

X-Plane Operation Manual

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CHAPTER 1: ABOUT X-PLANE

X-Plane is the world's most comprehensive and powerful flight simulator for personal computers.

X-Plane offers the most realistic flight model available for personal computers. X-Plane is not a game, but an engineering tool that can be used to predict the flying qualities of fixed and rotary wing aircraft. This incredible accuracy makes it a great tool for predicting aircraft performance and handling.

Since X-Plane predicts the performance and handling qualities of almost any aircraft, it is a great tool for pilots to keep up their currency in a simulator that flies like the real plane, for engineers to predict how some new airplane will fly, and for aviation enthusiasts to explore the world of aircraft flight dynamics.

Welcome to the world of props, jets, single- and multi-engine airplanes, as well as gliders, helicopters and VTOLs. X-Plane contains subsonic and supersonic flight dynamics, allowing you to predict the flight characteristics of the slowest or fastest aircraft. X-Plane also includes about 25 aircraft on its master disk, spanning the aviation industry (and history), sporting aircraft from the Bell 206 Jet-Ranger and Cessna 172 to the Space Shuttle and B-2 Bomber. You can also choose from more than 1,400 additional aircraft models that can be downloaded from the internet (www.X-Plane.org, www.X-Plane.com, and Google will get you started), nearly all of which are free, as well as design your own airplanes and test-fly them!

The full X-Plane scenery package covers the Earth in stunning resolution from 60 degrees north to 54 degrees south latitude. Scenery is also available for Mars at www.X-Plane.com, thanks to the Mars Orbiting Laser Altimeter, which mapped that planet's elevation. On Earth, you can land at any of over 33,000 airports, as well as test your mettle on aircraft carriers and helipads on building tops, or oil rigs, or frigates that pitch and roll in the waves. You can also realistically model the flight of remote controlled model aircraft, air launch in an X-15 or Space Ship One from the mother ship, fly reentries into Earth's atmosphere in the Space Shuttle, fly with your friends over the internet or a LAN, drop water on forest fires, shoot approaches to aircraft carriers at night in stormy weather and rough water conditions in a damaged F-4, or do many, many other incredible things.

Weather is variable from clear skies and high visibility to thunderstorms with controllable wind, wind shear, turbulence, and micro bursts. Rain, snow, and clouds are available for an instrument flying challenge, and thermals are available for the gliders. Actual weather conditions can be downloaded from the internet, allowing you to fly in weather that currently exists at the location of your flight!

X-Plane also has detailed failure modeling, with multitudes of systems that can be failed manually when an instructor wants to, or randomly when you least expect it! You can fail instruments, engines, flight controls or control cables, antennae, landing gear, or any of dozens of other systems at any moment. You can also have a friend or flight instructor (locally or via the internet, working from an Instructor's Operating Station) fail components on your aircraft without your knowledge. The instructor can alter the time of day, weather conditions, and failure status of hundreds of aircraft systems and components as well as relocate the aircraft to any location he or she chooses.