

## Simple flight using FS2004 ATC

This is pretty simple and as you get practice, you'll tweak several of these steps. Remember, the most important key on the keyboard; P(ause).

Choose the 737 for your aircraft (MaxFreight 737-700 with winglets)

Change weather and time to suit your taste

Go to Flight planner, input EDDF for Departing and EGLL for the Destination

Choose IFR - Direct - Cruising Altitude 33500

Fly Now

Turn on your lights: Strobe, Nav, Land, and BCN

Call ATC

Check ATIS

Set Baro (Important!)

Call ATC for Clearance etc.

On autopilot panel Flip NAV/GPS switch to GPS; \*F/D to On; \*\*A/T Arm to On; \*\*\*A/P to On; IAS/Mach to 12 (your first couple of times :0 )

Set the Altitude to what ATC told you and VERT Speed to 800

Call ATC Ground; turn on Progressive Taxi

Shift P for pushback and Shift P again once you're backed up Click the IAS button ON - Follow path to Runway

Click the IAS button OFF when you are close to runway - throttle down (you have to throttle down either F1 or using the throttle on joystick)

At the line, open the Throttle Quadrant (little airplane icon) Extend your flaps to 10

Change IAS to 200

Call ATC for takeoff

Line up on runway

Change your HDG to match the runway

Click the IAS button ON

Pull back on stick at 120 knots

Once in the air, click ALT button ON; click HDG button ON (Make sure it lines up with your nose)

Retract flaps

Retract landing gear

Change IAS to 250

Change VERT SPEED to 1500

Follow ATC instructions for heading changes and altitude changes

Click the GPS Icon

ATC will eventually get you close to your flight path on your GPS and will tell you to resume own navigation/proceed on course; click the NAV button ON

At 10000ft turn off LAND lights

Change IAS/MACH to 330

At 18000ft change Baro to 2992

Keep an eye on your speed so you do not OVERSPEED; at 26000ft (FL260) you need to start dropping your speed so your MACH does not exceed .82; at 33500ft (FL335) your IAS should be 295

At 114 miles from EGLL change IAS to 285

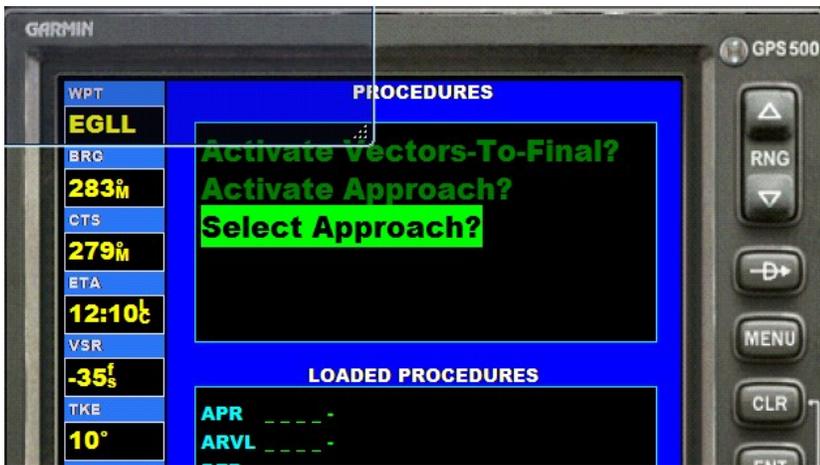
Change HDG to line up with the direction you are flying

Follow ATC instructions for descent, VERT SPEED 2500

At 55 miles or so from EGLL they will give you your ILS runway; Click HDG button; follow HDG instructions

Open GPS; hit the PROC button

"Select Approach" should be highlighted; click ENT button



Click the PUSH CRSR button 2 times



Scroll left until you find the screen that shows the APT EGLL Freqs. Scroll down to find your ILS Freq. (Outside ring scrolls up/down Inside ring scrolls left/right)



Open your Radio Stack; input ILS freq in NAV 1

Flip the NAV/GPS to NAV (you can go back and set the ILS into the GPS when you're not busy)

ATC will eventually give you updated BARO, make sure you change the BARO!

At 10000ft change IAS to 250

At 35 miles out we need to start slowing the aircraft and extending flaps. You need to be at 170 knots and 30 flaps just prior to Final

Flap speeds:

- 1 250
- 2 250
- 5 250
- 10 215
- 15 205
- 25 190
- 30 185
- 40 162

(The nm we start reducing speed changes with the path to the runway, it's usually 15 to 20nm out for speed reduction. EGLL vectored me straight in both times I flew this and the first time caught me too fast and too high, next time I was ready! (If you're still descending with too much speed 10 miles out, use the Speed Brake just left of the throttles on the Throttle Quadrant))

ATC will give you final instructions for the runway and send you over to Tower; click the NAV button



(On the GPS at the bottom right, you'll see XTK 0.17 nm which means I'm .17nm from the Localizer track for Rwy27L. At the bottom middle you'll see the GPS Localizer with the yellow triangle and a bar to the right of the triangle. When the XTK says 1.0nm you need to have the NAV button to ON. You will only see the Localizer on the GPS if you went back into the "Select Approach" screen clicked ENT and chose the ILS - Vectors - Activate This is your "double check" and, you can watch your approach)

You will start your turn to Final

Change your speed to 150 and go full flaps; Hit Shift + / to arm spoilers; put Auto Brake to 3; Lower landing gear

Keep an eye on your Glideslope, when it starts heading down and gets close to the middle, click your ALT button Off; change ALT to 00000; change VERT SPEED to \*\*\*\*800; click ALT button On

Keep an eye on your Glideslope, you'll have to adjust your VERT SPEED to chase the glideslope, it needs to stay

as close to the middle as possible. If the dot is above the middle mark you need to change the VERT SPEED to 600 or 700. If the dot is below the middle mark, you need to change your VERT SPEED to 900 or 1000 (The bottom pink dot is the Localizer, the vertical pink dot is the Glideslope. In the picture, the Localizer has not become active and the Glideslope has become active and it's time to change the Alt and VERT SPEED (I told you I got caught unaware, I should have been at 2200ft and 170 IAS))



At 200ft, flip your A/T ARM to OFF; Click the ALT button to Off; click the NAV button to Off

Flare the aircraft on the threshold; push F1 to put throttles at Idle, then hold F2 for full reverse thrust

Once you are safely slowed, click F1 to disengage Reverse thrust, exit runway, Retract flaps, turn Auto Brake to Off

Set IAS to 12; flip A/T ARM to On;

Follow ATC instruction; turn on Progressive Taxi; Click IAS button; taxi to gate/parking

Click IAS button just prior to gate/parking; throttle down

I highly recommend taking a deep breath just prior to takeoff and get ready to hit the Pause key on the keyboard. You're going to feel overwhelmed in the beginning, you aren't comfortable with where all the buttons are and you're moving fast (you don't have a co-pilot to hit some of those buttons for you). It will be the same on approach and landing. The Pause key is your friend and remember, it's a simulator, have fun.

\*\*\*\*Rate of Descent Table (Most Airports use 3.0 degrees for the glideslope and towards the bottom of any Terminal Procedure Chart the GS will be listed. You'll notice that at 150 knots at 3.0 degrees we should be at 796 VERT SPEED (VSI) Using 800 means we have to "fiddle" with the VSI to stay on the glideslope. If you want to come in faster or slower, use the table to set your VSI. You can use this table for ANY aircraft. If you buy a US Terminal Procedures book, this table will be on the back flap)

### RATE OF DESCENT TABLE

A rate of descent table is provided for use in planning and executing precision descents under known or approximate ground speed conditions. It will be especially useful for approaches when the localizer only is used for course guidance. A best speed, power, altitude combination can be programmed which will result in a stable glide rate and altitude favorable for executing a landing if minimums exist upon breakout. Care should always be exercised so that minimum descent altitude and missed approach point are not exceeded.

ANGLE OF DESCENT (degrees and tenths)	FEET /NM	GROUND SPEED (knots)										
		30	45	60	75	90	105	120	135	150	165	180
2.0	210	105	160	210	265	320	370	425	475	530	585	635
2.5	265	130	200	265	330	395	465	530	595	665	730	795
2.7	287	143	215	287	358	430	501	573	645	716	788	860
2.8	297	149	223	297	371	446	520	594	669	743	817	891
2.9	308	154	231	308	385	462	539	616	693	769	846	923
3.0	318	159	239	318	398	478	557	637	716	796	876	955
3.1	329	165	247	329	411	494	576	658	740	823	905	987
3.2	340	170	255	340	425	510	594	679	764	849	934	1019
3.3	350	175	263	350	438	526	613	701	788	876	963	1051
3.4	361	180	271	361	451	541	632	722	812	902	993	1083
3.5	370	185	280	370	465	555	650	740	835	925	1020	1110
4.0	425	210	315	425	530	635	740	845	955	1060	1165	1270
4.5	475	240	355	475	595	715	835	955	1075	1190	1310	1430
5.0	530	265	395	530	660	795	925	1060	1190	1325	1455	1590
5.5	580	290	435	580	730	875	1020	1165	1310	1455	1600	1745
6.0	635	315	475	635	795	955	1110	1270	1430	1590	1745	1950
6.5	690	345	515	690	860	1030	1205	1375	1550	1720	1890	2065
7.0	740	370	555	740	925	1110	1295	1480	1665	1850	2035	2220
7.5	795	395	595	795	990	1190	1390	1585	1785	1985	2180	2380
8.0	845	425	635	845	1055	1270	1480	1690	1905	2115	2325	2540
8.5	900	450	675	900	1120	1345	1570	1795	2020	2245	2470	2695
9.0	950	475	715	950	1190	1425	1665	1900	2140	2375	2615	2855
9.5	1005	500	750	1005	1255	1505	1755	2005	2255	2510	2760	3010
10.0	1055	530	790	1055	1320	1585	1845	2110	2375	2640	2900	3165
10.5	1105	555	830	1105	1385	1660	1940	2215	2490	2770	3045	3320
11.0	1160	580	870	1160	1450	1740	2030	2320	2610	2900	3190	3480
11.5	1210	605	910	1210	1515	1820	2120	2425	2725	3030	3335	3635
12.0	1260	630	945	1260	1575	1890	2205	2520	2835	3150	3465	3780

**DESCENT TABLE** 99028

\*Flight Director (Pink cross hairs on artificial horizon)

\*\*Auto Throttle

\*\*\*Auto Pilot

<http://www.navfltsm.addr.com/index.htm> for good all around info on Navigation for sim flying!