

Offset	Bytes	FSUIPC value	access
0020	4	Ground altitude in Metres x 256.	r
0238	1	Hour of local time in FS (0–23)	r
0239	1	Minute of local time in FS (0–59)	r
023A	1	Second of time in FS (0–59)	r
023B	1	Hour of Zulu time in FS (also known as UTC or GMT)	rw
023C	1	Minute of Zulu time in FS2	rw
023E	2	Day number in Year in FS (counting from 1)	rw
0240	2	Year in FS	rw
0246	2	Local time offset from Zulu (minutes). +ve = behind Zulu, -ve = ahead	r
0262	2	Pause the sim	rw
0264	2	Pause indicator (0=Not paused, 1=Paused)	r
0274	2	Frame rate is given by 32768/this value	r
0280	1	Operates NAV, Taxi, Panel and Wing light (but only reflects NAV settings). See \$0D0C for more control	r
0281	1	Operates Strobe and Beacon Lights. See \$0D0C for more control	rw
028C	2	Operates Landing Lights. See \$0D0C	rw
029C	2	Pitot Heat switch (0=off, 1=on)	rw
02A0	2	Magnetic variation (signed, -ve = West). For degrees *360/65536.	r
02B4	4	GS: Ground Speed, as 65536*metres/sec	r
02B8	4	TAS: True Air Speed, as knots * 128	r
02BC	4	IAS: Indicated Air Speed, as knots * 128	r
02C4	4	Barber pole airspeed, as knots * 128	r
02C8	4	Vertical speed, signed, as 256 * metres/sec.	r
02CC	8	Whiskey Compass, degrees in 'double' floating point format (FLOAT64)	r
02D4	2	[FS2004 only] ADF2 Frequency: main 3 digits, in Binary Coded Decimal. See also offset 02D6. A frequency of 1234.5 will have 0x0234 here and 0x0105 in offset 02D6.	rw
02D8	2	[FS2004 only] ADF2: relative bearing to NDB (*360/65536 for degrees, -ve left, +ve right)	r
02DC	6	ADF2 IDENTITY (string supplied: 6 bytes including zero terminator)	r
0300	2	VOR1 DME distance, 16-bit integer, nm * 10 [FS2002+]	r
0306	2	VOR2 DME distance, 16-bit integer, nm * 10 [FS2002+]	r
030C	4	Vertical speed, copy of offset 02C8 whilst airborne, not updated whilst the "on ground" flag (0366) is set. Can be used to check hardness of touchdown (but watch out for bounces which may change this). [FS2002+]	r
0330	2	Altimeter pressure setting (Kollsman window). As millibars (hectoPascals) * 16	rw
034C	2	ADF1 Frequency: main 3 digits, in Binary Coded Decimal. See also offset 0356. A frequency of 1234.5 will have 0x0234 here and 0x0105 in offset 0356. (See also offset 0389)	rw
034E	2	COM1 frequency, 4 digits in BCD format. A frequency of 123.45 is represented by 0x2345. The leading 1 is assumed.	rw
0350	2	NAV1 frequency, 4 digits in BCD format. A frequency of 113.45 is represented by 0x1345. The leading 1 is assumed. (See also offset 0388)	rw
0352	2	NAV2 frequency, 4 digits in BCD format. A frequency of 113.45 is represented by 0x1345. The leading 1 is assumed. (See also offset 0388)	rw
0354	2	Transponder setting, 4 digits in BCD format: 0x1200 means 1200 on the dials.	rw
0366	2	Aircraft on ground flag (0=airborne, 1=on ground)	r
036C	1	Stall warning (0=no, 1=stall)	r
036D	1	Overspeed warning (0=no, 1=overspeed)	r
036E	1	Turn co-ordinator ball position (slip and skid). -128 is extreme left, +127 is extreme right, 0 is balanced.	r
0378	2	DME1 or DME2 select (1=DME1, 2=DME2)	rw
037C	2	Turn Rate (for turn coordinator). 0=level, -512=2min Left, +512=2min Right	r
04C8	2	Dew point as degrees C *256, for the surface temperature layer, FS2k/CFS2 read only	r
04CB	1	Precipitation rate, 0–5, FS2k/CFS2 read only. Note that in FS2004, rate 0 = light drizzle. Type=0 is no rain/snow	r
04CC	1	Precipitation type, 0=none, 1=rain, 2=snow, FS2k/CFS2 read only.	r
04D2	2	Precipitation control: write hi-byte=type 0–2 (see above), low byte=rate 0–5.	rw

04D4	2	Dew point control: degrees C * 256. Sets surface layer dewpoint only	rw
04D8	2	Surface layer wind speed, in knots (FS2k/CFS2). This may be different to the current wind speed at the aircraft—see offset 0E90. This also provides wind_surf_vel for FS2k Adventures.	r
04DA	2	Surface layer wind direction, *360/65536 to get degrees MAGNETIC (FS2k/CFS2). This may be different to the current wind direction at the aircraft—see offset 0E92. This also provides wind_surf_dir for FS2k Adventures.	r
04E0	88	PM Offsets	rw
0558	4	Initial position with airSpeed [FSX]	w
055C	4	Initial position set [FSX]	w
0560	8	Latitude of aircraft in FS units. Multiply by 90.0/(10001750.0 * 65536.0 * 65536.0)	rw
0568	8	Longitude of aircraft in FS format. Multiply by 360.0/(65536.0 * 65536.0 * 65536.0 * 65536.0)	rw
0570	8	Altitude, in metres and fractional metres. The units are in the high 32-bit integer (at 0574) and the fractional part is in the low 32-bit integer (at 0570).	rw
0578	4	Pitch, *360/(65536*65536) for degrees. 0=level, -ve=pitch up, +ve=pitch down [Can be set in slew or pause states]	rw
057C	4	Bank, *360/(65536*65536) for degrees. 0=level, -ve=bank right, +ve=bank left [Can be set in slew or pause states]	rw
0580	4	Heading, *360/(65536*65536) for degrees TRUE. [Can be set in slew or pause states]	rw
05DC	2	Slew mode (indicator and control), 0=off, 1=on. (See 05DE also).	rw
0609	1	Engine type: 0=Piston (and some FS2004 Helos), 1=Jet, 2=Sailplane, 3=Helo, 4=Rocket, 5=Turboprop	r
0764	4	Autopilot available	r
077C	4	Stall horn available	r
0780	4	Engine mixture available	r
07A0	4	NAV1 available	r
07A4	4	NAV2 available	r
07BC	4	Autopilot Master switch Autopilot Master switch 0 = Off, 1 = CWS, 2 = On	rw
07C0	4	Autopilot wing leveller	rw
07C4	4	Autopilot NAV1 lock	rw
07C8	4	Autopilot heading lock	rw
07CC	2	Autopilot heading value, as degrees*65536/360	rw
07D0	4	Autopilot altitude lock	rw
07D4	4	Autopilot altitude value, as metres*65536	rw
07DC	4	Autopilot airspeed hold	rw
07E2	2	Autopilot airspeed value, in knots	rw
07E4	4	Autopilot mach hold	rw
07E8	4	Autopilot mach value, as Mach*65536	rw
07EC	4	Autopilot vertical speed hold	rw
07F2	2	Autopilot vertical speed value, as ft/min	rw
0800	4	Autopilot Approach hold. See the note above, for offset 07FC.	rw
0804	4	Autopilot Back course hold. The note for offset 07FC may also apply here.	rw
0808	4	Yaw damper	rw
0810	4	Autothrottle Arm	rw
0840	2	Crashed flag	r

0842	2	Vertical speed in metres per minute, but with -ve for UP, +ve for DOWN. Multiply by 3.28084 and reverse the sign for the normal fpm measure. This works even in slew mode (except in FS2002).	r
0844	2	NAV2 ILS localiser inverse runway heading if VOR2 is ILS. Convert to degrees by *360/65536. This is 180 degrees different to the direction of flight to follow the localiser. [FS2002+]	r
0846	2	NAV2 ILS glideslope inclination if VOR2 is ILS. Convert to degrees by *360/65536. [FS2002+]	r
084C	4	VOR2 Latitude, as in 085C above, except when NAV2 is tuned to an ILS, in which case this gives the localiser Latitude. [FS2002 and later]	r
0850	4	[FS2002/4 only]: VOR2 Longitude, as in 0864 above, except when NAV2 is tuned to an ILS, in which case this gives the localiser Longitude.	r
0854	4	[FS2002/4 only]: VOR2 Elevation, as in 086C above, except when NAV2 is tuned to an ILS, in which case this gives the localiser Elevation.	r
0858	4	VOR2 Latitude in FS form. Convert to degrees by *90/10001750. If NAV2 is tuned to an ILS this gives the glideslope transmitter Latitude.	r
085C	4	VOR1 Latitude in FS form. Convert to degrees by *90/10001750. If NAV1 is tuned to an ILS this gives the glideslope transmitter Latitude.	r
0860	4	VOR2 Longitude in FS form. Convert to degrees by *360/(65536*65536). If NAV2 is tuned to an ILS this gives the glideslope transmitter Longitude.	r
0864	4	VOR1 Longitude in FS form. Convert to degrees by *360/(65536*65536). If NAV1 is tuned to an ILS this gives the glideslope transmitter Longitude.	r
0868	4	VOR2 Elevation in metres. If NAV2 is tuned to an ILS this gives the glideslope transmitter Elevation.	r
086C	4	VOR1 Elevation in metres. If NAV1 is tuned to an ILS this gives the glideslope transmitter Elevation.	r
0870	2	NAV1 ILS localiser inverse runway heading if VOR1 is ILS. Convert to degrees by *360/65536. This is 180 degrees different to the direction of flight to follow the localiser.	r
0872	2	NAV1 ILS glideslope inclination if VOR1 is ILS. Convert to degrees by *360/65536	r
0874	4	VOR1 Latitude , as in 085C above, except when NAV1 is tuned to an ILS, in which case this gives the localiser Latitude. [FS2002 and later]	r
0878	4	[FS2002/4 only]: VOR1 Longitude , as in 0864 above, except when NAV1 is tuned to an ILS, in which case this gives the localiser Longitude.	r
087C	4	[FS2002/4 only]: VOR1 Elevation, as in 086C above, except when NAV1 is tuned to an ILS, in which case this gives the localiser Elevation.	r
088C	2	Engine 1 Throttle lever, -4096 to +16384	rw
088E	2	Engine 1 Prop lever, -4096 to +16384	rw
0890	2	Engine 1 Mixture lever, 0 - 16384	rw
0892	2	Engine 1 Starter switch position (Magnetos), Jet/turbo: 0=Off, 1=Start, 2=Gen; Prop: 0=Off, 1=right, 2=Left, 3=Both, 4=Start	rw
0894	2	Engine 1 combustion flag (TRUE if engine firing)	r
0896	2	Engine 1 Jet N2 as 0 - 16384 (100%).	r
0898	2	Engine 1 Jet N1 as 0 - 16384 (100%), or Prop RPM.	r
089A	2	Engine 1 Throttle lever, -4096 to +16384, same as 088C above except that values written here are treated like axis inputs and are disconnectable via offset 310A, and have the last written value obtainable from offset 3330	rw
08A0	2	Engine 1 Fuel Flow PPH SSL (pounds per hour, standardised to sea level)	r
08B2	2	Engine 1 Anti-Ice or Carb Heat switch (1=On)	rw
08B8	2	Engine 1 Oil temperature, 16384 = 140 C	r
08BA	2	Engine 1 Oil pressure, 16384 = 55 psi.	r
08BC	2	Engine 1 Pressure Ratio (where calculated): 16384 = 1.60	r
08BE	2	Engine 1 EGT, 16384 = 860 C. X-Plane deg C	r
08C0	2	Engine 1 Manifold Pressure: Inches Hg * 1024	r
08C8	2	Engine 1 RPM Scaler: For Props, use this to calculate RPM - see offset 0898	r
08D0	4	Engine 1 Oil Quantity: 16384 = 100% On FS2000 FSUIPC usually has to derive this from a leakage value as it isn't provided directly.	r
08D4	4	Engine 1 Vibration: 16384 = 5.0. This is a relative measure of amplitude from the sensors on the engine which when too high is an indication of a problem. The value at which you should be concerned varies according to aircraft and engine. Works only with x737	r
08D8	4	Engine 1 Hydraulic pressure: appears to be 4*psi	r
08DC	4	Engine 1 Hydraulic quantity: 16384 = 100%	r
08E8	8	Engine 1 CHT, degrees F in double floating point (FLOAT64)	r
0918	8	Engine 1 Fuel Flow Pounds per Hour, as floating point double (FLOAT64)	r
0920	4	Engine 1 Torque, in FLOAT32 format, probably in ft-lbs. (not jets)	r
0924	2	Engine 2 Throttle lever, -4096 to +16384	rw
0926	2	Engine 2 Prop lever, -4096 to +16384	rw
0928	2	Engine 2 Mixture lever, 0 - 16384	rw
092A	2	Engine 2 Starter switch position (Magnetos), Jet/turbo: 0=Off, 1=Start, 2=Gen; Prop: 0=Off, 1=right, 2=Left, 3=Both, 4=Start	rw

092C	2	Engine 2 combustion flag (TRUE if engine firing)	r
092E	2	Engine 2 Jet N2 as 0 – 16384 (100%).	r
0930	2	Engine 2 Jet N1 as 0 – 16384 (100%)	r
0932	2	Engine 2 Throttle lever, –4096 to +16384, same as 088C above except that values written here are treated like axis inputs and are disconnectable via offset 310A, and have the last written value obtainable from offset 3332	rw
0938	2	Engine 2 Fuel Flow PPH SSL (pounds per hour, standardised to sea level)	r
094A	2	Engine 2 Anti-Ice or Carb Heat switch (1=On)	rw
0950	2	Engine 2 Oil temperature, 16384 = 140 C	r
0952	2	Engine 2 Oil pressure, 16384 = 55 psi	r
0954	2	Engine 2 Pressure Ratio (where calculated): 16384 = 1.60	r
0956	2	Engine 2 EGT, 16384 = 860 C.	r
0958	2	Engine 2 Manifold Pressure: Inches Hg * 1024	r
0960	2	Engine 2 RPM Scaler: For Props, use this to calculate RPM – see offset 0930	r
0968	4	Engine 2 Oil Quantity: 16384 = 100% On FS2000 FSUIPC usually has to derive this from a leakage value as it isn't provided directly.	r
096C	4	Engine 2 Vibration: 16384 = 5.0. This is a relative measure of amplitude from the sensors on the engine which when too high is an indication of a problem. The value at which you should be concerned varies according to aircraft and engine. Works only with x737	r
0970	4	Engine 2 Hydraulic pressure: appears to be 4*psi	r
0974	4	Engine 2 Hydraulic quantity: 16384 = 100%	r
0980	8	Engine 2 CHT, degrees F in double floating point (FLOAT64)	r
09B0	8	Engine 2 Fuel Flow Pounds per Hour, as floating point double (FLOAT64)	r
09B8	4	Engine 2 Torque, in FLOAT32 format, probably in ft-lbs. (not jets)	r
09BC	2	Engine 3 Throttle lever, –4096 to +16384 [Programs controlling throttle directly from user inputs should write to 09CA instead if the input should be disconnectable via offset 310A/B (e.g. for auto-throttle management)]	rw
09BE	2	Engine 3 Prop lever, –4096 to +16384	rw
09C0	2	Engine 3 Mixture lever, 0 – 16384	rw
09C2	2	Engine 3 Starter switch position (Magnetos), Jet/turbo: 0=Off, 1=Start, 2=Gen; Prop: 0=Off, 1=right, 2=Left, 3=Both, 4=Start	rw
09C4	2	Engine 3 combustion flag (TRUE if engine firing)	r
09C6	2	Engine 3 Jet N2 as 0 – 16384 (100%)	r
09C8	2	Engine 3 Jet N1 as 0 – 16384 (100%)	r
09CA	2	Engine 3 Throttle lever, –4096 to +16384, same as 088C above except that values written here are treated like axis inputs and are disconnectable via offset 310A/B, and have the last written value obtainable from offset 3334	rw
09D0	2	Engine 3 Fuel Flow PPH SSL (pounds per hour, standardised to sea level). Don't know units, but it seems to match some gauges if divided by 128. Not maintained in all cases.	r
09E2	2	Engine 3 Anti-Ice or Carb Heat switch (1=On)	rw
09E8	2	Engine 3 Oil temperature, 16384 = 140 C.	r
09EA	2	Engine 3 Oil pressure, 16384 = 55 psi.	r
09EC	2	Engine 3 Pressure Ratio (where calculated): 16384 = 1.60	r
09EE	2	Engine 3 EGT, 16384 = 860 C.	r
09F0	2	Engine 3 Manifold Pressure: Inches Hg * 1024	r
09F8	2	Engine 3 RPM Scaler: For Props, use this to calculate RPM – see offset 09C8	r
0A00	4	Engine 3 Oil Quantity: 16384 = 100% On FS2000 FSUIPC usually has to derive this from a leakage value as it isn't provided directly.	r
0A08	4	Engine 3 Hydraulic pressure: appears to be 4*psi	r
0A0C	4	Engine 3 Hydraulic quantity: 16384 = 100%	r
0A18	8	Engine 3 CHT, degrees F in double floating point (FLOAT64)	r
0A48	8	Engine 3 Fuel Flow Pounds per Hour, as floating point double (FLOAT64)	r
0A50	4	Engine 3 Torque, in FLOAT32 format, probably in ft-lbs. (not jets)	r
0A54	2	Engine 4 Throttle lever, –4096 to +16384 [Programs controlling throttle directly from user inputs should write to 0A62 instead if the input should be disconnectable via offset 310A/B (e.g. for auto-throttle management)]	rw
0A56	2	Engine 4 Prop lever, –4096 to +16384	rw

0A58	2	Engine 4 Mixture lever, 0 – 16384	rw
0A5A	2	Engine 4 Starter switch position (Magnetos), Jet/turbo: 0=Off, 1=Start, 2=Gen; Prop: 0=Off, 1=right, 2=Left, 3=Both, 4=Start	rw
0A5C	2	Engine 4 combustion flag (TRUE if engine firing)	r
0A5E	2	Engine 4 Jet N2 as 0 – 16384 (100%)	r
0A60	2	Engine 4 Jet N1 as 0 – 16384 (100%),	r
0A62	2	Engine 4 Throttle lever, –4096 to +16384, same as 088C above except that values written here are treated like axis inputs and are disconnectable via offset 310A/B, and have the last written value obtainable from offset 3336	rw
0A68	2	Engine 4 Fuel Flow PPH SSL (pounds per hour, standardised to sea level). Don't know units, but it seems to match some gauges if divided by 128. Not maintained in all cases.	r
0A7A	2	Engine 4 Anti-Ice or Carb Heat switch (1=On)	rw
0A80	2	Engine 4 Oil temperature, 16384 = 140 C.	r
0A82	2	Engine 4 Oil pressure, 16384 = 55 psi. Not that in some FS2000 aircraft (the B777) this can exceed the 16-bit capacity of this location. FSUIPC limits it to fit, i.e.65535 = 220 psi	r
0A84	2	Engine 4 Pressure Ratio (where calculated): 16384 = 1.60	r
0A86	2	Engine 4 EGT, 16384 = 860 C. [Note that for Props this value is not actually correct. For FS2004 at least you will get the correct value from 3930. In FS2004 the value here has been derived by FSUIPC to be compatible with FS2002 et cetera]	r
0A88	2	Engine 4 Manifold Pressure: Inches Hg * 1024	r
0A90	2	Engine 4 RPM Scaler: For Props, use this to calculate RPM – see offset 0A60	r
0A98	4	Engine 4 Oil Quantity: 16384 = 100% On FS2000 FSUIPC usually has to derive this from a leakage value as it isn't provided directly.	r
0AA0	4	Engine 4 Hydraulic pressure: appears to be 4*psi	r
0AA4	4	Engine 4 Hydraulic quantity: 16384 = 100%	r
0AB0	8	Engine 4 CHT, degrees F in double floating point (FLOAT64)	r
0AE0	8	Engine 4 Fuel Flow Pounds per Hour, as floating point double (FLOAT64)	r
0AE8	4	Engine 4 Torque, in FLOAT32 format, probably in ft-lbs. (not jets)	r
0AEC	2	Number of engines	r
0AF4	2	Fuel weight as pounds per gallon * 256	r
0B18	8	Gyro suction in inches of mercury (Hg), floating point double (FLOAT64)	r
0B20	2	Sound control: 0 to switch off, 1 to switch on	rw
0B24	2	Sound flag: reads 0 is off, 1 if on	r
0B4C	2	Ground altitude (metres). See 0020 for more accuracy.	r
0B64	1	Fail mode: 0 ok, ADF inoperable = 1	rw
0B65	1	Fail mode: 0 ok, ASI inoperable = 1	rw
0B66	1	Fail mode: 0 ok, Altimeter inoperable = 1	rw
0B67	1	Fail mode: 0 ok, Attitude Indicator inoperable = 1	rw
0B68	1	Fail mode: 0 ok, COM1 radio inoperable = 1	rw
0B6B	1	Fail mode: 0 ok, Engine inoperable = 1, extended for FS2000/CFS2 for up to 4 individual engines: bit 0 =Engine 1 ... bit 3= Engine 4. (but note that this may not work for FS98 aircraft transposed into FS2k/CFS2).	rw
0B74	4	Fuel: centre tank level, % * 128 * 65536	rw
0B78	4	Fuel: centre tank capacity: US Gallons (see also offsets 1244– for extra FS2k/CFS2 fuel tanks)	r
0B7C	4	Fuel: left main tank level, % * 128 * 65536	rw
0B80	4	Fuel: left main tank capacity: US Gallons	r
0B84	4	Fuel: left aux tank level, % * 128 * 65536	rw
0B88	4	Fuel: left aux tank capacity: US Gallons	r
0B8C	4	Fuel: left tip tank level, % * 128 * 65536	rw
0B90	4	Fuel: left tip tank capacity: US Gallons	r
0B94	4	Fuel: right main tank level, % * 128 * 65536	rw
0B98	4	Fuel: right main tank capacity: US Gallons	r
0B9C	4	Fuel: right aux tank level, % * 128 * 65536	rw
0BA0	4	Fuel: right aux tank capacity: US Gallons	r
0BA4	4	Fuel: right tip tank level, % * 128 * 65536	rw

0BA8	4	Fuel: right tip tank capacity: US Gallons	r
0BAC	2	Inner Marker: activated when TRUE	r
0BAE	2	Middle Marker: activated when TRUE	r
0BB0	2	Outer Marker: activated when TRUE	r
0BB2	2	Elevator control input: -16383 to +16383	rW
0BB4	2	Elevator position indicator (maybe adjusted from input!)	r
0BB6	2	Aileron control input: -16383 to +16383	rW
0BB8	2	Aileron position indicator (maybe adjusted from input!)	r
0BBA	2	Rudder control input: -16383 to +16383	rW
0BB4	2	Elevator position indicator (maybe adjusted from input!)	r
0BB8	2	Aileron position indicator (maybe adjusted from input!)	r
0BBC	2	Rudder position indicator (maybe adjusted from input!)	r
0BBE	2	Helo pitch (elevator) trim control: -16383 to +16383, but only when —ApplyHeloTrimll set.	rW
0BC0	2	Elevator trim control input: -16383 to +16383	rW
0BC2	2	Elevator trim indicator (follows input)	r
0BC4	2	Left brake application read-out (0 off, 16383 full: parking brake=16383). You can apply a fixed brake pressure here, or else use the byte at 0C01 to apply brakes emulating the keypress.	rW
0BC6	2	Right brake application read-out (0 off, 16383 full: parking brake=16383). You can apply a fixed brake pressure here, or else use the byte at 0C00 to apply brakes emulating the keypress.	rW
0BC8	2	Parking brake: 0=off, 32767=on	rW
0BCA	2	Parking brake indicator	r
0BCC	4	Spoilers arm (0=off, 1=arm for auto deployment)	rW
0BD0	4	Spoilers control, 0 off, 4800 arm, then 5620 (7%) to 16383 (100% fully deployed). The 4800 value is set by arming. Values from 0 to somewhere close to, but below, 4800 do nothing. The percentage extension is the proportion of the distance in the range 4800 to 16383, even though values 4800 to 5619 cannot be used—7% seems to be the minimum. [These details have now been verified on FS2000, FS2002 and FS2004.]	rW
0BD4	4	Spoiler Left position indicator (0-16383)	r
0BD8	4	Spoiler Right position indicator (0-16383)	r
0BDC	4	Flaps control, 0=up, 16383=full deflection	rW
0BE0	4	Flaps position indicator (left). 16383=full deflection.	r
0BE4	4	Flaps position indicator (right). 16383=full deflection.	r
0BE8	4	Gear control: 0=Up, 16383=Down	rW
0BEC	4	Gear position (nose): 0=full up, 16383=full down	r
0BF0	4	Gear position (right): 0=full up, 16383=full down	r
0BF4	4	Gear position (left): 0=full up, 16383=full down	r
0C02	2	Aileron trim value/control: -16383 to +16383	rW
0C04	2	Rudder trim value/control: -16383 to +16383	rW
0C18	2	International units: 0=US, 1=Metric+feet, 2=Metric+metres	rW
0C1A	2	Simulation rate *256 (i.e. 256=1x)	rW
0C20	9	Local time in character format: "hh:mm:ss" (with zero terminator)	r
0C29	5	DME1 distance as character string, either "nn.n" or "nnn." (when > 99.9 nm).	r
0C2E	5	DME1 speed as character string, "nnn" followed by either space then zero or just zero.	r
0C33	5	DME2 distance as character string, either "nn.n" or "nnn." (when > 99.9 nm).	r
0C38	5	DME2 speed as character string, "nnn" followed by either space then zero or just zero.	r
0C3E	2	Gyro drift amount (*360/65536 for degrees).	rW
0C48	1	NAV1 Localiser Needle: -127 left to +127 right	r
0C49	1	NAV1 Glideslope Needle: -127 up to +127 down	r

		NAV1 Back Course flags: 0BC available 1Localiser tuned in 2On Back Course (?) 7Station active (even if no BC)	r
0C4A	1	NAV1 To/From flag: 0=not active, 1=To, 2=From	r
0C4B	1	NAV1 GS flag: TRUE if GS alive	r
0C4C	1	NAV1 code flags, bits used as follows: 0 DME available 1 TACAN 2 Voice available 3 No signal available 4 DME transmitter at GS transmitter 5 No back course 6 GS available 7 This is a localiser (else it's a VOR)	
0C4D	1	[FS2002+, Not yet tested]	r
0C4E	2	NAV1 OBS setting (degrees, 0–359)	rw
0C50	2	NAV1 radial (*360/65536 for degrees)	r
		NAV1 signal strength: For Localisers, seems to be either 0 or 256 For VORs varies from 0 to over 1,000,000 when really close!	
0C52	4	NAV1: relative bearing to VOR1, in degrees (0–359)	r
0C56	2	NAV2 Localiser Needle: –127 left to +127 right	r
0C59	1	NAV2 Back Course flags: 0BC available 1Localiser tuned in 2On Back Course (?) 7Station active (even if no BC)	
0C5A	1	NAV2 To/From flag: 0=not active, 1=To, 2=From	r
0C5B	1	NAV2: relative bearing to VOR2, in degrees (0–359)	r
0C5C	2	NAV2 OBS setting (degrees, 0–359)	rw
0C5E	2	NAV2 radial (*360/65536 for degrees)	r
		NAV1 signal strength: For Localisers, seems to be either 0 or 256 For VORs varies from 0 to over 1,000,000 when really close!	
0C62	4	ADF1: relative bearing to NDB (*360/65536 for degrees, –ve left, +ve right)	r
0C6A	2	NAV2 Glideslope Needle: –127 up to +127 down [FS2002+]	r
0C6E	1	NAV2 GS flag: TRUE if GS alive [FS2002+]	r
0C6F	1	NAV2 code flags, bits used as follows: DME available TACAN Voice available No signal available DME transmitter at GS transmitter No back course GS available This is a localiser (else it's a VOR)	
0C70	1	[FS2002+, Not yet tested]	r

		Lights (FS2k/CFS2), a switch for each one (bits from lo to hi): 0 Navigation 1 Beacon 2 Landing 3 Taxi 4 Strobes 5 Instruments 6 Recognition 7 Wing 8 Logo 9 Cabin	
0D0C	2		rw
0E8A	2	Current visibility (Statue miles * 100)	rw
0E8C	2	Outside Air Temperature (OAT), degrees C * 256	r
0E90	2	Ambient wind speed (at aircraft) in knots	r
		Ambient wind direction (at aircraft), *360/65536 to get degrees Magnetic or True. For compatibility with FS98, the direction is Magnetic for surface winds (aircraft below the altitude set into offset 0EEE), but True for all upper winds. See offset 02A0 for magnetic variation and how to convert.	
0E92	2		r
0E9A	2	Upper cloud layer ceiling in metres AMSL	rw
0E9C	2	Upper cloud layer base in metres AMSL	rw
0E9E	2	Upper cloud layer coverage, 65535 = 8 oktas, ... 32768= 4 oktas ... 0 = clear	rw
0EA2	2	Lower cloud layer ceiling in metres AMSL	rw
0EA4	2	Lower cloud layer base in metres AMSL	rw
0EA6	2	Lower cloud layer coverage, 65535 = 8 oktas, ... 32768= 4 oktas ... 0 = clear	rw
0EC0	2	Surface Temperature in degrees C * 256	r
0EC6	2	Pressure (QNH) as millibars (hectoPascals) *16.	r
0EDA	2	Middle wind speed, knots	r
0EDC	2	Middle wind direction, *360/65536 gives degrees True	r
0EDE	2	Middle wind turbulence setting, 0 none, 64, 128, 192, 224, 255 worst	r
0EE6	2	Lower wind speed, knots	r
0EE8	2	Lower wind direction, *360/65536 gives degrees True	r
0EEA	2	Lower wind turbulence setting, 0 none, 64, 128, 192, 224, 255 worst	r
0EEC	2	Lower wind gusts, enabled if True.	r
0EF0	2	Surface wind speed, knots. [See also 04D8]	r
0EF2	2	Surface wind direction, *360/65536 gives degrees Magnetic (!). [See also 04DA]	r
0EF4	2	Surface wind turbulence setting, 0 none, 64, 128, 192, 224, 255 worst	r
0EF6	2	Surface wind gusts, enabled if True.	r
0F48	2	Pressure (QNH) as millibars (hectoPascals) *16.	rw
0F5C	2	Middle wind speed, knots	rw
0F5E	2	Middle wind direction, *360/65536 gives degrees True	rw
0F60	2	Middle wind turbulence setting, 0 none, 64, 128, 192, 224, 255 worst	rw
0F62	2	Middle wind gusts, enabled if True.	rw
0F68	2	Lower wind speed, knots	rw
0F6A	2	Lower wind direction, *360/65536 gives degrees True	rw
0F6C	2	Lower wind turbulence setting, 0 none, 64, 128, 192, 224, 255 worst	rw
0F6E	2	Lower wind gusts, enabled if True.	rw
0F72	2	Surface wind speed, knots. [See also 04D8]	rw
0F74	2	Surface wind direction, *360/65536 gives degrees Magnetic (!). [See also 04DA]	rw
0F76	2	Surface wind turbulence setting, 0 none, 64, 128, 192, 224, 255 worst	rw

0F78	2	Surface wind gusts, enabled if True.	rw
11BA	2	G Force: units unknown, but /625 seems to give quite sensible values.	r
11BE	2	Angle of Attack. This is actually a relative value, giving in %*32767 the difference between the current AofA and the maximum angle of attack for the current aircraft. For a relative measure of AofA calculate $100 - (100 * \# / 32767)$, where # is this number.	r
11C6	2	Mach speed *20480.	r
11D0	2	Total Air Temperature (TAT), degrees Celsius * 256	r
1244	4	Fuel: centre 2 tank level, % * 128 * 65536 [FS2k/CFS2 only]	rw
1248	4	Fuel: centre 2 tank capacity: US Gallons [FS2k/CFS2 only]	r
124C	4	Fuel: centre 3 tank level, % * 128 * 65536 [FS2k/CFS2 only]	rw
1250	4	Fuel: centre 3 tank capacity: US Gallons [FS2k/CFS2 only]	r
132C	4	NAV/GPS switch, in FS2000 & FS2002. 0=NAV, 1=GPS	rw
1400	48	A set of Payload Station data, 48 bytes for each payload station	rw
2000	8	Turbine Engine 1 N1 value (%) as a double (FLOAT64). This is for jets and turboprops—it has no meaning on reciprocating prop aircraft.	r
2008	8	Turbine Engine 1 N2 value (%) as a double (FLOAT64). This is for jets and turboprops—it has no meaning on reciprocating prop aircraft.	r
2018	8	Turbine Engine 1 corrected N2 value (%) as a double (FLOAT64). This is for jets and turboprops—it has no meaning on reciprocating prop aircraft.	r
2028	8	Turbine Engine 1 max torque fraction (range 0.0–1.0) as a double (FLOAT64).	r
2030	8	Turbine Engine 1 EPR as a double (FLOAT64). This is for jets and turboprops.	r
2038	8	Turbine Engine 1 ITT (interstage turbine temperature) in degrees Rankine, as a double (FLOAT64). This is for jets and turboprops.	r
208C	4	Turbine Engine 1 Ignition Switch	rw
2100	8	Turbine Engine 2 N1 value (%) as a double (FLOAT64). This is for jets and turboprops—it has no meaning on reciprocating prop aircraft.	r
2108	8	Turbine Engine 2 N2 value (%) as a double (FLOAT64). This is for jets and turboprops—it has no meaning on reciprocating prop aircraft.	r
2118	8	Turbine Engine 2 corrected N2 value (%) as a double (FLOAT64). This is for jets and turboprops—it has no meaning on reciprocating prop aircraft.	r
2128	8	Turbine Engine 2 max torque fraction (range 0.0–1.0) as a double (FLOAT64).	r
2130	8	Turbine Engine 2 EPR as a double (FLOAT64). This is for jets and turboprops.	r
2138	8	Turbine Engine 2 ITT (interstage turbine temperature) in degrees Rankine, as a double (FLOAT64). This is for jets and turboprops.	r
218C	4	Turbine Engine 2 Ignition Switch	rw
2200	8	Turbine Engine 3 N1 value (%) as a double (FLOAT64). This is for jets and turboprops—it has no meaning on reciprocating prop aircraft.	r
2208	8	Turbine Engine 3 N2 value (%) as a double (FLOAT64). This is for jets and turboprops—it has no meaning on reciprocating prop aircraft.	r
228C	4	Turbine Engine 3 Ignition Switch	rw
2300	8	Turbine Engine 4 N1 value (%) as a double (FLOAT64). This is for jets and turboprops—it has no meaning on reciprocating prop aircraft.	r
2308	8	Turbine Engine 4 N2 value (%) as a double (FLOAT64). This is for jets and turboprops—it has no meaning on reciprocating prop aircraft.	r
238C	4	Turbine Engine 4 Ignition Switch	rw
2400	8	Propeller 1 RPM as a double (FLOAT64). This value is for props and turboprops and is negative for counter-rotating propellers.	r
2408	8	Propeller 1 RPM as a fraction of the maximum RPM. (double)	r
2410	8	Propeller 1 thrust in pounds, as a double (FLOAT64). This is for props and turboprops.	r
2500	8	Propeller 2 RPM as a double (FLOAT64). This value is for props and turboprops and is negative for counter-rotating propellers.	r
2508	8	Propeller 2 RPM as a fraction of the maximum RPM. (double)	r
2510	8	Propeller 2 thrust in pounds, as a double (FLOAT64). This is for props and turboprops.	r
281C	4	Master battery switch (1=On, 0=Off)	rw
2AAC	4	NAV1 course deviation needle (CDI), 32-bit float value, –127.0 left to +127.0 right	r
2AB0	4	NAV1 glideslope needle (CDI), 32-bit float value, –127.0 up to +127.0 down	r
2AB4	4	NAV2 course deviation needle (CDI), 32-bit float value, –127.0 left to +127.0 right	r
2AB8	4	NAV2 glideslope needle (CDI), 32-bit float value, –127.0 up to +127.0 down	r
2E80	4	Master avionics switch (0=Off, 1=On)	rw
2E98	8	Elevator deflection, in radians, as a double (FLOAT64). Up positive, down negative.	r
2EA0	8	Elevator trim deflection, in radians, as a double (FLOAT64). Up positive, down negative.	rw
2EA8	8	Aileron deflection, in radians, as a double (FLOAT64). Right turn positive, left turn negative.	r
2EB0	8	Aileron trim deflection, in radians, as a double (FLOAT64). Right turn positive, left turn negative.	r
2EB8	8	Rudder deflection, in radians, as a double (FLOAT64).	r
2EC0	8	Rudder trim deflection, in radians, as a double (FLOAT64).	rw
2EC8	4	Prop sync active (1=Active, 0=Inactive)	rw

2ED0	8	Incidence "alpha", in radians, as a double (FLOAT64). This is the aircraft <i>body</i> angle of attack (AoA) not the <i>wing</i> AoA.	r
2ED8	8	Incidence "beta", in radians, as a double (FLOAT64). This is the side slip angle.	r
2EE0	4	Flight Director Active, control and indicator. 1=active, 0=inactive. [FS2000–FS2004 only]	rw
2EE8	8	Flight director pitch value, in degrees. Double floating point format, only when FD is active. [FS2000–FS2004 only]	r
2EF0	8	Flight director bank value, in degrees. Double floating point format, right is negative, left positive. [FS2000–FS2004 only]	r
2EF8	8	CG percent, as a double (FLOAT64). This is the position of the actual CoG as a fraction (%/100) of MAC (X-Plane: CoG in meters)	rw
2F70	8	Attitude indicator pitch value, in degrees. Double floating point format.	r
2F78	8	Attitude indicator bank value, in degrees. Double floating point format.	r
		PANEL AUTOBRAKE SWITCH Read to check setting, write to change it.	
2F80	1	0=RTO, 1=Off, 2=brake1, 3=brake2, 4=brake3, 5=max	rw
3000	6	VOR1 IDENTITY (string supplied: 6 bytes including zero terminator)	r
3006	25	VOR1 name (string supplied: 25 bytes including zero terminator)	r
301F	8	VOR2 IDENTITY (string supplied: 6 bytes including zero terminator)	r
3025	25	VOR2 name (string supplied: 25 bytes needed including zero terminator)	r
303E	6	ADF1 IDENTITY (string supplied: 6 bytes including zero terminator)	r
3060	8	X (lateral, or left/right) acceleration in ft/sec/sec relative to the body axes.	r
3068	8	Y (vertical, or up/down) acceleration in ft/sec/sec relative to the body axes.	r
3070	8	Z (longitudinal, or forward/backward) acceleration in ft/sec/sec relative to the body axes.	r
3078	8	Pitch acceleration in radians/sec/sec relative to the body axes	r
3080	8	Roll acceleration in radians/sec/sec relative to the body axes (<i>see Note at end of table</i>). This is in double floating point format (FLOAT64). [FS2000 and later]	r
3088	8	Yaw acceleration in radians/sec/sec relative to the body axes (<i>see Note at end of table</i>). This is in double floating point format (FLOAT64). [FS2000 and later]	r
3090	8	Z (longitudinal, or forward/backward) GS-velocity in ft/sec relative to the body axes. This is in double floating point format (FLOAT64). [FS2000 and later]	rw
3098	8	X (lateral, or left/right) GS-velocity in ft/sec relative to the body axes. This is in double floating point format (FLOAT64). [FS2000 and later]	r
30A0	8	Y (vertical, or up/down) GS-velocity in ft/sec relative to the body axes. This is in double floating point format (FLOAT64). [FS2000 and later]	r
30A8	8	Pitch velocity in rads/sec relative to the body axes (<i>see Note at end of table</i>). This is in double floating point format (FLOAT64). [FS2000 and later]	r
30B0	8	Roll velocity in rads/sec relative to the body axes (<i>see Note at end of table</i>). This is in double floating point format (FLOAT64). [FS2000 and later]	r
30B8	8	Yaw velocity in rads/sec relative to the body axes (<i>see Note at end of table</i>). This is in double floating point format (FLOAT64). [FS2000 and later]	r
30C0	8	Current loaded weight in lbs. This is in double floating point format (FLOAT64). [FS2000 and later]	r
30E8	2	[FS2002/4 only]: Leading edge left inboard flap extension as a percentage of its maximum, with 16383 = 100%	r
30EA	2	[FS2002/4 only]: Leading edge left outboard flap extension as a percentage of its maximum, with 16383 = 100%	r
30EC	2	[FS2002/4 only]: Leading edge right inboard flap extension as a percentage of its maximum, with 16383 = 100%	r
30EE	2	[FS2002/4 only]: Leading edge right outboard flap extension as a percentage of its maximum, with 16383 = 100%	r
30F0	2	[FS2002/4 only]: Trailing edge left inboard flap extension in degrees * 256.	r
30F2	2	[FS2002/4 only]: Trailing edge left outboard flap extension in degrees * 256.	r
30F4	2	[FS2002/4 only]: Trailing edge right inboard flap extension in degrees * 256.	r
30F6	2	[FS2002/4 only]: Trailing edge right outboard flap extension in degrees * 256.	r
3101	1	Alternator (1 = on, 0 = off), read for state, write to control	rw
3102	1	Battery (1 = on, 0 = off), read for state, write to control	rw
3103	1	Avionics (1 = on, 0 = off), read for state, write to control [FS2000+]	rw
3104	1	Fuel pump (1 = on, 0 = off), read for state, write to control	rw

		<p>Controls the joystick connection to the main flight controls. Normally all zero, set the following bits to actually disconnect the specific joystick axes (from least significant bit = 0):</p> <p>0Elevator 1Aileron 2Rudder Throttles (all). See below (throttle sync control) Elevator trim Throttle #1 Throttle #2 (see next byte for others)</p> <p>If the user option is set to automatically disconnect the trim axis in FS A/P vertical modes, the disconnection of Elevator inputs via bit 0 above also disconnects Trim even if bit 5 is not also set. This allows existing A/P or fly-by-wire applications to work with those user implementations using a trim axis.</p> <p>Additionally, bit 2^4 is available to switch "throttle sync" on. In this mode all throttles are driven from the main throttle or throttle 1 inputs, and other throttle inputs are discarded. (The same option can also be used from an optional Hot Key).</p> <p>See also offset 3109 above, and also offsets 3328–3339, which provide the live axis values, post calibration. These would have been applied to FS if not prevented by the flags above.</p>	
310A	1	Applications can use these facilities to provide a responsive "fly-by-wire" control.	rw
3118	2	COM2 frequency (FS2002+ only), 4 digits in BCD format. A frequency of 123.45 is represented by 0x2345. The leading 1 is assumed.	rw
311A	2	COM1 standby frequency (FS2002+ only), 4 digits in BCD format. A frequency of 123.45 is represented by 0x2345. The leading 1 is assumed.	rw
311C	2	COM2 standby frequency (FS2002+ only), 4 digits in BCD format. A frequency of 123.45 is represented by 0x2345. The leading 1 is assumed.	rw
311E	2	NAV1 standby frequency (FS2002+ only), 4 digits in BCD format. A frequency of 113.45 is represented by 0x1345. The leading 1 is assumed.	rw
3120	2	NAV2 standby frequency (FS2002+ only), 4 digits in BCD format. A frequency of 113.45 is represented by 0x1345. The leading 1 is assumed.	rw
3122	1	<p>Radio audio switches (FS2002+ only). Read/write bit settings as follows:</p> <p>2^7 COM1 transmit 2^6 COM2 transmit 2^5 COM receive both 2^4 NAV1 sound 2^3 NAV2 sound 2^2 Marker sound 2^1 DME sound 2^0 ADF1 sound</p>	rw
3123	1	<p>Radio Use/Standby swap toggles (FS2002+ only), Write bits to operate toggles. Don't bother to read it, there's no meaning to anything read.</p> <p>2^3COM1 swap 2^2COM2 swap 2^1NAV1 swap 2^0NAV2 swap</p>	rw
3130	12	ATC flight number string for currently loaded user aircraft. This is limited to a maximum of 12 characters, including a zero terminator. [FS2002+ only]	rw
313C	12	ATC identifier (tail number) string for currently loaded user aircraft. This is limited to a maximum of 12 characters, including a zero terminator. [FS2002+ only]	rw
3148	24	ATC airline name string for currently loaded user aircraft. This is limited to a maximum of 24 characters, including a zero terminator. [FS2002+ only]	rw
3160	24	ATC aircraft type string for currently loaded user aircraft. This is limited to a maximum of 24 characters, including a zero terminator. [FS2002+ only]	rw
31A0	8	Y (vertical, or up/down) GS-velocity in ft/sec relative to world axes. This is in double floating point format (FLOAT64). [FS2000+]	r
31A8	8	Pitch velocity in rads/sec relative to world axes in double floating point format (FLOAT64).	r
31B0	8	Roll velocity in rads/sec relative to world axes in double floating point format (FLOAT64).	r
31E4	4	Radio altitude in metres * 65536	r
31F0	4	Pushback status (FS2002+). 3=off, 0=pushing back, 1=pushing back, tail to swing to left (port), 2=pushing back, tail to swing to right (starboard). Works only with Xpushback plugin	r

31F4	4	Pushback control (FS2002+). Write 0–3 here to set pushback operation, as described for the status, above. Works only with Xpushback plugin	rw
32FA	2	Text display control word. You can display messages from an external program just like an Adventure. Write the message as a zero-terminated string to offset 3380 (see below), subject to the maximum of 128 characters including the zero terminator, then write a number to this offset, 32FA, as follows: 0 display till replaced +n display for n seconds, or until replaced	rw
3300	2	Additional radio and autopilot status indicators (read only access)	r
3304	4	FSUIPC Version	r
3308	2	FS Version	r
3324	4	This is the altimeter reading in feet (or metres, if the user is running with the preference for altitudes in metres), as a 32-bit signed integer. Please check offset 0C18 to determine when metres are used (0C18 contains '2').	r
3328	2	Elevator Axis input value, post calibration, just before being applied to the simulation (if allowed to by the byte at offset 310A).	r
332A	2	Aileron Axis input value, post calibration, just before being applied to the simulation (if allowed to by the byte at offset 310A).	r
332C	2	Rudder Axis input value, post calibration, just before being applied to the simulation (if allowed to by the byte at offset 310A).	r
3330	2	Throttle 1 Axis input value, post calibration, just before being applied to the simulation (if allowed to by the byte at offset 310A).	r
3332	2	Throttle 2 Axis input value, post calibration, just before being applied to the simulation (if allowed to by the byte at offset 310A).	r
3334	2	Throttle 3 Axis input value, post calibration, just before being applied to the simulation (if allowed to by the byte at offset 310A).	r
3336	2	Throttle 4 Axis input value, post calibration, just before being applied to the simulation (if allowed to by the byte at offset 310A).	r
3364	1	FS2004 —Ready to Fly indicator. This is non-zero when FS is loading, or reloading a flight or aircraft or scenery, and becomes zero when flight mode is enabled (even if the simulator is paused or in Slew mode).	r
3365	1	In Menu or DialogII flag. This byte is non-zero when FS is effectively paused because the user accessed the Menu, or is in a dialogue resulting from menu or other selection activity. The non-zero values are: 1 = FS frozen because of menu activity 2 = FS frozen because of modal dialogue Both bits may be set in dialogues accessed through the menu. Note that the 2 bit may flicker a little on exit from the dialogue, due to the way it is detected. In FS2004 the byte at 3364 should also be considered when using this flag—there are some conditions, like reloading scenery or aircraft or flights, which effectively freeze the sim in ways not detectable except by the method used for the —ready to flyll indicator.	r
337D	1	Structural de-ice switch, (1 = on, 0 = off), read for state, write to control [FS2002+]	rw
337E	2	XPUIPC activity count. Simply a number that is incremented every time XPUIPC receives a call or message from Flight Simulator	r
3380	128	Message text area. This can be useful for programs wishing to display the adventure texts on a separate PC, via XPWideFS (the freeware ShowText.exe is an example). The text is truncated if longer than 127 characters, there always being a zero terminator provided. You can also write messages to this area, always zero terminated, for display on the FS windshield. After placing the message text, you must write the 16-bit timer value to offset 32FA to make XPUIPC send the message through to X-Plane (see 32FA above).	rw
34A0	8	Sea level pressure (QNH), double float (FS2002+)	r
3541	1	This operates the FSUIPC —freeze flight positionII facility. This keeps the aircraft at the same latitude and longitude for as long as it is engaged. The altitude and attitude of the aircraft is free to change, and, in fact, the aircraft flies as normal except for not changing its position over the ground. This is apparently a very useful facility for training environments.	rw
3590	4	Engine 1 Fuel Valve, 1 = open, 0 = closed. Can write to operate. [FS2002+] X-Plane 9.00+	rw
3594	4	Engine 2 Fuel Valve, 1 = open, 0 = closed. Can write to operate. [FS2002+] X-Plane 9.00+	rw
35B0	8	Engine 4 cowl flap position, as a double float: 0.0=fully closed, 1.0=fully open. Can be used to handle position and set it. [FS2000–FS2004 only]	rw
3670	8	Engine 3 cowl flap position, as a double float: 0.0=fully closed, 1.0=fully open. Can be used to handle position and set it. [FS2000–FS2004 only]	rw
3728	8	Reciprocating engine 2 manifold pressure, in lbs/sqft, as a double (FLOAT64). Divide by 70.7262 for inches Hg.	r
3730	8	Engine 2 cowl flap position, as a double float: 0.0=fully closed, 1.0=fully open. Can be used to handle position and set it. [FS2000–FS2004 only]	rw
37E8	8	Reciprocating engine 1 manifold pressure, in lbs/sqft, as a double (FLOAT64). Divide by 70.7262 for inches Hg.	r
37F0	8	Engine 1 cowl flap position, as a double float: 0.0=fully closed, 1.0=fully open. Can be used to handle position and set it. [FS2000–FS2004 only]	rw
3930	8	General engine 4 EGT in degrees Rankine, as a double (FLOAT64). Convert to Fahrenheit by Rankine – 459.67. FS default gauges show Centigrade.	r
3938	4	Engine 4 generator switch, a 32-bit BOOL (0 = off, 1 = on) [FS2000–FS2004 only]	rw
3958	4	Engine 4 fuel pump switch, a 32-bit BOOL (0 = off, 1 = on) [FS2000–FS2004 only]	rw
39F0	8	General engine 3 EGT in degrees Rankine, as a double (FLOAT64). Convert to Fahrenheit by Rankine – 459.67. FS default gauges show Centigrade.	r

39F8	4	Engine 3 generator switch, a 32-bit BOOL (0 = off, 1= on) [FS2000–FS2004 only]	rw
3A18	4	Engine 3 fuel pump switch, a 32-bit BOOL (0 = off, 1= on) [FS2000–FS2004 only]	rw
3AB0	8	General engine 2 EGT in degrees Rankine, as a double (FLOAT64). Convert to Fahrenheit by Rankine – 459.67. FS default gauges show Centigrade.	r
3AB8	4	Engine 2 generator switch, a 32-bit BOOL (0 = off, 1= on) [FS2000–FS2004 only]	rw
3AD8	4	Engine 2 fuel pump switch, a 32-bit BOOL (0 = off, 1= on) [FS2000–FS2004 only]	rw
3B70	8	General engine 1 EGT in degrees Rankine, as a double (FLOAT64). Convert to Fahrenheit by Rankine – 459.67. FS default gauges show Centigrade.	r
3B78	4	Engine 1 generator switch, a 32-bit BOOL (0 = off, 1= on) [FS2000–FS2004 only]	rw
3B98	4	Engine 1 fuel pump switch, a 32-bit BOOL (0 = off, 1= on) [FS2000–FS2004 only]	rw
3BFA	2	Flaps détente increment. The full range of flap movement is 0–0x3FFF (16383). Each détente position or —notchll is spaced equally over this range, no matter what flap angle is represented—a table in the AIR file gives those. To obtain the number of détentes, divide this increment value into 16383 and add 1. For example 2047 (0x7FF) would be the increment for 9 positions as on the default FS2K 737.	r
3BFC	4	Zero Fuel Weight, lbs * 256. This is the aircraft weight plus the payload weight, minus fuel. In FS2004 this changes as the payload is adjusted.	rw
3E00	8	Path of the Flight Simulator installation, down to and including the FS main folder and a following \ character.	r
6D88	1	Wiper Speed: 0=off,1=25%speed,2=50%speed,3=100%speed.	rw
6D8A	2	Steering command actually enacted by the gear, degrees positive right. Devide by 100 to get degrees	r
6D8C	1	Transponder mode (off=0,stdby=1,on=2,test=3)	rw
6D8E	1	Igniter engine 1 on yes/no	w
6D8F	1	Igniter engine 2 on yes/no	w
6D90	8	Latitude of aircraft e.g 50.123456 as double float (FLOAT64), write to reposition aircraft (see also 560); read 560	w
6D98	8	Longitude of aircraft e.g. 13.123456 as double float (FLOAT64), write to reposition aircraft (see also 568); read 568	w
6DA0	4	Altitude in feet as signed 32 bit integer, write to reposition aircraft (see also 570); read 570	w
6DA4	4	32 x Failure generation Bit 0: Microburst Bit 1: Bird strike Bit 2: Engine 1 separation Bit 3: Engine 2 separation Bit 4: Engine 1 hung start Bit 5: Engine 2 hungs start Bit 6: Engine 1 hot start Bit 7: Engine 2 hot start Bit 8: Engine 1 fire Bit 9: Engine 2 fire Bit 10: Engine 1 compressor stall Bit 11: Engine 2 compressor stall Bit 12: Engine_Seizure_eng1 Bit 13: Engine_Seizure_eng2 Bit 14: Oil_Pump_eng1 Bit 15: Oil_Pump_eng2 Bit 16: Fuel_Flow_Fluct_eng1 Bit 17: Fuel_Flow_Fluct_eng2 Bit 18: Brake_Left Bit 19: Brake_right Bit 20: Tire_Nose Bit 21: Tire_Left Bit 22: Tire_Right Bit 23: Gear_Actuator_Nose Bit 24: Gear_Actuator_Left Bit 25: Gear_Actuator_Right	rw
6DA8	1	Runway condition 0=clean&dry 1=dump 2=wet	rw
6DA9	1	APU starter switch 0 = off, 1 = on, 2 = start	rw
6DAA	1	Reset all failures set in 6DA4.	rw
6DAF	1	The percentage of thunderstorms present. 0...100	rw
6F00	2	Nosewheel speed * 10, signed +forward -backward	r
6F03	8	XPUIPC Version string with 0 terminator	r
6F0B	1	Anti-Ice left wing 0 = Off 1 = On	rw
6F0C	1	Anti-Ice right wing 0 = Off 1 = On	rw
6F0D	1	Reload scenery, write a 0-1 here (positive edge) will reload the scenery	rw
6F0E	1	Reload datarefs, write a 0-1 here (positive edge) will reload the datarefs	rw
6F0F	2	Middle cloud layer ceiling in metres AMSL	rw
6F11	2	Middle cloud layer base in metres AMSL	rw
6F13	2	Middle cloud layer coverage, 65535 = 8 oktas, ... 32768= 4 oktas ... 0 = clear	rw
6F14	1	Real weather file in use 0=no, 1=yes	rw
6F15	1	PTT if set to 1 => PTT pressed, 0 => PTT released	rw
6FFF	1	X-Plane flag, is set to 1 if X-Plane is active, you can use this to determine if xpuipc or fsuipc is running, see also 0x6F03 for version	r
C000	4096	FS2004 style NWI (—New Weather Interfacell) areas, allowing both local and global weather data to be read and written. C000–C3FF = Interpolated weather at aircraft (READ)* C400–C7FF = Global weather —"GLOB"(READ)** C800–CBFF = Weather writing area (WRITE) For GLOB or ICAO ID as specified. CC00–CFFF = Weather at requested location (READ) For ICAO ID or Lat/Lon* as specified.	r
D840	20	Additional A.I. Airborne traffic	r
F000	128	A.I. Airborne traffic	r

F080	40	A.I. Airborne traffic	r
10000	1	Xsquawkbox: Subscribe to XSB VATSIM, write a 1 here to subscribe, 0 to unsubscribe	rw
10001	1	Xsquawkbox: Connect to XSB to VATSIM, write a 1 here to connect, 0 to disconnect	rw
10002	1	Xsquawkbox: Check connection status: 0=disconnected, 1=connecting, 2=connected	r
10003	1	Xsquawkbox: Show the login box if you write a 1 here, will be reset by xpuipc	rw
10004	10	Xsquawkbox: Set the callsign in XSB VATSIM, write the callsign here as a string, e.g. "LH4711" This is limited to a maximum of 10 characters, including a zero terminator.	rw
1000E	30	Xsquawkbox: Set the server in XSB VATSIM, write the DNS address or IP here as a string, e.g. "server1" This is limited to a maximum of 30 characters, including a zero terminator.	rw
1002C	2	Xsquawkbox: Set the port in XSB VATSIM, write the port of server here as a integer	rw
1002E	30	Xsquawkbox: Set the login pilot ID in XSB VATSIM, write the login pilot ID here as a string, e.g. "123456" This is limited to a maximum of 30 characters, including a zero terminator.	rw
1004C	30	Xsquawkbox: Set the login password in XSB VATSIM, write the login password here as a string, e.g. "123456" This is limited to a maximum of 30 characters, including a zero terminator.	rw
1006A	30	Xsquawkbox: Set the login real name in XSB VATSIM, write the realname here as a string, e.g. "Hans Wurst" This is limited to a maximum of 30 characters, including a zero terminator.	rw
10088	30	Xsquawkbox: Set the login model in XSB VATSIM, write the model here as a string, e.g. "B737 NG" This is limited to a maximum of 30 characters, including a zero terminator.	rw
100A6	2	Xsquawkbox: Set the flight type for flightplan in XSB VATSIM, write the ascii code here e.g. 0x56 for V V = VFR I = IFR S = SVFR D	rw
100A8	2	Xsquawkbox: Set the TCAS type for flightplan in XSB VATSIM, write the ascii code here e.g. 0x54 for T 0 = None T = TCAS H = Heavy B = Heavy/TCAS F = B757 L = B757/TCAS	rw
100AA	2	Xsquawkbox: Set the NAV type for flightplan in XSB VATSIM, write the ascii code here e.g. 0x54 for T A = DME/Mode C B = DME/No Mode C C = LORAN/No Mode C D = DME/No Squawk E = FMS+MAP F = FMS G = GPS I = LORAN/Mode C M = Tacan/No Squawk N = Tacan/No Mode C P = Tacan/Mode C Q = RNP+RVSM R = RNP T = No DME/No Mode C U = No DME/Mode C W = RVSM X = No DME/No Squawk Y = LORAN/No Squawk	rw
100AC	2	Xsquawkbox: Set the speed in knots for flightplan in XSB VATSIM as an integer	rw
100AE	6	Xsquawkbox: Set the ICAO Code of departure airport for flightplan in XSB VATSIM, write the ICAO Code of departure airport here as a string, e.g. "EDDT" This is limited to a maximum of 6 characters, including a zero terminator.	rw
100B4	2	Xsquawkbox: Set the departure time for flightplan in XSB VATSIM, write the departure time here as zulu time, e.g. 1340 = 13:40, integer	rw

100B6	2	Xsquawkbox: Set the depature time actual for flightplan in XSB VATSIM, write theactual departure time here as zulu time, e.g. 1340 = 13:40, integer	rw
100B8	6	Xsquawkbox: Set the cruise altitude for flightplan in XSB VATSIM, write the cruise altitude here as a string, e.g. FL360" or "36000" This is limited to a maximum of 6 characters, including a zero terminator.	rw
100BE	6	Xsquawkbox: Set the ICAO Code of arrival airport for flightplan in XSB VATSIM, write the ICAO Code of arrival airport here as a string, e.g. "EDDM" This is limited to a maximum of 6 characters, including a zero terminator.	rw
100C4	2	Xsquawkbox: Set the enroute hours for flightplan in XSB VATSIM, write the enroute hours here as hours integer	rw
100C6	1	Xsquawkbox: Set the enroute mins for flightplan in XSB VATSIM, write the enroute mins here as minutes integer	rw
100C7	2	Xsquawkbox: Set the fuel hours for flightplan in XSB VATSIM, write the fuel hours here as hours integer	rw
100C9	1	Xsquawkbox: Set the fuel mins for flightplan in XSB VATSIM, write the fuel mins here as minutes integer	rw
100CA	6	Xsquawkbox: Set the ICAO Code of alternate airport for flightplan in XSB VATSIM, write the ICAO Code of alternate airport here as a string, e.g. "EDDF" This is limited to a maximum of 6 characters, including a zero terminator.	rw
100D0	100	Xsquawkbox: Remark for flightplan in XSB VATSIM, write a remark here as a string, e.g. "BlaBla Bla" This is limited to a maximum of 100 characters, including a zero terminator.	rw
10134	500	Xsquawkbox: Route for flightplan in XSB VATSIM, write a the route here as a string, e.g. "LUCOS.SEY067.SEY.PARCH.CCC.ROBER" This is limited to a maximum of 500 characters, including a zero terminator.	rw
10328	1	Xsquawkbox: Set the mic status: 0=mute the mic, 1=let XSB decide, 2=force to open	rw
10329	1	Xsquawkbox: Check mic status: 0=closed, 1=open	r
1032A	1	Xsquawkbox: Sends the flightplan to ATC if you write a 1 here, will be reset by xpuipc	rw
1032B	1	Xsquawkbox: Message status Bit 0: METAR message arrived Bit 1: Text message arrived Bit 2:	r
1032C	256	Xsquawkbox: METAR message, read the METAR message here. This is a maximum of 256 char zero terminated string. If you read here METAR message bit will be reset	r
1042C	512	Xsquawkbox: Text message, read the Text message here. This is a maximum of 512 char zero terminated string. If you read here Text message bit will be reset	r
10700	4	Baro "kollsman" full resolution 29.92 * 100 => 2992	r
10704	4	Baro altitude * 100	r
10708	2	Engine 1 speed rpm	r
1070A	2	Engine 2 speed rpm	r
11000	37	External flightmodel control via lat/lon/pitch/bank/heading	rw
11125	120	Here you can write a dataref directly in one write (120 bytes) of a fsuipc process, as follows: { char datarefString[100]; // 0..99 byte => 99 byte unsigned __int8 broadcast; // 100..101 byte => 1 byte unsigned __int8 datarefIndex; // 102..103 byte => 1 byte __int32 interger32Value; // 104..107 byte => 4 byte float floatValue; // 108..111 byte => 4 byte double doublefloatValue; // 112..119 byte => 8 byte }	w
1119D	101	Write the dataref and index you want to read: { char datarefString[100]; // 0..99 byte => 99 byte unsigned __int8 datarefIndex; // 100..101 byte => 1 byte }	rw