

Introduction projectmax C212-200



*For Simulation Use Only

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Introducing projectmax C212-200

Welcome to the **projectmax** C212-200, a high-fidelity simulation for Microsoft Flight Simulator 2020 and 2024. Designed to accurately reproduce the aircraft's systems, handling characteristics, and operational procedures, the Project MAX C212-200 delivers a realistic and immersive simulation experience

The Project MAX C212-200 includes a comprehensive range of advanced features, including:

- **High-Fidelity Aircraft Simulation** — Accurately modelled cockpit systems, aircraft handling, flight dynamics, and operational procedures based on the C212-200, including both normal and abnormal operations.
- **Advanced Electronic Flight Bag (EFB)** — Integrated flight management tools featuring SimBrief support, Weight & Balance management, takeoff, landing, and descent performance calculations, maintenance monitoring, engine monitoring, SmartCopilot, extensive aircraft customization.
- **Custom TPE331 Engine Simulation** — Proprietary engine modelling featuring custom propeller governor logic, beta range operation, propeller RPM control, engine spool dynamics, EGT simulation, Auto Power Reserve (APR), engine protection logic, and realistic start, shutdown, startlock, and unfeather procedures.
- **SmartCopilot** — An optional procedural assistant capable of managing routine cockpit tasks, including gust lock handling, propeller and power management, hydraulic and fuel pump operation, and configurable operational callouts while maintaining full pilot authority.
- **Persistent Systems and Maintenance** — Detailed simulations of hydraulic systems, engine oil consumption, brake temperature and wear, maintenance tracking, and interconnected system behaviour that directly influences aircraft operation.

These capabilities are complemented by enhanced cockpit interactions, immersive sound design, weather radar integration, and numerous operational refinements designed to provide a complete simulation experience.

Thank you for choosing the Project MAX C212-200. We appreciate your support and hope you enjoy flying the aircraft.



GETTING STARTED

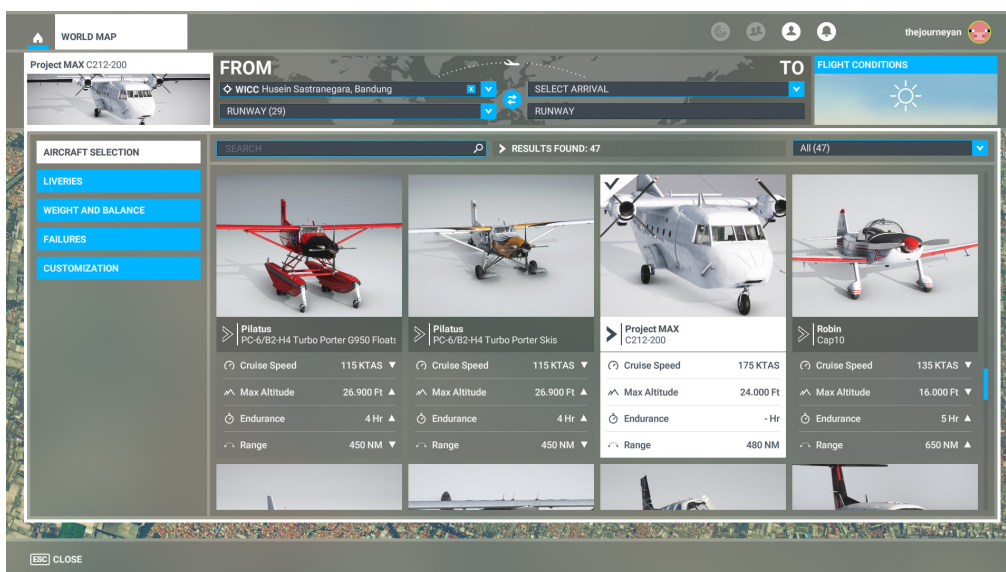
This manual provides the information needed to install, configure, and operate the Project MAX C212-200. It introduces the aircraft, its systems, controls, and available features, along with the procedures required for normal operation.

For the best introduction to the aircraft, we recommend following the sections in order, starting with the initial setup and configuration before progressing to the cockpit, systems, and normal operating procedures.



SELECTING THE AIRCRAFT (MSFS 2020)

From the Microsoft Flight Simulator 2020 main menu, select World Map, then choose Project MAX C212-200 from the aircraft selection menu. Once selected, choose your preferred livery from the Liveries menu before proceeding.

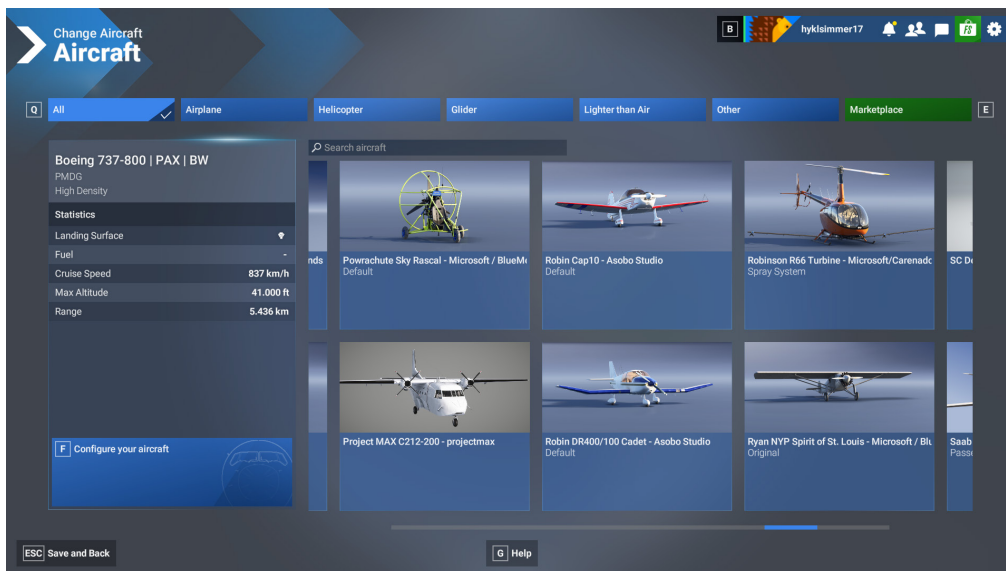


The Passenger and Military variants are installed under a single aircraft entry. Cabin configuration can be selected at any time through the Electronic Flight Bag (EFB) and does not require selecting a different aircraft

After selecting the aircraft, choose a suitable parking stand or gate, then press Ready to Fly to enter the cockpit.

SELECTING THE AIRCRAFT (MSFS 2024)

From the Microsoft Flight Simulator 2024 main menu, select Free Flight, then choose Project MAX C212-200 from the aircraft selection menu. Once selected, choose your preferred livery from the Liveries menu before proceeding.



The Passenger and Military variants are installed under a single aircraft entry. Cabin configuration can be selected at any time through the Electronic Flight Bag (EFB) and does not require selecting a different aircraft

After selecting the aircraft, choose a suitable parking stand or gate, then press Ready to Fly to enter the cockpit.

KEY BINDINGS & HARDWARE CONFIGURATION

The projectmax C212-200 is designed to operate using the default Microsoft Flight Simulator control assignments. In most cases, no additional controller configuration is required, allowing the aircraft to be flown immediately after installation. All primary flight controls, engine controls, and external lighting functions are mapped to the simulator's standard control events to ensure broad compatibility with a wide range of hardware.

If you are using a custom controller profile or dedicated flight simulation hardware, we recommend verifying that the essential flight and engine controls are assigned correctly before operating the aircraft. This is particularly important for the engine power and propeller RPM controls, as these are required for normal aircraft operation throughout all phases of flight.

The following table lists the recommended Microsoft Flight Simulator bindings used by the projectmax C212-200.

Aircraft Control	Recommended MSFS Binding
Power Levers	THROTTLE AXIS (OR THROTTLE 1&2 AXIS)
RPM Levers	PROPELLER AXIS (OR PROPELLER 1&2 AXIS)
Aileron	AILERONS AXIS
Elevator	ELEVATOR AXIS
Rudder	RUDDER AXIS
Nosewheel Steering	NOSE WHEEL STEERING AXIS (Optional)
Anti-Collision Light	TOGGLE BEACON LIGHTS
Position Light	TOGGLE NAV LIGHTS
Taxi Light	TOGGLE TAXI LIGHTS
Landing Light	TOGGLE LANDING LIGHTS

COCKPIT OVERVIEW

With the aircraft loaded and ready for operation, it is worth taking a few moments to become familiar with the flight deck before your first flight. While the Project MAX C212-200 closely follows the layout and operating philosophy of the real aircraft, knowing the location of the primary controls and systems will help establish a smooth and efficient cockpit workflow.

The following sections provide an overview of the primary cockpit controls required for normal aircraft operation. To familiarize yourself with the flight deck, this chapter introduces each panel in the order it is typically used during flight, beginning with the Main Instrument Panel.



MAIN INSTRUMENT PANEL

The Main Instrument Panel contains the primary flight instruments and navigation equipment required for normal aircraft operation. Located directly in front of both flight crew positions, these instruments provide the essential information needed to control, monitor, and navigate the aircraft throughout all phases of flight.

The projectmax C212-200 replicates the instrument layout of the aircraft, with the captain's and first officer's instrument panels arranged symmetrically on the left and right sides of the flight deck. Although both panels contain similar flight instruments, the captain's side serves as the primary reference during single-pilot operations.

The centre section of the instrument panel is dedicated to engine indication and aircraft system monitoring. To improve readability and organization, this area is described separately in the Engine Instrument Panel section that follows.



1. CAPTAIN & FIRST OFFICER INSTRUMENT PANEL

The Captain's and First Officer's Instrument Panels contain the primary flight and navigation instruments required for normal aircraft operation. Both panels share an identical layout, providing each pilot with an independent set of flight instruments for aircraft control and navigation. During single-pilot operation, the captain's instruments serve as the primary reference throughout all phases of flight.

The illustration below identifies the principal instruments installed on both instrument panels.



1. Attitude Indicator

Displays the aircraft's pitch and bank attitude relative to the horizon, providing the primary attitude reference during all phases of flight.

2. Horizontal Situation Indicator (HSI)

Displays aircraft heading, selected course, and navigation guidance from the selected navigation source.

3. Airspeed Indicator

Displays the aircraft's indicated airspeed in knots (KIAS).

4. Altimeter

Displays aircraft altitude referenced to the selected barometric pressure setting.

5. Vertical Speed Indicator (VSI)

Displays the aircraft's rate of climb or descent in feet per minute.

6. Turn Coordinator

Indicates the aircraft's rate of turn and slip/skid, assisting in coordinated flight.

7. Radio Magnetic Indicator (RMI)

Displays bearing information from the selected radio navigation source.

8. DME 1 & DME 2 Indicators

Display distance information from the selected Distance Measuring Equipment (DME) navigation source.

9. Automatic Direction Finder (ADF)

Displays relative bearing information to Non-Directional Beacon (NDB) stations.

10. Radio Altimeter & Decision Height (DH)

Displays the aircraft's height above ground level (AGL) together with the selected Decision Height reference.

11. Altitude Selector

Used to select the target altitude for the altitude alert system and compatible avionics functions.

12. Navigation Source Selector

Selects the navigation source displayed on the HSI between GPS and VOR.

13. Master Caution Annunciator

Illuminates whenever a caution condition is detected, directing the pilot's attention to the affected aircraft system.

14. Left Beta Indicator

Illuminates when the left propeller enters the beta operating range.

15. Right Beta Indicator

Illuminates when the right propeller enters the beta operating range.

2. ENGINE INSTRUMENT PANEL

The Engine Instrument Panel is located in the centre of the flight deck and provides the primary indications required to monitor engine performance, aircraft systems, and essential operating parameters. During normal operation, these instruments should be monitored continuously to ensure both engines and associated systems remain within their prescribed operating limits.

The illustration below identifies the principal instruments and controls located on the Engine Instrument Panel.



1. Torque Indicators

Display the torque produced by each engine and are used as the primary reference for engine power setting.

2. Propeller RPM Indicators

Display propeller rotational speed as a percentage of rated RPM.

3. Exhaust Gas Temperature (EGT) Indicators

Display the exhaust gas temperature of each engine and assist in monitoring engine operating limits during start, takeoff, climb, and cruise.

4. Fuel Flow Indicators

Display the fuel consumption rate for each engine.

5. Fuel Pressure Indicators

Display the fuel pressure supplied to each engine.

6. Oil Pressure Indicators

Display engine oil pressure for each engine.

7. Oil Temperature Indicators

Display engine oil temperature for each engine.

8. Fuel Quantity Indicators

Display the quantity of fuel remaining in the left and right fuel tanks.

9. Fuel Quantity Selector

Selects the fuel tank quantity displayed by the fuel quantity indication system.

10. Hydraulic Pressure Indicator

Displays hydraulic system pressure.

11. Brake Pressure Indicator

Displays brake system pressure.

12. Flap Position Indicator

Indicates the current flap position.

13. Outside Air Temperature (OAT) Indicator

Displays the outside air temperature.

14. DC Ammeters

Display the electrical current supplied by each DC generator.

15. DC Voltmeter

Displays the aircraft direct current (DC) electrical system voltage.

16. AC Voltmeter

Displays the aircraft alternating current (AC) electrical system voltage.

17. Bendix IN-2021A Weather Radar Indicator

Displays weather radar returns and provides the primary interface for weather radar operation.

18. EGT Test Switch

Used to test the operation of the Exhaust Gas Temperature indication system.

19. Stall Warning & Test Switch

Activates the stall warning system test to verify correct operation of the stall warning circuit and annunciation.

20. Auto Power Reserve (APR) Indicator

Indicates the operating status of the Auto Power Reserve (APR) system.

21. Overload Start Relay Indicator

Indicates the operating status of the engine Overload Start Relay system.

22. DC Voltmeter Selector

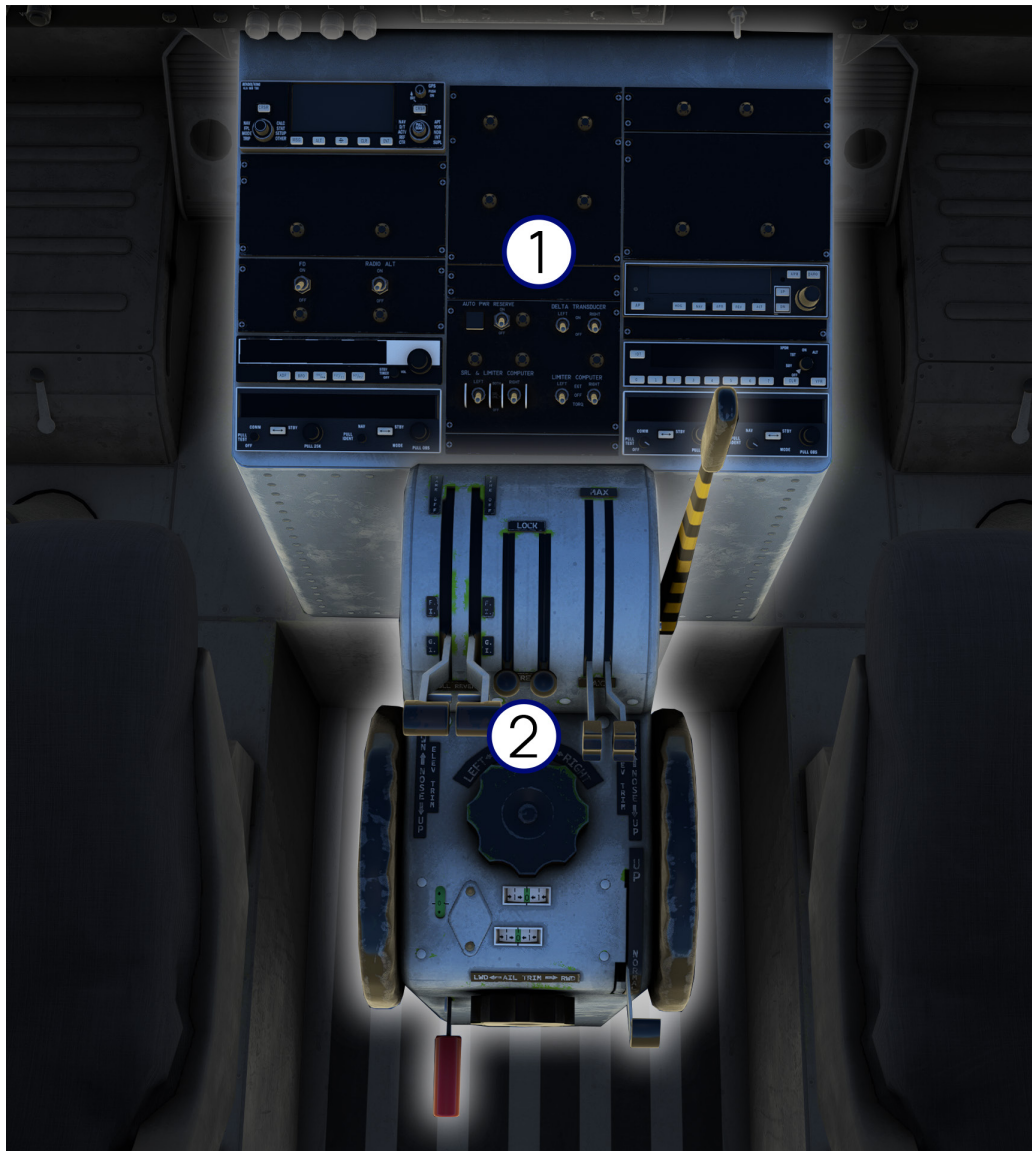
Selects the electrical source displayed on the DC voltmeter, including GEN 1, GEN 2, and BAT BUS.

CENTRE PEDESTAL

The Centre Pedestal contains the primary engine controls, flight management systems, and aircraft controls used throughout all phases of flight. Positioned between the captain's and first officer's seats, it provides convenient access to the controls most frequently used during normal aircraft operation.

The centre pedestal is divided into two primary sections. The Pedestal Control Panel houses the aircraft's avionics, autopilot, and navigation control panels, while the Engine & Flight Controls section contains the power levers, propeller controls, trim controls, and other primary flight controls required during normal operation.

The illustration below identifies these two sections.



1. PEDESTAL CONTROL PANEL

The Pedestal Control Panel contains the aircraft's navigation, communication, and flight management equipment. Depending on the installed aircraft configuration, this section includes the autopilot controller, communication and navigation radios, transponder, weather radar controls, radio altimeter controls, and other avionics required for normal flight operations.



1. GPS System

Provides area navigation (RNAV) capability using GPS satellite signals. Used for waypoint navigation, flight plan management, direct-to navigation, and en-route or terminal guidance.

2. Flight Director (FD) & Radio Altimeter Power Switches

Controls electrical power to the Flight Director and Radio Altimeter systems, enabling their operation during flight.

3. ADF Receiver (Automatic Direction Finder)

Receives NDB (Non-Directional Beacon) signals and provides bearing information for radio navigation.

4. COMM/NAV Transceiver No. 1

Provides VHF communication with ATC and navigation capability using VOR, Localizer, and ILS signals.

5. Auto Power Reserve (APR) Switch

Activates the Automatic Power Reserve system, providing additional engine power automatically during an engine failure or abnormal operating conditions.

6. Delta Pressure Transducer Selector

Selects the left or right delta-pressure transducer for engine system monitoring.

7. SRL (Speed Reset Limiter) Computer Selector

Selects the left or right Speed Reset Limiter computer used for engine torque limiting and power management.

8. Limiter Computer Selector

Selects the active engine limiter computer responsible for engine protection and torque limitation.

9. Automatic Flight Control System (AFCS) Control Panel

Controls the autopilot and flight director functions, including heading, navigation, altitude hold, approach, and reverse modes.

10. ATC Transponder

Transmits aircraft identification and altitude information to Air Traffic Control (ATC) secondary surveillance radar.

11. COMM/NAV Transceiver No. 2

Provides an independent VHF communication and navigation system for backup or simultaneous communication and navigation operations.

PEDESTAL CUSTOMIZATION

projectmax C212 allows users to customize the pedestal avionics configuration directly through the Electronic Flight Bag (EFB). Available options can be accessed via Aircraft → Customization, allowing users to configure the aircraft according to their preferred operational setup before flight.

The pedestal customization system currently provides the following configurable options:

- **Autopilot Panel** – Select between AP140 and Sperry autopilot systems.
- **Pedestal GPS** – Select the installed GPS unit (KLN 90B, GTN 750, or GNS 430).

The selected configuration is applied immediately to the aircraft, replacing the corresponding pedestal components and allowing different avionics layouts to be used without reinstalling the aircraft or modifying configuration files.



GTN 750

The GTN 750 option requires the PMS50 GTN 750 package. Microsoft Flight Simulator (PC) users must install the PMS50 GTN 750 package before enabling this option in the EFB. The package is available from the official PMS50 website.

PMS50 GTN 750: <https://pms50.com/msfs/>

KLN 90B

The KLN 90B option is powered by the Falcon71 KLN 90B package and is included with ProjectMAX by default. Users who wish to use the latest version may update it manually from the official GitHub repository.

Falcon71 KLN 90B: <https://github.com/falcon71/kln90b/releases>

2. ENGINE & FLIGHT CONTROLS

The Engine & Flight Controls are located on the center console between the Captain and First Officer seats. This assembly contains the primary engine power controls together with the aircraft flight control trim and landing gear controls. These controls are used throughout all phases of flight, from engine start and taxi to cruise, approach, and landing.

The illustration below identifies the principal engine and flight controls installed on the center console.



1. Power Levers

Controls engine power by regulating the amount of fuel delivered to each engine. Advancing the levers increases engine torque and aircraft thrust, while retarding them reduces engine power. The power levers are used throughout all phases of flight, including taxi, takeoff, climb, cruise, descent, and landing.

2. Friction Levers

Controls the engine operating condition by selecting Fuel Cutoff, Ground Idle, or Flight Idle. These levers are primarily used during engine start, shutdown, ground operations, and in-flight engine management.

3. Propeller Levers

Controls the propeller governor setting to adjust propeller rotational speed (RPM). Propeller RPM is selected independently of engine power to achieve the desired aircraft performance and operating efficiency.

4. Elevator Trim Switches

Provides electrical control of the elevator trim system, reducing pilot control forces and improving aircraft stability in pitch.

5. Flap Lever

Controls the extension and retraction of the wing flaps. Flap selection increases lift and drag, improving low-speed performance during takeoff, approach, and landing.

6. Parking Brake Handle

Applies and releases the aircraft parking brake to prevent unintended aircraft movement while parked or during engine start.

7. Aileron Trim Indicator

Displays the current aileron trim position, allowing the flight crew to monitor lateral trim settings during flight.

8. Rudder Trim Wheel

Adjusts rudder trim to compensate for yawing tendencies caused by asymmetric thrust, crosswinds, or aircraft loading, reducing pilot workload during flight.

9. Gust Lock Lever

Engages or disengages the gust lock mechanism, securing the flight controls while the aircraft is parked or during ground operations to prevent wind-induced movement and reduce unnecessary loads on the control system.

OVERHEAD PANEL

The Overhead Panel is located above the flight crew and contains the primary controls for the aircraft electrical, fuel, engine, lighting, ice protection, environmental, and monitoring systems. Most switches on this panel are configured during pre-flight preparation and engine start, while others are used during normal operation or abnormal and emergency procedures.

The illustration below identifies the principal controls and panels installed on the overhead console.



- 1. Master Switch**
Controls the aircraft master electrical power by connecting or disconnecting battery power from the primary electrical system.
- 2. DC Control Panel**
Controls and monitors the aircraft DC electrical system, including battery, essential buses, inverter functions, and DC power distribution.
- 3. AC Control & External Lighting Panel**
Controls the aircraft AC electrical system together with the external lighting, including navigation, position, anti-collision, taxi, and landing lights.
- 4. Fuel Booster Pump Control & Internal Lighting Panel**
Controls the electric fuel booster pumps for the left and right fuel tanks while also providing controls for selected cockpit and instrument internal lighting.
- 5. De-Icing Panel**
Controls the aircraft ice protection systems, including pneumatic de-icing boots, propeller de-ice, windshield anti-ice, and associated ice protection equipment.
- 6. Engine Control Panel**
Provides controls for engine fuel shutoff valves, function selector, ignition, and engine start system.
- 7. Cockpit Internal Lighting Panel**
Controls selected cockpit and instrument internal lighting.
- 8. Crossfeed Fuel Panel**
Controls the fuel crossfeed system, allowing fuel from one tank to supply either engine when required.
- 9. Warning & Test Panel**
Contains annunciator test switches and system warning indicators used to verify the operation of caution and warning lights during pre-flight inspections.
- 10. Left Emergency Feather Control**
Manually feathers the left propeller during an engine failure or emergency, reducing aerodynamic drag and improving single engine performance.
- 11. Right Emergency Feather Control**
Manually feathers the right propeller during an engine failure or emergency, reducing aerodynamic drag and improving single engine performance.
- 12. Cabin Heating Control**
Controls the aircraft cabin heating system by regulating heater operation and cabin airflow to maintain a comfortable cockpit and cabin environment during flight.

13. Circuit Breaker Panel

Contains the aircraft circuit breakers that protect individual electrical circuits from overloads or short circuits. A tripped circuit breaker indicates an electrical fault and should only be reset in accordance with the applicable operating procedures.

WARNING PANEL

The Warning Panel is located on the overhead console and provides the flight crew with immediate visual indications of aircraft system status. It displays caution and warning messages generated by the aircraft's electrical, engine, fuel, ice protection, and auxiliary systems, enabling abnormal conditions to be identified quickly during all phases of flight.

In addition to the annunciator panel, this assembly also incorporates the standby magnetic compass, cockpit clocks, and engine fire extinguishing controls. Together, these components provide essential flight reference, system monitoring, and emergency fire protection functions.

The illustration below identifies the principal components installed on the Warning Panel.



1. Standby Magnetic Compass

Provides an independent magnetic heading reference for aircraft navigation. The compass operates independently of the aircraft electrical system and serves as a backup heading reference..

2. Warning Panel

Displays caution and warning indications for the aircraft's major systems. The integrated TEST, BRIGHT, and DIM controls are used to verify annunciator operation and adjust annunciator brightness.

3. Captain Clock

Displays the current time and provides elapsed time functions for flight timing and navigation.

4. First Officer Clock

Provides an independent time reference for the First Officer and serves as a backup timing instrument.

5. Left Engine Fire Extinguishing Controls

Provides manual operation of the left engine fire extinguishing system. The controls allow the flight crew to discharge the selected extinguishing bottle into the left engine nacelle during an engine fire emergency.

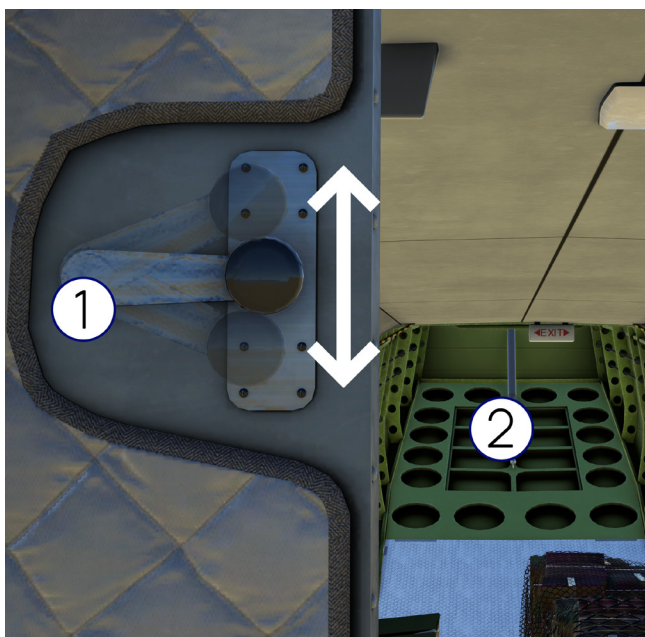
6. Right Engine Fire Extinguishing Controls

Provides manual operation of the right engine fire extinguishing system. The controls allow the flight crew to discharge the selected extinguishing bottle into the right engine nacelle during an engine fire emergency.

MISCELLANEOUS CONTROLS

The following controls and equipment are located throughout the cockpit and cargo compartment. They provide access to aircraft systems, cockpit utilities, and simulation-specific features that support normal operation and enhance the overall user experience within ProjectMAX.

The illustrations below identify the principal miscellaneous controls and equipment installed throughout the aircraft.



1. Ramp Door Lever

Controls the opening and closing of the rear cargo ramp. Move the lever UP to open the ramp and DOWN to close it. Normal operation requires adequate hydraulic pressure and a properly functioning hydraulic system.

2. Cargo Ramp Door

Provides access to the aircraft cargo compartment for loading and unloading cargo or passengers. The ramp is hydraulically operated through the Ramp Door Lever.

3. Captain Reading Light

Controls the Captain's adjustable reading light for improved cockpit visibility during low-light operations. An identical control is installed on the First Officer's side.

4. Windshield Wiper Switch

positions include OFF, SLOW, FAST, and PARK for normal windshield clearing during adverse weather conditions.

5. Captain Oxygen Bottle Pressure Gauge

Indicates the remaining pressure in the Captain's emergency oxygen bottle, allowing the flight crew to verify oxygen availability before and during flight.

6. Headset Simulation Connector

Invisible interaction point used to connect or disconnect the headset simulation. This feature is provided exclusively for simulation purposes and does not represent an operational aircraft control.

7. Audio Control Panel

Represents the aircraft audio control panel used for communication and navigation audio selection. This panel is currently not functional within the Add-on.

8. Headset Simulation Status Indicator

Indicates the current status of the headset simulation. When illuminated, the headset simulation is active; when the indicator is off, the headset simulation is disabled and its associated functions are unavailable.

ELECTRONIC FLIGHT BAG (EFB)

The projectmax C212-200 Electronic Flight Bag (EFB) provides quick access to aircraft utilities, operational tools, performance calculations, customization options, and maintenance functions. Most aircraft configuration and convenience features can be accessed directly through the EFB without interacting with cockpit switches, making pre-flight preparation and aircraft management significantly easier.

The EFB is divided into seven primary pages, each designed for a specific operational purpose.



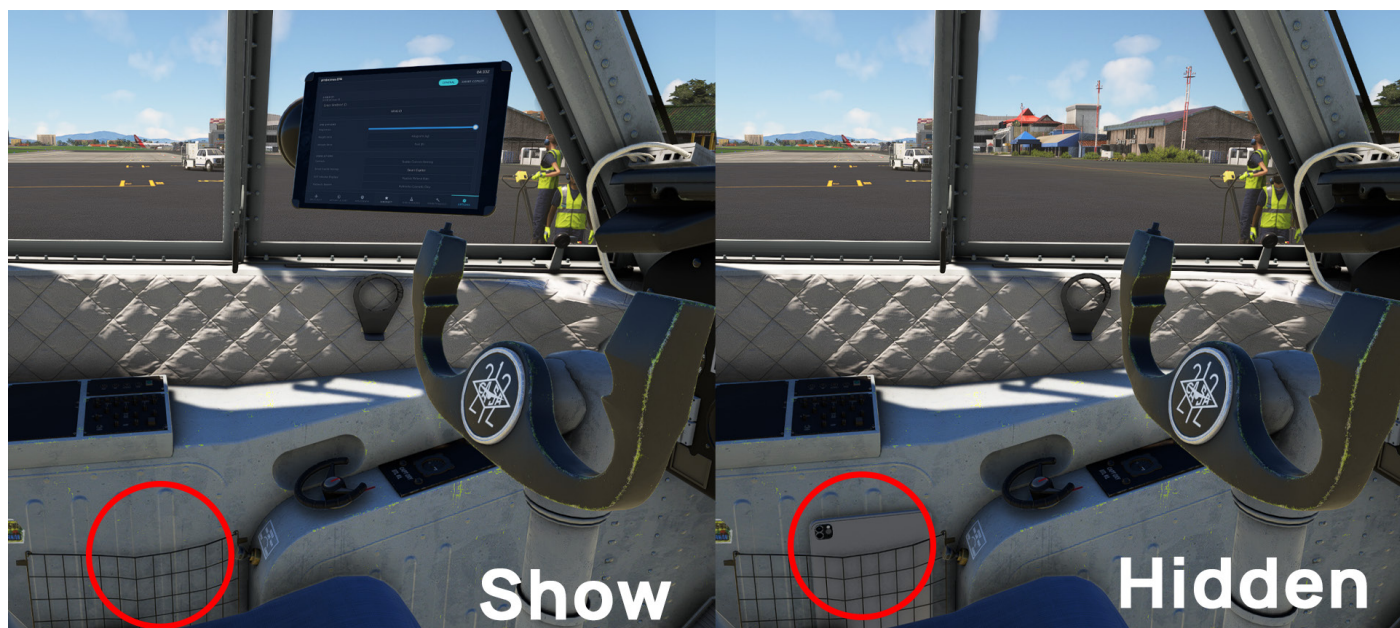
HIDDEN / SHOW EFB CLICKSPOT

To improve cockpit visibility, the ProjectMAX C212-200 includes a hidden clickspot that allows the Electronic Flight Bag (EFB) to be quickly shown or hidden.

The clickspot is located inside the Captain's document storage pocket, highlighted by the red circle in the illustration above. Clicking this area toggles the EFB between its visible and hidden states.

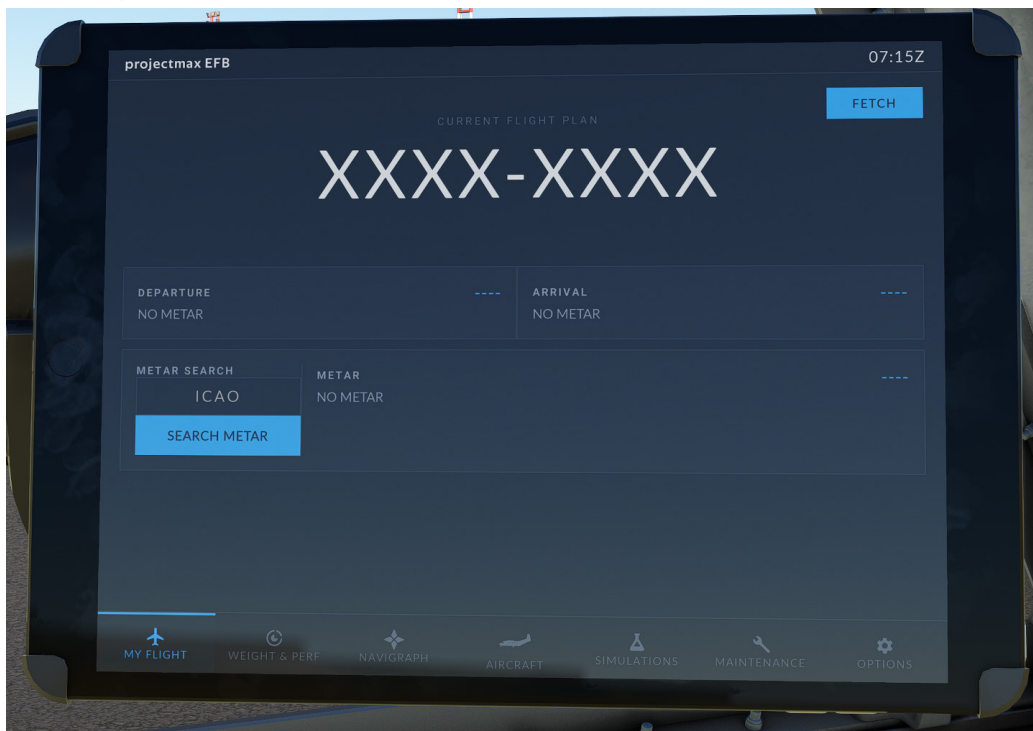
When the EFB is hidden, a smartphone is placed inside the storage pocket as a visual indication that the EFB has been stowed. Clicking the same clickspot again restores the EFB to its normal mounted position.

Note: Hiding the EFB only affects its visibility. All EFB functions remain available once it is shown again.



MY FLIGHT

The My Flight page displays the current flight plan together with departure and arrival weather information. When connected to SimBrief, the EFB can automatically import the active flight plan, route string, and METAR data, allowing the pilot to review essential flight information before departure.



WEIGHT & PERFORMANCE

This page combines aircraft loading and performance planning into a single interface.

- **Load & Balance** Adjust passenger count, payload, and fuel quantity while monitoring the aircraft's weight distribution in real time.
- **CG Envelope** Displays the aircraft's current center of gravity relative to the approved operating envelope.
- **Takeoff Performance** Calculates estimated takeoff distance and reference speeds based on aircraft weight and environmental conditions.
- **Landing Performance** Provides landing distance estimates and reference approach speed.
- **Top of Descent Calculator** Calculates the recommended descent point and required vertical speed for the selected altitude.



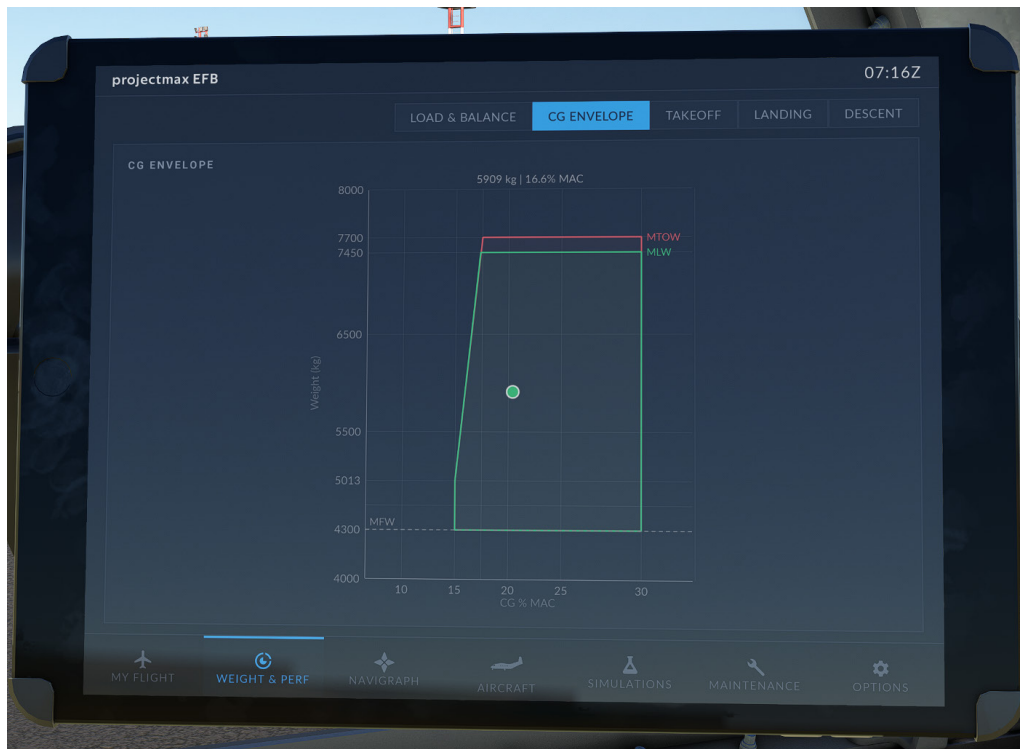
CG ENVELOPE

The **CG Envelope** page provides a graphical representation of the aircraft's current centre of gravity (CG) in relation to the approved operating envelope. The display combines the current aircraft weight and CG position, allowing the pilot to quickly verify that the aircraft remains within the certified loading limits before departure and throughout flight.

The horizontal axis represents the aircraft's **Centre of Gravity (% MAC)**, while the vertical axis represents the aircraft weight. Two operating envelopes are displayed:

- **MTOW Envelope** — Maximum Takeoff Weight operating limits.
- **MLW Envelope** — Maximum Landing Weight operating limits.

A live indicator displays the aircraft's current loading condition based on the payload and fuel entered through the Load & Balance page. As payload or fuel quantity changes, the indicator updates automatically, allowing immediate verification that the aircraft remains within the approved CG range. The display also provides a numerical readout of the current aircraft weight together with its calculated CG position.



TAKEOFF PERFORMANCE

The **Takeoff** page provides an estimated takeoff performance calculation based on the aircraft loading and environmental conditions entered by the pilot.

The calculator requires the following inputs:

- **Takeoff Weight**
- **Pressure Altitude**
- **Outside Air Temperature (OAT)**
- **Headwind** (tailwind entered as a negative value)

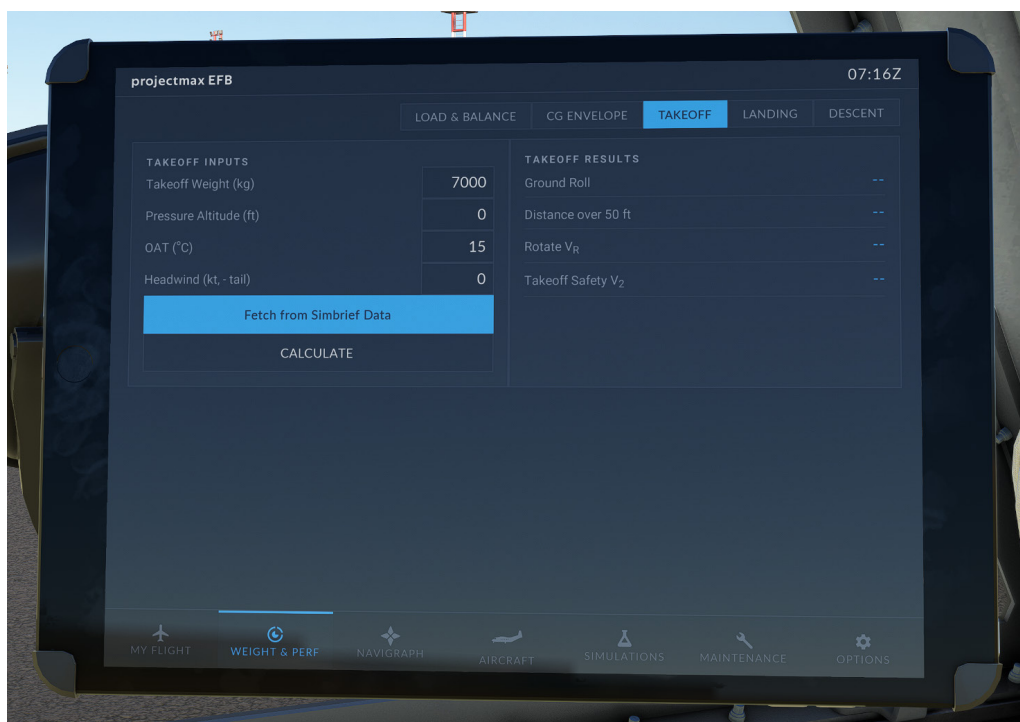
The **Fetch from SimBrief Data** function may also be used to populate the available environmental data when a SimBrief flight plan has already been loaded.

After selecting **Calculate**, the EFB estimates:

- **Ground Roll**
- **Distance over 50 ft obstacle**
- **Rotate Speed (VR)**
- **Takeoff Safety Speed (V2)**

The calculation considers aircraft weight together with corrections for pressure altitude, outside air temperature, and wind conditions. Headwind reduces the required takeoff distance, while tailwind increases the estimated distance. The calculated VR is also transmitted to the aircraft's V1 callout system for use during takeoff.

Note: All values are provided as operational estimates intended for simulation purposes only.



LANDING PERFORMANCE

The **Landing** page provides an estimated landing performance calculation using the current landing conditions entered by the pilot.

The calculator requires the following inputs:

- **Landing Weight**
- **Pressure Altitude**
- **Outside Air Temperature (OAT)**
- **Headwind** (tailwind entered as a negative value)

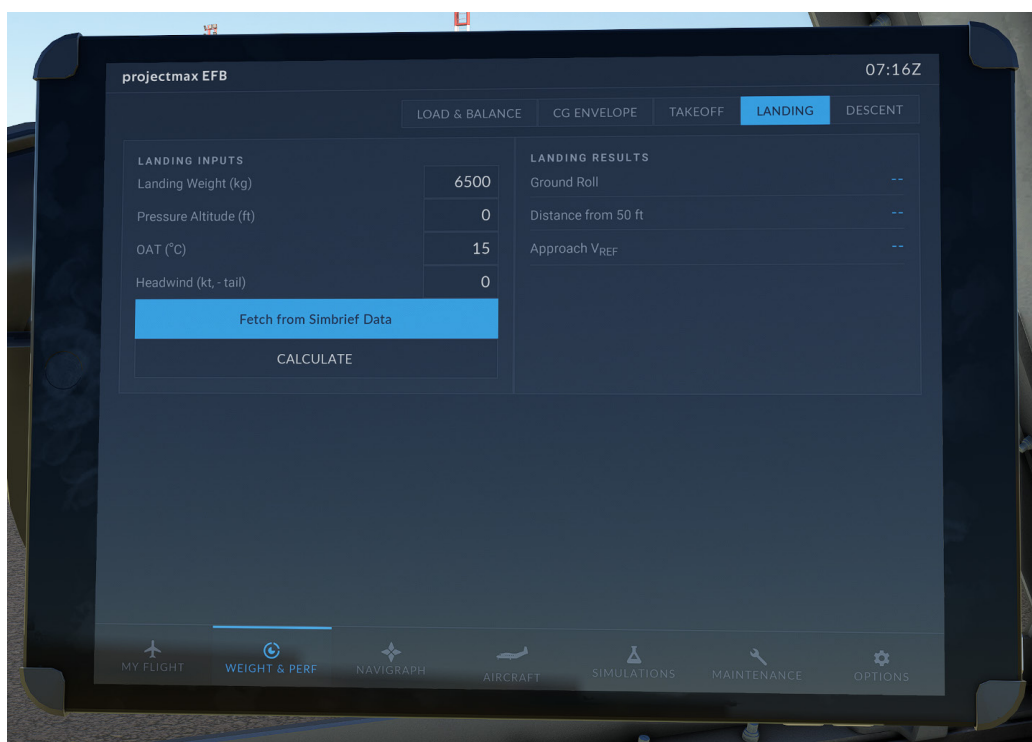
The **Fetch from SimBrief Data** function may also be used to populate the available environmental data when a SimBrief flight plan has already been loaded.

After selecting **Calculate**, the EFB estimates:

- **Landing Ground Roll**
- **Distance over 50 ft obstacle**
- **Reference Landing Speed (VREF)**

Landing performance is estimated from aircraft weight together with corrections for atmospheric conditions and wind. Increasing landing weight, higher density altitude, or tailwind conditions increase the required landing distance, while headwind reduces the estimated landing distance.

Note: These results are intended solely as simulation references and should not be used for real-world flight operations.



DESCENT PLANNING

The **Descent** page assists the pilot in determining an appropriate Top of Descent (TOD) based on the selected descent profile.

The calculator supports two descent methods:

- **Descent Angle**, where descent is planned using a selected flight path angle.
- **Descent Rate**, where descent is planned using a constant vertical speed.

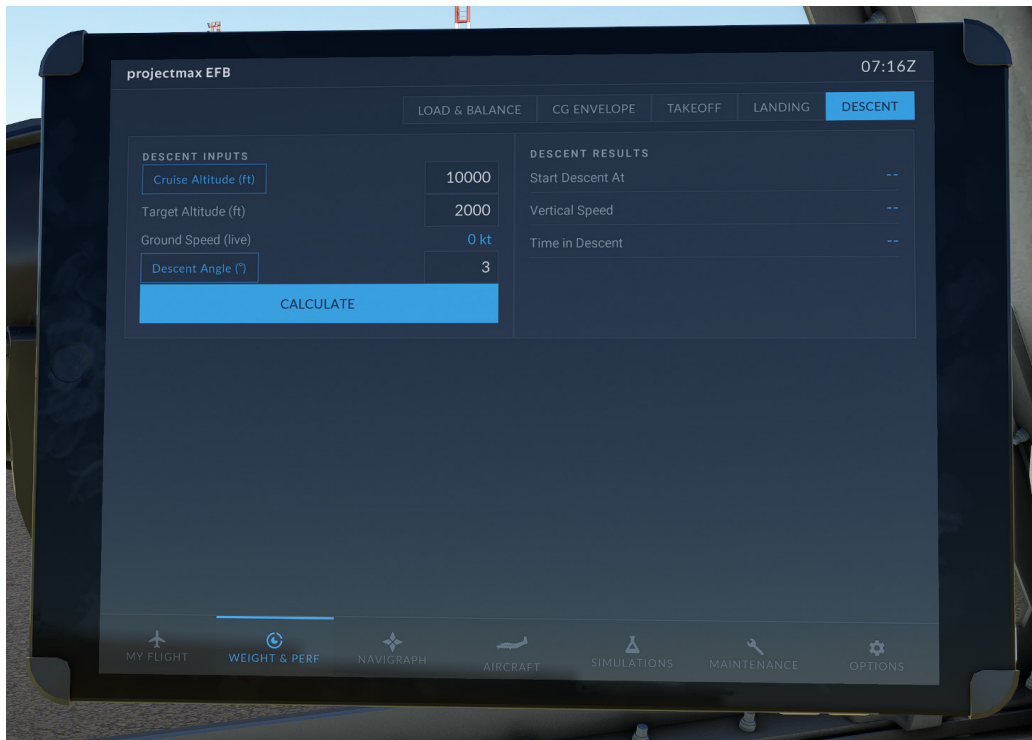
Cruise altitude may either be entered manually or obtained automatically from the aircraft's current indicated altitude using **Current Altitude** mode. Ground speed is continuously read from the simulator, ensuring that descent calculations remain representative of the current flight conditions.

After calculation, the page provides:

- **Top of Descent Distance** (nautical miles before the destination)
- **Required Vertical Speed**
- **Estimated Time to Descent**

When using **Current Altitude** mode, the calculator continuously updates the results as the aircraft altitude and ground speed change, providing real-time descent guidance throughout the cruise phase.

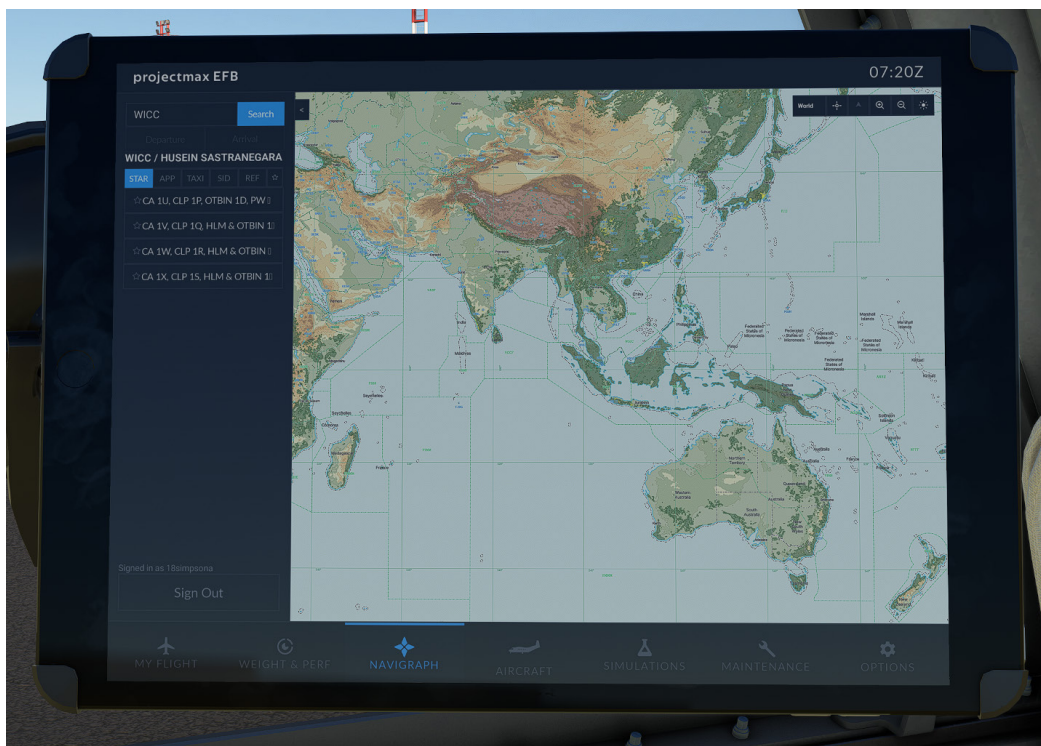
Note: The displayed values are intended as planning aids for simulator operation



NAVIGRAPH

The Navigraph page provides direct integration with Navigraph Charts, allowing pilots to access airport charts, procedures, and navigation data without leaving the simulator. After signing in with a Navigraph account, charts can be viewed directly within the EFB using the integrated chart viewer.

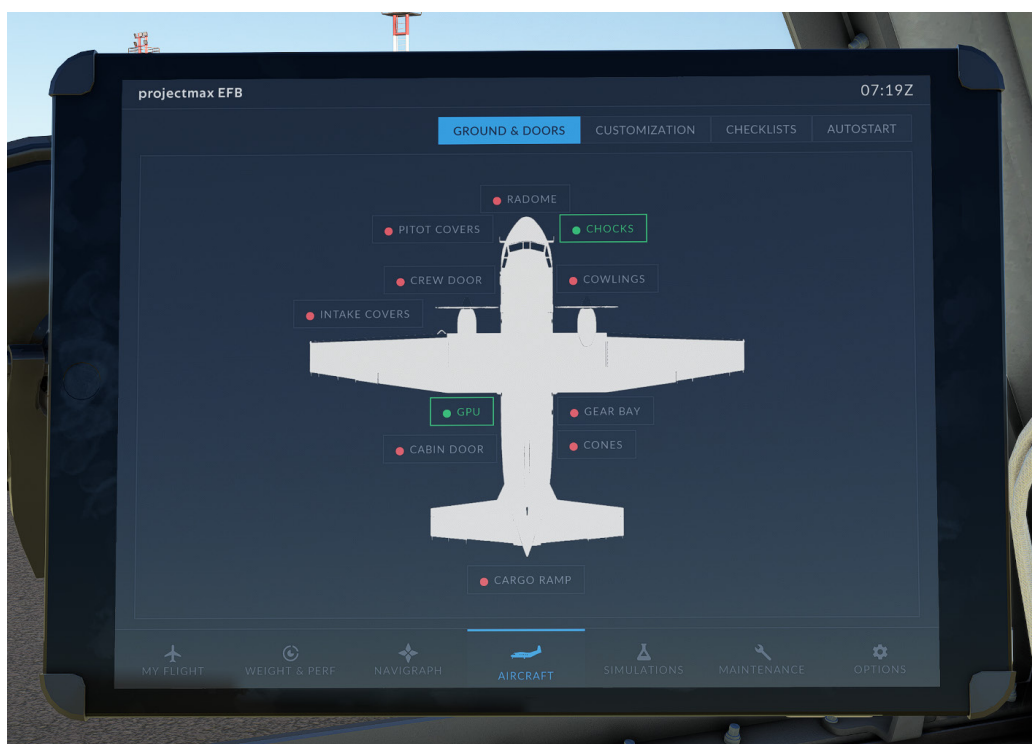
Note: An active Navigraph subscription is required to use this feature. Users without a valid subscription will not be able to access Navigraph Charts within the EFB.



AIRCRAFT

This page provides access to aircraft-specific controls, configuration options, and system management functions available through the Electronic Flight Bag (EFB).

- **Ground & Doors** Manage external aircraft equipment and operate passenger, cargo, and service doors while the aircraft is on the ground.
- **Customization** Configure various aircraft options, including cockpit preferences and visual settings, to personalize the aircraft according to user preference.
- **Panel States** Load predefined aircraft configurations for different operating conditions, allowing the cockpit to be prepared quickly for various phases of flight.



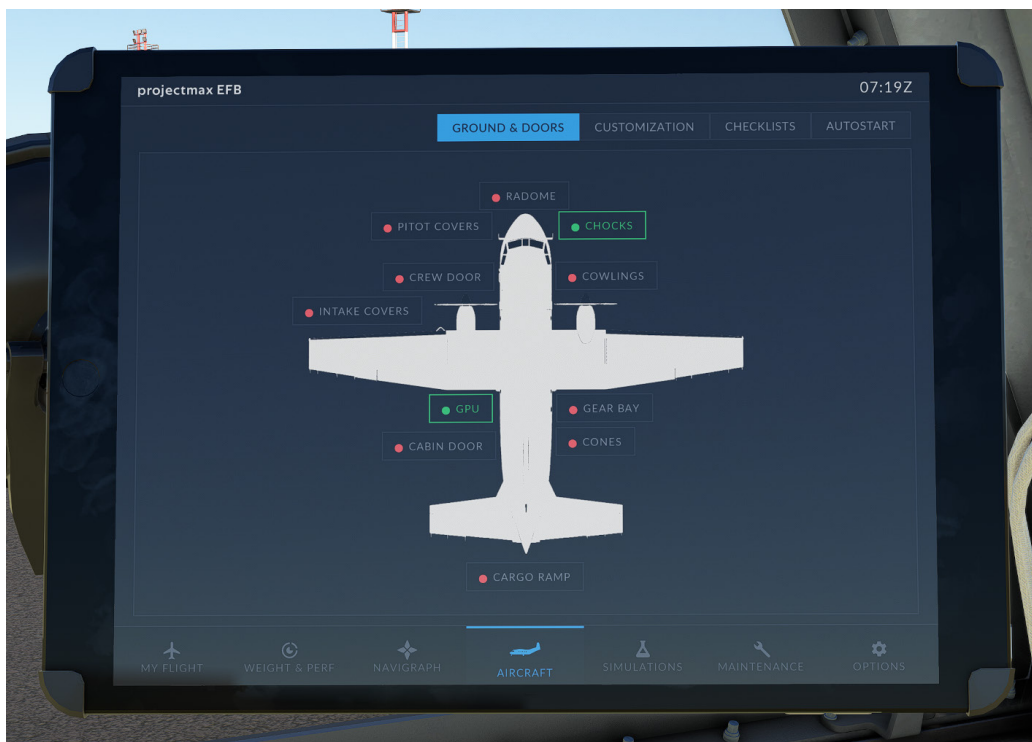
GROUND & DOORS

The **Ground & Doors** page provides an interactive top-down aircraft layout that allows pilots to manage ground equipment and aircraft access points directly from the EFB. Each item can be operated by selecting its corresponding location on the aircraft diagram, providing a quick visual overview of the aircraft configuration while on the ground.

The page includes the following controls:

- **Radome** – Opens or closes the nose radome.
- **Pitot Covers** – Installs or removes the pitot tube covers.
- **Chocks** – Installs or removes the wheel chocks.
- **Crew Door** – Operates the left crew entrance door.
- **Cowlings** – Opens or closes the engine cowlings.
- **Intake Covers** – Installs or removes the engine intake covers.
- **Maintenance Props** – Deploys or stows the engine maintenance support props.
- **Ground Power Unit (GPU)** – Connects or disconnects external ground power.
- **Landing Gear Bay** – Opens or closes the landing gear access panels.
- **Cabin Door** – Operates the main passenger cabin door.
- **Cones** – Places or removes ground safety cones around the aircraft.
- **Cargo Ramp** – Opens or closes the rear cargo ramp.

Certain functions are available only when the aircraft is on the ground or stationary. Some equipment, such as wheel chocks and protective covers, is automatically restricted to prevent operation during inappropriate flight conditions.

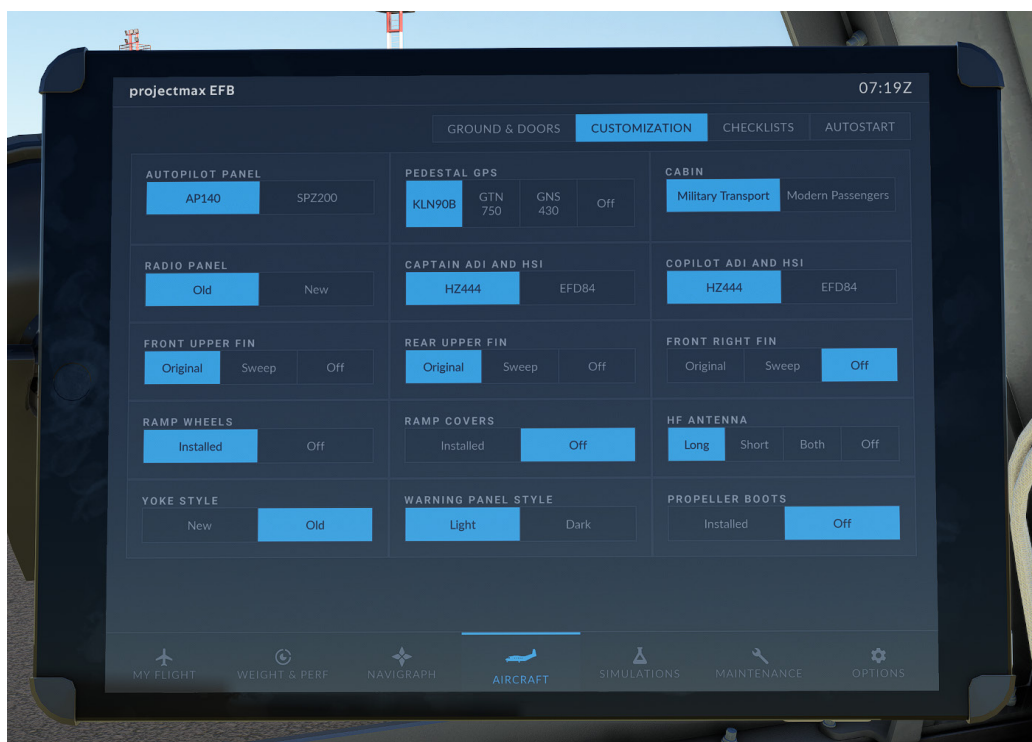


CUSTOMIZATION

The **Customization** page allows users to configure various aircraft options to match their preferred cockpit, cabin, and external aircraft configuration. All selected options are automatically saved and restored for future simulator sessions.

Available customization options include:

- **Autopilot Panel** – Select between the AP140 and SPZ200 autopilot systems.
- **Pedestal GPS** – Choose the installed GPS unit (KLN90B, GTN 750, or GNS 430).
- **Cabin Configuration** – Select either the Military Transport or Modern Passenger cabin.
- **Radio Panel** – Choose between the classic or modern radio panel layout.
- **Captain ADI & HSI** – Select the Captain's flight instrument configuration.
- **Copilot ADI & HSI** – Select the First Officer's flight instrument configuration.
- **Upper Fins** – Configure the front and rear upper fin installations.
- **Front Right Fin** – Select the preferred right-side fin configuration.
- **Ramp Wheels** – Install or remove cargo ramp wheels.
- **Ramp Covers** – Install or remove cargo ramp covers.
- **HF Antenna** – Select the desired HF antenna configuration.
- **Yoke Style** – Choose between the New or Old control yoke design.

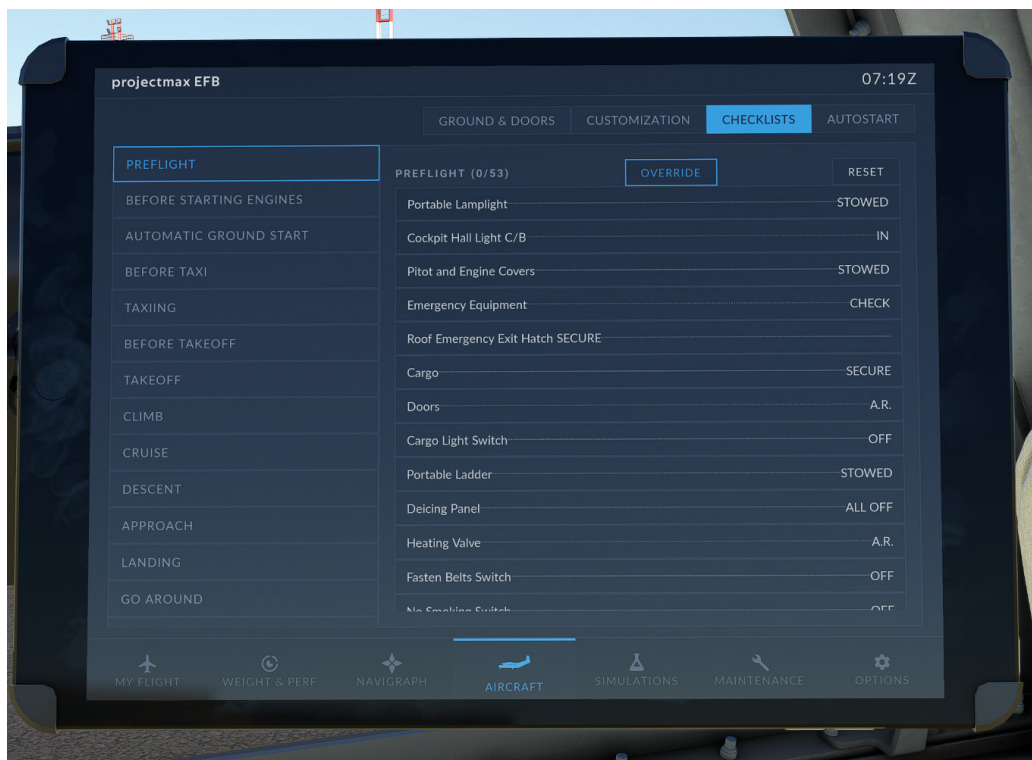


CHECKLIST

The **Checklists** page provides a collection of interactive Normal Checklists designed to assist pilots throughout each phase of flight. Individual checklist items can be marked as completed by selecting them, while the EFB displays the completion progress for the currently selected checklist. Checklist status is maintained for the current session and may be reset at any time using the Reset function

The following Normal Checklists are included:

- **Preflight**
- **Before Starting Engines**
- **Automatic Ground Start**
- **Before Taxi**
- **Taxiing**
- **Before Takeoff**
- **Takeoff**
- **Climb**
- **Cruise**
- **Descent**
- **Approach**
- **Landing**
- **Go Around**
- **After Landing**
- **Parking**
- **Engine Shutdown**

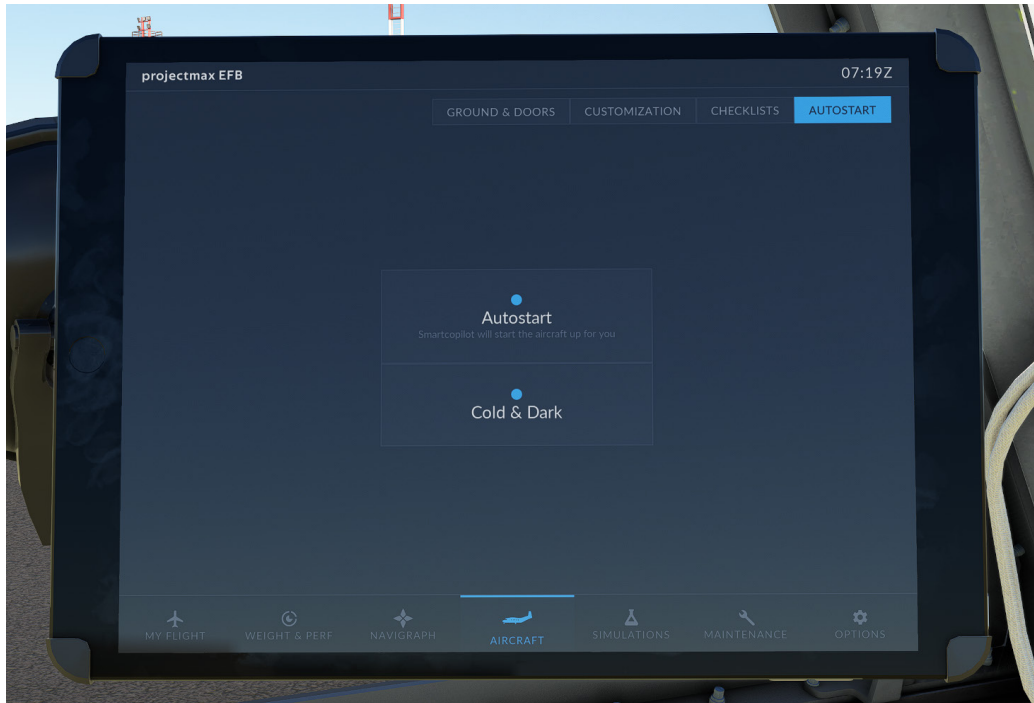


AUTOSTART

The Autostart page allows the aircraft to be initialized using predefined cockpit configurations, reducing setup time before flight.

Available panel states include:

- **Autostart** – Automatically starts the aircraft and configures the required systems.
- **Cold & Dark** – Aircraft completely shut down with all systems secured.



SIMULATIONS

The **Simulations** page provides access to aircraft-specific simulation features and training utilities available within the Electronic Flight Bag (EFB). These functions allow pilots to simulate abnormal conditions, monitor aircraft system status, and review operational information during flight.

This page includes the following sections:

- **Fuel** Displays the aircraft fuel system layout, including fuel tanks, valves, pumps, and fuel flow indications.
- **Electrical** Provides a live electrical system schematic showing power sources, batteries, generators, buses, and electrical distribution throughout the aircraft.
- **Engine** Displays engine system information, including the engine operating configuration and associated system status.



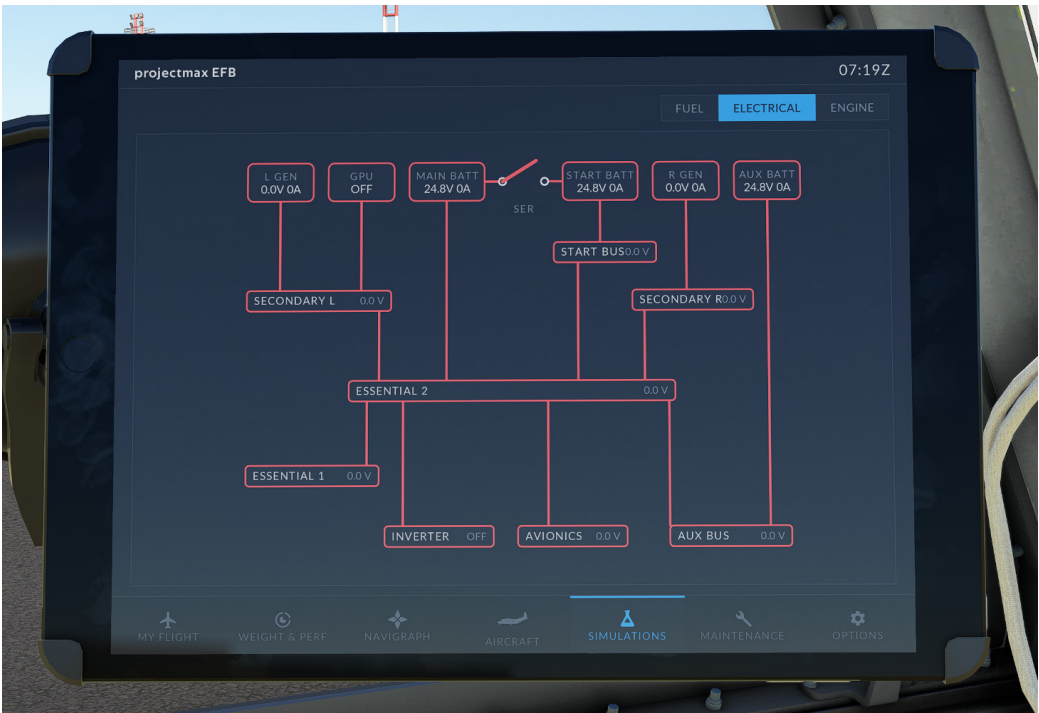
FUEL

The **Fuel** page presents a graphical representation of the aircraft fuel system. Fuel tanks, booster pumps, shutoff valves, crossfeed configuration, and fuel flow are displayed to provide a clear overview of the current fuel distribution throughout the aircraft.



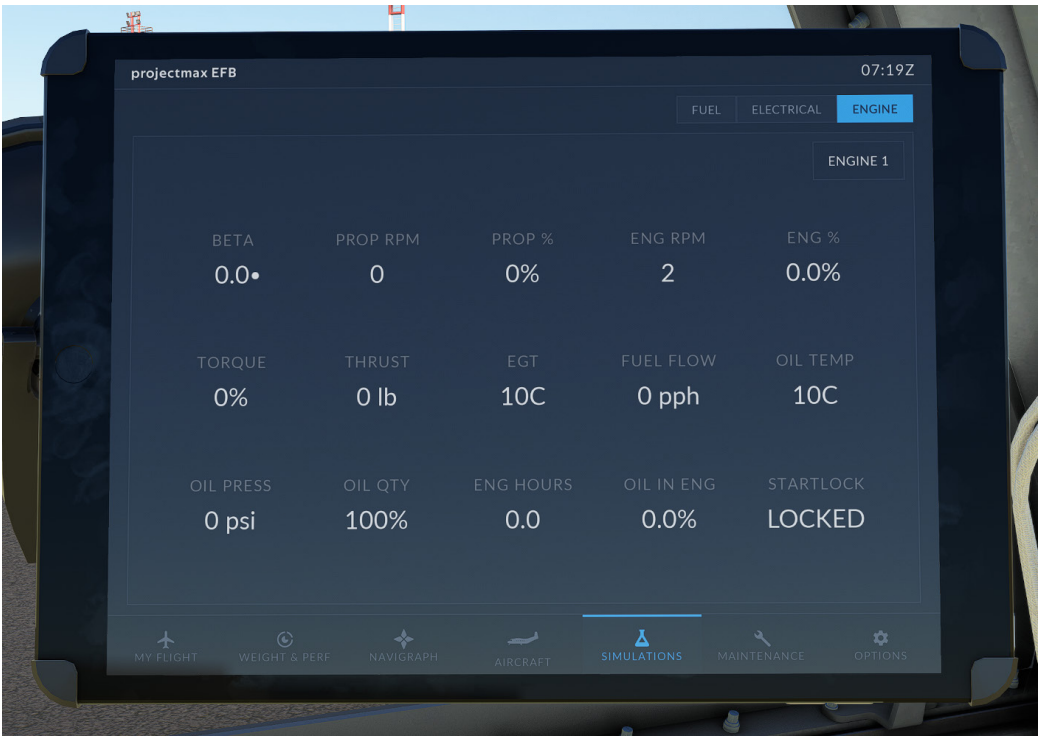
ELECTRICAL

The **Electrical** page displays the aircraft electrical distribution system in real time. Batteries, generators, external power, electrical buses, and associated power paths are shown together with live voltage and current indications, allowing the pilot to monitor electrical system operation at a glance.



ENGINE

The **Engine** page provides a graphical overview of the engine systems and associated operating parameters. System status is displayed in real time to assist with engine monitoring during all phases of flight.

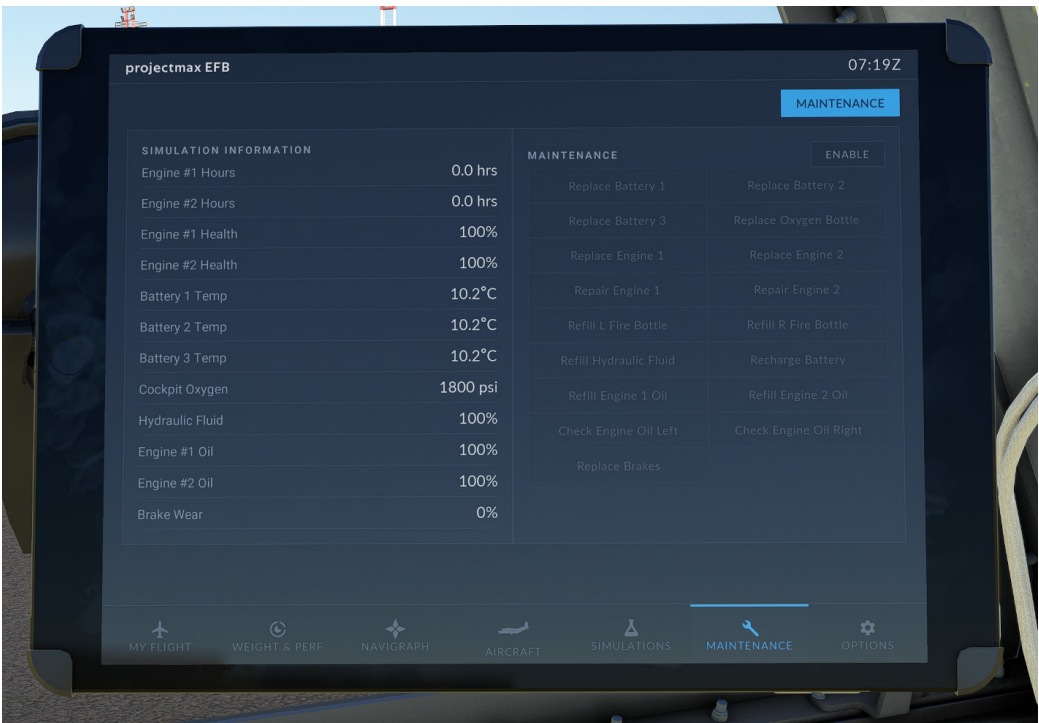


MAINTENANCE

The **Maintenance** page provides an overview of the aircraft’s simulated maintenance status and allows maintenance actions to be performed when maintenance simulations are enabled. Operational information such as engine hours, engine health, battery temperature, oxygen pressure, hydraulic fluid quantity, engine oil level, and brake wear is displayed for monitoring purposes.

This page includes the following sections:

- Simulation Information** Displays the current condition and service status of major aircraft systems, including engines, batteries, hydraulic fluid, oxygen supply, and brakes.
- Maintenance** Provides maintenance actions such as replacing components, refilling consumables, repairing engines, and servicing aircraft systems when maintenance simulation is enabled.
- Extended Engine Simulations** Enables advanced engine wear and performance simulation for a more realistic operating experience.
- Service Based Failures** Activates service interval-based failures that require periodic maintenance throughout aircraft operation.
- Failures** Provides access to the aircraft failure configuration page for managing simulated system failures.

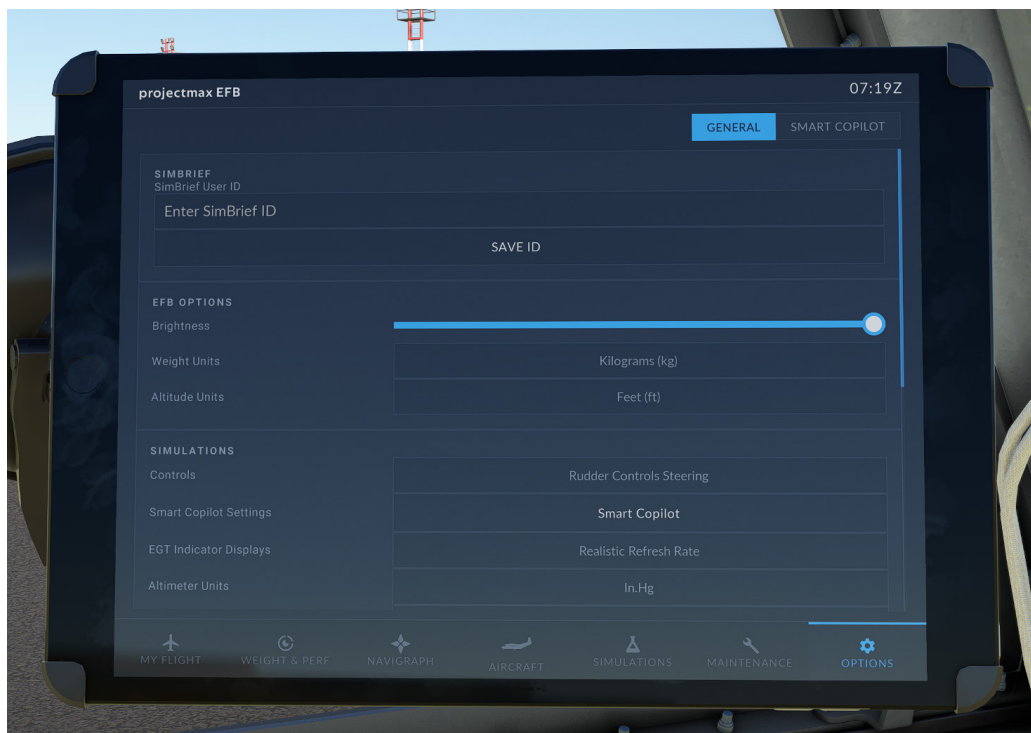


OPTIONS

The Options page provides access to configurable Electronic Flight Bag (EFB) settings and aircraft-specific preferences. These options allow users to customize the EFB interface, adjust simulation behavior, integrate external services, and configure Smart Copilot features.

This page includes the following sections:

- **General** Configure SimBrief integration, EFB preferences, display settings, unit selection, and aircraft simulation options.
- **Smart Copilot** Configure automation assistance and aural assistance features for supported Smart Copilot operations.

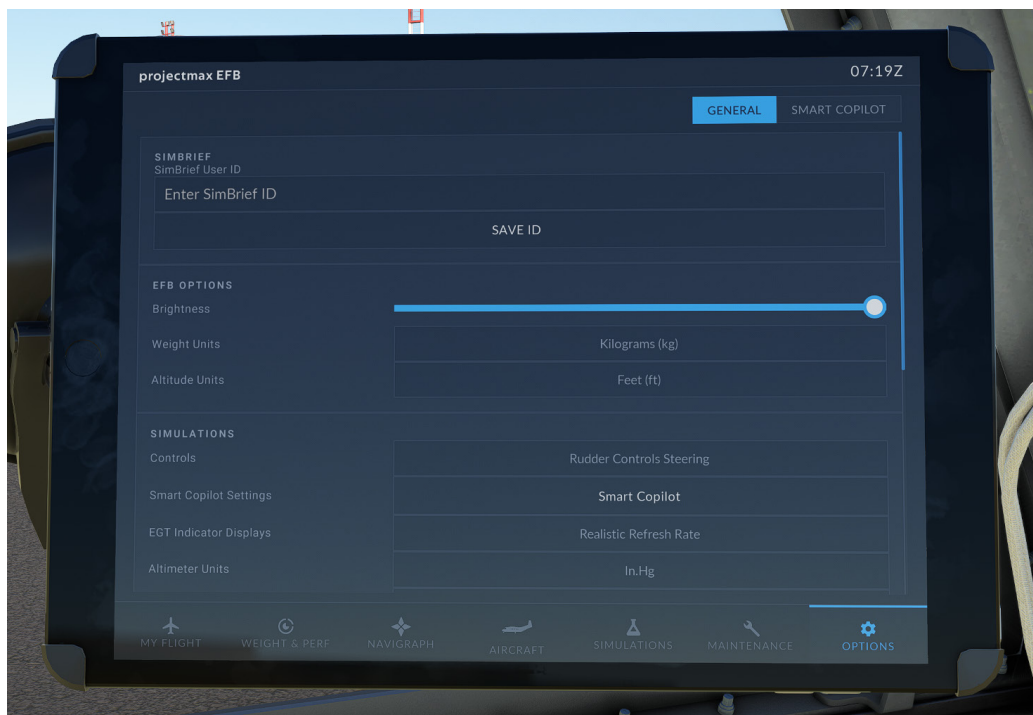


GENERAL

The **General** page contains the primary EFB configuration settings used for aircraft operation and user preferences. Changes made on this page are applied automatically and remain available for future simulator sessions.

Available options include:

- **SimBrief User ID** Links the EFB to a SimBrief account for flight plan integration.
- **Brightness** Adjusts the EFB display brightness.
- **Weight Units** Selects the preferred weight unit.
- **Altitude Units** Selects the preferred altitude unit.
- **Controls** Configures rudder steering behavior.
- **SmartCopilot Settings** Enables or disables Smart Copilot support.
- **EGT Indicator Displays** Selects the engine indication refresh mode.
- **Hydraulic System** Chooses between a fully simulated or cosmetic-only hydraulic system.



SMARTCOPILOT

The **SmartCopilot** page provides configuration options for Smart Copilot automation and aural assistance features. These settings are intended to improve multi-crew operation by automating selected aircraft procedures and providing configurable voice callouts.

Automation Assistance

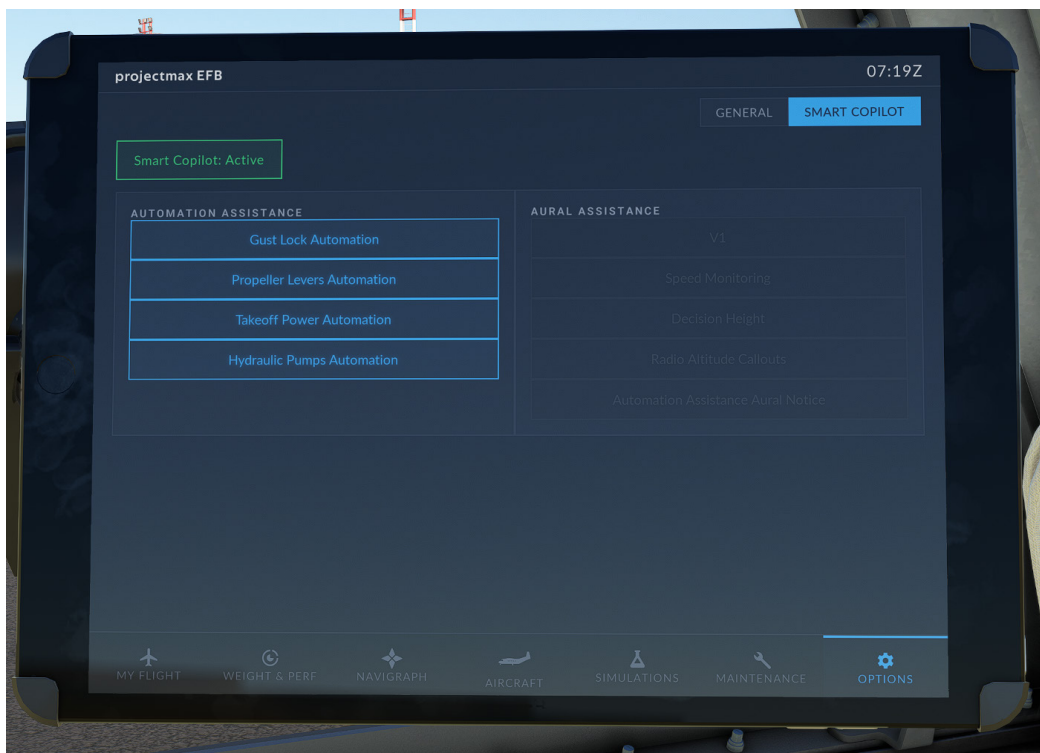
The following automation features are available:

- **Gust Lock Automation**
- **Propeller Levers Automation**
- **Takeoff Power Automation**
- **Hydraulic Pumps Automation**

Aural Assistance

The following automation features are available:

- **V1 Callout**
- **Speed Monitoring**
- **Decision Height**
- **Radio Altitude Callouts**
- **Automation Assistance Aural Notice**



CAUTION: SmartCopilot Aural Assistance is not available in the current version. This feature will be provided in a future update.

SIMBRIEF INTEGRATION

The Project MAX C212-200 includes SimBrief integration, allowing flight plans generated through SimBrief to be loaded easily into the aircraft's Electronic Flight Bag (EFB).

A dedicated Project MAX C212-200 aircraft profile is available in SimBrief. When creating a flight plan, select the following aircraft configuration:

- **Aircraft Type:** C212 – C-212-200 Aviocar
- **Variant or Airframe:** ProjectMAX (MSFS) – C-212-200 Aviocar

Once the flight plan has been generated, enter your SimBrief User ID in EFB → General to link the EFB to your SimBrief account. The EFB can then retrieve the active flight plan and associated flight information.

When connected to SimBrief, the My Flight page can automatically import the active flight plan and route string, together with the departure and arrival METAR data. SimBrief data is also used to populate the aircraft's Zero Fuel Weight (ZFW), payload, and fuel for flight preparation. The imported departure and arrival airports are also automatically populated on the Navigraph page, allowing the corresponding airport charts and procedures to be accessed directly from the EFB.

Note: An active SimBrief account is required to use the flight plan integration.