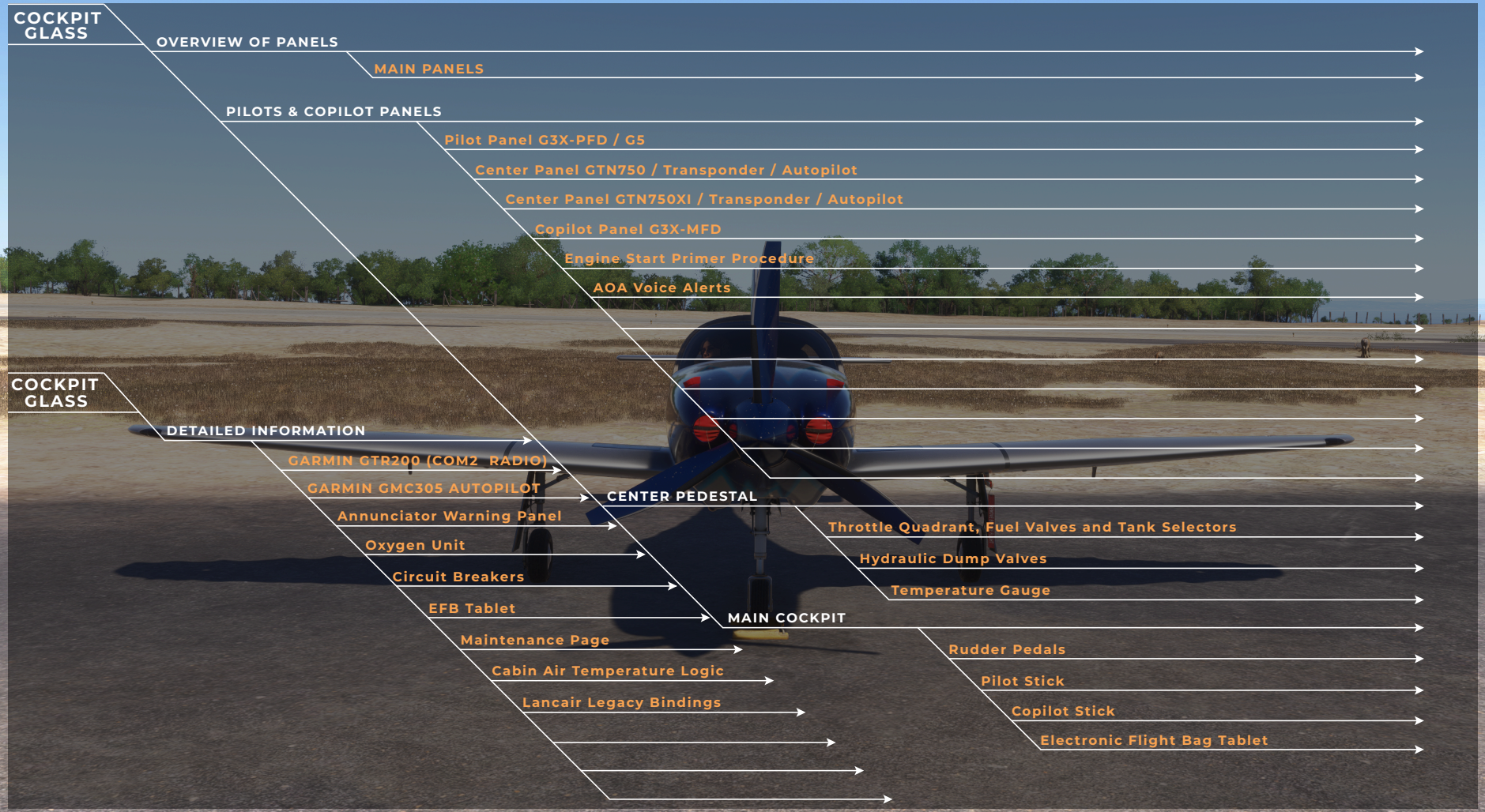
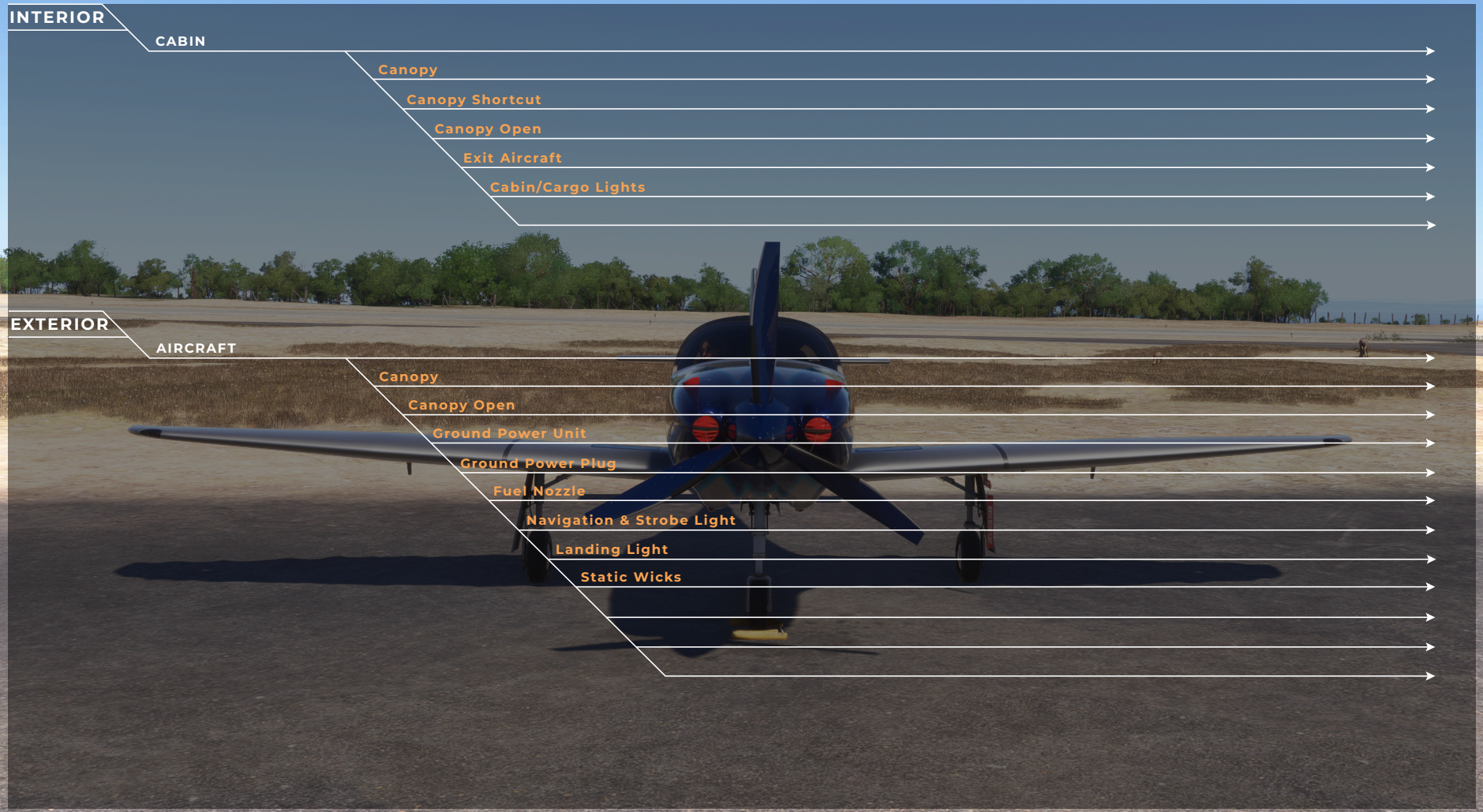
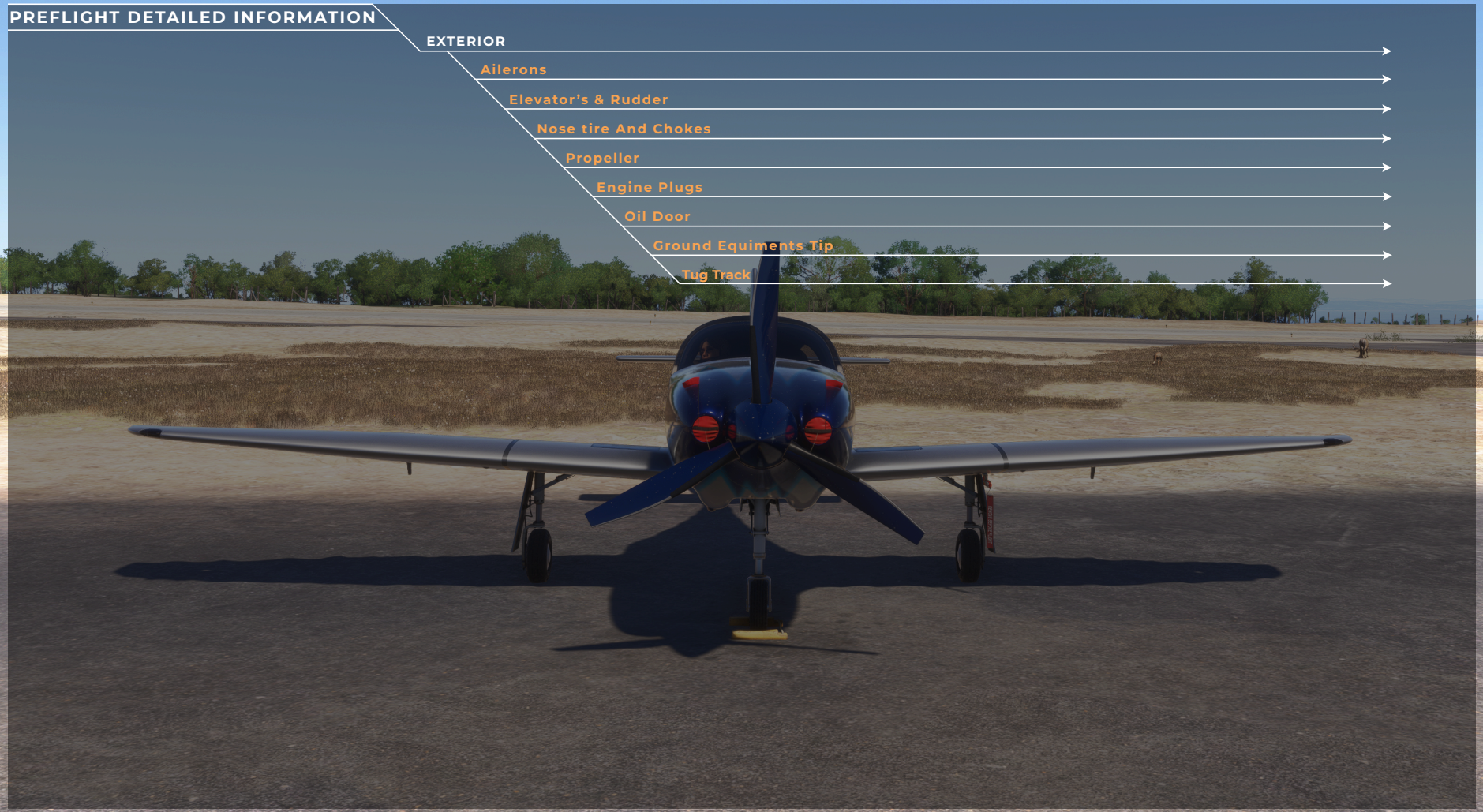
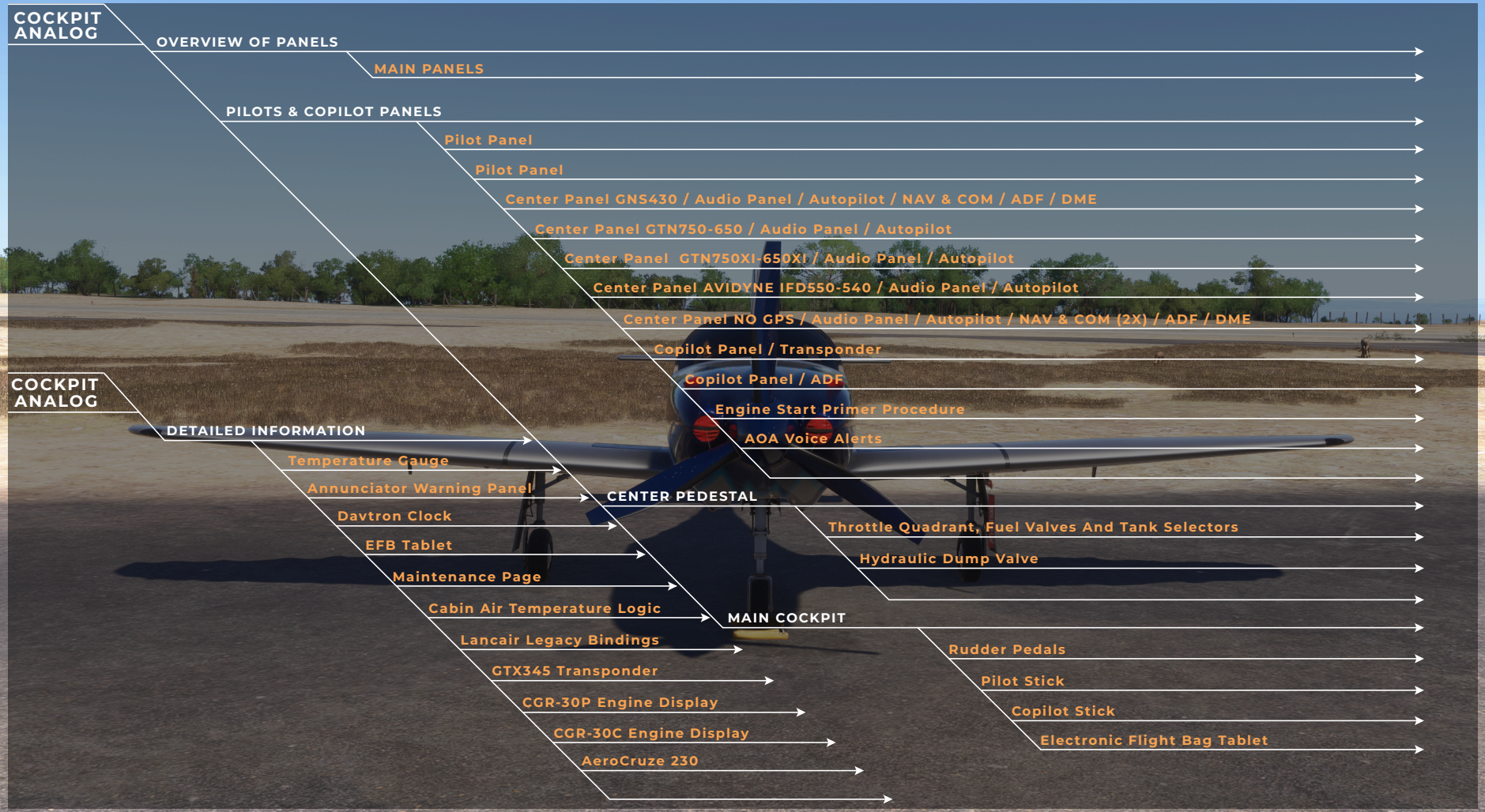

FLYSIMWARE
FLY THE VINTAGE SKIES
LANCAIR LEGACY(STARHAWK)
Version 1.8

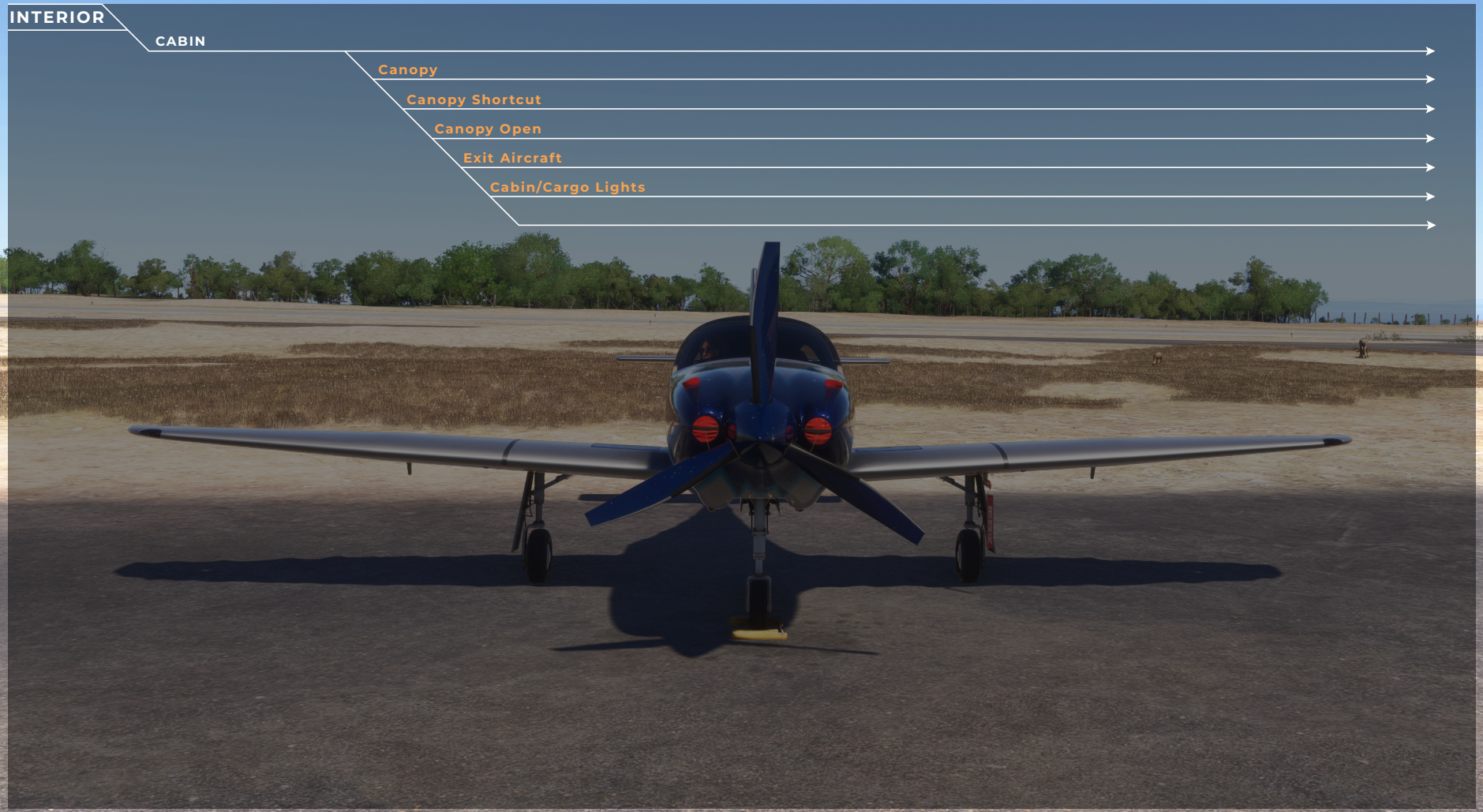

COCKPIT GLASS
OVERVIEW OF PANELS
MAIN PANELS
PILOTS & COPILOT PANELS
Pilot Panel G3X-PFD / G5
Center Panel GTN750 / Transponder / Autopilot
Center Panel GTN750XI / Transponder / Autopilot
Copilot Panel G3X-MFD
Engine Start Primer Procedure
AOA Voice Alerts
COCKPIT GLASS
DETAILED INFORMATION
GARMIN GTR200 (COM2 RADIO)
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CENTER PEDESTAL
Annunciator Warning Panel
Oxygen Unit
Circuit Breakers
EFB Tablet
MAIN COCKPIT
Maintenance Page
Cabin Air Temperature Logic
Lancair Legacy Bindings
Throttle Quadrant, Fuel Valves and Tank Selectors
Hydraulic Dump Valves
Temperature Gauge
Rudder Pedals
Pilot Stick
Copilot Stick
Electronic Flight Bag Tablet


INTERIOR
CABIN
Canopy
Canopy Shortcut
Canopy Open
Exit Aircraft
Cabin/Cargo Lights
EXTERIOR
AIRCRAFT
Canopy
Canopy Open
Ground Power Unit
Ground Power Plug
Fuel Nozzle
Navigation & Strobe Light
Landing Light
Static Wicks

PREFLIGHT DETAILED INFORMATION




COCKPIT ANALOG
OVERVIEW OF PANELS
MAIN PANELS
PILOTS & COPILOT PANELS
Pilot Panel
Pilot Panel
Center Panel GNS430 / Audio Panel / Autopilot / NAV & COM / ADF / DME
Center Panel GTN750-650 / Audio Panel / Autopilot
Center Panel GTN750XI-650XI / Audio Panel / Autopilot
Center Panel AVIDYNE IFD550-540 / Audio Panel / Autopilot
Center Panel NO GPS / Audio Panel / Autopilot / NAV & COM (2X) / ADF / DME
Copilot Panel / Transponder
Copilot Panel / ADF
Engine Start Primer Procedure
AOA Voice Alerts
COCKPIT ANALOG
DETAILED INFORMATION
Temperature Gauge
Annunciator Warning Panel
Davtron Clock
EFB Tablet
Maintenance Page
Cabin Air Temperature Logic
Lancair Legacy Bindings
GTX345 Transponder
CGR-30P Engine Display
CGR-30C Engine Display
AeroCruze 230
CENTER PEDESTAL
Throttle Quadrant, Fuel Valves And Tank Selectors
Hydraulic Dump Valve
MAIN COCKPIT
Rudder Pedals
Pilot Stick
Copilot Stick
Electronic Flight Bag Tablet


INTERIOR
CABIN
Canopy
Canopy Shortcut
Canopy Open
Exit Aircraft
Cabin/Cargo Lights

NOTE: Product support and update information can be found on Flysimware's Discord Community.

To report bugs or find solutions please locate the PRODUCT SUPPORT section!

Discord link:

https://discord.gg/WBXhEQVWma

Website:

https://flysimware.com/website2019/contact/

Avsim:

https://www.avsim.com/forums/forum/728-flysimware-forum/

LANCAIR LEGACY 10-550N (NATURALLY ASPIRATED ENGINE)

Exterior
Length: 22.4 ft
Width: 22.5 ft
Height: 8.0 ft

Interior
Two Seats
Cargo Compartment behind seats, Max 75 lbs

Operating Weights
Max T/O Weight: 2550 lb
Empty Weight: 1729 lb
Fuel Capacity: 384 lbs

Power Plant
Piston single engine
Engine Model: Continental I0-550N
Propeller 3 blades, feathering (STARHAWK ONLY)
Propeller: MT propeller MTV-9-D-C-F/CF183-50a

Range & Ceiling
8,500 ft, 75% Power, 45 Min reserve: 597nm
Eco cruise, 16,000 ft, 45% Power, 45 Min reserv: 1,002nm
Service ceiling: 18,000 ft

Runway
Takeoff run distance at Sea level: 1,254 ft
Takeoff run distance at 9,000 ft: 2,088 ft

Landing Roll out distance sea level: 1,330 ft
Landing Roll out distance 9,000 ft: 1.854 ft

Performance
Max Speed: 274 KIAS
Max level flight speed: 249 KTAS at sea level

Cruise speed at 8,500ft, 75%Power: 235 KTAS
Economy cruise,16,000 ft, 45%Power: 203 KTAS

Best climb rate at 3,000 ft: 2,313fpm
Best climb rate at 9,000 ft: 1,560 fpm

LANCAIR LEGACY TSIO 550N (TURBOCHARGED)

Exterior
Length: 22.4 ft
Width: 22.5 ft
Height: 8.0 ft

Interior
Two Seats
Cargo Compartment behind seats, Max 75 lbs

Operating Weights
Max T/O Weight: 2550 lb
Empty Weight: 1729 lb
Fuel Capacity: 384 lbs

Power Plant
Piston single engine
Engine Model: Continental TSIO-550E(Turbocharged)
Propeller 3 blades, feathering(STARHAWK ONLY)
Propeller: MT propeller MTV-9-D-C-F/CF183-50a

Range & Ceiling
16,000 ft, 75% Power, 45 Min reserve: 602nm
Eco cruise, 22,000 ft, 45% Power, 45 Min reserv: 782nm
Service ceiling: 25,000 ft

Runway
Takeoff run distance at Sea level: 1,110 ft
Takeoff run distance at 9,000 ft: 1,459 ft

Landing Roll out distance sea level: 1,330 ft
Landing Roll out distance 9,000 ft: 1.854 ft

Performance
Max Speed: 274 KIAS
Max level flight speed: 279 KTAS at 24,000 ft

Cruise speed at 16,000 ft, 75%Power: 262 KTAS
Economy cruise,22,000 ft, 45%Power: 200 KTAS

Best climb rate at 3,000 ft: 3,022fpm
Best climb rate at 9,000 ft: 2,937 fpm

Flight Sim Variant Information

1. Castering Nose gear steering & braking

- Castoring Nose Gear + Differential Braking — Use this variant if you have rudder pedals and toe brakes. This is the realistic setup: the nose wheel free-castors, and steering is controlled by applying left or right brake.

- Steering + Standard Brakes — Use the variant with the “Steering” suffix only if you do not have rudder pedals or toe brakes. This version allows nose wheel steering with a joystick twist axis and uses a standard brake button.

2. Engine Management

- 10-550N Engine - Naturally Aspirated
- TSIO-550E Engine - Turbocharged

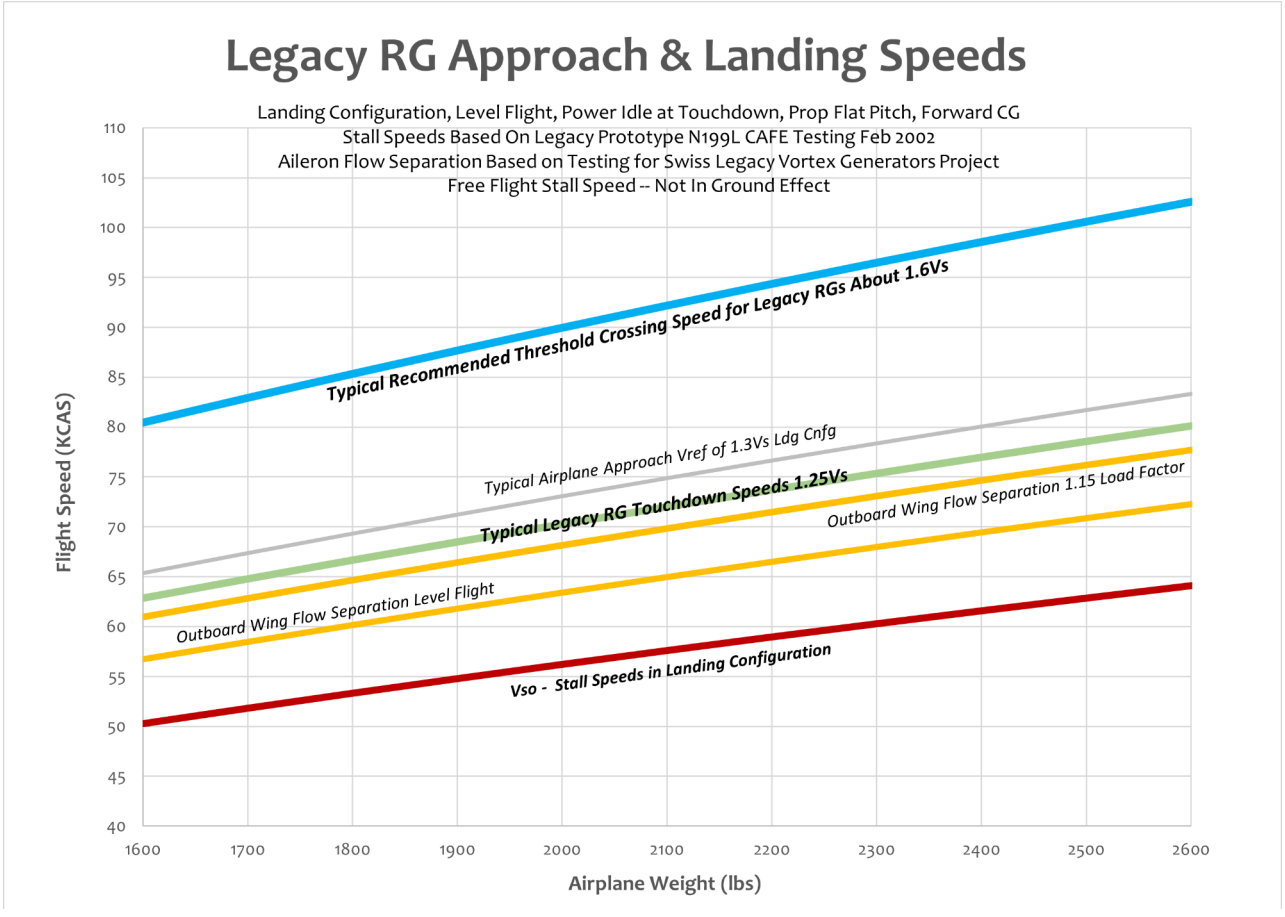
- Naturally Aspirated — If the variant name does not include “Turbo,” this is the naturally aspirated version. As you climb, manually lean the mixture to maintain the correct fuel-to-air ratio for best performance and fuel consumption.

- Turbocharged — If the variant name includes “Turbo,” this is the turbocharged version. Leave the mixture lever full forward up to the 18,000 ft critical altitude; above that, begin leaning the mixture for best fuel consumption.

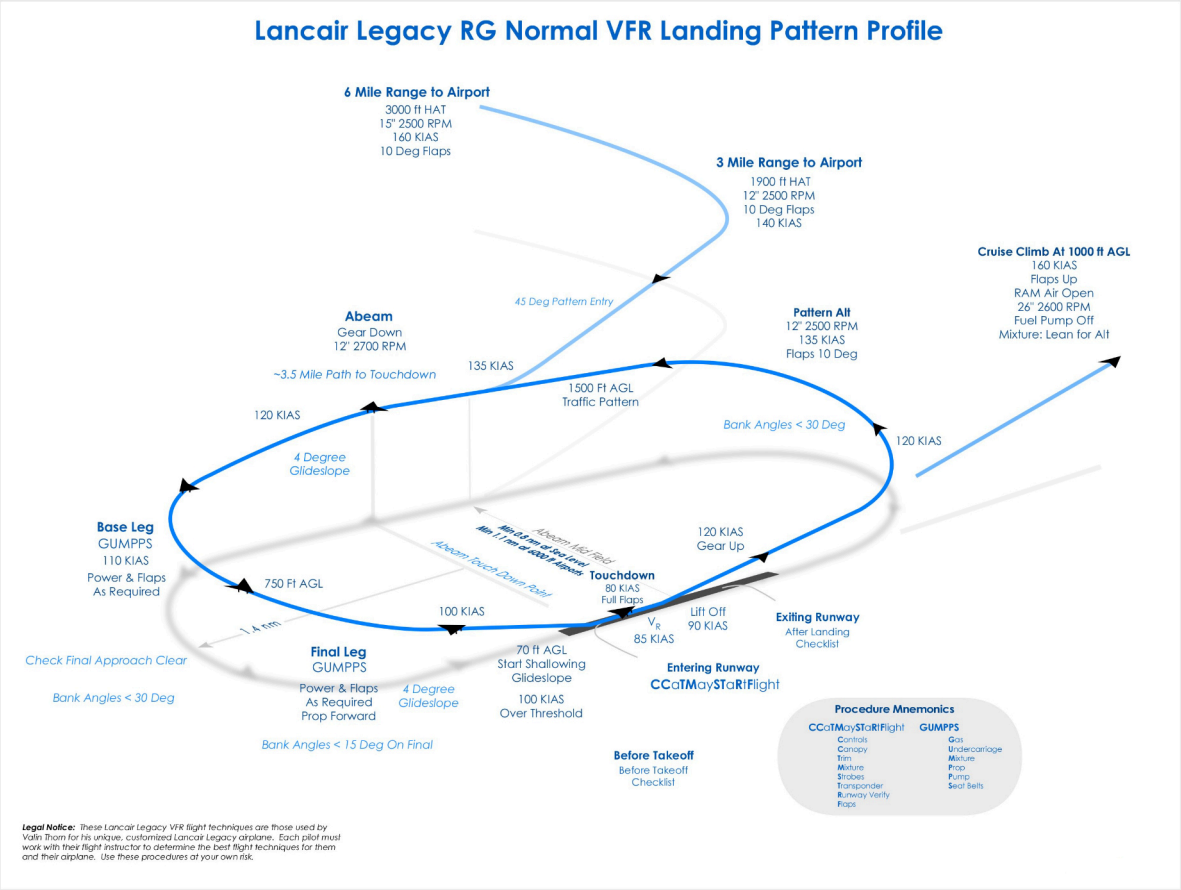
3. Propeller Feathering-Feathering is only available on the StarHawk variant

- Propeller feathering can only be activated after the prop lever has first been moved all the way back to the bottom position using either your hardware or mouse. Once the lever is fully back, you must use the mouse to grab the prop lever a second time and pull it further down into the feather range. The propeller RPM must be above 1,000 RPM for feathering to activate.

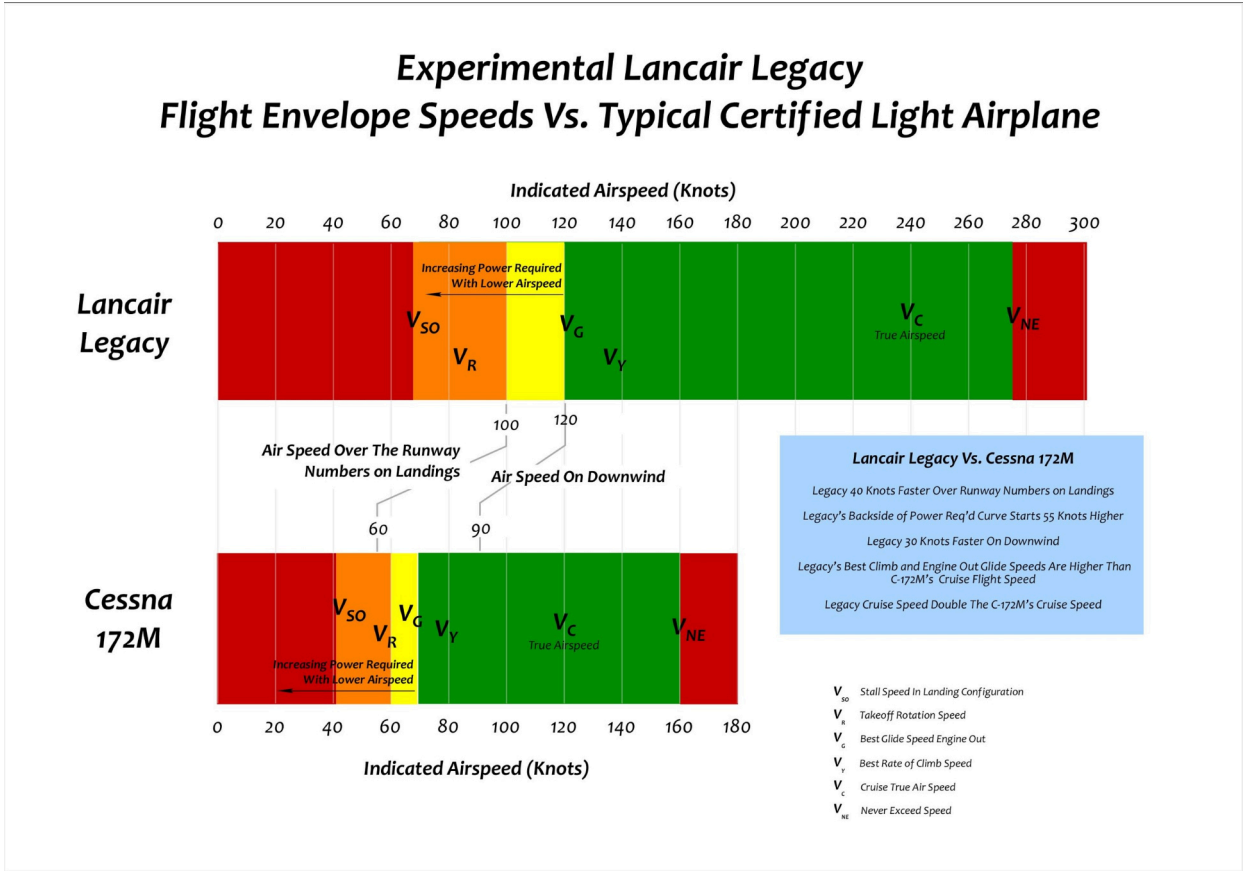
Flight Performace Data



Flight Performace Data



Flight Performace Data



TrueSim System Overview

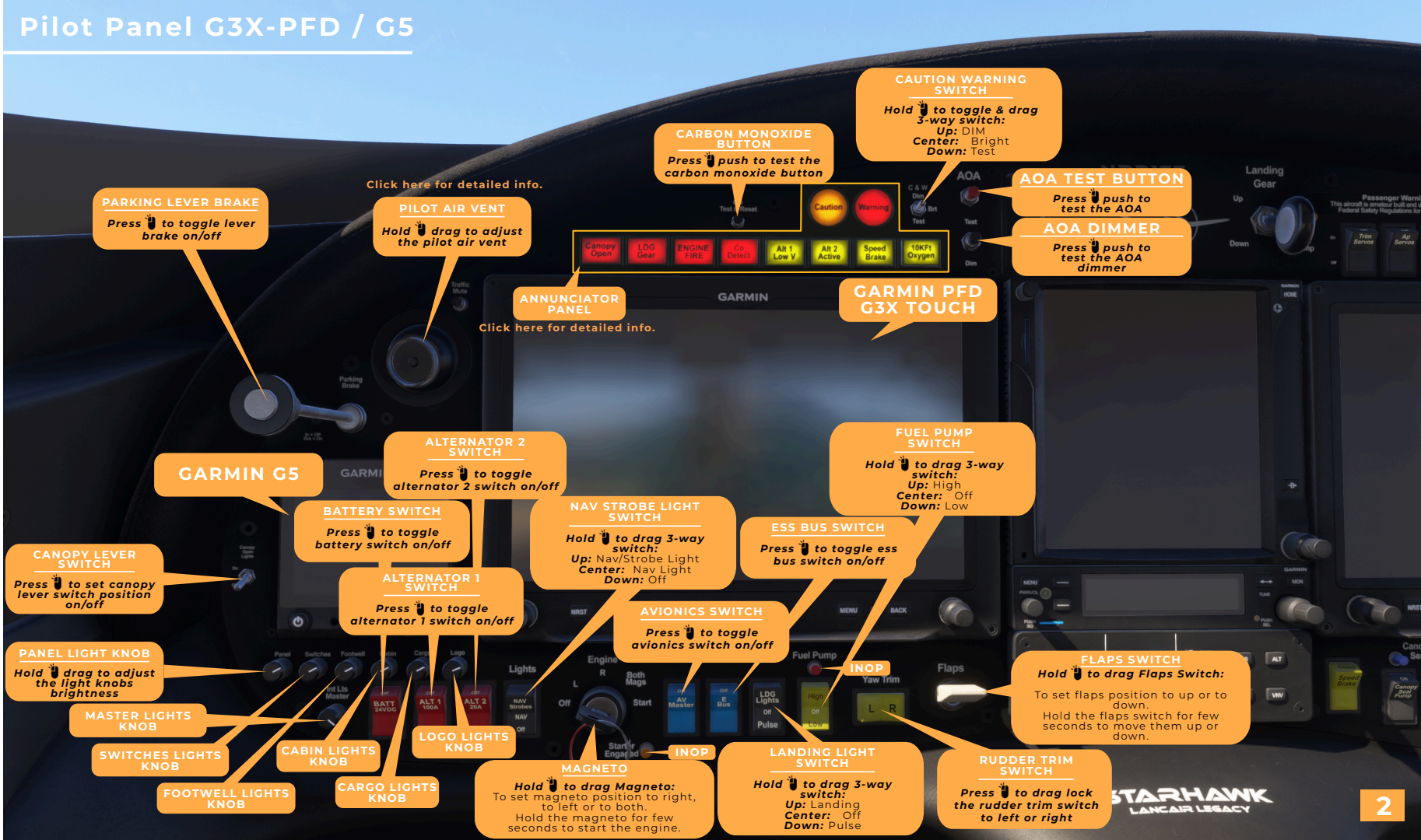
TrueSim is an advanced maintenance and wear simulation system that models the real-world aging and condition of the aircraft over time. Instead of static or purely visual effects, TrueSim continously tracks usage, environmental exposure, and operational behavior to simulate gradual system degradation. Components such as oil levels, filters, tire, and other systems will wear down naturally based on how the aircraft is operated. Factors like engine run time, ground movement, environmental conditions, and general usage all contribute to the aircraft's evolving condition, creating a more realisitc and persistent ownership experience.

The system operates seamlessly in the background during normal flight and retains its state between sessions,ensuring that the aurcraft's condition and wear is available. Maintenance features can be enabled or disabled at any time through the EFB settings, allowing users to choose between a fully simulated experience or a simplified mode depending on their preference.

MAIN PANELS



Pilot Panel G3X-PFD / G5



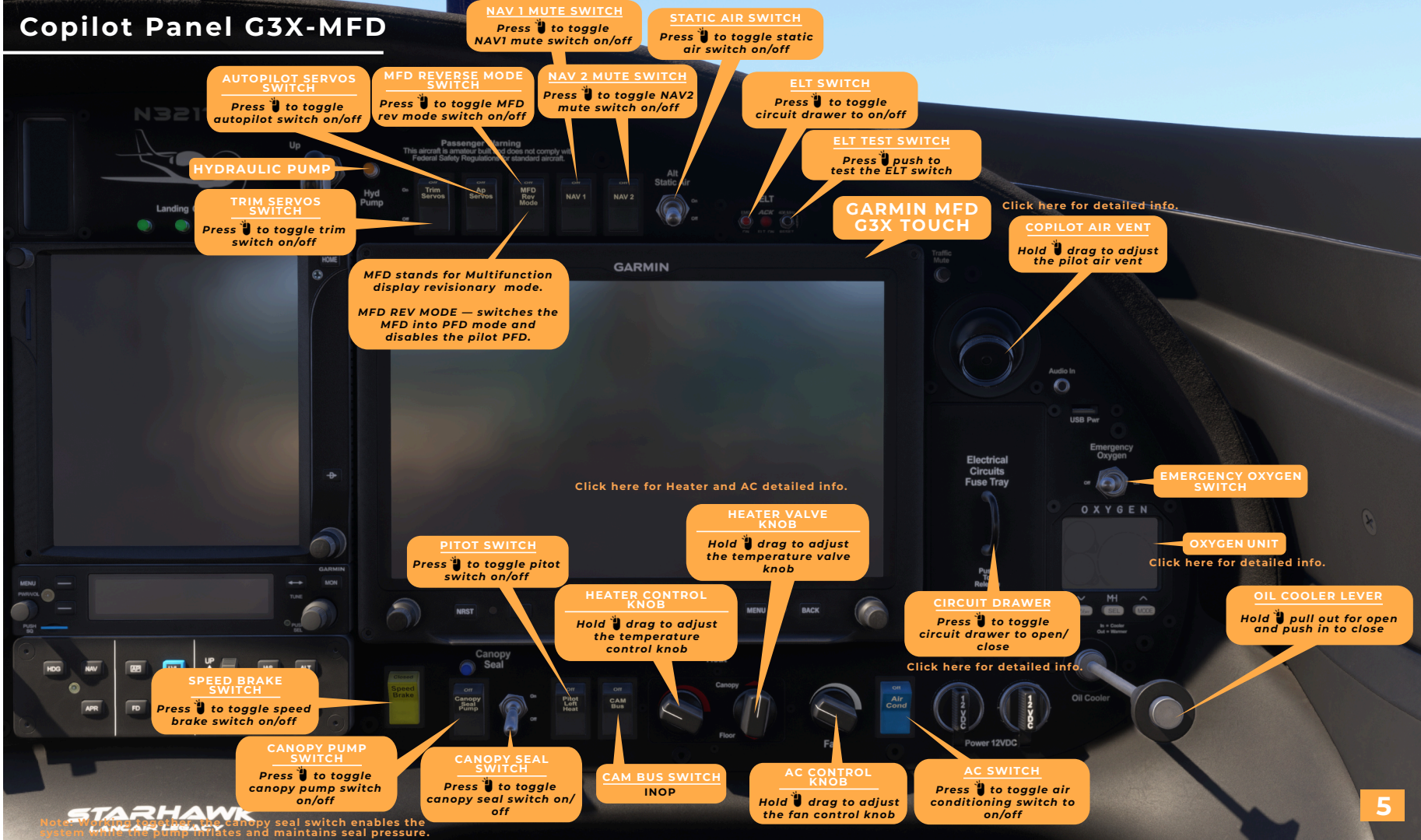
Center Panel GTN 750 / Transponder / Autopilot



Center Panel GTN 750XI / Transponder / Autopilot



Copilot Panel G3X-MFD



NAV 1 MUTE SWITCH
Press to toggle NAV1 mute switch on/off

STATIC AIR SWITCH
Press to toggle static air switch on/off

AUTOPILOT SERVOS SWITCH
Press to toggle autopilot switch on/off

MFD REVERSE MODE SWITCH
Press to toggle MFD rev mode switch on/off

NAV 2 MUTE SWITCH
Press to toggle NAV2 mute switch on/off

ELT SWITCH
Press to toggle circuit drawer to on/off

ELT TEST SWITCH
Press push to test the ELT switch

HYDRAULIC PUMP

TRIM SERVOS SWITCH
Press to toggle trim switch on/off

GARMIN MFD G3X TOUCH

Click here for detailed info.

COPILOT AIR VENT
Hold drag to adjust the pilot air vent

MFD stands for Multifunction display revisionary mode.

MFD REV MODE — switches the MFD into PFD mode and disables the pilot PFD.

Click here for Heater and AC detailed info.

HEATER VALVE KNOB
Hold drag to adjust the temperature valve knob

PITOT SWITCH
Press to toggle pitot switch on/off

HEATER CONTROL KNOB
Hold drag to adjust the temperature control knob

EMERGENCY OXYGEN SWITCH

OXYGEN UNIT
Click here for detailed info.

CIRCUIT DRAWER
Press to toggle circuit drawer to open/close

Click here for detailed info.

OIL COOLER LEVER
Hold pull out for open and push in to close

SPEED BRAKE SWITCH
Press to toggle speed brake switch on/off

CANOPY PUMP SWITCH
Press to toggle canopy pump switch on/off

CANOPY SEAL SWITCH
Press to toggle canopy seal switch on/off

CAM BUS SWITCH
INOP

AC CONTROL KNOB
Hold drag to adjust the fan control knob

AC SWITCH
Press to toggle air conditioning switch to on/off

Note: Working together, the canopy seal switch enables the system while the pump inflates and maintains seal pressure.

Engine Prime Start Procedure



Engine Cold Start Instructions:

The Lancair Legacy includes a custom engine start simulation based on engine temperature. For colder starts, the engine may require fuel pump priming and additional cranking time before it will fire.

30°F and below:
- Turn Fuel Pump high ON.
- Move the throttle above 80% for about 4 seconds.
- Turn the fuel pump OFF.
- Move the throttle between 40% and 80%.
- Crank the engine. The engine may take up to 5 seconds of cranking before it starts.

30°F to 45°F:
- Turn Fuel Pump low ON.
- Move the throttle above 80% for about 4 seconds.
- Turn the fuel pump OFF.
- Move the throttle between 40% and 80%.
- Crank the engine. The engine may take about 3.2 seconds of cranking before it starts.

45°F to 60°F:
- Move the throttle between 40% and 80%.
- Crank the engine. The engine may take about 2.5 seconds of cranking before it starts.

60°F and above:
- Use the normal engine start procedure.
- No additional priming delay is required.

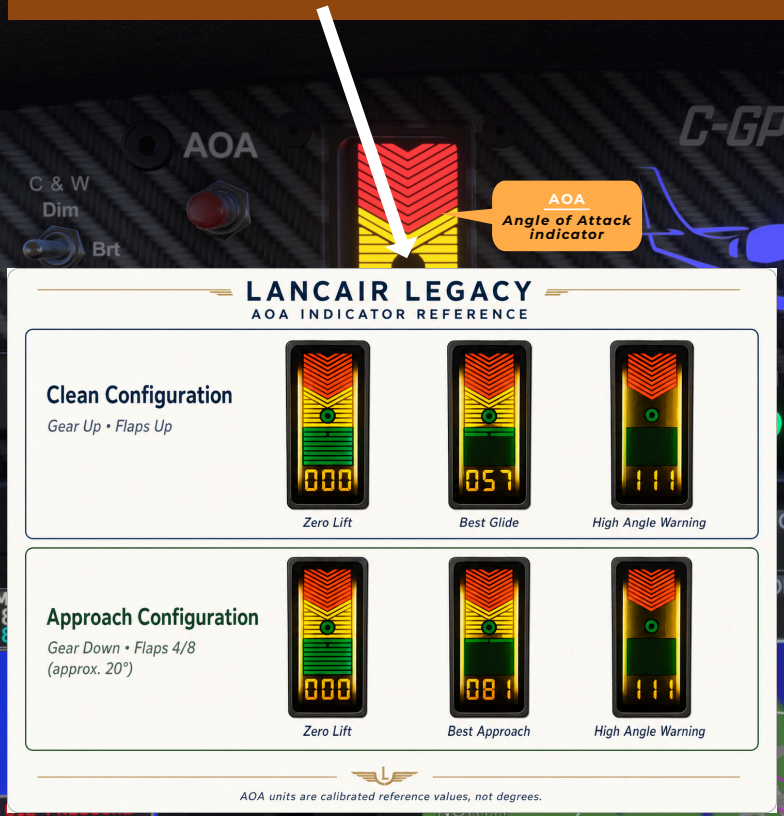
Note:
- After the engine has been running, engine temperature is used for restart behavior instead of outside air temperature.
- This feature can be enabled or disabled in the EFB.

AOA Voice Alerts

Test Button: Pushing the test button will go through some series of tests. The audio should enunciate "Angle Angle Push", "Landing Gear ", "Flaps", "AOA PASS" aural warnings.

Dim Button: Pushing the dim button, will bright/dim the AOA display unit.

Green Donut: As flaps go down the green donut in the center of the display will illuminate.



Modes of Operation

There are three modes of operation:

1. The Flight mode when the AOA Instrument is indicating AOA information and warnings and the display is moving up and down as AOA is increasing and decreasing.

2. Pressing the test mode puts the AOA Instrument through its self test.

3. This is the calibration mode. Not simulated. FSW has already calibrated this unit. Once calibrated, these units stay calibrated for life.

Aircraft Data Base Configurations

The AOA Instrument senses when the aircraft is in one of two configurations using a simple micro switch connected to the flap movement mechanism:

1. The cruise or clean configuration when the flaps are up.

2. The landing configuration when the flaps are not in the up position or in the down position for landing setting.

Voice Alerts

The Lancair Legacy includes AOA voice alerts to help remind the pilot of important landing configuration items. If the aircraft appears to be configured for landing but the landing gear is not down, the AOA system will repeat the “landing gear” voice alert.

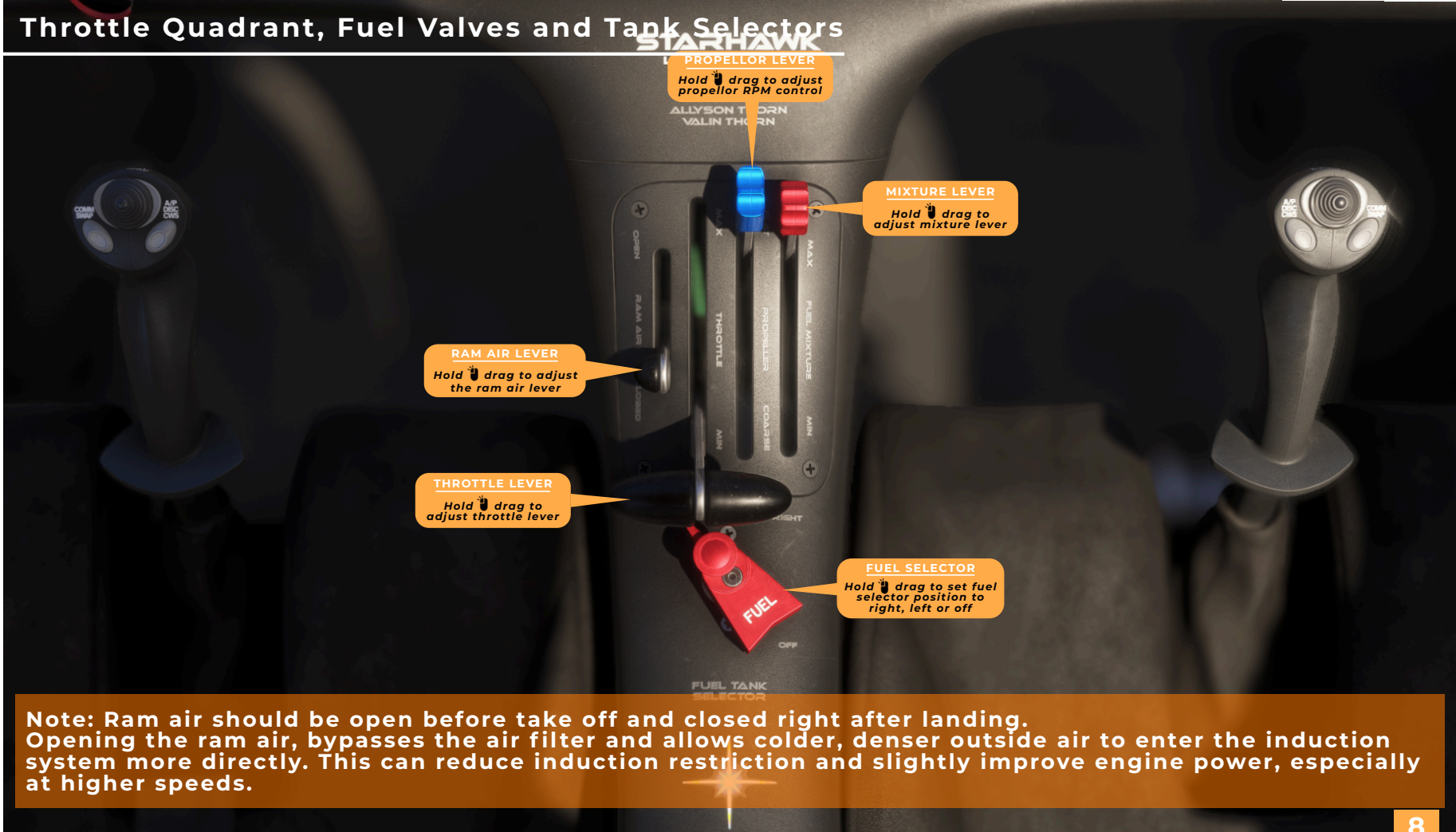
This alert may occur when:
The aircraft is in the air.
The throttle is at 50% or less.
The flaps are set to 25° or greater.
The landing gear is not down.

The AOA system also includes a takeoff configuration reminder. If the aircraft is on the ground with takeoff power applied and the flaps are not set, the system will repeat the “flaps” voice alert.

This alert may occur when:
The aircraft is on the ground.
The throttle is above 60%.
The flaps are set to 5° or less.

Note:
These alerts are helpful reminders only. Always verify the aircraft configuration using the cockpit indicators and normal checklist procedures.

Throttle Quadrant, Fuel Valves and Tank Selectors



Note: Ram air should be open before take off and closed right after landing.
Opening the ram air, bypasses the air filter and allows colder, denser outside air to enter the induction system more directly. This can reduce induction restriction and slightly improve engine power, especially at higher speeds.

Hydraulic Dump Valves



Temperature Gauge



CYCLE = 5, 10, 15, 20, 25, 30 (cycles to these timer times in minutes and also resets the timer when changing)

RESET = stops the beeping when the timer has run out and resets the timer back to the full selected time or powers the unit on.

RESET = hold for 3 seconds to power the unit off

°F / °C = toggles between Fahrenheit and Celsius (save state)

Rudder Pedals



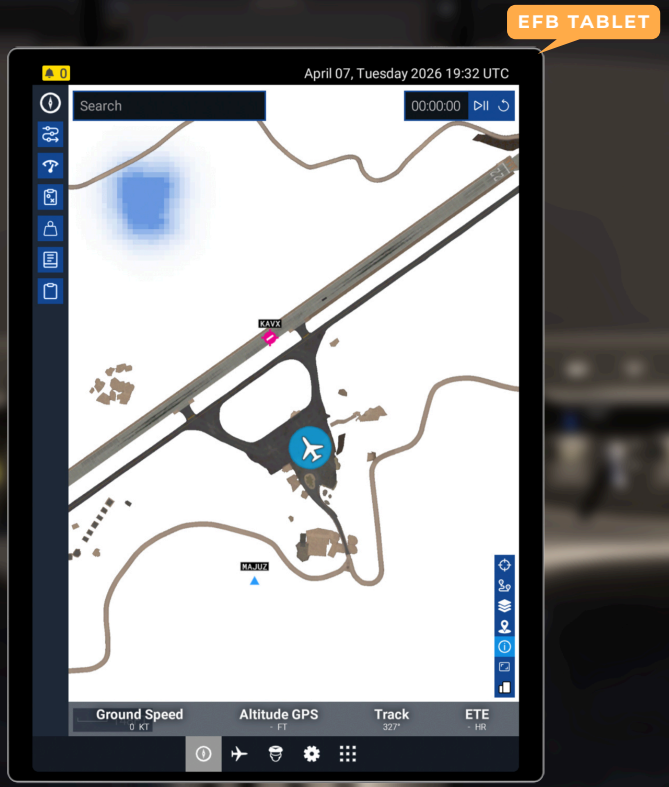
Pilot Stick


PILOT PITCH/ROLL TRIM
Hold drag the button up/down to adjust pitch trim & left/right to adjust roll trim
PILOT COMM SWITCH
Press to toggle
PILOT CWS SWITCH
Press to toggle

Copilot Stick



Electronic Flight Bag Tablet



Click for the detailed info.

Canopy


CANOPY HOTSPOT
Press to toggle canopy to open/close
Note: Make sure to click the canopy lever to unlock the canopy before clicking this hotspot
CANOPY LEVER
Press to toggle canopy lever to lock/ unlock the canopy

Canopy Shortcut



Canopy Open



Exit Aircraft



Note: This allows you to exit the aircraft but only if the canopy is already open.

Cabin / Cargo Lights



MAIN PANELS


Pilot Panel
Center Panel
LANCAIR LEGACY
Copilot Panel
C-GPHL
1200

Pilot Panel


AOA DIMMER
Press to push to test the AOA dimmer
CAUTION WARNING SWITCH
Hold to toggle & drag 3-way switch:
Up: DIM
Center: Bright
Down: Test
AOA TEST BUTTON
Press to push to test the AOA
Click here for detailed info:
PILOT AIR VENT
Hold drag to adjust the pilot air vent
LANDING GEAR SAFE LIGHTS
LANDING GEAR
Hold to set gear position up / down
PARKING LEVER BRAKE
Press to toggle lever brake on/off
PANEL LIGHT KNOB
Hold drag to adjust the light knobs brightness
FOOTWELL LIGHTS KNOB
CABIN LIGHTS KNOB
CARGO LIGHTS KNOB
SWITCHES LIGHTS KNOB
MASTER LIGHTS KNOB
BATTERY SWITCH
Press to toggle battery switch on/off
AVIONICS SWITCH
Press to toggle avionics switch on/off
FUEL PUMP SWITCH
Hold to drag 3-way switch:
Up: High
Center: Off
Down: Low
PITOT HEAT
Press to toggle ess pitot heat on/off
MAGNETO
Hold to drag Magneto:
To set magneto position to right, to left or to both.
Hold the magneto for few seconds to start the engine.
INOP
ALTERNATOR 1 SWITCH
Press to toggle battery switch on/off
NAV STROBE LIGHT SWITCH
Hold to drag 3-way switch:
Up: Nav/Strobe Light
Center: Nav Light
Down: Off
INOP
LANDING LIGHT SWITCH
Hold to drag 3-way switch:
Up: Landing
Center: Off
Down: Pulse
SPEED BRAKE
Press to toggle ess speed brake on/off
FLAPS SWITCH
Hold to drag Flaps Switch:
To set flaps position to up or to down.
Hold the flaps switch for few seconds to move them up or down.

Pilot Panel


Click here for detailed info.
ANNUNCIATOR CAUTIONS
ANNUNCIATOR WARNINGS
ALT LOW V
SPEED BRAKE
CANOPY
ENG FIRE
LDG GEAR
ASI
Airspeed Indicator
ADI
Attitude Indicator
(Vacuum Gyro)
ALT
Altitude Indicator
VOR
Course Deviation Indicator
T&B
Turn & Bank Coordinator
HSI
Horizontal Speed Indicator
(Vacuum Gyro)
VSI
Vertical Speed Indicator
RAM AIR LEVER
Hold pull out to open and push in to close
CLOCK/FLIGHT TIMER
Click here for detailed info.
CABIN HEAT/DEFROST
Hold pull out for max heat and in for low heat
AOA
AIRSPEED
KNOTS
VERTICAL SPEED
TURN COORDINATOR
2 MIN.
ENGINE
BOTH MAGS
START
OFF
RAM AIR
CABIN HEAT/ DEF

Center Panel GNS430 / PMA7000M-S / KX155 / KN62A / KR87 / KAP140



Center Panel GTN750 / GTN650 / KAP140



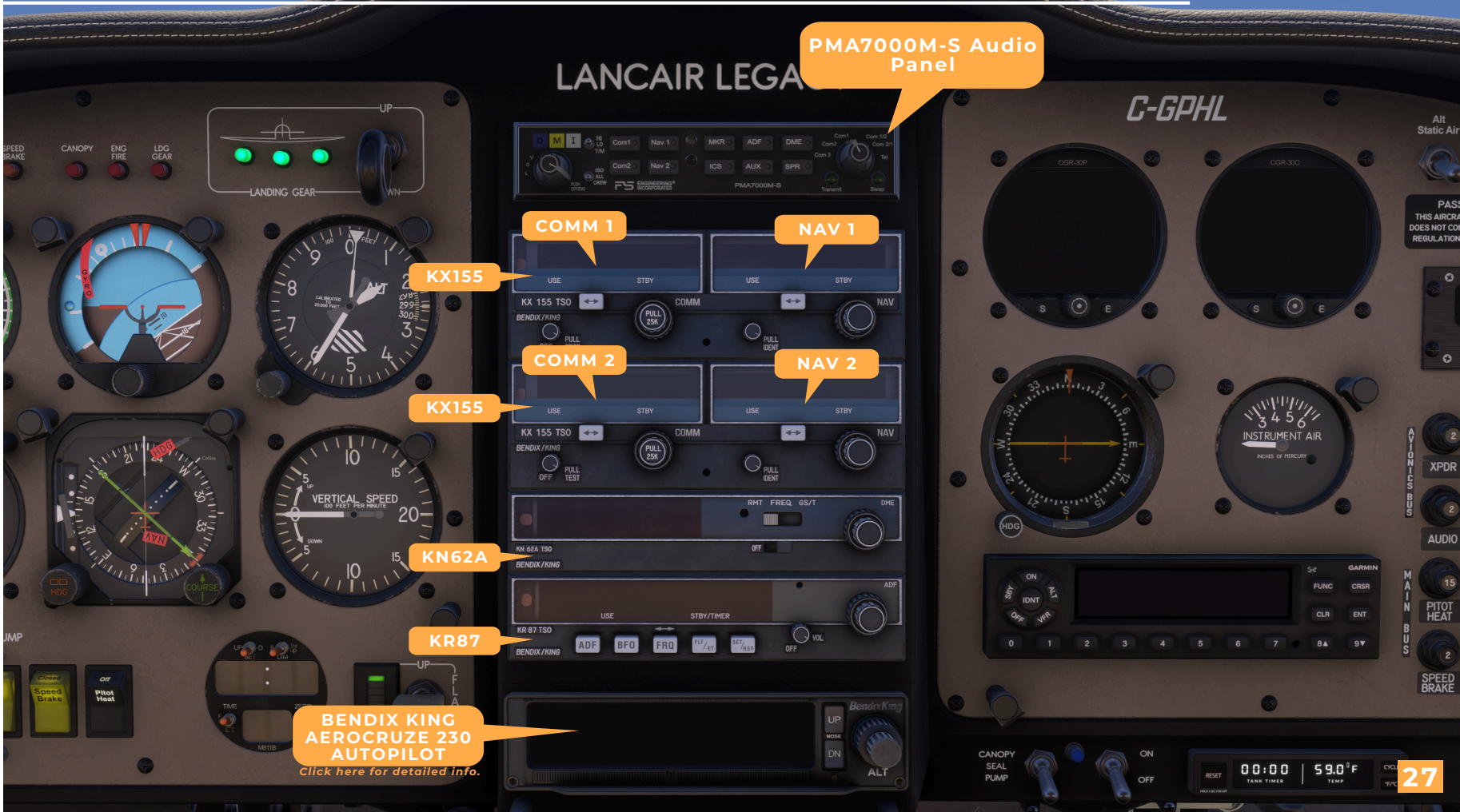
Center Panel GTN750XI/ GTN650XI / KAP140



Center Panel IFD550 / PMA7000M-S / IFD540 / KAP140



Center Panel NO GPS / PMA7000M-S / KX155 / KN62A / KR87 / KAP140



Copilot Panel / GTX345 Transponder



Copilot Panel / ADF



Engine Prime Start Procedure



Engine Cold Start Instructions:

The Lancair Legacy includes a custom engine start simulation based on engine temperature. For colder starts, the engine may require fuel pump priming and additional cranking time before it will fire.

30°F and below:
- Turn Fuel Pump high ON.
- Move the throttle above 80% for about 4 seconds.
- Turn the fuel pump OFF.
- Move the throttle between 40% and 80%.
- Crank the engine. The engine may take up to 5 seconds of cranking before it starts.

30°F to 45°F:
- Turn Fuel Pump low ON.
- Move the throttle above 80% for about 4 seconds.
- Turn the fuel pump OFF.
- Move the throttle between 40% and 80%.
- Crank the engine. The engine may take about 3.2 seconds of cranking before it starts.

45°F to 60°F:
- Move the throttle between 40% and 80%.
- Crank the engine. The engine may take about 2.5 seconds of cranking before it starts.

60°F and above:
- Use the normal engine start procedure.
- No additional priming delay is required.

Note:
- After the engine has been running, engine temperature is used for restart behavior instead of outside air temperature.
- This feature can be enabled or disabled in the EFB.

AOA Voice Alerts

Modes of Operation

There are three modes of operation:

1. The Flight mode when the AOA Instrument is indicating AOA information and warnings and the display is moving up and down as AOA is increasing and decreasing.

2. Pressing the test mode puts the AOA Instrument through its self test.

3. This is the calibration mode. Not simulated. FSW has already calibrated this unit. Once calibrated, these units stay calibrated for life.

Aircraft Data Base Configurations

The AOA Instrument senses when the aircraft is in one of two configurations using a simple micro switch connected to the flap movement mechanism:

1. The cruise or clean configuration when the flaps are up.

2. The landing configuration when the flaps are not in the up position or in the down position for landing setting.

Voice Alerts

The Lancair Legacy includes AOA voice alerts to help remind the pilot of important landing configuration items. If the aircraft appears to be configured for landing but the landing gear is not down, the AOA system will repeat the “landing gear” voice alert.

This alert may occur when:
The aircraft is in the air.
The throttle is at 50% or less.
The flaps are set to 25° or greater.
The landing gear is not down.

The AOA system also includes a takeoff configuration reminder. If the aircraft is on the ground with takeoff power applied and the flaps are not set, the system will repeat the “flaps” voice alert.

This alert may occur when:
The aircraft is on the ground.
The throttle is above 60%.
The flaps are set to 5° or less.

Note:
These alerts are helpful reminders only. Always verify the aircraft configuration using the cockpit indicators and normal checklist procedures.



Test Button: Pushing the test button will go through some series of tests. The audio should enunciate "Angle Angle Push", "Landing Gear ", "Flaps", "AOA PASS" aural warnings.

Dim Button: Pushing the dim button, will bright/dim the AOA display unit.

Green Donut: As flaps go down the green donut in the center of the display will illuminate.

Throttle Quadrant, Fuel Valves and Tank Selectors



Hydraulic Dump Valves



Rudder Pedals



Pilot Stick


PILOT PITCH/ROLL TRIM
Hold drag the button up/down to adjust pitch trim & left/right to adjust roll trim
PILOT COMM SWITCH
Press to toggle
PILOT CWS SWITCH
Press to toggle
COMM SWAP
A/P DISC CWS
RAM AIR
THROTTLE
FUEL
AILERON TRIM
RUDDER
L R

Copilot Stick



Electronic Flight Bag Tablet



Click for the detailed info.

Canopy


CANOPY HOTSPOT
Press to toggle canopy to open/close
Note: Make sure to click the canopy lever to unlock the canopy before clicking this hotspot
CANOPY LEVER
Press to toggle canopy lever to lock/ unlock the canopy

Canopy Shortcut



Canopy Open


CANOPY HOTSPOT
Press to toggle canopy to open/close
EXPERIMENTAL

Exit Aircraft



Cabin / Cargo Lights



Canopy



Click on this decal to raise and lower the canopy

Note: These decals are just a toggle.

Clicking the door handle unlatches or latches the door

Note: Clicking on the hotspot shows you raise/lower canopy options.

Canopy Open



Turn on the cabin lights during night time, to enter the aircraft.

Note: Clicking on the decal 'raise and lower' will display this new decal labelled 'enter aircraft and canopy light switch'. Click this decal to enter the aircraft.

Note: These decals are just a toggle.

Ground Power Unit



Access this GPU from the EFB Tablet.

GPU Power Plug



The bulbs light up based on the battery voltage.

- Red illuminates when the battery voltage is below 24.8V
- Amber illuminates between 24.8–25.3V
- Green illuminates above 25.3V

Fuel Nozzle



Use the stock EFB to call the custom or the default ATC fuel truck.

Navigation & Strobe Light



Navigation & Strobe Light



Landing Light



Static Wicks



Ailerons



1. Check both ailerons by moving them up and down.
2. They should be move freely with no resistance.

Elevator’s & Rudder



1. Check both elevator’s and a rudder by moving them up and down and left to right simultaneoulsy.
2. They should be move freely with no resistance.

Nose Tire & Chokes



Propeller



Compression Resistance: Move the propeller back and forth quickly, then quickly release the mouse. The propeller will return to a centered position between the compression peaks of the pistons, allowing you to feel the engine's compression resistance.

Hand-Starting Simulation: On the left propeller, slowly move the mouse downward. This will rotate the propeller through the compression stroke and past a piston's Top Dead Centre (TDC), simulating the action of manually hand-starting the engine.

A fully simulated propeller system recreates realistic propeller rotation, including engine compression and resistance

Realistic engine and propeller physics account for hand-cranking, starter cranking, inertia, compression, and shutdown behavior.

Engine Plugs



1. Remove engine plugs.
2. No foreign objects left behind after removal.

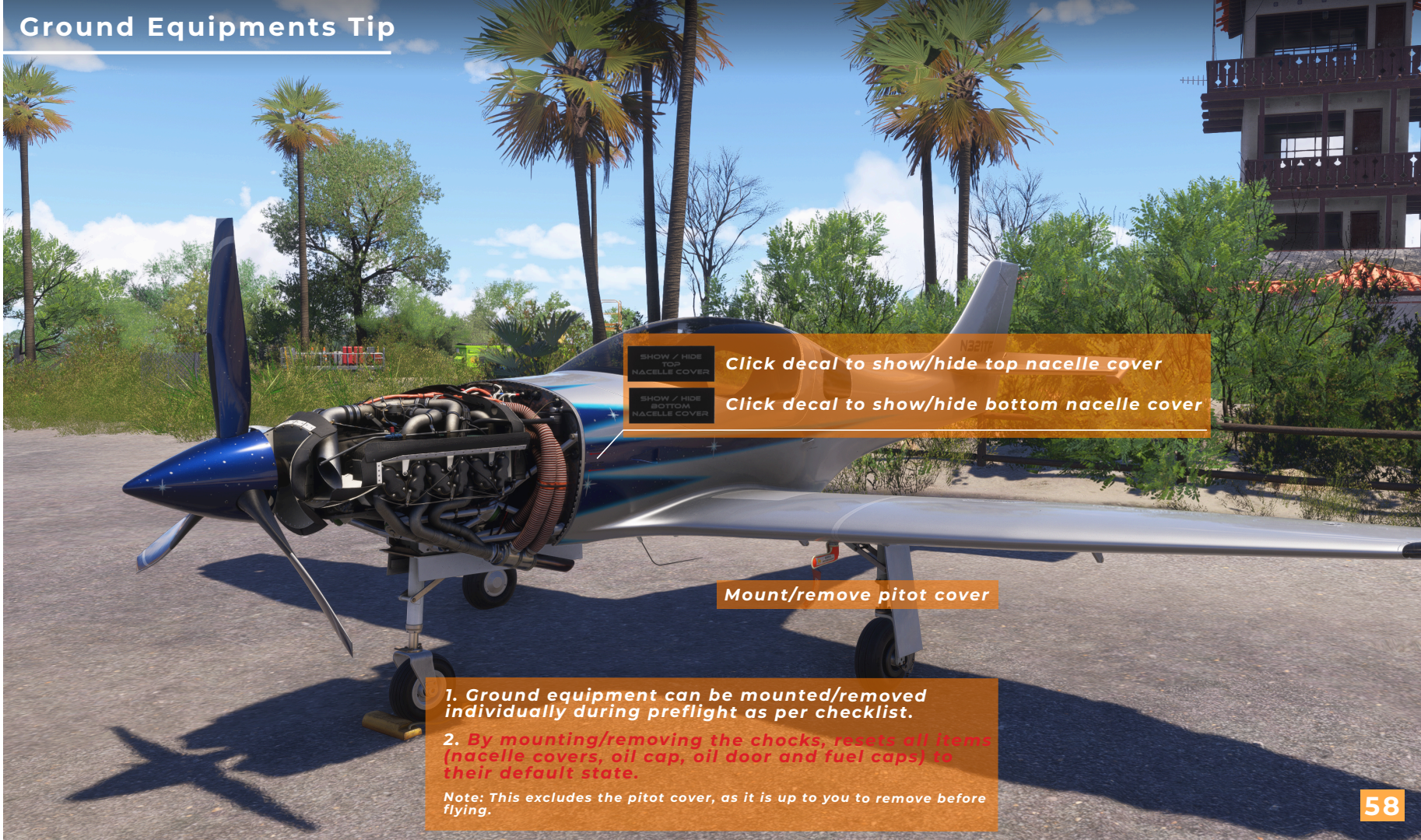
Oil Door



1. Open the oil access door to check the engine oil level during preflight.
2. Ensure the oil quantity is within the recommended range and the cap is securely fastened.

Check EFB maintenance page for oil levels.

Ground Equipments Tip



1. Ground equipment can be mounted/removed individually during preflight as per checklist.

2. By mounting/removing the chocks, resets all items (nacelle covers, oil cap, oil door and fuel caps) to their default state.

Note: This excludes the pitot cover, as it is up to you to remove before flying.

Tug Track



Tug Track can be operated using the included remote, with full mouse interaction.

Controller bindings are available through the EFB, allowing you to operate the Tug Track using a PS5, Xbox, or joystick controller.

Tug Track Instructions:

1. Open the Tug Track Remote
Click the Tug Track Icon in the top UI.

2. Power On
Press the Power button on the remote to spwan the Tug Track 6 ft in front of the aircraft tire.

3. Position the Aircraft Tire
Move the aircraft so the nose tire is centered on the Tug Track.

4. Lock the Tire
Use the Lock switch on the remote to secure the tire.

5. Move the Aircraft
Use the remote to drive the Tug Track and move the aircraft wherever you want.

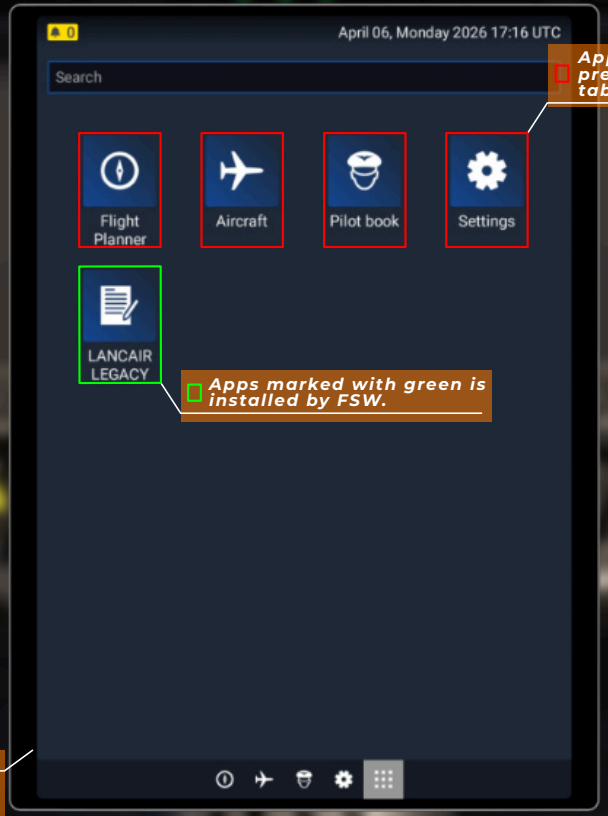
Circuit Breakers

These are the circuit fuses; if a fuse blows, it will illuminate for easy identification. If a blown fuse is suspected, you can open the circuit breaker panel or check the EFB Failure Page to diagnose the issue. You can also click on the illuminated fuse to replace it with a new one.



Return

EFB Tablet Detailed Info.



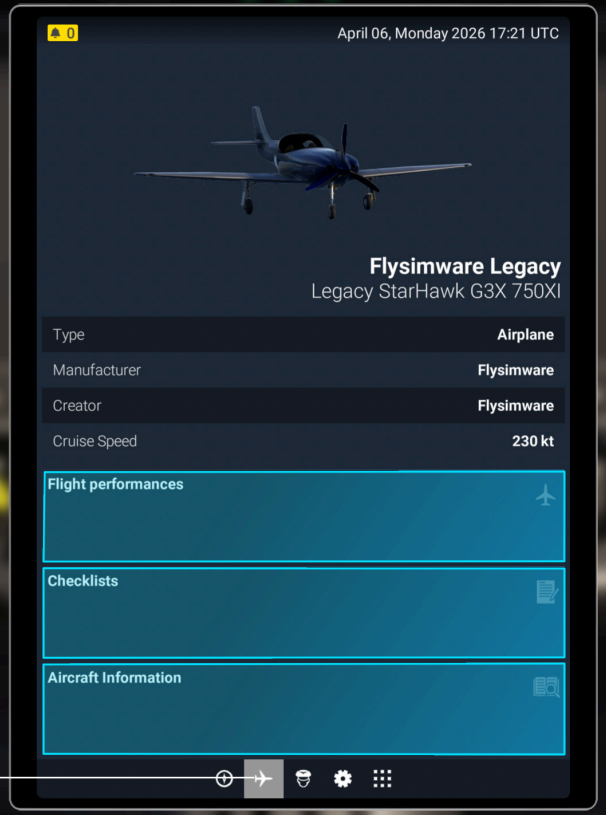
Apps marked with red are pre- installed on the tablet.

Apps marked with green is installed by FSW.

Note: "We have reported a bug to Asobo that viewing the pages in the bezel is lower quality than the widget. It is our recommendation to use the widget or the pop-out and place it on anothe monitor for high quality display."

Return

EFB Tablet Detailed Info.

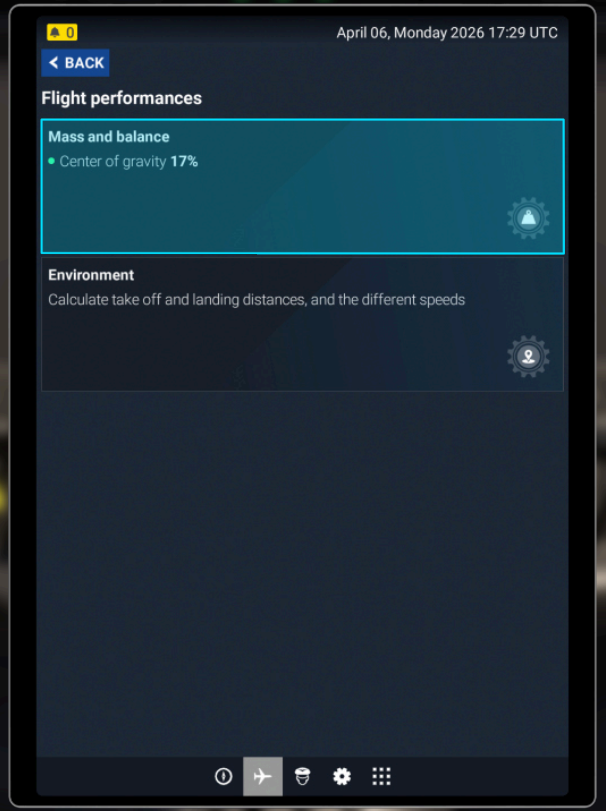


Aircraft

The Aircraft page is organized into three main categories:
-Flight Performance (including Mass and Balance and Environment submenus)
-Checklists (available in Standard, Advanced, and Expert levels)
-Aircraft Information (providing reference data specific to the airframe)

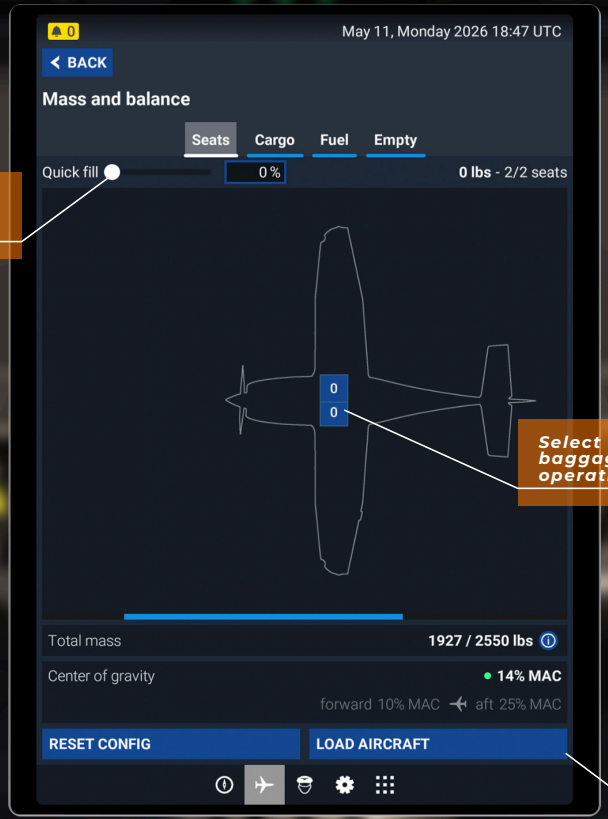
Return

EFB Tablet Detailed Info.



Return

EFB Tablet Detailed Info.



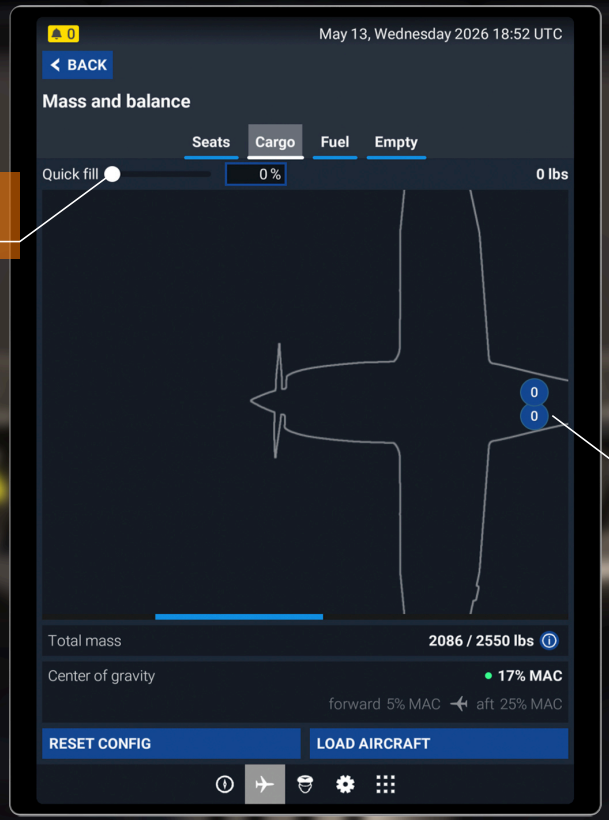
Use Quick Fill to set weight for characters.

Select seat positions to assign passengers and baggage, adjusting loads according to operational weight requirements.

Once weight requirements are confirmed, select Load Aircraft to apply passenger and baggage loading to the aircraft

Return

EFB Tablet Detailed Info.



Use Quick Fill to set weight for luggage.

In the Cargo section, select the desired cargo options to allocate baggage in accordance with load requirements

Return

EFB Tablet Detailed Info.

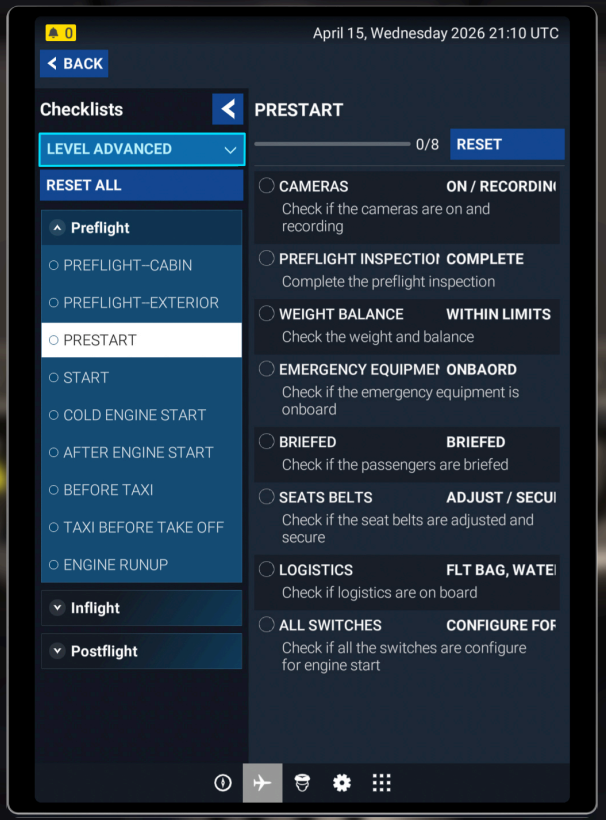
Use Quick Fill to set weight for fuel.

Set fuel quantities in accordance with mission and operational requirements.



Return

EFB Tablet Detailed Info.



LEVEL STANDARD

Select the checklist level to access Standard, Advanced, or Expert options.
Note: Use level standard as we do not offer any other levels of standard.



Return

EFB Tablet Detailed Info.

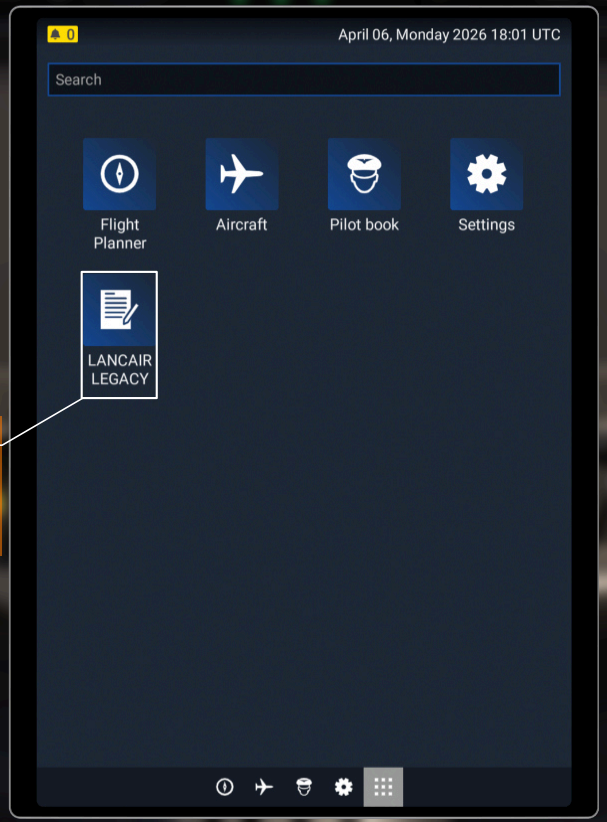
AIRCRAFT INFORMATION

The Aircraft Information page provides essential reference data about the aircraft's capabilities and configuration



Return

EFB Tablet Detailed Info.



LANCAIR LEGACY OPTIONS

A dedicated menu for adjusting the Lancair's Legacy customization, realism settings, optional equipment, and performance configurations.

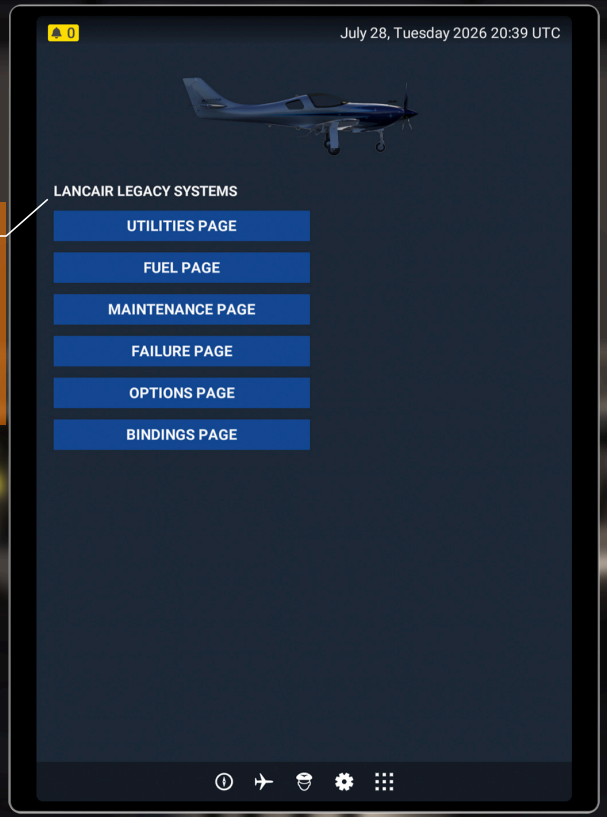
Return

EFB Tablet Detailed Info.

LANCAIR LEGACY SYSTEMS

This section gives you access to all Lancair Legacy app pages. After opening any page, use the Go Back button to return to this main menu.

If you navigate anywhere outside the Lancair Legacy app without exiting the page you were on, the next time you open the Lancair Legacy app it will automatically return to that same page.The only way to get back to this menu is by using the Go Back button.

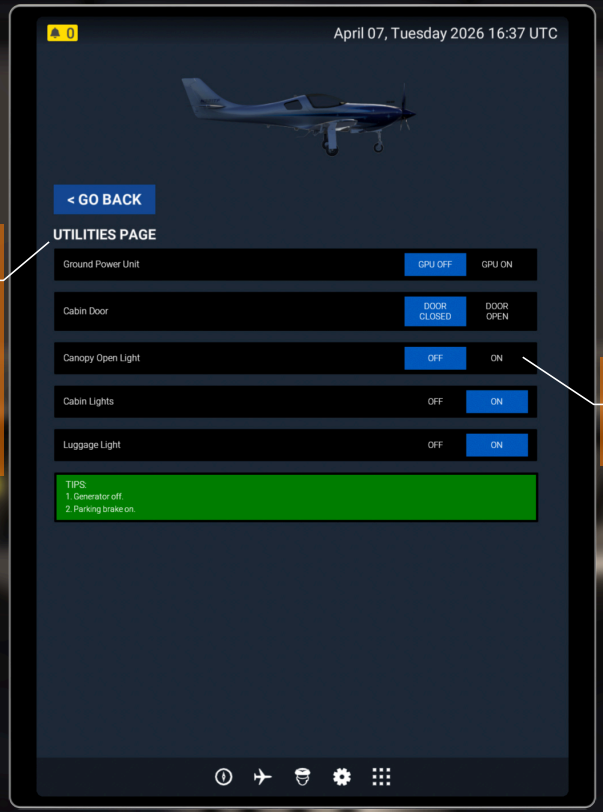


Return

EFB Tablet Detailed Info.

UTILITIES PAGE

The Utilities Page allows you to control essential aircraft functions for ground operations and pre-flight setup. In addition to GPU access, you can manage the cabin door for passenger entry, toggle canopy and cabin lights for visibility, and control the luggage light for loading operations. These options help ensure the aircraft is properly prepared, safe, and ready before departure.

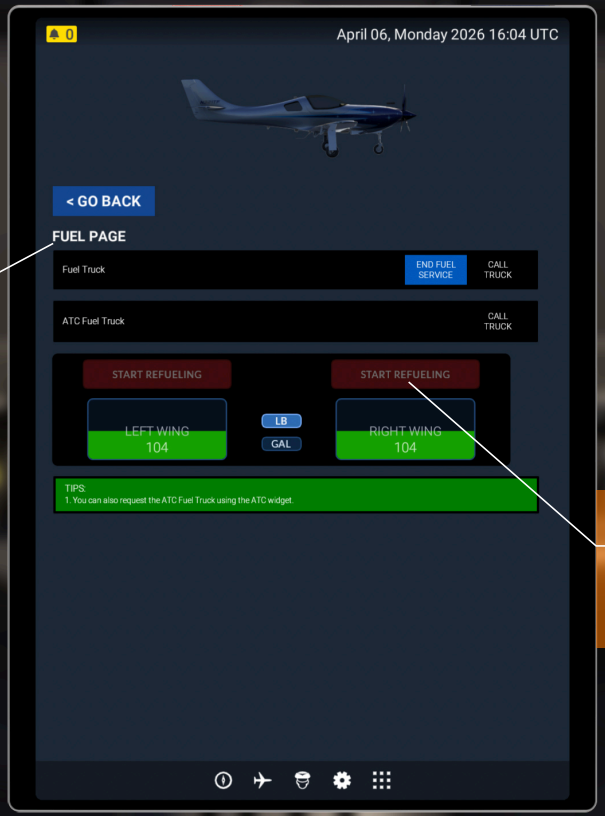


CANOPY OPEN LIGHT

Note: The canopy switch in the utilities does not show in the analog panels

Return

EFB Tablet Detailed Info.



FUEL PAGE

The Fuel Page allows you to manage fuel loading and monitor the Lancair's Legacy complete fuel system. You can request a fuel truck, end fuel service, or call the ATC fuel truck directly from the EFB—and also request it through the ATC widget as an alternative. Fuel quantities can be displayed in either pounds or gallons based on your preference.

Fueling

Click the red start fueling button(s) to fuel for one tank or click both for fueling both tanks.

Red indicates not fueling.

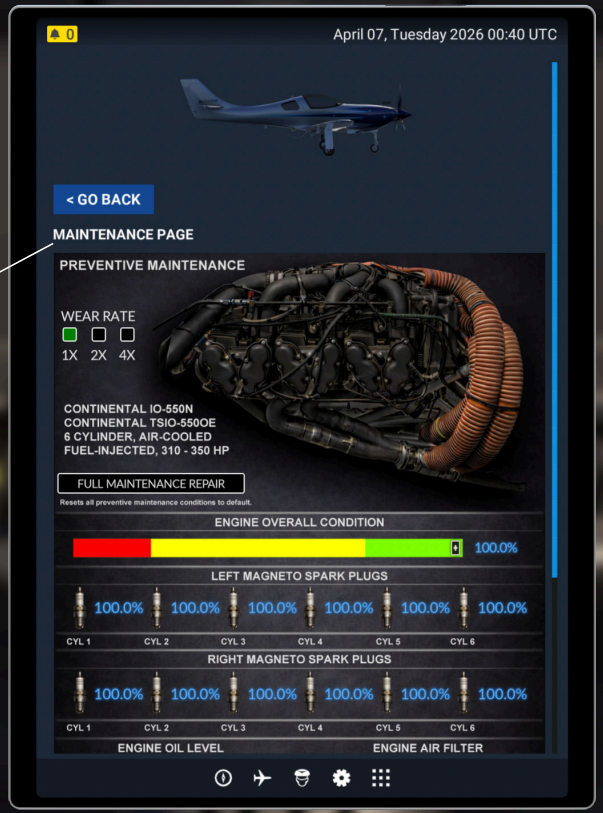
Return

EFB Tablet Detailed Info.

MAINTENANCE PAGE

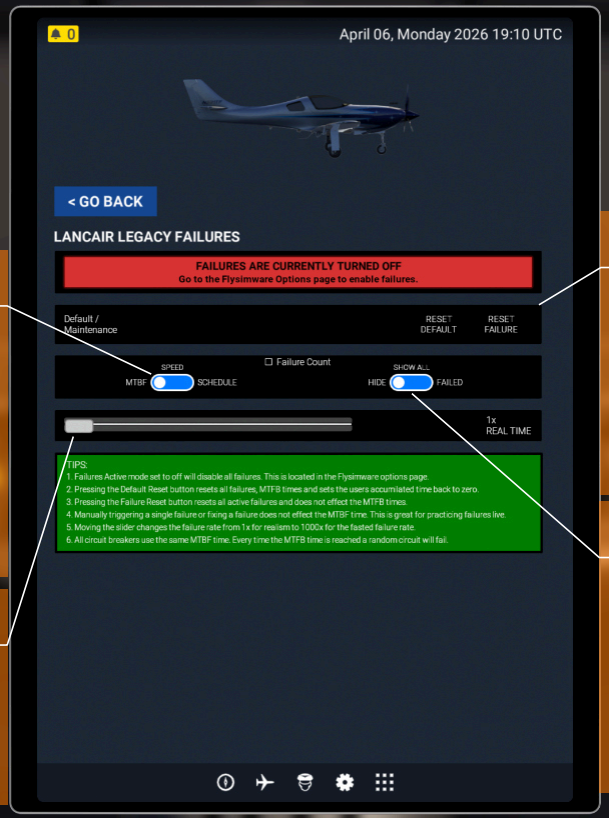
The Maintenance Page is powered by Flysimware's TrueSim system. TrueSim simulates real world wear, aging and system degradation over time. This feature can be turned ON/OFF in the EFB settings.

Click here for detailed info.



Return

EFB Tablet Detailed Info.



MTBF/SCHEDULE MODE

The Failures Page for the Lancair Legacy lets you choose how failures are generated using the MTBF/Speed/Scheduled mode switch. In MTBF mode (Mean Time Between Failures), systems fail automatically over time based on their reliability settings and the current time scale. In Speed mode, failures will occur above indicated speed or between a speed range, so for example, an engine failure can be set to fail at V1 to simulate a V1 engine failure. In Scheduled mode, you instead script specific failures to occur within a defined time window, which is ideal for training, testing, and repeatable scenarios.

SLIDER

The real-time slider is only active in MTBF mode and lets you accelerate failure progression from 1× up to 1000×; it is completely disabled in Scheduled mode. At 1000×, for example, a failure that would normally occur after 1000 MTBF hours will now show up after just 1 hour of real time.

DEFAULT/MAINTENANCE

The Default Maintenance section is where you service the aircraft's failure system. Reset Failure simply fixes all current failures at once, whether you're in flight or on the ground, without touching any of your accumulated MTBF time. Reset Default is more drastic: pressing it shows a temporary confirmation button for five seconds, and if you confirm, the MTBF time is reset to defaults and the user's accumulated time is reset back to zero, clearing all stored wear that normally carries over between flights.

FAILURE DISPLAY MODE

The three-way display switch (Hide / Show All / Failed) works in both MTBF/Speed/Scheduled modes and controls which failures appear in the list. Hide removes the list so you can treat the aircraft realistically and deal with problems through normal procedures and maintenance reset instead of watching them on screen, Show All reveals every failure so you can monitor MTBF, Speed or Scheduled modes. The Failed switch position only displays currently listed failures.

Return

EFB Tablet Detailed Info.

FAILURE

In MTBF mode, the Failure column shows the exact name of each failure along with its default MTBF hours. You can use the plus and minus controls to increase or decrease those hours for each item; these adjustments are saved for future flights, and clicking directly on the hours restores that failure's MTBF value to its default.

FAILURE TYPE

The Failure Type column shows which system each item belongs to, such as hydraulic, pneumatic, engine, or circuit breaker, so you can immediately see what part of the aircraft a given failure affects.



CATEGORY FILTER

The filters buttons (HYD, PNEU, ENG, ELEC, LTS, DE-ICE, CB) display (Failure Type) categories. Each filter button will display green to show and red to hide for that specific category.

STATUS

In MTBF mode, the Failure column shows the exact name of each failure along with its default MTBF hours. You can use the plus and minus controls to increase or decrease those hours for each item; these adjustments are saved for future flights, and clicking directly on the hours restores that failure's MTBF value to its default.

Return

EFB Tablet Detailed Info.

FAILURE

In Scheduled mode, the Failure column shows the failure name together with its Start and Range times, which you set in five-minute increments to define when the failure may occur. The plus and minus controls for Start and Range are linked for convenience: if you press minus on Range while it is within five minutes of Start, the Start is lowered automatically, and if you press plus on Start while it is within five minutes of Range, the Range is increased automatically, so you don't have to keep adjusting both values by hand.

FAILURE TYPE

The Failure Type column shows which system each item belongs to, such as hydraulic, pneumatic, engine, or circuit breaker, so you can immediately see what part of the aircraft a given scheduled event affects.



STATUS

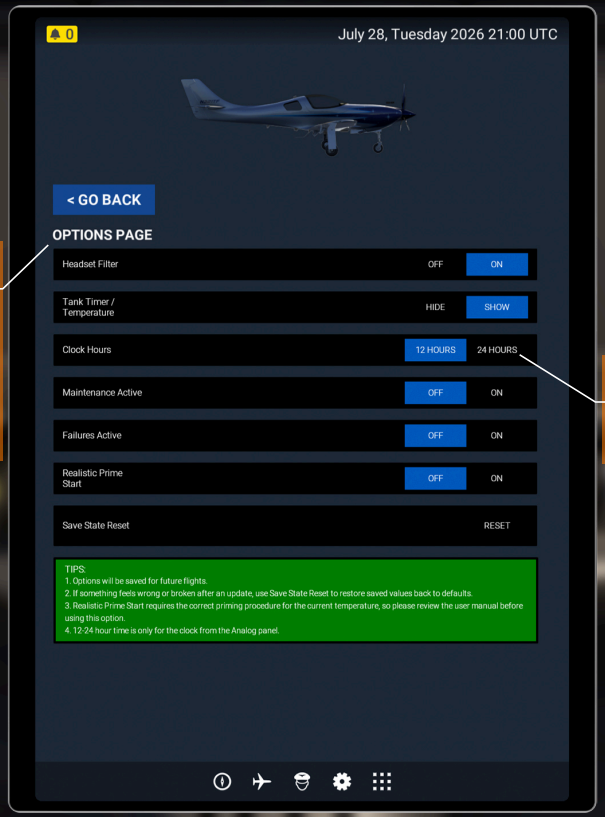
In Scheduled mode, the Status column is used to arm and clear scripted failures. It shows Arm when the failure is ready to be scheduled, and once the event has occurred the status changes to Failed in red; clicking it again clears the failure and returns the status to Arm so you can reuse the same setup.

Return

EFB Tablet Detailed Info.

OPTIONS PAGE

The Options Page allows you to configure key aircraft behaviors and system settings. You can enable Maintenance Mode or activate Failures to access and adjust their respective settings pages. These options let you customize the level of realism, from controlled testing to full system simulation, and all changes are saved automatically for future flights.



CLOCK HOURS

Note: Clock hours option is only available in the analog panel versions

Return

Temperature Gauge



CYCLE = 5, 10, 15, 20, 25, 30 (cycles to these timer times in minutes and also resets the timer when changing)

RESET = stops the beeping when the timer has run out and resets the timer back to the full selected time or powers the unit on.

RESET = hold for 3 seconds to power the unit off

°F / °C = toggles between cabin Fahrenheit and Celsius temperature. (save state).

Return

GARMIN GTR200 (COM2 RADIO)

For more detailed information

Click here to download

(Right click for options to open a new tab)

GARMIN GTR200 (COM2 RADIO) Manual PDF

Return

For more detailed information

Click here to download

(Right click for options to open a new tab)

GARMIN GMC305 AUTOPILOT UNIT Manual PDF

Return

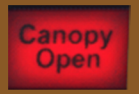
Annunciator Panel



Yellow are the cautions.



Red are the warnings.



Illuminates whenever the canopy is not fully latched.



Illuminates when the aircraft is configured for landing but the landing gear is not down.

This occurs when:
- Airspeed is below approximately 110 knots.
- Trailing edge flaps are greater than about 19 degrees.
- Landing gear is not fully extended.

Return

Annunciator Panel



Illuminates when an engine fire condition is detected.



Indicates carbon monoxide has been detected in the cockpit.
This warns the pilot of possible exhaust gases entering the cabin.



Illuminates when the main alternator voltage drops below normal operating levels while the engine is running.

This can occur at low engine RPM or if the main alternator is not supplying sufficient electrical power.



Illuminates when the standby alternator is actively supplying power to the electrical system.

Return

Annunciator Panel



This occurs when:
·Airspeed is below approximately 110 knots.
·Trailing edge flaps are greater than about 19 degrees.
·Landing gear is not fully extended.

This warns the pilot of possible exhaust gases entering the cabin.



Illuminates whenever the speed brake is deployed.

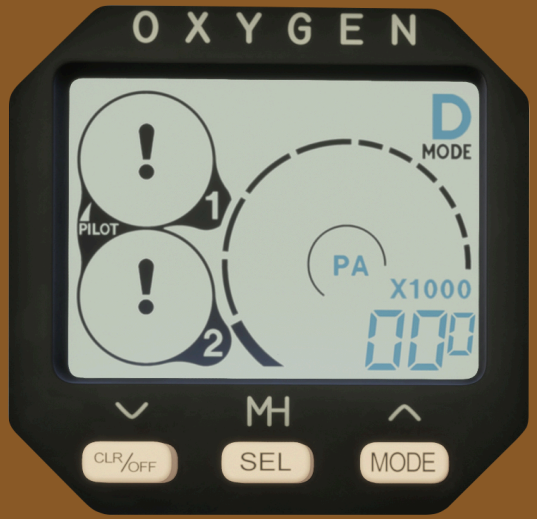


Illuminates when the aircraft altitude exceeds 10,000 feet and the oxygen unit is turned off.

Note: The oxygen system is not fully simulated at this time.
The annunciator is currently based only on whether the oxygen unit is powered on or off.
More detailed system behavior may be implemented in a future update.

Return

Oxygen Unit



Overview

The EDS-ip Oxygen System is an intelligent, fully integrated aviation oxygen system designed to automatically adapt to each user's breathing needs. It monitors respiratory patterns and delivers the precise amount of oxygen through a cannula or mask, ensuring efficient usage and proper oxygen levels at various altitudes. This system enhances safety, comfort, and oxygen conservation during flight.

Note: Requires battery and avionics bus switch to turn on oxygen unit int the sim.

Return

Oxygen Unit



CLR/OFF: To turn the system off simply press and hold the **CLR/OFF** button until the unit shows **OFF**. This will require the button to be held down for ~2 seconds. The fast click is clr and long hold click is off.

SEL: To turn the system on press & release the **SEL** button. The control head will light-up all the icons.



Cycle the selector mode button to cycle through the three modes:

a) Thousands (1000) of ft. for Pressure Alitude readout.
b) Hundreds (100) of psig. for Tank / Cylinder pressure readout.
c) Tenths (1/10) for regulator pressure readout.



MODE: The control head has two basic modes of operation; N and D mode. You can toggle the unit between the modes with the MODE key. Both modes deliver the same amount of oxygen as a function of pressure altitude.

Return

Oxygen Unit



N MODE: The N shows you are operating in night (also called manual) mode and delivers oxygen on-demand at all pressure altitudes.

Save state, recommended to leave in d



D MODE: The D shows you are operating in Day (also called delayed) mode. The user can pre-select pressure altitude settings from 4K ft. to 11K ft.

Return

Oxygen Unit



PA: Pressure Altitude.

X1000: Altitude values are indicated in thousands of feet.



PSI: Pounds Per Inch

X100: Altitude values are displayed in hundreds of psi.

Note: The tenths for the values is disabled or alaways zero only on this particular psi



PSI: Pounds Per Inch Gauge

X100: Altitude values are displayed in hundreds of psi.

Return

Oxygen Unit



Station status circle.

Everything unique to the stations will show up in these status circles.

Status Circle displaying 1 & 2 simultaneously, representing the pilot and copilot.



Station O2 Flow-flags: Shows station has responded with a pulse of oxygen.



Station Alert Icon & Station Active Inspiration Response: The Station Alert icon displays warnings for apnea, flow faults, and missing stations.

NOTE: Both station O2 flow flags and Station Active inspiration response these will blink off for 1.5 sec and on for 1.5 which is total of 3 sec which is 20 breaths/ minute

Return

Oxygen Unit



O2 Alert Icon

When the O_2 alert icon and O_2 flow flags is displayed, it typically indicates a failure when pressure reaches or drops below 500 PSI or either originating from the EFB Failure Page. You can either resolve the issue through the Failure Page or activate the emergency oxygen system, which bypasses the regulator and ensures both pilot and co-pilot receive sufficient oxygen.



OXYGEN SYSTEM – REGULATOR FAILURE (ERR / AIR WARNING)

The Oxygen system uses pneumatic air and regulators to supply oxygen on demand.

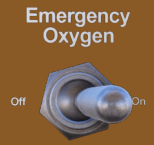
If pneumatic air is lost or regulators fail:
- Oxygen flow to masks stops
- Air warning appears
- ERR indication may display

Cause:
- Loss of pneumatic air
- Regulator failure

Effect:
No oxygen is delivered despite available tank pressure.

Return

Oxygen Unit



Emergency oxygen switch



Procedure(Emergency Bypass):
·Turn EMERGENCY switch on
·Bypasses regulators
·Oxygen flows continuously to masks

Note:
·Higher oxygen consumption
·Use only when required
·Warning remains until fault is fixed or emergency bypass switch is active.

Return

Annunciator Panel



Yellow are the cautions.



Red are the warnings.



Illuminates whenever the canopy is not fully latched.



Illuminates when the aircraft is configured for landing but the landing gear is not down.

This occurs when:
- Airspeed is below approximately 110 knots.
- Trailing edge flaps are greater than about 19 degrees.
- Landing gear is not fully extended.

Return

Annunciator Panel



Illuminates when an engine fire condition is detected.



Illuminates when the main alternator voltage drops below normal operating levels while the engine is running.

This can occur at low engine RPM or if the main alternator is not supplying sufficient electrical power.



Illuminates whenever the speed brake is deployed.

Return

Davtron Clock Detailed Info.



TIME CORRECTION - THREE WAY SWITCH
Makes minor time corrections

TIME DISPLAY
In hours & minutes

CHANNEL SELECTOR - THREE WAY SWITCH

Up position: Selects real time . This channel may be set to GMT time or local time. Use time correction and hour change to set GMT or local time. Note: To change clock mode between 12 or 24 hour format, go to the setting page on the tablet

Middle Position: Select flight time

Right Position: Select elapsed time

BRIGHTNESS & HOUR CHANGE - THREE WAY SWITCH

Left Position: Sets display brightness for daytime

Middle Position: Sets display brightness for nighttime

Right Position: Momentary position that increases the clock time by 1 hour for every time the switch is moved to this position. Note: Right click toggle the clock mode between 12 or 24 hour format only if the battery switch is off

ELAPSED TIME METER - THREE WAY SWITCH

Up position: Is a momentary position and sets the elapsed time meter to zero. The switch returns to middle position when released. Note: Up position will zero flight time only if both inverters switches are off

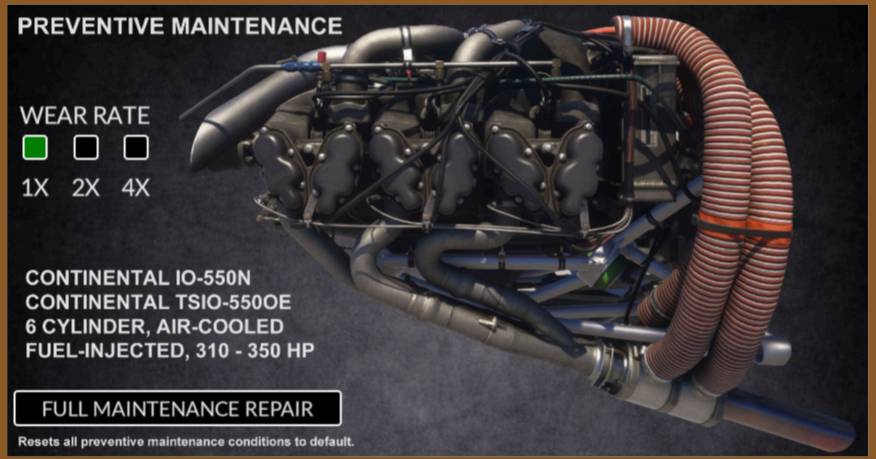
Middle Position: Stops the elapsed time meter

Right Position: Starts the elapsed time meter

TIME DISPLAY
In seconds

Return

Maintenance Page Detailed Info.



Wear rates increase if time accerleration (2x/ 4x) is used.
All systems degrade continously based on usage and time.

Return

Maintenance Page Detailed Info.

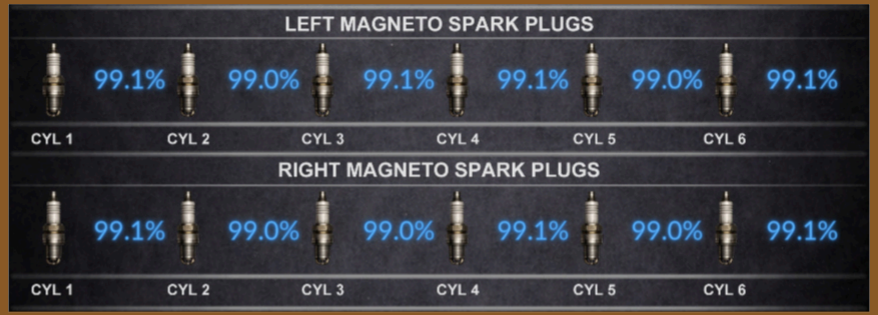


ENGINE & OIL SYSTEM

Engine Condition:
Gradually degrades over time
Performance reduces as condition drops from green → yellow → red
Red indicates a failed engine (no usable power)

Degradation is influenced by:
Spark plug condition
Air filter condition

Return



SPARK PLUGS

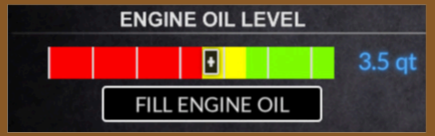
Running the engine rich will cause the spark plugs to foul.
Fouled spark plugs wear out faster.
This worsens the engine's overall condition more quickly.
Reduced condition results in noticeable loss of engine performance.

TURBO VS NON - TURBO

Turbo Aircraft:
Mixture is automatically optimized by TrueSim.
No manual leaning required.
Prevents plug fouling and extends engine life.

Non - Turbo Aircraft:
Running rich increases plug wear.
Proper mixture management improves longevity.

Return



OIL SYSTEM (CRITICAL)

Oil Consumption: ~1 quart every 5 hours (at 1x rate)
If oil loss reaches ~3.5 quarts:
Red indicates 3.5 quarts.
Engine will fail immediately.
Engine can be restored by clicking fill oil or full maintenance repair. (This is considered an engine overhaul).

Warning:
Using time accerleration can rapidly lead to engine failure.

Return

Maintenance Page Detailed Info.



TIRE PRESSURE

Gradually decreases over time.
Fully animated visual deflation.
Tires can be refilled at any time.
No effect on aircraft performance at this time.
Can be refilled using the Fill Tires or full maintenance repair.



HYDRAULIC RESERVOIR

Slowly depletes over time.
When depleted:
Landing gear will stop functioning normally.
Emergency extension available via hydraulic relief system.
Can be refilled using the Fill Reservoir or full maintenance repair.

It requires parking brake on and engine off.

Return

Maintenance Page Detailed Info.



BULB LIFE

Landing lights degrade over time.
Individual Bulbs can fail independently.
Failed bulbs will no longer illuminate.
Can be replaced using the Replace Bulbs or full maintenance repair.

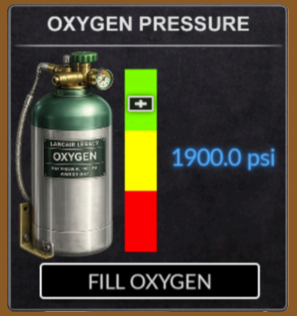


STRUT PRESSURE

Slowly decreases over time.
Can be refilled manually.
No current impact on aircraft handling (visual/maintenance only)
Can be refilled using the Fill Struts or full maintenance repair.

It requires parking brake on and engine off.

Return



OXYGEN PRESSURE

Depletes based on system usage.
Use the “Details” button for full system explanation.
Can be refilled using the Fill Oxygen or full maintenance repair.



BRAKE PAD LIFE

Wears down over time.
At 0% :
Brakes become ineffective.
Parking brake will not hold.
Can be restored using Replace Pads or full maintenance repair.

It requires parking brake on and engine off.

Return

Maintenance Page Detailed Info.

GENERAL NOTES

All maintenance items degrade gradually based on usage.
Most systems can be restored instantly via maintenance actions.
Some failures are visual or procedural only due to current simulator limitations.
Future simulator updates may expand realism. (e.g., Tire physics)

Return

DIRT BUILDUP(Rates & Conditions)



Return

Maintenance Page Detailed Info.

The aircraft will naturally accumulate:
Oil & Leaks
Runway tar
Insect splatter
Regular Dirt
Dust
Mud
Mud buildup on tires

These effect build up dynamically based on:
Surface type (Runway,dirt,gravel,etc.)
Weather conditions(Rain vs dry)
Ground movement and speed
Altitude(Insects accumulate at lower levels)

Environmental Interaction:
Rain will gradually wash away certain dirt types.
Heavier rain = faster cleaning
Some effects like oil and insects are more persistant and won't fully wash off.

At any time while parked, you can:
Use the EFB maintenance page
Select"Wash aircraft"
Restore the aircraft to a clean state

Built using the simulator's native tools wih custom logic, this system runs continously in free flight with full save-state persistence-ensuring the aircraft retains its condition and environmental buildup across sessions for a consistent, immersive experience.

Return





MUD (4MIN)

Builds in rain on soft/wet surfaces while moving on ground.

Return





MUD (TIRES) (8MIN)

Same as mud, but affects tires only.

Return

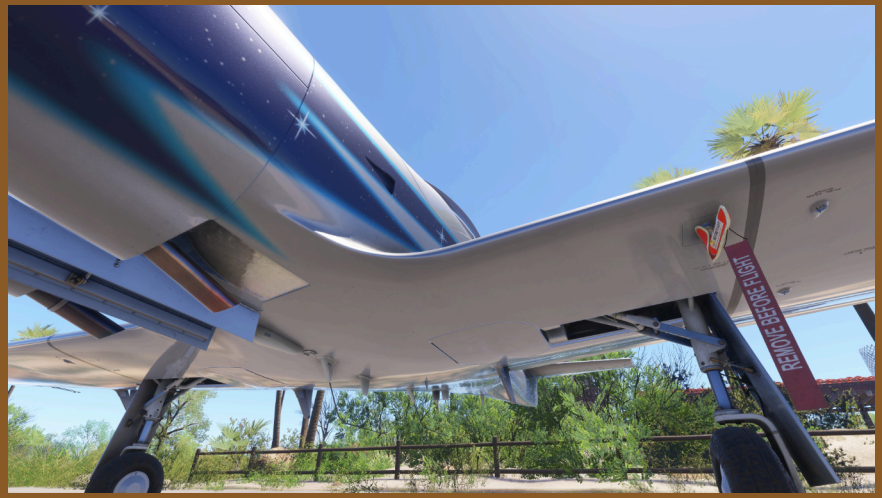


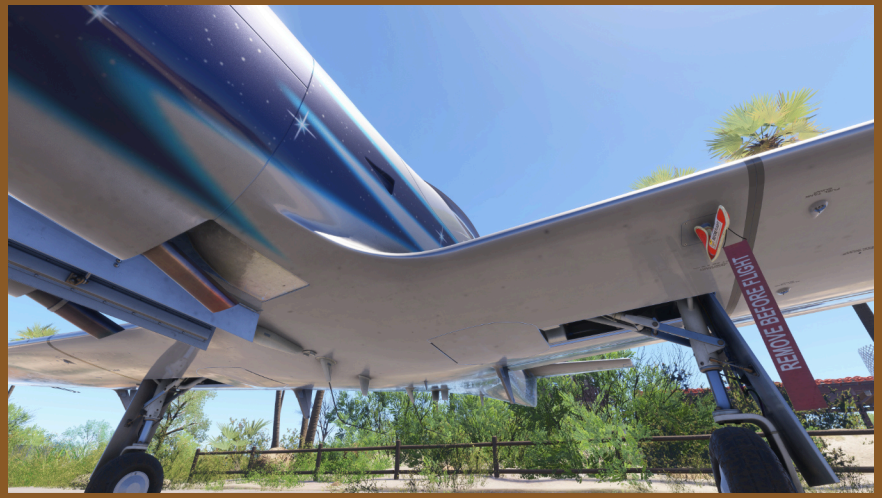


DUST (4MIN)

Builds in rain on dry dirt surfaces while moving on ground.

Return





REGULAR DIRT (20HRS)

Builds slowly over time while moving in dry surfaces.

Return

Maintenance Page Detailed Info.

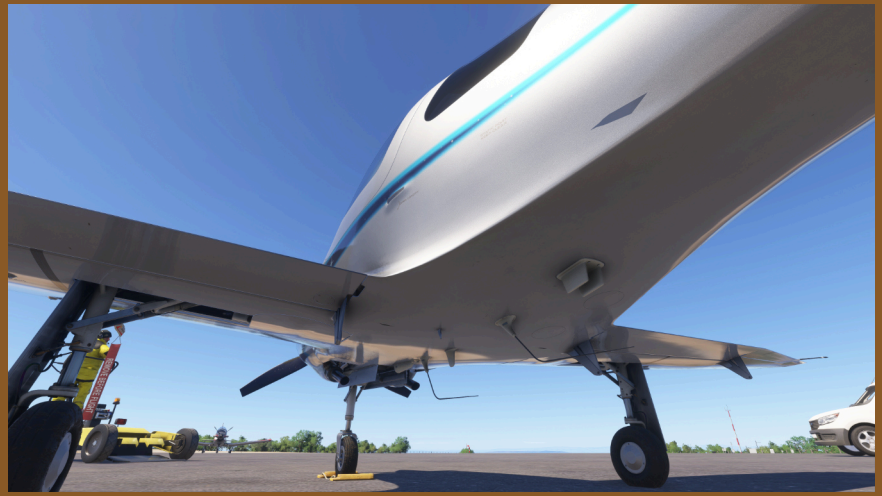


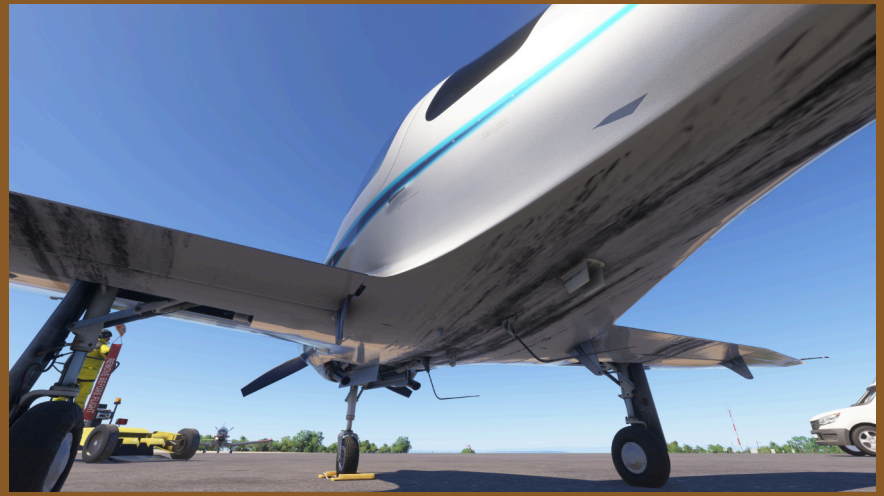


INSECTS (1HR)

Builds when:
On ground above ~20 knots OR
Below ~500 ft AGL
Only in dry conditions.

Return





RUNWAY TAR (40 HRS)

Builds slowly on hard runway surfaces above ~20 knots

Return

Maintenance Page Detailed Info.





OIL LEAKS (17HRS)

Builds over time while engine is running.

Return

Maintenance Page Detailed Info.

RAIN WASH (AIRCRAFT BODY)

Requirements:
Rain must be active.
Works faster above ~20 knots

CLEANS:
Mud
Mud (Tires)
Dust
Regular Dirt

DOES NOT CLEAN:
Insects
Oil Leaks
Runway Tar

Note: Wash rate increases with rain intensity.
Wash rate doubles at higher speeds.

RAIN WASH (TIRES)

Requirements:
Rain active.
Landing gear down(no effect when gear is up).
Faster above ~20knots.

CLEANS:
Mud (Tires only)

DOES NOT CLEAN:
Any other dirt types

MANUAL WASH

Requirements:
Aircraft on ground.
Parking brake ON.
Engine OFF.

Effect:
Instantly removes all:
Mud
Mud (Tires)
Dust
Regular dirt
Insects
Runway tar
Oil leaks

Return

Cabin Air Temperature Logic

The aircraft includes a simulated cabin temperature system that reacts to the canopy position, air conditioning system, heater system, and ambient air vents. The current cabin temperature can be viewed on the aircraft's cabin temperature display in both Fahrenheit and Celsius.

The cabin temperature is affected by four main systems: the canopy, air conditioning system, heater system, and ambient air vents:

Canopy / Ambient Temperature

When the canopy is open, outside ambient air has a strong effect on the cabin temperature. The more the canopy is opened, the more the cabin temperature will move toward the current outside air temperature.

An open canopy can reduce the effectiveness of the air conditioning or heating system. For the most accurate cabin temperature control, close the canopy before using the air conditioning or heater.

Air Conditioning System (Glass only)

The air conditioning system uses the air conditioning switch and the AC control knob. The engine must be running for the air conditioning system to operate. When the air conditioning switch is on, the AC control knob adjusts the amount of cooled air entering the cabin.

The aircraft has six adjustable AC vents, with three on the pilot side wall and three on the copilot side wall. Each vent can be opened or closed individually. For best cooling performance, make sure the air conditioning switch is on, the AC control knob is turned up, and the AC vents are open.

Heater System

The heater system uses the heater valve knob and the heater control knob. The heater valve knob directs heated air toward the floor, toward the canopy, or between both positions to split the airflow.

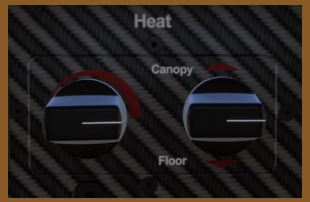
The heater control knob adjusts the heat level from the coolest heat setting to the hottest heat setting. The aircraft has two heater vents located under the panel, one for the pilot side and one for the copilot side. For best heating performance, make sure the heater controls are set as desired and the heater vents are open.

Ambient Air Vents

The aircraft also includes ambient air vents located on the main panel. These vents allow outside air to enter the cabin and are separate from the air conditioning and heater systems.

Ambient air vent temperature is based on the current outside air temperature. These vents can help bring fresh outside air into the cabin, but they can also reduce the effectiveness of the air conditioning or heater depending on outside conditions.

Return



Heater Controls (Glass only)

The heater system uses two heater control knobs. The heater valve knob directs heated air toward the floor, toward the canopy, or between both positions to split the airflow.

The heater control knob adjusts the heat level from the coolest heat setting to the hottest heat setting. Use both knobs together to control where the heat is sent and how warm the cabin airflow becomes.



Air Conditioning Controls (Glass only)

The air conditioning system uses an air conditioning switch and an AC control knob. The engine must be running for the air conditioning system to operate.

Turn the air conditioning switch on to enable the system, then use the AC control knob to adjust the amount of cooled air entering the cabin. For best cooling performance, make sure the AC vents are open.



Cabin Heat/Defrost (Analog only)

When the lever is pushed all the way in, ambient temperature will enter through the heater vents. The further you pull the lever out the more heat will enter into the cabin.

Return

Cabin Air Temperature System



Pilot Air Vent Flow

The pilot air vent can be adjusted to aim airflow where it is needed. Moving the vent up and down will also auto adjust slightly left and right. There is no manual control for left and right.

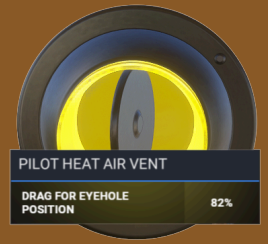


Pilot Air Vent Open / Close

The pilot air vent can be opened or closed by rotating the outer vent ring. Turn the ring left to loosen and open the vent, or turn it right to tighten and close the vent.

Closing the vent reduces or stops airflow from that vent. Opening the vent allows air to pass through when the related airflow system is active.

In either Mouse Legacy or Lock mode, place the mouse on the left side of the vent ring and drag clockwise, following the direction of a clock, to tighten and close the vent. To loosen and open the vent, do the opposite by dragging counterclockwise.



Heat & AC Vents

Same as the air vents

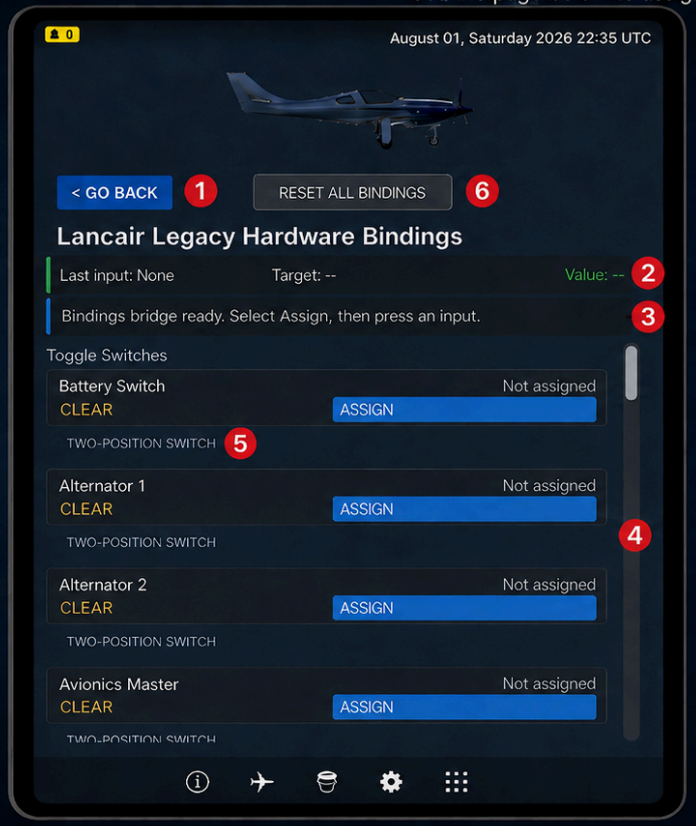
Note: No AC vents in the analog variants



Return

Lancair Legacy Hardware Bindings – How It Works

Use the page below to assign and manage your hardware bindings.



1 GO BACK

Tap "< GO BACK" to return to the previous page in the Legacy app.

2 LAST INPUT (LIVE MONITOR)

Shows the most recent control input detected. For LVar controls, the current value appears on the right. You can right-click to copy the LVar to the clipboard for use with third-party binding software.

Last input: Battery Switch LVar: GENERIC_ELECTRICAL_... Value: 1

3 ACTIVE STATUS

Shows what is actively happening right now, such as confirming that something was assigned, cleared, timed out, or other current messages.

Bindings bridge ready. Select Assign, then press an input.

4 BINDING LIST & HOW TO ASSIGN A CONTROL

Use the list on the left to clear existing bindings or assign joystick or keyboard inputs to each function.

1. Tap ASSIGN next to the function you want to bind.
2. Move or press the physical control (joystick button, switch, or keyboard key).
3. The assignment will be confirmed in the active status line and on the right side of the row.
4. Your bindings are saved automatically.
5. To remove a binding, tap CLEAR.

5 TWO-POSITION SWITCHES (TOGGLE SWITCHES ONLY)

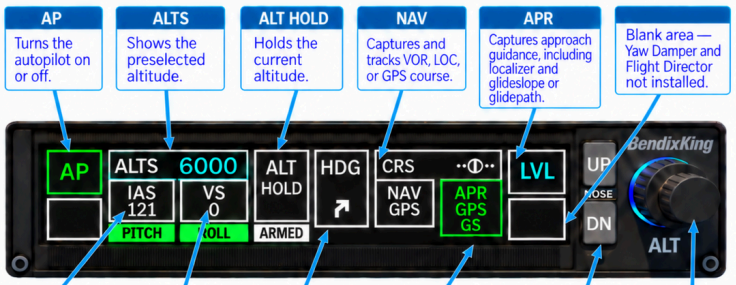
Only toggle switch controls offer the TWO-POSITION SWITCH option. When clicking the TWO-POSITION SWITCH, the toggle switch will now offer two assignments: ON and OFF, for physical two-position hardware switches. Clear the normal single assignment before enabling two-position mode. Clear both ON and OFF assignments before returning to normal mode.

6 RESET ALL BINDINGS

RESET ALL BINDINGS is a recovery option that removes all saved bindings and returns the page to its default state. It opens to a confirmation dialog and is intended for recovery accidents.

Return

AeroCruze 230 Overview



AP — Turns the autopilot on or off.

ALTS — Shows the preselected altitude.

ALT HOLD — Holds the current altitude.

NAV — Captures and tracks VOR, LOC, or GPS course.

APR — Captures approach guidance, including localizer and glideslope or glidepath.

Blank area — Yaw Damper and Flight Director not installed.

IAS — Flight Level Change: climbs or descends at the selected airspeed.

VS — Holds the selected vertical speed.

HDG — Follows the heading bug on the HSI.

LVL — Returns the airplane to wings-level with a safe pitch reference.

UP / DN — Changes IAS, vertical speed, pitch, depending on the active mode.

ALT knob — Outer knob (large): changes selected altitude by 1,000 feet per increment. Inner knob (small): changes selected altitude by 100 feet per increment.

Important for this aircraft

1. Analog installation: HDG and CRS do not show numeric readouts on the unit.
2. Use the HSI heading bug and OBS/course selector instead.
3. No Yaw Damper is installed, so that control is hidden.
4. No Flight Director is installed, so the normal FD area is intentionally blank.
5. HDG and CRS values are read on the HSI, not on the autopilot.

Color guide

White	= available / not active
Green	= active
ARMED	= waiting to capture
Light blue	= LVL indication

Common lower annunciations

PITCH | ROLL | ARMED | GS / GP

CWS appears beneath the VS window when the pilot presses the CWS button.

Return

AeroCruze 230 Lateral & Vertical Modes

How it works
One vertical mode and one lateral mode can be active at the same time.
Green indicates the active mode, white indicates available / not active, and light blue indicates LVL.

Vertical Modes

Control the airplane's climb, descent or altitude.

PITCH (default)

Maintains a pitch reference when no vertical mode is selected.



With AP on and no vertical mode selected, PITCH is active. Use UP / DN to change the pitch reference.

IAS

Climbs or descends at the selected airspeed.



Select IAS to climb or descend at the selected airspeed. ROLL remains active for lateral control.

VS

Holds the selected vertical speed.



Select VS to hold the selected vertical speed. ROLL remains active for lateral control.

ALT HOLD

Holds the current altitude.



Select ALT HOLD to maintain the current altitude. In this example HDG is active for lateral control.

Lateral Modes

Control the airplane's heading or bank.

ROLL (default)

Maintains wings-level flight when no lateral mode is selected.



With AP on and no lateral mode selected, ROLL behavior depends on current bank angle: < 6° levels the wings, 6°–22° maintains the current bank angle, > 22° limits and holds 22° of bank.

HDG

Follows the heading bug on the HSI.



Select HDG to follow the heading bug. In this example ALT HOLD is active for vertical control.

LVL

Returns the airplane to wings-level with a safe pitch reference.



Select LVL to return to wings-level. LVL provides a safe pitch reference for vertical control.

Key points

1. PITCH and ROLL are the default modes when the autopilot is engaged.
2. Selecting IAS or VS replaces PITCH.
3. Selecting ALT HOLD also replaces PITCH.
4. Selecting HDG replaces ROLL.
5. Pressing LVL engages LVL with a pitch reference.

Return

BendixKing

AeroCruze 230 Autopilot
Quick Reference Guide

3. ALTITUDE SELECTION & CAPTURE

The AeroCruze 230 can capture and hold a preselected altitude. You can climb or descend to the selected altitude using PITCH, IAS, or VS modes. When the aircraft reaches the selected altitude, ALT HOLD will automatically capture.

1 SET THE ALTITUDE

Use the ALT knob to select the desired altitude.

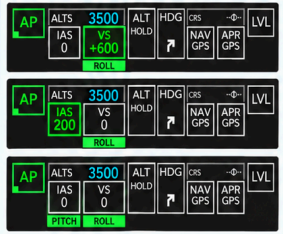


Outer knob (large)
Changes selected altitude by 1,000 feet per click.

Inner knob (small)
Changes selected altitude by 100 feet per click.

2 USE A VERTICAL MODE TO CLIMB OR DESCEND

Select PITCH, IAS, or VS to climb or descend toward the selected altitude.



Using VS Mode
- Select a climb or descent rate (e.g. +600 or -600 FPM).
- The aircraft will climb or descend at the selected rate.

Using IAS Mode
- Select a target airspeed.
- The aircraft will climb or descend to maintain the selected airspeed.

Using PITCH Mode
- Use the UP/DN buttons to set a pitch attitude.
- The aircraft will climb or descend at the selected pitch attitude.

3 ALT HOLD ARMING

ALT HOLD automatically arms when the aircraft is climbing and the selected altitude is above the current altitude, or descending and the selected altitude is below the current altitude.



ALT HOLD shows **ARMED** (white) when a new altitude is selected and the aircraft is climbing or descending toward that altitude.

4 ALTITUDE CAPTURE

As the aircraft reaches the selected altitude, ALT HOLD will automatically capture and become active.



When the selected altitude is reached, ALT HOLD turns green and the aircraft maintains that altitude.

ALTITUDE CAPTURE EXAMPLE



1. Select 5,000 ft and climb toward it using VS, IAS, or PITCH.
2. As capture begins, VS mode turns off, ALT CAPT turns green, and ARMED is removed.
3. Within about 50 feet of the selected altitude, ALT CAPT changes to ALT HOLD and the aircraft maintains the selected altitude.

IMPORTANT NOTES

- ALT HOLD arms when climbing to a higher selected altitude or descending to a lower selected altitude.
- ALT HOLD can capture from PITCH, IAS, or VS modes.
- During capture, ALT CAPT appears in green and ARMED disappears.
- Within about 50 feet of the selected altitude, ALT CAPT changes to ALT HOLD.
- To exit ALT HOLD, change the selected altitude by more than 400 feet, then press ALT HOLD.

Return

BendixKing

AeroCruze 230 Autopilot
Quick Reference Guide

4. NAVIGATION & APPROACH CAPTURE

The AeroCruze 230 can automatically capture and track selected navigation sources, including GPS, VOR, and ILS/LOC, and can also capture glideslope (GS) or glidepath (GP) for vertical guidance during an approach. NAV modes control lateral (course) guidance and APR modes provide both lateral and vertical approach guidance when available.

1 NAV GPS (Lateral Navigation)

Captures and tracks the GPS course (e.g., flight plan).



- Press NAV to arm GPS tracking (white).
- When the course is captured, NAV GPS turns green.
- The autopilot will then track the selected GPS course.

2 NAV VOR (Lateral Navigation)

Captures and tracks the selected VOR course.



- Press NAV to arm VOR tracking (white).
- When the course is captured, NAV VOR turns green.
- The autopilot will then track the selected VOR course.

3 NAV LOC (Lateral Navigation)

Captures and tracks the localizer course.



- Press NAV to arm LOC tracking (white).
- When the localizer is captured, NAV LOC turns green.
- The autopilot will then track the localizer course.

4 APR GPS (Approach with Glidepath)

Captures lateral and vertical guidance for RNAV (GPS) approaches with a glidepath (GP).



- Press APR to arm the approach (white).
- When lateral guidance is captured, APR GPS turns green.
- When glidepath guidance is available and captured, GP will be shown in the APR box and the autopilot will automatically track both lateral and vertical guidance.

5 APR LOC (Approach with Glideslope)

Captures lateral and vertical guidance for ILS approaches with a glideslope (GS).



- Press APR to arm the approach (white).
- When the localizer is captured, APR LOC turns green.
- When glideslope guidance is available and captured, GS will be shown in the APR box and the autopilot will automatically track both lateral and vertical guidance.

6 APR MODES ANNUNCIATIONS

The APR box will display additional annunciations when vertical guidance is available.



GP Glidepath captured (GPS / RNAV).

GS Glideslope captured (ILS / LOC).

7 APPROACH CAPTURE SEQUENCE (ILS Example)

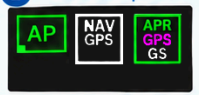
Typical sequence for an ILS approach using APR mode.

1 APR Armed



- Press APR to arm the approach (white).
- An ARMED annunciator will be shown (white).

2 Localizer Captured



- When the localizer is captured, APR turns green.
- GS will be shown (white) to indicate glideslope armed.

3 Glideslope Captured



- When the glideslope is captured, GS turns green.
- The autopilot now tracks both lateral and vertical guidance.

IMPORTANT NOTES

- NAV modes (GPS, VOR, LOC) provide lateral guidance only.
- APR modes (GPS, LOC) provide both lateral and vertical guidance when glidepath/glideslope is available.
- APR will arm when selected and the appropriate navigation source and approach are active.
- The GP or GS annunciation will appear in the APR box when vertical guidance is captured.
- If vertical guidance is not available, APR will only track lateral guidance (similar to NAV).
- Use the aircraft's navigation equipment (GPS, VOR, or ILS) to select and activate the desired course or approach.

Return

GTX 345 Transponder

For more detailed information

Click here to download

(Right click for options to open a new tab)

Garmin GTX 330 Manual PDF

DISCLAIMER: ALTHOUGH THE BEZEL IS A GTX 345 IN THIS PRODUCT

THE CODE IS FROM THE ASOBO GTX 330



Return



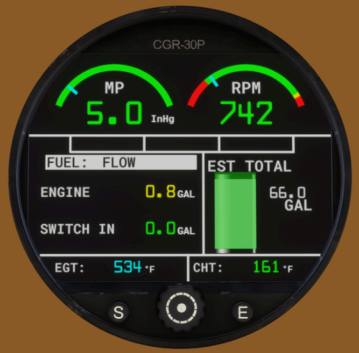
Overview

The CGR-30P is a state-of-the-art **Glass Panel Engine Monitor** that provides many of the engine and system instruments found in an aircraft panel. Each of the instruments displayed on the CGR's Main Engine Screen provides features not found in most multifunctional displays or traditional gauges.

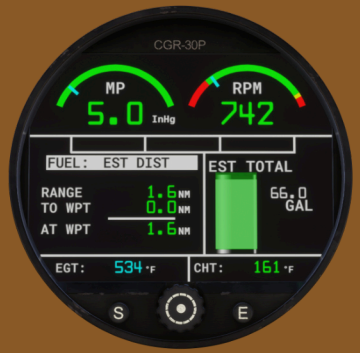
Aircraft panels equipped with individual instruments require a pilot to scan and interpret a multitude of gauges spread across an entire panel.
By providing a single location for viewing the engine and many aircraft system instruments, the CGR reduces a pilot's workload and the chance of missing a problem. Additionally, the CGR provides both analog and digital displays with digits that blink and change colors when yellow or red operating ranges are reached. Also, an external Caution and Warning Light can be placed in front of the pilot. All of these features are designed to alert the pilot the moment any monitored function enters a red or yellow operating range.

Return

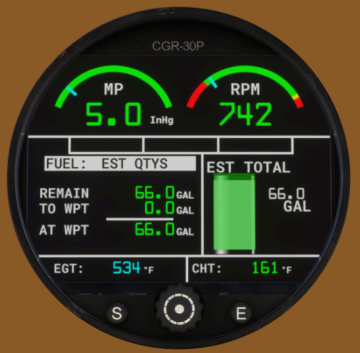
G5 CGR-30P Engine Display



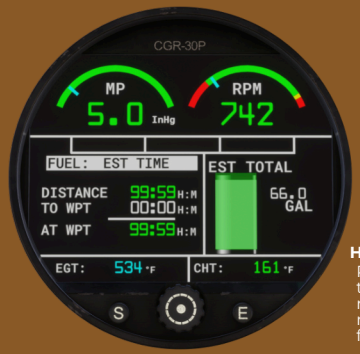
Fuel Flow: Displays current fuel flow, switch-in-fuel, and estimated total fuel.



Estimated Distance: Displays estimated fuel range and distance to the selected waypoint/destination.



Estimated Quantities: Displays estimated fuel remaining and fuel required at the selected waypoint/ destination.

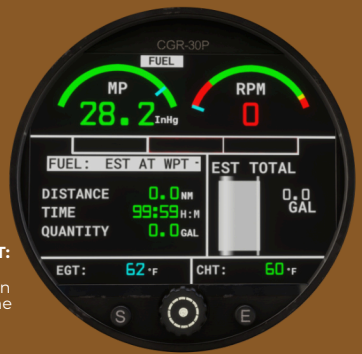


Estimated Time: Displays estimated flight time and time remaining to the selected waypoint/destination.

FUEL: EST AT DEST

When estimated at is set to destination the title above will display.

How to change WPT/DEST: Right click the knob, the title will start blinking, then rotate the knob to cycle the mode WPT or DEST. One final right click to set.



Estimated at Destination/ Waypoint: Sets the waypoint or destination used for the estimates shown on screens 2-4.



Estimated Fuel Used: Displays fuel used during the flight and since the fuel computer was last reset.

Return

Guage Buttons & knob



SCREENS Button: Pressing the SCREENS button sequences the CGR through the three display screens (Main, Secondary and Fuel Data).



SELECT Knob: The SELECT knob can be rotated. Depending on the screen and field being viewed, rotate the knob to scroll through fuel data screens on the fuel data screen.
The SELECT knob can be Pressed when on the fuel EST AT page. See image 4 on the engine fuel page for more instructions.



EXIT Button: Pressing the EXIT button will exit you out of a specific operation. Repeated presses will exit you out of the current screen and return you to the Main Screen. Pressing the E after returing to the main screen will clear the any displayed / blinking warnings.

Return

CGR-30C Engine Display



Overview

The CGR-30C provides you with several full-color strip gauges, which give pilots a quick reference view of critical parameters, along with digital readouts for the pinpoint accuracy. Pilots can configure the display to show the information they find most relevant, allowing for better situational awareness.

Return