

# **Mastering Microsoft Flight Simulator 2024**

*Learn, Fly, and Land Like a Pro*

Riley Mac

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# CHAPTER 1 — Getting Started

Every journey begins with a single step — and in Microsoft Flight Simulator 2024, that step is pressing the big green button labelled Ready to Fly. But before you get there, there is a handful of one-time setup tasks that will make every subsequent flight smoother, more immersive, and more enjoyable. This chapter walks you through all of them, from installation to your very first moment on a runway.

I remember my own first launch of MSFS vividly. I rushed past every settings screen, slammed into the air without reading a thing, and immediately crashed into a mountain outside Denver. Do not be me. Take twenty minutes with this chapter and you will start flying with confidence rather than confusion.



Figure 1.1 — Main menu navigation map. From the central Main Menu you can reach Free Flight, Career Mode, Missions, Multiplayer, the Marketplace, and Settings. New pilots should begin in Free Flight to practice before progressing into Career Mode.

## 1.1 Installing Microsoft Flight Simulator 2024

MSFS 2024 is available through two storefronts: the Microsoft Store (included with Xbox Game Pass) and Steam. The installation process is similar for both, but there are a few platform-specific differences worth knowing.

### Installing via Microsoft Store / Xbox Game Pass

<b>1</b>	<b>Open the Microsoft Store or Xbox app</b> Search for "Microsoft Flight Simulator 2024" or navigate directly to your Game Pass library if you are a subscriber.
<b>2</b>	<b>Click Install and choose your drive</b> The base installer is under 1 GB. However, the sim will stream and cache additional data during and after your first flight. You will want at least 60 GB of free space on an SSD.
<b>3</b>	<b>Sign in with your Xbox / Microsoft account</b> This account links your career progress, Marketplace purchases, and online multiplayer identity across PC and Xbox.
<b>4</b>	<b>Wait for the initial download</b> Once the base files are installed, launch the sim. It will immediately begin downloading a core content package in the background — roughly 2–8 GB depending on your edition.
<b>5</b>	<b>Let the Content Manager finish</b> On first launch you will see the Content Manager downloading required packages. Do not skip this. It includes critical terrain data, airports, and aircraft systems.

### Installing via Steam

<b>1</b>	<b>Open Steam and search for Microsoft Flight Simulator 2024</b> You can also navigate directly to the store page. Purchase the edition that suits you: Standard, Deluxe, or Premium Deluxe.
<b>2</b>	<b>Click Install and select install directory</b> Choose an SSD if available. Installing on a traditional hard drive is technically possible but results in significantly longer loading times.
<b>3</b>	<b>Let Steam download the base files</b> Steam will show the download in your Library. The sim will continue downloading additional content packages after first launch via its built-in Content Manager.

- 4 Launch from Steam — sign in with your Xbox account**  
MSFS 2024 requires an Xbox / Microsoft account even on Steam. This is how your game data syncs across platforms.
- 5 Allow the Content Manager to complete on first launch**  
Identical to the Microsoft Store process — do not skip this step.

◆ **Which Edition Should You Buy?**

Standard Edition includes 30 aircraft and is the right choice for most new players. Deluxe Edition adds 5 more aircraft and 5 more hand-crafted airports. Premium Deluxe adds a further 10 aircraft and 5 airports for a total of 45 aircraft. If you are on Xbox Game Pass, Standard is included at no extra cost. You can always upgrade later through the Marketplace.

## 1.2 First Launch and Initial Settings

The first time you launch MSFS 2024, you will be guided through an initial configuration wizard. Pay attention here — the choices you make affect both performance and realism. You can always change them later, but getting them right from the start saves frustration.

### Recommended First-Launch Graphics Settings

Navigate to Options → General Options → Graphics. Here is what to set based on your hardware:

Setting	Budget PC (GTX 970)	Mid-Range (RTX 2080)	High-End (RTX 4080)
Render Scaling	70%	85%	100%
Texture Resolution	Medium	High	Ultra
Terrain Level of Detail	Low	High	Ultra
Volumetric Clouds	Low	High	Ultra
Anti-Aliasing	FSR	DLSS	DLSS Quality
Shadow Quality	Low	Medium	High
Ambient Occlusion	Off	Medium	High
Water Waves	Low	High	Ultra
Target Frame Rate	30 fps	45 fps	60 fps

★ **The Single Best Performance Setting**

Render Scaling has by far the biggest impact on both performance and visual quality. Dropping from 100% to 85% typically gains 15–25 extra frames per second with minimal visual difference at 1080p. Try this first before lowering any other setting. On DLSS-capable NVIDIA cards, set Anti-Aliasing to DLSS Quality — it delivers near-native image quality at significantly lower GPU cost.

## Critical Non-Graphics Settings

**Data Connection:** Go to General Options → Data. Ensure "Online Functionality" is ON and "Photogrammetry" is ON. Without these, the world will look flat and generic. Also enable "Live Weather" and "Live Traffic" for maximum realism.

**Rolling Cache:** Set your Rolling Cache size to at least 32 GB (go to General Options → Data → Rolling Cache). This stores recently visited terrain locally so the sim does not have to re-download it on return flights.

**Assistance:** Go to Options → Assistance. For beginners, set the Preset to EASY or MEDIUM. This enables helpers like the AI Co-Pilot, tooltip labels in the cockpit, and landing assistance. Reduce these as your skills improve.

**Units:** Set your preferred units under General Options → Units of Measurement. Most real-world aviation uses feet for altitude, knots for speed, and nautical miles for distance. Match these for the most authentic experience.

## 1.3 Understanding the Main Menu

The MSFS 2024 main menu is your hub for everything. Unlike previous versions, it has been redesigned with a clear hierarchy and fast access to all major features (refer back to Figure 1.1). Here is what each option does:

- **Free Flight:** The classic MSFS experience — choose any airport in the world, any aircraft, any weather, and just fly. No objectives, no scoring. Perfect for exploring, practicing, and sightseeing. Most of the tutorials in Chapters 2–5 take place here.
- **Career Mode:** The major new feature in MSFS 2024. Start as a Student Pilot and work your way through real aviation certifications. Chapters 6–8 cover Career Mode missions in detail.
- **Missions:** Curated standalone challenges — bush trips, landing challenges, emergency scenarios, and more. Great for targeted skill-building.

- **Multiplayer:** Fly with others from around the world. See their aircraft in real time, join group flights, and connect with online ATC networks like VATSIM. Covered in Chapter 10.
- **Marketplace:** The in-sim store for additional aircraft, airports, scenery, and utilities. Both free and paid content. Covered in Chapter 9.
- **Settings / Options:** Everything from graphics and audio to controls and data settings. Access this from the gear icon in the top-right corner of the main menu.

## 1.4 Setting Up Your Controller, Keyboard or Joystick

MSFS 2024 supports a remarkable range of input devices — from a simple keyboard and mouse to full yoke-and-rudder setups worth thousands of pounds. Whatever you have, the sim will work with it. The key is configuring it correctly before your first flight.



Figure 1.2 — Default Xbox controller mapping. The triggers control throttle, the bumpers control flaps, the left stick handles ailerons and elevator, and the right stick handles rudder and camera look. The A and B buttons toggle autopilot and landing gear.

## Xbox / Gamepad Controller (Recommended for Beginners)

The Xbox controller is the most accessible starting point and MSFS 2024 ships with an excellent default profile for it. Here is the default mapping and what each control does in the air:

Input	Default Function	What It Does
<b>Left Trigger</b>	Throttle Decrease	Reduces engine power — slows the aircraft
<b>Right Trigger</b>	Throttle Increase	Adds engine power — speeds up and climbs
<b>Left Stick (X)</b>	Aileron	Banks left or right (rolls the wings)
<b>Left Stick (Y)</b>	Elevator	Pitches nose up or down
<b>Right Stick (X)</b>	Rudder	Yaws left or right (turns on ground)
<b>Right Bumper</b>	Flaps Up	Retracts flaps (used at cruise speed)
<b>Left Bumper</b>	Flaps Down	Extends flaps (used for takeoff & landing)
<b>A Button</b>	Autopilot Toggle	Turns autopilot on or off
<b>B Button</b>	Landing Gear	Raises or lowers the undercarriage
<b>Y Button</b>	External View	Switches to outside camera view
<b>Start</b>	Pause	Pauses the simulation

## Keyboard and Mouse

The keyboard provides access to every function in the sim. The most important keyboard shortcuts for beginners are:

Key	Function
<b>F1</b>	Cut throttle to idle
<b>F2</b>	Decrease throttle gradually
<b>F3</b>	Increase throttle gradually
<b>F4</b>	Full throttle
<b>Numpad 2/8</b>	Elevator — pitch down/up
<b>Numpad 4/6</b>	Ailerons — bank left/right
<b>Numpad 0/Enter</b>	Rudder — left/right
<b>G</b>	Landing gear up/down

Key	Function
F5–F8	Flap settings (up to full)
P	Pause
V	Cycle camera views
H	Show/hide flight HUD
Escape	Return to main menu

## Joystick, Yoke or HOTAS

If you own a dedicated flight controller — a Logitech Extreme 3D Pro, Thrustmaster T.16000M, Honeycomb Bravo, or similar — MSFS 2024 will usually detect and auto-configure it. However, always verify the binding after connection:

- 1 Go to Options → Controls**  
 The sim will show all connected devices in the device dropdown at the top.
- 2 Select your device from the dropdown**  
 If the sim detected a profile for your hardware, it will load it automatically. Check that it says "Preset Found" in the profile bar.
- 3 Verify the critical axes**  
 Move your joystick and watch the on-screen aircraft silhouette move. Confirm that left/right maps to banking and forward/back maps to pitch.
- 4 Set dead zones if needed**  
 If the aircraft drifts when you release the stick, add a small dead zone (5–10%) under the Sensitivity sub-menu.
- 5 Check for missing bindings**  
 Throttle, rudder, and brakes are sometimes unbound on generic controllers. Assign these manually by clicking an empty binding row and moving the control you want to use.
- 6 Save your profile**  
 Name and save your custom profile so it loads automatically whenever the controller is connected.

### ★ No Joystick? No Problem.

Thousands of MSFS pilots fly exclusively with keyboard and mouse or an Xbox controller and have an excellent experience. The sim's Assistance settings (Easy mode) can enable an AI Co-Pilot to help manage complex controls while you focus on learning. You can invest in a

dedicated flight controller later — it genuinely enhances immersion — but it is absolutely not required to start.

## 1.5 Understanding Your Aircraft Controls

Before you select an aircraft and fly, it helps to understand what physically moves when you push your stick or controller. Every fixed-wing aircraft is controlled by the same three primary control surfaces, plus engine power. Figure 1.3 shows how these work on the Cessna 172.



Figure 1.3 — Engine and flight controls. On the left, the throttle quadrant: throttle (power), mixture (fuel/air ratio), and propeller pitch. On the right, the three control surfaces: ailerons (roll), elevator (pitch), and rudder (yaw), plus the propeller providing thrust.