project magenta

FSUIPC Offsets

Quick reference - November 2026

How to use this list

What	The FSUIPC offsets for Prepar3D (FSUIPC6) and Microsoft Flight Simulator 2020 / 2024 (FSUIPC7), by subject, in offset order.
Source	Pete and John Dowson's FSUIPC offset lists: FSUIPC6 version 6.2.2, FSUIPC7 Offset Status 0.8.5 (September 2026). Shortened. Their documents rule: www.fsuipc.com
Offset	Hexadecimal.
Bytes	The size of the value.
P3D, MSFS	R = read works. W = write works. (R) (W) = probably works. R? W? = not tested. - = does not work. Empty = FSUIPC does not list it for that simulator.
Var	The simulator variable behind the offset in MSFS.
More	"More: FSUIPC list." means the full text is longer. Read it in the FSUIPC Offsets Status document.
Old	Offsets of FS2004 and earlier that FSUIPC 6 and 7 no longer list are at the end.
Ours	The Project Magenta offsets have a list of their own: PMOffsets.pdf.
Help	support@projectmagenta.com

Flight files

Offset	Bytes	Use	P3D	MSFS
0000	32	Reserved for diagnostics	-	-
0020	4	Ground altitude, metres * 256. See 0B4C. Var: GROUND ALTITUDE	R	R? W?
0024	256	Read: start-up flight name with path, zero terminated. Write: overrides values FSUIPC gives to its clients. One write of offset (2 bytes), length (2 bytes, max 252), data. Cancel: the same with length 0. More: FSUIPC list.	R	R
012C	1	The name of the current Log book	-	-
0130	256	Flight plan, path and file name (UNC with WideFS). Write to load a flight (fxml format; for an old .flt write name.flt.flt).	R W	R W

Time, date, simulator state

Offset	Bytes	Use	P3D	MSFS
0230	8	Absolute time, seconds, float64. Said to count from noon, 1 January, year 0. Var: ABSOLUTE TIME	R	(R)
0238	1	Local hour (0-23) Var: LOCAL TIME	R	(R) W?
0239	1	Local minute (0-59) Var: LOCAL TIME	R	(R) W?
023A	1	Second (0-59). To set: only the control KEY CLOCK SECONDS ZERO. Var: LOCAL TIME	R W	(R) W?
023B	1	Zulu hour Var: ZULU TIME	R W	(R) W?
023C	1	Zulu minute Var: ZULU TIME	R W	(R) W?

023D	1	Zulu day of month (from 1) Var: ZULU DAY OF MONTH	R	(R)
023E	2	Day number in the year (from 1) Var: ZULU DAY OF YEAR	R	(R) W?
0240	2	Zulu year Var: ZULU YEAR	R	(R) W?
0242	1	Zulu month Var: ZULU MONTH OF YEAR	R	(R)
0243	1	Zulu day of week Var: ZULU DAY OF WEEK	R	(R)
0244	1	Local month Var: LOCAL MONTH OF YEAR	R	(R)
0245	1	Local day of month Var: LOCAL DAY OF MONTH	R	(R)
0246	2	Local time offset from Zulu, minutes. + = behind Zulu, - = ahead. Var: TIME ZONE OFFSET	R	(R)
0248	2	Season: 0=Winter, 1=Spring, 2=Summer, 3=Fall	R	R?
024A	2	Local year Var: LOCAL YEAR	R	(R)
024C	4	Free FS memory, KB, updated every 10 s. See 0258, 0290.	R	-
0250	1	AI Airline Traffic Density % (0-100)	R W	-
0251	1	AI General Aviation Traffic Density % (0-100)	R W	-
0252	1	AI Ships & Ferries Traffic Density % (0-100)	R W	-
0254	1	Cloud cover density: 5=low to 8=max. Writing moves the slider; effect on the clouds not known.	R W?	-
0255	1	Clouds: 0=simple, 1=complex. Writing changes the setting; effect on the clouds not known.	R W?	-
0256	1	Thermal visualisation: 0=none, 1=natural, 2=schematic	R	-
0258	4	Memory used by FSUIPC, bytes. See 024C.	R	R
025C	4	AI aircraft, total. On the ground: 02A2. In the air: 02A4.	R	R
0260	2	Autobrake, A320neo only: 0=off, 1=lo, 2=med, 3=max. Right only after the first change of setting.		R
0262	2	Pause control: 0x1 = full pause, 0x8 = sim pause. No other pause state from here.	W	W
0264	2	Pause states, flags: 0x1 full pause, 0x2 old FSX pause (unused), 0x4 active pause, 0x8 sim pause (traffic runs), 0x10 Esc pause. Several can be set at once.	R	R
0266	2	Centre (nose or tail) wheel RPM Var: CENTER WHEEL RPM	R	(R)
0268	2	Left wheel RPM Var: LEFT WHEEL RPM	R	(R)
026A	2	Right wheel RPM Var: RIGHT WHEEL RPM	R	(R)
026C	1	Local day Var: LOCAL DAY OF WEEK	R	R
026D	1	Camera state, read or write: 2=cockpit, 3=external/chase, 4=drone, 5=fixed on plane, 6=environment, 7=six DoF, 8=gameplay, 9=showcase, 10=drone aircraft, 11=waiting, 12=world map, 13=hangar RTC, 14=hangar custom, 15=menu RTC, 16=in-game RTC, 17=replay, 19=drone top-down, 21=hangar, 24=ground, 25=follow traffic Var: CAMERA STATE		R W

026E	1	Camera substate, read or write: 1=locked, 2=unlocked, 3=quickview, 4=smart, 5=instrument Var: CAMERA SUBSTATE		R W
026F	1	Camera view type, read or write: 0=default, 1=pilot view, 2=instruments, 3=quickview, 4=quickview external, 5=view (showcase, drone, fixed, environment) Var: CAMERA VIEW TYPE AND INDEX:0		R W
0270	1	As 026F, as a number Var: CAMERA VIEW TYPE AND INDEX:1		R W
0271	1	Camera zoom focus: 0=auto, 1=manual. Cockpit and chase cameras. Var: GAMEPLAY CAMERA FOCUS		R W
0272	1	1 = on a runway Var: ON ANY RUNWAY		R
0273	1	1 = in a cloud Var: AMBIENT IN CLOUD		R
0274	2	Frame rate = 32768 / this value	R	R
0278	2	Broken: a simulator bug. Var: AUTO COORDINATION	R	(R) (W)
0280	1	Lights: NAV, TAXI, PANEL and WING together. Separate switches: 0D0C.	R W	R? W?
0281	1	Beacon and strobe lights. Separate switches: 0D0C.	R W	R? W?
0284	2	ADF1 Standby Frequency: main 3 digits, BCD. 1234.5 = 0x0234 here, 0x0105 in 0286. Var: ADF STANDBY FREQUENCY:1	R	(R) W?
0286	2	Extended ADF1 Standby Frequency: High byte = 1000s digit, low byte = fraction: 1234.5 = 0x0105	R	R? W?
0288	2	ADF2 Standby Frequency: main 3 digits, BCD. 1234.5 = 0x0234 here, 0x0105 in 0286. Var: ADF STANDBY FREQUENCY:2	R	(R) W?
028A	2	Extended ADF2 Standby Frequency: High byte = 1000s digit, low byte = fraction: 1234.5 = 0x0105	R	R? W?
028C	1	Landing lights. See 0D0C.	R W	R? W?
028D	1	Brake parking indicator		R
0290	4	Largest free FS memory block, KB, updated every 10 s. See 024C. Var: AUTOPILOT ALTITUDE SLOT INDEX	R	-
0294	4	Autopilot heading slot index		R W
0298	4	Autopilot speed slot index		R W
029B	1	Alternate static air source (0=off, 1=on) Var: ALTERNATE STATIC SOURCE OPEN	R W	R W
029C	1	Pitot Heat switch (0=off, 1=on) Var: PITOT HEAT	R W	R W
029D	1	Apu switch		R

Speeds, ADF 2, DME, pressurisation, pushback, radio frequencies

Offset	Bytes	Use	P3D	MSFS
02A0	2	Magnetic variation, signed, - = west. Degrees: *360/65536. Magnetic = true - this. Var: MAGVAR	R	(R)
02A2	2	AI aircraft on the ground. See 025C.	R	R
02A4	2	AI aircraft in the air. See 025C.	R	R
02B2	2	Zoom factor: 64 = x1, 128 = x2 ...	W	-

02B4	4	Ground speed, metres/sec * 65536. Not updated in slew. Var: GROUND VELOCITY	R	(R)
02B8	4	TAS, knots * 128 Var: AIRSPEED TRUE	R	(R) W?
02BC	4	IAS, knots * 128 Var: AIRSPEED INDICATED	R	(R) W?
02C0	1	Turb eng ignition switch ex1:1		R W
02C1	1	Turb eng ignition switch ex1:2		R W
02C2	1	Turb eng ignition switch ex1:3		R W
02C3	1	Turb eng ignition switch ex1:4		R W
02C4	4	Barber pole speed, knots * 128 Var: AIRSPEED BARBER POLE	R	(R)
02C8	4	Vertical speed, signed, metres/sec * 256. ft/min: * 60 * 3.28084 / 256. Var: VERTICAL SPEED	R	(R)
02CC	8	Whiskey compass, degrees, float64 Var: WISKEY COMPASS INDICATION DEGREES	R	(R) W?
02D4	2	ADF2 Frequency: main 3 digits, BCD. See 02D6. 1234.5 = 0x0234 here, 0x0105 in 02D6. Var: ADF ACTIVE FREQUENCY:2	R	(R) W?
02D6	2	Extended ADF2 frequency. High byte = 1000s digit, low byte = fraction: 1234.5 = 0x0105. Var: ADF ACTIVE FREQUENCY:2	R	R? W?
02D8	2	ADF2 relative bearing to the NDB. Degrees: *360/65536, - = left. Var: ADF RADIAL:2	R?	R?
02DC	6	ADF2 IDENTITY, string, zero terminated Var: ADF IDENT:2	R	(R)
02E2	25	ADF2 name, string, zero terminated Var: ADF NAME:2	R	(R)
02FB	1	ADF2 morse ID sound: 1=on, 0=off. Read and write. Var: ADF SOUND:2	R?	R? W?
02FC	4	Autopilot vs slot index		R? W?
0300	2	VOR1 DME distance, nm * 10 Var: NAV DME:1	R	(R)
0302	2	VOR1 DME speed, kts * 10 Var: NAV DMESPEED:1	R	(R)
0304	2	VOR1 DME time to station, secs * 10	R	R?
0306	2	VOR2 DME distance, nm * 10 Var: NAV DME:2	R	(R)
0308	2	VOR2 DME speed, kts * 10 Var: NAV DMESPEED:2	R	(R)
030A	2	VOR2 DME time to station, secs * 10	R	R?
030C	4	Vertical speed, copy of 02C8 while airborne, frozen while on ground (0366). Gives the touchdown rate. Watch for bounces. Var: VERTICAL SPEED	R	R?
0310	8	Timer, elapsed seconds, float64, updated each tick (1/18 s). See 0368.	R	R?
0318	4	Cabin altitude now, feet Var: PRESSURIZATION CABIN ALTITUDE	W?	R?
031C	4	Cabin altitude goal, feet Var: PRESSURIZATION CABIN ALTITUDE GOAL	W?	R?
0320	4	Cabin altitude change rate, feet/sec, float32 Var: PRESSURIZATION CABIN ALTITUDE RATE	R? W?	R?

0324	4	Cabin pressure differential, lbs/sq ft, float32: set - actual Var: PRESSURIZATION PRESSURE DIFFERENTIAL	R?	R?
0328	4	Pressurisation dump switch: 1=open, 0=closed Var: PRESSURIZATION DUMP SWITCH	W?	R? W?
032C	2	"Plane is in fuel box" flag	-	R?
032E	2	Reserved (used internally)	-	R?
0330	2	Altimeter setting, millibars * 16 Var: KOHLSMAN SETTING MB	R	(R) W?
0332	2	Altimeter secondary setting, millibars * 16. The G1000 gauge uses it. Var: KOHLSMAN SETTING MB:2	R	(R) W?
0334	4	Pushback angle, radians, float32 Var: PUSHBACK ANGLE	R	(R)
0338	4	Pushback X contact, feet, float32 Var: PUSHBACK CONTACTX	R	(R)
033C	4	Pushback Y contact, feet, float32 Var: PUSHBACK CONTACTY	R	(R)
0340	4	Pushback Z contact, feet, float32 Var: PUSHBACK CONTACTZ	R	(R)
0344	2	Pushback wait flag (0 or 1) Var: PUSHBACK WAIT	R	(R)
0346	1	Surface condition: 0=normal, 1=wet, 2=icy, 3=snow Var: SURFACE CONDITION	R	(R)
0347	1	Surface info valid flag. Does not work. Var: SURFACE INFO VALID	-	-
0348	2	Structural ice formation quantity, 0 - 16384 Var: STRUCTURAL ICE PCT	R	(R)
034A	2	Pitot ice formation quantity, 0 - 16384 Var: PITOT ICE PCT	R	(R)
034C	2	ADF1 Frequency: main 3 digits, BCD. See 0356. 1234.5 = 0x0234 here, 0x0105 in 0356. Var: ADF ACTIVE FREQUENCY:1	R	(R) W?
034E	2	COM1 frequency, BCD, 4 digits: 123.45 = 0x2345, leading 1 assumed Var: COM ACTIVE FREQUENCY:1	R	(R) W?
0350	2	NAV1 frequency, BCD, 4 digits: 113.45 = 0x1345, leading 1 assumed Var: NAV ACTIVE FREQUENCY:1	R	(R) W?
0352	2	NAV2 frequency, BCD, 4 digits: 113.45 = 0x1345, leading 1 assumed Var: NAV ACTIVE FREQUENCY:2	R	(R) W?
0354	2	Transponder code, BCD: 0x1200 = 1200 Var: TRANSPONDER CODE:1	R	-
0356	2	Extended ADF1 frequency. High byte = 1000s digit, low byte = fraction: 1234.5 = 0x0105.	R	R? W?

Flight state, warnings, turn coordinator, trim

Offset	Bytes	Use	P3D	MSFS
0366	2	Aircraft on ground flag (0=airborne, 1=on ground). Not updated in Slew mode. Var: SIM ON GROUND	R	(R) W?
0368	4	Timer 2, float32. See 0310.	R	R?
036C	1	Stall warning (0=no, 1=stall) Var: STALL WARNING	R	(R)

036D	1	Overspeed warning (0=no, 1=overspeed) Var: OVERSPEED WARNING	R	(R)
036E	1	Slip ball: -128 = full left, +127 = full right, 0 = centred. Finer: 0380. Var: TURN COORDINATOR BALL	R	(R)
0371	1	Reserved for ASE weather control flags	-	R?
0372	2	Reliability % (0-100)	-	R?
0374	2	NAV1 or NAV2 select. Not used.	-	R?
0378	2	DME1 or DME2 select (1=DME1, 2=DME2) Var: SELECTED DME	R	(R) W?
037C	2	Turn rate: 0 = level, -512 = 2 min left, +512 = 2 min right. Finer: 0384. Var: DELTA HEADING RATE	R	(R) W?
0380	4	Slip ball, float32, -1.0 to +1.0 Var: TURN COORDINATOR BALL	R	(R)
0384	4	Turn rate, degrees/sec, float32. +/-3.0 = the 2 min marks. Var: DELTA HEADING RATE	R	(R)
03A0	4	1st FSUIPC monitored value (Logging tab), if numeric, float32	R	R?
03A4	4	2nd FSUIPC monitored value (Logging tab), if numeric, float32	R	R?
03A8	4	3rd FSUIPC monitored value (Logging tab), if numeric, float32	R	R?
03AC	4	4th FSUIPC monitored value (Logging tab), if numeric, float32	R	R?
03B0	8	Left aileron deflection, radians, float64 Var: AILERON LEFT DEFLECTION	R	(R)
03B8	8	Right aileron deflection, radians, float64 Var: AILERON RIGHT DEFLECTION	R	(R)
03C0	64	Buttons of joysticks 0 to 15: 16 values of 32 bits, bit 0 = button 0. Up to 128 buttons: 7F00.	R	-
0400	128	Name of the last flight saved, zero terminated, no file type. Change counter: 3BD2.	R	R?
0480	8	Aileron trim axis input, float64, read only	W?	R?
0488	8	Rudder trim axis input, float64, read only	W?	R?
0490	8	Aileron trim wanted, float64. With bit 0 of 04A0 set, this goes to the FS trim (2EB0) instead of 0480.	-	R? W?
0498	8	Rudder trim wanted, float64. With bit 1 of 04A0 set, this goes to the FS trim (2EC0) instead of 0488.	-	R? W?
04A0	1	Trim disconnect: bit 0 = aileron trim (2EB0), bit 1 = rudder trim (2EC0). Clears itself after about 10 s: write it every few seconds.	R?	R? W?
04A8	8	Elapsed simulated seconds, float64. Stops in pause and menus, follows the sim rate.	R	R?

Surface weather, design speeds, initial position

Offset	Bytes	Use	P3D	MSFS
04B0	48	Area reserved by FSUIPC	-	R?
04B4	2	Not used (was adventure weather)	R?	-
04BA	2	Not used (was adventure weather)	R?	-
04BC	2	Not used (was adventure weather)	R?	-
04C0	2	Not used (was adventure weather)	R?	-
04C2	2	Not used (was adventure weather)	R?	-
04C4	2	Not used (was adventure weather)	R?	-
04C6	2	Not used (was adventure weather)	R?	-
04C8	2	Surface dew point, degrees C * 256, read only	R?	-

04CB	1	Precipitation rate, 0-5, read only	W?	-
04CC	1	Precipitation type: 0=none, 1=rain, 2=snow. Read only.	W?	-
04CD	1	Not used (was adventure weather)	R? W?	-
04CE	1	Not used (was adventure weather)	W?	-
04CF	1	Not used (was adventure weather)	W?	-
04D2	2	Precipitation control: high byte = type 0-2, low byte = rate 0-5. 0xFFFF gives control back to FS.	-	-
04D4	2	Surface dew point control, degrees C * 256. 0x8000 gives control back to FS.	-	-
04D6	2	0xFADE when FSUIPC's weather interface is ready	R	-
04D8	2	Surface wind speed, knots. Wind at the aircraft: 0E90.	R?	-
04DA	2	Surface wind direction, magnetic. Degrees: *360/65536. Wind at the aircraft: 0E92.	R?	-
04DE	2	Weather option control: not supported	-	-
04E0	88	Area reserved for Project Magenta	-	R? W?
0538	8	Design speed VS0 (stall, full flaps), ft/sec, float64 Var: DESIGN SPEED VS0	R	(R)
0540	8	Design speed VS1 (stall, clean), ft/sec, float64 Var: DESIGN SPEED VS1	R	(R)
0548	8	Design speed VC (cruise), ft/sec, float64 Var: DESIGN SPEED VC	R	(R)
0550	8	Minimum drag speed, ft/sec, float64 Var: MIN DRAG VELOCITY	R	(R)
0558	4	Initial position: airspeed, knots. Write it in one IPC write with the fields that follow (on ground, lat, lon, alt, pitch, bank, heading). Alone: sets the speed where the aircraft is.	-	R? W?
055C	4	Initial position: 1 = on ground, 0 = in flight. Write it in one IPC write with the fields that follow. On ground sets speed 0.	W	R? W?

Position, attitude, COM frequencies

Offset	Bytes	Use	P3D	MSFS
0560	8	Latitude, FS units, 64 bits. Degrees: * 90 / (10001750 * 65536 * 65536). Easier: 6010. Var: PLANE LATITUDE	R W	(R) W?
0568	8	Longitude, FS units, 64 bits. Degrees: * 360 / (65536 * 65536 * 65536 * 65536). Easier: 6018. Var: PLANE LONGITUDE	R W	(R) W?
0570	8	Altitude, metres: whole metres in 0574, fraction in 0570. Write to move the aircraft. Easier: 6020. Var: PLANE ALTITUDE	R W	(R) W?
0578	4	Pitch. Degrees: *360/(65536*65536). - = up, + = down. Var: PLANE PITCH DEGREES	R	(R) W?
057C	4	Bank. Degrees: *360/(65536*65536). - = right, + = left. Var: PLANE BANK DEGREES	R	(R) W?
0580	4	Heading, true. Degrees: *360/(65536*65536). Var: PLANE HEADING DEGREES TRUE	R	(R) W?
0584	4	Which of lat, lon, alt, pitch, bank, heading (0560-0580) FS updated at the time in 0588. Bits: 0=lat, 2=lon, 4=alt, 6=pitch, 7=bank, 8=heading	R	R?
0588	8	Real time, seconds, float64, of the last update of 0560-0580	R	R?
0590	4	Indicated altitude at the current sea level pressure, feet Var: INDICATED ALTITUDE CALIBRATED		-

05C4	4	Active COM1 frequency in Hz Var: COM ACTIVE FREQUENCY:1	R	-
05C8	4	Active COM2 frequency in Hz Var: COM ACTIVE FREQUENCY:2	R	-
05CC	4	Standby COM1 frequency in Hz Var: COM STANDBY FREQUENCY:1	R	-
05D0	4	Standby COM2 frequency in Hz Var: COM STANDBY FREQUENCY:2	R	-

Smoke, slew, aircraft type and equipment, nearest airports

Offset	Bytes	Use	P3D	MSFS
05D4	2	1 = smoke system available Var: SMOKESYSTEM AVAILABLE	W?	R?
05D6	1	Gear type flags: 0x1 wheels, 0x2 skis, 0x3 floats, 0x4 skids Var: IS GEAR WHEELS	R W	R?
05D8	2	Smoke: 1=on, 0=off. See 05D4. Var: SMOKE ENABLE	R?	R? W?
05DC	2	Slew mode: 0=off, 1=on. Read and write. See 05DE. Var: IS SLEW ACTIVE	R	(R) W?
05E4	2	Slew roll rate: 0 = none, - = right, + = left. 192 = one roll a minute.	-	R? W?
05E6	2	Slew yaw rate: 0 = none, - = right, + = left. 24 = one turn a minute.	-	R? W?
05E8	2	Slew vertical rate: 16384 = none, above = down, below = up. One key press = 512.	-	R? W?
05EB	1	Slew forward/back: + = back, - = forward, 1-127 slow to fast	-	R? W?
05ED	1	Slew sideways: + = right, - = left, 1-127 slow to fast	-	R? W?
05EE	2	Slew pitch rate: 16384 = none, below = up, above = down, 0-32767	-	R? W?
05F4	2	Slew mode display: 0=off, 1=coords/hdg/spd, 2=fps, 3=all	-	R?
05FC	2	Flight mode display: 0=off, 1=coords/hdg/spd, 2=fps, 3=all	-	R?
0609	1	Engine type: 0=piston (and some helicopters), 1=jet, 2=none (sailplane), 3=helicopter turbine, 4=rocket (unsupported), 5=turboprop Var: ENGINE TYPE	R	(R)
060C	1	1 = retractable gear, 0 = fixed Var: IS GEAR RETRACTABLE	R	(R)
0614	2	Left float extension: 0 = retracted, 16384 = extended Var: RETRACT LEFT FLOAT EXTENDED	R	(R)
0616	2	Right float extension: 0 = retracted, 16384 = extended Var: RETRACT RIGHT FLOAT EXTENDED	R	(R)
0618	16	ICAO Designator: From aircraft.cfg		R W?
0628	4	Instant replay: 1=on, 0=off. Write while play time remains (062C).	-	-
062B	1	1 = in the main menu (not the Esc menu) Var: PLANE IN PARKING STATE		R? W?
062C	4	ICAO airline, 3 characters + 0. From aircraft.cfg.	-	R?
0630	36	Idents, 6 characters each, of the 6 nearest airports in 0658		R?
0654	4	Speed along the ground normal at the last touchdown, feet/sec, float32 Var: PLANE TOUCHDOWN NORMAL VELOCITY		R?
0658	120	The 6 nearest airports, nearest first. 20 bytes each: ICAO (4), latitude, longitude (degrees, float32), altitude (feet, float32), distance (nm). Updated when the aircraft moves one minute of arc. 6-character idents: 0630.	R?	R?

06D0	144	FSUIPC feedback flight control (bank, pitch, speed, yaw). See the TXT document in the FSUIPC SDK.	R	R? W?
0760	4?	Video recording: 1=on, 0=off	-	R?
0764	4	Autopilot available Var: AUTOPILOT AVAILABLE	R	(R)
0778	4	Flaps available Var: FLAPS AVAILABLE	R	(R)
077C	4	Stall horn available Var: STALL HORN AVAILABLE	R	(R)
0780	4	Engine mixture available Var: ENGINE MIXURE AVAILABLE	R	(R)
0784	4	Carb heat available Var: CARB HEAT AVAILABLE	R	(R)
078C	4	Spoiler available Var: SPOILER AVAILABLE	R	(R)
0790	4	Aircraft is tail dragger Var: IS TAIL DRAGGER	R	(R)
0794	4	Strobes available Var: STROBES AVAILABLE	R	(R)
0798	4	Duplicate of 0818. Use 0818. Var: AUTOPILOT ALTITUDE LOCK VAR:3		(R) (W)
079C	4	Toe brakes available Var: TOE BRAKES AVAILABLE	R	(R)
07A0	4	NAV1 available Var: NAV AVAILABLE:1	R	(R)
07A4	4	NAV2 available Var: NAV AVAILABLE:2	R	(R)
07A8	1	1 = modern [FUEL SYSTEM], 0 = legacy [FUEL] Var: NEW FUEL SYSTEM		(R)
07A9	1	1 = new electrical system, 0 = legacy FSX one Var: NEW ELECTRICAL SYSTEM		(R)
07AA	1	1 = external power available Var: EXTERNAL POWER AVAILABLE		(R)
07AB	1	External power switch: 1 = on Var: EXTERNAL POWER ON		(R)
07B6	1	Fly by wire ELAC switch Var: FLY BY WIRE ELAC SWITCH	W?	R? W?
07B7	1	Fly by wire ELAC computer failed flag Var: FLY BY WIRE ELAC FAILED	W?	R?
07B8	1	Fly by wire FAC switch Var: FLY BY WIRE FAC SWITCH	W?	R? W?
07B9	1	Fly by wire FAC computer failed flag Var: FLY BY WIRE FAC FAILED	W?	R?
07BA	1	Fly by wire SEC switch Var: FLY BY WIRE SEC SWITCH	W?	R? W?
07BB	1	Fly by wire SEC computer failed flag Var: FLY BY WIRE SEC FAILED	W?	R?

Autopilot, helicopter rotor

Offset	Bytes	Use	P3D	MSFS
07BC	4	Autopilot Master switch Var: AUTOPILOT MASTER	R	(R) W?

07C0	4	Autopilot wing leveller Var: AUTOPILOT WING LEVELER	R	(R) W?
07C4	4	Autopilot NAV1 lock Var: AUTOPILOT NAV1 LOCK	R	(R) W?
07C8	4	Autopilot heading lock Var: AUTOPILOT HEADING LOCK	R	(R) W?
07CC	2	Autopilot heading value, as degrees*65536/360 Var: AUTOPILOT HEADING LOCK DIR	R	(R) (W)
07CE	2	Autopilot target heading value, as degrees*65536/360 Var: AUTOPILOT HEADING LOCK DIR:3		(R) (W)
07D0	4	Autopilot altitude lock Var: AUTOPILOT ALTITUDE LOCK	R	(R) W?
07D4	4	Autopilot constrained altitude (limited by flight plan and profile), metres * 65536. Target altitude: 0818. Var: AUTOPILOT ALTITUDE LOCK VAR	R	(R) W?
07D8	4	Autopilot attitude hold Var: AUTOPILOT ATTITUDE HOLD	R	(R) W?
07DC	4	Autopilot airspeed hold Var: AUTOPILOT AIRSPEED HOLD	R	(R) W?
07E2	2	Autopilot airspeed value, in knots Var: AUTOPILOT AIRSPEED HOLD VAR	R	(R) W?
07E4	4	Autopilot mach hold Var: AUTOPILOT MACH HOLD	R	(R) W?
07E8	4	Autopilot mach value, as Mach*65536 Var: AUTOPILOT MACH HOLD VAR	R	(R) W?
07EC	4	Autopilot vertical speed hold Var: AUTOPILOT VERTICAL HOLD	R	(R) W?
07F2	2	Autopilot vertical speed value, ft/min. Write works only after one AP VS SET control. Var: AUTOPILOT VERTICAL HOLD VAR	R	R W
07F4	4	Autopilot RPM (N1) hold Var: AUTOPILOT RPM HOLD	R	(R) W?
07FA	2	Autopilot N1 hold value, 16384 = 100%. Writing rounds to whole %. Var: AUTOPILOT RPM HOLD VAR	R	(R) W?
07FC	4	Autopilot glideslope hold. Setting it also sets 0800. To clear both: write 0 to both in one FSUIPC call. Var: AUTOPILOT GLIDESLOPE HOLD	R	(R) W?
0800	4	Autopilot approach hold. See 07FC. Var: AUTOPILOT APPROACH HOLD	R	(R) W?
0804	4	Autopilot back course hold. See 07FC. Var: AUTOPILOT BACKCOURSE HOLD	R	(R) W?
0808	4	Yaw damper Var: AUTOPILOT YAW DAMPER	R	(R) W?
080C	4	Autothrottle TOGA (take off power) Var: AUTOPILOT TAKEOFF POWER ACTIVE	R	(R) W?
0810	4	Autothrottle Arm Var: AUTOPILOT THROTTLE ARM	R	(R) W?
0814	4	Flight analysis mode: 0=off, 1=landing, 2=course tracking, 3=manoeuvres	-	R?
0818	4	Autopilot target altitude, signed. Read: divide by 65536. Write: feet. Constrained altitude: 07D4. Var: AUTOPILOT ALTITUDE LOCK VAR:3		R W
081C	1	Not currently populated correctly Var: IS ALTITUDE FREEZE ON		-

081D	1	Not currently populated correctly Var: IS ATTITUDE FREEZE ON		-
081E	1	Rotor Brake Active (0=off, 1=on). Robinson helicopter only Var: ROTOR BRAKE ACTIVE	R	(R)
081F	1	Rotor Clutch Active (0=off, 1=on). Robinson helicopter only Var: ROTOR CLUTCH ACTIVE	R	(R)
0820	1	Rotor Chip Detected (0=off, 1=on). Robinson helicopter only Var: ROTOR CHIP DETECTED	R	(R)
0821	1	Rotor Gov Active (0=off, 1=on). Robinson helicopter only Var: ROTOR GOV ACTIVE	R	(R)
0822	2	Rotor brake application, 0 to 16384. Robinson helicopter only. No direct write: FSUIPC sends Rotor Brake controls until the value is reached. Var: ROTOR BRAKE HANDLE POS	R	(R) W?
0824	2	Rotor lateral trim (0 to 16384). Robinson helicopter only Var: ROTOR LATERAL TRIM PCT	R?	R? W?
0826	1	Rotor Gov switch (0=off, 1=on). Robinson helicopter only Var: ROTOR GOV SWITCH POS	R	(R) W?
0828	8	Rotor transmission temperature, degrees Rankine, float64. Not seen working. Var: ROTOR TEMPERATURE	R?	R?

Crash, VOR, ILS and DME positions

Offset	Bytes	Use	P3D	MSFS
0830	2	Action on crash (does not work). High bytes: see 0832, 0833.	-	R?
0832	1	Crash detection: 1=on, 0=off Var: REALISM CRASH DETECTION	W?	R?
0833	1	Crash with other aircraft: 1=on, 0=off Var: REALISM CRASH WITH OTHERS	W?	R?
0834	4	DME2 latitude, when separate. Units as 085C. Var: NAV DME LATLONALT:2	R	(R)
0838	4	DME2 longitude, when separate. Units as 0864. Var: NAV DME LATLONALT:2	R	(R)
083C	4	DME2 elevation, metres, when separate Var: NAV DME LATLONALT:2	R	(R)
0840	2	Crashed flag	R	R?
0842	2	Vertical speed, metres/min, - = up. ft/min: * -3.28084.	R?	R?
0844	2	NAV2 localiser inverse runway heading (ILS only). Degrees: *360/65536. 180 off the approach course. Var: NAV LOCALIZER:2	R	(R)
0846	2	NAV2 glideslope angle (ILS only). Degrees: *360/65536. Var: NAV RAW GLIDE SLOPE:2	R	(R)
084C	4	VOR2 latitude, as 085C. ILS: the localiser's. Var: NAV VOR LATLONALT:2	R	(R)
0850	4	VOR2 longitude, as 0864. ILS: the localiser's. Var: NAV VOR LATLONALT:2	R	(R)
0854	4	VOR2 elevation, metres. ILS: the localiser's. Var: NAV VOR LATLONALT:2	R	(R)
0858	4	VOR2 latitude, FS units. Degrees: *90/10001750. ILS: the glideslope transmitter's. Var: NAV GS LATLONALT:2	R	(R)

085C	4	VOR1 latitude, FS units. Degrees: *90/10001750. ILS: the glideslope transmitter's. Var: NAV GS LATLONALT:1	R	(R)
0860	4	VOR2 longitude, FS units. Degrees: *360/(65536*65536). ILS: the glideslope transmitter's.	R	(R)
0864	4	VOR1 longitude, FS units. Degrees: *360/(65536*65536). ILS: the glideslope transmitter's.	R	(R)
0868	4	VOR2 elevation, metres. ILS: the glideslope transmitter's.	R	(R)
086C	4	VOR1 elevation, metres. ILS: the glideslope transmitter's.	R	(R)
0870	2	NAV1 localiser inverse runway heading (ILS only). Degrees: *360/65536. 180 off the approach course. Var: NAV LOCALIZER:1	R	(R)
0872	2	NAV1 glideslope angle (ILS only). Degrees: *360/65536. Var: NAV RAW GLIDE SLOPE:1	R	(R)
0874	4	VOR1 latitude, as 085C. ILS: the localiser's. Var: NAV VOR LATLONALT:1	R	(R)
0878	4	VOR1 longitude, as 0864. ILS: the localiser's. Var: NAV VOR LATLONALT:1	R	(R)
087C	4	VOR1 elevation, metres. ILS: the localiser's. Var: NAV VOR LATLONALT:1	R	(R)
0880	4	DME1 latitude, when separate. Units as 085C. Var: NAV DME LATLONALT:1	R	(R)
0884	4	DME1 longitude, when separate. Units as 0864. Var: NAV DME LATLONALT:1	R	(R)
0888	1	Engine select flags: bit 0 = engine 1 ... bit 3 = engine 4. See 0892. Var: ENGINE CONTROL SELECT	R W	(R) (W)
0889	1	Rotor clutch switch: 1=on, 0=off. Read and write. Var: ROTOR CLUTCH SWITCH POS	R? W?	R? W?
088A	2	DME1 elevation, metres, when separate	R	(R)

Engines 1 to 4

Offset	Bytes	Use	P3D	MSFS
088C	2	Engine 1 throttle lever, -4096 to +16384. User input: write 089A, which 310A can disconnect. Var: GENERAL ENG THROTTLE LEVER POSITION:1	R W	(R) W?
088E	2	Engine 1 combustion flag: 1 = running Var: GENERAL ENG PROPELLER LEVER POSITION:1	R W	(R) W?
0890	2	Engine 1 mixture lever, 0 - 16384 Var: GENERAL ENG MIXTURE LEVER POSITION:1	R W	(R) W?
0892	2	Engine 1 starter / magnetos. Jet: 0=off, 1=start, 2=gen. Prop: 0=off, 1=right, 2=left, 3=both, 4=start Var: GENERAL ENG STARTER:1	R W	R W
0894	2	Engine 1 combustion flag: 1 = running Var: GENERAL ENG COMBUSTION:1	R	(R) W?
0896	2	Engine 1 N2, 16384 = 100%. Also turbine RPM % for helicopters. Var: TURB ENG N2:1	R W?	(R) W?
0898	2	Engine 1 N1, 16384 = 100%, or Prop RPM. RPM = value * RPM scaler (08C8) / 65536, negative for counter-rotating props. Var: TURB ENG N1:1	R W?	(R) W?
089A	2	Engine 1 throttle lever, -4096 to +16384, as an axis input: 310A can disconnect it. Last written value: 3330	-	-

08A0	2	Engine 1 fuel flow, pounds/hour at sea level standard. Not always kept. Var: RECIP ENG FUEL FLOW:1	R	(R) W?
08A2	1	Slope value for aileron		R W
08A3	1	Slope value for elevator		R W
08A4	1	Slope value for rudder		R W
08A5	1	Slope value for Steering Tiller		R W
08B2	2	Engine 1 anti-ice or carb heat switch: 1 = on Var: GENERAL ENG ANTI ICE POSITION:1	R	(R) W?
08B8	2	Engine 1 oil temperature, 16384 = 140 C Var: GENERAL ENG OIL TEMPERATURE:1	R	(R) W?
08BA	2	Engine 1 oil pressure, 16384 = 55 psi. Capped at 65535 = 220 psi. Var: GENERAL ENG OIL PRESSURE:1	R	(R) W?
08BC	2	Engine 1 pressure ratio (EPR), 16384 = 1.60 Var: TURB ENG PRESSURE RATIO:1	W?	R? W?
08BE	2	Engine 1 EGT, 16384 = 860 C Var: GENERAL ENG EXHAUST GAS TEMPERATURE:1	R	(R) W?
08C0	2	Engine 1 manifold pressure, inches Hg * 1024 Var: RECIP ENG MANIFOLD PRESSURE:1	R	(R) W?
08C8	2	Engine 1 RPM scaler, for props: see 0898. Turboprops: shaft RPM.	R	R?
08D0	4	Engine 1 oil quantity, 16384 = 100% Var: GENERAL ENG OIL LEAKED PERCENT:1	R	(R)
08D4	4	Engine 1 vibration, 16384 = 5.0 Var: TURB ENG VIBRATION:1	R	(R)
08D8	4	Engine 1 hydraulic pressure, about 4 * psi Var: HYDRAULIC PRESSURE:1	R	(R)
08DC	4	Engine 1 hydraulic quantity, 16384 = 100% Var: HYDRAULIC RESERVOIR PERCENT:1	R	(R)
08E4	1	Cloud type at the aircraft's altitude		-
08E8	8	Engine 1 CHT, degrees F, float64 Var: RECIP ENG CYLINDER HEAD TEMPERATURE:1	W?	R? W?
08F0	4	Engine 1 turbine temperature (ITT), degrees C * 16384 Var: ENG TURBINE TEMPERATURE:1	R? W?	R?
08F4	4	Engine 1 torque %, 16384 = 100%. Props: computed from 0920, for a maximum of 600 ft-lbs. Var: TURB ENG MAX TORQUE PERCENT:1	R?	R? W?
08F8	4	Engine 1 fuel pressure, psf (psi * 144) Var: GENERAL ENG FUEL PRESSURE:1	R?	R? W?
08FC	4	Engine 1 electrical load, scale not known Var: ENG ELECTRICAL LOAD:1	R?	R?
0900	4	Engine 1 Transmission oil pressure (psi * 16384). Helicopters. Var: ENG TRANSMISSION PRESSURE:1	W?	R?
0904	4	Engine 1 Transmission oil temperature (degrees C * 16384). Helicopters. Var: ENG TRANSMISSION TEMPERATURE:1	R? W?	R?
0908	4	Engine 1 Rotor RPM % (16384=100%). Helicopters. Var: ROTOR RPM PCT	W?	R?
090C	4	Engine 1 fuel used since start, pounds, float32 Var: GENERAL ENG FUEL USED SINCE START:1	R	(R)
0910	4	Engine 1 running time, hours, float32 Var: GENERAL ENG ELAPSED TIME:1	R	(R)
0918	8	Engine 1 fuel flow, pounds/hour, float64 Var: RECIP ENG FUEL FLOW:1	R	(R) W?

0920	4	Engine 1 torque, ft-lbs, float32. Not jets. Var: ENG TORQUE:1	R	(R)
0924	2	Engine 2 throttle lever, -4096 to +16384. User input: write 0932, which 310A can disconnect. Var: GENERAL ENG THROTTLE LEVER POSITION:2	-	R? W?
0926	2	Engine 2 prop lever, -4096 to +16384 Var: GENERAL ENG PROPELLER LEVER POSITION:2	-	R? W?
0928	2	Engine 2 mixture lever, 0 - 16384 Var: GENERAL ENG MIXTURE LEVER POSITION:2	-	R? W?
092A	2	Engine 2 starter / magnetos. Jet: 0=off, 1=start, 2=gen. Prop: 0=off, 1=right, 2=left, 3=both, 4=start Var: GENERAL ENG STARTER:2	-	R? W?
092C	2	Engine 2 combustion flag: 1 = running Var: GENERAL ENG COMBUSTION:2	-	R? W?
092E	2	Engine 2 N2, 16384 = 100% Var: TURB ENG N2:2	-	R? W?
0930	2	Engine 2 N1, 16384 = 100%, or Prop RPM. RPM = value * RPM scaler (08C8) / 65536, negative for counter-rotating props. Var: TURB ENG N1:2	-	R? W?
0932	2	Engine 2 throttle lever, -4096 to +16384, as an axis input: 310A can disconnect it. Last written value: 3332	-	W?
0938	2	Engine 2 fuel flow, pounds/hour at sea level standard. Not always kept. Var: RECIP ENG FUEL FLOW:2	-	R? W?
094A	2	Engine 2 anti-ice or carb heat switch: 1 = on Var: GENERAL ENG ANTI ICE POSITION:2	-	R? W?
0950	2	Engine 2 oil temperature, 16384 = 140 C Var: GENERAL ENG OIL TEMPERATURE:2	-	R? W?
0952	2	Engine 2 oil pressure, 16384 = 55 psi. Capped at 65535 = 220 psi. Var: GENERAL ENG OIL PRESSURE:2	-	R? W?
0954	2	Engine 2 pressure ratio (EPR), 16384 = 1.60 Var: TURB ENG PRESSURE RATIO:2	-	R? W?
0956	2	Engine 2 EGT, 16384 = 860 C Var: GENERAL ENG EXHAUST GAS TEMPERATURE:2	-	R? W?
0958	2	Engine 2 manifold pressure, inches Hg * 1024 Var: RECIP ENG MANIFOLD PRESSURE:2	-	R? W?
0960	2	Engine 2 RPM scaler, for props: see 0930. Turboprops: shaft RPM.	-	R? W?
0968	4	Engine 2 oil quantity, 16384 = 100% Var: GENERAL ENG OIL LEAKED PERCENT:2	-	R? W?
096C	4	Engine 2 vibration, 16384 = 5.0 Var: TURB ENG VIBRATION:2	-	R? W?
0970	4	Engine 2 hydraulic pressure, about 4 * psi Var: HYDRAULIC PRESSURE:2	-	R? W?
0974	4	Engine 2 hydraulic quantity, 16384 = 100% Var: HYDRAULIC RESERVOIR PERCENT:2	-	R? W?
0980	8	Engine 2 CHT, degrees F, float64 Var: RECIP ENG CYLINDER HEAD TEMPERATURE:2	-	R? W?
0988	4	Engine 2 turbine temperature (ITT), degrees C * 16384 Var: RECIP ENG TURBINE INLET TEMPERATURE:2	-	R? W?
098C	4	Engine 2 torque %, 16384 = 100% Var: TURB ENG MAX TORQUE PERCENT:2	-	R? W?
0990	4	Engine 2 fuel pressure, psf (psi * 144) Var: GENERAL ENG FUEL PRESSURE:2	-	R? W?
0994	4	Eng electrical load:2		R? W?

0998	4	Eng transmission pressure:2		R? W?
099C	4	Eng transmission temperature:2		R? W?
09A0	4	Eng rotor rpm:2		R? W?
09A4	4	Engine 2 fuel used since start, pounds, float32 Var: GENERAL ENG FUEL USED SINCE START:2	-	R? W?
09A8	4	Engine 2 running time, hours, float32 Var: GENERAL ENG ELAPSED TIME:2	-	R? W?
09B0	8	Engine 2 fuel flow, pounds/hour, float64 Var: RECIP ENG FUEL FLOW:2	-	R? W?
09B8	4	Engine 2 torque, ft-lbs, float32. Not jets. Var: ENG TORQUE:2	-	R? W?
09BC	2	Engine 3 throttle lever, -4096 to +16384. User input: write 09CA, which 310A can disconnect. Var: GENERAL ENG THROTTLE LEVER POSITION:3	-	R? W?
09BE	2	Engine 3 prop lever, -4096 to +16384 Var: GENERAL ENG PROPELLER LEVER POSITION:3	-	R? W?
09C0	2	Engine 3 mixture lever, 0 - 16384 Var: GENERAL ENG MIXTURE LEVER POSITION:3	-	R? W?
09C2	2	Engine 3 starter / magnetos. Jet: 0=off, 1=start, 2=gen. Prop: 0=off, 1=right, 2=left, 3=both, 4=start Var: GENERAL ENG STARTER:3	-	R? W?
09C4	2	Engine 3 combustion flag: 1 = running Var: GENERAL ENG COMBUSTION:3	-	R? W?
09C6	2	Engine 3 N2, 16384 = 100% Var: TURB ENG N2:3	-	R? W?
09C8	2	Engine 3 N1, 16384 = 100%, or Prop RPM. RPM = value * RPM scaler (08C8) / 65536, negative for counter-rotating props. Var: TURB ENG N1:3	-	R? W?
09CA	2	Engine 3 throttle lever, -4096 to +16384, as an axis input: 310A can disconnect it. Last written value: 3334	-	W?
09D0	2	Engine 3 fuel flow, pounds/hour at sea level standard. Not always kept. Var: RECIP ENG FUEL FLOW:3	-	R? W?
09D2	16	ICAO Manufacturer: From aircraft.cfg		R W?
09E2	2	Engine 3 anti-ice or carb heat switch: 1 = on Var: GENERAL ENG ANTI ICE POSITION:3	-	R? W?
09E8	2	Engine 3 oil temperature, 16384 = 140 C Var: GENERAL ENG OIL TEMPERATURE:3	-	R? W?
09EA	2	Engine 3 oil pressure, 16384 = 55 psi. Capped at 65535 = 220 psi. Var: GENERAL ENG OIL PRESSURE:3	-	R? W?
09EC	2	Engine 3 pressure ratio (EPR), 16384 = 1.60 Var: TURB ENG PRESSURE RATIO:3	-	R? W?
09EE	2	Engine 3 EGT, 16384 = 860 C Var: GENERAL ENG EXHAUST GAS TEMPERATURE:3	-	R? W?
09F0	2	Engine 3 manifold pressure, inches Hg * 1024 Var: RECIP ENG MANIFOLD PRESSURE:3	-	R? W?
09F8	2	Engine 3 RPM scaler, for props: see 09C8. Turboprops: shaft RPM.	-	R? W?
0A00	4	Engine 3 oil quantity, 16384 = 100% Var: GENERAL ENG OIL LEAKED PERCENT:3	-	R? W?
0A04	4	Engine 3 vibration, 16384 = 5.0 Var: TURB ENG VIBRATION:3	-	R? W?
0A08	4	Engine 3 hydraulic pressure, about 4 * psi Var: HYDRAULIC PRESSURE:3	-	R? W?

0A0C	4	Engine 3 hydraulic quantity, 16384 = 100% Var: HYDRAULIC RESERVOIR PERCENT:3	-	R? W?
0A18	8	Engine 3 CHT, degrees F, float64 Var: RECIP ENG CYLINDER HEAD TEMPERATURE:3	-	R? W?
0A20	4	Engine 3 turbine temperature (ITT), degrees C * 16384 Var: ENG TURBINE TEMPERATURE:3	-	R? W?
0A24	4	Engine 3 torque %, 16384 = 100% Var: TURB ENG MAX TORQUE PERCENT:3	-	R? W?
0A28	4	Engine 3 fuel pressure, psf (psi * 144) Var: GENERAL ENG FUEL PRESSURE:3	-	R? W?
0A2C	4	Eng electrical load:3		R? W?
0A30	4	Eng transmission pressure:3		R? W?
0A34	4	Eng transmission temperature:3		R? W?
0A38	4	Eng rotor rpm:3		R? W?
0A3C	4	Engine 3 fuel used since start, pounds, float32 Var: GENERAL ENG FUEL USED SINCE START:3	-	R? W?
0A40	4	Engine 3 running time, hours, float32 Var: GENERAL ENG ELAPSED TIME:3	-	R? W?
0A48	8	Engine 3 fuel flow, pounds/hour, float64 Var: RECIP ENG FUEL FLOW:3	-	R? W?
0A50	4	Engine 3 torque, ft-lbs, float32. Not jets. Var: ENG TORQUE:3	-	R? W?
0A54	2	Engine 4 throttle lever, -4096 to +16384. User input: write 0A62, which 310A can disconnect. Var: GENERAL ENG THROTTLE LEVER POSITION:4	-	R? W?
0A56	2	Engine 4 prop lever, -4096 to +16384 Var: GENERAL ENG PROPELLER LEVER POSITION:4	-	R? W?
0A58	2	Engine 4 mixture lever, 0 - 16384 Var: GENERAL ENG MIXTURE LEVER POSITION:4	-	R? W?
0A5A	2	Engine 4 starter / magnetos. Jet: 0=off, 1=start, 2=gen. Prop: 0=off, 1=right, 2=left, 3=both, 4=start Var: GENERAL ENG STARTER:4	-	R? W?
0A5C	2	Engine 4 combustion flag: 1 = running Var: GENERAL ENG COMBUSTION:4	-	R? W?
0A5E	2	Engine 4 N2, 16384 = 100% Var: TURB ENG N2:4	-	R? W?
0A60	2	Engine 4 N1, 16384 = 100%, or Prop RPM. RPM = value * RPM scaler (08C8) / 65536, negative for counter-rotating props. Var: TURB ENG N1:4	-	R? W?
0A62	2	Engine 4 throttle lever, -4096 to +16384, as an axis input: 310A can disconnect it. Last written value: 3336	-	W?
0A68	2	Engine 4 fuel flow, pounds/hour at sea level standard. Not always kept. Var: RECIP ENG FUEL FLOW:4	-	R? W?
0A7A	2	Engine 4 anti-ice or carb heat switch: 1 = on Var: GENERAL ENG ANTI ICE POSITION:4	-	R? W?
0A80	2	Engine 4 oil temperature, 16384 = 140 C Var: GENERAL ENG OIL TEMPERATURE:4	-	R? W?
0A82	2	Engine 4 oil pressure, 16384 = 55 psi. Capped at 65535 = 220 psi. Var: GENERAL ENG OIL PRESSURE:4	-	R? W?
0A84	2	Engine 4 pressure ratio (EPR), 16384 = 1.60 Var: TURB ENG PRESSURE RATIO:4	-	R? W?
0A86	2	Engine 4 EGT, 16384 = 860 C Var: GENERAL ENG EXHAUST GAS TEMPERATURE:4	-	R? W?

0A88	2	Engine 4 manifold pressure, inches Hg * 1024 Var: RECIP ENG MANIFOLD PRESSURE:4	-	R? W?
0A90	2	Engine 4 RPM scaler, for props: see 0A60. Turboprops: shaft RPM.	-	R? W?
0A98	4	Engine 4 oil quantity, 16384 = 100% Var: GENERAL ENG OIL LEAKED PERCENT:4	-	R? W?
0A9C	4	Engine 4 vibration, 16384 = 5.0 Var: TURB ENG VIBRATION:4	-	R? W?
0AA0	4	Engine 4 hydraulic pressure, about 4 * psi Var: HYDRAULIC PRESSURE:4	-	R? W?
0AA4	4	Engine 4 hydraulic quantity, 16384 = 100% Var: HYDRAULIC RESERVOIR PERCENT:4	-	R? W?
0AA8	1	Fuel pump 11: 1 = running. Needs NumberOfPumps > 10 in the ini. Var: FUELSYSTEM PUMP ACTIVE:11		R
0AA9	1	Fuel pump 11: 1 = enabled. Needs NumberOfPumps > 10 in the ini. Var: FUELSYSTEM PUMP SWITCH:11		R W
0AB0	8	Engine 4 CHT, degrees F, float64 Var: RECIP ENG CYLINDER HEAD TEMPERATURE:4	-	R? W?
0AB8	4	Engine 4 turbine temperature (ITT), degrees C * 16384 Var: ENG TURBINE TEMPERATURE:4	-	R? W?
0ABC	4	Engine 4 torque %, 16384 = 100% Var: TURB ENG MAX TORQUE PERCENT:4	-	R? W?
0AC0	4	Engine 4 fuel pressure, psf (psi * 144) Var: GENERAL ENG FUEL PRESSURE:4	-	R? W?
0AC4	4	Eng electrical load:4		R? W?
0AC8	4	Eng transmission pressure:4		R? W?
0ACC	4	Eng transmission temperature:4		R? W?
0AD0	4	Eng rotor rpm:4		R? W?
0AD4	4	Engine 4 fuel used since start, pounds, float32 Var: GENERAL ENG FUEL USED SINCE START:4	-	R? W?
0AD8	4	Engine 4 running time, hours, float32 Var: GENERAL ENG ELAPSED TIME:4	-	R? W?
0AE0	8	Engine 4 fuel flow, pounds/hour, float64 Var: RECIP ENG FUEL FLOW:4	-	R? W?
0AE8	4	Engine 4 torque, ft-lbs, float32. Not jets. Var: ENG TORQUE:4	-	R? W?

Fuel pumps, tank selectors, APU, failures

Offset	Bytes	Use	P3D	MSFS
0AEC	2	Number of engines Var: NUMBER OF ENGINES	R	(R) W?
0AEE	1	Fuel pump 10: 1 = running. Needs NumberOfPumps > 9 in the ini. Var: FUELSYSTEM PUMP ACTIVE:10		R
0AEF	1	Fuel pump 10: 1 = enabled. Needs NumberOfPumps > 9 in the ini. Var: FUELSYSTEM PUMP SWITCH:10		R W
0AF0	2	Propeller pitch control: 0=fixed, 1=auto, 2=manual	-	R? W?
0AF2	1	Fuel pump 12: 1 = running. Needs NumberOfPumps > 11 in the ini. Var: FUELSYSTEM PUMP ACTIVE:12		R
0AF3	1	Fuel pump 12: 1 = enabled. Needs NumberOfPumps > 11 in the ini. Var: FUELSYSTEM PUMP SWITCH:12		R W
0AF4	2	Fuel weight, pounds per gallon * 256 Var: FUEL WEIGHT PER GALLON	R	(R) W?

0AF6	1	Fuel pump 13: 1 = running. Needs NumberOfPumps > 12 in the ini. Var: FUELSYSTEM PUMP ACTIVE:13		R
0AF7	1	Fuel pump 13: 1 = enabled. Needs NumberOfPumps > 12 in the ini. Var: FUELSYSTEM PUMP SWITCH:13		R W
0AF8	2	Fuel tank selector, engine 1 (engine 2: 0B22): 0=none, 1=all, 2=left, 3=right, 4=left aux, 5=right aux, 6=centre, 7=centre 2, 8=centre 3, 9=external 1, 10=external 2, 11=right tip, 12=left tip, 13=crossfeed, 14=crossfeed L to R, 15=crossfeed R to L, 16=crossfeed both, 17=external, 18=isolate, 19=left main, 20=right main Var: FUEL TANK SELECTOR:1	R	R W
0AFA	1	Fuel pump 14: 1 = running. Needs NumberOfPumps > 13 in the ini. Var: FUELSYSTEM PUMP ACTIVE:14		R
0AFB	1	Fuel pump 14: 1 = enabled. Needs NumberOfPumps > 13 in the ini. Var: FUELSYSTEM PUMP SWITCH:14		R W
0AFC	1	Fuel pump 15: 1 = running. Needs NumberOfPumps > 14 in the ini. Var: FUELSYSTEM PUMP ACTIVE:15		R
0AFD	1	Fuel pump 15: 1 = enabled. Needs NumberOfPumps > 14 in the ini. Var: FUELSYSTEM PUMP SWITCH:15		R W
0AFE	1	Fuel pump 16: 1 = running. Needs NumberOfPumps > 15 in the ini. Var: FUELSYSTEM PUMP ACTIVE:16		R
0AFF	1	Fuel pump 16: 1 = enabled. Needs NumberOfPumps > 15 in the ini. Var: FUELSYSTEM PUMP SWITCH:16		R W
0B00	2	Throttle lower limit, 16384 = 100%. With reverse thrust normally -4096 (25% reverse). Var: THROTTLE LOWER LIMIT	R	(R) W?
0B02	1	Fuel pump 1: 1 = running. Needs NumberOfPumps > 0 in the ini. Var: FUELSYSTEM PUMP ACTIVE:1		R
0B03	1	Fuel pump 1: 1 = enabled. Needs NumberOfPumps > 0 in the ini. Var: FUELSYSTEM PUMP SWITCH:1		R W
0B04	1	Fuel pump 2: 1 = running. Needs NumberOfPumps > 1 in the ini. Var: FUELSYSTEM PUMP ACTIVE:2		R
0B05	1	Fuel pump 2: 1 = enabled. Needs NumberOfPumps > 1 in the ini. Var: FUELSYSTEM PUMP SWITCH:2		R W
0B06	1	Fuel pump 3: 1 = running. Needs NumberOfPumps > 2 in the ini. Var: FUELSYSTEM PUMP ACTIVE:3		R
0B07	1	Fuel pump 3: 1 = enabled. Needs NumberOfPumps > 2 in the ini. Var: FUELSYSTEM PUMP SWITCH:3		R W
0B08	1	Fuel pump 4: 1 = running. Needs NumberOfPumps > 3 in the ini. Var: FUELSYSTEM PUMP ACTIVE:4		R
0B09	1	Fuel pump 4: 1 = enabled. Needs NumberOfPumps > 3 in the ini. Var: FUELSYSTEM PUMP SWITCH:4		R W
0B0A	1	Fuel pump 5: 1 = running. Needs NumberOfPumps > 4 in the ini. Var: FUELSYSTEM PUMP ACTIVE:5		R
0B0B	1	Fuel pump 5: 1 = enabled. Needs NumberOfPumps > 4 in the ini. Var: FUELSYSTEM PUMP SWITCH:5		R W
0B0C	4	Mmo * 20480 Var: MACH MAX OPERATE	R	(R) W?
0B10	1	Fuel pump 6: 1 = running. Needs NumberOfPumps > 5 in the ini. Var: FUELSYSTEM PUMP ACTIVE:6		R
0B11	1	Fuel pump 6: 1 = enabled. Needs NumberOfPumps > 5 in the ini. Var: FUELSYSTEM PUMP SWITCH:6		R W
0B12	1	Fuel pump 7: 1 = running. Needs NumberOfPumps > 6 in the ini. Var: FUELSYSTEM PUMP ACTIVE:7		R
0B13	1	Fuel pump 7: 1 = enabled. Needs NumberOfPumps > 6 in the ini. Var: FUELSYSTEM PUMP SWITCH:7		R W

0B14	1	Fuel pump 8: 1 = running. Needs NumberOfPumps > 7 in the ini. Var: FUELSYSTEM PUMP ACTIVE:8		R
0B15	1	Fuel pump 8: 1 = enabled. Needs NumberOfPumps > 7 in the ini. Var: FUELSYSTEM PUMP SWITCH:8		R W
0B16	1	Fuel pump 9: 1 = running. Needs NumberOfPumps > 8 in the ini. Var: FUELSYSTEM PUMP ACTIVE:9		R
0B17	1	Fuel pump 9: 1 = enabled. Needs NumberOfPumps > 8 in the ini. Var: FUELSYSTEM PUMP SWITCH:9		R W
0B18	8	Gyro suction, inches Hg, float64 Var: SUCTION PRESSURE	R	(R) W?
0B20	2	Sound control: 0=off, 1=on	-	R? W?
0B22	2	Fuel tank selector, engine 2. Values as 0AF8. Var: FUEL TANK SELECTOR:2		R W
0B24	2	Sound flag: 0=off, 1=on	R	R? W?
0B26	32	ICAO model. From aircraft.cfg.		R W?
0B46	1	Transponder state: 0=off, 1=standby, 2=test, 3=on, 4=alt, 5=ground Var: TRANSPONDER STATE:1		R W
0B47	1	COM1 frequency spacing: 0=25kHz, 1=8.33kHz Var: COM SPACING MODE:1		R (W)
0B48	1	COM2 frequency spacing: 0=25kHz, 1=8.33kHz Var: COM SPACING MODE:2		R (W)
0B49	1	Autopilot flight level change		R
0B4A	1	Reverse thrust toggle flag		R W
0B4C	2	Ground altitude, metres. Finer: 0020.	R	R? W?
0B4E	1	Flap speed exceeded		R W?
0B4F	1	Gear speed exceeded		R W?
0B50	1	Bleed air source. Documented: 0=min, 1=auto, 2=off, 3=APU, 4=engines. FSX A321: 0=auto, 1=off, 2=APU, 3=engines. Var: BLEED AIR SOURCE CONTROL	R	R? W?
0B51	1	APU generator switch Var: APU GENERATOR SWITCH	R	(R) W?
0B52	1	APU generator active flag Var: APU GENERATOR ACTIVE	R	(R) W?
0B53	1	APU on fire flag Var: APU ON FIRE DETECTED	W?	R? W?
0B54	4	APU RPM, % of maximum, float32 Var: APU PCT RPM	R	(R) W?
0B58	4	APU starter, %, float32. Write non-zero to start the APU, zero to stop it. Var: APU PCT STARTER	R	(R) W?
0B5C	4	APU generator voltage, float32 Var: APU VOLTS	R	(R) W?
0B60	2	Scenery complexity, 0-5	-	R? W?
0B62	1	Failure: hydraulics, 1 = failed	-	R? W?
0B63	1	Failure: brakes. Bit 0 = left, bit 1 = right, bit 2 = total.	-	R? W?
0B64	1	Failure: ADF (both), 1 = failed Var: PARTIAL PANEL ADF	R	R? W?
0B65	1	Failure: ASI, 1 = failed Var: PARTIAL PANEL AIRSPEED	R	(R) W?
0B66	1	Failure: Altimeter, 1 = failed Var: PARTIAL PANEL ALTIMETER	R	(R) W?
0B67	1	Failure: Attitude Indicator, 1 = failed Var: PARTIAL PANEL ATTITUDE	R	(R) W?

0B68	1	Failure: COM radios, 1 = failed. See 3BD6. Var: PARTIAL PANEL COMM	R?	R? W?
0B69	1	Failure: Mag Compass, 1 = failed Var: PARTIAL PANEL COMPASS	-	(R) W?
0B6A	1	Failure: Electrics, 1 = failed Var: PARTIAL PANEL ELECTRICAL	W?	R? W?
0B6B	1	Failure: engines. Bit 0 = engine 1 ... bit 3 = engine 4. Var: GENERAL ENG FAILED:1	R? W?	R?
0B6C	1	Failure: Fuel indicators, 1 = failed Var: PARTIAL PANEL FUEL INDICATOR	W?	R?
0B6D	1	Failure: Direction Indicator, 1 = failed Var: PARTIAL PANEL HEADING	R	(R) W?
0B6E	1	Failure: VSI, 1 = failed Var: PARTIAL PANEL VERTICAL VELOCITY	R	(R) W?
0B6F	1	Failure: Transponder, 1 = failed Var: PARTIAL PANEL TRANSPONDER	W?	R? W?
0B70	1	Failure: NAV radios, 1 = failed. See 3BD6. Var: PARTIAL PANEL NAV	R? W?	R? W?
0B71	1	Failure: Pitot, 1 = failed Var: PARTIAL PANEL PITOT	W?	R? W?
0B72	1	Failure: Turn coordinator, 1 = failed Var: PARTIAL PANEL TURN COORDINATOR	W?	R?
0B73	1	Failure: Vacuum, 1 = failed Var: PARTIAL PANEL VACUUM	W?	R? W?

Fuel tanks

Offset	Bytes	Use	P3D	MSFS
0B74	4	Fuel: centre tank level, % * 128 * 65536 Var: FUEL TANK CENTER LEVEL	R	(R) W?
0B78	4	Fuel: centre tank capacity: US Gallons. More tanks: 1244. Var: FUEL TANK CENTER CAPACITY	R	(R) W?
0B7C	4	Fuel: left main tank level, % * 128 * 65536 Var: FUEL TANK LEFT MAIN LEVEL	R	(R) W?
0B80	4	Fuel: left main tank capacity: US Gallons Var: FUEL TANK LEFT MAIN CAPACITY	R	(R) W?
0B84	4	Fuel: left aux tank level, % * 128 * 65536 Var: FUEL TANK LEFT AUX LEVEL	R	(R) W?
0B88	4	Fuel: left aux tank capacity: US Gallons Var: FUEL TANK LEFT AUX CAPACITY	R	(R) W?
0B8C	4	Fuel: left tip tank level, % * 128 * 65536 Var: FUEL TANK LEFT TIP LEVEL	R	(R) W?
0B90	4	Fuel: left tip tank capacity: US Gallons Var: FUEL TANK LEFT TIP CAPACITY	R	(R) W?
0B94	4	Fuel: right main tank level, % * 128 * 65536 Var: FUEL TANK RIGHT MAIN LEVEL	R	(R) W?
0B98	4	Fuel: right main tank capacity: US Gallons Var: FUEL TANK RIGHT MAIN CAPACITY	R	(R) W?
0B9C	4	Fuel: right aux tank level, % * 128 * 65536 Var: FUEL TANK RIGHT AUX LEVEL	R	(R) W?
0BA0	4	Fuel: right aux tank capacity: US Gallons Var: FUEL TANK RIGHT AUX CAPACITY	R	(R) W?
0BA4	4	Fuel: right tip tank level, % * 128 * 65536 Var: FUEL TANK RIGHT TIP LEVEL	R	(R) W?

0BA8	4	Fuel: right tip tank capacity: US Gallons Var: FUEL TANK RIGHT TIP CAPACITY	R	(R) W?

Markers, flight controls, trim, brakes, flaps, gear

Offset	Bytes	Use	P3D	MSFS
0BAC	2	Inner Marker: 1 = active Var: INNER MARKER	R	(R) W?
0BAE	2	Middle Marker: 1 = active Var: MIDDLE MARKER	R	(R) W?
0BB0	2	Outer Marker: 1 = active Var: OUTER MARKER	R	(R) W?
0BB2	2	Elevator control input: -16383 to +16383 Var: ELEVATOR POSITION	R	(R) W?
0BB4	2	Elevator position indicator (may differ from the input) Var: ELEVATOR DEFLECTION PCT	R	(R) W?
0BB6	2	Aileron control input: -16383 to +16383 Var: AILERON POSITION	R	(R) W?
0BB8	2	Aileron position indicator, left aileron (may differ from the input) Var: AILERON LEFT DEFLECTION PCT	R	(R) W?
0BBA	2	Rudder control input: -16383 to +16383 Var: RUDDER POSITION	R	(R) W?
0BBC	2	Rudder position indicator (may differ from the input) Var: RUDDER DEFLECTION PCT	R	(R) W?
0BBE	2	Helicopter pitch trim: -16383 to +16383. Needs ApplyHeloTrim.	R	R? W?
0BC0	2	Elevator trim control input: -16383 to +16383. Write uses the ELEVATOR TRIM SET axis control. Var: ELEVATOR TRIM PCT	R	R W
0BC2	2	Elevator trim indicator (follows input) Var: ELEVATOR TRIM INDICATOR	R	(R) W?
0BC4	2	Left brake: 0 = off, 32767 = full (parking brake = 32767). Write a fixed pressure here, or use 0C01 for the key press. Values read are lower than written at the low end. Var: BRAKE LEFT POSITION	R	(R) (W)
0BC6	2	Right brake: 0 = off, 32767 = full (parking brake = 32767). Write a fixed pressure here, or use 0C00 for the key press. Values read are lower than written at the low end. Var: BRAKE RIGHT POSITION	R W	(R) (W)
0BC8	2	Parking brake: 0=off, 32767=on Var: BRAKE PARKING POSITION	R W	R W
0BCA	2	Braking indicator: 0 = none, 1 = left, 2 = right, 3 = both Var: BRAKE INDICATOR	R	(R) W?
0BCC	4	Spoilers arm: 0=off, 1=armed Var: SPOILERS ARMED	R W	(R) W?
0BD0	4	Spoilers control: 0 = off, 4800 = armed, 5620 (7%) to 16383 (100%). Below 4800: nothing. Var: SPOILERS HANDLE POSITION	R W	(R) W?
0BD4	4	Left spoiler position, 0-16383 Var: SPOILERS LEFT POSITION	R	(R) W?
0BD8	4	Right spoiler position, 0-16383 Var: SPOILERS RIGHT POSITION	R	(R) W?
0BDC	4	Flaps control: 0 = up, 16383 = full. Notches are spaced evenly: step = 16383 / (positions - 1). Values read are not exact. See 3BFA. Var: FLAPS HANDLE PERCENT	R W	(R) W?

0BE0	4	Flaps position, left, 16383 = full deflection. Not the lever notches. Inboard trailing edge flaps only. Detail: 30E0-30FF. Var: TRAILING EDGE FLAPS LEFT PERCENT	R	(R) W?
0BE4	4	Flaps position, right, 16384 = full deflection. Not the lever notches. Inboard trailing edge flaps only. Detail: 30E0-30FF. Var: TRAILING EDGE FLAPS RIGHT PERCENT	R	(R) W?
0BE8	4	Gear control: 0=Up, 16383=Down Var: GEAR HANDLE POSITION	R W	(R) (W)
0BEC	4	Gear position, nose: 0 = up, 16383 = down Var: GEAR CENTER POSITION	R W	(R) (W)
0BF0	4	Gear position, right: 0 = up, 16383 = down Var: GEAR RIGHT POSITION	R W	(R) (W)
0BF4	4	Gear position, left: 0 = up, 16383 = down Var: GEAR LEFT POSITION	R W	(R) W?
0BF8	4	Unlimited visibility value, statute miles * 1600, from the display settings	-	R? W?
0BFC	1	Flaps handle index (0 = up) Var: FLAPS HANDLE INDEX	R W	(R) W?
0BFD	1	Anti-skid active: non-zero Var: ANTISKID BRAKES ACTIVE	R W	R?
0C00	1	Right toe brake control: 0-200, with timed decay	W	R? W?
0C01	1	Left toe brake control: 0-200, with timed decay	W	R? W?
0C02	2	Aileron trim value/control: -16383 to +16383 Var: AILERON TRIM PCT	R	(R) W?
0C04	2	Rudder trim value/control: -16383 to +16383 Var: RUDDER TRIM PCT	R	(R) W?
0C06	2	Helicopter bank trim: -16383 to +16383. Needs ApplyHeloTrim=Both.	R	R? W?
0C08	2	Steering tiller input (FSUIPC axis), -16384 to +16383, if calibrated	R	R? W?
0C0A	2	Rudder input value, -16384 to +16383, if calibrated	R	R? W?
0C0C	4	Max rated engine rpm		R
0C10	4	Nose gear steer angle, as percent over 100 (-1.37 to +1.37). Not calibrated. Var: GEAR STEER ANGLE	R	R
0C14	4	ADF2 signal strength Var: ADF SIGNAL:2	R	(R) W?

Sim rate, DME text, navigation radios

Offset	Bytes	Use	P3D	MSFS
0C18	2	Units: 0=US, 1=metric + feet, 2=metric + metres Var: UNITS OF MEASURE	W?	R? W?
0C1A	2	Simulation rate * 256 (256 = 1x). Powers of two, 64 (1/4x) to 32768 (128x). FSUIPC sets it with the INCR and DECR controls. Write with care. Var: SIMULATION RATE	R	R W
0C1C	4	ADF1 signal strength Var: ADF SIGNAL:1	R	(R) W?
0C20	9	Local time as text: hh:mm:ss, zero terminated	R	R? W?
0C29	5	DME1 distance as text: nn.n, or nnn. above 99.9 nm. Do not rely on the 5th character.	R	R? W?
0C2E	5	DME1 speed as text: nnn, then zero, or space and zero	R	R? W?
0C33	5	DME2 distance as text: nn.n, or nnn. above 99.9 nm. Do not rely on the 5th character.	R	R? W?

0C38	5	DME2 speed as text: nnn, then zero, or space and zero	R	R? W?
0C3E	2	Gyro drift. Degrees: *360/65536. Set in whole degrees: the value read back differs a little. Var: GYRO DRIFT ERROR	R	(R) W?
0C40	2	NAV1 magnetic variation. Degrees: *360/65536. May differ from the airport's variation. Var: NAV MAGVAR:1	R	(R) W?
0C42	2	NAV2 magnetic variation. Degrees: *360/65536. May differ from the airport's variation. Var: NAV MAGVAR:2	R	(R) W?
0C44	2	Realism setting, 0-100 Var: REALISM	R	(R) W?
0C46	1	Autobrakes active		(R)
0C47	1	Light brake on		(R)
0C48	1	NAV1 Localiser Needle: -127 left to +127 right Var: NAV CDI:1	R	(R) W?
0C49	1	NAV1 Glideslope Needle: -119 up to +119 down Var: NAV GSI:1	R	(R) W?
0C4A	1	NAV1 back course flags, bits: 0 = BC available, 1 = localiser tuned, 2 = on back course, 7 = station active	R	(R) W?
0C4B	1	NAV1 To/From flag: 0=not active, 1=To, 2=From Var: NAV TOFROM:1	R	(R) W?
0C4C	1	NAV1 GS flag: 1 = glideslope alive Var: NAV GS FLAG:1	R	(R) W?
0C4D	1	NAV1 code flags, bits: 0 = DME, 1 = TACAN, 2 = voice, 3 = no signal, 4 = DME/GS co-located, 5 = no back course, 6 = GS, 7 = localiser (else VOR) Var: NAV BACK COURSE FLAGS:1	R	(R) W?
0C4E	2	NAV1 OBS, degrees 0-359 Var: NAV OBS:1	R	(R) W?
0C50	2	NAV1 radial. Degrees: *360/65536. Magnetic for a VOR, true for a localiser. Var: NAV RADIAL:1	R	(R) W?
0C52	4	NAV1 signal strength. Localiser: 0 or 256. VOR: 0 to over 1,000,000. Var: NAV SIGNAL:1	R	(R) W?
0C56	2	NAV1 relative bearing to the VOR, degrees 0-359 Var: NAV RELATIVE BEARING TO STATION:1	R	(R) W?
0C59	1	NAV2 Localiser Needle: -127 left to +127 right Var: NAV CDI:2	R	(R) W?
0C5A	1	NAV2 back course flags, bits: 0 = BC available, 1 = localiser tuned, 2 = on back course, 7 = station active	R	(R) W?
0C5B	1	NAV2 To/From flag: 0=not active, 1=To, 2=From Var: NAV TOFROM:2	R	(R) W?
0C5C	2	NAV2 relative bearing to the VOR, degrees 0-359 Var: NAV RELATIVE BEARING TO STATION:2	R	(R) W?
0C5E	2	NAV2 OBS, degrees 0-359 Var: NAV OBS:2	R	(R) W?
0C60	2	NAV2 radial. Degrees: *360/65536. Magnetic for a VOR, true for a localiser. Var: NAV RADIAL:2	R	(R) W?
0C62	4	NAV2 signal strength. Localiser: 0 or 256. VOR: 0 to over 1,000,000. Var: NAV SIGNAL:2	R	(R) W?
0C6A	2	ADF1 relative bearing to the NDB. Degrees: *360/65536, - = left. Var: ADF RADIAL:1	R	(R) W?

0C6C	2	ADF1 dial bearing, where adjustable, degrees 1-360 Var: ADF CARD	W?	R? W?
0C6E	1	NAV2 Glideslope Needle: -127 up to +127 down Var: NAV GSI:2	W?	R? W?
0C6F	1	NAV2 GS flag: 1 = glideslope alive Var: NAV GS FLAG:2	W?	R? W?
0C70	1	NAV2 code flags, bits: 0 = DME, 1 = TACAN, 2 = voice, 3 = no signal, 4 = DME/GS co-located, 5 = no back course, 6 = GS, 7 = localiser (else VOR) Var: NAV BACK COURSE FLAGS:2	R	(R) W?
0C71	1	Bus lookup index		(R) W?
0C72	1	Bus connection on:6		(R) W?
0C73	8	Simulation time		(R) W?
0C7B	1	Autopilot glideslope arm		(R) W?
0C7C	1	Autopilot glideslope active		(R) W?
0C7D	1	1 = GPS updates suspended. Must be 1 to set any other GPS variable. Var: GPS OVERRIDDEN		(R)
0C92	2	Texture quality, 0-3	-	R? W?

Lights, tower, macros, default EFIS

Offset	Bytes	Use	P3D	MSFS
0D0C	2	Lights, one bit each: 0 = navigation, 1 = beacon, 2 = landing, 3 = taxi, 4 = strobes, 5 = instruments, 6 = recognition, 7 = wing, 8 = logo, 9 = cabin Var: LIGHT NAV	R	R W
0D50	24	Tower latitude, longitude, altitude: 8 bytes each, format as 0560-0577	-	R? W?
0D6C	4	Parameter for the macro or Lua request written to 0D70. Write it first.	-	R? W?
0D70	128	Macro and Lua requests. Macro: write "file:macro" (16 characters each). Lua: write the control (Lua, LuaDebug, LuaKill, LuaSet, LuaClear, LuaToggle), a space, the program name. More: FSUIPC list.	-	
0D98	2	N/S setting: 2=north, 3=south	-	R? W?
0D9C	2	E/W setting: 0=east, 1=west	-	R? W?
0DD6	2	Scenery BGL variable "usrvar"	-	R? W?
0DD8	2	Scenery BGL variable "usrvr2"	-	R? W?
0DDA	2	Scenery BGL variable "usrvr3"	-	R? W?
0DDC	2	Scenery BGL variable "usrvr4"	-	R? W?
0DDE	2	Scenery BGL variable "usrvr5"	-	R? W?
0E00	2	Default 738 and A321 EFIS, ND range. 738: 0 = 5 nm to 7 = 640 nm. A321: 0 = 10 nm to 5 = 320 nm. Var: Display Scale	R W	-
0E02	2	Default 738 EFIS: ND mode: 0=APP, 1=VOR, 2=MAP Var: EFIS Mode	R W	-
0E04	2	Default 738 and A321 EFIS, ND map items. 738: 0=WPT, 1=APT, 2=NDB, 3=VOR. A321: 0=WPT, 1=VOR, 2=NDB, 3=APT. Var: MapItem Shown	R W	-
0E06	2	Default 738 EFIS: ND VOR/ADF1 switch: 0=VOR, 1=OFF, 2=ADF Var: EFIS VORADF1	R W	-
0E08	2	Default 738 EFIS: ND VOR/ADF2 switch: 0=VOR, 1=OFF, 2=ADF Var: EFIS VORADF2	R W	-

0E0A	2	Default 738 EFIS: ND 0=arc, 1=centred Var: MFD Centered	R W	-
0E0C	2	Default 738 EFIS: speed/Mach C/O button, 1 = pressed. Writing changes the picture only. Var: IAS Mach Pressed	R	-
0E0E	2	Default A321 EFIS: ND mode: 0=ILS, 1=VOR, 2=NAV, 3=ARC Var: Display Mode	R W	-
0E10	2	Default A321 EFIS: ND VOR/ADF1 switch: 0=VOR, 1=OFF, 2=ADF Var: VOR 1 Switch	R W	-
0E12	2	Default A321 EFIS: ND VOR/ADF2 switch: 0=VOR, 1=OFF, 2=ADF Var: VOR 2 Switch	R W	-
0E14	2	Default A321 EFIS: 0=inHg, 1=hPa Var: HPA Button	R W	-
0E16	2	Default A321 EFIS: ILS button, 0=off, 1=on Var: ILS Mode	R W	-
0E18	2	Default A321 EFIS: speed/Mach C/O button, 1 = pressed. Writing changes the picture only. Var: SPD MACH Pressed	R	-
0E1A	2	Default A321 EFIS: altitude step switch: 0 = 100, 1 = 1000 Var: AP ALT CHG RATE	R W	-
0E80	4	ICAO id of nearest weather station	R	-

Weather

Offset	Bytes	Use	P3D	MSFS
0E84	1	Cloud type at the aircraft, 1-10. 0 = not in a cloud layer.	R	
0E85	1	At the aircraft: Cloud coverage	R	-
0E86	2	At the aircraft: Cloud icing level	R	-
0E88	2	At the aircraft: Cloud turbulence level	R	-
0E8A	2	Ambient Visibility	R	-
0E8C	2	At the aircraft: cloud icing level, 0-4 Var: AMBIENT TEMPERATURE	R	(R)
0E8E		Dew point	R	-
0E90	2	Wind speed at the aircraft, knots Var: AMBIENT WIND VELOCITY	R	(R)
0E92	2	Wind direction at the aircraft, true. Degrees: *360/65536. Var: AMBIENT WIND DIRECTION	R	(R)
0E94	2	At the aircraft: wind gusting value	R	-
0E96	2	At the aircraft: wind directional variation	R	-
0E98	2	At the aircraft: wind turbulence value	R	-
0E9A	2	Weather at the aircraft, old style (0E9A-0F09). Upper cloud layer ceiling, metres AMSL.	R W?	-
0E9C	2	Upper cloud layer base, metres AMSL	-	-
0E9E	2	Upper cloud layer coverage: 65535 = 8 oktas, 0 = clear	-	-
0EA0	2	Upper cloud layer altitude variation, metres	-	-
0EA2	2	Lower cloud layer ceiling, metres AMSL	-	-
0EA4	2	Lower cloud layer base, metres AMSL	-	-
0EA6	2	Lower cloud layer coverage: 65535 = 8 oktas, 0 = clear	-	-
0EA8	2	Lower cloud layer altitude variation, metres	-	-
0EAA	2	Storm layer ceiling, metres AMSL	-	-
0EAC	2	Storm layer base, metres AMSL. A storm layer must be the lowest.	-	-

0EAE	2	Storm cloud layer coverage: 65535 = 8 oktas, 0 = clear	-	-
0EB0	2	Storm cloud layer altitude variation, metres	-	-
0EB2	2	Upper Temperature level, metres AMSL	-	-
0EB4	2	Upper Temperature, degrees C * 256	-	-
0EB6	2	Middle Temperature level, metres AMSL	-	-
0EB8	2	Middle Temperature, degrees C * 256	-	-
0EBA	2	Lower Temperature level, metres AMSL	-	-
0EBC	2	Lower Temperature, degrees C * 256	-	-
0EBE	2	Surface temperature level, metres AMSL (the ground elevation)	-	-
0EC0	2	Surface Temperature, degrees C * 256	-	-
0EC2	2	Temperature drift, degrees C * 256 (not used?)	-	-
0EC4	2	Temperature day/night variation, degrees C * 256	-	-
0EC6	2	Pressure (QNH), millibars * 16 Var: SEA LEVEL PRESSURE	-	-
0EC8	2	Pressure drift , millibars * 16 (not used?)	-	
0ECA	2	Upper wind ceiling, metres AMSL	-	
0ECC	2	Upper wind base, metres AMSL	-	
0ECE	2	Upper wind speed, knots	-	
0ED0	2	Upper wind direction, true. Degrees: *360/65536	-	
0ED2	2	Upper wind turbulence: 0 = none, 64, 128, 192, 255 = worst	-	
0ED4	2	Upper wind gusts: 1 = on	-	
0ED6	2	Middle wind ceiling, metres AMSL	-	
0ED8	2	Middle wind base, metres AMSL	-	
0EDA	2	Middle wind speed, knots	-	
0EDC	2	Middle wind direction, true. Degrees: *360/65536	-	
0EDE	2	Middle wind turbulence: 0 = none, 64, 128, 192, 255 = worst	-	
0EE0	2	Middle wind gusts: 1 = on	-	
0EE2	2	Lower wind ceiling, metres AMSL	-	
0EE4	2	Lower wind base, metres AMSL	-	
0EE6	2	Lower wind speed, knots	-	
0EE8	2	Lower wind direction, true. Degrees: *360/65536	-	
0EEA	2	Lower wind turbulence: 0 = none, 64, 128, 192, 255 = worst	-	
0EEC	2	Lower wind gusts: 1 = on	-	
0EEE	2	Surface wind ceiling, metres AGL	-	
0EF0	2	Surface wind speed, knots. See 04D8.	-	
0EF2	2	Surface wind direction, magnetic. Degrees: *360/65536. See 04DA.	-	
0EF4	2	Surface wind turbulence: 0 = none, 64, 128, 192, 255 = worst	-	
0EF6	2	Surface wind gusts: 1 = on	-	
0EF8	2	Upper cloud layer type: 0=user-defined, 1=cirrus, 8=stratus, 9=cumulus	-	
0EFA	2	Upper cloud layer icing: 1 = on	-	
0EFC	2	Upper cloud layer turbulence, 0 to 255, in steps: 0, 72, 144, 216, 252	-	
0EFE	2	Lower cloud layer type: 0=user-defined, 1=cirrus, 8=stratus, 9=cumulus	-	
0F00	2	Lower cloud layer icing: 1 = on	-	
0F02	2	Lower cloud layer turbulence, 0 to 255, in steps: 0, 72, 144, 216, 252	-	

0F04	2	Storm layer type: 10=storm. FSUIPC allows any type as a third, lowest layer: 0=user-defined, 1=cirrus, 8=stratus, 9=cumulus.	-
0F06	2	Storm layer icing: 1 = on	-
0F08	2	Storm layer turbulence, 0 to 255, in steps: 0, 72, 144, 216, 252	-
0F1C	2	Global weather, old style (0F1C-0F8B). Upper cloud layer ceiling, metres AMSL.	R? W
0F1E	2	Upper cloud layer base, metres AMSL	-
0F20	2	Upper cloud layer coverage: 65535 = 8 oktas, 0 = clear	-
0F22	2	Upper cloud layer altitude variation, metres	-
0F24	2	Lower cloud layer ceiling, metres AMSL	-
0F26	2	Lower cloud layer base, metres AMSL	-
0F28	2	Lower cloud layer coverage: 65535 = 8 oktas, 0 = clear	-
0F2A	2	Lower cloud layer altitude variation, metres	-
0F2C	2	Storm layer ceiling, metres AMSL	-
0F2E	2	Storm layer base, metres AMSL. A storm layer must be the lowest.	-
0F30	2	Storm cloud layer coverage: 65535 = 8 oktas, 0 = clear	-
0F32	2	Storm cloud layer altitude variation, metres	-
0F34	2	Upper Temperature level, metres AMSL	-
0F36	2	Upper Temperature, degrees C * 256	-
0F38	2	Middle Temperature level, metres AMSL	-
0F3A	2	Middle Temperature, degrees C * 256	-
0F3C	2	Lower Temperature level, metres AMSL	-
0F3E	2	Lower Temperature, degrees C * 256	-
0F40	2	Surface temperature level, metres AMSL (the weather station's elevation)	-
0F42	2	Surface Temperature, degrees C * 256	-
0F44	2	Temperature drift, degrees C * 256 (not used?)	-
0F46	2	Temperature day/night variation, degrees C * 256	-
0F48	2	Pressure (QNH), millibars * 16	R
0F4A	2	Pressure drift , millibars * 16 (not used?)	-
0F4C	2	Upper wind ceiling, metres AMSL	-
0F4E	2	Upper wind base, metres AMSL	-
0F50	2	Upper wind speed, knots	-
0F52	2	Upper wind direction, true. Degrees: *360/65536	-
0F54	2	Upper wind turbulence: 0 = none, 64, 128, 192, 255 = worst	-
0F56	2	Upper wind gusts: 1 = on	-
0F58	2	Middle wind ceiling, metres AMSL	-
0F5A	2	Middle wind base, metres AMSL	-
0F5C	2	Middle wind speed, knots	-
0F5E	2	Middle wind direction, true. Degrees: *360/65536	-
0F60	2	Middle wind turbulence: 0 = none, 64, 128, 192, 255 = worst	-
0F62	2	Middle wind gusts: 1 = on	-
0F64	2	Lower wind ceiling, metres AMSL	-
0F66	2	Lower wind base, metres AMSL	-
0F68	2	Lower wind speed, knots	-
0F6A	2	Lower wind direction, true. Degrees: *360/65536	-
0F6C	2	Lower wind turbulence: 0 = none, 64, 128, 192, 255 = worst	-

0F6E	2	Lower wind gusts: 1 = on	-	
0F70	2	Surface wind ceiling, metres AGL	-	
0F72	2	Surface wind speed, knots. See 04D8.	-	
0F74	2	Surface wind direction, magnetic. Degrees: *360/65536. See 04DA.	-	
0F76	2	Surface wind turbulence: 0 = none, 64, 128, 192, 255 = worst	-	
0F78	2	Surface wind gusts: 1 = on	-	
0F7A	2	Upper cloud layer type: 0=user-defined, 1=cirrus, 8=stratus, 9=cumulus	-	
0F7C	2	Upper cloud layer icing: 1 = on	-	
0F7E	2	Upper cloud layer turbulence, 0 to 255, in steps: 0, 72, 144, 216, 252	-	
0F80	2	Lower cloud layer type: 0=user-defined, 1=cirrus, 8=stratus, 9=cumulus	-	
0F82	2	Lower cloud layer icing: 1 = on	-	
0F84	2	Lower cloud layer turbulence, 0 to 255, in steps: 0, 72, 144, 216, 252	-	
0F86	2	Storm layer type: 10=storm. FSUIPC allows any type as a third, lowest layer: 0=user-defined, 1=cirrus, 8=stratus, 9=cumulus.	-	
0F88	2	Storm layer icing: 1 = on	-	
0F8A	2	Storm layer turbulence, 0 to 255, in steps: 0, 72, 144, 216, 252	-	
0F8C	2	Visibility setting	-	-

Flight folder, marker and ADF positions, G force, Mach

Offset	Bytes	Use	P3D	MSFS
0FF0	16	Not used: always zero. Was the path reading facility. See 0400 and 1000.	R?	-
1000	256	Folder where FS saves flights, full path (UNC with WideFS)	R	R? W?
1100	4	Inner Marker Latitude, FS units. Degrees: *90/10001750. Var: INNER MARKER LATLONALT	R?	R? W?
1104	4	Inner Marker Longitude, FS units. Degrees: *360/(65536*65536). Var: INNER MARKER LATLONALT	R?	R? W?
1108	4	Inner Marker altitude, metres Var: INNER MARKER LATLONALT	W?	R? W?
110C	4?	Middle Marker Latitude, FS units. Degrees: *90/10001750. Var: MIDDLE MARKER LATLONALT	R? W?	R? W?
1110	4	Middle Marker Longitude, FS units. Degrees: *360/(65536*65536). Var: MIDDLE MARKER LATLONALT	R?	R? W?
1114	4	Middle Marker altitude, metres Var: MIDDLE MARKER LATLONALT	W?	R? W?
1118	4	Outer Marker Latitude, FS units. Degrees: *90/10001750. Var: OUTER MARKER LATLONALT	R? W?	R? W?
111C	4	Outer Marker Longitude, FS units. Degrees: *360/(65536*65536). Var: OUTER MARKER LATLONALT	R?	R? W?
1120	4	Outer Marker altitude, metres Var: OUTER MARKER LATLONALT	W?	R? W?
1124	4	ADF1 Latitude, FS units. Degrees: *90/10001750. Var: ADF LATLONALT:1	R? W?	R? W?
1128	4	ADF1 Longitude, FS units. Degrees: *360/ (65536*65536). Var: ADF LATLONALT:1	R?	R? W?
112C	4	ADF1 altitude, metres Var: ADF LATLONALT:1	W?	R? W?
1130	4	ADF2 Latitude, FS units. Degrees: *90/10001750. Var: ADF LATLONALT:2	R? W?	R? W?

1134	4	ADF2 Longitude, FS units. Degrees: *360/ (65536*65536). Var: ADF LATLONALT:2	R?	R? W?
1138	4	ADF2 altitude, metres Var: ADF LATLONALT:2	W?	R? W?
1140	8	G force, raw value from SimConnect Var: G FORCE	R?	(R) W?
115E	1	Time of day: 0=dawn, 1=day, 2=dusk, 3=night Var: TIME OF DAY	R	(R) W?
11A2	1	Ground scenery shadows: 1=on, 2=off	-	R? W?
11A4	2	Aircraft shadows: 1=on, 0=off. Read and write.	-	R? W?
11B6	1	Aircraft reflections: 2=on, 1=off	-	R? W?
11B8	2	G force at touchdown: copy of 11BA	R?	R? W?
11BA	2	G force. Units not known: / 624 looks right. See 1140. Var: G FORCE	R?	(R) W?
11BE	2	Angle of attack indicator angle, 65536 = 360 degrees. 32767 = the 0.0 mark. Falls as the wing's angle of attack rises. Var: ANGLE OF ATTACK INDICATOR	R	(R) W?
11C6	2	Mach * 20480 Var: AIRSPEED MACH	R	(R) W?
11D0	2	TAT, degrees C * 256 Var: TOTAL AIR TEMPERATURE	R	(R) W?

Fuel totals, more tanks, weights, payload

Offset	Bytes	Use	P3D	MSFS
123E	1	Fuel: number of fuel selectors Var: NUM FUEL SELECTORS	R	(R) W?
123F	1	Fuel: non-zero = unlimited fuel set Var: UNLIMITED FUEL	R	(R) W?
1240	4	Fuel: total capacity, gallons Var: FUEL TOTAL CAPACITY	R	(R) W?
1244	4	Fuel: centre 2 tank level, % * 128 * 65536 Var: FUEL TANK CENTER2 LEVEL	R	(R) W?
1248	4	Fuel: centre 2 tank capacity: US Gallons Var: FUEL TANK CENTER2 CAPACITY	R	(R) W?
124C	4	Fuel: centre 3 tank level, % * 128 * 65536 Var: FUEL TANK CENTER3 LEVEL	R	(R) W?
1250	4	Fuel: centre 3 tank capacity: US Gallons Var: FUEL TANK CENTER3 CAPACITY	R	(R) W?
1254	4	Fuel: external 1 tank level, % * 128 * 65536 Var: FUEL TANK EXTERNAL1 LEVEL	R	(R) W?
1258	4	Fuel: external 1 tank capacity: US Gallons Var: FUEL TANK EXTERNAL1 CAPACITY	R	(R) W?
125C	4	Fuel: external 2 tank level, % * 128 * 65536 Var: FUEL TANK EXTERNAL2 LEVEL	R	(R) W?
1260	4	Fuel: external 2 tank capacity: US Gallons Var: FUEL TANK EXTERNAL2 CAPACITY	R	(R) W?
1264	4	Fuel: total quantity, gallons. Legacy fuel system: with the unusable fuel. Modular fuel system: without. Var: FUEL TOTAL QUANTITY	R	(R) W?
1268	4	Fuel: selected quantity, gallons Var: FUEL SELECTED QUANTITY	R	(R) W?
126C	4	Fuel: total weight, pounds Var: FUEL TOTAL QUANTITY WEIGHT	R	(R) W?

1270	4	Estimated cruise fuel flow, pounds/hour Var: ESTIMATED FUEL FLOW	R	(R) W?
1274	2	Text display mode (ATIS): 0=static, 1=scrolling	-	R? W?
132C	4	NAV/GPS switch. 0=NAV, 1=GPS Var: GPS DRIVES NAV1	R	R W
1330	4	Empty weight, lbs * 256 Var: EMPTY WEIGHT	R?	R? W?
1334	4	Max gross weight, lbs * 256 Var: MAX GROSS WEIGHT	R?	R? W?
13FC	4	Number of payload stations Var: PAYLOAD STATION COUNT	R	(R) W?
1400	48 each	Payload stations, 48 bytes each, up to 61 (count in 13FC): weight (lbs, float64), lateral, vertical and longitudinal distance from datum (ft, float64 each), name (16 characters). Can be written. Var: PAYLOAD STATION WEIGHT:1	R	(R) W?
1F80	40	Write only: adds one entry to the TCAS tables (not an AI aircraft). 40 bytes, the TCAS DATA structure of F080, in one write. More: FSUIPC list.	W	R? W?

Turbine engines and propellers

Offset	Bytes	Use	P3D	MSFS
2000	8	Turbine Engine 1 N1 %, float64 Var: TURB ENG N1:1	R W?	(R) W?
2008	8	Turbine Engine 1 N2 %, float64 Var: TURB ENG N2:1	R W?	(R) W?
2010	8	Turbine Engine 1 corrected N1 %, float64 Var: TURB ENG CORRECTED N1:1	R W?	(R) W?
2018	8	Turbine Engine 1 corrected N2 %, float64 Var: TURB ENG CORRECTED N2:1	R W?	(R) W?
2020	8	Turbine Engine 1 corrected fuel flow, pounds/hour, float64 Var: TURB ENG CORRECTED FF:1	R	(R) W?
2028	8	Turbine Engine 1 max torque fraction, 0.0-1.0, float64 Var: TURB ENG MAX TORQUE PERCENT:1	R?	R? W?
2030	8	Turbine Engine 1 EPR, float64 Var: TURB ENG PRESSURE RATIO:1	R	(R) W?
2038	8	Turbine Engine 1 ITT, degrees Rankine, float64 Var: TURB ENG ITT:1	R	(R) W?
2048	4	Turbine Engine 1 afterburner switch (1=on, 0=off) Var: TURB ENG AFTERBURNER:1	R	(R)
204C	8	Turbine Engine 1 jet thrust, pounds, float64. Propeller thrust: 2410. Var: TURB ENG JET THRUST:1	R	(R) W?
2054	4	Turbine Engine 1 tank selector. Values as 0AF8. Var: TURB ENG TANK SELECTOR:1	R	(R) W?
2058	4	Turbine Engine 1 tanks used, bits: 0 = centre 1, 1 = centre 2, 2 = centre 3, 3 = left main, 4 = left aux, 5 = left tip, 6 = right main, 7 = right aux, 8 = right tip, 9 = external 1, 10 = external 2 Var: TURB ENG TANKS USED:1	R	(R) W?
205C	4	Turbine Engine 1: number of fuel tanks Var: TURB ENG NUM TANKS USED:1	R	(R) W?
2060	8	Turbine Engine 1 fuel flow, pounds/hour, float64 Var: TURB ENG FUEL FLOW PPH:1	R	(R) W?
2068	4	Turbine Engine 1 fuel available flag Var: TURB ENG FUEL AVAILABLE:1	W?	R? W?

206C	8	Turbine Engine 1 bleed air pressure, psi, float64 Var: TURB ENG BLEED AIR:1	R	(R) W?
207C	8	Turbine Engine 1 reverser fraction, 0.0-1.0, float64 Var: TURB ENG REVERSE NOZZLE PERCENT:1	R	(R) W?
2084	8	Turbine Engine 1 vibration Var: TURB ENG VIBRATION:1	W?	R? W?
208C	4	Turbine Engine 1 ignition switch Var: TURB ENG IGNITION SWITCH:1	R	(R) W?
2090	8	Turb eng primary nozzle percent:1		R? W?
2098	1	Turb eng master starter switch		R? W?
2100	8	Turbine Engine 2 N1 %, float64 Var: TURB ENG N1:2	-	R? W?
2108	8	Turbine Engine 2 N2 %, float64 Var: TURB ENG N2:2	-	R? W?
2110	8	Turbine Engine 2 corrected N1 %, float64 Var: TURB ENG CORRECTED N1:2	-	R? W?
2118	8	Turbine Engine 2 corrected N2 %, float64 Var: TURB ENG CORRECTED N2:2	-	R? W?
2120	8	Turbine Engine 2 corrected fuel flow, pounds/hour, float64 Var: TURB ENG CORRECTED FF:2	-	R? W?
2128	8	Turbine Engine 2 max torque fraction, 0.0-1.0, float64 Var: TURB ENG MAX TORQUE PERCENT:2	-	R? W?
2130	8	Turbine Engine 2 EPR, float64 Var: TURB ENG PRESSURE RATIO:2	-	R? W?
2138	8	Turbine Engine 2 ITT, degrees Rankine, float64 Var: TURB ENG ITT:2	-	R? W?
2148	4	Turbine Engine 2 afterburner switch (1=on, 0=off) Var: TURB ENG AFTERBURNER:2	-	R? W?
214C	8	Turbine Engine 2 jet thrust, pounds, float64. Propeller thrust: 2510. Var: TURB ENG JET THRUST:2	-	R? W?
2154	4	Turbine Engine 2 tank selector. Values as 0AF8. Var: TURB ENG TANK SELECTOR:2	-	R? W?
2158	4	Turbine Engine 2 tanks used. Bits as 2058. Var: TURB ENG TANKS USED:2	-	R? W?
215C	4	Turbine Engine 2: number of fuel tanks Var: TURB ENG NUM TANKS USED:2	-	R? W?
2160	8	Turbine Engine 2 fuel flow, pounds/hour, float64 Var: TURB ENG FUEL FLOW PPH:2	-	R? W?
2168	4	Turbine Engine 2 fuel available flag Var: TURB ENG FUEL AVAILABLE:2	-	R? W?
216C	8	Turbine Engine 2 bleed air pressure, psi, float64 Var: TURB ENG BLEED AIR:2	-	R? W?
217C	8	Turbine Engine 2 reverser fraction, 0.0-1.0, float64 Var: TURB ENG REVERSE NOZZLE PERCENT:2	-	R? W?
2184	8	Turbine Engine 2 vibration Var: TURB ENG VIBRATION:2	-	R? W?
218C	4	Turbine Engine 2 ignition switch Var: TURB ENG IGNITION SWITCH:2	R W	(R) W?
2190	8	Turb eng primary nozzle percent:2		R? W?
2200	8	Turbine Engine 3 N1 %, float64 Var: TURB ENG N1:3	-	R? W?
2208	8	Turbine Engine 3 N2 %, float64 Var: TURB ENG N2:3	-	R? W?

2210	8	Turbine Engine 3 corrected N1 %, float64 Var: TURB ENG CORRECTED N1:3	-	R? W?
2218	8	Turbine Engine 3 corrected N2 %, float64 Var: TURB ENG CORRECTED N2:3	-	R? W?
2220	8	Turbine Engine 3 corrected fuel flow, pounds/hour, float64 Var: TURB ENG CORRECTED FF:3	-	R? W?
2228	8	Turbine Engine 3 max torque fraction, 0.0-1.0, float64 Var: TURB ENG MAX TORQUE PERCENT:3	-	R? W?
2230	8	Turbine Engine 3 EPR, float64 Var: TURB ENG PRESSURE RATIO:3	-	R? W?
2238	8	Turbine Engine 3 ITT, degrees Rankine, float64 Var: TURB ENG ITT:3	-	R? W?
2248	4	Turbine Engine 3 afterburner switch (1=on, 0=off) Var: TURB ENG AFTERBURNER:3	-	R? W?
224C	8	Turbine Engine 3 jet thrust, pounds, float64. Propeller thrust: 2610. Var: TURB ENG JET THRUST:3	-	R? W?
2254	4	Turbine Engine 3 tank selector. Values as 0AF8. Var: TURB ENG TANK SELECTOR:3	-	R? W?
2258	4	Turbine Engine 3 tanks used. Bits as 2058. Var: TURB ENG TANKS USED:3	-	R? W?
225C	4	Turbine Engine 3: number of fuel tanks Var: TURB ENG NUM TANKS USED:3	-	R? W?
2260	8	Turbine Engine 3 fuel flow, pounds/hour, float64 Var: TURB ENG FUEL FLOW PPH:3	-	R? W?
2268	4	Turbine Engine 3 fuel available flag Var: TURB ENG FUEL AVAILABLE:3	-	R? W?
226C	8	Turbine Engine 3 bleed air pressure, psi, float64 Var: TURB ENG BLEED AIR:3	-	R? W?
227C	8	Turbine Engine 3 reverser fraction, 0.0-1.0, float64 Var: TURB ENG REVERSE NOZZLE PERCENT:3	-	R? W?
2284	8	Turbine Engine 3 vibration Var: TURB ENG VIBRATION:3	-	R? W?
228C	4	Turbine Engine 3 ignition switch Var: TURB ENG IGNITION SWITCH:3	R W	(R) W?
2290	8	Turb eng primary nozzle percent:3		R? W?
2300	8	Turbine Engine 4 N1 %, float64 Var: TURB ENG N1:4	-	R? W?
2308	8	Turbine Engine 4 N2 %, float64 Var: TURB ENG N2:4	-	R? W?
2310	8	Turbine Engine 4 corrected N1 %, float64 Var: TURB ENG CORRECTED N1:4	-	R? W?
2318	8	Turbine Engine 4 corrected N2 %, float64 Var: TURB ENG CORRECTED N2:4	-	R? W?
2320	8	Turbine Engine 4 corrected fuel flow, pounds/hour, float64 Var: TURB ENG CORRECTED FF:4	-	R? W?
2328	8	Turbine Engine 4 max torque fraction, 0.0-1.0, float64 Var: TURB ENG MAX TORQUE PERCENT:4	-	R? W?
2330	8	Turbine Engine 4 EPR, float64 Var: TURB ENG PRESSURE RATIO:4	-	R? W?
2338	8	Turbine Engine 4 ITT, degrees Rankine, float64 Var: TURB ENG ITT:4	-	R? W?
2348	4	Turbine Engine 4 afterburner switch (1=on, 0=off) Var: TURB ENG AFTERBURNER:4	-	R? W?

234C	8	Turbine Engine 4 jet thrust, pounds, float64. Propeller thrust: 2710. Var: TURB ENG JET THRUST:4	-	R? W?
2354	4	Turbine Engine 4 tank selector. Values as 0AF8. Var: TURB ENG TANK SELECTOR:4	-	R? W?
2358	4	Turbine Engine 4 tanks used. Bits as 2058. Var: TURB ENG TANKS USED:4	-	R? W?
235C	4	Turbine Engine 4: number of fuel tanks Var: TURB ENG NUM TANKS USED:4	-	R? W?
2360	8	Turbine Engine 4 fuel flow, pounds/hour, float64 Var: TURB ENG FUEL FLOW PPH:4	-	R? W?
2368	4	Turbine Engine 4 fuel available flag Var: TURB ENG FUEL AVAILABLE:4	-	R? W?
236C	8	Turbine Engine 4 bleed air pressure, psi, float64 Var: TURB ENG BLEED AIR:4	-	R? W?
237C	8	Turbine Engine 4 reverser fraction, 0.0-1.0, float64 Var: TURB ENG REVERSE NOZZLE PERCENT:4	-	R? W?
2384	8	Turbine Engine 4 vibration Var: TURB ENG VIBRATION:4	-	R? W?
238C	4	Turbine Engine 4 ignition switch Var: TURB ENG IGNITION SWITCH:4	R	(R) W?
2390	8	Turb eng primary nozzle percent:4		R? W?
2400	8	Propeller 1 RPM, float64. Negative for counter-rotating props. Turboprops: shaft RPM. Var: GENERAL ENG RPM:1	R?	R?
2408	8	Propeller 1 RPM, fraction of maximum, float64 Var: GENERAL ENG PCT MAX RPM:1	W?	R? W?
2410	8	Propeller 1 thrust, pounds, float64 Var: PROP THRUST:1	R? W?	R? W?
2418	8	Propeller 1 beta blade angle, radians, float64 Var: PROP BETA:1	R?	R? W?
2420	4	Propeller 1 feathering inhibit Var: PROP FEATHERING INHIBIT:1	W?	R? W?
2424	4	Propeller 1 feathered flag Var: PROP FEATHERED:1	W?	R? W?
2428	8	Propeller 1 sync delta lever Var: PROP SYNC DELTA LEVER:1	W?	R? W?
2430	4	Propeller 1 autofeather armed flag Var: PROP AUTO FEATHER ARMED:1	W?	R? W?
2434	4	Propeller 1 feather switch Var: PROP FEATHER SWITCH:1	W?	R? W?
2438	4	Propeller 1 panel auto-feather switch. One control for all props. Var: PANEL AUTO FEATHER SWITCH:1	R? W?	R? W?
243C	4	Propeller 1 sync active. One control for all props. Var: PROP SYNC ACTIVE:1	R?	R? W?
2440	4	Propeller 1 de-ice switch. One control for all props. Var: PROP DEICE SWITCH:1	R?	R? W?
2480	128	Only in MSFS 2024 Var: LIVERY NAME		R? W?
2500	8	Propeller 2 RPM, float64. Negative for counter-rotating props. Turboprops: shaft RPM. Var: GENERAL ENG RPM:2	-	R? W?
2508	8	Propeller 2 RPM, fraction of maximum, float64 Var: GENERAL ENG PCT MAX RPM:2	-	R? W?

2510	8	Propeller 2 thrust, pounds, float64 Var: PROP THRUST:2	-	R? W?
2518	8	Propeller 2 beta blade angle, radians, float64 Var: PROP BETA:2	-	R? W?
2520	4	Propeller 2 feathering inhibit Var: PROP FEATHERING INHIBIT:2	-	R? W?
2524	4	Propeller 2 feathered flag Var: PROP FEATHERED:2	-	R? W?
2528	8	Propeller 2 sync delta lever Var: PROP SYNC DELTA LEVER:2	-	R? W?
2530	4	Propeller 2 autofeather armed flag Var: PROP AUTO FEATHER ARMED:2	-	R? W?
2534	4	Propeller 2 feather switch Var: PROP FEATHER SWITCH:2	-	R? W?
2538	4	Propeller 2 panel auto-feather switch. One control for all props. Var: PANEL AUTO FEATHER SWITCH:2	-	R? W?
253C	4	Propeller 2 sync active. One control for all props. Var: PROP SYNC ACTIVE:2	-	R? W?
2540	4	Propeller 2 de-ice switch. One control for all props. Var: PROP DEICE SWITCH:2	-	R? W?
2544	184	Free for general use		R? W?
2600	8	Propeller 3 RPM, float64. Negative for counter-rotating props. Turboprops: shaft RPM. Var: GENERAL ENG RPM:3	-	R? W?
2608	8	Propeller 3 RPM, fraction of maximum, float64 Var: GENERAL ENG PCT MAX RPM:3	-	R? W?
2610	8	Propeller 3 thrust, pounds, float64 Var: PROP THRUST:3	-	R? W?
2618	8	Propeller 3 beta blade angle, radians, float64 Var: PROP BETA:3	-	R? W?
2620	4	Propeller 3 feathering inhibit Var: PROP FEATHERING INHIBIT:3	-	R? W?
2624	4	Propeller 3 feathered flag Var: PROP FEATHERED:3	-	R? W?
2628	8	Propeller 3 sync delta lever Var: PROP SYNC DELTA LEVER:3	-	R? W?
2630	4	Propeller 3 autofeather armed flag Var: PROP AUTO FEATHER ARMED:3	-	R? W?
2634	4	Propeller 3 feather switch Var: PROP FEATHER SWITCH:3	-	R? W?
2638	4	Propeller 3 panel auto-feather switch. One control for all props. Var: PANEL AUTO FEATHER SWITCH:3	-	R? W?
263C	4	Propeller 3 sync active. One control for all props. Var: PROP SYNC ACTIVE:3	-	R? W?
2640	4	Propeller 3 de-ice switch. One control for all props. Var: PROP DEICE SWITCH:3	-	R? W?
2644	184	Free for general use		R? W?
2700	8	Propeller 4 RPM, float64. Negative for counter-rotating props. Turboprops: shaft RPM. Var: GENERAL ENG RPM:4	-	R? W?
2708	8	Propeller 4 RPM, fraction of maximum, float64 Var: GENERAL ENG PCT MAX RPM:4	-	R? W?
2710	8	Propeller 4 thrust, pounds, float64 Var: PROP THRUST:4	-	R? W?

2718	8	Propeller 4 beta blade angle, radians, float64 Var: PROP BETA:4	-	R? W?
2720	4	Propeller 4 feathering inhibit Var: PROP FEATHERING INHIBIT:4	-	R? W?
2724	4	Propeller 4 feathered flag Var: PROP FEATHERED:4	-	R? W?
2728	8	Propeller 4 sync delta lever Var: PROP SYNC DELTA LEVER:4	-	R? W?
2730	4	Propeller 4 autofeather armed flag Var: PROP AUTO FEATHER ARMED:4	-	R? W?
2734	4	Propeller 4 feather switch Var: PROP FEATHER SWITCH:4	-	R? W?
2738	4	Propeller 4 panel auto-feather switch. One control for all props. Var: PANEL AUTO FEATHER SWITCH:4	-	R? W?
273C	4	Propeller 4 sync active. One control for all props. Var: PROP SYNC ACTIVE:4	-	R? W?
2740	4	Propeller 4 de-ice switch. One control for all props. Var: PROP DEICE SWITCH:4	-	R? W?
2744	216	Free for general use		R? W?

Electrics, air data, AI control, hot buttons

Offset	Bytes	Use	P3D	MSFS
281C	4	Master battery switch: 1=on, 0=off. 747-8: always reads on, and cannot be switched back on. Var: ELECTRICAL MASTER BATTERY	R	(R) W?
2824	8	Total load amps Var: ELECTRICAL TOTAL LOAD AMPS	W?	R? W?
282C	8	Battery load Var: ELECTRICAL BATTERY LOAD	W?	R? W?
2834	8	Battery voltage Var: ELECTRICAL BATTERY VOLTAGE	R	(R) W?
2840	8	Main bus voltage Var: ELECTRICAL MAIN BUS VOLTAGE	R	(R) W?
2848	8	Main bus amps Var: ELECTRICAL MAIN BUS AMPS	W?	R? W?
2850	8	Avionics bus voltage Var: ELECTRICAL AVIONICS BUS VOLTAGE	W?	R? W?
2858	8	Avionics bus amps Var: ELECTRICAL AVIONICS BUS AMPS	W?	R? W?
2860	8	Hot battery bus voltage Var: ELECTRICAL HOT BATTERY BUS VOLTAGE	W?	R? W?
2868	8	Hot battery bus amps Var: ELECTRICAL HOT BATTERY BUS AMPS	W?	R? W?
2870	8	Battery bus voltage Var: ELECTRICAL BATTERY BUS VOLTAGE	W?	R? W?
2878	8	Battery bus amps Var: ELECTRICAL BATTERY BUS AMPS	W?	R? W?
2880	8	Generator alternator 1 bus voltage Var: ELECTRICAL GENALT BUS VOLTAGE:1	R	(R) W?
2888	8	Generator alternator 1 bus amps Var: ELECTRICAL GENALT BUS AMPS:1	W?	R? W?
2890	8	Generator alternator 2 bus voltage Var: ELECTRICAL GENALT BUS VOLTAGE:2	R	(R) W?

2898	8	Generator alternator 2 bus amps Var: ELECTRICAL GENALT BUS AMPS:2	W?	R? W?
28A0	8	Generator alternator 3 bus voltage Var: ELECTRICAL GENALT BUS VOLTAGE:3	R	(R) W?
28A8	8	Generator alternator 3 bus amps Var: ELECTRICAL GENALT BUS AMPS:3	W?	R? W?
28B0	8	Generator alternator 4 bus voltage Var: ELECTRICAL GENALT BUS VOLTAGE:4	R	(R) W?
28B8	8	Generator alternator 4 bus amps Var: ELECTRICAL GENALT BUS AMPS:4	W?	R? W?
28C0	8	Ambient air density, slugs per cubic foot, float64 Var: AMBIENT DENSITY	R	(R) W?
28C8	8	Ambient air pressure, lbs per square foot, float64 Var: AMBIENT PRESSURE	R	(R) W?
28D0	8	Static air temperature, degrees Fahrenheit, float64 Var: AMBIENT TEMPERATURE	R	(R) W?
28D8	8	Static air temperature, degrees Rankine, float64 Var: AMBIENT TEMPERATURE	R	(R) W?
28E0	8	Theta: air temperature / ISO sea level temperature, float64	R	R? W?
28E8	8	Delta: air pressure / ISO sea level pressure, float64	R	R? W?
28F0	8	Sigma: air density / ISO sea level density, float64	R	R? W?
28F8	8	Old AI traffic control. Do not use. See 2900.	R?	-
2900	12	AI traffic control: sends an FS control to one AI aircraft. Write 12 bytes together: aircraft id (from the TCAS table), control, parameter. Control 0xFFFF deletes the aircraft.	-	-
290C	4?	Number of hot joystick button slots: 56	R	R? W?
2910	224	Hot joystick buttons: 56 slots of 4 bytes, zero when free. Programs use them to detect button presses, as with the hot keys at 3210. Byte 0 = joystick number + 128. See 32FF. More: FSUIPC list.	R	
29F0	4?	Virtual buttons (3340): set, clear or toggle one. Write 4 bytes: button (0-31), virtual joystick (64-72), action (0=toggle, 1=set, 2=clear), 0.	-	R? W?

Control surfaces, hydraulics, wind, flight director, CG, HSI

Offset	Bytes	Use	P3D	MSFS
2A00	8	Elevon 1 deflection Var: ELEVON DEFLECTION:1	W?	R?
2A08	8	Elevon 2 deflection Var: ELEVON DEFLECTION:2	W?	R?
2A10	8	Elevon 3 deflection Var: ELEVON DEFLECTION:3	W?	R?
2A18	8	Elevon 4 deflection Var: ELEVON DEFLECTION:4	W?	R?
2A20	8	Elevon 5 deflection Var: ELEVON DEFLECTION:5	W?	R?
2A28	8	Elevon 6 deflection Var: ELEVON DEFLECTION:6	W?	R?
2A30	8	Elevon 7 deflection Var: ELEVON DEFLECTION:7	W?	R?
2A38	8	Elevon 8 deflection Var: ELEVON DEFLECTION:8	W?	R?
2A48	8	Folding wing, left, %, float64. Read only. Var: FOLDING WING LEFT PERCENT	W?	R? W?

2A50	8	Folding wing, right, %, float64. Read only. Var: FOLDING WING RIGHT PERCENT	W?	R? W?
2A70	8	Canopy open, float64 Var: CANOPY OPEN	W?	R? W?
2A78	8	Water rudder, left, extended, float64 Var: WATER LEFT RUDDER EXTENDED	W?	R? W?
2A80	8	Water rudder, right, extended, float64 Var: WATER RIGHT RUDDER EXTENDED	W?	R? W?
2A88	4	Water rudder handle position, 16384 = 100% Var: WATER RUDDER HANDLE POSITION	R	(R) W?
2A90	4	Tail wheel lock: 1=locked, 0=unlocked Var: TAILWHEEL LOCK ON	R	(R) W?
2AAC	4	NAV1 CDI needle, float32, -127.0 left to +127.0 right Var: NAV CDI:1	R	(R) W?
2AB0	4	NAV1 glideslope needle, float32, -119.0 up to +119.0 down Var: NAV GSI:1	R	(R) W?
2AB4	4	NAV2 CDI needle, float32, -127.0 left to +127.0 right Var: NAV CDI:2	R	(R) W?
2AB8	4	NAV2 glideslope needle, float32, -127.0 up to +127.0 down Var: NAV GSI:2	R	(R) W?
2ABC	68	Free for general use		(R) W?
2B00	8	Gyro compass heading, magnetic, with drift, float64 Var: PLANE HEADING DEGREES GYRO	R	(R) W?
2B08	8	Hydraulics 1 pressure, psf	W?	R? W?
2B1C	8	Hydraulics1 reservoir, %	W?	R? W?
2C08	8	Hydraulics 2 pressure, psf	W?	R? W?
2C1C	8	Hydraulics2 reservoir, %	W?	R? W?
2D08	8	Hydraulics 3 pressure, psf	W?	R? W?
2D1C	8	Hydraulics3 reservoir, %	W?	R? W?
2DC6	2	Helicopter beep (governor). Also set by the Increase / Decrease Heli Beep controls. 0 to 16368.	R?	R? W?
2DC8	8	Wind at the aircraft, lateral (X), body axes, ft/sec, float64. + = right crosswind, - = left. Var: AIRCRAFT WIND X	R	(R)
2DD0	8	Wind at the aircraft, vertical (Y), body axes, ft/sec, float64. + = pushing on the under surfaces. Var: AIRCRAFT WIND Y	R	(R)
2DD8	8	Wind at the aircraft, longitudinal (Z), body axes, ft/sec, float64. + = headwind, - = tailwind. Var: AIRCRAFT WIND Z	R	(R)
2DE0	8	Wind direction at the aircraft, degrees true, float64. Write only: changes the wind. Read: 3490. Var: AMBIENT WIND DIRECTION	R	(R)
2DE8	8	Wind speed at the aircraft, knots, float64. Write only: changes the wind. Read: 3488. Var: AMBIENT WIND VELOCITY	R	(R)
2DF0	8	Visibility at the aircraft, metres, float64. Read only. Var: AMBIENT VISIBILITY	R	(R)
2DF8	4	In cloud flag Var: AMBIENT IN CLOUD	R? W?	R? W?
2E00	4	Precipitation state Var: AMBIENT PRECIP STATE	R?	R? W?

2E04	4	Autopilot max bank, degrees. Writing uses the AP MAX BANK INC and DEC controls to come close. Var: AUTOPILOT MAX BANK	R	(R) W?
2E08	8	Hydraulics 4 pressure, psf	W?	R? W?
2E1C	8	Hydraulics4 reservoir, %	W?	R? W?
2E78	8	CG lateral, fraction of MAC (% / 100), float64 Var: CG PERCENT LATERAL	R	(R) W?
2E80	4	Master avionics switch: 0=off, 1=on. Uses AVIONICS MASTER SET. Var: AVIONICS MASTER SWITCH	R	R W
2E88	4	Panel auto-feather arm switch: 0=off, 1=on Var: PANEL AUTO FEATHER SWITCH:1	R?	R? W?
2E90	4	Standby vacuum circuit on Var: CIRCUIT STANDY VACUUM ON	W?	R? W?
2E98	8	Elevator deflection, radians, float64. + = up. Var: ELEVATOR DEFLECTION	R	(R) W?
2EA0	8	Elevator trim deflection, radians, float64. + = up. Var: ELEVATOR TRIM POSITION	R	(R) W?
2EA8	8	Aileron deflection, radians, float64, average of left and right. + = right turn. Var: AILERON AVERAGE DEFLECTION	R	(R) W?
2EB0	8	Aileron trim deflection, radians, float64. + = right turn. Write goes through 0C02, for a maximum of 0.2. Var: AILERON TRIM	R	(R)
2EB8	8	Rudder deflection, radians, float64 Var: RUDDER DEFLECTION	R	(R) W?
2EC0	8	Rudder trim deflection, radians, float64. Write goes through 0C04, for a maximum of 0.2. Var: RUDDER TRIM	R	(R)
2EC8	4	Prop sync: 1=active, 0=inactive Var: PROP SYNC ACTIVE:1	R	(R) W?
2ED0	8	Incidence alpha, radians, float64: body angle of attack. FS ignores wing incidence, so the wing's too. Var: INCIDENCE ALPHA	R	(R) W?
2ED8	8	Incidence beta, radians, float64: side slip angle Var: INCIDENCE BETA	R	(R) W?
2EE0	4	Flight director: 1=active, 0=inactive. Read and write. Var: AUTOPILOT FLIGHT DIRECTOR ACTIVE	R	(R) W?
2EE8	8	Flight director pitch, degrees, float64. Only with the FD active. Var: AUTOPILOT FLIGHT DIRECTOR PITCH	R	(R) W?
2EF0	8	Flight director bank, degrees, float64. - = right, + = left. Var: AUTOPILOT FLIGHT DIRECTOR BANK	R	(R) W?
2EF8	8	CG, fraction of MAC (% / 100), float64 Var: CG PERCENT	R	(R) W?
2F00	8	CG aft limit (%/100) Var: CG AFT LIMIT	W?	R? W?
2F08	8	CG fwd limit (%/100) Var: CG FWD LIMIT	W?	R? W?
2F10	8	CG max mach Var: CG MAX MACH	R	(R) W?
2F18	8	CG min mach Var: CG MIN MACH	W?	R? W?
2F20	8	Concorde visor nose handle (%) Var: CONCORDE VISOR NOSE HANDLE	W?	R?
2F28	8	Concorde visor pos pct (%) Var: CONCORDE VISOR POSITION PERCENT	W?	R? W?

2F30	8	Concorde nose angle, radians Var: CONCORDE NOSE ANGLE	W?	R? W?
2F38	8	Gear pos tail Var: GEAR TAIL POSITION	W?	R?
2F40	8	Autopilot max speed. Not in the MSFS SDK. Var: AUTOPILOT MAX SPEED HOLD	W?	R? W?
2F48	8	Autopilot cruise speed. Not in the MSFS SDK. Var: AUTOPILOT CRUISE SPEED HOLD	W?	R? W?
2F50	8	Barber pole mach Var: BARBER POLE MACH	W?	R? W?
2F58	4	Fuel transfer mode: 0=off, 1=auto, 2=fwd, 3=aft Var: FUEL SELECTED TRANSFER MODE	R	(R)
2F60	8	Hydraulic system integrity (%) Var: HYDRAULIC SYSTEM INTEGRITY	W?	R?
2F68	4	Attitude cage button Var: ATTITUDE CAGE	W?	R?
2F70	8	Attitude indicator pitch, degrees, float64 Var: ATTITUDE INDICATOR PITCH DEGREES	R	(R)
2F78	8	Attitude indicator bank, degrees, float64 Var: ATTITUDE INDICATOR BANK DEGREES	R	(R)
2F80	1	Panel autobrake switch: 0=RTO, 1=off, 2=brake 1, 3=brake 2, 4=brake 3, 5=max. Read and write. A320neo: goes back to 0 after a write. Var: AUTO BRAKE SWITCH CB	R	R W
2F88	8	HSI CDI needle, -127.0 to +127.0, float64. Full scale: 10 degrees for a VOR, 2.5 for a localiser. Var: HSI CDI NEEDLE	R	(R) W?
2F90	8	HSI glideslope needle, -119.0 to +119.0, float64. Full scale: 0.7 degrees. Var: HSI GSI NEEDLE	R	(R) W?
2F98	8	HSI speed, float64 Var: HSI SPEED	R?	R? W?
2FA0	8	HSI distance, metres, float64 Var: HSI DISTANCE	R	(R) W?
2FA8	2	HSI bearing. Does not seem to work. Var: HSI BEARING	W?	R? W?
2FAA	1	HSI CDI valid flag. Does not seem to work. Var: HSI CDI NEEDLE VALID	W?	R? W?
2FAB	1	HSI GSI valid flag Var: HSI GSI NEEDLE VALID	R	(R) W?
2FAC	1	HSI bearing valid flag. Not seen set. Var: HSI BEARING VALID	W?	R? W?
2FAD	1	HSI To/From flag: 0=off, 1=To, 2=From Var: HSI TF FLAGS	R	(R) W?
2FAE	1	HSI has localiser flag Var: HSI HAS LOCALIZER	R	(R) W?
2FB0	6	HSI ident string Var: HSI STATION IDENT	R	(R) W?
2FE0	32	Add-Ons menu: a program adds its own menu entry. It takes a free hot key slot, writes the menu text, and reads the flag in the slot. It must refresh the slot every 10 s or the entry goes. More: FSUIPC list.	-	

Radio names, accelerations, weight, flap detail

Offset	Bytes	Use	P3D	MSFS
3000	6	VOR1 IDENTITY, string, zero terminated Var: NAV IDENT:1	R	(R) W?
3006	25	VOR1 name, string, zero terminated Var: NAV NAME:1	R	(R) W?
301F	6	VOR2 IDENTITY, string, zero terminated Var: NAV IDENT:2	R	(R) W?
3025	25	VOR2 name (string supplied: 25 bytes needed including zero terminator) Var: NAV NAME:2	R	(R) W?
303E	6	ADF1 IDENTITY, string, zero terminated Var: ADF IDENT:1	R	(R) W?
3044	25	ADF1 name, string, zero terminated Var: ADF NAME:1	R	(R) W?
305D		Count of "Toggle aircraft name display" controls seen, 0-255, wraps	R	R? W?
3060	8	Acceleration X (lateral), body axes, ft/sec2, float64 Var: ACCELERATION BODY X	R W?	(R) W?
3068	8	Acceleration Y (vertical), body axes, ft/sec2, float64 Var: ACCELERATION BODY Y	R W?	(R) W?
3070	8	Acceleration Z (longitudinal), body axes, ft/sec2, float64 Var: ACCELERATION BODY Z	R W	(R) (W)
3078	8	Pitch acceleration, body axes, radians/sec2, float64 Var: STRUCT BODY ROTATION ACCELERATION	R	R? W?
3080	8	Roll acceleration, body axes, radians/sec2, float64 Var: STRUCT BODY ROTATION ACCELERATION	R	R? W?
3088	8	Yaw acceleration, body axes, radians/sec2, float64 Var: STRUCT BODY ROTATION ACCELERATION	R	R? W?
3090	8	Ground velocity Z (longitudinal), body axes, ft/sec, float64 Var: VELOCITY BODY Z	R? W?	R? W?
3098	8	Ground velocity X (lateral), body axes, ft/sec, float64 Var: VELOCITY BODY X	R? W?	R? W?
30A0	8	Ground velocity Y (vertical), body axes, ft/sec, float64 Var: VELOCITY BODY Y	R? W?	R? W?
30A8	8	Pitch velocity, body axes, radians/sec, float64 Var: ROTATION VELOCITY BODY X	R W?	(R) W?
30B0	8	Roll velocity, body axes, radians/sec, float64 Var: ROTATION VELOCITY BODY Z	R W?	(R) W?
30B8	8	Yaw velocity, body axes, radians/sec, float64 Var: ROTATION VELOCITY BODY Y	R W?	(R) W?
30C0	8	Loaded weight, lbs, float64. Not updated in some aircraft (A320neo). Var: TOTAL WEIGHT	R	R W?
30C8	8	Mass, slugs, float64. See 30C0. Not updated in some aircraft (A320neo). Var: TOTAL WEIGHT	R?	R W?
30D0	8	Vertical acceleration, G, float64	-	R? W?
30D8	8	Dynamic pressure, lbs/sq ft Var: DYNAMIC PRESSURE	R	(R) W?
30E0	2	Trailing edge left inboard flap extension, 16383 = 100% Var: TRAILING EDGE FLAPS0 LEFT PERCENT	R	R? W?
30E2	2	Trailing edge left outboard flap extension, 16383 = 100% Var: TRAILING EDGE FLAPS1 LEFT PERCENT	R	R? W?

30E4	2	Trailing edge right inboard flap extension, 16383 = 100% Var: TRAILING EDGE FLAPS0 RIGHT PERCENT	R	R? W?
30E6	2	Trailing edge right outboard flap extension, 16383 = 100% Var: TRAILING EDGE FLAPS1 RIGHT PERCENT	R	R? W?
30E8	2	Leading edge left inboard flap extension, 16383 = 100% Var: LEADING EDGE FLAPS0 LEFT PERCENT	R	R? W?
30EA	2	Leading edge left outboard flap extension, 16383 = 100% Var: LEADING EDGE FLAPS1 LEFT PERCENT	R	R? W?
30EC	2	Leading edge right inboard flap extension, 16383 = 100% Var: LEADING EDGE FLAPS0 RIGHT PERCENT	R	R? W?
30EE	2	Leading edge right outboard flap extension, 16383 = 100% Var: LEADING EDGE FLAPS1 RIGHT PERCENT	R	R? W?
30F0	2	Trailing edge left inboard flap extension, degrees * 256 Var: TRAILING EDGE FLAPS0 LEFT ANGLE	R	R? W?
30F2	2	Trailing edge left outboard flap extension, degrees * 256 Var: TRAILING EDGE FLAPS1 LEFT ANGLE	R	R? W?
30F4	2	Trailing edge right inboard flap extension, degrees * 256 Var: TRAILING EDGE FLAPS0 RIGHT ANGLE	R	R? W?
30F6	2	Trailing edge right outboard flap extension, degrees * 256 Var: TRAILING EDGE FLAPS1 RIGHT ANGLE	R	R? W?
30F8	2	Leading edge left inboard flap extension, degrees * 256 Var: LEADING EDGE FLAPS0 LEFT ANGLE	R	R? W?
30FA	2	Leading edge left outboard flap extension, degrees * 256 Var: LEADING EDGE FLAPS1 LEFT ANGLE	R	R? W?
30FC	2	Leading edge right inboard flap extension, degrees * 256 Var: LEADING EDGE FLAPS0 RIGHT ANGLE	R	R? W?
30FE	2	Leading edge right outboard flap extension, degrees * 256 Var: LEADING EDGE FLAPS1 RIGHT ANGLE	R	R? W?

Switches, axis disconnect, FSUIPC controls, radios, ATC names

Offset	Bytes	Use	P3D	MSFS
3100	1	Engine primer: write non-zero to operate. One shot. Var: RECIP ENG PRIMER:1	R?	R? W?
3101	1	Alternator 1 (1=on, 0=off). Read and write. Var: GENERAL ENG MASTER ALTERNATOR:1	R?	R W
3102	1	Battery (1=on, 0=off). Read and write. Var: ELECTRICAL MASTER BATTERY	W?	R W
3103	1	Avionics (1=on, 0=off). Read and write. Uses AVIONICS MASTER SET. Var: AVIONICS MASTER SWITCH	W?	R W
3104	1	Fuel pump 1 (1=on, 0=off). Read and write. Separate pumps: 3125. Var: GENERAL ENG FUEL PUMP SWITCH:1	R	R
3105	1	VOR1 morse ID sound (1=on, 0=off). Read and write. See 3122. Var: NAV SOUND:1	R?	R?
3106	1	VOR2 morse ID sound (1=on, 0=off). Read and write. See 3122. Var: NAV SOUND:2	R?	R?
3107	1	ADF1 morse ID sound (1=on, 0=off). Read and write. See 3122. Var: ADF SOUND	R?	R?
3108	1	Write 1 to disable FSUIPC's AutoTune ADF1 (FSUIPC.INI)	-	R? W?
3109	1	Control flags. Bit 0 = disable AxisCalibration. Bit 1 = keep the older axis controls (AILERON SET, ELEVATOR SET ...) connected when 310A / 310B disconnect the main ones; clears itself after 10 s. Bit 7 = free for programs. More: FSUIPC list.	-	R? W?

310A	1	Disconnects joystick axes from the flight controls, one bit each: 0 = elevator, 1 = aileron, 2 = rudder, 3 = all throttles, 4 = throttle sync, 5 = elevator trim, 6 = throttle 1, 7 = throttle 2. Clears itself after 10 s: write it every few seconds. More: FSUIPC list.	W?	R? W?
310B	1	Disconnects more axes, one bit each: 0 = slew ahead, 1 = slew side, 2 = slew heading, 3 = slew altitude, 4 = slew bank, 5 = slew pitch, 6 = throttle 3, 7 = throttle 4. Clears itself after 10 s. See 3109.	W?	R? W?
310C	4	Reserved	-	R? W?
3110	8	Sends a control to the simulator. Two 32-bit integers: control number, parameter. Write all 8 bytes in one block; 4 will do without a parameter. FSUIPC's own controls and presets work too.	W	R? W?
3118	2	COM2 frequency, BCD, 4 digits: 123.45 = 0x2345, leading 1 assumed Var: COM ACTIVE FREQUENCY:2	R W	(R) W?
311A	2	COM1 standby frequency, BCD, 4 digits: 123.45 = 0x2345, leading 1 assumed Var: COM STANDBY FREQUENCY:1	R W	(R) W?
311C	2	COM2 standby frequency, BCD, 4 digits: 123.45 = 0x2345, leading 1 assumed Var: COM STANDBY FREQUENCY:2	R W	(R) W?
311E	2	NAV1 standby frequency, BCD, 4 digits: 113.45 = 0x1345, leading 1 assumed Var: NAV STANDBY FREQUENCY:1	R W	(R) W?
3120	2	NAV2 standby frequency, BCD, 4 digits: 113.45 = 0x1345, leading 1 assumed Var: NAV STANDBY FREQUENCY:2	R W	(R) W?
3122	1	Radio audio switches, bits: 7 = COM1 transmit, 6 = COM2 transmit, 5 = COM receive both, 4 = NAV1 sound, 3 = NAV2 sound, 2 = marker sound, 1 = DME sound, 0 = ADF1 sound Var: ADF SOUND	R? W?	R? W?
3123	1	Radio use/standby swap, write only. Bits: 3 = COM1, 2 = COM2, 1 = NAV1, 0 = NAV2.	W	R? W?
3124	1	Simulator version: 110 = MSFS 2020, 121 = MSFS 2024 (the last digit may change). 0 = not connected.	R?	R W?
3125	1	Fuel pump switches, one per engine. Bits: 2^0 = pump 1, 2^1 = pump 2, 2^2 = pump 3, 2^4 = pump 4. See 3104. Var: GENERAL ENG FUEL PUMP SWITCH:1	R W	(R)
3126	1	Set view direction, write only: 0 = forward, 1-7 = clockwise in 45 degree steps, 8 = down, 9 = up, 10-17 = the same looking up. Other values reset.	W	R? W?
3127	9	FSUIPC weather option control: not supported	-	-
3130	8	ATC flight number of the user aircraft, from aircraft.cfg, up to 12 characters with the zero. Writing may not change what ATC uses unless a flight plan is loaded (0130). Var: ATC FLIGHT NUMBER	R W	(R)
3138	1	Battery 2 (1=on, 0=off). Read and write. Var: ELECTRICAL MASTER BATTERY:2		-
313C	10	ATC identifier (tail number) of the user aircraft, from aircraft.cfg, up to 12 characters with the zero Var: ATC ID	R W?	(R)
3148	23	ATC airline name of the user aircraft, from aircraft.cfg, up to 24 characters with the zero Var: ATC AIRLINE	R W?	(R)
3160	23	ATC aircraft type of the user aircraft, from aircraft.cfg, up to 24 characters with the zero Var: ATC TYPE	R	(R) W?

Velocities, surface, pushback, key strokes, hot keys

Offset	Bytes	Use	P3D	MSFS
3178	8	TAS velocity Z (longitudinal), body axes, ft/sec, float64 Var: RELATIVE WIND VELOCITY BODY Z	R W?	(R)
3180	8	TAS velocity X (lateral), body axes, ft/sec, float64 Var: RELATIVE WIND VELOCITY BODY X	R W?	(R)
3188	8	TAS velocity Y (vertical), body axes, ft/sec, float64 Var: RELATIVE WIND VELOCITY BODY Y	R W?	(R)
3190	8	Ground velocity Z (longitudinal), world axes, ft/sec, float64 Var: VELOCITY WORLD Z	R? W?	R? W?
3198	8	Ground velocity X (lateral), world axes, ft/sec, float64 Var: VELOCITY WORLD X	R? W?	R? W?
31A0	8	Ground velocity Y (vertical), world axes, ft/sec, float64 Var: VELOCITY WORLD Y	R? W?	R? W?
31A8	8	Pitch velocity, world axes, radians/sec, float64 Var: STRUCT WORLD ROTATION VELOCITY	R	(R) W?
31B0	8	Roll velocity, world axes, radians/sec, float64 Var: STRUCT WORLD ROTATION VELOCITY	R	(R) W?
31B8	8	Yaw velocity, world axes, radians/sec, float64 Var: STRUCT WORLD ROTATION VELOCITY	R	(R) W?
31C0	8	Acceleration X (lateral), world axes, ft/sec2, float64 Var: ACCELERATION WORLD X	R? W?	R? W?
31C8	8	Acceleration Y (vertical), world axes, ft/sec2, float64 Var: ACCELERATION WORLD Y	R? W?	R? W?
31D0	8	Acceleration Z (longitudinal), world axes, ft/sec2, float64 Var: ACCELERATION WORLD Z	R? W?	R? W?
31D8	2	Slew mode lateral axis input after calibration (310B can disconnect it)	R?	R? W?
31DA	2	Slew mode lateral axis input after calibration (310B can disconnect it)	R?	R? W?
31DC	2	Slew mode yaw axis input after calibration (310B can disconnect it)	R?	R? W?
31DE	2	Slew mode vertical axis input after calibration (310B can disconnect it)	R?	R? W?
31E0	2	Slew mode roll axis input after calibration (310B can disconnect it)	R?	R? W?
31E2	2	Slew mode pitch axis input after calibration (310B can disconnect it)	R?	R? W?
31E4	4	Radio altitude, metres * 65536 Var: RADIO HEIGHT	R	R? W?
31E8	4	Surface type: 0=concrete, 1=grass, 2=water, 3=bumpy grass, 4=asphalt, 5=short grass, 6=long grass, 7=hard turf, 8=snow, 9=ice, 10=urban, 11=forest, 12=dirt, 13=coral, 14=gravel, 15=oil treated, 16=steel mats, 17=bituminous, 18=brick, 19=macadam, 20=planks, 21=sand, 22=shale, 23=tarmac, 254=unknown Var: SURFACE TYPE	R?	R? W?
31EC	4	Surface condition: 0=normal, 1=wet, 2=icy, 3=snow Var: SURFACE CONDITION	-	R? W?
31F0	4	Pushback status: 0=straight back, 1=tail to the left, 2=tail to the right, 3=off	R	W?
31F4	4	Pushback control: write 0-3, as 31F0 Var: PUSHBACK STATE	W	-
31F8	4	Tug heading, write only: 0 to 4294967295 = 0 to 360 degrees	W?	-
31FC	4	Tug speed, write only, ft/sec	W?	(W)
3200	12	Sends a keystroke to FS. Write 12 bytes in one write: message (WM_KEYDOWN or WM_KEYUP), wParam, lParam.	W?	R? W?

320C	4	Number of hot key slots: 56	R	R? W?
3210	224	Hot keys: 56 slots of 4 bytes, zero when free, shared by all programs. Byte 0 = virtual key code, byte 1 = shift state (bit 0 shift, 1 ctrl, 2 alt), byte 2 = flags from the program, byte 3 = flags from FSUIPC. See 32FE. More: FSUIPC list.	R W	

FSUIPC status, inhibits, text display, axis inputs, virtual buttons

Offset	Bytes	Use	P3D	MSFS
32F0	4	FSUIPC protected mode controls: not supported	R? W?	-
32F4	2	ID of the last FS menu command: not supported	-	-
32F6	2	FSUIPC option inhibits: set bits turn options off for up to 14 s. Bits: 0 = reverse elevator trim, 1 = fix control accelerations, 2 = rudder spikes, 3 = elevator spikes, 4 = aileron spikes, 5 = autopilot altitude fix, 6 = extend battery life, 7 = clock seconds sync. Most are not supported now.	R? W?	-
32F8	1	Inhibits, one bit each: 0 = flaps, 1 = spoilers, 2 = gear, 4-7 = reverser of engine 1-4. Key presses and mouse clicks are undone, not blocked: the device may twitch. More: FSUIPC list.	R W	R? W?
32F9	1	Brakes in use: non-zero for a second after the last brake control or axis increase. Also for rising values written to 0C00 or 0C01.	R	R? W?
32FA	2	Text display control. Write the text to 3380, then here: 0 = show until replaced, n = show for n seconds, -1 = scroll, -n = scroll, or n seconds.	W	-
32FC	2	Aircraft change counter: counts each change of the aircraft at 3C00, and each "reload user aircraft"	R	R? W?
32FE	1	Hot key counter: counts each hot key of 3210 that occurs	R	R? W?
32FF	1	Hot button counter: counts each hot button of 2910 that occurs	R	R? W?
3300	2	Radio and autopilot status, read only, bits: 1 = good NAV1, 2 = good NAV2, 3 = good ADF1, 4 = NAV1 has DME, 5 = NAV2 has DME, 6 = NAV1 is ILS, 7 = AP NAV1 radial acquired, 8 = AP LOC acquired, 9 = AP GS acquired, 10 = AP LOC is back course, 11 = good ADF2, 12 = NAV2 is ILS	R	R? W?
3302	2	FSUIPC options, read only. None in use.	R?	R? W?
3304	4	FSUIPC version. High word (3306): version * 1000 in BCD, 0x1998 = 1.998. Low word: build letter, 0 = none, 1-26 = a-z.	R	R W?
3308	2	Simulator, as FSUIPC sees it: 8 = FSX 32-bit, 9 = ESP, 10 = P3D 32-bit, 11 = FSX 64-bit, 12 = P3D 64-bit, 13 = MSFS 2020, 14 = MSFS 2024. 1-7 = older simulators.	R	R W?
330A	2	Fixed pattern 0xFADE. Shows that 3304-3308 are valid.	R	R? W?
330C	2	Status flags: bit 1 = programs have full access, bit 2 = FSUIPC is registered, bit 4 = throttle sync option on	R?	R? W?
330E	1	Count of programs that have connected this session, up to 255	-	R? W?
330F	17	Reserved area for WideFS KeySend facility	-	R? W?
3320	2	WideFS shutdown: write 0xABCD to shut down the WideServer and WideClient PCs. Needs AllowShutdown in their ini files. More: FSUIPC list.	R W	R? W?
3322	2	WideServer version * 1000 in BCD (0x5110 = 5.110). 0 = not enabled. See 333C.	R W	R? W?
3324	4	Altimeter reading, feet (metres if 0C18 = 2), signed. See 0590. Var: INDICATED ALTITUDE	R W?	(R) W?
3328	2	Elevator axis input after calibration (310A can disconnect it)	R?	R? W?
332A	2	Aileron axis input after calibration (310A can disconnect it)	R?	R? W?
332C	2	Rudder axis input after calibration (310A can disconnect it)	R?	R? W?

332E	2	Throttle axis input after calibration (310A can disconnect it). The single throttle, for the engines selected in 0888.	R?	R? W?
3330	2	Throttle 1 axis input after calibration (310A can disconnect it)	R?	R? W?
3332	2	Throttle 2 axis input after calibration (310A can disconnect it)	R?	R? W?
3334	2	Throttle 3 axis input after calibration (310A can disconnect it)	R?	R? W?
3336	2	Throttle 4 axis input after calibration (310A can disconnect it)	R?	R? W?
3338	2	Elevator Trim axis input after calibration (310A can disconnect it)	R?	R? W?
333A	2	Throttle lower limit: 0 without reverse, else the reverse limit, such as -4096 (25%) Var: THROTTLE LOWER LIMIT	R?	R? W?
333C	2	WideFS flags: bit 0 = 1 for TCP, 0 for SPX. Bit 1 = 1 when connected. See 3322.	-	R? W?
333E	2	Weather clear count: counts each call of FS's "clear weather"	-	R? W?
3340	36	Virtual buttons: 9 values of 32 bits = joysticks 64 to 72 with 32 buttons each. Set or clear a bit and FSUIPC sees a button. See 29F0.	R W	R? W?
3364	1	Non-zero while FS loads a flight, aircraft or scenery. 0 = ready to fly. Use with 3365.	R	R W?
3365	1	In menu or dialog: 1 = in a menu, 2 = in a dialog. Only the menu is supported. See 062B.	R	W?
3366	1	Engine fires: bits 0-3 = engines 1 to 4 Var: ENG ON FIRE:1	R W	(R) (W)
3367	1	Doors open, one bit each: bit 0 = exit 1 ... bit 3 = exit 4. Legacy aircraft; states depend on where the aircraft stands. See 341B, 3424. Var: EXIT OPEN:0	R W	(R)
3368	4	Reserved for PFC.DLL events	-	R? W?
336C	2	Frame counter: counts each frame call from FS	R	R? W?
336E	2	Toe brakes handled by FSUIPC ("Set" in its joystick pages): 336E non-zero = left, 336F = right	R	R? W?
3370	4	PFC driver alive counters, 4 bytes: 3370 = COM read thread, 3371 = elevator trim motor (0=off, 1=up, 2=down), 3372 = COM write thread, 3373 = main FS chain	-	R? W?
3374	4	Millisecond count of the FSUIPC log, live	R	R? W?
3378	4	Millisecond timestamp of the last line in the FSUIPC log	R	R? W?
337C	1	Propeller de-ice switches, bits 0-3 = props 1 to 4. Read and write. Var: PROP DEICE SWITCH:1	R? W?	R?
337D	1	Structural de-ice switch (1=on, 0=off). Read and write. Var: STRUCTURAL DEICE SWITCH	R W	(R)
337E	2	FSUIPC activity count: counts each call from FS. Shows that FS is alive. May stand still while FS loads.	R	R? W?
3380	128	Message text, zero terminated, up to 127 characters. Write the text, then write 32FA to show it.	R W	-

Logging, more axes, wind, air data, freeze, standby altimeter

Offset	Bytes	Use	P3D	MSFS
3400	2	FSUIPC logging options, bits: 1 = weather, 2 = IPC writes, 3 = IPC reads, 4 = extras, 5 = button and key detail, 6 = VRI comms, 7 = com HID, 8 = L:Vars, 9 = axes, 10 = events, 11 = buttons and keys, 12 = Lua separate. Writing needs LogOptionsProtect=No in the ini.	R W	R? W?

3402	2	P3D mode, bits: 0 = pause, 1 = slew, 2 = disabled, 3 = crash, 4 = freeze position, 5 = freeze attitude, 6 = freeze altitude, 7 = freeze lat/lon, 8 = SimDirector, 9 = SimDirector world editor, 10 = recording, 11 = playback, 12 = instant replay. All 16 bits set = the interface failed.	R W	-
3410	2	Flags: bits 4-7 = reverser of engine 1-4 is set but inhibited (32F8)	R	R? W?
3412	2	Spoiler axis input after calibration (341A can disconnect it). Copy to 0BD0 for normal action.	R	R? W?
3414	2	Flaps axis input after calibration (341A can disconnect it). Copy to 0BDC for normal action.	R	R? W?
3416	2	Left Brake axis input after calibration (341A can disconnect it). Copy to 0BC4 for normal action.	R	R? W?
3418	2	Right Brake axis input after calibration (341A can disconnect it). Copy to 0BC6 for normal action.	R	R? W?
341A	1	Disconnects more axes, one bit each: 0 = left brake, 1 = right brake, 2 = flaps, 3 = spoilers. For failures: read the inputs at 3412-3418, change them, write them to 0BC4, 0BC6, 0BDC, 0BD0. Clears itself after 10 s. More: FSUIPC list.	-	R? W?
341B	1	Interactive point goal, one bit each: bit 0 = point 0 ... bit 3 = point 3. Toggling a bit sends Toggle Aircraft Exit Fast with parameter bit + 1. Var: INTERACTIVE POINT GOAL:0		-
341C	1	No smoking switch (1=on, 0=off) Var: CABIN NO SMOKING ALERT SWITCH	W	(R) W?
341D	1	Seat belts switch (1=on, 0=off) Var: CABIN SEATBELTS ALERT SWITCH	W	(R) W?
341E	1	Hydraulic switches, one bit each: bit 0 = pump 1 ... Var: HYDRAULIC SWITCH	W	R W
341F	1	Fuel cross feed switch Var: FUEL CROSS FEED	W	(R) W?
3420	4	Rad ins switch Var: RAD INS SWITCH	W?	R? W?
3424	1	Interactive point open, one bit each: bit 0 = point 0 ... bit 3 = point 3 Var: INTERACTIVE POINT OPEN:0	R?	-
3428	8	Decision height, metres, float64 Var: DECISION HEIGHT	W?	R? W?
3438	8	Engine 1 fuel flow bug position Var: ENG FUEL FLOW BUG POSITION:1	W?	R?
3440	8	Engine 2 fuel flow bug position Var: ENG FUEL FLOW BUG POSITION:2	W?	R?
3448	8	Engine 3 fuel flow bug position Var: ENG FUEL FLOW BUG POSITION:3	W?	R?
3450	8	Engine 4 fuel flow bug position Var: ENG FUEL FLOW BUG POSITION:4	W?	R?
3458	8	Panel autopilot speed setting. Better: 07E2. Var: AUTOPILOT AIRSPEED HOLD VAR	W?	R? W?
3460	8	Linear CL alpha, per radian, float64 Var: LINEAR CL ALPHA	R?	(R) W?
3468	8	Zero lift alpha, radians, float64 Var: ZERO LIFT ALPHA	R?	(R) W?
3470	8	Wind X component, m/sec, float64. + = west, - = east. Var: AMBIENT WIND X	R	(R)
3478	8	Wind Y component, m/sec, float64. + = up, - = down. Var: AMBIENT WIND Y	R	(R)
3480	8	Wind Z component, m/sec, float64. + = south, - = north. Var: AMBIENT WIND Z	R	(R)

3488	8	Wind speed, m/sec, float64 Var: AMBIENT WIND VELOCITY	R	(R)
3490	8	Wind direction, true, float64 Var: AMBIENT WIND DIRECTION	R	(R)
3498	8	Ambient pressure, float64 Var: AMBIENT PRESSURE	R	(R) W?
34A0	8	Sea level pressure (QNH), float64 Var: SEA LEVEL PRESSURE	R	(R) W?
34A8	8	Ambient temperature, float64 Var: AMBIENT TEMPERATURE	R	(R) W?
34B0	8	Pressure altitude, metres, float64 (altimeter at 1013.2 hPa) Var: PRESSURE ALTITUDE	R	(R) W?
34B8	8	ISA temperature at the aircraft's altitude, degrees Rankine, float64 Var: STANDARD ATM TEMPERATURE	R	(R) W?
34C0	8	Square root of sigma (28F0), float64 Var: SIGMA SQRT	R	(R) W?
34C8	8	Total velocity, ft/sec, float64: the resultant of 3178, 3180, 3188 Var: TOTAL WORLD VELOCITY	R	(R) W?
34D0	8	G force maximum Var: MAX G FORCE	R	(R) W?
34D8	8	G force minimum Var: MIN G FORCE	R	(R) W?
34E8	4	Engine 1 max RPM reached Var: GENERAL ENG MAX REACHED RPM:1	R	(R) W?
34EC	4	Engine 2 max RPM reached Var: GENERAL ENG MAX REACHED RPM:2	R	(R) W?
34F0	4	Engine 3 max RPM reached Var: GENERAL ENG MAX REACHED RPM:3	R	(R) W?
34F4	4	Engine 4 max RPM reached Var: GENERAL ENG MAX REACHED RPM:4	R	(R) W?
34F8	2	PFC left brake application, 0-16383	-	R? W?
34FA	2	PFC right brake application, 0-16383	-	R? W?
3500	23	ATC aircraft model of the user aircraft, from aircraft.cfg, up to 24 characters with the zero Var: ATC MODEL	R	(R) W?
3518	8	The "Ambient Wind Y" that FS sets, float64, within a second of a write to 3478. For programs that control up and down drafts.	R?	-
3520	2	Earliest version of the connected WideClients. 0 = none, or all 6.441 or older.	R	R? W?
3540	1	Freeze position: the aircraft keeps its latitude and longitude and flies on otherwise. Write non-zero: a timer that counts down one per 55 ms. Write 255 every 5 to 10 s to hold. Var: IS LATITUDE LONGITUDE FREEZE ON		-
3541	1	As 3540 (the FSUIPC list has the same text)	W	
3542	2	Standby altimeter setting, millibars * 16. Used by FSUIPC for 3544, not by FS.	R W	R? W?
3544	4	Standby altimeter reading, feet (metres if 0C18 = 2), signed. Kept by FSUIPC from 3542.	R W	R? W?
3548	8	Horizon bars offset, % of maximum, float64: -100.0 down to +100.0 up. Default Cessnas: maximum 10 degrees. Var: ATTITUDE BARS POSITION	R?	R?
3550	56	Reserved for FSUIPC diagnostics related to Gauge Mousing	-	R? W?

Piston engines, general engine data

Offset	Bytes	Use	P3D	MSFS
3590	4	Engine 1 fuel valve: 1=open, 0=closed. Does not work in the 747-8. A320neo: 1 = closed, 0 = open. Var: GENERAL ENG FUEL VALVE:1	R	-
3594	4	Engine 2 fuel valve: 1=open, 0=closed. Does not work in the 747-8. Var: GENERAL ENG FUEL VALVE:2	R	-
3598	4	Engine 3 fuel valve: 1=open, 0=closed. Does not work in the 747-8. Var: GENERAL ENG FUEL VALVE:3	R	-
359C	4	Engine 4 fuel valve: 1=open, 0=closed. Does not work in the 747-8. Var: GENERAL ENG FUEL VALVE:4	R	-
35A0	8	Mach, float64 Var: AIRSPEED MACH	R	-
35A8	8	Reciprocating engine 4 manifold pressure, lbs/sq ft, float64. / 70.7262 = inches Hg. Var: RECIP ENG MANIFOLD PRESSURE:4	R	(R) (W)
35B0	8	Engine 4 cowl flap position, float64: 0.0 = closed, 1.0 = open. Read and write. Var: RECIP ENG COWL FLAP POSITION:4	R	(R) (W)
35B8	8	Reciprocating engine 4 carb heat position	-	R? W?
35C0	8	Reciprocating engine 4 alternate air position Var: RECIP ENG ALTERNATE AIR POSITION:4	W?	R? W?
35C8	8	Reciprocating engine 4 coolant reservoir, % Var: RECIP ENG COOLANT RESERVOIR PERCENT:4	W?	(R) W?
35D0	4	Reciprocating engine 4 left magneto select (1=on, 0=off) Var: RECIP ENG LEFT MAGNETO:4	R	R? W?
35D4	4	Reciprocating engine 4 right magneto select (1=on, 0=off) Var: RECIP ENG RIGHT MAGNETO:4	R	(R) W?
35D8	8	Reciprocating engine 4 fuel/air mass ratio, float64 Var: RECIP MIXTURE RATIO:4	R?	R? W?
35E0	8	Reciprocating engine 4 brake power, ft-lbs, float64. / 550 = HP. Var: RECIP ENG BRAKE POWER:4	R?	R? W?
35E8	8	Reciprocating engine 4 carburettor temperature, degrees Rankine, float64 Var: RECIP CARBURETOR TEMPERATURE:4	R?	R? W?
35F0	8	Reciprocating engine 4 starter torque Var: RECIP ENG STARTER TORQUE:4	W?	R? W?
35F8	4	Reciprocating engine 4 turbocharger failed Var: RECIP ENG TURBOCHARGER FAILED:4	W?	R? W?
35FC	4	Reciprocating engine 4 emergency boost active flag. On some aircraft: the supercharger. Var: RECIP ENG EMERGENCY BOOST ACTIVE:4	R? W?	R? W?
3600	8	Reciprocating engine 4 emergency boost time, seconds, float64. FS turns the boost off at 312. Write 0 to keep it going. Var: RECIP ENG EMERGENCY BOOST ELAPSED TIME:4	R?	R? W?
3608	8	Reciprocating engine 4 wastegate position, read only Var: RECIP ENG WASTEGATE POSITION:4	R?	R? W?
3610	8	Reciprocating engine 4 TIT, degrees Rankine Var: RECIP ENG TURBINE INLET TEMPERATURE:4	W?	R? W?
3618	8	Reciprocating engine 4 CHT, degrees Rankine, float64 Var: RECIP ENG CYLINDER HEAD TEMPERATURE:4	R	(R) (W)
3620	8	Reciprocating engine 4 Radiator temperature, degrees Rankine Var: RECIP ENG RADIATOR TEMPERATURE:4	W?	R? W?

3628	8	Reciprocating engine 4 fuel pressure, float64 Var: GENERAL ENG FUEL PRESSURE:4	W?	R? W?
3630	8	Recip eng primer:4		R? W?
3640	4	Reciprocating engine 4 tank selector. Values as 0AF8. Var: RECIP ENG FUEL TANK SELECTOR:4	R	(R) W?
3644	4	Reciprocating engine 4 tanks used. Bits as 2058. Var: RECIP ENG FUEL TANKS USED:4	R	(R) W?
3648	4	Reciprocating engine 4: number of fuel tanks in use Var: RECIP ENG FUEL NUMBER TANKS USED:4	R	(R) W?
3654	4	Reciprocating engine 4 fuel available flag Var: RECIP ENG FUEL AVAILABLE:4	W?	R? W?
3660	8	Reciprocating engine 1 Radiator temperature, degrees Rankine	-	
3668	8	Reciprocating engine 3 manifold pressure, lbs/sq ft, float64. / 70.7262 = inches Hg. Var: RECIP ENG MANIFOLD PRESSURE:3	R	(R) (W)
3670	8	Engine 3 cowl flap position, float64: 0.0 = closed, 1.0 = open. Read and write. Var: RECIP ENG COWL FLAP POSITION:3	R	(R) (W)
3678	8	Reciprocating engine 3 carb heat position	-	R? W?
3680	8	Reciprocating engine 3 alternate air position Var: RECIP ENG ALTERNATE AIR POSITION:3	-	R? W?
3688	8	Reciprocating engine 3 coolant reservoir, % Var: RECIP ENG COOLANT RESERVOIR PERCENT:3	-	R? W?
3690	4	Reciprocating engine 3 left magneto select (1=on, 0=off) Var: RECIP ENG LEFT MAGNETO:3	R	(R) W?
3694	4	Reciprocating engine 3 right magneto select (1=on, 0=off) Var: RECIP ENG RIGHT MAGNETO:3	R	(R) W?
3698	8	Reciprocating engine 3 fuel/air mass ratio, float64 Var: RECIP MIXTURE RATIO:3	-	R? W?
36A0	8	Reciprocating engine 3 brake power, ft-lbs, float64. / 550 = HP. Var: RECIP ENG BRAKE POWER:3	-	R? W?
36A8	8	Reciprocating engine 3 carburettor temperature, degrees Rankine, float64 Var: RECIP CARBURETOR TEMPERATURE:3	-	R? W?
36B0	8	Reciprocating engine 3 starter torque Var: RECIP ENG STARTER TORQUE:3	-	R? W?
36B8	4	Reciprocating engine 3 turbocharger failed Var: RECIP ENG TURBOCHARGER FAILED:3	-	R? W?
36BC	4	Reciprocating engine 3 emergency boost active flag. On some aircraft: the supercharger. Var: RECIP ENG EMERGENCY BOOST ACTIVE:3	-	R? W?
36C0	8	Reciprocating engine 3 emergency boost time, seconds, float64. FS turns the boost off at 312. Write 0 to keep it going. Var: RECIP ENG EMERGENCY BOOST ELAPSED TIME:3	-	R? W?
36C8	8	Reciprocating engine 3 wastegate position, read only Var: RECIP ENG WASTEGATE POSITION:3	-	R? W?
36D0	8	Reciprocating engine 3 TIT, degrees Rankine Var: RECIP ENG TURBINE INLET TEMPERATURE:3	-	R? W?
36D8	8	Reciprocating engine 3 CHT, degrees Rankine, float64 Var: RECIP ENG CYLINDER HEAD TEMPERATURE:3	R W	(R) (W)
36E0	8	Reciprocating engine 3 Radiator temperature, degrees Rankine Var: RECIP ENG RADIATOR TEMPERATURE:3	-	R? W?
36E8	8	Reciprocating engine 3 fuel pressure, float64 Var: GENERAL ENG FUEL PRESSURE:3	-	R? W?

36F0	8	Recip eng primer:3		R? W?
3700	4	Reciprocating engine 3 tank selector. Values as 0AF8. Var: RECIP ENG FUEL TANK SELECTOR:3	R W	(R) W?
3704	4	Reciprocating engine 3 tanks used. Bits as 2058. Var: RECIP ENG FUEL TANKS USED:3	R	(R) W?
3708	4	Reciprocating engine 3: number of fuel tanks in use Var: RECIP ENG FUEL NUMBER TANKS USED:3	R	(R) W?
3714	4	Reciprocating engine 3 fuel available flag Var: RECIP ENG FUEL AVAILABLE:3	-	R? W?
3728	8	Reciprocating engine 2 manifold pressure, lbs/sq ft, float64. / 70.7262 = inches Hg. Var: RECIP ENG MANIFOLD PRESSURE:2	R W	(R) (W)
3730	8	Engine 2 cowl flap position, float64: 0.0 = closed, 1.0 = open. Read and write. Var: RECIP ENG COWL FLAP POSITION:2	R W	(R) (W)
3738	8	Reciprocating engine 2 carb heat position	-	R? W?
3740	8	Reciprocating engine 2 alternate air position Var: RECIP ENG ALTERNATE AIR POSITION:2	-	R? W?
3748	8	Reciprocating engine 2 coolant reservoir, % Var: RECIP ENG COOLANT RESERVOIR PERCENT:2	-	R? W?
3750	4	Reciprocating engine 2 left magneto select (1=on, 0=off) Var: RECIP ENG LEFT MAGNETO:2	R	(R) W?
3754	4	Reciprocating engine 2 right magneto select (1=on, 0=off) Var: RECIP ENG RIGHT MAGNETO:2	R	(R) W?
3758	8	Reciprocating engine 2 fuel/air mass ratio, float64 Var: RECIP MIXTURE RATIO:2	-	R? W?
3760	8	Reciprocating engine 2 brake power, ft-lbs, float64. / 550 = HP. Var: RECIP ENG BRAKE POWER:2	-	R? W?
3768	8	Reciprocating engine 2 carburettor temperature, degrees Rankine, float64 Var: RECIP CARBURETOR TEMPERATURE:2	-	R? W?
3770	8	Reciprocating engine 2 starter torque Var: RECIP ENG STARTER TORQUE:2	-	R? W?
3778	4	Reciprocating engine 2 turbocharger failed Var: RECIP ENG TURBOCHARGER FAILED:2	-	R? W?
377C	4	Reciprocating engine 2 emergency boost active flag. On some aircraft: the supercharger. Var: RECIP ENG EMERGENCY BOOST ACTIVE:2	-	R? W?
3780	8	Reciprocating engine 2 emergency boost time, seconds, float64. FS turns the boost off at 312. Write 0 to keep it going. Var: RECIP ENG EMERGENCY BOOST ELAPSED TIME:2	-	R? W?
3788	8	Reciprocating engine 2 wastegate position, read only Var: RECIP ENG WASTEGATE POSITION:2	-	R? W?
3790	8	Reciprocating engine 2 TIT, degrees Rankine Var: RECIP ENG TURBINE INLET TEMPERATURE:2	-	R? W?
3798	8	Reciprocating engine 2 CHT, degrees Rankine, float64 Var: RECIP ENG CYLINDER HEAD TEMPERATURE:2	R W	(R) (W)
37A0	8	Reciprocating engine 2 Radiator temperature, degrees Rankine Var: RECIP ENG RADIATOR TEMPERATURE:2	-	R? W?
37A8	8	Reciprocating engine 2 fuel pressure, float64 Var: GENERAL ENG FUEL PRESSURE:2	-	R? W?
37B0	8	Recip eng primer:2		R? W?
37C0	4	Reciprocating engine 2 tank selector. Values as 0AF8. Var: RECIP ENG FUEL TANK SELECTOR:2	R W	(R) W?

37C4	4	Reciprocating engine 2 tanks used. Bits as 2058. Var: RECIP ENG FUEL TANKS USED:2	R	(R) W?
37C8	4	Reciprocating engine 2: number of fuel tanks in use Var: RECIP ENG FUEL NUMBER TANKS USED:2	R	(R) W?
37D4	4	Reciprocating engine 2 fuel available flag Var: RECIP ENG FUEL AVAILABLE:2	-	R? W?
37E8	8	Reciprocating engine 1 manifold pressure, lbs/sq ft, float64. / 70.7262 = inches Hg. Var: RECIP ENG MANIFOLD PRESSURE:1	R W	(R) (W)
37F0	8	Engine 1 cowl flap position, float64: 0.0 = closed, 1.0 = open. Read and write. Var: RECIP ENG COWL FLAP POSITION:1	R W	(R) (W)
37F8	8	Reciprocating engine 1 carb heat position	-	R? W?
3800	8	Reciprocating engine 1 alternate air position Var: RECIP ENG ALTERNATE AIR POSITION:1	-	R? W?
3808	8	Reciprocating engine 1 coolant reservoir, % Var: RECIP ENG COOLANT RESERVOIR PERCENT:1	-	R? W?
3810	4	Reciprocating engine 1 left magneto select (1=on, 0=off) Var: RECIP ENG LEFT MAGNETO:1	R	(R) W?
3814	4	Reciprocating engine 1 right magneto select (1=on, 0=off) Var: RECIP ENG RIGHT MAGNETO:1	R	(R) W?
3818	8	Reciprocating engine 1 fuel/air mass ratio, float64 Var: RECIP MIXTURE RATIO:1	-	R? W?
3820	8	Reciprocating engine 1 brake power, ft-lbs, float64. / 550 = HP. Var: RECIP ENG BRAKE POWER:1	-	R? W?
3828	8	Reciprocating engine 1 carburettor temperature, degrees Rankine, float64 Var: RECIP CARBURETOR TEMPERATURE:1	-	R? W?
3830	8	Reciprocating engine 1 starter torque Var: RECIP ENG STARTER TORQUE:1	-	R? W?
3838	4	Reciprocating engine 1 turbocharger failed Var: RECIP ENG TURBOCHARGER FAILED:1	-	R? W?
383C	4	Reciprocating engine 1 emergency boost active flag. On some aircraft: the supercharger. Var: RECIP ENG EMERGENCY BOOST ACTIVE:1	-	R? W?
3840	8	Reciprocating engine 1 emergency boost time, seconds, float64. FS turns the boost off at 312. Write 0 to keep it going. Var: RECIP ENG EMERGENCY BOOST ELAPSED TIME:1	-	R? W?
3848	8	Reciprocating engine 1 wastegate position, read only Var: RECIP ENG WASTEGATE POSITION:1	-	R? W?
3850	8	Reciprocating engine 1 TIT, degrees Rankine Var: RECIP ENG TURBINE INLET TEMPERATURE:1	-	R? W?
3858	8	Reciprocating engine 1 CHT, degrees Rankine, float64 Var: RECIP ENG CYLINDER HEAD TEMPERATURE:1	R W	(R) (W)
3860	8	Reciprocating engine 1 Radiator temperature, degrees Rankine Var: RECIP ENG RADIATOR TEMPERATURE:1		R? W?
3868	8	Reciprocating engine 1 fuel pressure, float64 Var: GENERAL ENG FUEL PRESSURE:1	-	R? W?
3870	8	Engine 1 primer Var: RECIP ENG PRIMER:1	-	R? W?
3880	4	Reciprocating engine 1 tank selector. Values as 0AF8. Var: RECIP ENG FUEL TANK SELECTOR:1	R W	(R) W?
3884	4	Reciprocating engine 1 tanks used. Bits as 2058. Var: RECIP ENG FUEL TANKS USED:1	R	(R) W?

3888	4	Reciprocating engine 1: number of fuel tanks in use Var: RECIP ENG FUEL NUMBER TANKS USED:1	R	(R) W?
3894	4	Reciprocating engine 1 fuel available flag Var: RECIP ENG FUEL AVAILABLE:1	-	R? W?
38A0	4	General engine 4 failure (0=none, 1=full) Var: GENERAL ENG FAILED:4	R	(R) W?
38A4	4	General engine 4 combustion Var: GENERAL ENG COMBUSTION:4	R W	(R) (W)
38A8	8	General engine 4 throttle lever, float64: 0.0 = idle, 1.0 = max Var: GENERAL ENG THROTTLE LEVER POSITION:4	R	(R) W?
38B0	8	General engine 4 mixture lever, float64: 0.0 = cutoff, 1.0 = full rich Var: GENERAL ENG MIXTURE LEVER POSITION:4	R	(R) W?
38B8	8	General engine 4 propeller lever, float64: 0.0 to 1.0 Var: GENERAL ENG PROPELLER LEVER POSITION:4	R	(R) W?
38C0	4	General engine 4 starter Var: GENERAL ENG STARTER:4	R	(R) W?
3918	8	General engine 4 oil temperature, degrees Rankine, float64 Var: GENERAL ENG OIL TEMPERATURE:4	R W	(R) (W)
3920	8	General engine 4 oil pressure, lbs/sq ft, float64. / 144 = psi. Var: GENERAL ENG OIL PRESSURE:4	R	(R) W?
3928	8	Reciprocating engine 4 oil leak, %, float64 Var: GENERAL ENG OIL LEAKED PERCENT:4	R	(R) W?
3930	8	General engine 4 EGT, degrees Rankine, float64. Fahrenheit = Rankine - 459.67. Var: GENERAL ENG EXHAUST GAS TEMPERATURE:4	R W	(R) (W)
3938	4	Engine 4 generator switch (0=off, 1=on) Var: GENERAL ENG GENERATOR SWITCH:4	R W	(R)
393C	4	Engine 4 generator active (0=off, 1=on). 0 when the engine stops. Var: GENERAL ENG GENERATOR ACTIVE:4	R W	(R) (W)
3940	8	Reciprocating engine 4 damage, %, float64 Var: GENERAL ENG DAMAGE PERCENT:4	R	(R) W?
3948	8	Reciprocating engine 4 combustion sound, %, float64 Var: GENERAL ENG COMBUSTION SOUND PERCENT:4	R	(R) W?
3958	4	Engine 4 fuel pump switch (0=off, 1=on) Var: GENERAL ENG FUEL PUMP SWITCH:4	R W	(R) W?
395C	4	General eng master alternator:4		R? W?
3960	4	General engine 3 failure (0=none, 1=full) Var: GENERAL ENG FAILED:3	R	(R) W?
3964	4	General engine 3 combustion Var: GENERAL ENG COMBUSTION:3	R W	(R) (W)
3968	8	General engine 3 throttle lever, float64: 0.0 = idle, 1.0 = max Var: GENERAL ENG THROTTLE LEVER POSITION:3	R	(R) W?
3970	8	General engine 3 mixture lever, float64: 0.0 = cutoff, 1.0 = full rich Var: GENERAL ENG MIXTURE LEVER POSITION:3	R	(R) W?
3978	8	General engine 3 propeller lever, float64: 0.0 to 1.0 Var: GENERAL ENG PROPELLER LEVER POSITION:3	R	(R) W?
3980	4	General engine 3 starter Var: GENERAL ENG STARTER:3	R	(R) W?
39D8	8	General engine 3 oil temperature, degrees Rankine, float64 Var: GENERAL ENG OIL TEMPERATURE:3	R W	(R) (W)
39E0	8	General engine 3 oil pressure, lbs/sq ft, float64. / 144 = psi. Var: GENERAL ENG OIL PRESSURE:3	R	(R) W?
39E8	8	Reciprocating engine 3 oil leak, %, float64 Var: GENERAL ENG OIL LEAKED PERCENT:3	R	(R) W?

39F0	8	General engine 3 EGT, degrees Rankine, float64. Fahrenheit = Rankine - 459.67. Var: GENERAL ENG EXHAUST GAS TEMPERATURE:3	R W	(R) (W)
39F8	4	Engine 3 generator switch (0=off, 1=on) Var: GENERAL ENG GENERATOR SWITCH:3	R W	(R)
39FC	4	Engine 3 generator active (0=off, 1=on). 0 when the engine stops. Var: GENERAL ENG GENERATOR ACTIVE:3	R W	(R) (W)
3A00	8	Reciprocating engine 3 damage, %, float64 Var: GENERAL ENG DAMAGE PERCENT:3	R	(R) W?
3A08	8	Reciprocating engine 3 combustion sound, %, float64 Var: GENERAL ENG COMBUSTION SOUND PERCENT:3	R	(R) W?
3A18	4	Engine 3 fuel pump switch (0=off, 1=on) Var: GENERAL ENG FUEL PUMP SWITCH:3	R W	(R) W?
3A1C	4	General eng master alternator:3		R? W?
3A20	4	General engine 2 failure (0=none, 1=full) Var: GENERAL ENG FAILED:2	R	(R) W?
3A24	4	Reciprocating engine 2 combustion Var: GENERAL ENG COMBUSTION:2	R W	(R) (W)
3A28	8	General engine 2 throttle lever, float64: 0.0 = idle, 1.0 = max Var: GENERAL ENG THROTTLE LEVER POSITION:2	R	(R) W?
3A30	8	General engine 2 mixture lever, float64: 0.0 = cutoff, 1.0 = full rich Var: GENERAL ENG MIXTURE LEVER POSITION:2	R	(R) W?
3A38	8	General engine 2 propeller lever, float64: 0.0 to 1.0 Var: GENERAL ENG PROPELLER LEVER POSITION:2	R	(R) W?
3A40	4	General engine 2 starter Var: GENERAL ENG STARTER:2	R	(R) W?
3A98	8	General engine 2 oil temperature, degrees Rankine, float64 Var: GENERAL ENG OIL TEMPERATURE:2	R W	(R) (W)
3AA0	8	General engine 2 oil pressure, lbs/sq ft, float64. / 144 = psi. Var: GENERAL ENG OIL PRESSURE:2	R	(R) W?
3AA8	8	Reciprocating engine 2 oil leak, %, float64 Var: GENERAL ENG OIL LEAKED PERCENT:2	R	(R) W?
3AB0	8	General engine 2 EGT, degrees Rankine, float64. Fahrenheit = Rankine - 459.67. Var: GENERAL ENG EXHAUST GAS TEMPERATURE:2	R W	(R) (W)
3AB8	4	Engine 2 generator switch (0=off, 1=on) Var: GENERAL ENG GENERATOR SWITCH:2	R W	(R)
3ABC	4	Engine 2 generator active (0=off, 1=on). 0 when the engine stops. Var: GENERAL ENG GENERATOR ACTIVE:2	R W	(R) (W)
3AC0	8	Reciprocating engine 2 damage, %, float64 Var: GENERAL ENG DAMAGE PERCENT:2	R	(R) W?
3AC8	8	Reciprocating engine 2 combustion sound, %, float64 Var: GENERAL ENG COMBUSTION SOUND PERCENT:2	R	(R) W?
3AD8	4	Engine 2 fuel pump switch (0=off, 1=on) Var: GENERAL ENG FUEL PUMP SWITCH:2	R W	(R) W?
3ADC	4	General eng master alternator:2		R? W?
3AE0	4	General engine 1 failure (0=none, 1=full) Var: GENERAL ENG FAILED:1	R	(R) W?
3AE4	4	Reciprocating engine 1 combustion Var: GENERAL ENG COMBUSTION:1	R W	(R) (W)
3AE8	8	General engine 1 throttle lever, float64: 0.0 = idle, 1.0 = max Var: GENERAL ENG THROTTLE LEVER POSITION:1	R	(R) W?
3AF0	8	General engine 1 mixture lever, float64: 0.0 = cutoff, 1.0 = full rich Var: GENERAL ENG MIXTURE LEVER POSITION:1	R	(R) W?

3AF8	8	General engine 1 propeller lever, float64: 0.0 to 1.0 Var: GENERAL ENG PROPELLER LEVER POSITION:1	R	(R) W?
3B00	4	General engine 1 starter Var: GENERAL ENG STARTER:1	R	(R) W?
3B58	8	General engine 1 oil temperature, degrees Rankine, float64 Var: GENERAL ENG OIL TEMPERATURE:1	R W	(R) (W)
3B60	8	General engine 1 oil pressure, lbs/sq ft, float64. / 144 = psi. Var: GENERAL ENG OIL PRESSURE:1	R	(R) W?
3B68	8	Reciprocating engine 1 oil leak, %, float64 Var: GENERAL ENG OIL LEAKED PERCENT:1	R	(R) W?
3B70	8	General engine 1 EGT, degrees Rankine, float64. Fahrenheit = Rankine - 459.67. Var: GENERAL ENG EXHAUST GAS TEMPERATURE:1	R W	(R) (W)
3B78	4	Engine 1 generator switch (0=off, 1=on) Var: GENERAL ENG GENERATOR SWITCH:1	R W	(R)
3B7C	4	Engine 1 generator active (0=off, 1=on). 0 when the engine stops. Var: GENERAL ENG GENERATOR ACTIVE:1	R W	(R) (W)
3B80	8	Reciprocating engine 1 damage, %, float64 Var: GENERAL ENG DAMAGE PERCENT:1	R	(R) W?
3B88	8	Reciprocating engine 1 combustion sound, %, float64 Var: GENERAL ENG COMBUSTION SOUND PERCENT:1	R	(R) W?
3B98	4	Engine 1 fuel pump switch (0=off, 1=on) Var: GENERAL ENG FUEL PUMP SWITCH:1	R W	(R) W?
3B9C	4	General eng master alternator:1		R? W?

Tailhook, PFC, panel failures, flap detents

Offset	Bytes	Use	P3D	MSFS
3BA0	8	Tailhook position, float64: 0.0 = retracted, 1.0 = lowered Var: TAILHOOK POSITION	R? W?	R? W?
3BA8	40	PFC driver axis inputs. Without the PFC driver, programs can write axis values here for FSUIPC to assign and calibrate. Normal range 0-127. More: FSUIPC list.	R W	R? W?
3BD0	1	Reserved	-	R? W?
3BD2	2	Flight save counter: counts each flight saved (menu, key, AutoSave, FSUIPC). The name is in 0400.	R	R? W?
3BD6	1	Panel failures, one byte each: 3BD6 ADF, 3BD7 ASI, 3BD8 altimeter, 3BD9 attitude indicator, 3BDA COM, 3BDB avionics, 3BDC compass, 3BDD electrical, 3BDE engine (per engine: 0B6B), 3BDF fuel indicator, 3BE0 heading indicator, 3BE1 and 3BE2 NAV, 3BE3 pitot heat Var: PARTIAL PANEL ADF	R? W?	R? W?
3BD7	1	Partial panel airspeed		R? W?
3BD8	1	Partial panel altimeter		R? W?
3BD9	1	Partial panel attitude		R? W?
3BDA	1	Partial panel comm		R? W?
3BDB	1	Partial panel avionics		R?
3BDC	1	Partial panel compass		R? W?
3BDD	1	Partial panel electrical		R? W?
3BDE	1	Partial panel engine		R? W?
3BDF	1	Partial panel fuel indicator		R?
3BE0	1	Partial panel heading		R? W?
3BE1	1	Partial panel nav		R? W?

3BE2	1	Partial panel nav		R? W?
3BE3	1	Partial panel pitot		R? W?
3BE4	1	Partial panel transponder		R? W?
3BE5	1	Partial panel turn coordinator		R?
3BE6	1	Partial panel vacuum		R? W?
3BE7	1	Partial panel vertical velocity		R? W?
3BF6	2	SimConnect connection count: counts each connect or reconnect of FSUIPC to SimConnect	R	R? W?
3BF8	2	Number of flap positions, without flaps up Var: FLAPS NUM HANDLE POSITIONS	R	(R) W?
3BFA	2	Flaps detent increment. Full range 0-16383, detents evenly spaced. Number of detents = 16383 / increment + 1: 2047 = 9 positions.	R	R? W?

Zero fuel weight, aircraft name, paths, flight load and save

Offset	Bytes	Use	P3D	MSFS
3BFC	4	Zero fuel weight, lbs * 256: aircraft + payload, no fuel. Fluctuates a little. Steady: empty weight (1330) + payload (1400).	R?	R? W?
3C00	256	Full path of the current aircraft.cfg (UNC with WideFS), zero padded. Change counter: 32FC. MSFS: a relative path if the aircraft was loaded before FSUIPC7 started.	R	R W?
3D00	256	Name of the current aircraft ("title" in aircraft.cfg) Var: TITLE	R	(R) W?
3E00	256	Simulator installation path (UNC with WideFS). MSFS: the InstalledPackagesPath from UserCfg.opt, where the Community folder is.	R	R? W?
3F00	2	Load or save a flight: put the name in 3F04, then write here: 0 = load, 1 = save, 257 = save with a description. Loading takes several seconds.	W	R? W?
3F02	2	Flight load counter: counts each change or reload of the flight in 3F04. May also change when SimConnect reconnects (3BF6).	R	R? W?
3F04	252	Read: path of the loaded flight (UNC with WideFS), zero padded. Change counter: 3F02. Write: the file name to load or save, zero terminated; a description may follow. More: FSUIPC list.	R W	R? W?

Reserved and add-on areas

Offset	Bytes	Use	P3D	MSFS
4000	256	Reserved: Marc's area for FS Meteo gauge, etc	-	R? W?
4100	256	Jean-Michael Biston ("Michael") for Airbus gauges (PART 1)		R? W?
4200	256	Reserved (ESOUND Sound Playing Interface)	-	R? W?
4300	512	Reserved: Hans G. Schuetz: 744 system simulator panel	-	R? W?
4500	256	Don LaFontaine's FreeFDS (to be confirmed!)		R? W?
4600	256	Holger Johannsen ("Flypage"), for Canadair RJ-700 Project		R? W?
4700	128	Alexey Morozov (Russian Federation: Interstate Aviation Committee)		R? W?
4780	128	Andreas Kraft, TUTOR project		R? W?
4800	256	Steffen Herberg, EPIC project		R? W?
4900	256	John Dekker, Radar Contact		R? W?
5000	128	Alex Kuznetsov, Gauges for PSS and Aerosoft integration		R? W?
5080	64	Chris Barnett. LAS - 737NG Project		R? W?

50C0	64	Oleksiy Frolov Dash8+EPIC Project		R? W?
5100	256	SimConnect menu: write zero terminated strings: title, prompt, then up to 10 entries. FSUIPC writes 0 to 5100 and the choice to 5101. Write 0 to 5100 to close the menu.	W	-
5200	3584	Reserved: 5200-527F British Airways Virtual, 5280-52FF Aerosoft hardware, 5300-53FF B777 systems simulator, 5400-5FFF Project Magenta	-	R? W?

GPS and flight plan

Offset	Bytes	Use	P3D	MSFS
6000	512	GPS data area. The known offsets follow.	-	R? W?
6004	4	GPS flags, bits: 1 = active plan, 2 = active waypoint, 3 = arrived, 5 = direct to Var: GPS IS ACTIVE FLIGHT PLAN	R	(R) W?
6010	8	GPS: aircraft latitude, degrees, float64, + = north Var: GPS POSITION LAT	R	(R) W?
6018	8	GPS: aircraft longitude, degrees, float64, + = east Var: GPS POSITION LON	R	(R) W?
6020	8	GPS: aircraft altitude, metres, float64 Var: GPS POSITION ALT	R	(R) W?
6028	8	GPS: magnetic variation at the aircraft, radians, float64. True = magnetic + this. Var: GPS MAGVAR	R	(R) W?
6030	8	GPS: aircraft ground speed, metres/sec, float64 Var: GPS GROUND SPEED	R	(R) W?
6038	8	GPS: aircraft true heading, radians, float64 Var: GPS GROUND TRUE HEADING	R	(R) W?
6040	8	GPS: aircraft magnetic track, radians, float64 Var: GPS GROUND MAGNETIC TRACK	R	(R) W?
6048	8	GPS: distance to next waypoint, metres, float64 Var: GPS WP DISTANCE	R	(R) W?
6050	8	GPS: magnetic bearing to next waypoint, radians, float64 Var: GPS WP BEARING	R?	R? W?
6058	8	GPS: cross track error, metres, float64 Var: GPS WP CROSS TRK	R	(R) W?
6060	8	GPS: required true heading, radians, float64 Var: GPS WP TRUE REQ HDG	W?	R? W?
6068	8	GPS: track error, radians, float64 Var: GPS WP TRACK ANGLE ERROR	W?	R? W?
6078	8	GPS: aircraft vertical speed Var: GPS WP VERTICAL SPEED	W?	R? W?
6080	1	GPS: previous waypoint valid flag (0 = not valid) Var: GPS WP PREV VALID	W?	R? W?
6081	8	GPS: previous waypoint ID, zero terminated Var: GPS WP PREV ID	W?	R? W?
608C	8	GPS: previous waypoint latitude, degrees, float64, + = north Var: GPS WP PREV LAT	R? W?	R? W?
6094	8	GPS: previous waypoint longitude, degrees, float64, + = east Var: GPS WP PREV LON	R?	R? W?
609C	8	GPS: previous waypoint altitude, metres, float64 Var: GPS WP PREV ALT	R?	R? W?
60A4	8	GPS: next waypoint ID, zero terminated Var: GPS WP NEXT ID	R	(R) W?

60AC	8	GPS: next waypoint latitude, degrees, float64, + = north Var: GPS WP NEXT LAT	R?	R? W?
60B4	8	GPS: next waypoint longitude, degrees, float64, + = east Var: GPS WP NEXT LON	R?	R? W?
60BC	8	GPS: next waypoint altitude, metres, float64 Var: GPS WP NEXT ALT	R?	R? W?
60E4	4	GPS: next waypoint ETE, seconds Var: GPS WP ETE	R	(R) W?
60E8	4	GPS: next waypoint ETA, seconds, local time Var: GPS WP ETA	R	(R) W?
60EC	8	GPS: Distance to next waypoint, metres, float64 Var: GPS WP DISTANCE	W?	R? W?
60F4	8	GPS: Distance between previous and next waypoints, metres, float64	-	R? W?
60FC	4	GPS: Approach mode Var: GPS APPROACH MODE	W?	R? W?
6100	4	GPS: Approach waypoint type Var: GPS APPROACH WP TYPE	W?	R? W?
6104	4	GPS: Approach segment type Var: GPS APPROACH SEGMENT TYPE	W?	R? W?
6108	1	GPS: approach waypoint is the runway flag Var: GPS APPROACH IS WP RUNWAY	R? W?	R? W?
610C	8	GPS: Course to set (CTS), radians, float64 Var: GPS COURSE TO STEER	W?	R? W?
6120	4	GPS: Flight Plan, total number of waypoints Var: GPS FLIGHT PLAN WP COUNT	W?	R? W?
6128	4	GPS: Approach waypoint count Var: GPS APPROACH WP COUNT	W?	R? W?
6137	5	GPS: Flight plan destination airport ID Var: GPS APPROACH AIRPORT ID	W?	R? W?
613C	4	GPS: Approach waypoint index Var: GPS APPROACH WP INDEX	W?	R? W?
6140	8	GPS: Approach name Var: GPS APPROACH APPROACH ID	W?	R? W?
6150	4	GPS: approach transition index. -1 = not valid. Var: GPS APPROACH TRANSITION INDEX	R? W?	R? W?
6154	8	GPS: Approach transition name Var: GPS APPROACH TRANSITION ID	W?	R? W?
615C	1	GPS: Approach is missed flag Var: GPS APPROACH IS MISSED	W?	R? W?
6160	4	GPS: Approach type Var: GPS APPROACH APPROACH TYPE	W?	R? W?
6168	4	GPS: Approach time zone deviation Var: GPS APPROACH TIMEZONE DEVIATION	W?	R? W?
616C	4	GPS: current waypoint index, from 1 Var: GPS FLIGHT PLAN WP INDEX	R	(R) W?
6170	4	GPS: Approach current waypoint index Var: GPS APPROACH APPROACH INDEX	W?	R? W?
6174	28	Free for general use		R? W?
6190	4	GPS: Time last waypoint was crossed, seconds since Zulu midnight	-	R? W?
6198	4	GPS: destination ETE, seconds Var: GPS ETE	-	R? W?
619C	4	GPS: destination ETA, seconds, local time Var: GPS ETA	-	R? W?

61A0	8	GPS: Route total distance, metres, float64	-	-
61A8	8	GPS: Estimated fuel burn, gallons, float64	-	-
61B0	4	GPS: Time of last update to 61B8 (seconds since Zulu midnight)	-	-
61B8	4	GPS: Count updated every 5 seconds	-	-
6200	1216	Reserved: 6200-62FF PMDG, 6300-63FF TrafficBoard, 6400-641F FlightDeck Companion	-	R? W?
6420	512	Reserved for PMDG data		R? W?

User areas, add-ons, friction, inertia, L:vars, joystick buttons

Offset	Bytes	Use	P3D	MSFS
66C0	64	Free for general use (button and key programming)	-	R? W?
6700	1632	Reserved: 6700-67FF Airbus gauges (part 2), 6800-6BFF FS-Communicator	-	R? W?
6C00	256	Reserved for PMDG data		R? W?
6D60	32	FSUIPC message window title, up to 32 characters with the zero. Write it once, before the multi-line message to 3380.	-	R? W?
6D80	1504	Reserved for add-ons: XPUIPC (6D88-6DAF, 6F00-6FFF), vasFMC, FSCommunicator, Flight Deck Software, Sim737 overhead, LINDA and others. More: FSUIPC list.	-	R? W?
7360	12	Sets friction values, as ipc.SetFriction in Lua. 12 bytes: value (float32, write it last), class (0=brake, 1=wheel, 2=scrape, 3=skid, 4=float, 5=water rudder, 6=ski), surface (0-24, as 31E8), direction (0=rolling, 1=sliding), condition (0=dry, 1=rain, 2=ice, 3=snow), previous value (float32, read only). Class 255 restores the originals.	-	
736C	2	Distance to the nearest AI aircraft on the ground, nm	-	R? W?
736E	2	Distance to the nearest AI aircraft in the air, nm	-	R? W?
7370	2448	Reserved for add-ons: 7400-781F PMDG NGX, and others. More: FSUIPC list.	-	R? W?
7C00	8	Empty weight pitch moment of inertia, slug ft2 Var: EMPTY WEIGHT PITCH MOI	-	R
7C08	8	Empty weight roll moment of inertia, slug ft2 Var: EMPTY WEIGHT ROLL MOI	-	R
7C10	8	Empty weight yaw moment of inertia, slug ft2 Var: EMPTY WEIGHT YAW MOI	-	R
7C18	8	Empty weight pitch moment of inertia, slug ft2 Var: EMPTY WEIGHT CROSS COUPLED MOI	-	R
7C20	8	Total weight pitch moment of inertia, slug ft2 Var: TOTAL WEIGHT PITCH MOI	-	R
7C28	8	Total weight roll moment of inertia, slug ft2 Var: TOTAL WEIGHT ROLL MOI	-	R
7C30	8	Total weight yaw moment of inertia, slug ft2 Var: TOTAL WEIGHT YAW MOI	-	R
7C38	8	Total weight cross coupled moment of inertia, slug ft2 Var: TOTAL WEIGHT CROSS COUPLED MOI	-	R
7C40	704	Free for general use	-	
7C50	72	Sets lvars, activates hvars, calls presets, runs calculator code, sends input events. Write the name to 7C50 with its prefix: L: lvar, H: hvar, P: preset, I: input event. Write the value or parameter first. More: FSUIPC list.		-
7F00	256	Buttons of joysticks 0 to 15: 16 areas of 16 bytes = 128 buttons each, bit 0 = button 0. See 03C0.	R W	R?

Views, ActiveSky, surface query, camera, traffic limiter

Offset	Bytes	Use	P3D	MSFS
8000	768	Reserved for FSUIPC and WideFS internals	-	R? W?
8300	256	View data. The known values follow.	-	-
8320	1	View mode: 1=cockpit, 2=virtual cockpit, 4=external, 5=top down. The view where the mode last changed, not always the selected one.	R	-
832C	2	Zoom in cockpit mode, 64 = 1x. Read and write.	-	-
832E	2	Zoom in virtual cockpit mode, 64 = 1x. Read and write.	-	-
8330	2	Zoom in tower mode, 64 = 1x. Read and write.	-	-
8334	2	Zoom in spot plane mode, 64 = 1x. Read and write.	-	-
8336	2	Zoom in top down mode, 64 = 1x. Read and write.	-	-
833C	2	Spot plane direction from the aircraft, degrees * 65536 / 360. Read and write.	-	-
8340	4	Spot plane distance from the aircraft, metres * 256. Read and write.	-	-
8345	1	Spot plane transition: 0=gradual, 1=instant. Read and write.	-	-
8348	4	Spot plane altitude above the aircraft, metres * 256. Read and write.	-	-
83BC	24	Active view point latitude, longitude, altitude. Read only.	-	-
83D4	12	View point pitch, bank, heading, format as 0578	-	-
8638	4	ActiveSky needed: turbulence at the aircraft, 0-1000, float32	R?	-
863C	4	ActiveSky needed: visibility, metres, float32 (negative = not supported)	R?	-
8640	1	ActiveSky needed: precipitation type: 0=none, 1=rain, 2=snow, 3=hail	R?	-
8641	1	ActiveSky needed: precipitation rate, 0-4	R?	-
8642	1	ActiveSky needed: non-zero = in cloud	R?	-
8670	16	Surface query. Write latitude (8674) and longitude (8678) in degrees, float32, and 0 to 867E; then write anything to 8670. Result when 867E is non-zero: altitude in 8670 (metres AMSL), surface type 867C (as 31E8), condition 867D (as 31EC). Flags 867E: bit 15 = valid, bit 0 = platform, bit 1 = moving platform.	R?	R? W?
8680	32	Camera name for 86A0	-	R? W?
86A0	24	Moves the current camera (SimConnect CameraSetRelative6DOF). Write the 6 float32 parameters as one block of 24 bytes. Camera by name: write it to 8680 first. More: FSUIPC list.	W	R? W?
86E0	2	Traffic Limiter: limit value	R? W?	-
86E2	1	Traffic Limiter: target frame rate value	R? W?	-
86E3	1	Traffic Limiter: ground preference value	R? W?	-
86E4	1	Traffic Limiter: planned airports preference value	R? W?	-
86E5	1	Traffic Limiter: airports preference value	R? W?	-
86E6	1	Traffic Limiter: near preference value	R? W?	-
86E7	1	Traffic Limiter: reserved	R? W?	-
9540	64	Current aircraft profile name, 63 characters + zero	R?	R? W?
9690	24	Nearest AI aircraft on the ground: id (4 bytes), latitude, longitude, altitude (float32 each), heading, ground speed, vertical speed (2 bytes each), COM1 frequency (2 bytes)	-	R? W?
96A8	24	Nearest AI aircraft in the air, format as 9690	-	R? W?
9800	1024	Used by Wideclient's Lua display control	-	R? W?
9C00	1024	Used for the ASE Weather reading facilities	-	-
A000	512	Free for general use (button and key programming)	-	R? W?

A200	3584	Reserved	-	R? W?

Weather strings, weather interface

Offset	Bytes	Use	P3D	MSFS
B000	4096	METAR weather strings, up to 2000 characters. B000-B7FF: write a string to set weather. B800-BFFF: read the weather at the place asked for in CCxx. Reading B000: WideClient Lua menu data. More: FSUIPC list.	R W	R?
C000	4096	Weather interface (NWI). C000-C3FF: weather at the aircraft (read). C400-C7FF: global weather (read). C800-CBFF: weather writing. CC00-CFFF: weather at a requested ICAO or lat/lon (read). More: FSUIPC list.	R W	-

AI traffic

Offset	Bytes	Use	P3D	MSFS
D000	20	Runways in use at an airport within about 85 nm. Write a signature (D000) and the ICAO (D004); read the timestamp (D008), up to 2 departure runways (D00C) and 2 arrival runways (D010): number, designator. Numbers 1-36, 37=N to 44=NW. Designators: 0=none, 1=L, 2=R, 3=C, 4=W. More: FSUIPC list.	R W	R? W?
D040	1920	AI ground aircraft, additional data: 96 entries of 20 bytes	R	R? W?
D840	1920	AI airborne aircraft, additional data, format as D040. Main tables: F080.	-	R? W?
E000	64	AI ground aircraft tables, housekeeping: E000 slot size (40), E002 maximum slots (96), E004 slots used, E006 change count, E008 change count per slot, E068 options (range, id type), E07E offset of the nearest aircraft. More: FSUIPC list.	R W?	R? W?
E080	3840	AI ground aircraft: 96 slots of 40 bytes (the TCAS DATA structure)	R	R? W?
F000	64	AI airborne aircraft tables, housekeeping, as E000: F068 options, F07E offset of the nearest aircraft. More: FSUIPC list.	R W?	R? W?
F080	3840	AI airborne aircraft: 96 slots of 40 bytes, format as E080	R	R? W?

Old offsets: not in FSUIPC 6 or 7

From the 2011 list. FS2004 and earlier. Do not use them in new work.

Offset	Bytes	Use
033A	2	Manual fuel tank selection if set (appears to be standard anyway in FS2000)
033E	2	Jet engine can flameout if set (appears not an option in FS2000?)
0342	2	Manual mixture control if set
0358	2	COM frequency settable in 25KHz increments if true (else 50KHz)
035C	2	ADF frequency settable in 100Hz increments if true (else 1KHz)
0388	1	NAV radio activation. If you change the NAV1 or NAV2 frequencies, writing 2 here makes FS re-scan for VORs to receive on those frequencies.
0389	1	ADF radio activation. If you change the ADF frequency, writing 2 here makes FS re-scan for an NDB to receive on that frequency. (Although FS2000 seems to do this quite soon in any case)
038A	1	COM radio activation. If you change the COM radio, writing a 1 here makes FS scan for ATIS broadcasts to receive on that frequency.
05B0	24	The viewpoint Latitude (8 bytes), Longitude (8 bytes) and Altitude (8 bytes) in the same format as 0560–0577 above. This is read only and seems to relate to the position of the viewer whether in cockpit, tower or spot vi
05D2	2	Current view direction, *360/65536 for degrees TRUE. Read only.
05DE	2	Slew control: write non-zero value here at same time as changing 05DC above, and the Slew mode change includes the swapping of the assigned joystick axes. [ignored in FS2004 – the axes are swapped in any case. See offset
060E	2	Retractable gear flag (0 if not, 1 if retractable)
0612	2	Display IAS if TRUE, TAS otherwise
0700	96	Area used for operating, controlling and configuring the facilities in FSUIPC for feedback flight control (bank, pitch, speed). For full details of this please see the separate TXT documentation in the SDK.
0768	4	Autopilot V/S hold available
076C	4	Autothrottle airspeed hold available
0770	4	Autothrottle mach hold available
0774	4	Autothrottle RPM hold available
0788	4	Pitot heat available
07AC	4	NAV1 OBS available
07B0	4	NAV2 OBS available
07B4	4	VOR2 gauge available
0848	2	Off-runway crash detection
084A	2	Can collide with dynamic scenery
0DE2	2	Scenery BGL variable “spar10” (originally 031Eh in BGL) (doesn’t appear to be supported at all in FS2004)
0DE4	2	Scenery BGL variable “spar11” (originally 0320h in BGL) (doesn’t appear to be supported at all in FS2004)
0DE6	2	Scenery BGL variable “spar12” (originally 0322h in BGL) (doesn’t appear to be supported at all in FS2004)
0DE8	2	Scenery BGL variable “spar13” (originally 0324h in BGL) (doesn’t appear to be supported at all in FS2004)
0DEA	2	Scenery BGL variable “spar14” (originally 0326h in BGL) (doesn’t appear to be supported at all in FS2004)
0DEC	2	Scenery BGL variable “spar15” (originally 0328h in BGL) (doesn’t appear to be supported at all in FS2004)

0DEE	2	Scenery BGL variable “spar16” (originally 032Ah in BGL) (doesn’t appear to be supported at all in FS2004)
0DF0	2	Scenery BGL variable “spar17” (originally 032Ch in BGL) (doesn’t appear to be supported at all in FS2004)
0DF2	2	Scenery BGL variable “spar18” (originally 032Eh in BGL) (doesn’t appear to be supported at all in FS2004)
0E5A	2	EFIS active (1=enabled)
0E5C	2	EFIS VOR/ILS elevation in metres
0E5E	2	EFIS density: 0=thin, 1=medium, 2=thick
0E60	2	EFIS range: 0=short, 1=medium, 2=long
0E62	2	EFIS mode: 0=normal, 1=reset, 2=plot intercept
0E64	2	EFIS via VOR (2) or ILS (4)
0E66	2	EFIS NAV select (1 or 2)
0E68	2	EFIS display type: 0=rectangles, 1=telegraph poles, 2=yellow brick road
11D4	4	This is an internal pointer, not for specific use by applications, except that it can be used as a flag to indicate when it is possible to read or write most of the simulation variables. When this DWORD is zero FSUIPC ca
3BE8	8	Attitude Indicator failure timer, as a double floating point value.
3BF0	4	Attitude indicator lock indicator, 32-bit integer but probable only Boolean (0 or 1) [FS2k/CFS2 only]
3BF4	4	Low vacuum indicator, 32-bit integer but probable only Boolean (0 or 1) [FS2k/CFS2 only]
5600	2560	Available for applications: apply for allocations to Pete Dowson
6640	192	Available for applications: apply for allocations to Pete Dowson
6D00	3712	Available for applications: apply for allocations to Pete Dowson
7B80	1024	Reserved
D800	2048	FS2004 A.I. airborne aircraft additional traffic data (see section on AI Traffic earlier)