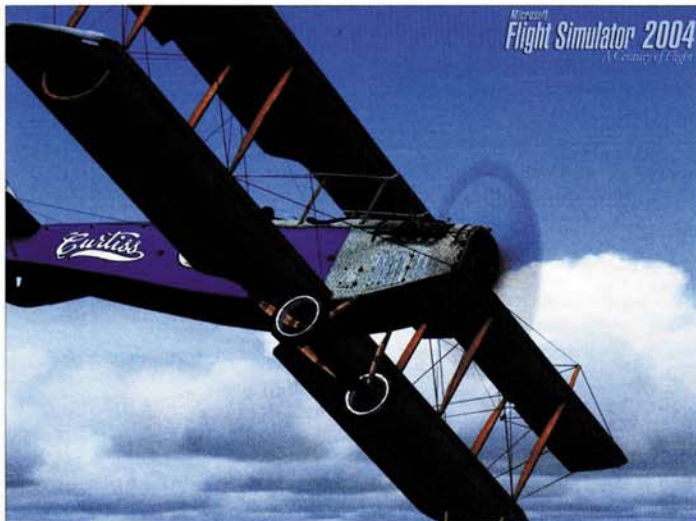


# Microsoft Flight Simulator 2004 — A Century of Flight

Which flying is more fun? Do you have a yen to go barnstorming in a Curtiss Jenny or fly a precision approach in a 747-400? What Microsoft has cleverly realised is that although modern flight simulation is a rich vein for the armchair pilot (whether a professional pilot in real life or not) sometimes it is too easy. GPS, air traffic control, weather reports and an autopilot are all now taken for granted and that means that something is lost in recreating the adventure of flight.

However, in this latest incarnation of the venerable and highly popular Flight Simulator series, the company has included some of the history-making aircraft of the past century. Want to try beating the Wright brothers' first short hop at Kitty Hawk? — it's here. Want to pilot the Spirit of St Louis over to Le Bourget? Or fly a Curtiss Jenny on a 1920s mail run? These 'seat of the pants' flying experiences are invariably more challenging and exciting than their modern counterparts and, in truth, are highly educational. Microsoft has even commissioned special essays to go with each of the new nine historical aircraft which places these machines in their context and assesses their importance.

However, with the last 'historical' type represented by the Piper Cub, there are some curious omissions. Where, for example, are the record-breaking X-1 and X-15? (though this would probably need some sort of subroutine to allow air launch from an A1 B-29/B-52 and stable supersonic flight — something that the FS series has yet to address). A re-entry profile for the space shuttle would also provide a challenge and would qualify for an historic aircraft, likewise the Harrier and Concorde (which made it into FS2000). Though the FS series has also been a civil simulation, a few military types



Microsoft's version of the Curtiss Jenny.

e.g. a Spitfire, MiG-21 or F-117 would also show how aviation has progressed. However, helicopter fans gain a new type — the Robinson R22 — to play with alongside the standard Bell 206.

As well as the increased selection of aircraft FS2004 also comes with other upgrades to place it on a different level from FS2002. Weather effects are greatly enhanced with clouds now fully 3D to fly around and through — adding to the feeling of immersion. Connect to the Internet and you can even take a 'snapshot' of current weather at your location or have real-world weather updated every 15mins courtesy of the worldwide database. Dynamic weather now means clouds form, move and disperse as in real life.

The 3D virtual cockpits now have clickable controls so trim wheels and overhead panels can be manipulated by mouse. In a tie-up with Garmin, two new GPS systems have been introduced that make navigation child's-play and includes terrain maps (although, of course, purists will want to deselect that option on the de Havilland DH88 Comet Racer 'Grosvenor

House' flight to Australia). Interactive Air Traffic Control has also been smartened up, with ATC now able to let you file IFR plans *en route* and even refuse you permission to take off if you want to fly VFR in IFR conditions!

Only the hypothetical airlines of the default AI computer-controlled aircraft jar slightly and make you realise you are in a simulated world (a possible breakthrough here would be in the use of real-world airline liveries and schedules — available in add-on packs — though legal issues surrounding the use of real airline liveries means this is not as simple as it sounds).

Microsoft has also included a 'learning centre' in the sim which gives advice and tips on everything from flying helicopters to operating GPS to landing taildraggers and is useful and informative for novices and veterans alike.

The default Learjet 45 has been given a makeover in the graphics department and given a virtual cockpit; ground graphics have also received an overhaul, with main power lines included for help in visual navigation and more detail added in cities. Different

buildings now mean it is simple to tell where you are in the world by looking at the architecture and style of the buildings — a useful clue should you get really lost in the Lockheed Vega and end up over the wrong continent. Major airports now have taxiway signs added so you can follow the control towers' directions to the right gate.

A key question here is — is it worth upgrading from the already impressive FS2002? If you have a lot of add-ons already installed on your hard drive for FS2002, including clouds, scenery and historic aircraft, you may want to give FS2004 a miss and wait for the next incarnation in 2005. However, if you are tempted by classic aircraft, stunning dynamic weather, new GPS and better ATC as well as revamped terrain and city graphics — then this is the standard in civilian flight sims, if not having the ultra-realistic flight models of X-Plane or IL-2.

In short, this latest simulation adds to the already impressive legacy of Microsoft's flight simulator line. It's highly immersive, it's extremely good fun and surprisingly educational for both novice and professional alike. The new weather graphics are first-rate and the effect of flying in a cumulus-filled sunset sky in an antique biplane produces a warm fuzzy feeling in anyone with a hint of aviation in their blood. ♦

**Tim Robinson**

## System Requirements

Windows 2000/XP  
—128MB RAM  
98/Me — 64MB RAM  
450Mhz Processor  
1.8Gb Disk Space  
16Mb Graphics Card  
Joystick, Mouse, Speakers

Microsoft estimated retail price £49.99

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