

FLYSIMWARE

— FLY THE VINTAGE SKIES —



LANCAIR LEGACY(STARHAWK)

Version 1.6

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)

GARMIN GMC305 AUTOPILOT

Annunciator Warning Panel

Oxygen Unit

Circuit Breakers

EFB Tablet

Maintenance Page

Cabin Air Temperature Logic

Lancair Legacy Bindings

CENTER PEDESTAL

MAIN COCKPIT

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

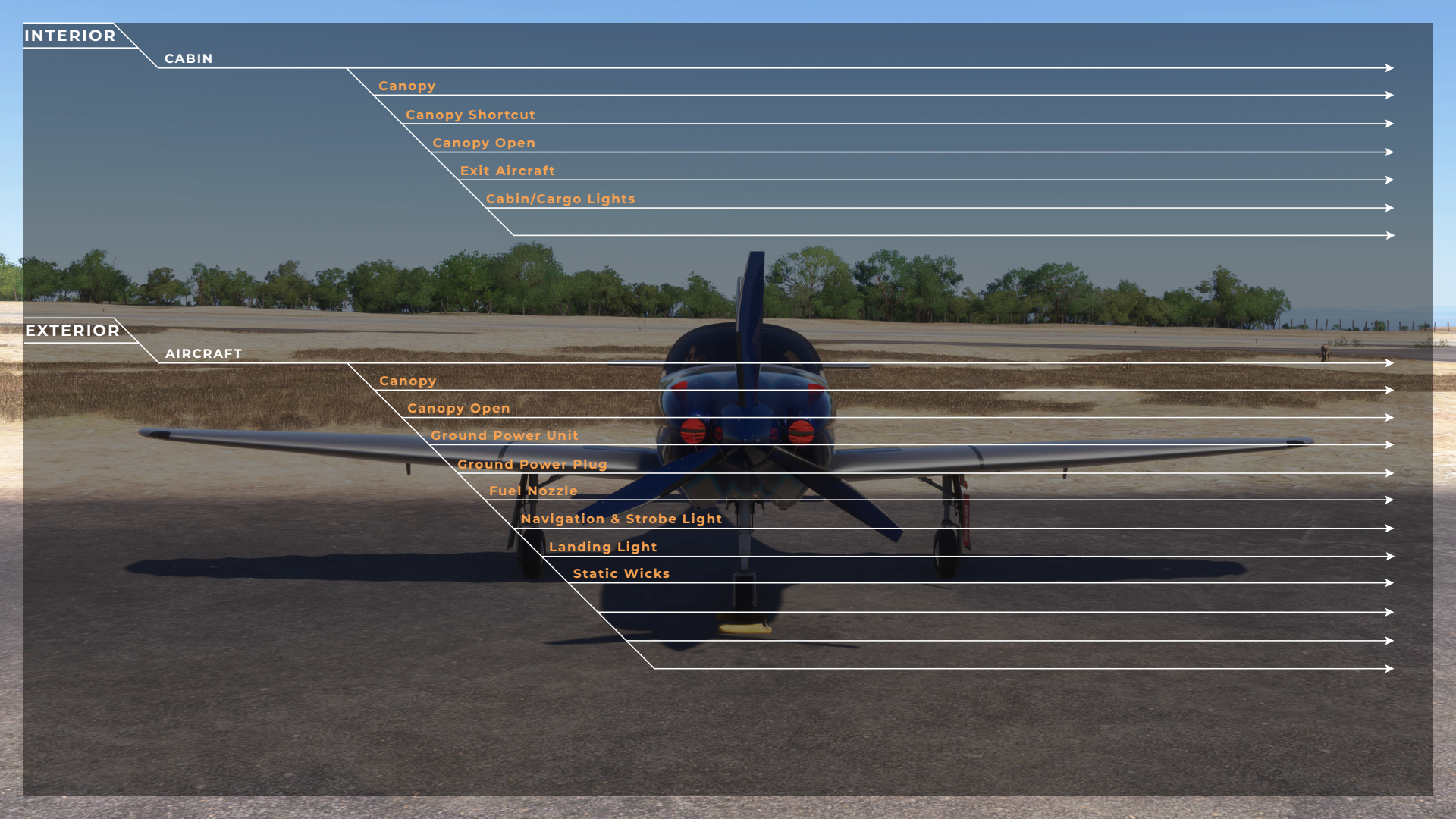
Ground Power Plug

Fuel Nozzle

Navigation & Strobe Light

Landing Light

Static Wicks



PREFLIGHT DETAILED INFORMATION

EXTERIOR

Ailerons

Elevator's & Rudder

Nose tire And Chokes

Propeller

Engine Plugs

Oil Door

Ground Equipments Tip

Tug Track



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

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

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/>

Technical Specifications

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 IO-
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

Technical Specifications

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

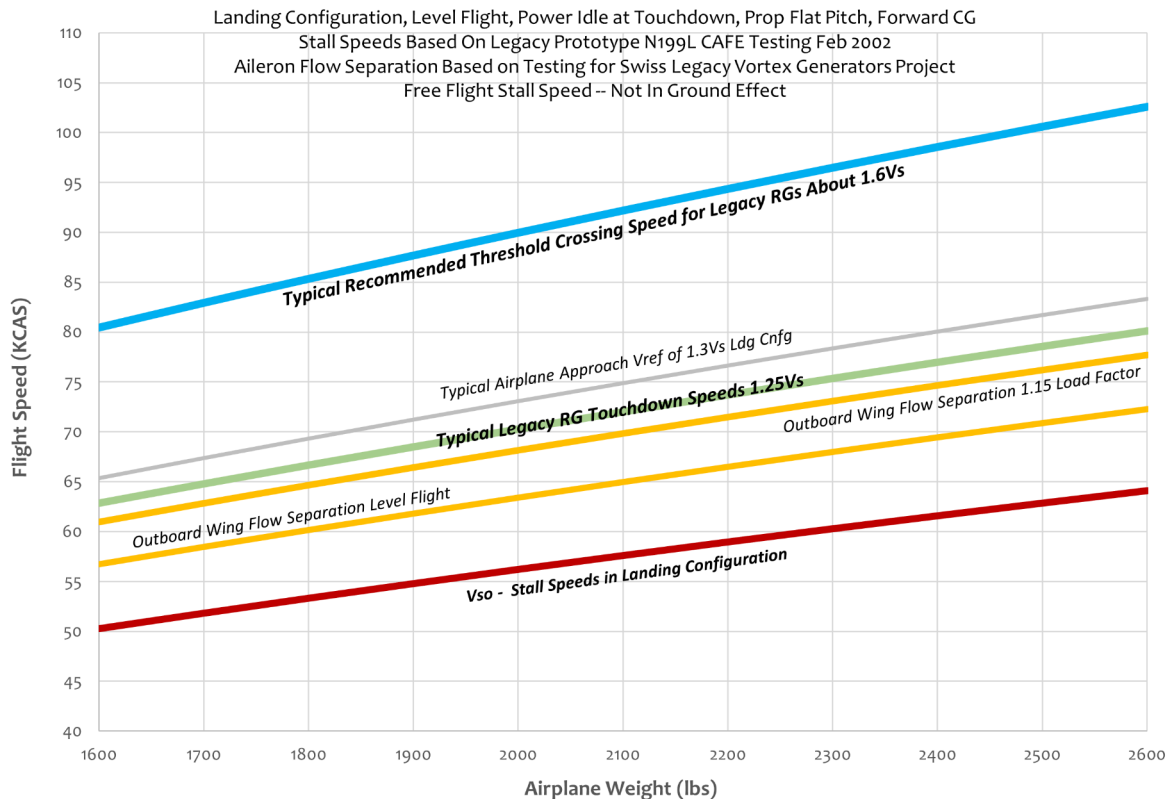
- **10-550N Engine - Naturally Aspirated**
- **TS10-550E Engine - Turbocharged**
 - **Naturally Aspirated** — If the variant name does not include “Turbo,” this is the naturally aspirated version. As you climb, manually lean the mixture to maintain the correct fuel-to-air ratio for best performance and 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.

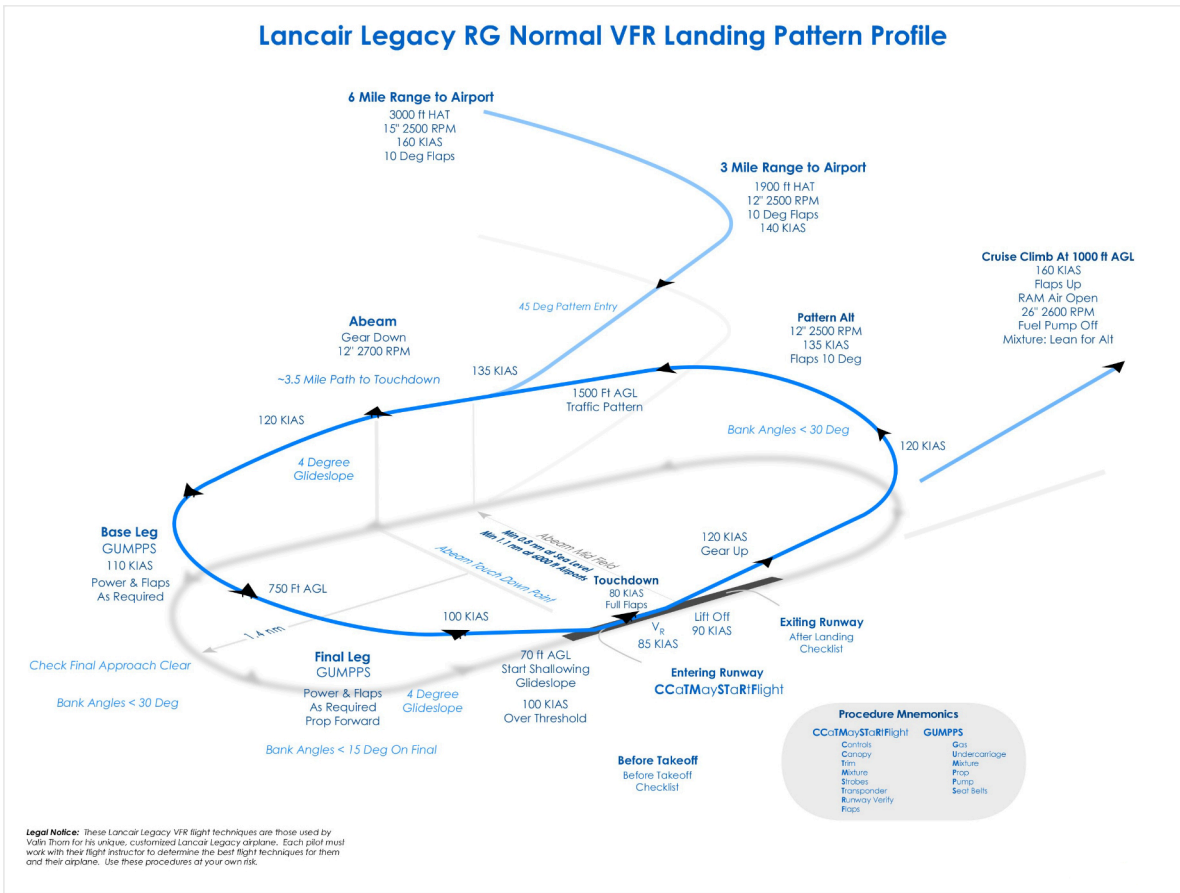
Flight Performance Data

Legacy RG Approach & Landing Speeds



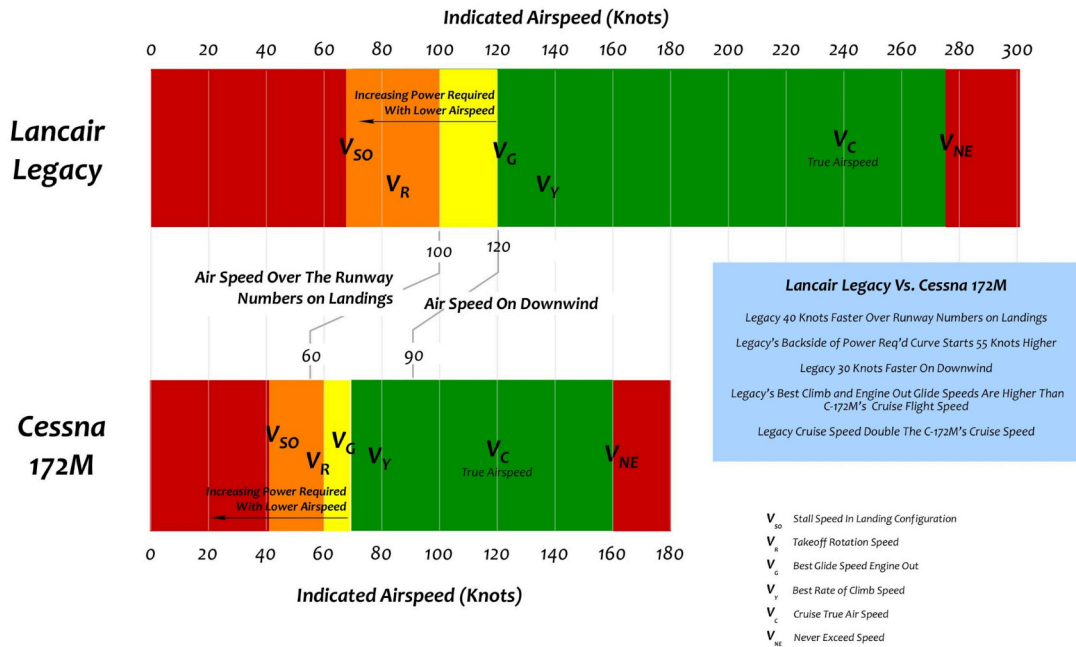
Aircraft Information

Flight Performance Data



Flight Performace Data

Experimental Lancair Legacy Flight Envelope Speeds Vs. Typical Certified Light Airplane



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 continuously 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 realistic and persistent ownership experience.

The system operates seamlessly in the background during normal flight and retains its state between sessions, ensuring that the aircraft'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

Center Panel

Copilot Panel

Pilot Panel G3X-PFD / G5



PARKING LEVER BRAKE

Press to toggle lever brake on/off

Click here for detailed info.

PILOT AIR VENT

Hold drag to adjust the pilot air vent

CARBON MONOXIDE BUTTON

Press push to test the carbon monoxide button

CAUTION WARNING SWITCH

Hold to toggle & drag 3-way switch:
Up: DIM
Center: Bright
Down: Test

AOA TEST BUTTON

Press push to test the AOA

AOA DIMMER

Press push to test the AOA dimmer

ANNUNCIATOR PANEL

Click here for detailed info.

GARMIN PFD G3X TOUCH

GARMIN G5

ALTERNATOR 2 SWITCH

Press to toggle alternator 2 switch on/off

BATTERY 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

FUEL PUMP SWITCH

Hold to drag 3-way switch:
Up: High
Center: Off
Down: Low

ESS BUS SWITCH

Press to toggle ess bus switch on/off

AVIONICS SWITCH

Press to toggle avionics switch 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.

CANOPY LEVER SWITCH

Press to set canopy lever switch position on/off

PANEL LIGHT KNOB

Hold drag to adjust the light knobs brightness

MASTER LIGHTS KNOB

SWITCHES LIGHTS KNOB

CABIN LIGHTS KNOB

FOOTWELL LIGHTS KNOB

CARGO LIGHTS KNOB

LOGO LIGHTS KNOB

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.

LANDING LIGHT SWITCH

Hold to drag 3-way switch:
Up: Landing
Center: Off
Down: Pulse

RUDDER TRIM SWITCH

Press to drag lock the rudder trim switch to left or right

Center Panel GTN 750 / Transponder / Autopilot



LANDING GEAR

Hold  to set gear position up/down

LANDING GEAR SAFE LIGHTS

GARMIN GTN 750 (PMS50)

[Click here for detailed info.](#)

GARMIN GTR200 (COM2 RADIO)

GARMIN GMC305 AUTOPILOT UNIT

[Click here for detailed info.](#)

Center Panel GTN 750XI / Transponder / Autopilot



AOA INSTRUMENT
DISPLAY

LANDING GEAR

Hold  to set gear
position up / down

LANDING GEAR
SAFE LIGHTS

GARMIN GTN
750XI (TDS)

[Click here for detailed info.](#)

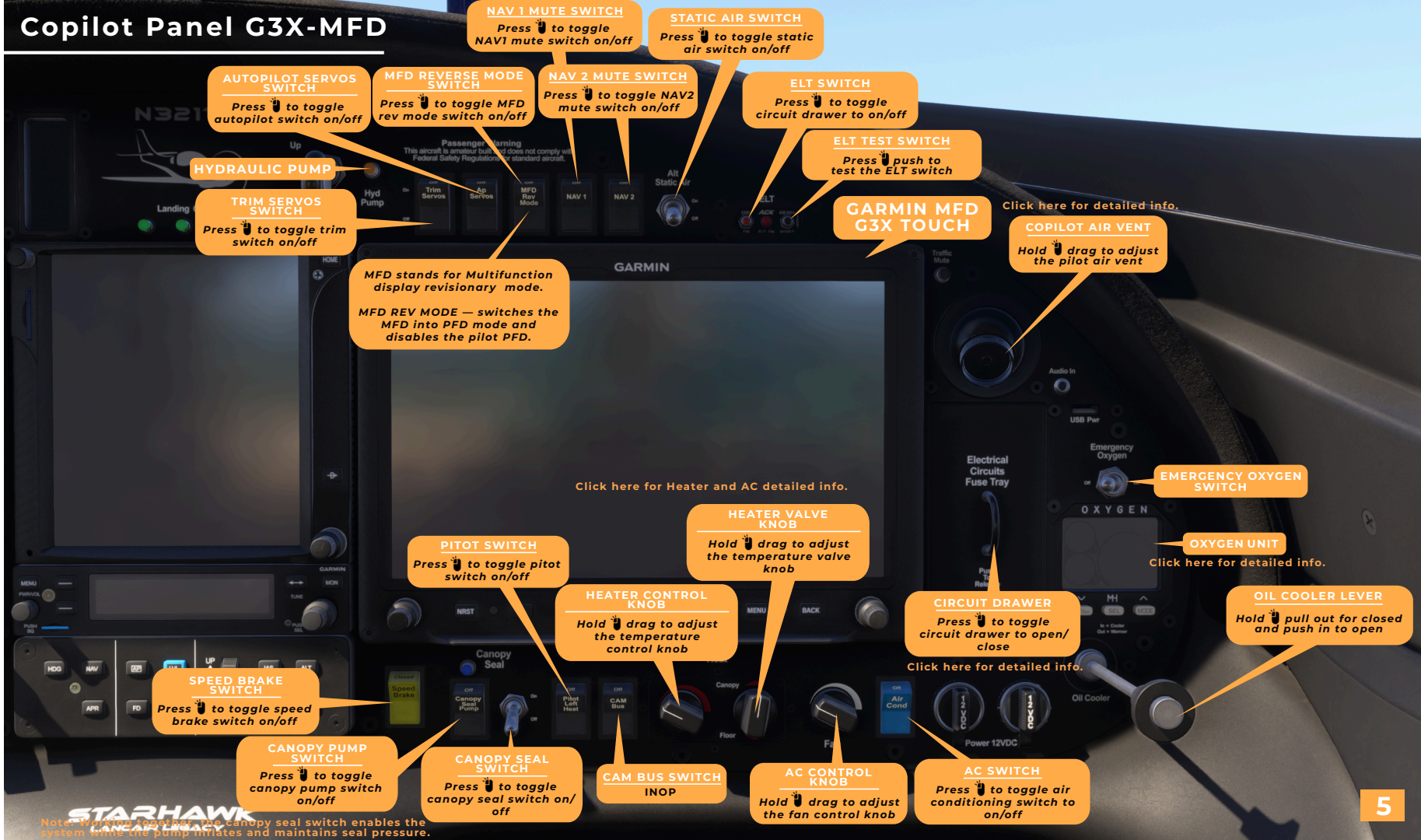
GARMIN GTR200
(COM2 RADIO)

GARMIN GMC305
AUTOPILOT UNIT

[Click here for detailed info.](#)

STARHAWK
LANCAIR LEGACY

Copilot Panel G3X-MFD



AUTOPILOT SERVOS SWITCH

Press to toggle autopilot switch on/off

HYDRAULIC PUMP

TRIM SERVOS SWITCH

Press to toggle trim 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

STATIC AIR SWITCH

Press to toggle static air switch on/off

ELT SWITCH

Press to toggle circuit drawer to on/off

ELT TEST SWITCH

Press push to test the ELT switch

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.

PITOT SWITCH

Press to toggle pitot switch on/off

HEATER VALVE KNOB

Hold drag to adjust the temperature valve knob

HEATER CONTROL KNOB

Hold drag to adjust the temperature control knob

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

CIRCUIT DRAWER

Press to toggle circuit drawer to open/close

Click here for detailed info.

EMERGENCY OXYGEN SWITCH

OXYGEN UNIT

Click here for detailed info.

OIL COOLER LEVER

Hold pull out for closed and push in to open

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

STARHAWK

PROPELLOR LEVER

Hold  drag to adjust propeller RPM control

ALLYSON THORN
VALIN THORN

MIXTURE LEVER

Hold  drag to adjust mixture lever

RAM AIR LEVER

Hold  drag to adjust the ram air lever

THROTTLE LEVER

Hold  drag to adjust throttle lever

FUEL SELECTOR

Hold  drag to set fuel selector position to right, left or off

FUEL TANK
SELECTOR

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

CROSS OVER DUMP VALVE

Press  to toggle cross over dump valve to on/off

PRIMARY DUMP VALVE

Press  to toggle primary dump valve to on/off

HYDRAULIC PRESSURES

Measured in psi

HYDRAULIC PRESSURES

HYDRAULICS DUMP VALVES

RETRACT CIRCUIT

CIRCUIT DEPLOY

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

RUDDER PEDALS

RUDDER PEDAL HANDLE

Press  hold to adjust rudder pedal's position

FOOTWELL LED LIGHTS

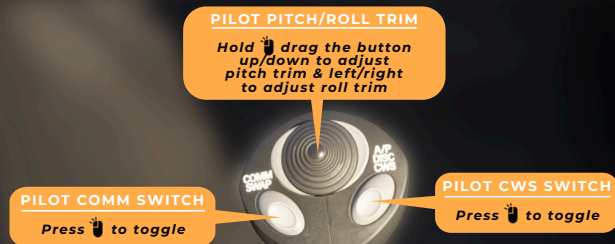
Press  hold to rotate footwell knob to adjust brightness. Access it from the pilot panel.

[Click here for detailed info.](#)

HEATER VENT

Hold  drag to adjust the heater eye valves

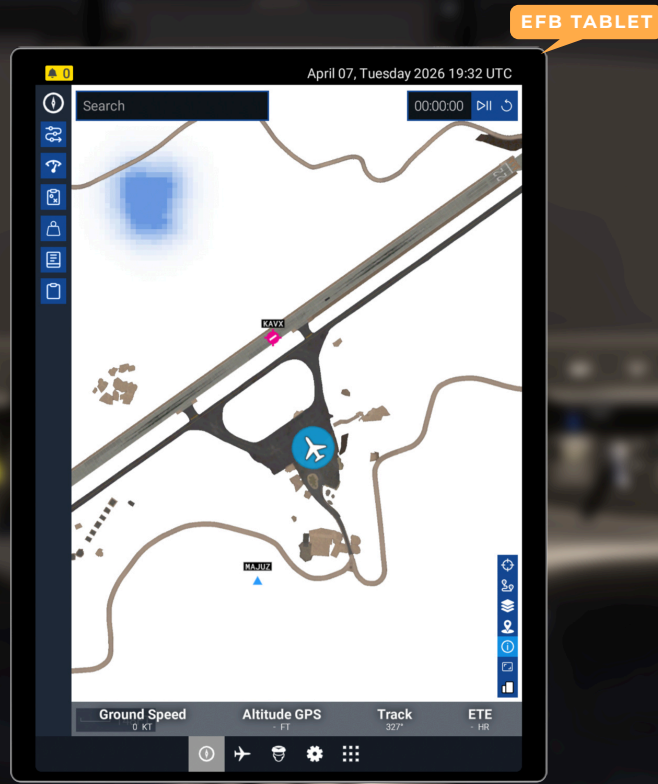
Pilot Stick



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

Note: This is the shortcut to open/close the canopy. Canopy seal switch should be turned off, while using that shortcut.

Note: This bypasses the latch mechanism between the seats, allowing the canopy to be unlocked or locked, while opening and closing immediately

[Click here for detailed info.](#)

AC VENTS

Hold  drag to adjust the ac vents

CANOPY OPEN

Press  to toggle canopy lever to lock/unlock the canopy



Canopy Open

CANOPY HOTSPOT

Press  to toggle
canopy to open/close

Exit Aircraft

EXIT AIRCRAFT

Press  to toggle
button to 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



AOA DIMMER

Press 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 push to test the AOA

Click here for detailed info.

PILOT AIR VENT

Hold drag to adjust the pilot air vent

PARKING LEVER BRAKE

Press to toggle lever brake on/off

PANEL LIGHT KNOB

Hold drag to adjust the light knobs brightness

FOOTWELL LIGHTS KNOB

CARGO LIGHTS KNOB

SWITCHES LIGHTS KNOB

MASTER LIGHTS KNOB

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.

ALTERNATOR 1 SWITCH

Press to toggle battery switch on/off

CABIN LIGHTS KNOB

BATTERY SWITCH

Press to toggle battery switch on/off

AVIONICS SWITCH

Press to toggle avionics switch on/off

NAV STROBE LIGHT SWITCH

Hold to drag 3-way switch:
Up: Nav/Strobe Light
Center: Nav Light
Down: Off

FUEL PUMP SWITCH

Hold to drag 3-way switch:
Up: High
Center: Off
Down: Low

PILOT HEAT

Press to toggle ess pitot heat 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.

LANDING GEAR SAFE LIGHTS

LANDING GEAR

Hold to set gear position up / down

SPEED BRAKE

Press to toggle ess speed brake on/off

LANDING LIGHT SWITCH

Hold to drag 3-way switch:
Up: Landing
Center: Off
Down: Pulse

LANCAIR LEGAL

Pilot Panel

Click here for detailed info.

ANNUNCIATOR CAUTIONS

ANNUNCIATOR WARNINGS

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 for closed and push in to open

CABIN HEAT/DEFROST

Hold  pull out for max heat and in for low heat

CLOCK/FLIGHT TIMER

Click here for detailed info.

LANCAIR LEGAL

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



PMA7000M-S Audio Panel

GARMIN GNS430

KX155

KN62A

KR87

KAP140 AUTOPILOT UNIT

Center Panel GTN750 / GTN650 / KAP140

LANCAIR LEGACY

GARMIN GTN750
(PMS50)

GARMIN GTN650
(PMS50)

KAP140
AUTOPILOT UNIT

C-GPHL

Alt
Static Air

PASSENGER
THIS AIRCRAFT IS
DOES NOT COMPLY
REGULATIONS FOR

MAIN
BUS

INOP

AUDIO

MAIN
BUS

PITOT
HEAT

SPEED
BRAKE

Center Panel GTN750XI/ GTN650XI / KAP140

LANCAIR LEGACY

GARMIN GTN750XI
(TDS)

GARMIN GTN650XI
(TDS)

KAP140
AUTOPILOT UNIT

C-GPHL

Alt
Static A

PA
THIS AIRC
DOES NOT C
REGULATI

AIR
INSTRUM
INSTRUM

AUDI

1
PITOT HEAT

MAIN
BUS

2
SPEED
BRAKE

Center Panel IFD550 / PMA7000M-S / IFD540 / KAP140



PMA7000M-S
Audio Panel

AVIDYNE 550

AVIDYNE 540

KAP140
AUTOPILOT UNIT

LANCAIR LEGAL

PMA7000M-S Audio Panel

KX155

COMM 1

NAV 1

KX155

COMM 2

NAV 2

KN62A

KR87

KAP140
AUTOPILOT UNIT

C-GPHL

Alt
Static Air

PASS
THIS AIRCRAFT
DOES NOT COMPLY
WITH REGULATION

ADVANCE
SUBS
XPDR
AUDIO

MAIN
BUS
PITOT
HEAT
SPEED
BRAKE

27

Copilot Panel / GTX345 Transponder



Click here for detailed info.

CGR-30P ENGINE GAUGE

Click here for detailed info.

CGR-30C ENGINE GAUGE

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

Click here for detailed info.

COPILOT AIR VENT

Hold drag to adjust the pilot air vent

ADF BEARING POINTER

SPEED REF PLACARD

GTX 345 TRANSPONDER

Click here for detailed info.

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

Click here for detailed info.

TEMPERATURE GAUGE

CIRCUIT BREAKERS
Press to toggle push or pull the circuit breakers

ELT SWITCH
Press to toggle elt switch to on/off

OIL COOLER LEVER
Hold drag to adjust the oil cooler door

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

Copilot Panel / ADF

AIR LEGACY

[Click here for detailed info.](#)

CGR-30P ENGINE GAUGE



[Click here for detailed info.](#)

CGR-30C ENGINE GAUGE



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

Air Static A

DAVTRON M303



[Click here for detailed info.](#)

COPILOT AIR VENT

Hold drag to adjust the pilot air vent

ADF BEARING POINTER



SPEED REF PLACARD

SPEED REFERENCE			
TAKEOFF & CLIMB			
V ₁ - MINIMUM SPEED (KTS)	100	100	100
V ₂ - MINIMUM SPEED (KTS)	100	100	100
V _{LO} - MINIMUM SPEED (KTS)	100	100	100
V _{LO} - MINIMUM SPEED (KTS)	100	100	100
V _{LO} - MINIMUM SPEED (KTS)	100	100	100
APPROACH & LANDING			
V _{APP} - APPROACH SPEED (KTS)	100	100	100
V _{LS} - LANDING SPEED (KTS)	100	100	100
V _{LO} - MINIMUM SPEED (KTS)	100	100	100
V _{LO} - MINIMUM SPEED (KTS)	100	100	100
V _{LO} - MINIMUM SPEED (KTS)	100	100	100

ADF



[Click here for detailed info.](#)

TEMPERATURE GAUGE



CANOPY PUMP SWITCH

Press to toggle canopy pump switch on/off

CANOPY SEAL SWITCH

Press to toggle canopy seal switch on/off

CIRCUIT BREAKERS

Press to toggle push or pull the circuit breakers

ELT SWITCH

Press to toggle elt switch to on/off

OIL COOLER LEVER

Hold pull out for closed and push in to open

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

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 DIM



AOA



AOA
Angle of Attack
Indicator

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.

LANCAIR LEGACY AOA INDICATOR REFERENCE

Clean Configuration

Gear Up • Flaps Up



Zero Lift



Best Glide



High Angle Warning

Approach Configuration

Gear Down • Flaps 4/8
(approx. 20°)



Zero Lift



Best Approach



High Angle Warning

AOA units are calibrated reference values, not degrees.

Throttle Quadrant, Fuel Valves and Tank Selectors



THROTTLE LEVER

Hold  drag to adjust throttle lever

PROPELLER LEVER

Hold  drag to adjust propeller RPM control

MIXTURE LEVER

Hold  drag to adjust mixture lever

FUEL SELECTOR

Hold  drag to set fuel selector position to right, left or off

RUDDER TRIM

Hold  drag to set rudder trim position to right or left

Hydraulic Dump Valves

CROSS OVER DUMP VALVE

Press  to toggle cross over dump valve to on/off

DUMP

CLOSED

HYDRAULIC PRESSURES

Measured in psi

HYDRAULIC
PRESSURES

RETRACT
CIRCUIT

Rudder Pedals

FOOTWELL LED LIGHTS

Press  hold to rotate footwell knob to adjust brightness. Access it from the pilot panel.

RUDDER PEDAL HANDLE

Press  hold to adjust rudder pedal's position

RUDDER PEDALS

[Click here for detailed info.](#)

HEATER VENT

Hold  drag to adjust the heater eye valves

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

AP
DISC
CWS

THROTTLE

FUEL

AILERON TRIM

L R

RUDDER



Copilot Stick

COPLOT PITCH/ROLL TRIM

Hold  drag the button up/down to adjust pitch trim & left/right to adjust roll trim

COPLOT CWS SWITCH

Press  to toggle

COPLOT COMM SWITCH

Press  to toggle

Electronic Flight Bag Tablet



EFB 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

Press  to toggle canopy lever to lock/unlock the canopy

Canopy Open

CANOPY HOTSPOT

Press  to toggle canopy to open/close

Exit Aircraft

Note: The canopy should be open to exit the aircraft.

EXIT HOTSPOT
Press **U** to exit the aircraft

Cabin / Cargo Lights



Canopy

Click on this decal to raise and lower the canopy

Note: These decals are just a toggle.

↑ RAISE CANOPY

↓ LOWER CANOPY

Clicking the door handle unlatches or latches the door

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

OPEN CANOPY

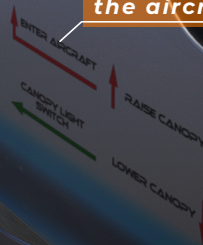
STATIC PORT
KEEP CLEAR

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

FUEL NOZZLE

Fuel nozzle will show once the fuel caps are removed and either the custom fuel truck or the ATC fuel truck has arrived.

Request fuel supply services from the ground crew through ATC

Navigation & Strobe Light



Navigation & Strobe Light

NAVIGATION RED LIGHT

Green Navigation Light on the
other wing

STROBE LIGHTS

Landing Light

LANDING LIGHT

There is no taxi light on this aircraft

Static Wicks



STATIC WICKS

Ailerons



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

Nose Tire & Chokes

1. *Inspect nose tire for proper shape and inflation.*
2. *Ensure no excessive wear, cuts or flat spots.*

1. *Click here to mount or remove 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

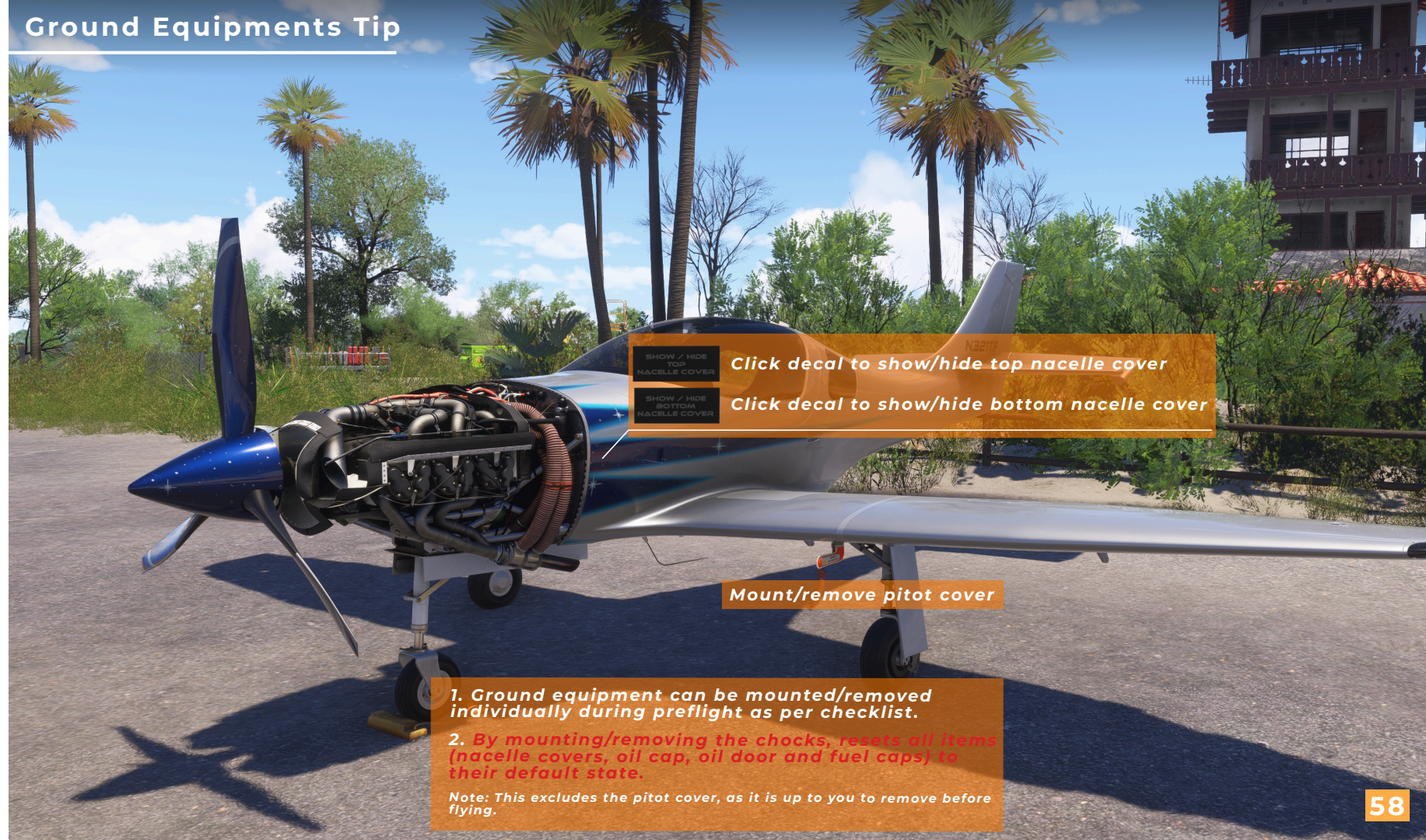
SHOW / HIDE
TOP
NACELLE COVER

SHOW / HIDE
BOTTOM
NACELLE COVER

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



SHOW / HIDE
TOP
NACELLE COVER

Click decal to show/hide top nacelle cover

SHOW / HIDE
BOTTOM
NACELLE COVER

Click decal to show/hide bottom nacelle cover

Mount/remove pitot cover

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 spawn the Tug Track 6 ft in front of the aircraft tire.

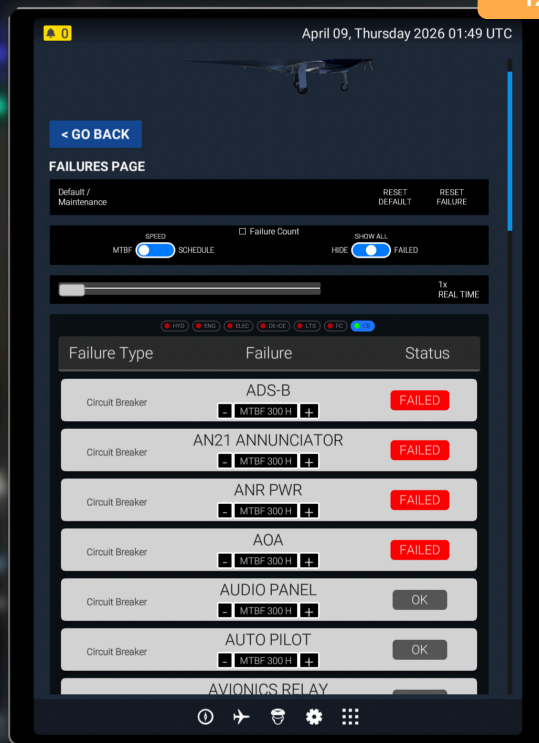
3. Position the Aircraft Tire
Move the aircraft so the nose tire is centered on the Tug Track.

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.



12V Bus

Essential Bus

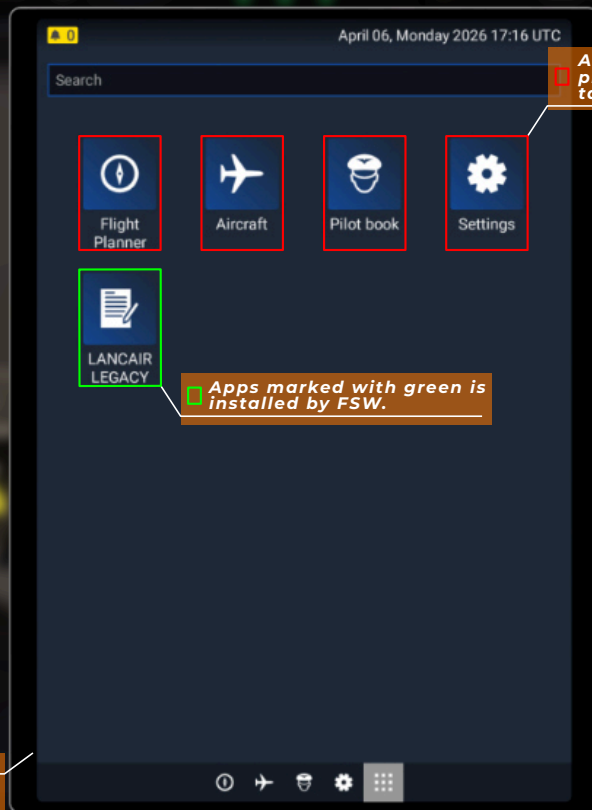
Avionics Bus

Main Bus



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 another monitor for high quality display."

[Return](#)

EFB Tablet Detailed Info.

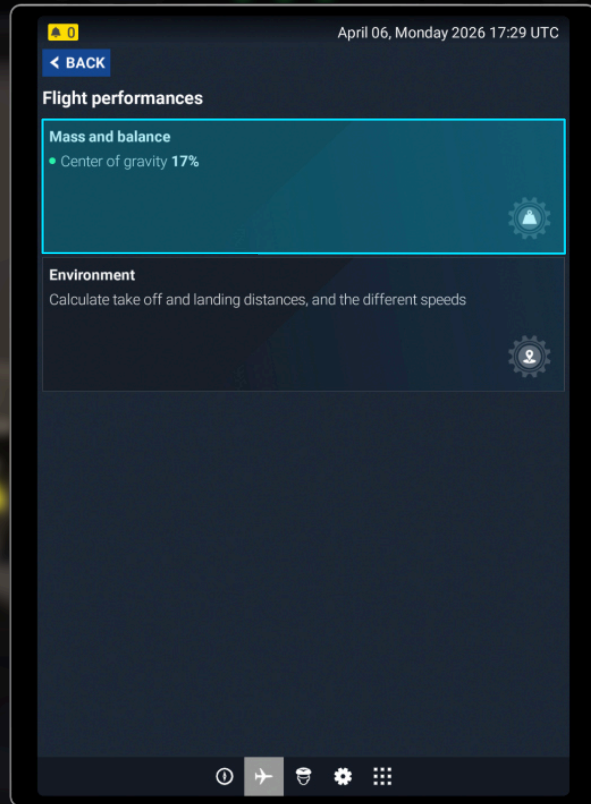
Aircraft

The Aircraft page is organized into three main categories:

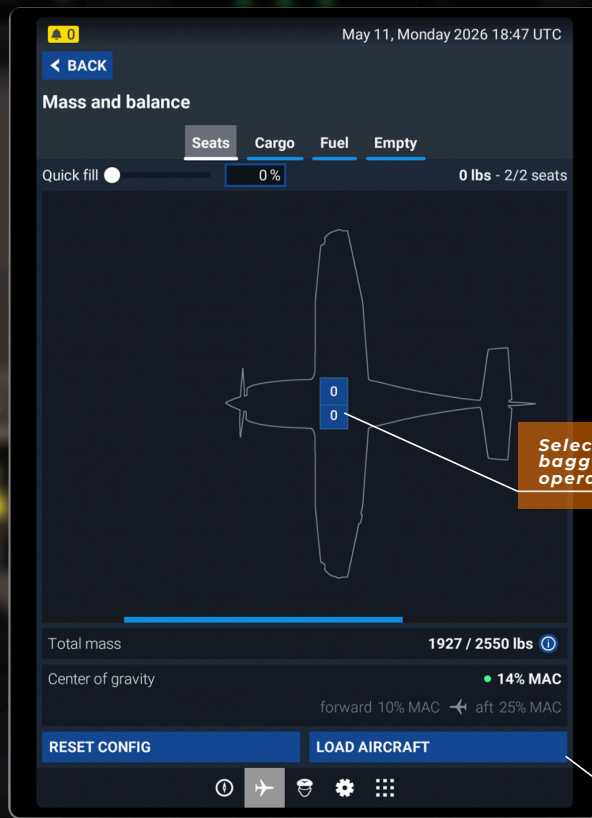
- Flight Performance (including Mass and Balance and Environment submenus)
- Checklists (available in Standard, Advanced, and Expert levels)
- Aircraft Information (providing reference data specific to the airframe)

[Return](#)

EFB Tablet Detailed Info.



EFB Tablet Detailed Info.



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

EFB Tablet Detailed Info.

WARNING: The Quick Fill function may permit loading beyond operational limits, potentially resulting in an unflyable aircraft.

May 13, Wednesday 2026 18:52 UTC

< BACK

Mass and balance

Seats Cargo Fuel Empty

Quick fill 0 % 0 lbs

0 0

Total mass 2086 / 2550 lbs ⓘ

Center of gravity • 17% MAC

forward 5% MAC ✈ aft 25% MAC

RESET CONFIG LOAD AIRCRAFT

ⓘ ✈ ⚙ ⚙ ⚙

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

EFB Tablet Detailed Info.

Set fuel quantities in accordance with mission and operational requirements.

April 06, Monday 2026 17:46 UTC

< BACK

Mass and balance

Seats Cargo **Fuel** Empty

Quick fill 70 % 46 gal ⓘ

GAL LBS

Left

Left Tank
23

Right

Right Tank
23

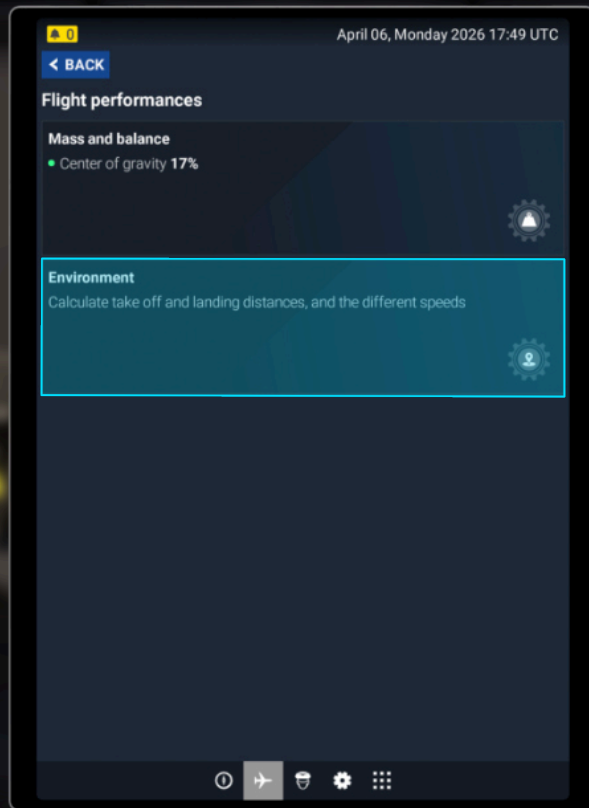
Total mass 2011 / 2550 lbs ⓘ

Center of gravity • 15% MAC
forward 10% MAC ✈ aft 25% MAC

RESET CONFIG LOAD AIRCRAFT

ⓘ ✈ ⚙ ⚙ ⚙

EFB Tablet Detailed Info.



EFB Tablet Detailed Info.

ENVIRONMENT

The Environment Page provides the tools to compute accurate takeoff and landing performance by combining runway selection with live METAR data or custom manual weather inputs. Users can set wind magnitude and direction, temperature, QNH, and aircraft configuration (such as flaps). These settings allow the system to generate realistic performance numbers tailored to the specific runway and weather conditions.

0

April 06, Monday 2026 18:21 UTC

< BACK

Environment

TAKE OFF LANDING

Runway

Search

Weather

METAR MANUAL

Wind magnitude0 KT

Wind direction0 °

Temperature15 °C

QNH1013 HPA

Aircraft Configuration

FLAP INDEX 0

No runway selected

ⓘ

✈

🛡

⚙

⋮

EFB Tablet Detailed Info.

AIRCRAFT INFORMATION

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

▲ 0

May 12, Tuesday 2026 20:34 UTC

BACK

Flysimplware Lancair Legacy

Cabin	LEGACY G3X GTN750
Landing Surface	-
Fuel	18 gal/h
Cruise Speed	235 kt
Max Altitude	18 000 ft
Range	600 nm

ⓘ

✈

🛩

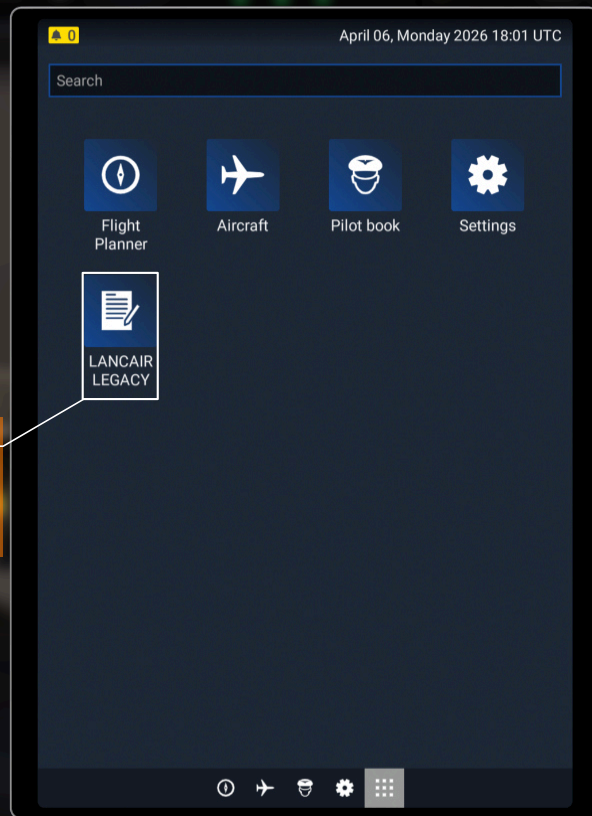
⚙

⋮

EFB Tablet Detailed Info.

LANCAIR LEGACY OPTIONS

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

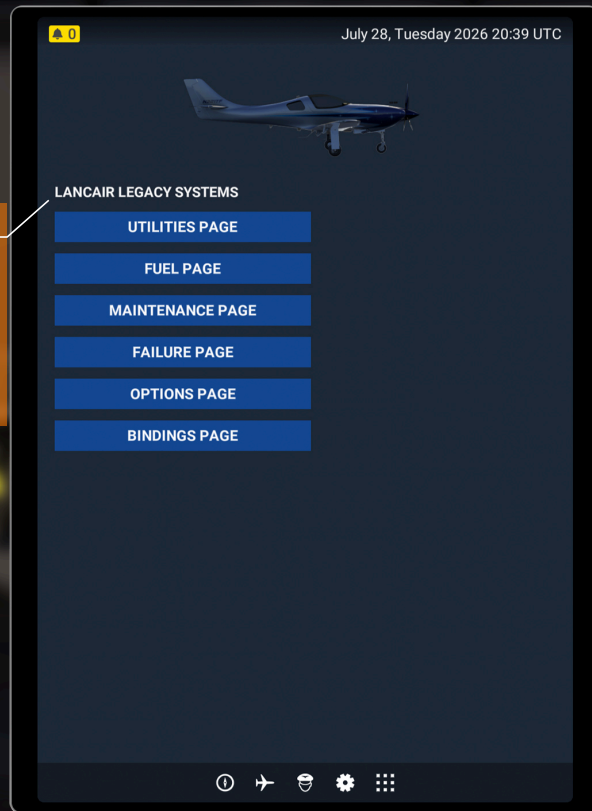


EFB Tablet Detailed Info.

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.

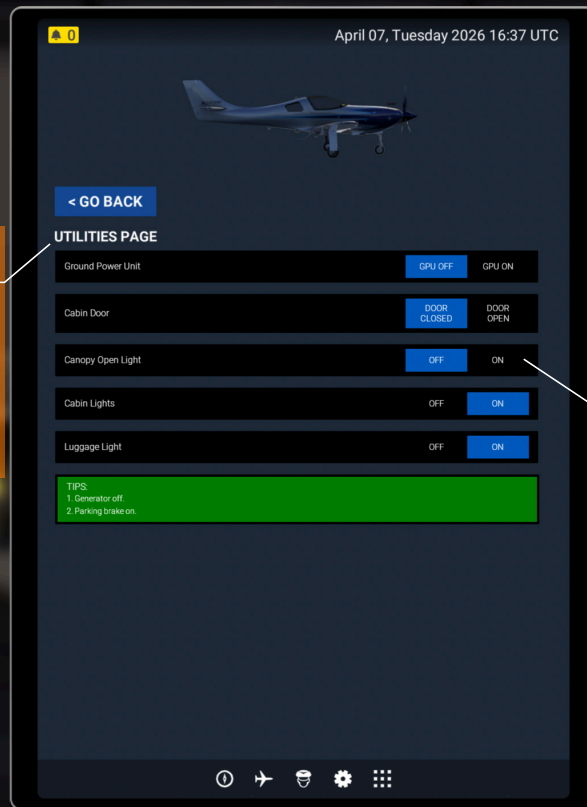
If you navigate anywhere outside the Lancair Legacy app without exiting the page you were on, the next time you open the Lancair Legacy app it will automatically return to that same page. The only way to get back to this menu is by using the Go Back button.



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.



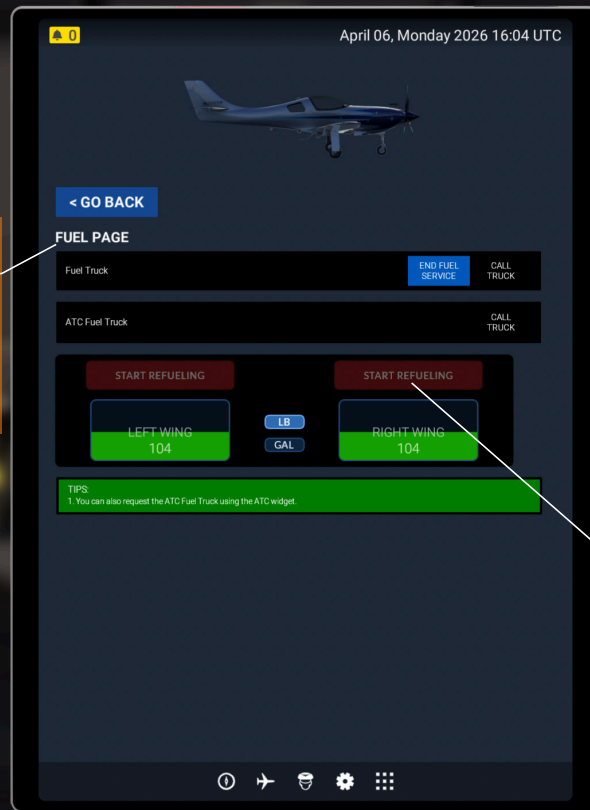
CANOPY OPEN LIGHT

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

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

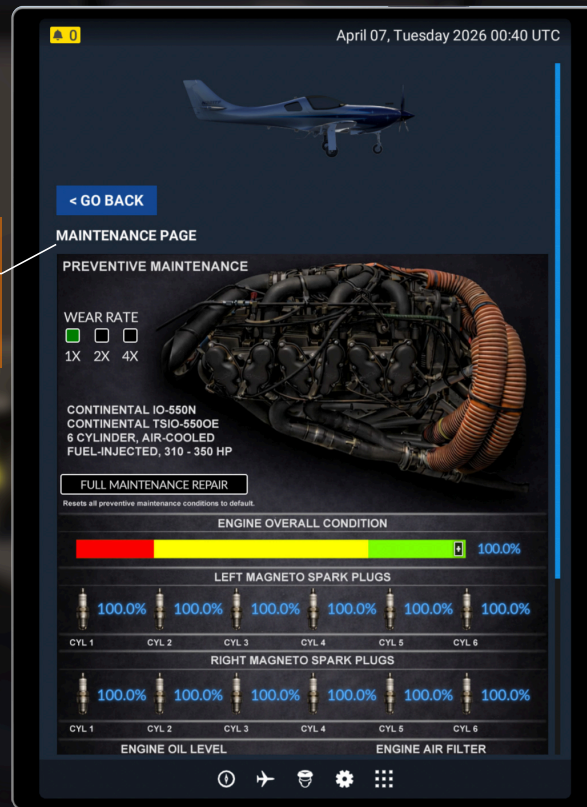
Click the red start fueling button(s) to fuel for one tank or click both for fueling both tanks. Red indicates not fueling.

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](#)

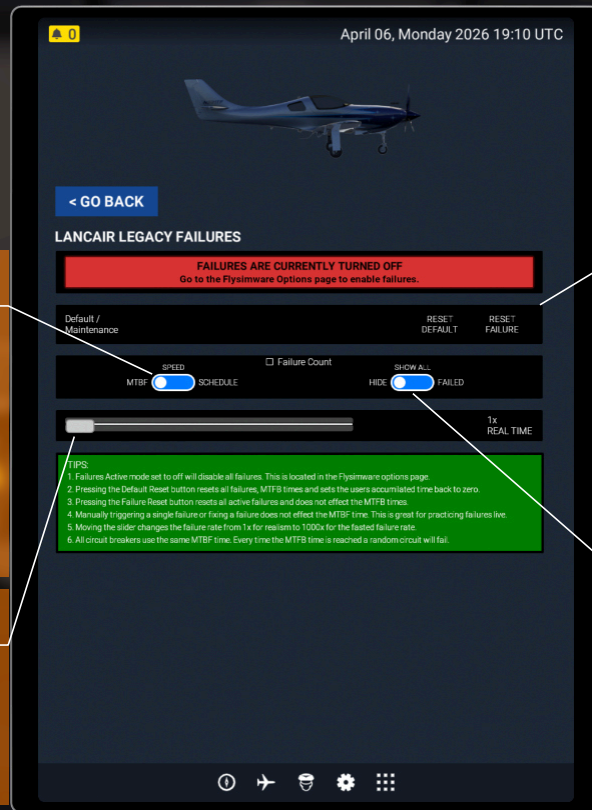
EFB Tablet Detailed Info.

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 1x up to 1000x; it is completely disabled in Scheduled mode. At 1000x, 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.

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.



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.

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.


July 28, Tuesday 2026 21:00 UTC



< GO BACK

OPTIONS PAGE

Headset Filter

OFFON

Tank Timer / Temperature

HIDESHOW

Clock Hours

12 HOURS24 HOURS

Maintenance Active

OFFON

Failures Active

OFFON

Realistic Prime Start

OFFON

Save State Reset

RESET

TIPS

- Options will be saved for future flights.
- If something feels wrong or broken after an update, use Save State Reset to restore saved values back to defaults.
- Realistic Prime Start requires the correct priming procedure for the current temperature, so please review the user manual before using this option.
- 12/24 hour time is only for the clock from the Analog panel.







CLOCK HOURS

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

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](#)

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.

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.

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.



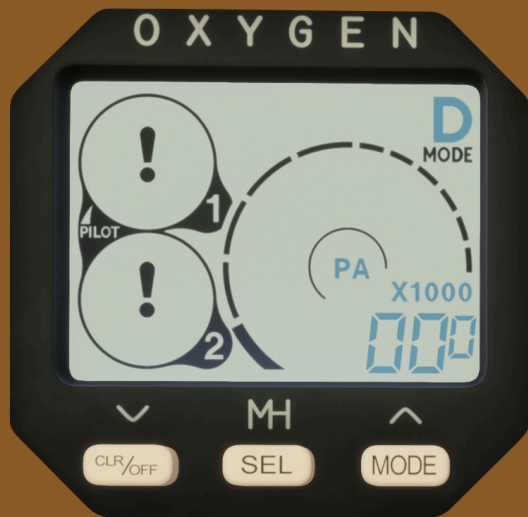
Illuminates whenever the speed brake is deployed.



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.

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 into the sim.

[Return](#)

Oxygen Unit

CLR/OFF

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

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 Altitude readout.
- b) Hundreds (100) of psig. for Tank / Cylinder pressure readout.
- c) Tenths (1/10) for regulator pressure readout.

MODE

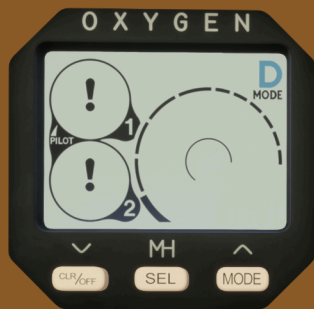
MODE: The control head has two basic modes of operation; N and D mode. You can toggle the unit between the modes with the MODE key. Both modes deliver the same amount of oxygen as a function of pressure altitude.

Oxygen Unit



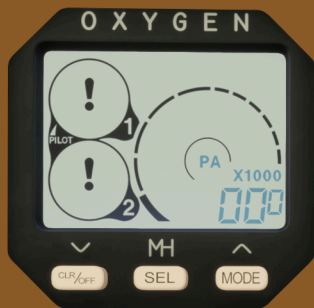
N MODE: The N shows you are operating in night (also called manual) mode and delivers oxygen on-demand at all pressure altitudes.

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.

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 always 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.

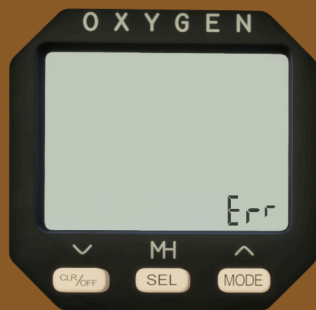
NOTE: Both station O2 flow flags and Station Active inspiration response these will blink off for 1.5 sec and on for 1.5 which is total of 3 sec which is 20 breaths/ minute

Oxygen Unit



O2 Alert Icon

When the O₂ alert icon and O₂ 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

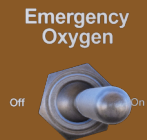
Cause:

- Loss of pneumatic air
- Regulator failure

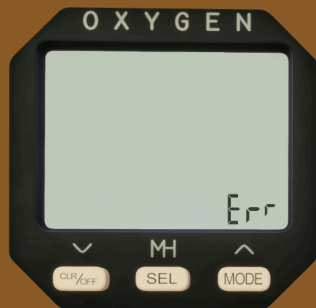
Effect:

No oxygen is delivered despite available tank pressure.

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.

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.

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.



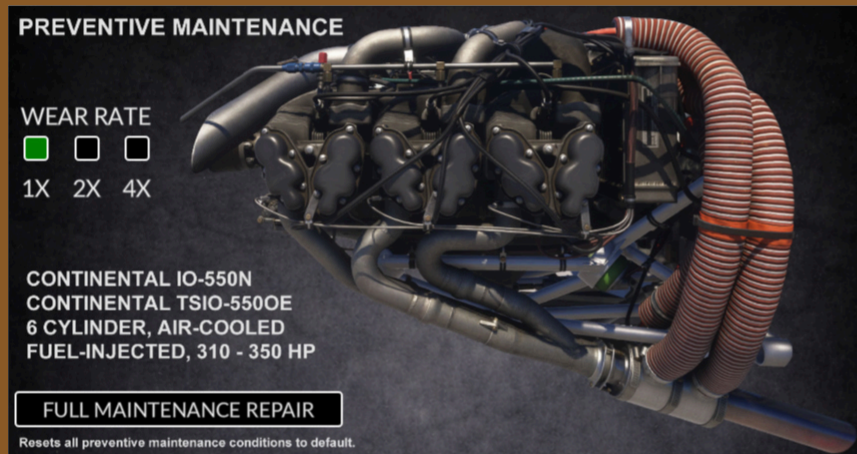
Illuminates whenever the speed brake is deployed.

Davtron Clock Detailed Info.



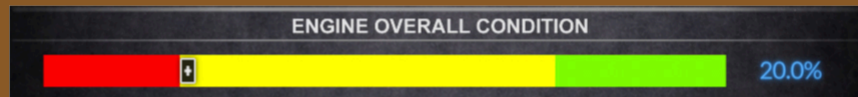
Return

Maintenance Page Detailed Info.



Wear rates increase if time accerleration (2x/4x) is used.

All systems degrade continously based on usage and time.



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

Maintenance Page Detailed Info.



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.

Maintenance Page Detailed Info.



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.

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.

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.

Maintenance Page Detailed Info.



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.

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)

DIRT BUILDUP(Rates & Conditions)



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.

Maintenance Page Detailed Info.



MUD (4MIN)

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

[Return](#)

Maintenance Page Detailed Info.



MUD (TIRES) (8MIN)

Same as mud, but affects tires only.

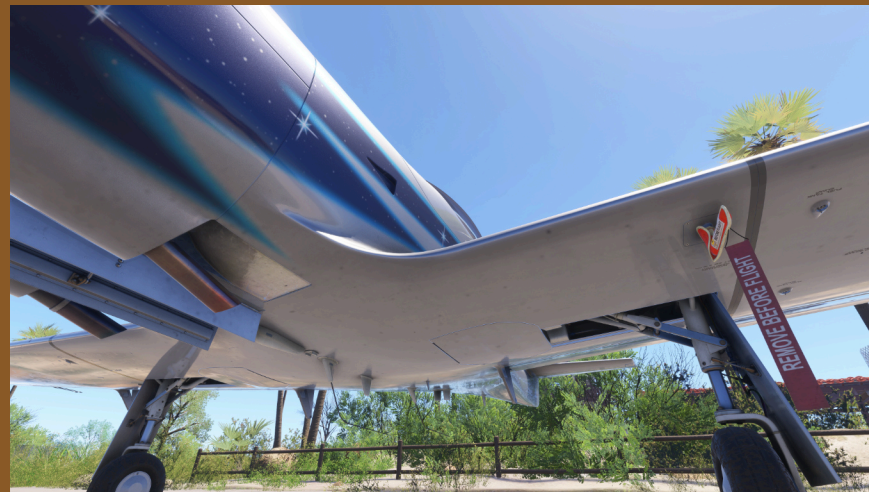
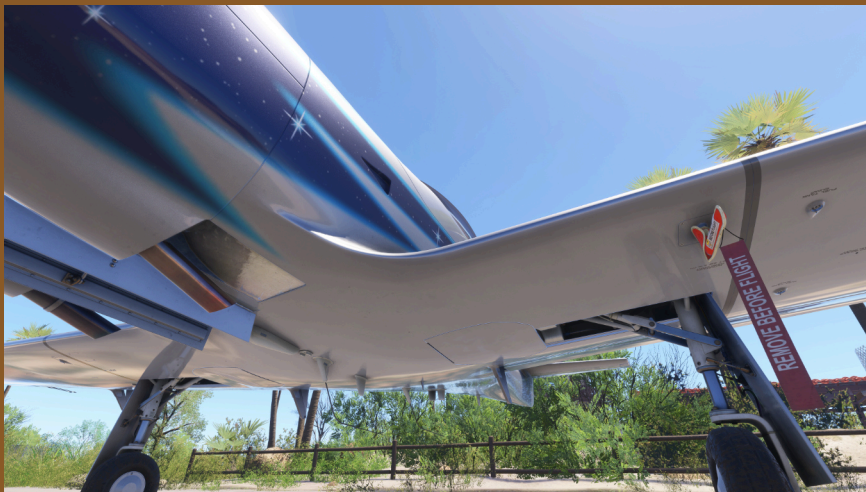
Maintenance Page Detailed Info.



DUST (4MIN)

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

[Return](#)



REGULAR DIRT (20HRS)

Builds slowly over time while moving in dry conditions.

Maintenance Page Detailed Info.



INSECTS (1HR)

Builds when:

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

[Return](#)

Maintenance Page Detailed Info.

**RUNWAY TAR (40 HRS)**

Builds slowly on hard runway surfaces above ~20 knots

[Return](#)



OIL LEAKS (17HRS)

Builds over time while engine is running.

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

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.

Cabin Air Temperature System (Glass only)



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)

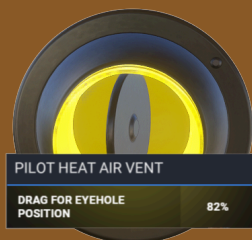
The air conditioning system uses an air conditioning switch and an AC control knob. The engine must be running for the air conditioning system to operate.

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.

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

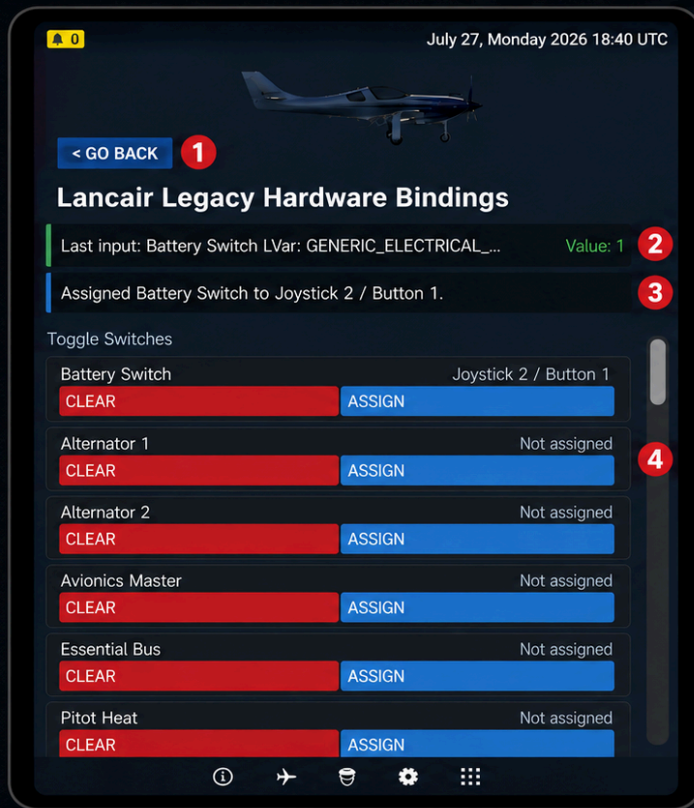
Note: No AC vents in the analog variants



[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.

Example shown:

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.

Examples include: assigned a control, cleared a binding, or ran out of time.

Example shown:

Assigned Battery Switch to Joystick 2 / Button 1.

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.

How to assign a control

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.

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

G5 CGR-30P Engine Display



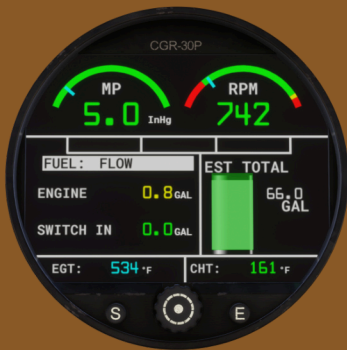
Overview

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.

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.

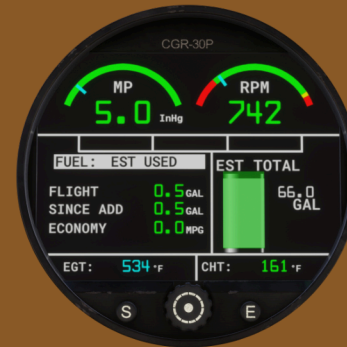
FUEL: EST AT DEST

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.

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.

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.