MICROSOFT FLIGHT SIMULATOR 2024 TRAINING GUIDE

A Practical Manual to Realistic Flying, Procedures, and Aircraft Control for PS5 Users, PC Users, and Other Users

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INTRODUCTION

Welcome to **Microsoft Flight Simulator 2024**, the most advanced and immersive flight simulator to date. This guide covers everything you need to master flying on **PC, Xbox, or PlayStation**, from basic flight and landing techniques to advanced aircraft systems and mission-based careers.

Experience a **digital twin of the entire planet**, with realistic weather, day-night cycles, and thousands of airports. Fly a wide range of aircraft — from light planes to airliners and helicopters — while exploring career missions, multiplayer events, and community content.

Whether you are a beginner or a seasoned virtual pilot, this guide will help you **take off, navigate, and land confidently** in a fully-realized world of flight simulation.

HISTORY OF THE FLIGHT SIMULATOR FRANCHISE

The **Microsoft Flight Simulator** franchise began as a passion project by **Bruce Artwick** in the late 1970s and grew into one of the longest-running and most influential simulation series in gaming history. What started as a simple wireframe flight model has evolved into a **near-photorealistic, planet-wide simulation**, powered by satellite imagery, cloud computing, and artificial intelligence.

Early Foundations: subLOGIC and Microsoft (1970s–1980s)

In the mid-1970s, Bruce Artwick developed a flight simulation program as part of his graduate studies. Recognizing its potential, he founded **subLOGIC Corporation** in 1977 and began distributing the software by mail order.

In **1979**, subLOGIC released **FS1 Flight Simulator** for the **Apple II**, followed by versions for systems such as the **TRS-80**. These early releases laid the groundwork for personal computer flight simulation.

Microsoft entered the picture in **1982**, licensing the software and releasing **Microsoft Flight Simulator 1.0** for the **IBM PC**. This version introduced major improvements, including **color graphics, variable weather, and time-of-day settings**, bringing the simulator to a wider audience.

Between **1983 and 1986**, subLOGIC continued developing **Flight Simulator II** across multiple platforms, adding features such as **multiple 3D viewpoints and expanded airport coverage**.

The Microsoft Era: Innovation and Expansion (Late 1980s–2000s)

In **1988**, Bruce Artwick formed the **Bruce Artwick Organization (BAO)** to work directly with Microsoft on future releases, beginning with **Microsoft Flight Simulator 3.0**.

The 1990s marked a period of rapid technical progress:

- **Flight Simulator 5.0 (1993)** introduced textured terrain, significantly improving realism.
- **Flight Simulator 5.1 (1995)** added satellite imagery and became the first version distributed on **CD-ROM**.
- Later in 1995, Microsoft acquired BAO, bringing development fully in-house.

With **Flight Simulator 98**, the franchise embraced **DirectX**, enabling hardware-accelerated 3D graphics and introducing **helicopter flight**.

Throughout the 2000s, releases expanded realism and scope:

- **Flight Simulator 2000** introduced downloadable real-world weather
- **Flight Simulator 2002** added AI aircraft and air traffic control
- **Flight Simulator 2004: A Century of Flight** celebrated aviation history with historical aircraft
- **Flight Simulator X (2006)** delivered major graphical upgrades, multiplayer features, and DirectX 10 support

Hiatus and Modern Revival (2009–Present)

In **2009**, Microsoft closed **Aces Game Studio**, casting uncertainty over the franchise's future. During this period, third parties kept the ecosystem alive:

- **Lockheed Martin** adapted the codebase for professional training as **Prepar3D**
- **Dovetail Games** re-released **Flight Simulator X: Steam Edition**, extending its lifespan

Microsoft attempted a reboot with **Microsoft Flight (2012)**, but its simplified design and lack of add-on support led to an early shutdown.

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The franchise returned in spectacular fashion with **Microsoft Flight Simulator (2020)**, announced at E3 2019 and released on PC in 2020 and Xbox in 2021. Using **Bing Maps satellite imagery, Azure cloud computing, and AI**, it recreated the entire Earth with unprecedented realism.

Microsoft Flight Simulator 2024

Released in **November 2024**, **Microsoft Flight Simulator 2024** builds upon the 2020 foundation by introducing **structured career modes**, expanded activities, and deeper simulation systems. It represents the next evolution of a franchise that has continually redefined what flight simulation can be.

MICROSOFT FLIGHT SIMULATOR 2024: INSTALLATION & SETUP

Microsoft Flight Simulator 2024 is installed in two stages: an initial base download through **Steam, the Microsoft Store, or Xbox**, followed by an **in-game download of core data** and setup of graphics and controls. A **stable internet connection** is essential, as the simulator streams global scenery, weather, and live data in real time.

The simulator is available on **PC**, **Xbox Series X|S**, and **PlayStation 5**.

System Requirements (PC)

Ensure your system meets the following specifications for optimal performance:

Component	Minimum Requirements	Recommended Requirements
CPU	AMD Ryzen 5 2600X / Intel Core i7-6800K	AMD Ryzen 7 2700X / Intel Core i7-10700K
Graphics	AMD Radeon RX 5700 / NVIDIA GTX 970	AMD Radeon RX 5700 XT / NVIDIA RTX 2080
RAM	16 GB	32 GB
Storage	50 GB (base install)	50 GB+ (add-ons & cache recommended)
OS	Windows 10 (latest update)	Windows 10 (latest update)
Internet	10 Mbps	50 Mbps

Installation Process (PC)

The installation consists of two main steps:

1. Install the Launcher

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- **Microsoft Store / Xbox App:** Sign in with your Microsoft account and install the base game from your library or via a redeemed code.
- **Steam:** Open Steam, go to your **Library**, locate *Microsoft Flight Simulator 2024*, and click **Install** to download the launcher.

2. Launch and Download Game Content

- Start the game and sign in with your **Microsoft account or Gamertag**.
- The simulator will prompt you to download the main content packages.
- MSFS 2024 uses a **thin-client architecture**, keeping the initial download around **50 GB**, with most world data streamed from the cloud.
- Optional Deluxe or Premium content can be downloaded immediately or installed later.

Initial Setup & Configuration

Once installation is complete, the simulator will guide you through first-time setup:

Startup Configuration

- **Graphics Settings:** Automatically detected (e.g., Medium or High-End). These can be fine-tuned later under **Options > Graphics**.
- **Language & Subtitles:** Select your preferred language and subtitle settings.
- **Pilot Identity:** Customize your in-game avatar.

Controls & Hardware

- The simulator automatically detects connected devices such as **yokes, joysticks, throttles, and gamepads**, assigning default profiles.
- If controls feel overly sensitive, reduce input sensitivity (recommended **–30% to –50%**) under **Controls > Hardware**.
- Confirm essential controls—**pitch trim, flaps, rudder, and brakes**—are mapped to accessible inputs.

Assistance Settings

- Go to **Options > Assistance** to adjust realism.
- Beginners should start with **Default or All Assists**, with crash damage disabled.
- Assists can be gradually reduced as skill and confidence improve.

BEST GENERAL SETTINGS FOR SMOOTH FLIGHT PERFORMANCE

A smooth and enjoyable experience in **Microsoft Flight Simulator 2024** depends heavily on your **General Settings**, especially graphics, flight modeling, and interface options. While some choices—like camera motion and audio—are purely personal, the settings below provide consistent performance and visual clarity for most players, regardless of hardware.

Graphics Settings (Recommended)

These settings balance visual quality with stable performance.

Setting	Recommended Value	Description
Display Mode	Full Screen	Ensures optimal performance and stability
HDR10	On (if supported)	Improves brightness and contrast
Full Screen Resolution	Native / Highest	Match your monitor's resolution
Anti-Aliasing	AMD FSR 2 (Quality) / DLSS (RTX)	Smooths jagged edges
Render Scaling	100	Maintains native internal resolution
FidelityFX Sharpening	100	Improves clarity with minimal performance cost
V-Sync	On	Prevents screen tearing
NVIDIA Reflex Low Latency	On + Boost	Reduces input lag (NVIDIA GPUs)
Frame Rate Limit	100%	Caps FPS to maintain consistency
Dynamic Settings	Off	Prevents automatic quality shifts
Global Rendering Quality	Custom	Enables manual fine-tuning

Global Rendering Quality (Custom Preset)

These options are only adjustable when **Global Rendering Quality** is set to *Custom*.

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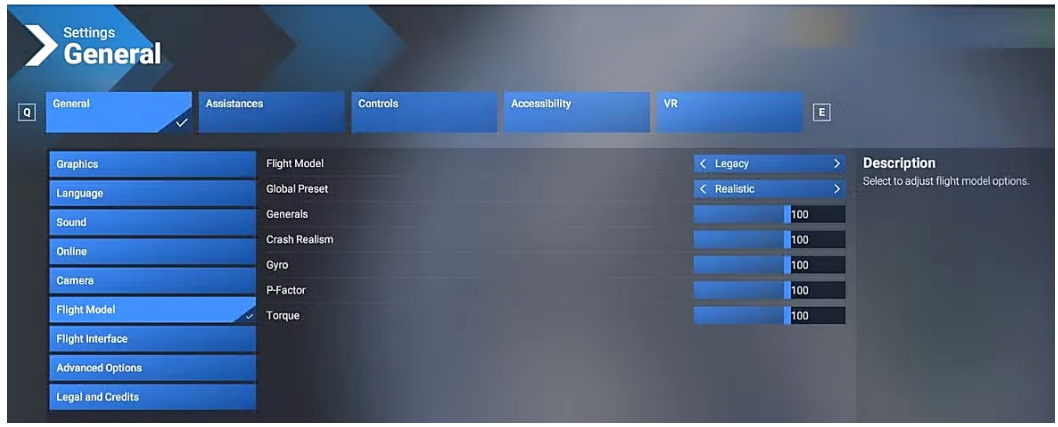
Setting	Value	FPS Impact
Terrain Level of Detail	160	High
Objects Level of Detail	80	Medium
Volumetric Clouds	Ultra	High
Texture Resolution	High	High
Buildings	High	Medium
Trees	Medium	High
Grass	High	Medium
Shadow Maps	1536	Medium
Ambient Occlusion	High	Low
Motion Blur	Off	Low
Ray-Traced Shadows	Off	High
Glass Cockpit Refresh Rate	Medium	Medium
Traffic (Road/Air/Sea)	Low–Off	Medium–High
Characters Quality	Low	Low

These selections prioritize smoothness during takeoff, landing, and low-altitude flying—where performance matters most.

Flight Model Settings



For realistic yet controllable aircraft behavior:

Setting	Value	Purpose
Flight Model	Modern	Enables advanced physics and add-ons
Global Preset	Realistic	Balanced realism
General Flight Dynamics	80	Controls inertia and drag
Crash Realism	65	Realistic without punishing errors
Gyro Effect	100	Improves controller-based tilt control

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P-Factor	100	Simulates propeller effects
Torque	100	Adds realistic engine behavior

Flight Interface Settings (Recommended)

These settings balance clarity and immersion by keeping essential information visible while reducing unnecessary on-screen clutter.

Setting	Recommended Value	Purpose
Aerodynamic Visualization	Off	Disables airflow overlays to keep the screen clean
White Dot Cursor (Freelook)	Off	Removes the cursor while freelooking
Landmark Markers	On	Highlights major landmarks for navigation
City Markers	On	Displays nearby cities
Airport Markers	On	Shows nearby airports
Preflight Pins	On	Highlights inspection points during walkarounds
POI Labels	Off	Prevents excessive on-screen labels
Traffic Nameplates	Off	Removes aircraft name tags
HUD in Cockpit View	Yes	Displays key flight data inside the cockpit
HUD in External View	Off	Keeps external views distraction-free
Cockpit Interaction System	Lock	Prevents accidental cockpit inputs
Instrument Name Tooltips	Delayed	Shows instrument names after a brief hover
Instrument Instruction Tooltips	Delayed	Displays descriptions without clutter

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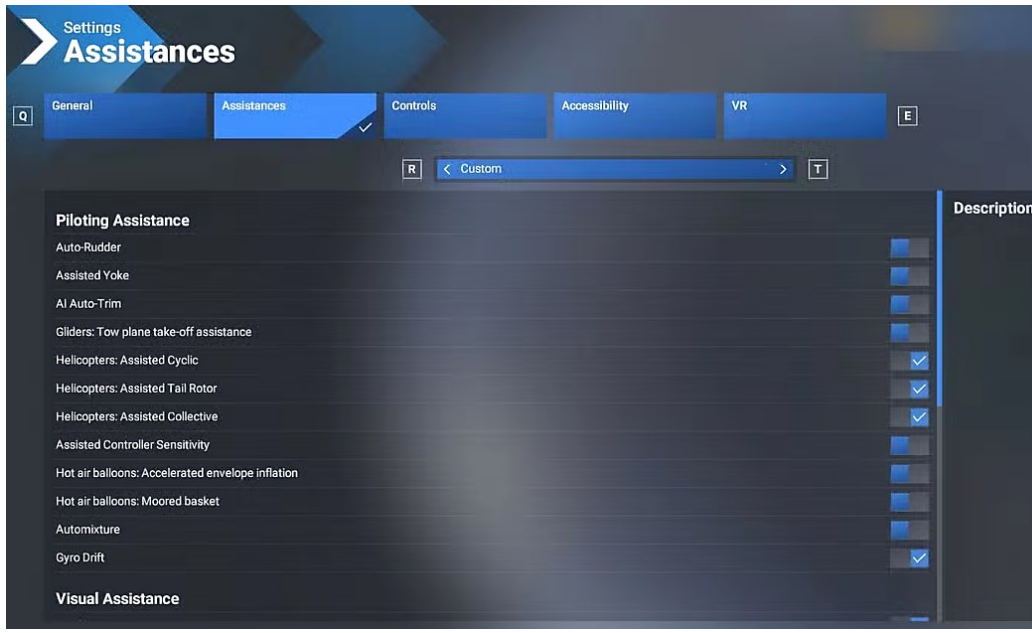
Best Assistance Settings for a Balanced Experience



Assistance settings control how much the simulator helps you fly. These recommendations provide stability without removing learning opportunities.

Piloting Assistance

Setting	Recommended Value	Purpose
Auto-Rudder	On	Helps maintain coordination, especially without pedals
Assisted Yoke	Off	Encourages manual control
AI Auto-Trim	Off	Promotes proper trim management
Glider Tow Assistance	On	Stabilizes glider takeoffs
Helicopter Assisted Cyclic	Off	Preserves realistic rotorcraft handling
Helicopter Assisted Tail Rotor	Off	Manual yaw control
Helicopter Assisted Collective	On	Eases power control
Assisted Controller Sensitivity	On	Smooths controller inputs

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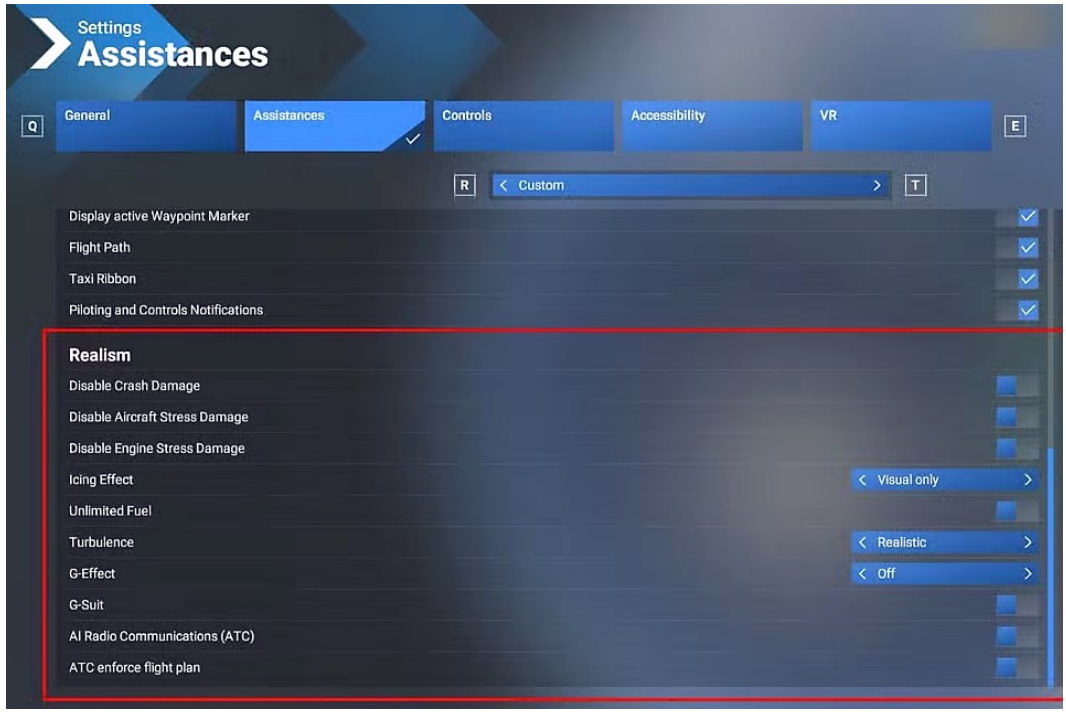
Auto-Mixture	On	Automatically manages fuel mixture
Gyro Drift	On	Simulates realistic instrument behavior
Hot Air Balloon Inflation	Off	Requires manual envelope control
Hot Air Balloon Moored Basket	Off	Enables realistic ground handling

Visual Assistance

Setting	Recommended Value	Purpose
Active Waypoint Marker	On	Displays the next waypoint
Flight Path Gates	Off	Disables arcade-style guidance
Taxi Ribbon	Off	Encourages real-world taxi awareness
Control Notifications	Off	Removes constant pop-up reminders

Realism Settings



These options add authenticity while keeping gameplay forgiving enough for learning.

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Setting	Recommended Value	Purpose
Crash Damage	Off	Prevents flight-ending crashes
Aircraft Stress Damage	Off	Avoids damage from high G-forces
Engine Stress Damage	Off	Protects engines during learning
Icing Effects	Visuals Only	Shows icing without performance penalties
Unlimited Fuel	Off	Encourages fuel planning
Turbulence	Realistic	Adds immersion
G-Effects	Off	Prevents blackout
G-Suit	On	Simulates protection at high G
AI ATC Communications	On	Handles radio calls automatically
ATC Enforce Flight Plan	Off	Allows flexibility in departures and arrivals

KEYBOARD SHORTCUTS

Cockpit Camera and Instrument View Controls

These keyboard commands control cockpit views, instrument focus, and pilot positioning within the aircraft.

Instrument View Navigation

- **Previous Instrument View:** SHIFT + F
- **Next Instrument View:** SHIFT + H
- **Toggle Instrument Views:**
  - View 1: SHIFT + NUM 1
  - View 2: SHIFT + NUM 2
  - View 3: SHIFT + NUM 3
  - View 4: SHIFT + NUM 4
  - View 5: SHIFT + NUM 5
  - View 6: SHIFT + NUM 6
  - View 7: SHIFT + NUM 7
  - View 8: SHIFT + NUM 8
  - View 9: SHIFT + NUM 9
  - View 10: SHIFT + NUM 0

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Cockpit Look Directions

- **Look Left:** SHIFT + J
- **Look Right:** SHIFT + L
- **Look Up:** SHIFT + I
- **Look Down:** SHIFT + K

Zoom and View Height

- **Zoom In:** SHIFT + O
- **Zoom Out:** SHIFT + U
- **Increase View Height:** SHIFT + E
- **Decrease View Height:** SHIFT + Q

Cockpit Camera Movement

- **Move Forward:** SHIFT + W
- **Move Backward:** SHIFT + S
- **Move Left:** SHIFT + A
- **Move Right:** SHIFT + D

Pilot Position Selection

- **Previous Pilot Position:** SHIFT + G
- **Next Pilot Position:** SHIFT + T

Quick Views and Reset

- **QuickView Left:** SHIFT + F
- **QuickView Right:** SHIFT + H
- **Reset Cockpit View:** SHIFT + SPACE

Drone Camera Controls

These keyboard shortcuts allow precise movement, rotation, focus, and tracking control while using the Drone Camera.

Drone Translation (Movement)

- **Move Forward:** W
- **Move Backward:** S
- **Move Up:** E
- **Move Down:** Q
- **Move Left:** A

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- **Move Right:** D

Drone Orientation (Rotation)

- **Pitch Up:** I
- **Pitch Down:** K
- **Yaw Left:** J
- **Yaw Right:** L
- **Roll Left:** U
- **Roll Right:** O

Zoom and Focus Controls

- **Increase Zoom:** SHIFT + O
- **Decrease Zoom:** SHIFT + U
- **Increase Depth of Field:** Y
- **Decrease Depth of Field:** H
- **Toggle Depth of Field:** 3
- **Toggle Foreground Blur:** 4

Exposure and Auto Controls

- **Increase Exposure:** T
- **Decrease Exposure:** G
- **Toggle Auto Exposure:** 2
- **Toggle Auto Focus:** 1

Speed Adjustments

- **Increase Rotation Speed:** SHIFT + R
- **Decrease Rotation Speed:** SHIFT + F
- **Increase Translation Speed:** SHIFT + T
- **Decrease Translation Speed:** SHIFT + G

Target Lock and Tracking

- **Lock to Next Target:** M
- **Lock to Previous Target:** N
- **Attach to Next Target:** B
- **Attach to Previous Target:** V
- **Toggle Follow Mode:** 5
- **Toggle Lock Mode:** 6

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Presets and Reset Options

- **Top-Down View:** F
- **Reset Drone Roll:** SHIFT + SPACE
- **Reset Target Offset:** R

External Camera Quick Controls

These shortcuts allow fast adjustments to the external camera view for better situational awareness and cinematic angles.

- **QuickView Right:** SHIFT + F (Instantly switches the external camera to the right-side view)
- **QuickView Top:** SHIFT + G (Displays a top-down external view of the aircraft)
- **Zoom In:** SHIFT + O (Zooms closer to the aircraft in External View)
- **Zoom Out:** SHIFT + U (Pulls the camera back for a wider external view)

Photo Mode Camera Controls

Photo Mode allows precise camera positioning and fine visual adjustments for capturing high-quality screenshots and cinematic shots.

Camera Movement

- **Move Forward:** W
- **Move Backward:** S
- **Move Left:** A
- **Move Right:** D
- **Move Up:** E
- **Move Down:** Q

Zoom Controls

- **Zoom In:** SHIFT + O
- **Zoom Out:** SHIFT + U

Camera Orientation

- **Pan Left:** J
- **Pan Right:** L
- **Pitch Up:** I
- **Pitch Down:** K
- **Roll Left:** U
- **Roll Right:** O

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- **Reset Horizon:** SHIFT + SPACE

Photo Mode Actions

- **Toggle Photo Mode:** SHIFT + V
- **Take Picture:** SPACE

Exposure & Focus Controls

- **Toggle Auto Focus:** 1
- **Toggle Auto Exposure:** 2
- **Increase Exposure:** T
- **Decrease Exposure:** G
- **Increase Focus:** R
- **Decrease Focus:** F

Autopilot Controls & Keyboard Shortcuts

These controls manage aircraft automation, including speed, altitude, navigation, and engine thrust modes. They are essential for efficient cruise, climb, descent, and approach operations.

Autopilot Master Controls

- **Toggle Autopilot Master:** CTRL + 1
- **Disengage Autopilot:** CTRL + 2

Throttle & Engine Automation

- **Arm Auto Throttle:** CTRL + [
- **Disconnect Autothrottle:** CTRL + '
- **Auto Throttle to Go-Around (GA):** CTRL +]
- **Autopilot N1 Hold:** CTRL + F6
- **Set Autopilot N1 Reference:** CTRL + 8
- **Increase N1 Reference:** CTRL + HOME
- **Decrease N1 Reference:** CTRL + END

Airspeed & Mach Control

- **Autopilot Airspeed Hold:** CTRL + F1
- **Increase Reference Airspeed:** CTRL + INSERT
- **Decrease Reference Airspeed:** CTRL + DEL
- **Autopilot Mach Hold:** CTRL + F11

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Altitude & Vertical Control

- **Toggle Altitude Hold:** CTRL + F2
- **Increase Reference Altitude:** CTRL + PAGE UP
- **Decrease Reference Altitude:** CTRL + PAGE DOWN
- **Toggle Vertical Speed (VS) Hold:** CTRL + F8
- **Increase VS Reference:** CTRL + HOME
- **Decrease VS Reference:** CTRL + END
- **Toggle Flight Level Change (FLC):** CTRL + F9

Navigation & Lateral Guidance

- **Heading Hold:** CTRL + F5
- **NAV1 Hold:** CTRL + F7
- **Localizer Hold:** CTRL + F10
- **Approach Hold:** CTRL + F3
- **Wing Leveler:** CTRL + F12

Attitude Control

- **Toggle Attitude Hold:** CTRL + F4

Banner Towing Controls

These controls are used for banner towing operations, allowing you to deploy or retract towing equipment during flight.

- **Toggle Grapple Hook:** Z (Deploys or retracts the banner grapple hook)
- **Toggle Lead Pole:** X (Raises or lowers the banner lead pole for banner attachment)

Braking Controls

These controls manage ground stopping power and directional braking while taxiing, landing, or parking.

- **Toggle Parking Brakes:** CTRL + SPACE (Engages or releases the aircraft's parking brakes)
- **Apply Brakes:** SPACE (Applies wheel brakes simultaneously)
- **Left Brake:** NUM / (Applies braking force to the left wheel only, useful for tight ground turns)
- **Right Brake:** NUM *(Applies braking force to the right wheel only, allowing precise steering control)

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Camera & SmartCam Controls

These commands let you switch views, manage Smart Camera targets, and quickly save or load custom camera angles.

Smart Camera

- **Toggle Smart Camera:** CTRL + B (Enables or disables the Smart Camera system)
- **Next SmartCam Target:** SHIFT + Y (Cycles to the next available SmartCam focus target)
- **Previous SmartCam Target:** SHIFT + R (Cycles to the previous SmartCam focus target)

View Switching

- **Cockpit / External View Toggle:** BACKSPACE (Switches between cockpit and external camera views)
- **Toggle Drone Camera:** SHIFT + X (Activates or deactivates the drone camera)

External Camera Navigation

- **Reset External View:** SHIFT + SPACE (Resets the external camera to its default position)
- **Look Up:** SHIFT + K
- **Look Down:** SHIFT + I
- **Look Left:** SHIFT + L
- **Look Right:** SHIFT + J

External Quick Views

- **QuickView Left:** SHIFT + H (Instantly snaps the camera to the left external view)
- **QuickView Rear:** SHIFT + T (Instantly snaps the camera to the rear external view)

Custom Camera Presets

Use these shortcuts to save and recall personalized camera angles.

Load Custom Cameras

- **Load Camera 1**: SHIFT + F1

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- **Load Camera 2**: SHIFT + F2
- **Load Camera 3**: SHIFT + F3
- **Load Camera 4**: SHIFT + F4

Save Custom Cameras

- **Save Camera 1**: SHIFT + F5
- **Save Camera 2**: SHIFT + F6
- **Save Camera 3**: SHIFT + F7
- **Save Camera 4**: SHIFT + F8

Slew Mode Camera Controls

Slew Mode allows free movement of the aircraft for repositioning, photo setups, or practice without engine power. Use these shortcuts to navigate and orient the aircraft in 3D space.

Activating Slew Mode

- **Toggle Slew Mode:** SHIFT + Z (Enter or exit Slew Mode)
- **Reset Slew Mode:** SHIFT + SPACE (Returns the aircraft to default position and orientation)

Translating the Aircraft

- **Forward / Backward:** W / S
- **Left / Right:** A / D
- **Up / Down:** E / Q

Fine adjustments (speed modifiers)

- **Move Up / Down Fast**: SHIFT + E / SHIFT + Q
- **Move Up / Down Slow**: CTRL + E / CTRL + Q

Rotating the Aircraft

- **Pitch Up / Down:** I / K
- **Roll Left / Right:** U / O
- **Yaw Left / Right:** J / L

Pitch Speed Modifiers

- **Pitch Up / Down Fast:** SHIFT + I / SHIFT + K
- **Pitch Up / Down Slow:** CTRL + I / CTRL + K

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Freezing Movement

- **Freeze X-Axis Translation:** 1
- **Freeze Y-Axis Translation:** 2
- **Freeze Pitch:** 3

ATC (Air Traffic Control) Controls

Use these shortcuts to manage communications with air traffic control efficiently during your flight.

Accessing ATC Panels

- **Open Communications Panel:** \
- **Select ATC Panel Choice 0–9:** 0 → 9 (Quickly switch between different ATC options)

Sending Responses

- **Quick Reply:** ENTER (Sends a predefined response to ATC prompts)

MSFS 2024 – Developer Mode Shortcuts

Document Management

- **New Document:** ALT + N
- **Open Document:** ALT + O
- **Save Document:** CTRL + S
- **Save As Document:** CTRL + SHIFT + S
- **Close Document:** CTRL + Z
- **Rename Document/Object:** CTRL + R
- **Validate Document:** ENTER

Undo / Redo / Edit

- **Undo:** CTRL + W
- **Redo:** CTRL + Y
- **Cut Selection:** CTRL + X
- **Copy Selection:** CTRL + C
- **Paste Selection:** CTRL + V
- **Duplicate Selection:** CTRL + D
- **Split Edge:** SHIFT + S
- **Ungroup:** CTRL + SHIFT + G
- **Find / Focus Object:** CTRL + F

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Object Management

- **Hide Selected:** CTRL + H
- **Hide Selected Edition:** CTRL + SHIFT + H
- **Hide All Objects:** ALT + H
- **Hide All Edition:** ALT + SHIFT + H
- **Lock Selected:** CTRL + L
- **Lock Object:** ALT + L
- **Range Selection:** SHIFT
- **New Group:** CTRL + G

Gizmo Controls

- **Gizmo Translate:** Z
- **Gizmo Rotate:** E
- **Gizmo Scale:** R

Add / Place World Elements

- **Add Apron:** SHIFT + Q
- **Add Painted Line:** SHIFT + L
- **Add Parking:** SHIFT + ,
- **Add Taxiway Point:** SHIFT + P
- **Add Runway:** SHIFT + R

Camera & Tools

- **Developer Camera Look At:** ALT
- **Toggle Sim Pause:** SPACE
- **Hide Lock Window:** F2
- **Toggle Console:** '

Navigation

- **Move Up:** ↑
- **Move Down:** ↓

Firefighting Controls

- **Toggle Spray:** Z – Activates or deactivates the water/foam spray system.
- **Mission: Toggle Scoops/Doors:** Z – Opens or closes the firefighting aircraft's water scoops or doors during missions.

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Player Character Controls

Movement

- **Move Forward:** W
- **Move Backward:** S
- **Strafe Left:** A
- **Strafe Right:** D
- **Toggle Run:** SPACE
- **Toggle Crouch:** C

Looking / Camera

- **Look Up:** I
- **Look Down:** K
- **Look Left:** J
- **Look Right:** L
- **Camera Reset:** SHIFT + SPACE

Interaction

- **Take Control of Character:** SHIFT + C
- **Interact / Use:** E

Power Management Controls

Engine Start / Stop

- **Auto Start Engine:** CTRL + E
- **Engine Autostop:** CTRL + SHIFT + E

Condition Lever (Throttle / Engine Power for piston/turboprop)

- **Decrease Condition Lever:** H
- **Increase Condition Lever:** Y
- **Condition Lever Cut Off:** CTRL + H
- **Condition Lever High Idle:** CTRL + Y

Mixture (Fuel-Air Ratio)

- **Decrease Mixture:** H
- **Increase Mixture:** Y
- **Set Mixture Lean:** CTRL + H
- **Set Mixture Rich:** CTRL + Y

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