### **History of FSUIPC7**

### Version 7.4.17 (4th September 2024)

- 1. Delayed request for key input (from MSFS) to prevent issues with key reception
- **2.** corrections for when running FSUIPC7 in a client PC:
  - enable WAPI even though WASM is not installed on the client PC)
  - start/stop PMDG 777 data thread when needed
- **3.** Mapped AI traffic state STATE SIMPLE FLIGHT to STATE ENROUTE AS FILED.

### Version 7.4.16 (25th July 2024)

- 1. WASM updated to 1.0.5. Changes include:
  - performance improvements: switched to using tagged data
  - LvarScanPeriod ini parameter now accepts negative values
  - functional improvements for when lvar update period is disabled in WASM
  - log message updates
- 2. String length allowed for preset node names increased (in Find Preset window) so that duplicate node names not shown
- **3.** Mapped AI traffic state STATE SIMPLE TAKEOFF to STATE TAKEOFF.
- **4.** Log message changes to prevent buffer overrun.

## Version 7.4.15 (12th July 2024)

- 1. WASM memory issue corrected
- 2. Start of FSUIPC threads and WASM/WAPI connection changed to use camera state.
- **3.** Removed option to stop WAPI when MSFS in main menu WAPI connection now maintained unless forcibly stopped.
- **4.** Correction to starting/stopping PMDG theads for 737 and 777 on aircraft change.

# Version 7.4.14 (5th July 2024)

- 1. WASM updated to version 1.0.4: bug fixed that could crash WASM in certain situations.
- 2. Specific PMDG 777 offsets enabled.
- 3. Reset status of auto-save toggle once a flight is finished.
- **4.** Clear Input Event checkbox in button assignments when button not assigned.
- **5.** New menu option added to allow the user to reload presets from the *events.txt* and *myevents.txt* files: File  $\rightarrow$  Reload Presets

### Version 7.4.13 (5th June 2024)

- 1. Update to MSFS SDK 0.24.3.0.
- **2.** Default auto-start method of FSUIPC7 changed back to use the MSFS' *EXE.xml* file. The ability to start FSUIPC7 via the *MSFS.bat* file is still available as an option in the installer.
- 3. Added FUEL TANK SELECTOR: 2 simvar to offset 0x0B22

- **4.** Minimum initial stall time increased from 5 to 15 seconds
- 5. New ini parameter LvarScanPeriod added to WASM, with a default value of 10 (minutes). This is the period, starting from when aircraft loaded, when the WASM will scan for lvars and push them out to clients. After this period has elapsed, new lvars will only be seen by FSUIPC7 if created by FSUIPC7 or if/when a rescan is performed.
- **6.** Log message updates.

# Version 7.4.12 (23rd May 2024)

- **1.** Functionality to auto-tune the start-up parameters of FSUIPC7 added. See Advanced User Guide for details.
- **2.** Default auto-start method of FSUIPC7 changed to use the *MSFS.bat* file. The ability to start FSUIPC7 via the MSFS *EXE.xml* is still available as an option in the installer.
- **3.** New ini parameter added: **IgnoreDevice**. This parameter goes in the *[JoyNames]* section of the *FSUIPC7.ini* and can be used to ignore a specific device (or all devices from a specific Vendor) during the HiD scanning for your devices.
- **4.** Added new ini parameter **MaxCustomControlNumber** to allow the range of custom control numbers available to be user-specified.
- **5.** The start of the *ipcInit.lua* script has been delayed until data has been requested from MSFS.
- **6.** Added **icao** airline (from *aircraft.cfg* file) at offset 0x062C.
- 7. Added BRAKE PARKING INDICATOR simvar at offset 0x028D.
- 8. Added new lua function ipc.getInputEventValue("input event name").
- **9.** New functionality to add Input Events to offsets via new ini file section [InputEventOffsets].
- **10.** Update to MSFS SDK 0.24.2.0. The following new simulator events/controls have been added:

```
HELICOPTER_ENGINE_1_GOVERNOR_SWITCH_OFF
HELICOPTER_ENGINE_1_GOVERNOR_SWITCH_ON
HELICOPTER_ENGINE_1_GOVERNOR_SWITCH_TOGGLE
HELICOPTER_ENGINE_1_GOVERNOR_SWITCH_SET
HELICOPTER_ENGINE_1_BEEP_TRIM_INCREASE
HELICOPTER_ENGINE_1_BEEP_TRIM_DECREASE
HELICOPTER_ENGINE_1_BEEP_TRIM_SET
HELICOPTER_ENGINE_2_GOVERNOR_SWITCH_OFF
HELICOPTER_ENGINE_2_GOVERNOR_SWITCH_ON
HELICOPTER_ENGINE_2_GOVERNOR_SWITCH_TOGGLE
HELICOPTER_ENGINE_2_GOVERNOR_SWITCH_SET
HELICOPTER_ENGINE_2_BEEP_TRIM_INCREASE
HELICOPTER_ENGINE_2_BEEP_TRIM_DECREASE
HELICOPTER_ENGINE_2_BEEP_TRIM_DECREASE
HELICOPTER_ENGINE_2_BEEP_TRIM_SET
```

11. Privilege status of FSUIPC process, elevated (i.e. admin) or standard, logged at start-up.

### Version 7.4.11 (31st March 2024)

- 1. Change to default value of **InitialStallTime** ini parameter.
- **2.** Fixed an issue that could prevent key presses/releases (including hot keys) being received and processed.

### Version 7.4.10 (28th March 2024)

- **1.** Corrected issue that prevented Input Event assignments to entering/leaving axis ranges from working.
- **2.** Fixed an issue that could prevent key presses/releases (including hot keys) being received and processed.

## Version 7.4.9 (17th March 2024)

- 1. Correction to start PMDG thread for PMDG offset population
- **2.** Additional delay added between detection of FS and attempt to connect. This was added as sometimes when connecting to soon, key press/release events were not being received via SimConnect.

## Version 7.4.8 (2<sup>nd</sup> March 2024)

- 1. Various checks added to prevent possible memory issues.
- 2. Various timers modified to allow things to start quicker.
- **3.** Update to ignore 2nd set of Input Events received from some aircraft which was causing a corruption issue (could result in a buttons or keys section being removed!).

## **Version 7.4.7 (28th February 2024)**

- 1. Issue with key release preset names being saved incorrectly fixed (was saving press name).
- 2. Fix to prevent Input Events being requested twice. Input Events now also loaded in unregistered version for use via offsets.
- **3.** Fixes to auto-starting luas when not using WAPI and when using profiles-in-separate files.
- **4.** Changes in when the WAPI connection is started now delayed by several seconds after leaving World Map.
- **5.** Switched order of checking location of UserCfg.opt file. Now Steam location checked first, as this is the order the Installer checks.
- **6.** StartEarly parameter added, applicable in the [WideServer] section, to start the WideServer component once a Simconnect connection is acquired (without this, it is only started once an aircraft is loaded and ready-to-fl).

### **Version 7.4.6 (14th February 2024)**

- **1.** EXT Wnd size/position not saved if iconized to prevent a CTD when re-starting.
- 2. Fixed an issue with preset name not being saved for key assignments when using the **Find Preset** dialogue box/panel.
- 3. Initial stall time set to a minimum of 45seconds when auto-started
- 4. Added a Never option to the OpenOnStart ini parameter
- **5.** Various changes to start-up after the simconnect Open event is received.

## Version 7.4.5 (2<sup>nd</sup> February 2024)

- 1. Corrected use of Hot Keys when using the free/unregistered version of FSUIPC7.
- **2.** Allow comments in [Auto] section, using the semicolon symbol (;).
- **3.** Additional checks added on simconnect open to ensure everything received ok, otherwise the connection is closed and then reconnected. Initial stall time also reduced from 120 to 30 seconds

## Version 7.4.4 (21st January 2024)

1. Corrected simconnect issue introduced in previous version

### Version 7.4.3 (19th January 2024)

- **1.** Bug fixed that prevented parameters being saved when assigning keys to lua files with an index > 32.
- 2. Technical changes in detecting when to start various threads and when to kill auto-luas after going back to the MSFS main menu system
- 3. Various updates to logging messages (non-functional).

## **Version 7.4.2 (2nd January 2024)**

1. Bug fixed that prevented parameters being saved when assigning buttons to lua files with an index > 32.

# **Version 7.4.1 (15<sup>th</sup> December 2023)**

- 1. Open FSUIPC main window on start-up if a new version is available.
- 2. Fixed a minor bug in key assignments that added a release control when non specified.
- **3.** Allow the following helicopter axes to be calibrated using FSUIPC's calibration facilities:

AXIS\_CYCLIC\_LATERAL\_SET -> calibrate as Aileron
AXIS\_CYCLIC\_LONGITUDINAL\_SET -> calibrate as Elevator
AXIS\_COLLECTIVE\_SET -> calibrate as Prop-pitch
AXIS\_HELICOPTER\_THROTTLE\_SET -> calibrate as Throttle
HELICOPTER\_THROTTLE\_SET -> calibrate as Throttle
AXIS\_HELICOPTER\_THROTTLE1\_SET -> calibrate as Throttle1
HELICOPTER\_THROTTLE1\_SET -> calibrate as Throttle1
AXIS\_HELICOPTER\_THROTTLE2\_SET -> calibrate as Throttle2
HELICOPTER\_THROTTLE2\_SET -> calibrate as Throttle2

# Version 7.4.0 (8th December 2023)

- **1.** Added support for assignments to Input Events for buttons, keys and entering/leaving axis ranges.
- 2. New Log menu entries for Input Events:

**Log->Input Events**: to log input events, when received, to the *FSUIPC7.log* file **Log->List Input Events**: to list available input events in the FSUIPC7 main window

**3.** New ini parameter **DontLogTheseIE**, used to prevent Input Events being logged, similar to the way the current **DontLogThese** ini parameter can be used to prevent events/controls from being

logged. Can be used in the [General] section but better to be used in [Profile.xxx] sections, as Input Events are aircraft specific.

- **4.** offset 0x7C50 has also been updated to allow Input Events to be sent.
- **BREAKING CHANGE**: the parameter (for setting an lvar value, parameter for a preset or parameter for an Input Event) has been moved from offset 0x7C80 to 0x7C90 as using 0x7C80 does not allow enough space for the full lvar or preset name (up to 64 bytes) at offset 0x7C50.
- **5.** New lua function **ipc.execInputEvent**(*name*, *parameter*) has been added.
- **6.** WASM updated to 1.0.3: minor bug fix, no functional change
- 7. WAPI updated to 1.0.4: corrected thread-locking issue.
- **8.** New ini parameter **ObeyThrottleLowerLimit** added. This prevents the throttle from going below the lower limit (defined by the aircraft) when **Throttle Decr** controls (including individual controls) are used to activate reversers.
- **9.** The **Log->New Log** menu option has been disabled by default. This can be enabled by using the new ini parameter **Ena bleNewLog**.
- 10. Corrected use of DELAY and READY parameters in [Programs] ini file section
- 11. New parameter **CONNECTED** allowed in [Programs] ini file entries. This will delay a program starting until FSUIPC is connected to MSFS (via SimConnect) and has received initial values to populate offsets.
- **12.** Updated to SDK 0.23.1.0 released with SU14 (1.35.21.0).
- 13. Full nearest airport Ident (6 characters each) list added to offset 0x0640. This is to compliment the nearest 6 airport list at offset 0x0658 that only holds space for the 4 characters of the Ident (ICAO).

## Version 7.3.25 (29th October 2023)

- 1. WAPI updated to 1.0.3: thread protection added for when sending calculator code.
- **2.** Minor correction to SimConnect re-connection logic to fix bug that prevented FSUIPC7 from shutting down in certain situations.
- **3.** Fixed issue that prevented setting font and font attributes in lua wnd.font library function.
- **4.** Removed re-writing of **Delay** ini parameter in [Programs] section when not needed.
- **5.** Update to pause indication offset 0x0264 and pause control offset 0x0262 see Offset Status document for details.

### **Version 7.3.24 (2<sup>nd</sup> October 2023)**

1. Updated to MSFS SDK 0.22.3.0. The following new events/controls have been added:

3rd Party Window Open Primary 3rd Party Window Open SECONDARY

**3rd Party Window Move Down** 

3rd Party Window Move Up

**3rd Party Window Validate** 

- 2. Re-enabled write to ADF1/2 standby frequency offsets 0x0284, 0x0286, 0x0288 & 0x028A
- **3.** Changed offset 0x026D (CAMERA STATE) to read/write (was read-only).

**4.** Added **CAMERA SUBSTATE** simvar to offset 0x026E, **CAMERA VIEW TYPE AND INDEX** simvar to offsets 0x026F (index 0) and 0x0270 (index 1), **GAMEPLAY CAMERA FOCUS** to offset 0x0271,all as read/write.

## **Version 7.3.23 (15th September 2023)**

- **1. 'Find Preset...'** button added to both the key and button assignments dialog boxes, which presents a tree-view list of available presets based upon the comments in the preset files.
- **2.** Added version check on start-up. A message is displayed in the main window indicating either that the latest version is being used or that an update is available.
- **3.** The preset menu displayed in the axis assignment dialog box when 'Send Preset to FS' is selected has been restricted to contain only those presets which accept a parameter. Note that the full preset list is still available when assigning to an axis range (right-hand side of axis assignment dialog).

# **Version 7.3.22 (4th September 2023)**

- 1. Re-enabled offset 0x341E (Hydraulic Switch).
- 2. Improved logic in simconnect re-connection.
- **3.** Load presets even when WASM is not installed. This is to prevent assignments to presets being lost when the WASM module is temporarily removed/disabled.
- **4.** Added **Send Preset to FS** as distinct axis assignment option.
- **5.** Added ini parameter **ExitIfEventsAreMissing**, with a default value of FALSE. When set, this prevents assignments to presets being lost if the *events.txt* file is temporarily unavailable.

### Version 7.3.21 (9th June 2023)

- 1. Added ShowSplash ini parameter, to allow FSUIPC7 splash screen to be disabled.
- **2.** Added **LogLuaNew** ini parameter, used to overwrite the lua log file when lua logged to a separate file.
- **3.** Added handling for events using the new \*\_EX1 event handling system.
- **4.** Added **Log->WAPI** menu to allow WAPI log level to be set.

### Version 7.3.20 (24th April 2023)

- **1.** Allow key presses/releases sent to the FS by FSUIPC7 to be received back for further action, e.g. to support hot-key assignments.
- **2.** Added back use of ini parameter **ShortAircraftNameOk** to allow profile substring matching to be turned off, specifically for use when using **UseAirLocForProfiles** ini parameter.
- **3.** Added support for the **a** character as a parameter placeholder in preset calculator code (as used by MobiFlight)
- **4.** Added new lua function **ipc.execPreset** to execute the calculator code of a preset by preset name (optional preset parameter also supported).
- **5.** Additional WHYSTART logging added.

# Version 7.3.19 (22<sup>nd</sup> March 2023)

- 1. Updated to MSFS SDK 0.21.0.0
- 2. New control/event added: Elect Fuel Pump Set
- **3.** Various minor none-functional updates to make the code more robust.

#### Version 7.3.18 (15th March 2023)

- 1. New ini parameter added: ComWriteLoopTime, with a default value 10ms.
- 2. Default value of ComReadLoopTime changed from 20ms to 10ms
- 3. WASM updated to 1.0.2:
  - LvarScanFrequency ini parameter changed to determine max number of scans per second regardless of LvarUpdateFrequency setting. Positive values indicate maximum number of scans per second, negative values indicate minimum number of seconds between scans. A value of 0 turns off scanning for new lvars.
  - The default value for this setting is -2 (i.e. scan for new lvars approximately every 2 seconds)
  - lvar values not updated until at least 250ms after config change (to give time for clients to process changes)
  - minor memory related bug-fixes and logging updates
- 4. WAPI updated to 1.0.2:
  - lvars-ready callback now called once initial values received
  - lvar-value reading locked to prevent reading until initial values received
  - minor updates in logging and to prevent compilation warnings
- **5.** The following simvars are no longer requested:

0x08F8: FUELSYSTEM ENGINE PRESSURE:1 0x0990: FUELSYSTEM ENGINE PRESSURE:2 0x0A28: FUELSYSTEM ENGINE PRESSURE:3 0x0AC0: FUELSYSTEM ENGINE PRESSURE:4

This is a temporary measure to prevent excessive log messages in the MSFS console window when using aircraft that do not use the new Fuel System. I will look into a proper fix to only request these simvars when used in a future update.

**6.** The default value for the **NumberOfPumps** ini paramater set to 0. As with the previous item, this is to prevent log message flooding in the Asobo console window when using aircraft that do not use the new Fuel System.

## Version 7.3.17 (25th February 2023)

- 1. Recognise profile-specific button presses in button assignment window even if profile-specific checkbox not checked
- **2.** WAPI and WASM updated to version 1.0.0, containing the following changes:
  - up to 10,220 lvars now loaded
  - automatic rescanning for new lvars: no longer necessary to reload to pick-up new lvars
- [developers using WAPI only] lvars-available callback delayed by 1s after names available so that the initial values can be received. This means that the initial value will be available in this callback, and no lvar-callback will be received until the lvar value changes.

### Version 7.3.16 (11th January 2023)

1. Re-built against MSFS SDK 0.20.5.0

- 2. Added additional axis control/event Rotor Axis Tail Rotor Set
- **3.** Input keys strings updated to the latest MSFS SDK: mainly changes to numpad keys when numlock is off, and some new additional keys added
- **4.** Correction to key repeat handling which caused repeated key down events being sent in certain situations
- 5. Added log message to indicate custom control numbers registered
- **6.** PMDG 737 header and offsets updated to version 3.0.56. Note that the offsets for the following variables have changed:

AircraftModel - was 6C8D, now 6C8E WeightInKg - was 6C8E, now 6C90 GPWS\_V1CallEnabled - was 6C8F, now 6C91 GroundConnAvailable - was 6C90, now 6C92

Last byte of first reserved area for PMDG737 is now 6C93 (was 6C91). See the document **Offset Mapping for PMDG 737-700** for further details.

- 7. New ini parameter **MaxButtonAssignments** added. This allows you to increase the default number of available button assignments, which is 2099
- **8.** Offsets that hold lvars now only updated on actual lvar changed received from server, not when you write to the offset

## **Version 7.3.15 (15<sup>th</sup> November 2022)**

- 1. Re-built against MSFS SDK 0.20.4.0
- **2.** The following additional controls have been added:

ROTOR LONGITUDINAL TRIM SET

ROTOR LONGITUDINAL TRIM INC

ROTOR LONGITUDINAL TRIM DEC

ROTOR TRIM RESET

AXIS ROTOR BRAKE SET

ROTOR BRAKE ON

ROTOR BRAKE OFF

ROTOR BRAKE TOGGLE

MAC\_CREADY\_SETTING\_DEC

MAC CREADY SETTING INC

MAC CREADY SETTING SET

PROP LOCK ON

PROP LOCK OFF

PROP LOCK SET

PROP LOCK TOGGLE

AXIS COLLECTIVE SET

COLLECTIVE INCR

COLLECTIVE\_DECR

TAIL ROTOR INCR

TAIL ROTOR DECR

ROTOR GOV SWITCH OFF

ROTOR GOV SWITCH ON

AUTO HOVER TOGGLE

AUTO HOVER OFF

AUTO HOVER SET

AUTO HOVER ON PLASMA ON PLASMA OFF PLASMA SET PLASMA TOGGLE SPOILERS INC SPOILERS DEC RADIO VOR3 IDENT TOGGLE RADIO VOR3 IDENT SET RADIO VOR3 IDENT ENABLE RADIO VOR3 IDENT DISABLE RADIO VOR4 IDENT TOGGLE RADIO VOR4 IDENT SET RADIO VOR4 IDENT ENABLE RADIO VOR4 IDENT DISABLE ADF2 SET ADF2 EXTENDED SET ADF2 LOWRANGE SET ADF2 HIGHRANGE SET ADF2 OUTSIDE SOURCE ADF2 NEEDLE SET ADF2 VOLUME SET ADF2 VOLUME INC ADF2 VOLUME DEC HELICOPTER THROTTLE INC HELICOPTER THROTTLE DEC AXIS HELICOPTER THROTTLE SET HELICOPTER THROTTLE SET HELICOPTER THROTTLE CUT HELICOPTER THROTTLE FULL HELICOPTER THROTTLE1 INC HELICOPTER THROTTLE1 DEC AXIS HELICOPTER THROTTLE1 SET HELICOPTER THROTTLE1 SET HELICOPTER THROTTLE1 CUT HELICOPTER THROTTLE1 FULL HELICOPTER\_THROTTLE2\_INC HELICOPTER THROTTLE2 DEC AXIS HELICOPTER THROTTLE2 SET HELICOPTER THROTTLE2 SET HELICOPTER THROTTLE2 CUT HELICOPTER THROTTLE2 FULL AXIS CYCLIC LATERAL SET AXIS CYCLIC LONGITUDINAL SET CYCLIC LATERAL LEFT CYCLIC LATERAL RIGHT CYCLIC LONGITUDINAL DOWN CYCLIC LONGITUDINAL UP

Note that the new axis AXIS\_TAIL\_ROTOR\_SET is currently not recognised (and so has not been added)

### **Version 7.3.14 (1st November 2022)**

1. Correction to using assignments to lua files with an index >= 64 (which were previously interpreted as assignments to presets).

### Version 7.3.13 (28th October 2022)

- **1.** Re-enabled ability to calibrate axis when assigned with 'Send to FS as normal axis' or when assigned outside of FSUIPC (which was disabled in v7.3.9).
- **2.** Additional controls added: HEADING\_BUG\_SET\_EX1, SET\_THROTTLE\_REVERSE\_THRUST\_ON, SET\_THROTTLE\_REVERSE\_THRUST\_OFF, DECISION HEIGHT SET, DECISION ALTITUDE\_MSL\_SET
- 3. Rudder Trim Set Ex1 and Aileron Trim Set Ex1 flagged as axes controls
- **4.** Allow the following axes controls to go through FSUIPC's calibration facilities: \*\_EX1 axes controls for Throttle and PropPitch, **Axis Steering Set**

### Version 7.3.12 (20th October 2022)

- 1. Fix for using custom control numbers
- **2.** Lua sound.play function updated to ignore a negative volume request this was used to only play sound if the FS has the focus but is no longer possible. Negative values still accepted (for backwards compatibility) but will be treated as positive values.
- 3. Requests for facilities (i.e. nearest airports) switched to using the new SDK \* EX1 functions.
- **4.** WASM and WAPI both updated to version 0.9.1. The WASM contains a fix for when setting lvars to negative numbers, and the build tools for both have been updated to VS2022 and the latest platform toolset.
- 5. FSUIPC7 build infrastructure updated to VS2022 and using the latest platform toolset.

### **Version 7.3.11 (5<sup>th</sup> October 2022)**

- 1. Correction to preset loading in certain situations (when WAPI not enabled in FSUIPC7.ini file).
- 2. Simvar CAMERA STATE added to offset 0x026D (1-byte) for read-only.
- **3.** Most threads, including WideServer, now not initially started until aircraft loaded and ready-to-fly.
- **4.** Lua [Auto] and profile-specific [Auto.xxx] scripts now also auto-started when FSUIPC7 is started and MSFS already running with an aircraft loaded.

## **Version 7.3.10 (27th September 2022)**

1. Correction to preset loading – presets now loaded before the general assignments.

#### **Version 7.3.9 (26th September 2022)**

- 1. Fixed CTD caused by WAPI config data being received in quick succession (caused when creating multiple lvars via the WAPI interface)
- 2. Menu option Add-ons->WASM->List Lvars no longer automatically performs a reload of the WASM. A new option is provided for this: Add-ons->WASM->Reload & List Lvars

- **3.** The **Create Mouse Macro** button has removed from key assignments dialog as mouse macros are not available in FSUIPC7 / MSFS
- **4.** Correction to loading of presets due to a missing [WAPI] section in the FSUIPC7.ini file
- **5.** Corrected loading of lvars/hvars when starting a new flight in the same aircraft and improved logging of number of lvars/hvars as well as the enabling/disabling of the **Add-ons->WASM** menu items so that the state of the menu items as well as the logging of lvars/hvars should correctly reflect when lvars/hvars are available.
- **6.** A new option is available to have the FSUIPC7 main window open on start-up: **Options -> Open on Start.**
- 7. Presets assigned to axes are now saved using the preset name rather than the control number to prevent issues when the preset control number changes.
- **8.** WASM and WAPI both updated to version 0.9.0:
  - removed gauge handler for internal events and switched to using custom events
  - delay lvar loading timer until camera state indicates that MSFS is out of the main menu system. With this change, you should be able to remove or at least substantially reduce the value if the WASM ini parameter **LvarScanDelay**, if you have manually set this in the WASM ini file (*FSUIPC WASM.ini*) in your WASM persistent storage area.
- **9.** The range of the **BRAKE LEFT/RIGHT POSITION** simvars (held in offsets 0c0BC4 and 0x0BC6) has been changed from 0-16384 to 0-32767 in accordance with MSFS documentation.
- **10.** Axes are no longer calibrated UNLESS assign using *Send direct to FSUIPC Calibration*. Axes assigned using *Send to FS as normal axis* are no longer calibrated as this is causing issues since the SU10 update. Note that you can still scale (and reverse) such axes if needed using FSUIPC's axes scaling feature (see the Advanced User guide for details)

# Version 7.3.8 (28th August 2022)

- **1.** PMDG 737 offsets enabled and working see new document **Offset Mapping for PMDG 737-700**. However, please not that PMDG have still not published the SDK and so there may be some offsets not populated or at the wrong address. Please report any errors found to the FSUIPC7 support forum.
- 2. WideFS Enable option correctly remembered, i.e. you only need to enable once.
- **3.** *Preset* controls moved to a distinct drop-down menu when used for assignments, available on a checkbox to switch between standard FS controls and presets.
- **4.** Minor update to WAPI library to prevent issues when running multiple clients.
- **5.** Simvar added to new offset: 0x0590 holding **Indicated Altitude Calibrated** as a 4-byte float (in feet)

## Version 7.3.7 (30th June 2022)

- **1.** PMDG 737 offsets enabled, although these are still not being populated (and so cannot be used). I will look into this further once PMDG have published the SDK for the MSFS2020 version of the 737-700.
- **2.** New ini option added: **TrapMSFSkeys**. Setting this to **Yes** will enable a global keyboard trapping mechanism and FSUIPC7 will receive all keypresses (when MSFS is NOT in the main menu system). This may help with certain button-box devices that act like 2<sup>nd</sup> keyboards (i.e. devices that send key presses/releases).

- **3.** Added auto-detection of windows 11 to automatically set **DisableMSFSMonitor** ini parameter to Enum
- 4. Defaulted to enable the WASM if installed
- 5. Corrected move of profile specific [LvarOffsets.xxx] section to separtate ini file when using UseProfiles=Files

## Version 7.3.6 (30th May 2022)

**1.** WAPI updated to 0.5.10: fixed a CTD issue caused when using multiple WASM clients

## Version 7.3.5 (29th May 2022)

- **1.** WASM & WAPI updated to 0.5.9: increased the maximum number of lvars available from 2044 to 3066
- 2. Corrected / enabled repeat key assignments (previously not working)
- **3.** Added two new ini parameters for adjusting key repeat rate:

**InitialKeyRepeatRate** – defaults to 250ms **SubsequentKeyRepeatRate** – defaults to 100ms

These parameters can be added to the [Keys] section or a profile-specific [Keys.xxx] sections.

**4.** Corrected shift codes used when sending keys using the FSIOPC-added KeySend controls and enabled the use if the Win key for such controls. Note that this change may break existing assignments to the FSUIPC-added keysend controls using key modifiers (especially the Wind key). You should update your assignments to such controls to use the new "shift" value numbers as documented in the Advanced User guide.

# Version 7.3.4 (19th May 2022)

- 1. WAPI updated to 0.5.8.
- **2.** Correction to bulk writing to multiple offsets. A bug was introduced in 7.3.0 that prevented simvars being updated when bulk writing to an offset area that included an offset that was not linked to a simvar. This caused issues when, gor example, updating payload weights using ProSim.
- 3. Bug corrected that prevented presets being sent when assigned to key presses.
- 4. Corrected use of left/right modifiers for when using the shift and ctrl keys. Also the left/right alt keys are distinguished (current assignments using the alt key modifier will now use the left alt key) and removed the windows key as a modifier (as it was not possible to use anyway!).

## Version 7.3.3 (12th April 2022)

- **1.** New ini parameter added 'UseKeyboardHook'. When set, uses a global keyboard hook to receive key presses directly from windows and not via simconnect. To be used if using controllers that send keypresses that are otherwise not detected by FSUIPC7
- **2.** Recompiled against MSFS SDK 0.18.0.0. No new events all new events in this release currently give an error (Unrecognised Name).
- 3. Re-enabled main window (was disabled in previous release) to allow window scrolling to see lvars/hvars. Keyboard input no longer recognised when FSUIPC7 has the focus.
- 4. WASM / WAPI updated to versions 0.5.8 and 0.5.7 respectively, containing minor bug fixes.

# Version 7.3.2 (20th March 2022)

- 1. Keyboard input to FS enabled when FSUIPC has the focus.
- **2.** Updates made to when running FSUIPC7 on an MSFS client machine to allow keys to be sent. Note that keys are not sent to any particular application, and so any client can only react to these if they have been defined as 'hot keys' for that application.

## Version 7.3.1 (9th March 2022)

**1.** Bug fixed that prevented assignments to buttons with numbers 64 – 95 from being triggered.

## Version 7.3.0 (6th March 2022)

**1.** Updated to MSFS SDK v0.17.0.0. The following additional controls have been added:

TOGGLE THROTTLE1 REVERSE THRUST TOGGLE THROTTLE2 REVERSE THRUST TOGGLE THROTTLE3 REVERSE THRUST TOGGLE THROTTLE4 REVERSE THRUST SET THROTTLE1 REVERSE THRUST ON SET THROTTLE2 REVERSE THRUST ON SET THROTTLE3 REVERSE THRUST ON SET THROTTLE4 REVERSE THRUST ON SET THROTTLE1 REVERSE THRUST OFF SET THROTTLE2 REVERSE THRUST OFF SET THROTTLE3 REVERSE THRUST OFF SET THROTTLE4 REVERSE THRUST OFF THROTTLE1 REVERSE THRUST HOLD THROTTLE2 REVERSE THRUST HOLD THROTTLE3 REVERSE THRUST HOLD THROTTLE4 REVERSE THRUST HOLD MASTER WARNING SET MASTER WARNING ON MASTER WARNING OFF MASTER\_WARNING\_TOGGLE MASTER WARNING ACKNOWLEDGE MASTER CAUTION SET MASTER CAUTION ON MASTER CAUTION OFF MASTER CAUTION TOGGLE MASTER CAUTION ACKNOWLEDGE AP ALT RADIO MODE TOGGLE AP ALT RADIO MODE SET AP ALT RADIO MODE ON AP ALT RADIO MODE OFF

## Existing events now recognised:

MENU RENO KICK PLAYER

ELEVATOR\_DOWN ELEVATOR\_UP AILERON\_LEFT AILERON\_RIGHT TAXI\_LIGHTS\_ON TAXI\_LIGHTS\_OFF NAV\_LIGHTS\_ON NAV\_LIGHTS\_OFF STARTER1\_SET STARTER2\_SET STARTER3\_SET STARTER4\_SET

- **2.** Offset 0x7C50 added to enable setting of lvars, activation of hvars, calling presets and executing calculator code (added for use by external programs)
- **3.** Ability to add any simvar to a free FSUIPC offset for both reading and writing, via a 'myOffsets.txt' file.
- **4.** Changes to starting of ipcReady.lua: the ipcReady.lua will only be started once lvars/hvars have been received from the WASM, if the WASM functionality has been enabled.
- **5.** Correction to the starting of lua [Autos] (and profile specific [Autos.xxx]) when the WASM is not installed or enabled.
- **6.** Correction to writing to the PUMP SWITCH offsets.

# Version 7.2.16 (14th February 2022)

**1.** The following additional controls have been added:

OIL COOLING FLAPS SET

OIL COOLING FLAPS UP

OIL COOLING FLAPS DOWN

OIL COOLING FLAPS TOGGLE

RADIATOR\_COOLING\_FLAPS\_SET

RADIATOR COOLING FLAPS UP

RADIATOR COOLING FLAPS DOWN

RADIATOR COOLING FLAPS TOGGLE

NAV1 VOLUME SET EX1

NAV2\_VOLUME\_SET\_EX1

TACAN1 ACTIVE CHANNEL SET

TACAN1 ACTIVE MODE SET

TACAN1 STANDBY CHANNEL SET

TACAN1\_STANDBY\_MODE\_SET

TACAN1\_SWAP

TACAN1 VOLUME DEC

TACAN1 VOLUME INC

TACAN1 VOLUME\_SET

TACAN2\_ACTIVE\_CHANNEL\_SET

TACAN2 ACTIVE MODE SET

TACAN2 STANDBY CHANNEL SET

TACAN2 STANDBY MODE SET

TACAN2 SWAP

TACAN2\_VOLUME\_DEC

TACAN2 VOLUME INC

TACAN2 VOLUME SET

G LIMITER ON

G LIMITER OFF

G LIMITER SET

**G\_LIMITER\_TOGGLE** 

```
TACAN1 SET
TACAN2 SET
TACAN1 OBI DEC
TACAN2 OBI DEC
TACAN1 OBI INC
TACAN2 OBI INC
TACAN1 OBI FAST DEC
TACAN2 OBI FAST DEC
TACAN1 OBI FAST INC
TACAN2 OBI FAST INC
TOGGLE TACAN DRIVES NAV1
CONDITION LEVER SET
CONDITION LEVER INC
CONDITION LEVER DEC
CONDITION LEVER HIGH IDLE
CONDITION LEVER LOW IDLE
CONDITION LEVER CUT OFF
AXIS CONDITION LEVER SET
CONDITION LEVER 1 SET
CONDITION LEVER 1 INC
CONDITION LEVER 1 DEC
CONDITION LEVER 1 HIGH IDLE
CONDITION LEVER 1 LOW IDLE
CONDITION LEVER 1 CUT OFF
AXIS CONDITION LEVER 1 SET
CONDITION LEVER 2 SET
CONDITION LEVER 2 INC
CONDITION LEVER 2 DEC
CONDITION LEVER 2 HIGH IDLE
CONDITION LEVER 2 LOW IDLE
CONDITION LEVER 2 CUT OFF
AXIS CONDITION LEVER 2 SET
CONDITION LEVER 3 SET
CONDITION LEVER 3 INC
CONDITION LEVER 3 DEC
CONDITION LEVER 3 LOW IDLE
CONDITION_LEVER_3_CUT_OFF
AXIS CONDITION LEVER 3 SET
CONDITION LEVER 4 SET
CONDITION LEVER 4 INC
CONDITION LEVER 4 DEC
CONDITION LEVER 4 HIGH IDLE
CONDITION LEVER 4 LOW IDLE
CONDITION LEVER 4 CUT OFF
AXIS CONDITION LEVER 4 SET
```

- **2.** WASM updated to 0.5.7, to allow 1k of calculator code (was previously 256 bytes).
- **3.** Maximum number of events loaded from event files now defined by new ini parameter **MaxNumberOfCustomEvents**, with a default value of 1024.
- **4.** Added implicit call to Reload the WASM before listing lvars.
- **5.** Drop-down menu for testing lvars/hvars increased in width.

- 6. New ini parameter added (default value Yes): StopWAPIInMenu
- 7. New functionality to assign to calculator code presets, loaded from files **events.txt** and **myevents.txt**.

### Version 7.2.15 (26th January 2022)

1. The following additional controls have been added:

Flight Level Change

Flight Level Change On

Flight Level Change Off

Rpm Slot Index Set

Beacon Lights On

Beacon Lights Off

Ap Spd Var Set Ex1

**2.** Two new lua functions added related to hvars:

ipc.getHvarName(hvarId)

ipc.getHvarId(hvarName)

**3.** The following simulator variables have been added to offsets:

0x0798: AUTOPILOT ALTITUDE LOCK VAR:3 [4 bytes]

0x07A8: NEW FUEL SYSTEM [1 byte]

0x07A9: NEW ELECTRICAL SYSTEM [1 byte]

0x07AA: EXTERNAL POWER AVAILABLE [1 byte]

0x07AB: EXTERNAL\_POWER\_ON [1 byte]

**4.** Added new ini parameter to be used in the *[General]* section: **UseAirLocForProfiles**This allows profile matching on the aircraft.cfg folder location, that can improve profile matching when using different liveries

- **5.** WASM updated to 0.5.6: changes are:
  - new ini parameter added **UseAirLocForHvars**, to allow hvar file matching on air file folder name
  - logging messages for processing hvar files corrected and updated

## **Version 7.2.14 (21st December 2021)**

- 1. Path to FLT files held in offset 0x1000 corrected for MS Store installations
- 2. Corrected use of LuaPath ini parameter when using relative paths
- **3.** Added new ini parameter to be used in the *[General]* section: **NumberOfPumps.** This restricts the request for the indexed simvars

FUELSYSTEM PUMP ACTIVE FUELSYSTEM PUMP SWITCH

to the number of pumps defined by this ini parameter.

This has been added as requesting these indexed simvars in aircraft that use the new **FuelSystem** module that have less than the number of pumps requested will produce continual errors in the MSFS developers console.

The default value for this parameter is 6. If you do not use the developers console, you can set this to 16 to request all indices for these variables (regardless of loaded aircraft).

### Version 7.2.13 (19th November 2021)

- 1. Rebuilt against MSFS SDK 0.16.0.0
- **2.** Added new ini parameter value **Enum** for parameter **DisableMSFSMonitor** to restore MSFS monitoring under Windows 11. This value should now be preferred over the value **Yes**, which disables the MSFS window monitor.
- **3.** WAPI thread read/write protection updated to prevent possibly CTD when receiving lvar/hvar values
- **4.** Following simvars added to offsets, all 1 byte booleans, with the 'SWITCH' variables being read/write and the 'ACTIVE' ones read-only:

0x0B02 FUELSYSTEM PUMP ACTIVE:1

0x0B03 FUELSYSTEM PUMP SWITCH:1

0x0B04 FUELSYSTEM PUMP ACTIVE:2

0x0B05 FUELSYSTEM PUMP SWITCH:2

0x0B06 FUELSYSTEM PUMP ACTIVE:3

0x0B07 FUELSYSTEM PUMP SWITCH:3

0x0B08 FUELSYSTEM PUMP ACTIVE:4

0x0B09 FUELSYSTEM PUMP SWITCH:4

0x0B0A FUELSYSTEM PUMP ACTIVE:5

0x0B0B FUELSYSTEM PUMP SWITCH:5

0x0B10 FUELSYSTEM PUMP ACTIVE:6

0x0B11 FUELSYSTEM PUMP SWITCH:6

0x0B12 FUELSYSTEM PUMP ACTIVE:7

0x0B13 FUELSYSTEM PUMP SWITCH:7

0x0B14 FUELSYSTEM PUMP ACTIVE:8

0x0B15 FUELSYSTEM PUMP SWITCH:8

0x0B16 FUELSYSTEM PUMP ACTIVE:9

0x0B17 FUELSYSTEM PUMP SWITCH:9

 $0x0AEE\ FUELSYSTEM\ PUMP\ ACTIVE:10$ 

0x0AEF FUELSYSTEM PUMP SWITCH:10

0x0AA8 FUELSYSTEM PUMP ACTIVE:11

0x0AA9 FUELSYSTEM PUMP SWITCH:11

0x0AF2 FUELSYSTEM PUMP ACTIVE:12

0x0AF3 FUELSYSTEM PUMP SWITCH:12

0x0AF6 FUELSYSTEM PUMP ACTIVE:13

0x0AF7 FUELSYSTEM PUMP SWITCH:13

0x0AFA FUELSYSTEM PUMP ACTIVE:14

0x0AFB FUELSYSTEM PUMP SWITCH:14

0x0AFC FUELSYSTEM PUMP ACTIVE:15

0x0AFD FUELSYSTEM PUMP SWITCH:15

0x0AFE FUELSYSTEM PUMP ACTIVE:16

0x0AFF FUELSYSTEM PUMP SWITCH:16

- **5.** Indexed simvar FUELSYSTEM ENGINE PRESSURE added to same offset as legacy simvar GENERAL ENG FUEL PRESSURE for all 4 engines. This new simvar is read-only.
- 6. New ini parameter KillLuasOnSimStop added.
- 7. Experimental (and currently undocumented) new feature added to allow FSUIPC7 to be ran on an FS client PC.

## **Version 7.2.12 (5th November 2021)**

- 1. WAPI updated to v0.5.5L correction for when connection restarted in same session
- **2.** Added new ini parameter to help with issues with Windows 11 experienced by some users: **DisableMSFSMonitor**
- 3. Code improvements to lua thread close down and crash handling
- **4.** Following simvars added to offsets, all 8 byte floats:
  - 0x7C00 EMPTY WEIGHT PITCH MOI
  - 0x7C08 EMPTY WEIGHT ROLL MOI
  - 0x7C10 EMPTY WEIGHT YAW MOI
  - 0x7C18 EMPTY WEIGHT CROSS COUPLED MOI
  - 0x7C20 TOTAL WEIGHT PITCH MOI
  - 0x7C28 TOTAL WEIGHT ROLL MOI
  - 0x7C30 TOTAL WEIGHT YAW MOI
  - 0x7C38 TOTAL WEIGHT CROSS COUPLED MOI
- **5.** Following 2-byte simvars added to offsets
  - 0x07CE AUTOPILOT HEADING LOCK DIR:3
  - 0x07F8 AUTOPILOT VERTICAL HOLD VAR:3
- **6.** Correction for some issues starting programs from the [Programs] ini section
- 7. Method to determine MS Store vs Steam install changed no longer relying on MSFS registry entries

# Version 7.2.11 (21st October 2021)

- **1.** WASM module updated to version 0.5.5: changed to recognise hvars (in \*.hvar files) without the preceding 'H:'
- 2. Key presses assigned to buttons now distinguish between the left and right Alt and Shift modifiers.
- 3. New simulator variable GPS OVERRIDDEN added to offset 0x0C7D
- 4. Simulator variable GPS DRIVES NAV1 at offset 0x132C now writeable
- 5. Updated to MSFS SDK 0.15.0.0

### **Version 7.2.10 (14th September 2021)**

- 1. Fixed fault/exception thrown in FSUIPC7 when MSFS exits
- 2. WAPI updated to v0.5.4: minor correction to isRunning() function.

### **Version 7.2.9 (10<sup>th</sup> September 2021)**

- 1. Fixed bug causing a CTD when using the UD size/type specifier in the [LvarsToOffsets] ini section.
- 2. Added simvar Local Day Of Week to offset 0x026C as an unsigned byte
- **3.** Fixed bug that cause some lua event.offset callbacks to be dropped
- 4. MSFS SDK updated to 0.14.1.0

## Version 7.2.8 (27th August 2021)

- 1. WASM updated to 0.5.4: lvar/hvar names restricted to MAX\_VAR\_NAME\_SIZE characters (currently set to 56)
- 2. Corrections to updating lvars via offsets, especially for F (float) types

## Version 7.2.7 (23<sup>rd</sup> August 2021)

- 1. Lights Potentiometer Set controls/Events flagged as axes controls
- 2. Double quotes removed from ICAO model, type and designator offsets
- 3. WASM/WAPI updated to v0.5.3:
  - number of lvar CDAs increased from 12 to 14, to support up to 2044 vars per aircraft
- correction to bug where wrong lvar value passed to lvar update callback when not in 1st CDA (id above 1023)

# **Version 7.2.6 (25th August 2021)**

1. Bug fix: correction to bug in lvar.hvar access introduced in last release

## Version 7.2.5 (3<sup>rd</sup> August 2021)

- 1. Updated to MSFS SDK v0.14.0.0
- **2.** Offset 0x3124 updated to contain 0 when not connected to MSFS, so can be used to determine connection status
- **3.** WAPI interface (providing access to lvars/hvars) not enabled if WASM module not installed in Community folder

#### Version 7.2.4 (28th July 2021)

- 1. Additional correction to running programs from the [Programs] section.
- 2. Hot key now also restores the FSUIPC main window when minimised to the task bar.
- **3.** New simvars for GEAR type added to bitwise oriented offset 0x05D6:
  - IS GEAR WHEELS bit 0/0x1
  - IS GEAR SKIS bit 1/0x2
  - IS GEAR FLOATS bit 2/0x4
  - IS GEAR SKIDS bit 3/0x8

### Version 7.2.3 (23rd July 2021)

- 1. Correction to running programs from the [**Programs**] section when the program file spec is contained in quotes and when any program arguments contain file paths.
- **2.** Key input events (i.e. Key strokes recognised via simconnect) updated to include all those marked as Ok in SDK 0.13.0.0 documentation.
- **3.** WASM module updated to clear config CDA when MSFS goes back to main menu. This fix allows a callback to be issued when the same config data (i.e. same aircraft loaded) is written to the config data CDA so that the [Auto.xxx] section may be actioned.

### Version 7.2.2 (13th July 2021)

- 1. New lua function added: ipc.ReloadWASM()
- 2. Flagged Anti Ice Gradual Set Eng controls as axes controls
- 3. Updated to clear lvar set CDA after being used so that the same command can be resent
- **4.** Changed starting of autos (lua and macro) until after lvars have been loaded, when the WAPI has been enabled.
- **5.** WASM / WAPI updated to 0.5.2. Changes include:
- allow hvars to be loaded from WASM persistent storage area (i.e. under User' MSFS Package folder)
  - MobiFlight event files now optionally installed via installer
  - additional hvar files provided

### **Version 7.2.1 (22nd June 2021)**

- **1.** Fixed bug preventing luas from auto-starting when FSUIPC7 is started when MSFS is in a paused state.
- **2.** The following additional simvars have been added to offsets:

AUTOPILOT GLIDESLOPE ACTIVE AUTOPILOT GLIDESLOPE ARM SIMULATION TIME BUS LOOKUP INDEX BUS CONNECTION ON:6

#### **Version 7.2.0 (8th June 2021)**

- 1. Corrections to the state of AI traffic in AI traffic tables/offsets
- **2.** Logging of slope adjustments removed when slope is 0 (no adjustment)
- 3. New FSUIPC control added: Trigger Auto-save, used to manually trigger an auto-save.
- **4.** New facility added to enable lvars to be added to offsets (via ini only at the moment) for both reading and writing.
- **5.** WAPI/WASM updated to v0.5.1
- **6. AUTOPILOT VS SLOT INDEX** simvar added to offset 0x02FC
- 7. Enabled write to offset 0x0818 AUTOPILOT ALTITUDE LOCK VAR:3. Write in feet, uses AP ALT VAR SET ENGLISH control
- **8.** Updated to MSFS SDK 0.13.0 and added the following new controls/events: Gps Obs On

Gps Obs Off

Gps Obs Set

Gps Obs Inc

Gps Obs Dec

Gps Obs

Adf Active Set

Adf Stby Set

Adf2 Active Set

Ap Pitch Ref Set

Ap Avionics Managed On

Ap Avionics Managed Off

Ap Avionics Managed Toggle

Ap Avionics Managed Set

- 9. Increased number of entries allowed under [AlsoManage] ini section from 32 to 64
- 10. Flagged LIGHT\_POTENTIOMETER SET as axis control

## Version 7.1.0 (9th May 2021)

- 1. Added indexed simvar TURB ENG IGNITION SWITCH EX1 (:1/2/3/4) as 1 byte offsets (read/write) to offset area at 0x02C0/1/2/3.
- **2.** Updated to recognise up to 128 buttons in Buttons Assignment panel.
- **3.** Added integration to the FSUIPC WASM module to provide lvar access as in FSUIPC5/6 (i.e. via macros and lua scripts)
- 4. Additional lua functions added to read/write lvars as strings: readLvarSTR, writeLvarSTR
- **5.** Additional lua function added to activate hvars (**activateHvar**) + allow hvars to be used in macros
- 6. WASM menu added to Add-ons menu when FSUIPC WASM detected
- 7. Read-only protection removed from offsets A000 A200 to allow them to be used as free user offsets, as documented,

## Version 7.0.9 (14th April 2021)

1. Rebuild against SDK 0.12.0.0 for MSFS 1.15.7.0

#### Version 7.0.8 (12th March 2021)

- 1. Correction to bug in offset monitoring
- 2. Bug fix to start axes scanning when FSUIPC7 started and MFS already running with a flight loaded

### Version 7.0.7 (18th March 2021)

- 1. Starting of [Auto] luas changed to when ready-to-fly
- 2. Default stall times updated
- 3. Transponder offset 0x0354 corrected and now working
- 4. Monitor facility bug corrected

5. Killing of luas threads updated to prevent lock

### Version 7.0.6 (10<sup>th</sup> March 2021)

- 1. Re-compiled against MSFS SDK v0.11.0.0
- 2. Changes to internal re-connection timers.
- 3. JAVA SDK by Mouseviator updated to v1.1

# **Version 7.0.5 (17<sup>th</sup> February 2021)**

- 1. Fixed bug that caused issues when loading multiple event (\*.evt) files
- 2. Increased allowable initial stall time from 100 to 200s
- 3. Updated to MSFS SDK version 0.10.0.0
- 4. Further offsets added:

0x0290 - AUTOPILOT ALTITUDE SLOT INDEX

0x0294 - AUTOPILOT HEADING SLOT INDEX

0x0298 - AUTOPILOT SPEED SLOT INDEX

0x029D - APU SWITCH

## **Version 7.0.4 (9th January 2021)**

- 1. Fixed bug in key assignments to allow assignment to numpad keys with numlock off (PgDn, End, etc)
- 2. Correction to registry scanning that caused a crash when a non-existant device found
- 3. Initial button delay now working, and improvements for a more accurate repeat rate (esp. with virtual buttons)
- 4. Further controls added from 0.9.0.0 SDK
- 5. Lua event.cancel() function corrected to cancel all events on the argument function (previously only cancelled first found)
- 6. Further offsets added:

0x0C10: GEAR CENTER STEER ANGLE

0x0C46: AUTOBRAKES ACTIVE

0c0C47 LIGHT BRAKE ON

- 7. Added command-line option '-auto' that, when present, removes the 'Exit with FS' option and makes this mandatory (used when auto-starting FSUIPC7 from MSFS EXE.dll)
- 8. Added new ini parameter **AdjustNavForMagVar** that adjusts the Nav1/2 in offsets 0x0870 &7 0x0844 with magnetic variation
- 9. Profile creation update to allow an empty axis profile to be created (i.e. when creating a new axis profile and not importing General axes)
- 10. Installer updated to start FSUIPC7 automatically with MSFS (from MSFS's EXE.xml). The desktop icon is still available, but this no longer starts FSUIPC7 it will start MSFS and display a splash screen for 30s.

# **Version 7.0.3 (24th December 2020)**

- 1. New \* EX1 controls added for throttle and prop pitch
- 2. Console window position correction for -ve values
- 3. Autobrake offset added for A320Neo (0x0260)
- 4. Reverted pushback direction select control (was reverted due to an SDK error that has now been corrected)
- 5. Offset 0x0278 re-activated (Autocord Set)
- 6. Re-enabled offset 0x2F58 for write (Fuel Selected Transfer Mode)
- 7. Increased max parameter allowed for autobrake offset 0x2F80 to 6 (was 5)
- 8. Arrow keys re-mapped for key input to allow assignment
- 9. Added offsets for main control surface slopes (calibration) at offset 0x08A2
- 10. Offsets for ALTITUDE and ATTITUDE FREEZE ON added at offsets 0x081C and 0x081D (although these are currently not populayed correctly for most, if not all, aircraft)

#### **Version 7.0.2 (November 2020)**

- 1. Re-compiled against MSFS SDK 0.8.0.0
- 2. Additional pause (sleep) control added
- 3. Add-on controls now correctly annotated
- 4. Allow **DontLogThese** ini parameter to be used in [Profile.xxx] sections (to be profile specific)
- 5. Allow **MaxSteerSpeed** (ini parameter) to be set dynamically from a user-defined offset. Also additional control added to allow **MaxSteerSpeed** to be modified.
- 6. List of axes controls updated
- 7. Alt key modifier re-activated, i.e. can now use as a modifier both when assigning keypresses and sending key presses to the sim
- 8. Added sim variable AUTOPILOT ALTITUDE LOCK VAR:3 at offset 0x0818
- 9. Correction to bug in loading macro files that only accessed L:vars (only 1st was recognised)

#### **Version 7.0.1 (November 2020)**

- 1. Re-compiled against MSFS SDK 0.7.1.0
- 2. Fix for bug in lua sound.play
- 3. Correction to reconnection process when MSFS restarted and FSUIPC left running
- 4. Minor update to the Delphi SDK

#### **Version 7.0.0 (November 2020)**

1. Initial release

Published by John Dowson, September 2024

Support Forum: Pete Dowson's Support Forum