



WHAT'S NEW IN 146 PROFESSIONAL FOR MICROSOFT FLIGHT SIMULATOR?



Just Flight

New liveries added

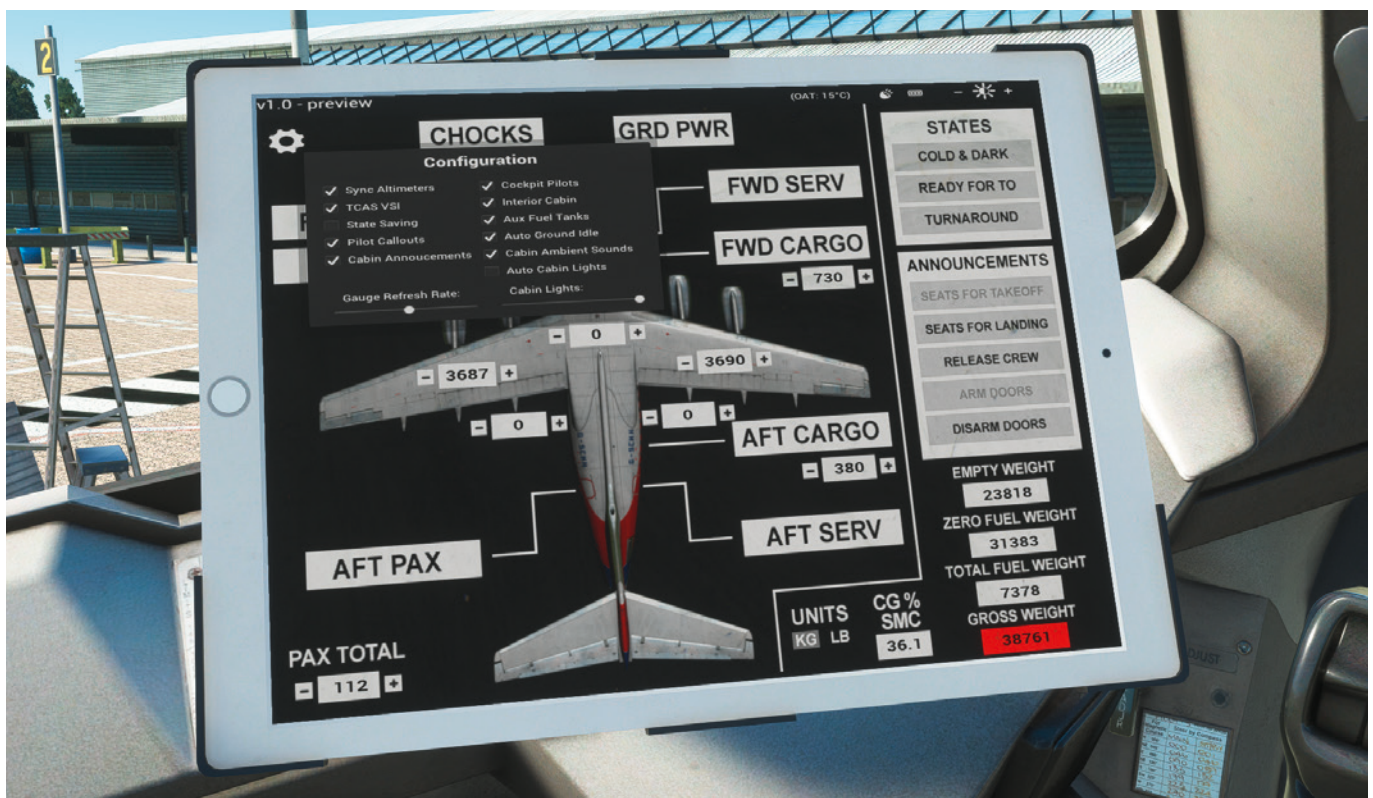
- Formula One Silver 146-100 (G-OFOA)
- Jota 146-200 (G-SMLA)
- Jota 146-300QT (G-JOTE)
- Cobham 146-200 (VH-NJG)
- Cobham 146-300 (VH-NJN)
- Cello Aviation 146-200 (G-RAJJ)



EFB

- Import your SimBrief flight and view a summary or scrollable full OFP
- Monitor your position in real time using a map view with tracking, zoom and pan options
- Explore and view your Navigraph charts with georeferencing support
- Use a notepad for making notes during the flight – particularly useful for noting down clearances and taxi instructions
- Aircraft configuration menu added:
 - Sync Altimeters – automatically synchronises standby and Co-pilot/Captain altimeter barometric settings ('master setting' is based on camera selection)
 - TCAS VSI – toggles between traditional and TCAS vertical speed indicators
 - State Saving – enables/disables aircraft state saving
 - Pilot Callouts – enables/disables pilot call-outs ("V1", "Rotate" etc.)
 - Cabin Announcements – enables/disables cabin announcements ("The seatbelt sign has been turned off..." etc.)

- o HF Aerials (-100 variant only) – enables/disables HF aerial wires on exterior
- o Cockpit Pilots – enables/disables the visible Co-pilot and Captain with interior camera selected
- o Interior Cabin – enables/disables the cabin with interior camera selected (note that the cabin is low-poly for performance)
- o Aux Fuel Tanks – enables/disables the auxiliary fuel tanks
- o Auto Ground Idle – enables/disables the automatic selection of throttles to ground idle from flight idle upon touchdown
- o Cabin Ambient Sounds – enables/disables the cabin ambient sounds
- o Gauge Refresh Rate – allows you to control the digital gauge refresh rates (lower refresh rate = higher FPS)
- o Auto Cabin Lights – when enabled, the cabin lights intensity is automatically set depending on the time of day. When disabled, a slider provides control of the intensity.
- CG % SMC shown, can be clicked to automatically set correct trim for take-off; warning shown if CG outside limits
- Auxiliary fuel tanks added
- Chocks added
- MTOW exceedance warning added
- Custom sounds added (with mute option)
- Outside air temperature (OAT) read-out added
- Product version number added
- EFB tablet battery now drains if electrical power not connected via aircraft
- Display brightness control added
- Improvements to all logic, e.g. pilot and cabin announcement triggers, manual ZFW division of pax and payload



Other features

- Flight idle baulk logic added to thrust levers – when airborne, the thrust levers cannot be retarded below the flight idle baulk position (60 or 67% N2 depending on engine ice protection) without depressing the lever trigger
- Native Wwise sound set with over 400 custom sounds
- All new dynamic lighting that takes full advantage of the latest MSFS technology, including dimmable and freely moveable cockpit lighting
- All aircraft systems (electrical, fuel, hydraulic, TMS etc.) have undergone upgrades which bring them as close as possible to the real-world FCOMs, with hundreds of changes
- Model and texture improvements, including the addition of decals for high resolution text on the exterior model
- Custom ground power unit and chocks added
- Exterior model takes advantage of the MSFS effects system, including APU, GPU and engine heat haze
- Many improvements to MWS and annunciator realism and logic, including the addition of 'Bright-up' functionality
- Extensive upgrades to the flight dynamics for more realistic flight behaviour, CG changes with fuel/payload, autopilot performance and much more, all with direct input from a real-world 146/RJ pilot
- Extensive upgrades to the autopilot and flight director system, including pitch and roll hold performance, SYNC mode logic and IAS/MACH hold accuracy
- DME hold functionality added to VHF NAV 1
- Improved TCAS logic (as displayed on TCAS VSI)
- Auxiliary fuel tanks fitted (can be toggled via the EFB) to provide additional range – great for bizjet operations
- Realistic APU fuel burn added (usage varies with altitude and load)
- Lots more control assignments now supported
- Captain or Co-pilot EFB automatically moved depending on camera position
- Left and right cockpit sills can be hidden for easier access to the side panels
- HSI vertical deviation indicator now available for RNAV/GPS approaches
- REFUEL SELECTED annunciator logic added to fuel system
- COM radios now support 8.33 kHz spacing and realistic test and power-up logic added
- Two-speed pitch trim functionality added, which varies pitch trim speed depending on flap setting
- MSFS ground equipment support added (jetway, baggage and catering vehicles)
- MSFS custom camera views added
- MSFS visual icing added
- MSFS VR compatibility added
- Ground tests logic reworked to match FCOMs
- GPWS and steep approach functionality expanded and improved
- Numerous improvements to cockpit control logic and animations, including trim wheels and thrust levers
- Captain or Co-pilot now visible in cockpit (if enabled via EFB)
- Standard barometric pressure clickspot added to both main altimeters – automatically sets the barometric setting for all altimeters to standard (29.92 inHg/1013 mb)
- All digital displays reworked to use new MSFS gauge technology for crisper and more realistic appearance, and improved performance
- Hydraulic system pressures and accumulators now simulated more realistically, including gradual pressure loss of braking system when parked, and improved AC/DC pump and PTU logic

- Cockpit seats can now be moved fore/aft along their rails and the observer seat can be extended
- Sun visors have been added and can be positioned anywhere along their rails
- Cup holders have been animated to hold your virtual coffee!



New and improved features added in the v1.3 Update (May 2022)

- New liveries added:
 - Crossair 146-200 (HB-IXD)
 - Eurowings 146-300 (D-AQUA)
- Fully simulated fuel crossfeed system for non-normal operations and fuel balancing, including the ability to feed the APU from either the left or the right wing tank
- Improved camera presets with more detailed cabin windows for the wing views
- Rain effects added to the cabin windows
- Numerous improvements to the cockpit model, including smoother edges on the control columns and more detailed knobs
- Animated cockpit door, which is opened and closed automatically by the cabin crew when they report that the cabin is secure before take-off and landing
- Numerous improvements to the flight dynamics based on real-world 146 pilot feedback, including greater rolling resistance and airframe drag, and TGT and fuel burn figures that closely match the real aircraft
- QC and QT freighter variants now have a dynamic cargo container system, with the quantity of containers reflecting your chosen payload
- SimBrief OFP payload (ZFW and total fuel) can now be automatically loaded onto your aircraft
- Your chosen take-off and approach flap setting can now be preselected using the speeds flipchart, automatically setting the ASI speed bugs based on your selection and limiting the co-pilot call-outs on approach (e.g. no “Set flaps to 33 degrees” callout if you have selected a flaps 30 approach)
- Rudder limiter now simulated, reducing the maximum rudder deflection as airspeed increases, reaching a limit of only ± 2 degrees at VMO
- TMS TGT/SYNC disengagement logic added, allowing you to quickly switch from TGT/SYNC to either TGT or SYNC mode
- TMS logic tweaked for more accurate thrust management, especially in the cruise (740°C TGT at FL 290 providing suitable cruise power)
- When using the PTU, the Green hydraulic system pressure now drops as the associated services are used (e.g. flaps, brakes, gear and airbrakes), with the PTU ‘bark’ only audible when it is pressurising the system
- Transponder is now compatible with the VATSIM vPilot client
- Mono-spaced fonts implemented for a more realistic appearance of digital read-outs
- VHF NAV 2 test mode logic added
- ALT ARM and ALT modes can now be engaged at the same time to allow for preselection of next altitude
- Airbrake drift added – the airbrakes will gradually separate (at different rates and to different degrees) once hydraulic pressure is depleted
- Additional control assignment support:
 - SET ELT – sets the autopilot SYNC mode on/off
 - THROTTLE 10-90% – sets the thrust levers accordingly
 - ENGINE AUTOSTOP – shuts down all four engines
 - INCREASE/DECREASE AUTOPILOT REFERENCE ALTITUDE – increases/decreases altitude arm value