

FLYSIMWARE

— FLY THE VINTAGE SKIES —



LEARJET 35A



















Version 1.3

NOTE: The Xbox version will not include the TDS GTN750Xi due to limitations!

NOTE: Some switches, button and knobs should not use the default sim bindings. We include a hardware binding documentation included in our download zip file if you purchased from an online store. If you purchased through the sim marketplace you can get all of our documentation from our main website product page called MSFS PC & Xbox help files.

NOTE: Below are some features some of the panels currently may include or do not include!

FLYSIMWARE LEARJET 35A

FEATURES	DESCRIPTION	WT530	PMS50 GTN750	TDS GTN750Xi
Go-Around mode	Sets the pitch to 9 degrees up. GNS530: You must use the pitch sync			
CAPTURE ALTITUDE IN FLIGHT DIRECTOR ONLY MODE	This means with autopilot off and no SPD, VS modes on.			
HALF BANK	This reduces the autopilot bank from 25 degrees to 15 degrees.			
SPD - MACH HOLD MODE	Holds the speed for the flight level change mode in MACH rather than IAS.			
ARM MODE - ILS	Allows you to arm the nav for ILS when in heading mode.			
ARM MODE - VOR	Allows you to arm the nav for a VOR when in heading mode.			

Product/Sim Information

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://flysimware.com/website2019/contact/>

Technical Specifications

Learjet 35A

Exterior

Exterior Height: 12 ft 3 inches
Wing Span: 39 ft 6 inches
Length: 48 ft 7 inches
External Baggage: NA

Interior

Cabin Volume: 268 cubic ft
Internal Baggage: 40 cubic ft

Occupancy

Crew: 2
Passengers: 6-8

Operating Weights

Max T/O Weight: 18,300 lb
Max Landing Weight: 15,300 lb
Operating Weight: 10,700 lb
Empty Weight: 10,000 lb
Fuel Capacity: 6,238 lb
Payload W/Full Fuel: 2,000 lb
Max Payload: 3,200 lb

Range

Normal Range: 1,700 - 2,000 nm
Max Range: 2,000 - 2,100 nm
Service Ceiling: 45,000 ft

Distances

Balanced Field Length: 5,000 - 6,000 ft
Landing Distance: 3,000 ft

Performance

Rate of Climb: 4,290 fpm
Climb Rate One Engine Inop: 1,000 - 1,500 fpm

Max Speed: 451 kts
Normal Cruise: 424 kts
Economy Cruise: 377 kts
Fuel Capacity: 6238 lb

Power Plant

Engines: 2
Maximum Thrust: 3,500 lb / each
Engine Mfg: Honeywell Aerospace
Engine Model: TFE731

COCKPIT

OVERVIEW OF PANELS

ALL PANELS

MAIN PANELS

PILOTS & COPILOT PANELS

Pilot Panel

Copilot Panel

Engine Panel

Glareshield Panel

Navigation Panel GNS-530

Navigation Panel GTN-750XI

Navigation Panel GTN-750

Pilot's Sidewall

Copilot's Sidewall

Left Audio Panel

Right Audio Panel

DETAILED INFORMATION

Reverser Panel

Annunciator Warning Panel

Autopilot Panel

Anti-Ice Fuel Computer

Engine Start

Lower Center Panel

Climate / Lights Panel

Fuel Valve & Tank Selector

Center Pedestal

EFB Tablet

Davtron Clock

GTX 345 Transponder

CENTER PEDESTAL

MAIN COCKPIT

Anti-Ice / Fuel Computer

Start Panel

Lower Center Panel

Pressurization System

Climate / Lights Panel

Throttle Quadrant

Fuel Valves And Tank Selectors

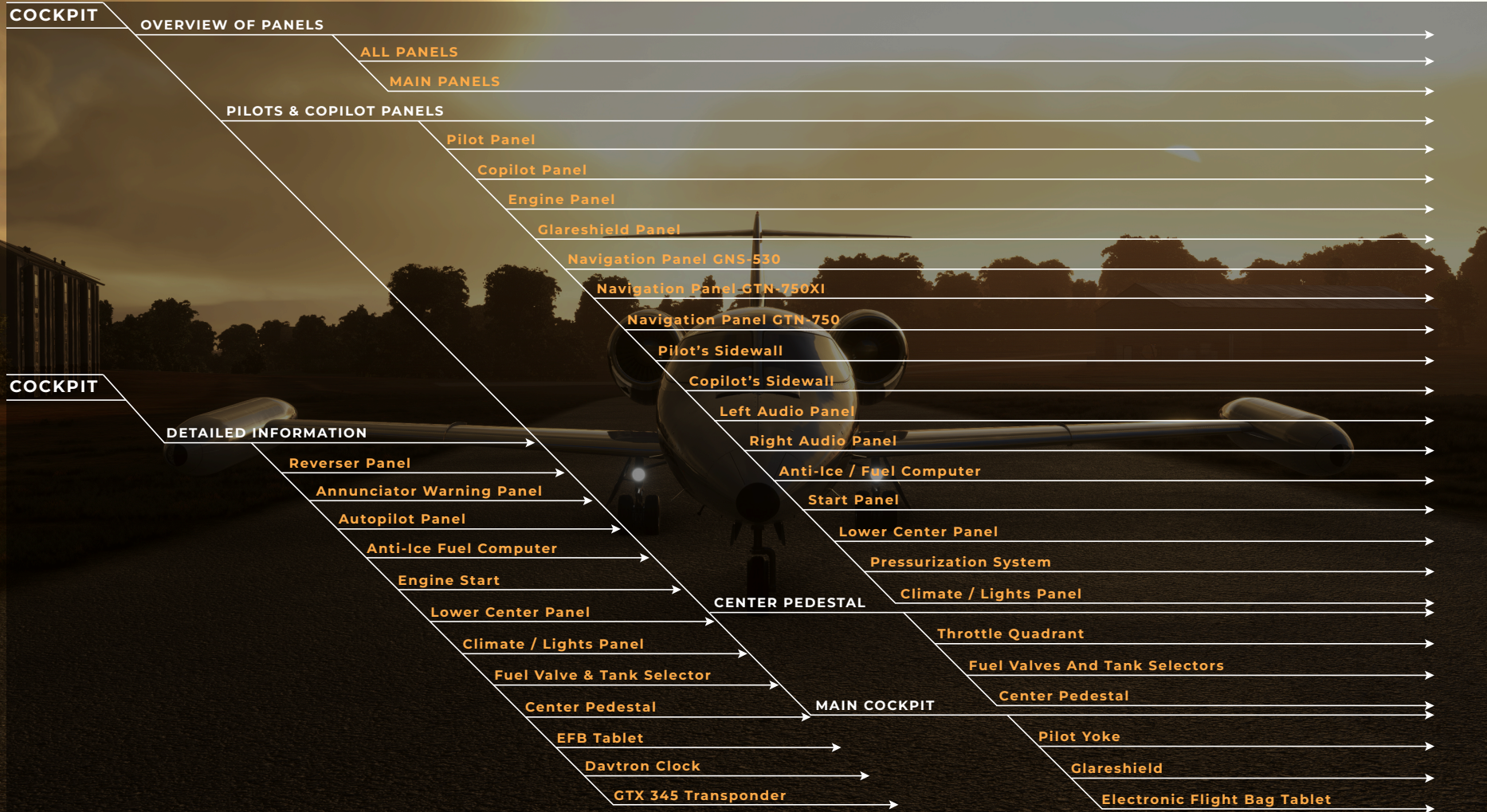
Center Pedestal

Pilot Yoke

Glareshield

Electronic Flight Bag Tablet

COCKPIT



INTERIOR

CABIN

Cabin Tables

Passenger Curtains

Cabin Door

Cabin Door Open

Cabin Door Switches

Cabin Lights

INTERIOR

DETAILED INFORMATION

Cabin Door

EXTERIOR

AIRCRAFT

Cabin Door

Cabin Door Open

Engine Covers

Ground Power Unit

Ground Power Plug

Pitot Covers

Fuel Caps

Fuel Nozzle

Wing Lights And Static Wicks

Navigation & Strobe Light

Landing-taxi Light

Belly Beacon Light

Tail Beacon Light

Wing Ice Inspection Light

Chocks

ALL PANELS

Reverser-Panel

Annunciator Warning Panel

Autopilot-Panel

ANNUNCIATOR PANEL WARNINGS

[Click here for detailed info.](#)

FIRE HANDLE WARNING

[Click here for detailed info.](#)

Main panel

LANDING GEAR WARNING

[Click here for detailed info.](#)

Copilot's sidewall

Pilot's sidewall

CABIN ALTITUDE WARNING HORN

[Click here for detailed info.](#)

Throttle Quadrant

Fuel Valves & Tank Selectors

Center Pedestal

R. Circuit panel

L. Circuit Panel

MAIN PANELS



Pilot Panel



Copilot Panel

DME TEST SWITCH
Hold momentarily to test

DME SELECTOR & DISPLAY

ANGLE OF ATTACK INDICATOR

GROUND PROXIMITY WARNING SYSTEM
The 'PULL UP' alert from the GPWS informs the copilot that immediate action is required to avoid terrain

MASTER WARNING
Illuminates with a red annunciator light. Press to reset

DME MODE SWITCH
Hold drag rotate to change modes

DME MODE SWITCH
Hold drag rotate to change modes

ADI
Attitude Directional Indicator

ASI
Airspeed / Mach Indicator

COPILOT AIRSPEED BUG KNOB
Hold drag rotate for bug position

ALTITUDE CAPTURE INDICATOR

DECISION HEIGHT INDICATOR

A & APS
Altimeter & Altitude Pre-Selector

BARO KNOB
Hold drag rotate to tune
Hold push for:
1-3 seconds : Standard
4 seconds : INHG/HPO
8 seconds : Feet/Meters

RMI
Radio Magnetic Indicator

HSI
Horizontal Situation Indicator

PILOT ALTITUDE ALERTER KNOB
Hold drag rotate to set capture altitude
Hold push to test

VSI
Vertical Speed Indicator

HEADING BUG KNOB
Hold drag rotate to adjust heading bug

HSI DME OPTION SELECTOR

LANDING GEAR
Hold drag to set gear position up/down

CDI KNOB
Hold drag rotate to adjust selected course

RADAR ALTIMETER

GEAR HORN SWITCH
Hold momentarily to drag the switch up to test, hold switch down to mute gear horn

ELECTRONIC LOCATOR TRANSMITTER
Press to toggle to change modes

DECISION HEIGHT KNOB
Hold drag rotate to tune

GEAR BRT KNOB
Hold drag rotate to adjust brightness

NAVGPS COPILLOT SWITCH
Press to toggle NAVGPS mode

DATCON HOUR METERS

RADAR ALTIMETER TEST SWITCH
Hold momentarily to toggle

Engine Panel

RAM AIR TEMP

ALERTER DAY NIGHT
Press to test on/off

N2 GAUGES
L & R turbine speed

RAM AIR TEMPERATURE
Outside Air Temperature
Indicator and Ram Rise in
celcius

N1 REMINDER WHEEL

ALERTER SWITCH
Press to toggle for
brightness day/night

STANDBY ALTIMETER

ENGINE TEMPERATURE
GAUGES
L & R turbine
temperature gauges

OIL PRESSURE GAUGE
Engine oil pressure L&R
indicators

AIR DATA SWITCH
Press to toggle

AIU FAIL WARNING

BARO KNOB
Hold drag rotate
to set altimeter
setting on standby
altimeter

HYDRAULIC PRESSURE
INDICATOR

HYDRAULIC
PRESSURE

FUEL FLOW GAUGE
Fuel flow L&R
indicators

EMERGENCY AIR
INDICATOR

EMERGENCY
AIR

N1 GAUGES
L & R engine speed
gauges

ELECTRICAL &
TEMPERATURE
INDICATORS

Glareshield Panel

REVERSER PANEL

Click here for detailed info.

LEFT & RIGHT THRUST REVERSER SWITCHES

Hold  left click to drag the 3-way switch:
Up: Arm
Center: Off
Down: Test

(The down position acts as a momentary switch)

REVERSER PANEL

MAIN ANNUNCIATOR PANEL

AUTOPILOT MODE SELECTOR

ANNUNCIATOR TEST SWITCH

Press and hold the  to momentarily display annunciator warnings.

ENGINE FIRE BOTTLE SWITCHES

Press  to discharge

ENGINE FIRE BOTTLE SWITCHES

Press  to discharge

ENGINE FIRE T- HANDLES

Hold  drag to pull for the fire bottle

ENGINE FIRE T- HANDLES

Hold  drag to pull for the fire bottle

Navigation Panel GNS-530

GNS 530
Navigation System



WEATHER RADAR UNIT



RADAR RANGE KNOB

Hold  to rotate the Radar Range Knob to adjust the range parameters on the Weather Radar Panel.

RADAR MODE KNOB

Hold  to rotate the Radar Range Knob to select the weather or map parameter on the panel.

NOT SIMULATED

GTX 345 TRANSPONDER
Click here for detailed info.

Navigation Panel TDS GTN750XI



Navigation Panel PMS50 GTN-750



Pilot's Sidewall

NOT SIMULATED



NOT SIMULATED



PILOT INSTRUMENT LIGHTS
Hold  to drag the knob and adjust the brightness.

PILOT ELECTROLUMINESCENT LIGHTS
Hold  to drag the knob and adjust the brightness.

HSI LCD LIGHTS
Hold  to drag the knob and adjust the brightness.

GLARESHIELD LIGHTS
Hold  to drag the knob and adjust the brightness.

PILOT MAP LIGHT
Hold  to drag the knob and adjust



MAP LIGHT
Hold  to drag and adjust map light position

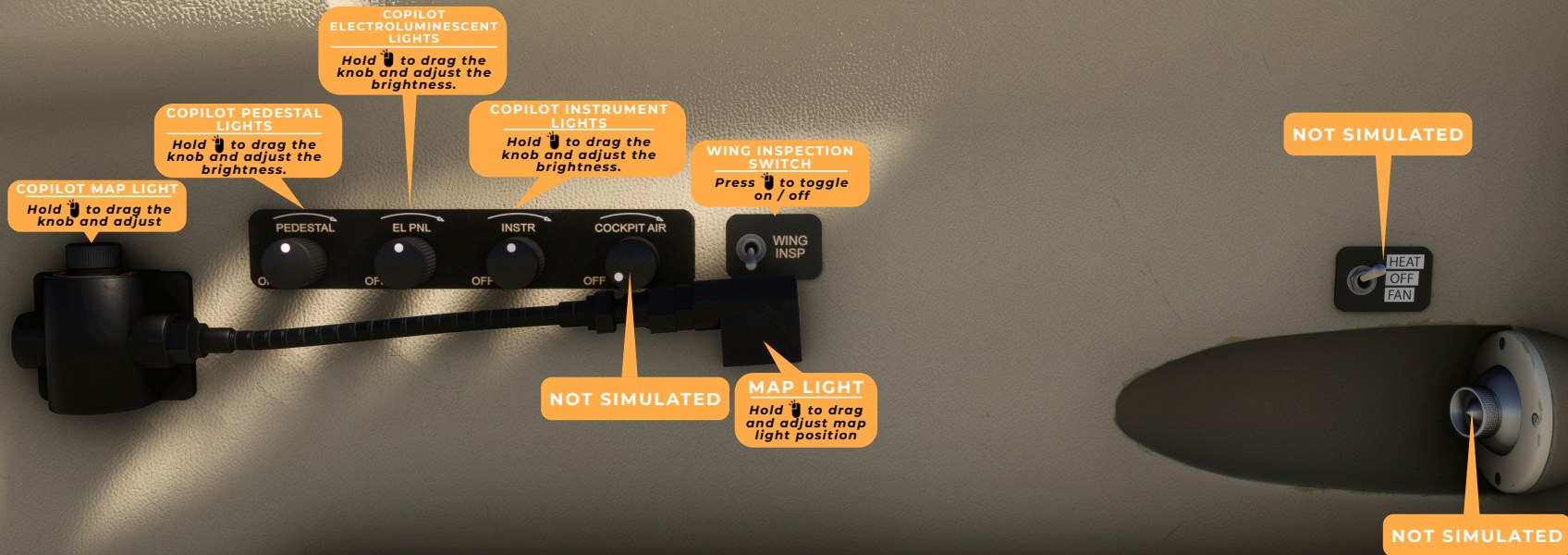
NOT SIMULATED

NOT SIMULATED



OXYGEN PRESSURE GAUGE

Copilot's Sidewall



Pilot Audio Panel



Copilot Audio Panel



NOT SIMULATED

COMM 1 AUDIO SWITCH
Press to toggle on / off

COMM 1 AUDIO SWITCH
Press to toggle on / off

COPILLOT TRANSMIT KNOB
Hold to lock and change transmit type to:
VHF
VHF2
HF (INOP)
INPH
PASS SPEAKER

MASTER SPKR VOL
Hold to adjust the volume

PASS SPKR VOL
Hold to adjust the volume

NOTE: Copilot's audio is INOP (Info displayed here is for pilot audio panel)

Anti-Ice / Fuel Computer Panel

WINDSHIELD ANTI-ICING

Hold left click to drag the 3-way switch:
Up: On
Center: Hold
Down: Off

WINDSHIELD/RADOME SWITCH

Hold left click to drag the 3-way switch:
Up: Alcohol to Windshield & Radome
Center: Alcohol to Radome only
Down: Off

*Controls alcohol anti-ice system

WING AND STABILIZER ANTI-ICING

Press to toggle airframe anti-ice position to on / off

NOT SIMULATED

RADIO ALTIMETER POWER SWITCH

Press to toggle the switch to on / off

AVIONICS MASTER

Press to toggle avionics master switch position to on / off

MARKER BEACON SWITCH

Press to toggle the sensitivity to HI / LOW

MASTER AUTOPILOT SWITCH

Press to toggle to enable power on / off

LEFT FUEL COMPUTER

Press to toggle the switch to on / off

RIGHT FUEL COMPUTER

Press to toggle the switch to on / off



L & R PITOT HEAT SWITCHES

Press to toggle pitot anti-ice heat on / off

L & R NACELLE HEAT SWITCHES

Press to toggle nacelle anti-ice heat on / off

STATIC SOURCE SWITCH

Hold left click to drag the 3-way switch:
Up: Left
Center: Both
Down: Right

NOT SIMULATED

SLAVING CONTROL PILOT SWITCH

Hold momentarily to toggle the switch to free / slave

SLAVE DIRECTION SWITCH

Hold to move up & down to toggle the switch to left and right

AC BUS SWITCH

Press to toggle the switch to PRI / SEC

EMERGENCY BATTERY SWITCH

Hold left click to drag the 3-way switch:
Up: Emergency
Center: Standby
Down: Off

START PRESSURE REGULATOR SWITCH

Hold to toggle left / right

[Click for the detailed info.](#)

Start Panel



[Click for the detailed info.](#)




Click for the detailed info.

Pressurization Panel




Climate / Lights Panel

TEMPERATURE KNOB
Press  to toggle temperature knob to auto / manual

TEMPERATURE CONTROL KNOB
Hold  drag the knob to adjust the temperature


COOL FAN SWITCH
Hold  left click to drag the 3-way switch:
Up: Cool
Center: Off
Down: Fan

L & R BLEED AIR
Hold  left click to drag the 3-way switch:
Up: Emergency
Center: On
Down: Off

STROBE LIGHT SWITCH
Press  to toggle the strobe light on or off

BEACON LIGHT SWITCH
Press  to toggle the beacon light on or off

RECOGNITION LIGHT SWITCH
Press  to toggle the recognition light on or off

NAVIGATION LIGHT SWITCH
Press  to toggle the navigation light on or off

NOT SIMULATED

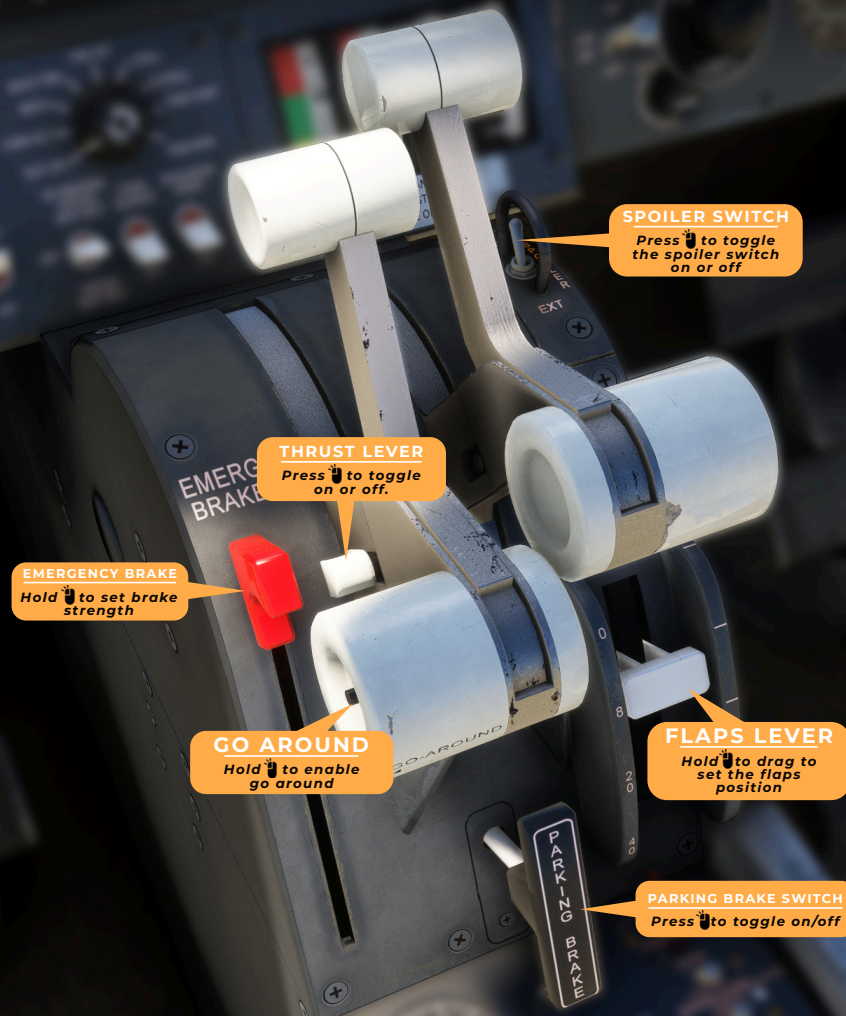
NOT SIMULATED

SLAVING CONTROL COPILOT SWITCH
Press  to toggle the switch to free / slave

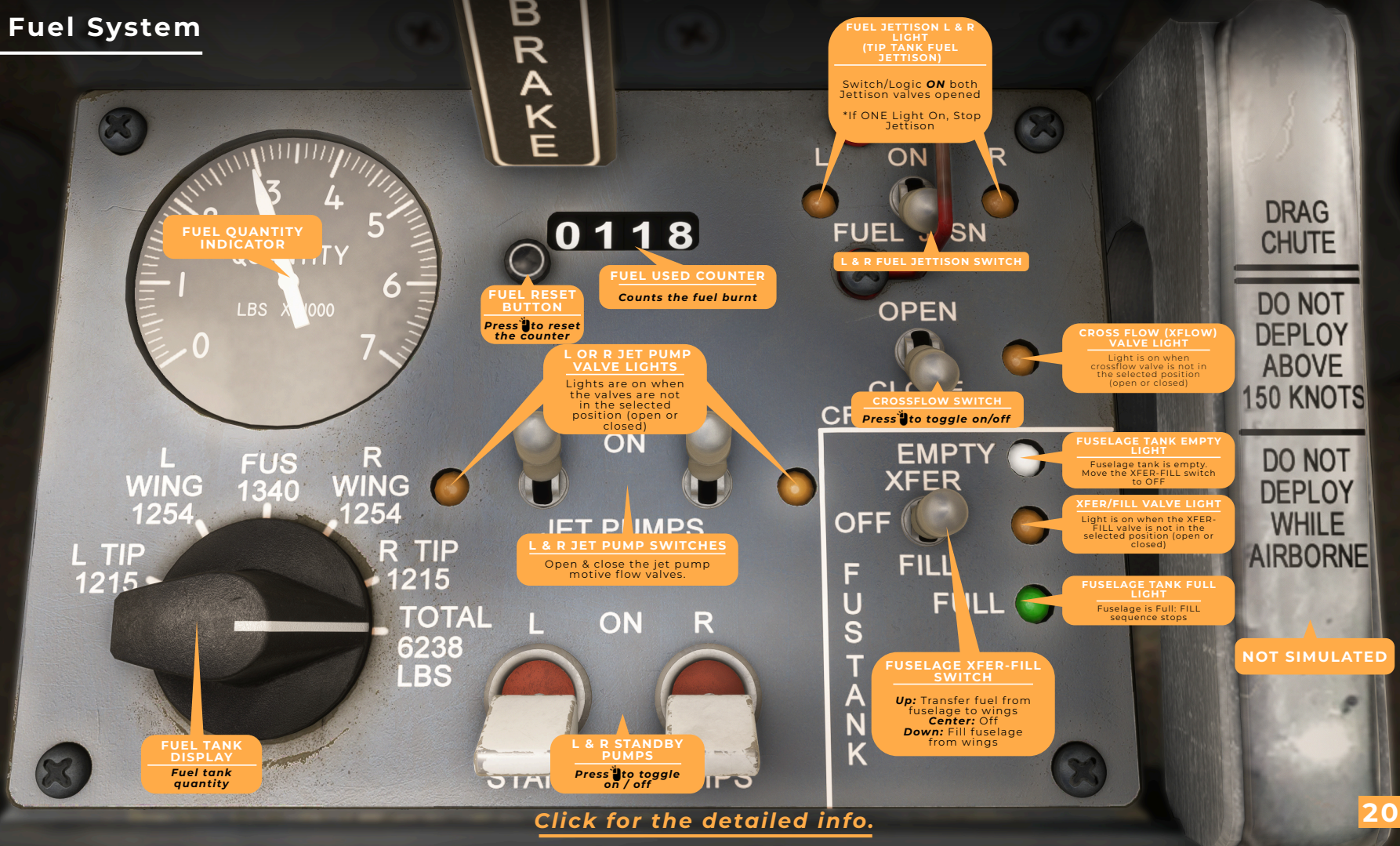
SLAVE DIRECTION SWITCH
Hold  momentarily to move up & down to toggle the switch to left and right

[Click for the detailed info.](#)

Throttle Quadrant



Fuel System



[Click for the detailed info.](#)

Center Pedestal

PITCH TRIM INDICATOR


AILERON TRIM INDICATOR

RUDDER TRIM INDICATOR

STEER LOCK

Press  momentarily to enable steering

PRIMARY / SECONDARY PITCH TRIM SWITCH

Hold  to drag the 3-way switch:
Up: Primary
Center: Off
Down: Secondary

RUDDER TRIM

Hold  momentarily to adjust rudder trim

YAW DAMPER

Press  on buttons to engage

NOT SIMULATED

COMM 2 / NAV 2 / ADF 1 / ADF 2 / RADIOS

SECONDARY PITCH TRIM


Hold  momentarily to drag the switch up to pitch down, hold switch down to pitch up

NOT SIMULATED

[Click for the detailed info.](#)

Pilot Yoke

AILERON/PITCH TRIM

Hold  momentarily
HAT switch while
moving barrel up/
down or left/right

**Important to bind to
external key/button*

AUTOPILOT PITCH REF

Hold  without Hat
switch momentarily to
adjust autopilot pitch or
roll ref

**Note: Suggest bind to
external key/button*

CONTROL WHEEL MASTER SWITCH

Momentary Press: Disengages autopilot and yaw damper
Stops stall warning pusher
Disengage nose wheel steer lock

**Note: Stop Steer Lock with MSW*

While Holding MSW: Stops All Pri and Sec Trim Motion
Deactivates Stick Pusher & Puller
Illuminates Yellow 'Pitch Trim' Light
Engages Nosewheel Steering

MANUEVER ROLL PITCH SWITCH

Hold  momentarily to
manuever roll/pitch

PITCH SYNC SWITCH

Hold  momentarily
to sync flight director

HIDE YOKE

Press  to hide
yoke

It's important to have bindings for the following switches:

1. Control Wheel Master Switch
2. Maneuver Roll Pitch Switch
3. Pitch Sync Switch

Here is the link to the detailed video.

https://www.youtube.com/watch?v=v9AiEBwdKXo&ab_channel=Flysimware

[Click for the detailed info.](#)



Electronic Flight Bag Tablet

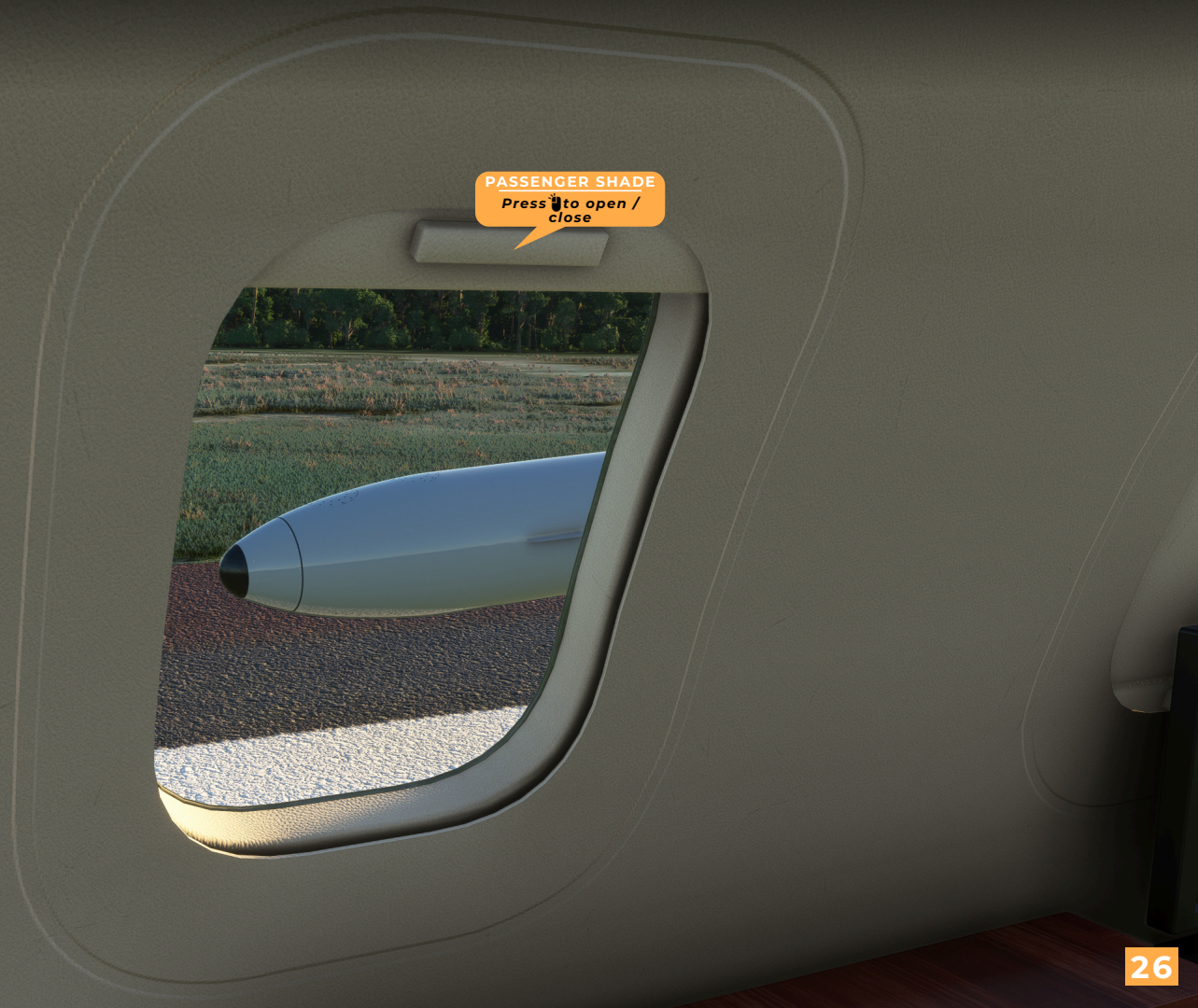


[Click for the detailed info.](#)

Cabin Tables



Passenger Curtains



Cabin Door

OPEN

UPPER DOOR HANDLE

Press  to open / close

HOTSPOT

Press  to raise / lower the upper door

DOOR LIGHTS

LOWER DOOR CABLE

Press  to raise / lower the lower door

MOTOR SWITCH

Press  to lock/unlock the door seal

LOWER DOOR HANDLE

Press  to unlock / lock the lower door

[Click for the detailed info.](#)

Cabin Door Open

UPPER DOOR HANDLE

Press  to open and close

HOTSPOT

Press  to raise / lower the door

LOWER DOOR HANDLE

Press  to lock / unlock the lower door

Cabin Door Switches



STEP
LIGHT



CABIN DOOR LIGHT

Press to turn it on or off

CABIN
LIGHT



CABIN LIGHT

Press to turn it on or off

DIM



CABIN LIGHT DIM

Press to control the intensity of the light

BAGGAGE
LIGHT



BAGGAGE LIGHT

Press to turn on/off the luggage light

Cabin Lights

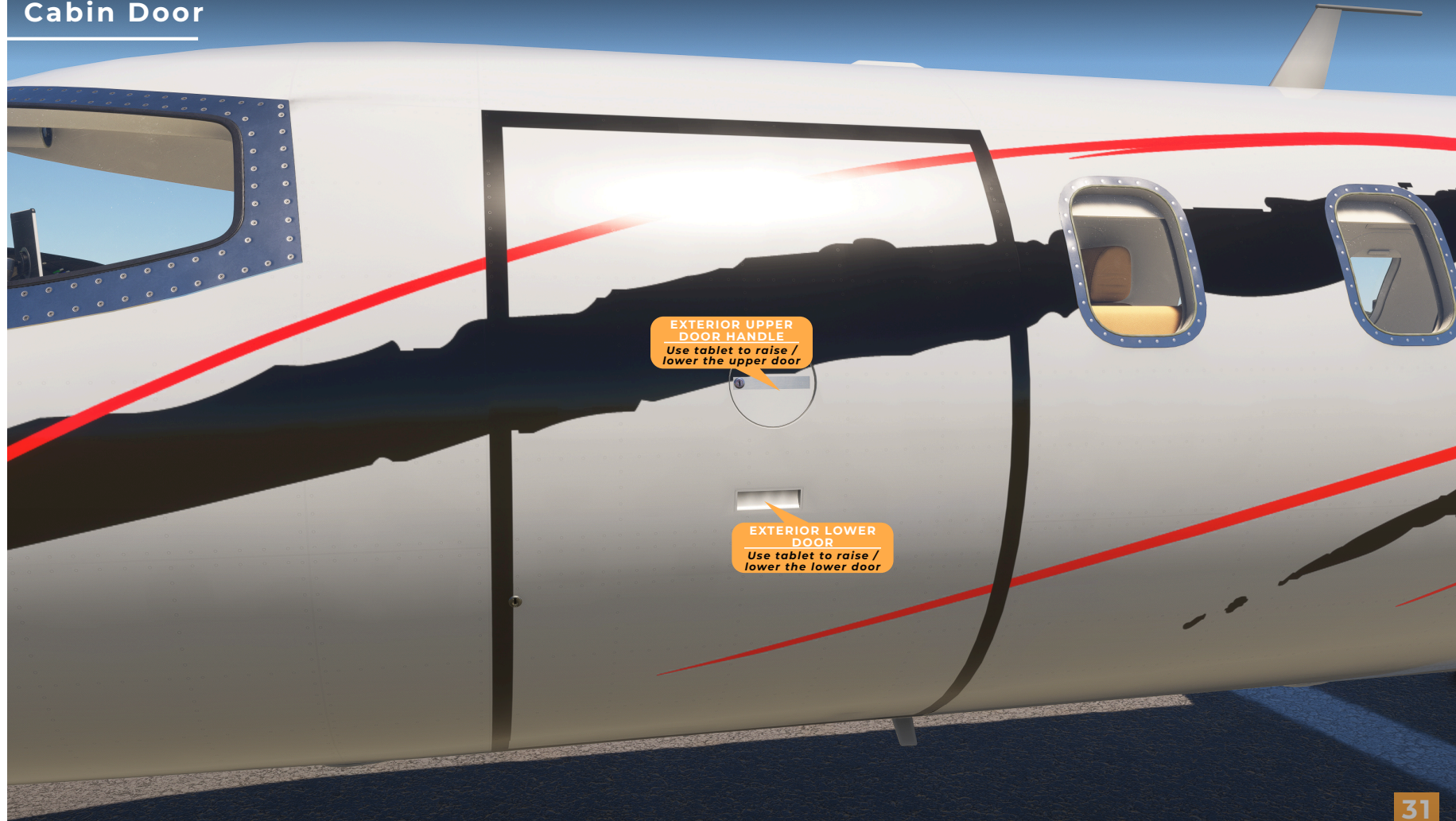
CABIN LIGHTS

PASSENGER LIGHTS

OXYGEN SUPPLY BOX
Not Simulated

AC VENTS
Not Simulated

Cabin Door



Cabin Door Open



Engine Covers



L. ENGINE COVER
Use tablet to place or remove

LEFT FRONT

Ground Power Unit



Access this GPU from the EFB Tablet.

Ground Power Unit



Request ground power unit (GPU) services from the ground crew through ATC

GPU Power Plug



Pitot Covers

L.PITOT COVER
Use tablet to place or
remove

REMOVE BEFORE FLIGHT

Fuel Caps

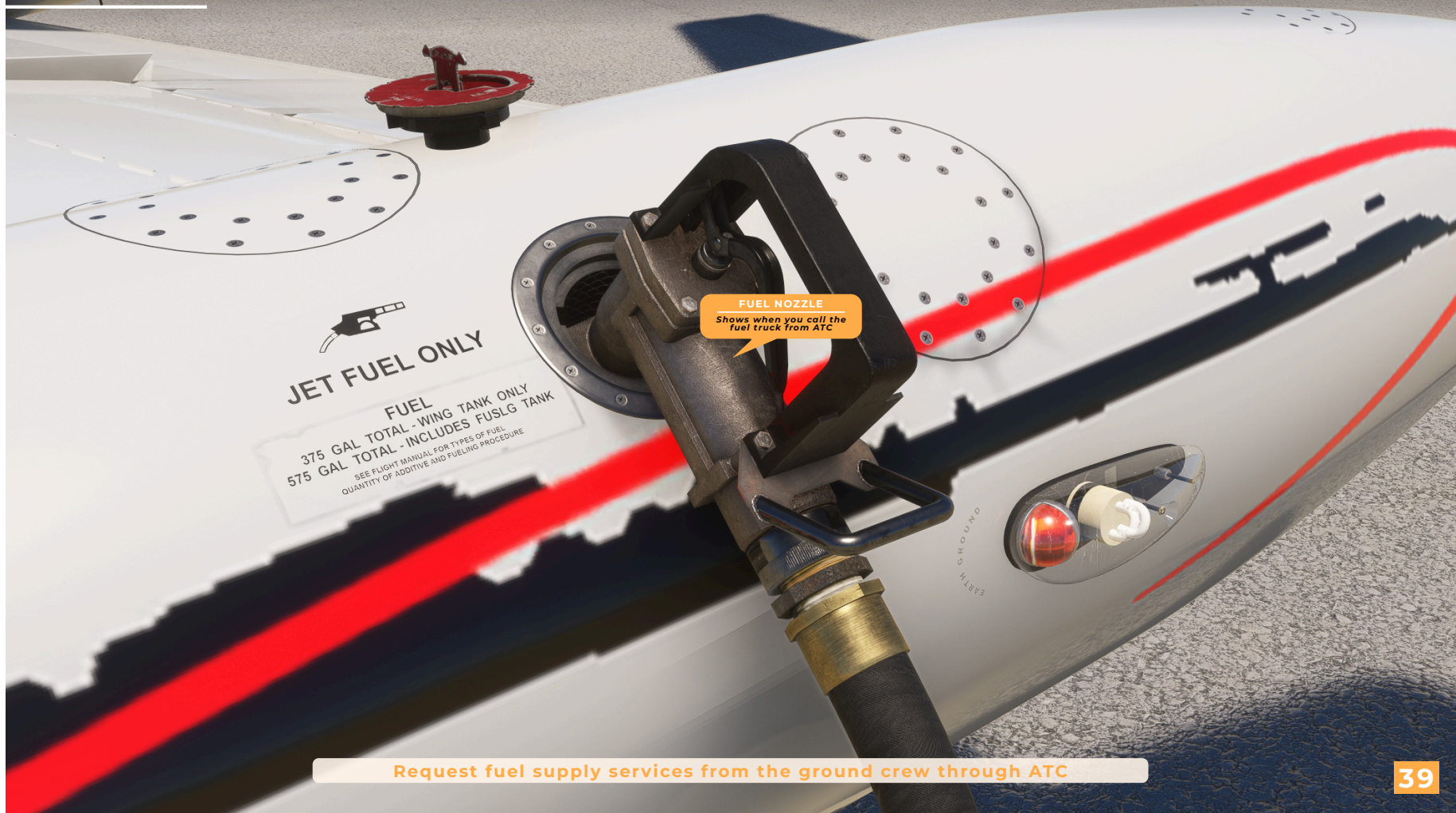
FUEL CAPS

Opens only when you call
fuel truck from ATC

JET FUEL ONLY

FUEL
WING TANK ONLY
IDES FUSLG TANK
FUEL
EDURE

Fuel Nozzle



FUEL NOZZLE
Shows when you call the
fuel truck from ATC

JET FUEL ONLY

FUEL
375 GAL TOTAL - WING TANK ONLY
575 GAL TOTAL - INCLUDES FUSLG TANK
SEE FLIGHT MANUAL FOR TYPES OF FUEL
QUANTITY OF ADDITIVE AND FUELING PROCEDURE

EARTH
GROUND

Request fuel supply services from the ground crew through ATC

Wing Lights and Static Wicks



Navigation & Strobe Light

EARTH GROUND

NAVIGATION LIGHT

STROBE LIGHT

Landing - taxi Light

LANDING - TAXI LIGHT



Belly Beacon Light



BELLY BEACON LIGHT

Tail Beacon Light



TAIL BEACON LIGHT

Wing Ice Inspection Light



WING ICE INSPECTION LIGHT

Chocks

CHOCKS
Use tablet to place or
remove

Reverser Panel Detailed Information



ARM: Normal indication that the isolation valves are open and sufficient hydraulic pressure is available for the thrust reversers.

DEPLOY: Reversers are engaged.



Anunciator Panel Warnings

- a. Red 'Warning' lights
- b. Amber 'Caution' lights
- c. Green 'System' lights



Any Red 'Warning' light or the FIRE T- handle lights triggers the MSTR WARN glareshield light. There are no voice or tone alerts for the activation of an annunciator panel light or the MSTR WARN lights.

All audio and visual warnings are on pages 48 through 62

Return

Annunciator Warning Panel



Illuminates upon:

- Nacelle temperatures exceed approximately 410°F in the areas of the pylon firewall or accessory gearbox.*
- Nacelle temperatures exceed 890°F in the areas of the turbine section.*



ARMED:

Illuminates when corresponding [ENG FIRE PULL] handle is pulled and extinguishing agent is available from the associated bottle.

Annunciator Warning Panel



LH ENG
CHIP
RH ENG
CHIP

Metal particle contamination detected within corresponding engine's oil pump assembly.

LOW FUEL
HYD XFLO
L LO R LO
OIL OIL

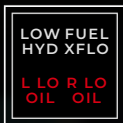
Illuminated when crossflow valve is open.

LOW FUEL
HYD XFLO
L LO R LO
OIL OIL

- Illuminates when hydraulic pressure falls below 1125(+/-25) PSI.
- Extinguishes when hydraulic pressure rises above 1250(+/-40) PSI.

Return

Annunciator Warning Panel



- Illuminates when oil pressure of either engine falls below approximately 23 PSI.
- Extinguishes when oil pressure rises above 30 PSI.

CUR LIM

Indicates 275- amp current limiter failure.

LOW FUEL

Fuel level in either wing tank is between 400 and 500 LBS.

[Return](#)

Annunciator Warning Panel



L FUEL PRESS

R FUEL PRESS

Illuminates when less than 0.25 psi fuel pressure to engine.

DOOR

With electrical power applied to the airplane, annunciator illuminates when:

- Upper door latching hooks not disengaged.
- Passenger/crew door not closed properly secured, microswitch(es) closed due to malfunction, or locking pin disengaged.

Annunciator Warning Panel



Flashing: Angle of attack is in amber range and stick shaker is active.
Steady : System is off, failed or angle of attack is in red range.



System is inoperative with speed above 0.69 Mach and autopilot disengaged. If above 0.74 Mach, the overspeed warning horn sounds.



- Loss of DC power to corresponding inverter.
- Loss of or insufficient AC power output to the corresponding 115 VAC bus and/or
- Main battery switches set to 'on and associated INVERTER switch set to 'OFF' .



LO OIL
PRESS

- a. Illuminates when oil pressure of either engine falls below approximately 23 PSI.
 - b. Extinguishes when oil pressure rise above 30 PSI.

**STAB
OV HT**

Illuminates when temperature of horizontal stablizer reaches 215°F.

**WSHLD
OV HT**

 - a. Illuminates when low-limit thermostat detects temperature of 215°F in bleed air windshield anti-ice discharge nozzle.
 - b. Illuminates when high -limit thermostat detects temperature of 290°F in bleed air windshield anti-ice discharge nozzle.

Return

STAB
OV HT

Illuminates when temperature of horizontal stabilizer reaches 215°F.

**WSHLD
OV HT**

a. Illuminates when low-limit thermostat detects temperature of 215°F in bleed air windshield anti-ice discharge nozzle.

b. Illuminates when high -limit thermostat detects temperature of 290°F in bleed air windshield anti-ice discharge nozzle.

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WSHLD
OV HT

- a. Illuminates when low-limit thermostat detects temperature of 215°F in bleed air windshield anti-ice discharge nozzle.
- b. Illuminates when high -limit thermostat detects temperature of 290°F in bleed air windshield anti-ice discharge nozzle.
- Return**
- 54**

Return

Annunciator Warning Panel



**BLEED
AIR L**

**BLEED
AIR R**

- Illuminates when corresponding duct temperature exceeds approximately 645°F.
- Extinguishes when corresponding duct temperature falls below approximately 590°F.
- Illuminates when bleed air pressure exceeds approximately 45 PSI.

SPOILER

Steady Illumination:

- SPOILER switch set to 'EXT'.
- Either spoiler extended beyond 1°.

Annunciator Warning Panel



Flashing:

- Flaps are extended beyond 13° with SPOILER switch set to EXT.

**AUG
AIL**

Malfunction detected in the aileron augmentation system in spoiler and spoileron modes.

**PITOT
HT**

- One or both PITOT HEAT switch(es) set to 'OFF'.
- One or both heating element(s) inoperative or malfunction detected.

**FUEL
FILTER**

Differential pressure is 1.25 psi across one or both airframe fuel filters. Fuel is bypassing the tailcone filter.

Annunciator Warning Panel



L ENG
ICE

R ENG
ICE

Illuminates when bleed air pressure is low.

L FUEL
COMPTER

R FUEL
COMPTER

- Either or both FUEL COMPTER switches set to 'OFF'.
- Fault detected or power loss in Electronic engine control system (EEC).

L VG
MON

R VG
MON

Failure of a single rotor in either vertical gyro.

DH

Illuminates at or below 'decision height'.

Return

Annunciator Warning Panel



**NAC
HEAT
ON**

If the NAC heat light is illuminated, it tells the pilots that the system is functioning and actively preventing ice formation on the engine nacelles.

**L
GEN**

**R
GEN**

Corresponding generator is inoperative or off-line.

**CAB
ALT**

Illuminates when cabin altitude exceeds 8,750 feet.

**ALC
AI**

Illuminates when the alcohol reservoir, for windshield and radome anti-ice, is empty. Depending upon airplane serial number, illuminates if pressure pump fails.

[Return](#)

Annunciator Warning Panel



ENG SYNC

Illuminates when the system is operating and the nose gear is down and locked to alert the crew that engine should not be used during takeoff or landing.

T.O TRIM

Horizontal stablizer not positioned within takeoff trim range during ground operations.

STEER ON

Nosewheel steering system engaged

WSHLD HT

Normal indication when WSHLD HT switch set to "ON" or "HOLD"

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Additional Warning Tones



There are several other warning tones and alerts produced by the Learjet 35:

1. Overspeed warning: Sounds when the aircraft exceeds V_{mo} or M_{mo} .
2. Autopilot or Yaw Damper disengage tone: Single chord sound when either the autopilot or the yaw damper is disconnected

Cabin Altitude Warning Horn

OBJECTIVES

- TAKE OFF ON RUNWAY
- RELEASE PARKING BRAKE:
- PULL STICK BUTTON 11

TABLE 12-2. AUTOMATIC PROTECTION AND WARNING FEATURES—CURRENT MODEL AIRCRAFT

CABIN ALTITUDE	PROTECTION AND WARNING
8,750 ±250 ft	<ul style="list-style-type: none"> Pressurization aneroid automatically switches the system to manual control. CABIN ALT caution light illuminates.
9,500 ±250 ft	<ul style="list-style-type: none"> Emergency pressurization valves are activated by aneroid switches, directing engine bleed air directly into the cabin.
10,100 ±250 ft	<ul style="list-style-type: none"> Cabin altitude warning horn sounds—initiate emergency descent.
11,500 ±1,500 ft	<ul style="list-style-type: none"> Cabin altitude limiters actuate.
14,000 ±750 ft	<ul style="list-style-type: none"> Passenger oxygen masks are deployed and cabin overhead lights are illuminated.

* The differential pressure relief for the outflow valve is 9.4 psid, and the differential pressure relief for the safety valve is 9.7 psid.

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Landing Gear Warning

Three red UNSAFE lights on the landing gear selector module, and aural warning tone.

Activate for two Conditions:

- When all of the following conditions are present:
 - Landing gear not down and locked,
 - Altitude is less than 14,500 feet MSL,
 - Either thrust level below 55-60% N1, and
 - Airspeed below 170 KIAS
- Landing gear not down and locked and flaps extended beyond 25 degrees.

Aural warning tone may be canceled for condition #1 only by momentarily positioning the TEST/MUTE switch on the landing gear selector module to MUTE, or by pressing the MUTE switch on the right thrust level knob. Condition #2 cannot be muted.

Selecting the TEST position will test all landing gear position and warning lights and the aural warning horn.

[Return](#)

Autopilot Panel



NOTE: (Must have master autopilot switch located on pilot's panel)

-----Autopilot Lateral-----

HDC: The HDC mode is used to maintain the heading selected by the heading bug on the pilot's or Co-pilot's HSI. Typical maximum bank angle is 25° in response to the heading bug rotation.

1/2 BNK: The 1/2 BNK mode is used to limit maximum bank angle to 15° in HDC or VOR NAV mode.

NAV: The NAV mode is used to intercept and/or track the VOR or localizer approach course selected on the pilot's or co-pilot's HSI when valid data is available from the active navigation receiver. Typical maximum bank angle is 25° in response to heading bug rotation.

BC: The BC mode is used to track a localizer back course inbound (or localizer front course outbound). When valid data is available from the active navigation receiver. This mode is functional only when NAV mode is selected.

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Autopilot Panel



NOTE: (Must have master autopilot switch located on pilot's panel)

-----Autopilot Lateral-----

LVL: The LVL mode is used to maintain wings level roll attitude in both the flight director (autopilot off) and autopilot engaged mode.

-----Other Modes-----

TST: Tests all bulbs and disengages all autopilot modes.

ENG: Master autopilot mode. (Autopilot master switch located on pilot's panel must be on.)

SFT: The SFT mode is used to soften autopilot pitch and roll response during flight in turbulent air. This mode is locked out when NAV localizer/VOR approach course is captured. This mode is not available during flight director only operation. (This function is not included on our model.)

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Autopilot Panel



-----Autopilot Vertical-----

SPD: The SPD mode is used to maintain the airspeed or Mach at the moment of mode engagement by commanding pitch attitude changes.

VS: The V/S mode is used to maintain the rate of climb or decent existing at the moment of mode engagement by commanding pitch attitude changes.

GS: The GS mode is used to intercept and track an ILS glideslope inbound when valid data is available from the active navigation receiver. This mode is functional only when NAV mode is selected.

ALT/SEL: The ALT/SEL is selected to level off at the altitude preselected on the alerter control when the flight director or autopilot is engaged in any vertical mode. When the preselected altitude is reached, the ALT/SEL mode is disengaged and the ALT mode is engaged.

ALT HLD: The ALT HLD mode is used to maintain the barometric altitude existing at the moment of mode engagement.

Anti -Ice Fuel Computer Panel Detailed Info.

1. Windshield Anti-Icing
2. Pitot Static Ice Protection
3. Wing and Stabilizer Anti - icing (See test panel section for details.)
4. Engine Anti - Icing
5. Marker Beacon Volume Control (not simulated)
6. **Radio Altimeter Control:** When this switch is in the upper position, power is supplied to the radio altimeter
7. **Master Autopilot Switch:** This switch must be on for the FC 530 unit.
8. **VG ERECT SWITCH:** When pressed a fast erection cycle for the corresponding gyro. When pressing when autopilot is engaged will cause disengagement.
9. **Slaving Controls Pilot:** The FREE/SLAVE is positioned to 'SLAVE' for slaved operation, and 'FREE' for unslaved operation. In slaved operation, heading displacement errors are corrected automatically through the gyro slaving circuit. In unslaved operation, heading displacement errors are corrected using the L/R SLAVE switch to rotate the compass cards left or right to agree with the magnetic heading.
10. **AC Bus Primary / Secondary:** When the AC BUS switch is set to the upper 'PRI' position, left 115 VAC bus power is supplied to the gauge through the .25-amp PRI AC VM circuit breaker on the pilot's CB panel. When the AC BUS switch is set to the lower 'SEC' position, left 115 VAC bus power is supplied to the gauge through the .25-amp PRI AC VM circuit breaker on the co-pilot's CB panel.
11. **Emergency Battery:** To test the emergency battery before flight the EMER PWR switch should be positioned to STBY before the battery switches are turned on. The EMER PWR annunciator should illuminate. Turn a battery switch ON and the EMER PWR annunciator light should extinguish as the standby indicator is then powered by a main battery. The emergency battery must be turned off after flight or the emergency battery will drain.

Anti -Ice Fuel Computer Panel Detailed Info.

12. Fuel Computers: With fuel computers on, when turbine N2 reaches 45% RPM the starter will automatically disengage. With the fuel computers off, the starter/ generator switch must be moved to OFF when turbine N2 reaches 45% RPM.

13. Starting Pressure Regulator: When positioned L or R the switch commands the fuel computer to provide increased fuel scheduling for engines starting. An increase in the fuel flow gauge can be seen. Do not energize the SPR switch at any time than engine start .



Start Panel Instructions

1. Turn on both fuel computer switches. (With fuel computers on the start light will distinguish when engine starts. If fuel computers are off the start light will remain on until the start switch is off or on L GEN.
2. Check that thrust levers are in Idle Cutoff.
3. Right click GEN switch down to the start position. Wait for N1 RPM to reach 10% then move thrust lever upto idle.
4. **AIRSTART:** (Windmilling or airstarts may be attempted for emergency procedures.)
To shutdown 1 engine left click thrust lever lock. To shutdown both engines middle click mouse wheel.



Lower Center Panel Detailed Info.

1. Anti-Skid Switch: Use this to prevent lockup of brakes. Indication on the anti-skid panel will light for any fault in the anti-skid system with anti-skid switch on or if the switch is off.

2. Stall Warning Switch: The stall warning lights on the annunciator panel will light when the battery switches are turned on, and the stall warning switches are in the OFF position. With the stall warning switches ON and the control column shaker actuated, the light will flash until the AOA diminishes to a safe point. When the AOA is in the yellow margin and the stall warning lights will illuminate steady and stick shaker will occur, when in the red margin the stick pusher is pushed forward to prevent a stall.

3. Warning System Check: (Middle click mouse wheel to use test button)

[A.] Cabin Altitude Check: Cabin altitude warning shall sound.

[B.] Mach Check: Must have PRI or SEC INV on, have pitch within T.O. Segment. L STALL switch on. Control column shall aft with 18 pounds of force and the aural overspeed warning shall sound.

[C.] Mach Trim Check: The stabilizer trim will trim slowly in the nose up direction for 1 to 3 seconds and then stop. The MACH TRIM warning light shall illuminate and the stall warning horn shall sound.

[D.] Fire Detection Check: Both ENG FIRE PULL t-handles and the MASTER WARN will flash.

[E.] L R STALL: The pilot's AOA indicator will sweep from the green segment to the red segment. As the needle passes through the yellow margin, the shaker will actuate and the L or R STALL warning light shall flash. As the needle advances to the red segment, the pusher will actuate. L or R STALL warning light will illuminate steady just prior to or at the pusher actuation.

4. Hydraulic Pump: This switch operates the electric hydraulic pump. Turn this switch on to set the parking brake before the engines are started. Once engines are operating, the engine - driven hydraulic pumps supply hydraulic pressure. Leave the switch in the ON position for flight.

Lower Center Panel Detailed Info.

5. L R Landing / Taxi Lights: With the L or R switch in the down position both landing and taxi lights are set OFF. With the L or R switch in the middle position only the taxi corresponding light is ON. With the L or R switch in the upper position both landing and taxi corresponding lights are ON.

6. No Smoking / Fasten Seat Belt: With the switch located in the down position the seat belt light in the cabin is ON. With the switch positioned in the middle position both no smoking and fasten seat belt lights in the cabin are OFF. With the switch positioned in the upper position both no smoking and fasten seat belt lights in the cabin are ON.

7. Horn Silence: The HORN SILENCE switch is spring loaded to the OFF position. If the cabin altitude exceed 10,100', the cabin altitude warning horn sounds. The horn may be silenced by moving the momentary HORN SILENCE switch to the up position.

8. Spoileron Reset: Not simulated!

9. Wing / Stabilizer Temperature:

[RED] Indicates a freezing condition will occur on surfaces below 35°F or a system failure has occurred.

[GREEN] Indicates that above 35°F moisture will not freeze to surface and the system is functioning properly.

[YELLOW] Indicates an overheating condition and possible system failure or malfunction has occurred.

10. Temperature Control: Indicates the position of the hot air bypass value (H-valve). Used to control the cabin temperature.

11. Flaps: Indicates the flaps position.

Climate / Lights Panel Detailed Info.

- 1. Auto / Manual:** Selects automatic or manual control of the cabin temperature. When set to AUTO, the climate control systems automatically adjusts the position of the hot air bypass valve (H-valve) to maintain the desired cabin temperature set with the COLD/HOT knob. In MAN, pilot has direct control of the H-valve.
- 2. Cold / Hot:** Controls the desired cabin temperature. In the AUTO mode, temperature is controlled by the controller based on the position of the COLD/HOT knob. In the MAN mode, pilot has direct control of the hot air bypass valve (H-Valve) using COLD/HOT knob.
- 3. Cool / Fan:** Operation simulated. In the COOL position, the freon air conditioner provide cool air to the cabin. Ensure that the CABIN AIR switch is in the off position . In the FAN position, the blower fans operate but not the air conditioner itself. This switch must be OFF for engine start.
- 4. Recognition Lights:** Turns on the recognition lights located on both tip tanks.
- 5. Strobe Lights:** Turns on strobe lights located on both navigation light fixtures on each tip tank.
- 6. Navigation Lights:** Turns on both navigation lights located on the side of both tip tanks and one white navigation on the tail light fixture.
- 7. Beacon Lights:** Turns on both beacon lights located on the top of the vertical stablizer and the bottom of the fuselage.
- 8. Bleed Air:** With the switch in the bottom position the bleed air system is off. With the switch in the middle position the bleed air system is on. With the switch in the upper position the bleed air emergency system is on.
- 9. Auxiliary Heat:** Not Simulated!
- 10. VG Erect Switch:** When pressed a fast erection cycle for the corresponding gyro. When pressing when autopilot is engaged will cause disengagement.
- 11. Slaving Controls Co-Pilot:** The FREE/SLAVE is positioned to 'SLAVE' for slaved operation, and 'FREE' for unslaved operation. In slaved operation. In slaved operation, heading displacement errors are corrected using the L/R SLAVE switch to rotate the compass cards left or right to agree with the magnetic heading.

Fuel System

1. Fuel Quantity Indicator

2. Fuel Quantity Selector: Check fuel quantity and balance, wing-to-wing and tip-to-tip.

3. Fuel Used Counter : You must push the reset counter to start counting fuel burn.

4. Jet Pumps and Standby Pumps : Jet pump switches open the motive flow valves allowing engine fuel pump pressure to operate jet pumps located in the tip tanks and wing tanks. These valves are normally left in on position. The standby pumps provide fuel pressure for engine starting automatically during the start sequence. They can be manually turned on for fuel balancing with the crossflow valve opened. The standby pumps also activate when the Transfer switch is placed into the FILL position to fill the fuselage tank.

5. Fuel Jettison : Empties tip tanks only.

6. Cross Flow Valve : If you have a fuel imbalance and you want to move fuel from the left wing tank to the right wing tank switch open the cross flow and switch open the left standby pump. To move fuel from the right wing to the left wing, turn on the right standby pump.

7. Fuselage XFER-FILL Valve :

Fill Position: The transfer and crossflow valves are sequenced open, and both standby pumps are energized automatically on to fill the fuselage tank. When the tank is full, a float valve closes the valves, turn off the standby pumps, and illuminates the green FULL light.

XFER Position: The transfer and crossflow valves are sequenced open and the transfer pump is energized automatically while both standby pumps are deactivated. When the fuselage tank is empty, the white EMPTY light is illuminated. Position the XFER-FILL switch to off.

The Learjet 35A engines only burn fuel from wing tanks. Fuel from the tip tanks are transferred to the wing tank by gravity until the fuel in each tank is approximately 600 lbs. Tip fuel is then transferred by the motive flow jet pumps in each tip tank.

When the tip tank fuel decreases below 760 lbs. In each tank, place the FUS TANK XFER-FILL switch to XFER. Monitor that the fuselage fuel transfer evenly from the fuselage tank into each wing tank.

Opening the aircraft options panel (Shift+2) allows you to see what fuel valves are open as illustrated fuel paths will appear. This will allow you to learn the fuel system as you use the fuel functions.

Center Pedestal Panel Detailed Info.

1. Pitch Trim Indicator

2. Aileron Trim Indicator

3. Rudder Trim Indicator

4. Steer Lock: When steer lock switch is pressed the steer lock is disabled allowing full range steering for the front gear. When the STEER LOCK switch is pressed a [STEER ON] light will show on the main annunciator panel. To disable the steer lock you must press the orange MSW switch located on the pilot's or co-pilot's yoke. When the aircraft speed increases the steering will reduce range until 45 knots. At 45 knots the steer lock system will disable.

Steer lock switch can be assigned to the keyboard / joystick by using the 'TAIL HOOK' assignment.

5. Primary / Secondary Pitch Trim Switch: When this switch is set to the upper 'PRI' position, the pitch trim system operates in the primary mode and pitch trim commands are made using the control wheel (YOKE) trim switches. When set to the lower 'SEC' position, the pitch system operates in the secondary mode and pitch commands are made using the secondary pitch trim switch. When set to the center 'OFF' position, the primary and secondary motors, pitch trim control circuits, and the autopilot will be inoperative.

6. Secondary Pitch Trim Switch

7. Rudder Trim Switch

Center Pedestal Panel Detailed Info.

8. Yaw Damper: On the FC-530 equipped airplanes, the primary or secondary yaw damper system is selected for operation or testing by pressing the corresponding PWR switch. When this switch is pressed and power is available to the selected system, the green [ON] annunciator above each switch will be illuminated. With power available to both systems and both [ON] annunciators illuminated, pressing and holding the TST switch initiates simultaneous testing of both systems. During this test, the [PR] and [SEC] annunciators should illuminate and both effort indicator pointers should swing to the right, then slowly to the left.

With the [ON] annunciators illuminated, the selected system is engaged by pressing the corresponding ENG switch. ENG switch logic is such that only one system may be engaged at a time. Selection of either system will disengage the other. The engaged system is indicated by illumination of the green [ENG] annunciator above the corresponding PRI or SEC ENG switch. The direction of the rudder deflection is indicated by the corresponding PRI or SEC effort indicator.

9. COMM 2 / NAV 2 / ADF 1 / ADF 2 Radios

Aileron and primary pitch trim commands are located on the pilot's and co-pilot's yoke!

EFB Tablet Detailed Info.



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EFB Tablet Detailed Info.

PARKING MODE INSTRUCTIONS

To engage or disengage parking mode:
 • Press the buttons labeled to activate them.
 • Press the button again to deactivate them.

DOOR CONTROL INSTRUCTIONS

To open or close the cabin and cockpit doors:
 • Turn the button labeled "Cabin Door" on to open the cabin door and off to close it.
 • Turn the button labeled "Cockpit Door" on to open the cockpit door and off to close it.



LIGHTING CONTROLS

Press the buttons to turn the door/cabin or luggage compartment lights on/off

TABLE AND SHADES CONTROL INSTRUCTIONS

To open or close the table and shades:
 • Turn the button labeled "Table" on to open the table and off to close it.
 • Turn the button labeled "Shades" on to open the shades and off to close them.

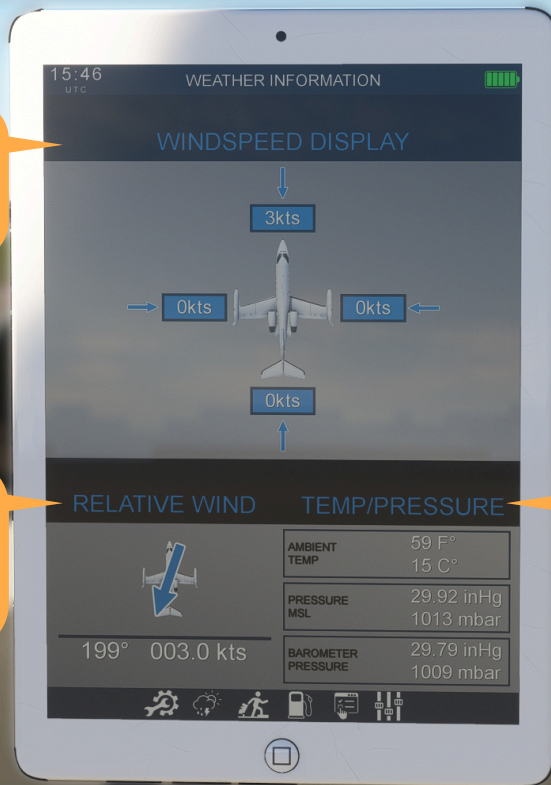
EFB Tablet Detailed Info.

WINDSPEED DISPLAY INFORMATION

The windspeed display provides real-time information on the current wind speed in knots (Kts). This information is crucial for monitoring weather conditions and ensuring safe operation of the aircraft.

RELATIVE WIND INFORMATION

The concept of relative wind involves the direction of the airflow in relation to an aircraft in motion. An arrow representing the relative wind direction would rotate to indicate this airflow direction as it varies with the aircraft's orientation and movement through the air.



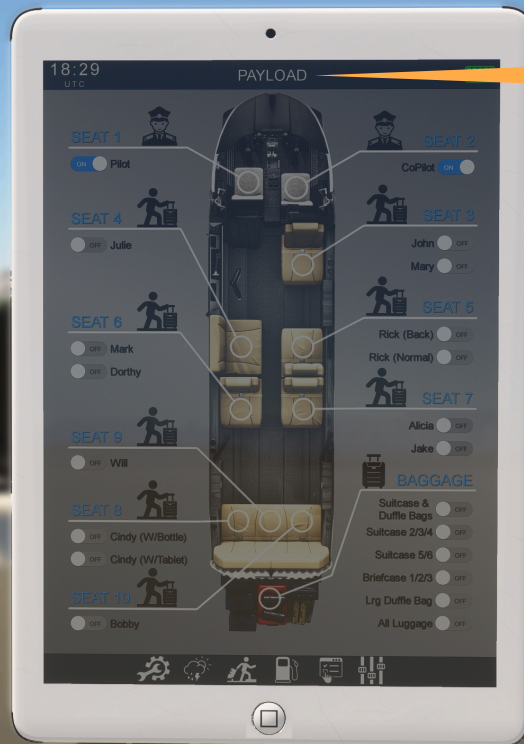
TEMP/PRESSURE INFORMATION

The Ambient temp. display indicates temperature of air surrounding the aircraft. This is reported in Celsius (°C) or Fahrenheit (°F).

The pressure at mean sea level (MSL) refers to the atmospheric pressure measure at the average sea level. Pressure at MSL is typically measure in units such as inches of mercury (inHg) or millibars (mbar).

The barometer pressure is information is used to set altimeters, which measure the aircraft's altitude above sea level. It is measure in the same units as the pressure at MSL.

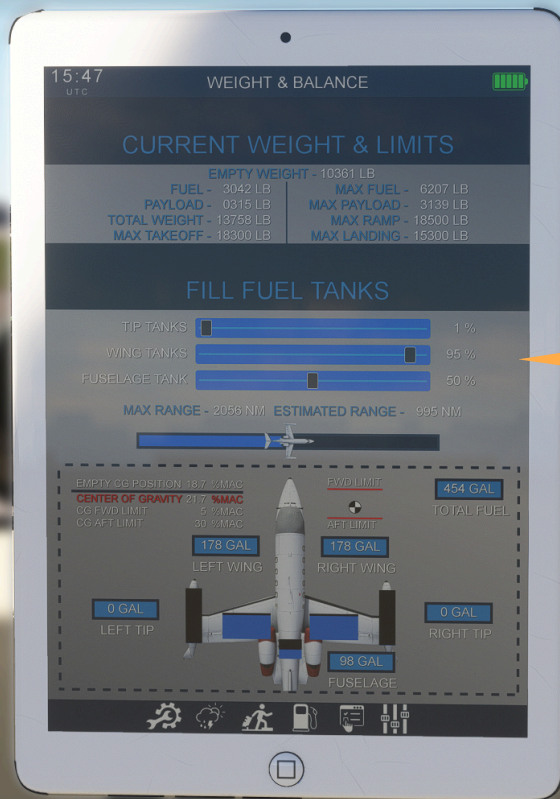
EFB Tablet Detailed Info.



PASSENGER AND BAGGAGE DISPLAY CONTROL

Use the "On/Off" button on the tablet to show or hide the pilot, copilot, passengers, and baggage based on the desired configuration and weight distribution.

EFB Tablet Detailed Info.



WEIGHT & BALANCE INFORMATION

The sliders allow you to adjust the tank levels and display the corresponding weights and limits. Additionally, the system calculates and shows the distance that can be covered with the available or set fuel in nautical miles (nm). Fuel units are measured in gallons.

You can also change the units from gallons (GAL) to liters (L) and pounds (LBS) to kilograms (KG) in the settings tab.

EFB Tablet Detailed Info.

**SELECT CHECKLIST
OPTION**
Click the 'Select Checklist'
option to prompt the
checklist window to
appear.



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EFB Tablet Detailed Info.

CHECKLIST

Carefully select each checklist option to ensure comprehensive inspection and readiness across all Pre-flight, Prestart, Start, Before taxi, Taxi&before takeoff, Runway lineup, After takeoff, Climb, Cruise, Descent, Approach & final, After landing, and Shutdown procedures.



EFB Tablet Detailed Info.



SOUNDS CONTROL INSTRUCTIONS

You can turn on or off the following sounds:

Disable Trim Clacker
Disable N1/N2 Clackers
Use the corresponding controls to manage these sound settings as needed.

UNITS CONTROL INSTRUCTIONS

Activate the option to switch the default units to standard/metric.

OPTIONS

Options include payload sync, fuel save state, and showing passengers.

FUEL INSTRUCTIONS

Select the button to convert the fuel units from gallons to pounds.

EFB Tablet Detailed Info.



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Davtron Clock Detailed Info.

TIME DISPLAY
In hours & minutes

TIME CORRECTION - THREE WAY SWITCH
Makes minor time corrections

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

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

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

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GTX 345 Transponder



[CLICK HERE GARMIN GTX 345 TRANSPONDER MANUAL](#)

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

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Pilot Yoke Detailed Info.



Control Wheel Trim Switch ('Barrel Switch'): Either control wheel trim switch (NOSE UP/ NOSE DOWN/LWD/RWD) functions as a manual autopilot controller when moved in any of the four directions without depressing the trim arming button. When an attitude change is made this way, the appropriate servo changes the attitude of the aircraft and disengages any roll or pitch modes previously selected in the affected axis except NAV ARM, G/S ARM, and ALT SEL ARM. The autopilot reverts to basic attitude hold in the affected axis when the switch is released. Depressing the trim arming button and moving the trim switch in any of the four directions disengages the autopilot, and the autopilot disengagement tone sounds. This is the normal means of disengaging the autopilot since it does not disengage the yaw damper. Previously selected flight director modes are not disengaged when the autopilot is disengaged.



Master Switch Wheel: When pressed, disengages autopilot, yaw damper, and nosewheel steering (on the ground only). When pressed and held, it disengages:

Primary & Secondary Trim.

Pitch Servo: Stick pusher & stick nudger (both stall protection devices) and the stick puller (overspeed protection device).



Control Wheel Maneuver Switch (MANUV/RP): Depressing and holding either the pilot or copilot MANUV/RP switch temporarily releases autopilot access to the pitch and roll servos and extinguishes the green ROLL and PITCH annunciators but does not cancel any previously selected flight director roll or pitch modes. This enables either pilot to change the aircraft attitude in both pitch and roll axes manually. When the switch is released, the autopilot resynchronizes to and holds the original roll mode and the existing (new) values in the SPD, V/S or ALT HLD modes; the green ROLL and Pitch annunciators illuminate again.

Pilot Yoke Detailed Info.



Control Wheel SYNC Switch (PITCH SYNC): The pilot PITCH SYNC switch is a flight director function only and has no effect if the autopilot is engaged. When pressed, it cancels any selected pitch modes except G/S ARM and ALT SEL ARM and synchronizes the command bars to the existing pitch attitude. It does not affect the autopilot in any way (as the MANUV/RP switch does).



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Cabin Door Detailed Info.

OPEN



UPPER DOOR HANDLE: The upper handle will un-latch the upper section of the door. To un-latch the motor hook must be un-hooked. To latch the upper door handle, the motor hooks must be hooked. The motor hooks must be motored back to the un-hooked position after the door is latched otherwise the red DOOR annunciator will illuminate.



LOWER DOOR HANDLE: The lower door handle will un-latch the lower section of the door. To un-latch move handle to the right. To latch / lock move handle to the left.



MOTOR SWITCH: The motor switch will pull the door tight to allow the upper handle to latch. When the switch is in the down position the motor is no longer holding the door tight.



LOWER DOOR CABLE: Lower door cable will extend the lower door when the lower door handle is un-latched. To latch click again on the lower door cable to close the lower door and the door will automatically latch.

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