEOSB_BRTDOWN_F	Adjust Brightness down	Renamed since BMS 2.0
Callbacks present but not implemented in the avionic code		
SimIFFPower	Not implemented - reserved for future use	
SimIFFIn	Not implemented - reserved for future use	
SimMaxPower	Not implemented - reserved for future use	
SimABReset	Not implemented - reserved for future use	
OLD Avionics Callback before the full MFD page Keep or no keep?		
SimRadarAAModeStep	replaced by MFD buttons	Outdated - don't use

SimRadarAGModeStep	replaced by MFD buttons	Outdated - don't use
SimRadarGainUp	Beware - There is NO corresponding MFD button name implemented right now.	
SimRadarGainDown	Beware - There is NO corresponding MFD button name implemented right now.	
SimRadarStandby	replaced by MFD buttons	
SimRadarRangeStepUp	replaced by MFD buttons	
SimRadarRangeStepDown	replaced by MFD buttons	
SimRadarNextTarget	replaced by MFD buttons	
SimRadarPrevTarget	replaced by MFD buttons	Outdated - don't use
SimRadarBarScanChange	replaced by MFD buttons	used before we had all MFD pages implemented, before the
SimRadarAzimuthScanChange	replaced by MFD buttons	TMS - DMS code etc etc
SimRadarFOVStep	replaced by MFD buttons	
SimMaverickFOVStep	replaced by MFD buttons	
SimSOIFOVStep	replaced by MFD buttons	
SimRadarFreeze	replaced by MFD buttons	
SimRadarSnowplow	replaced by MFD buttons	
SimACMBoresight	replaced by MFD buttons	
SimACMVertical	replaced by MFD buttons	
SimACMSlew	replaced by MFD buttons	
SimACM30x20	replaced by MFD buttons	
SimNextWaypoint	replaced by ICP buttons	
SimPrevWaypoint	replaced by ICP buttons	
SimToggleUHFMaster	In SP3 this command erroneously changed the source of radio channel programming from the UFC to the backup controls on the UHF panel. BMS corrects this problem and now the selection of input controls for UHF channel selection is made via the CNI switch on the AUX COMM panel as per the real system.	
SimStepSMSLeft	replaced by MFD buttons	
SimStepSMSRight	replaced by MFD buttons	
SimToggleMissileSpotScan	replaced by MFD buttons	
SimToggleMissileBoreSlave	replaced by MFD buttons	
SimToggleMissileTDBPUncage	replaced by MFD buttons	
SimHSDRangeStepUp	replaced by MFD buttons	
SimHSDRangeStepDown	replaced by MFD buttons	
SimFCCSubModeStep	replaced by MFD buttons	
SimNextAAWeapon	replaced by MFD buttons	
SimNextAGWeapon	replaced by MFD buttons	
SimNextNavMode	replaced by MFD buttons	
IncreaseAlow	replaced by ICP buttons	
DecreaseAlow	replaced by ICP buttons	
SimTISLPower	SP3 command. It is not at all clear what this command is meant to operate. SP3 docs don't say and the game code doesn't appear to use it.	
SimFLIRToggle	Added in eRazor executables.	
OTWSwapMFDS	replaced by MFD buttons	
Views		

OTWTrackExternal	View external	
ToggleDisplacementCam	Toggle displacement camera ON/OFF	
OTWTrackTargetToWeapon	View target's weapon	
OTWToggleScoreDisplay	Toggle score display ON/OFF	
OTWToggleSidebar	View SA Bar	
OTWStepNextAC	Step to next aircraft	
OTWStepPrevAC	Step to previous aircraft	
OTWStepNextPadlock	Padlock next	
OTWStepPrevPadlock	Padlock previous	
OTWStepNextPadlockAA	Padlock next aircraft (SP3)	
OTWStepPrevPadlockAA	Padlock previous aircraft (SP3).	
OTWStepNextPadlockAG	Padlock next ground vehicule (SP3)	
OTWStepPrevPadlockAG	Padlock previous ground vehicule (SP3)	
OTWSelectF3PadlockMode	Padlock	
OTWSelectF3PadlockModeAA	Padlock AA (SP3)	
OTWSelectF3PadlockModeAG	Padlock AG (Sp3)	
OTWSelectEFOVPadlockMode		
OTWSelectEFOVPadlockModeAA	SP3 command.	
OTWSelectEFOVPadlockModeAG	SP3 command.	
OTWStepMFD1	SP2 command. Synonym for DMS Left.	Outdated - don't use
OTWStepMFD2	SP2 command. Synonym for DMS Right.	Outdated - don't use
OTWStepMFD3		
OTWStepMFD4		
OTWSelectHUDMode	"1" view HUD only	
OTWSelectOrbitMode	View Orbit	
OTWSelectAirFriendlyMode	View friendly aircraft in sequence	
OTWSelectGroundFriendlyMode	View friendly ground unit in sequence	
OTWSelectAirEnemyMode	View enemy aircraft in sequence	
OTWSelectGroundEnemyMode	View enemy ground unit in sequence	
OTWSelectTargetMode	View Target	
OTWSelectWeaponMode	View Weapon	
OTWSelectSatelliteMode	View Satellite camera	
OTWSelectFlybyMode	View Flyby	
OTWSelectIncomingMode	View incoming threat	
OTWSelectTopGunView	Select Top Gun view	
OTWSelectPrevTopGunView	Select previous Topgun view	
OTWSelectNextTopGunView	Select next Topgun view	
OTWToggleActionCamera	Toggle action camera	
OTWSelect2DCockpitMode	"2" view for 2D pit - 2D pit not supported but used in Sticky snapview by the code.	
OTWSelect3DCockpitMode	"3" view 3D cockpit	
SimToggleCockpit	Cockpit Normal - Wideview	
SimToggleGhostMFDs	toggles larger MFD view ON/OFF	
OTWViewLeft	Look left	
OTWViewRight	Look right	
OTWViewUp	Look up	
OTWViewDown	Look down	
OTWViewDownLeftTiltDown	Tilt view left down	
OTWViewDownRightTiltDown	Tilt view right down	

OTWViewUpLeftTiltDown	Tilt views
OTWViewUpRightTiltDown	Tilt views
OTWViewDownTiltDown	Tilt views
OTWViewUpTiltDown	Tilt views
OTWViewRightTiltDown	Tilt views
OTWViewLeftTiltDown	Tilt views
OTWViewDownLeftTiltUp	Tilt views
OTWViewDownRightTiltUp	Tilt views
OTWViewUpLeftTiltUp	Tilt views
OTWViewUpRightTiltUp	Tilt views
OTWViewDownTiltUp	Tilt views
OTWViewUpTiltUp	Tilt views
OTWViewRightTiltUp	Tilt views
OTWViewLeftTiltUp	Tilt views
OTWViewReset	
OTWViewUpRight	
OTWViewUpLeft	
OTWViewDownRight	
OTWViewDownLeft	
OTWViewZoomIn	Used by mouse Field ov view (mouse wheel)
OTWViewZoomOut	Used by mouse Field ov view (mouse wheel)
OTWSnap900	Snap views at 0900
OTWSnap300	Snap views at 0300
OTWHud1100View	
OTWHud900View	
OTWHud800View	
OTWHud600LView	
OTWHud600RView	
OTWHud400View	
OTWHud300View	
OTWHud200View	
OTWHud1200View	
OTW1200View	
OTW1200DView	
OTW1200HUDView	
OTW1200LView	
OTW1000View	
OTW200View	
OTW900View	SP2 command. Synonym for ghost MFD view.
OTW300View	
OTW800View	
OTW400View	
OTW1200RView	
OTWPrevCustom3dPitView	
OTWNextCustom3dPitView	
OTWToggleCustom3dPitView	
OTWSelectHybridPitMode	
OTWToggleHybridPitMode	

OTWGlanceForward	Glance forward (held) - momentary especially used when padlocking and needing to glance forward. Forward view remains active as long as the callback is depressed	
OTWCheckSix	Glance backward (held) - momentary especially used when padlocking and needing to glance at your six. This view remains active as long as the callback is depressed	
TO BE MOVED WHEN KNOWN		
OTWStepHeadingScale		
OTWSelectChaseMode		
AFIncExhaust		
AFDecExhaust		
WingmanSendGrdDL		
ElementSendGrnDL		
FlightSendGrnDL		