ELECTRONIC FLIGHT BAG (EFB)

XPLANE12

Electronic Flight Bag (EFB)

This manual is specifically for the Electronic Flight Bag (EFB) installed in the Just Flight General Aviation fleet for X-Plane 12.

This manual lists all the possible EFB options across our X-Plane 12 GA fleet. The exact layout as shown in the screenshots may differ slightly between aircraft.

CONTENTS

EFB OVERVIEW

Just Flight's GA aircraft for X-Plane 12 are equipped with a tablet computer that houses the controls of a vast array of configuration options to customise your experience.

Hidden clickspots in the 3D cockpit and on the tablet's bezel allow you to place the tablet on either side of the windscreen or on either yoke. Clicking on the left windscreen clickspot when the tablet is in that position will hide the tablet entirely.

The bezel around the tablet has four clickspots:

1. Left-click the left bezel to toggle the 2D pop-up window of the tablet. This can be ‘popped out’ and moved to a different monitor if desired.
2. Left-click and drag the top bezel to rotate and tilt the tablet.
3. The Home button can be used to return to the Home screen. Alternatively, with an app in the EFB open, you can click on the app icon at the top left corner of the page to return to the Home screen.
4. Left-click the bottom bezel to cycle the tablet through its various cockpit positions.

The homepage displays a list of apps that are available for use. Left-clicking on one of the app icons will open the respective app.

AIRCRAFT OPTIONS

Selecting the AIRCRAFT OPTIONS icon on the homepage will launch the Aircraft Options app, which allows you to control various aircraft options. These options include:

PILOT DOOR – opens and closes the pilot's door (Duchess only).

PILOT WINDOW – opens and closes the pilot's storm window (PA-28s only).

COPILOT DOOR – opens and closes the co-pilot's door.

BAGGAGE DOOR – opens and closes the rear baggage door.

WINDOW REFLECTIONS – toggles the window reflections on/off.

INSTRUMENT REFLECTIONS – toggles the reflective glass faces of the individual instruments on/off.

COCKPIT LIGHTS – toggles the cockpit and panel lighting on/off.

GROUND EQUIPMENT – toggles the tie-downs, wheel chocks and other protective elements for when the aircraft is parked (individually selectable on the PA-28s).

SWAP PILOTS – swaps between the male and female pilot models in the cockpit.

ALTIMETER IN.HG / MB – toggles the altimeter Kollsman window between inches of mercury and millibars.

WEIGHT AND BALANCE

Left-clicking the WEIGHT & BALANCE icon on the homepage will launch the Weight and Balance app, which allows you to control the aircraft's fuel load and payload.

This app opens the X-Plane Weight and Balance Configuration page which allows you to control the load in the aircraft via the aircraft image on the left side of the page. It also displays a loading envelope graph and loading data which update automatically based on the aircraft's current fuel and payload.

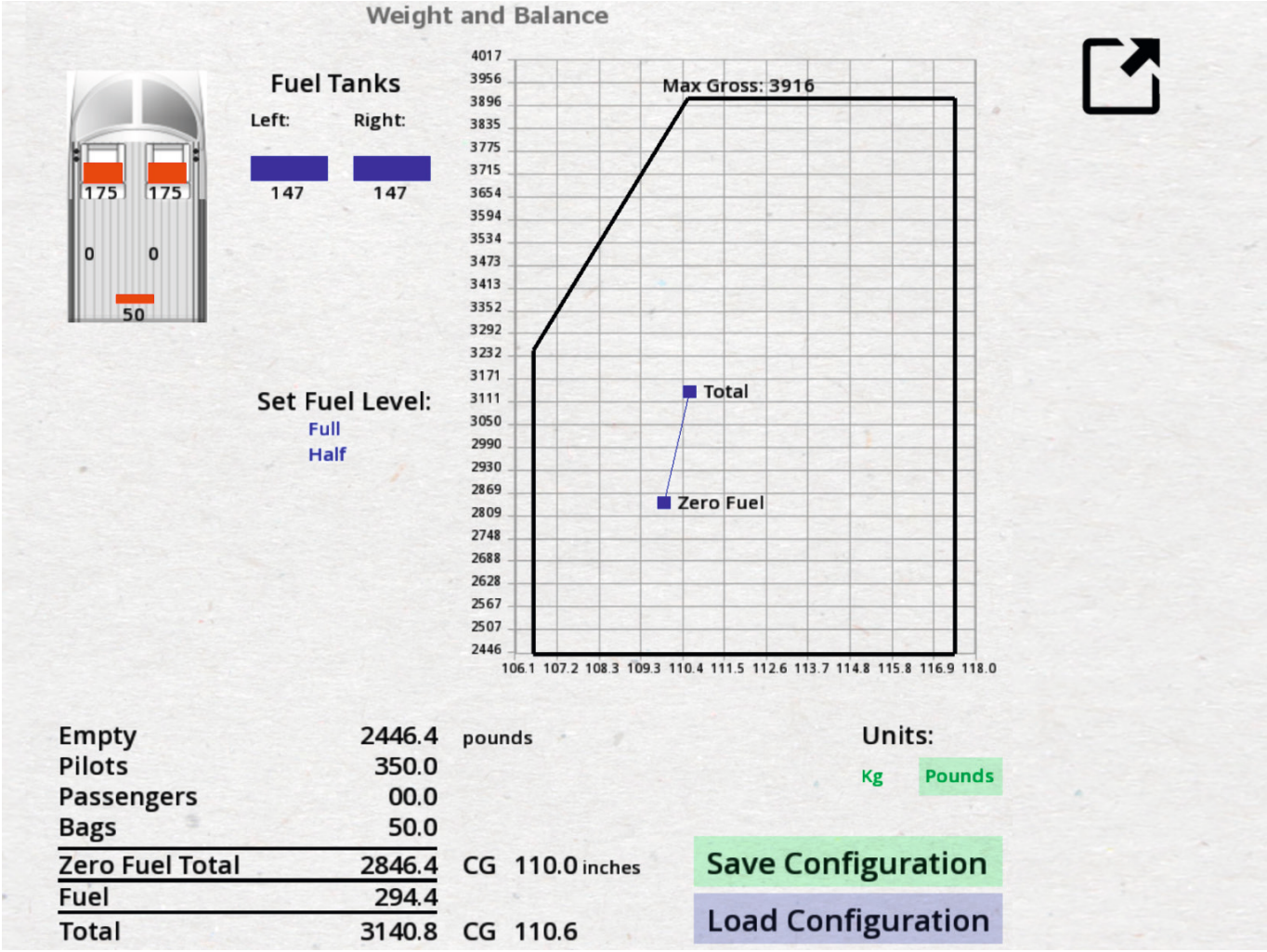
The weight in each seat and in the baggage area can be adjusted by using the mouse scroll wheel to adjust the weight in five-pound increments. Changes are applied to the aircraft immediately.

Fuel levels in each tank can be set in the same way or by clicking the 'Full' and 'Half' buttons to set the total fuel level.

The displayed units can be toggled between Kg and Pounds in the lower right corner.

Clicking the 'Save Configuration' button will save the current settings to disk. Clicking 'Load Configuration' will load the previously saved configuration.

The symbol in the upper right corner allows the window to be popped up into its own 2D window.



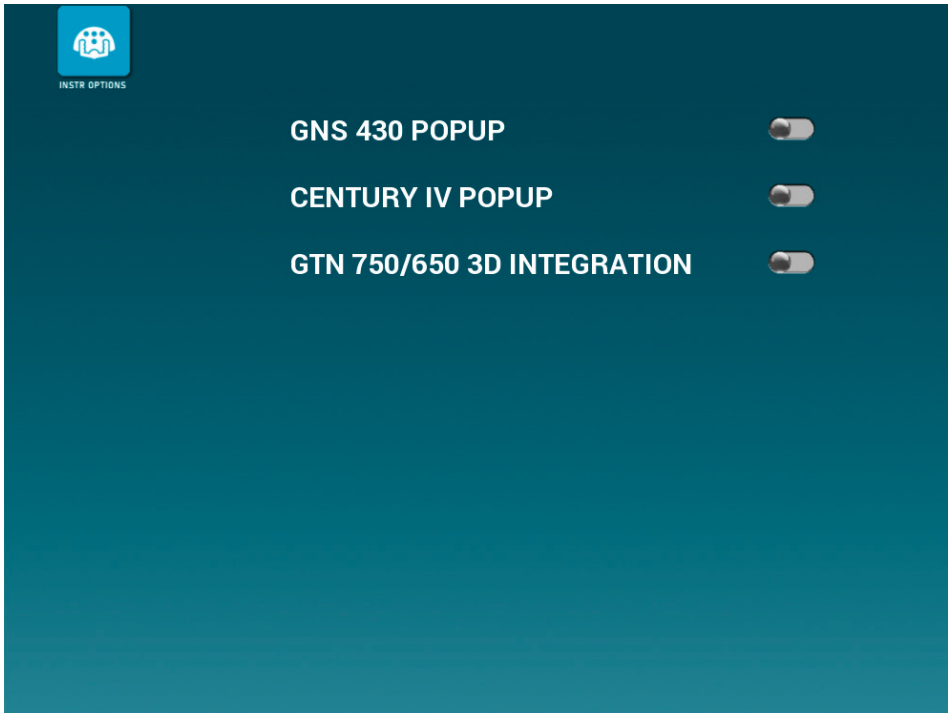
INSTRUMENT OPTIONS

Left-clicking the INSTR OPTIONS icon on the homepage will launch the Instrument Options app, which allows you to open pop-up windows for the instruments fitted to the aircraft and toggle 3D integration for the Reality XP GTN750/650.

GNS 430 POPUP – toggles the 2D pop-up of the GNS 430 GPS unit.

CENTURY IV POPUP – toggles the 2D pop-up of the Century IV autopilot unit.

GTN750/650 3D INTEGRATION – toggles the 3D integration of the Reality XP GTN750/650 (if installed).



ENGINE CONFIGURATION

Left-clicking the ENGINE CONFIG icon on the homepage will launch the Engine Configuration app, which allows you to view data on the aircraft's electrical system and engine(s) as well as providing various options such as enabling advanced engine simulation.

Clicking the REFILL button will automatically fill all fuel tanks and clicking the RECHARGE button will top up the battery voltage.

In addition to supporting X-Plane's own failures system, our simulations include a few of the more common failures found on these aircraft:

Spark plug fouling

This can occur if the engine is kept at low RPM for prolonged periods and symptoms include rough running with a subsequent increase in cockpit vibration. If fouling occurs, increase engine RPM and aggressively lean the mixture. This can be done at low power settings on the ground without harming the engine.

Vapour lock

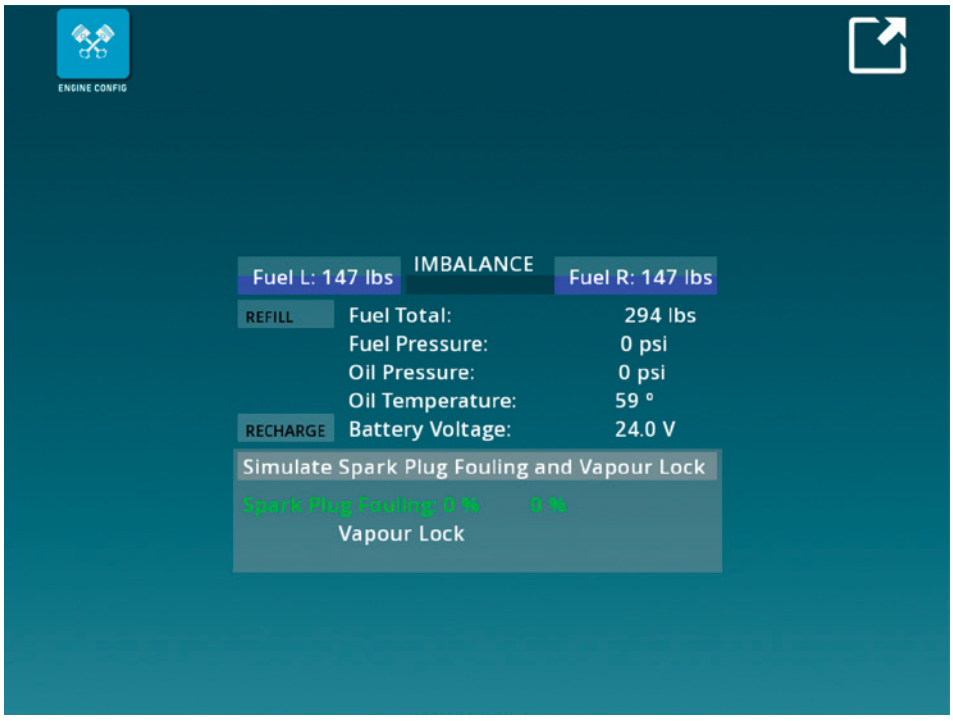
This can occur for up to approximately 30 minutes after the engine has been shut down. After shutdown, fuel vapour can remain within the fuel lines as the result of high temperatures. This vapour disrupts the operation of the fuel system and creates an incompatible mix of air and fuel, so you might need a few attempts at starting the engine before ignition occurs. This problem is more likely to occur when operating in high temperatures. If vapour lock is suspected, operate the electric fuel pump for 20-30 seconds with the mixture in the idle cut-off position, then repeat the engine starting attempt.

Battery failure

The battery can be quickly drained, either by leaving electrical systems switched on without the engine (and therefore alternator) running, or by repeated attempts to start the engine. The battery can be recharged using the RECHARGE button.

These failures can be enabled/disabled by clicking on ‘Simulate Spark Plug Fouling and Vapour Lock’.

The symbol in the upper right corner allows this page to be popped out into its own separate 2D window.

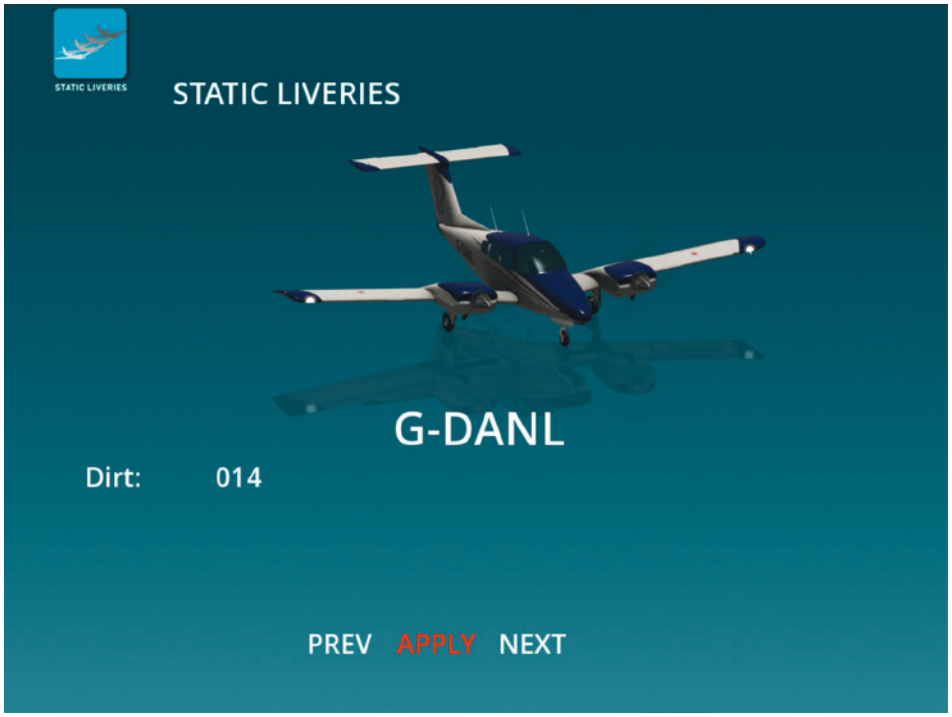


STATIC LIVERIES

Left-clicking the STATIC LIVERIES icon on the homepage will launch the Static Liveries app, which allows you to cycle through and apply the various liveries that are included in the 'Liveries' folder of the aircraft.

Scrolling the mouse wheel over the aircraft image or clicking the PREV and NEXT buttons at the bottom of the page cycles through the available liveries, and clicking APPLY will load the selected livery. There may be a pause of several seconds during loading.

The 'Dirt' value can be adjusted by hovering the mouse cursor over the value and scrolling the mouse wheel. Clicking on the value toggles it between 0 and 100. This adjusts how clean or dirty the exterior of the aircraft appears to be.



CONFIGURATION

Left-clicking the CONFIGURATION icon on the homepage will launch the Configuration app, which includes options such as the ability to instantly start or shut down the engine(s) and to adjust the aircraft's handling characteristics via DynaFeel.

Two general configuration options are featured on this page:

ENGINES RUNNING – toggles the aircraft between a cold and dark state and an engines-running state. Clicking this will cause X-Plane to reload the plane and restart the flight.

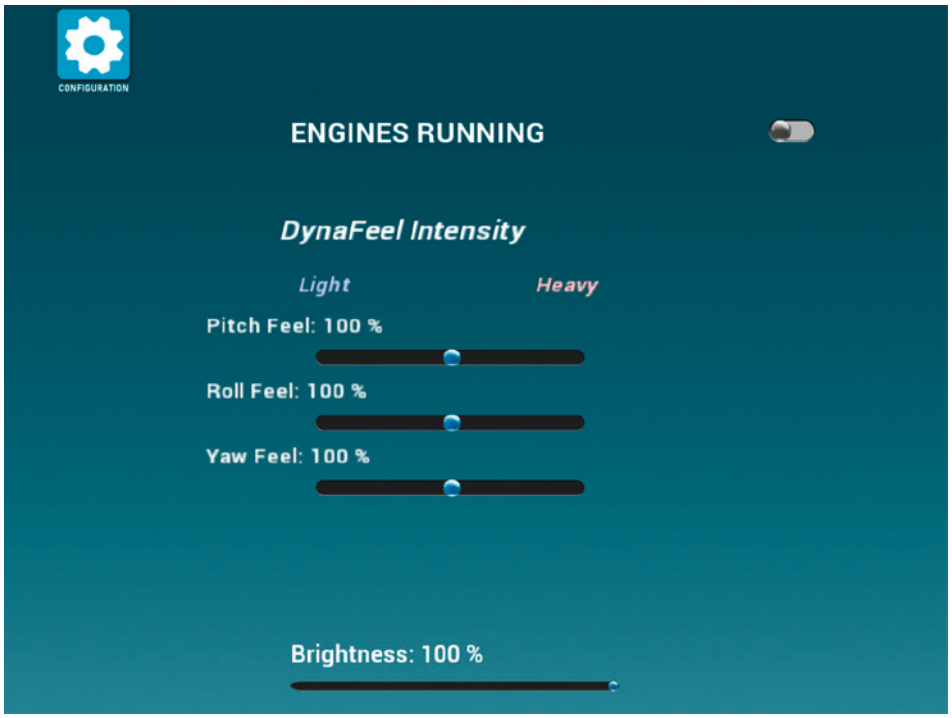
BRIGHTNESS – adjusts the brightness of the tablet display.

Thranda DynaFeel

Thranda's DynaFeel system simulates the 'heaviness' of the controls in flight, while still allowing you to deflect the controls fully. X-Plane already allows us to limit the total control deflections as speed increases, which helps simulate the 'heaviness' of the controls in the real aircraft, but this limitation means it is not possible to reach full control deflection at speed, which affects the ability to perform slips and accelerated stalls.

The DynaFeel system dynamically adjusts the rate at which the controls deflect, based on airspeed and how much the control is deflected. This means that the controls will feel light and responsive at low speeds and with small deflections, but will get progressively heavier as airspeed increases.

The controls in the pop-up control the intensity of this effect and can be adjusted in real time as you fly. The aircraft has been carefully tuned to respond correctly at 100%, but the intensity can be adjusted anywhere between 0% and 200%. 0% disables the system entirely and causes the controls to always feel light, while 200% will have an exaggerated heavy effect.



LOG BOOK

Left-clicking the LOG BOOK icon on the homepage will launch X-Plane's built-in Log Book window, which allows you to view your recently logged flights in the simulator.

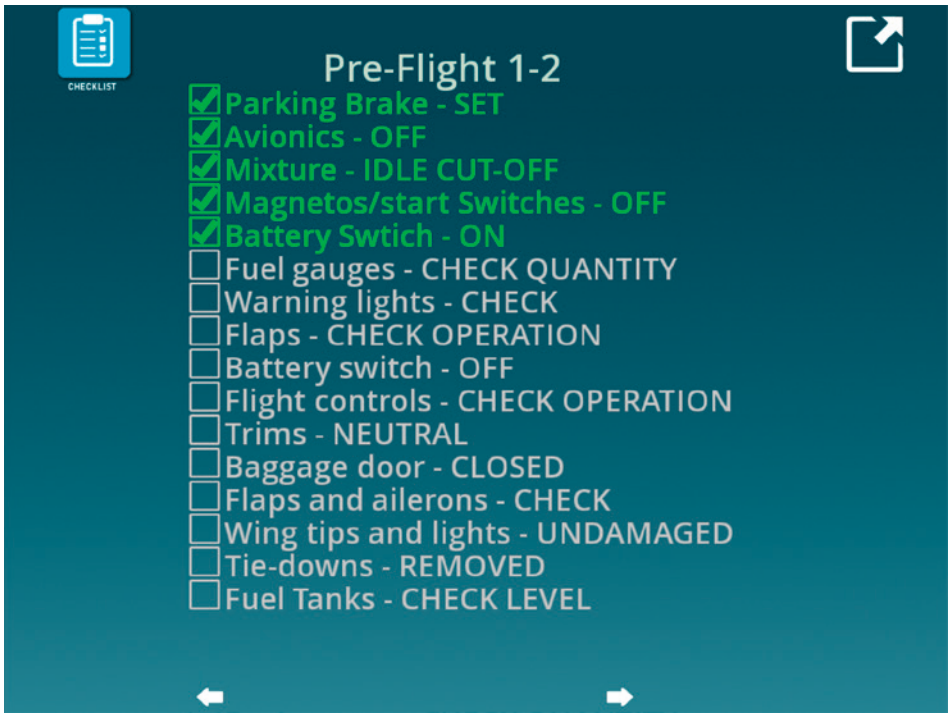
CHECKLIST

Left-clicking the CHECKLIST icon on the homepage will launch the Checklist app, which will open an interactive checklist covering the aircraft's procedures.

Each item can be clicked to turn it green as a visual reminder that it has been completed.

The arrow buttons at the bottom of the page navigate to the previous and next pages.

The symbol in the upper right corner allows this window to be popped up into its own separate 2D window.



GROUND HANDLING

Left-clicking the GROUND HANDLING icon on the homepage will launch X-Plane's built-in Ground Handling window, which allows you to request ground services and push back the aircraft.

DYNAMIC LIVERIES

Left-clicking the DYNAMIC LIVERIES icon on the homepage will launch the Dynamic Liveries app. This allows users to customise the paint scheme on the aircraft.

A visual preview of the current scheme is prominently displayed in the window.

Left-clicking on the ERA field immediately below the image allows you to toggle between two different templates: CLASSIC and MODERN.

The paint scheme is divided into multiple different sections of the aircraft, which are listed on the right side of the page. Clicking on a section will select it, indicated by a small red circle.

Once a section is selected, the colours can be adjusted via the ‘R’, ‘G’ and ‘B’ clickspots on the left by left-clicking and using the mouse scroll wheel. A preview of the colour is shown in the adjacent large square.

Additionally, the metallicity and roughness of the section can be set via the ‘Metal’ and ‘Rough’ clickspots to the right of the colour preview. For best results we recommend keeping the ‘Metal’ values less than about 26 for non-metallic materials and above about 245 for metallic materials.

The REGISTRATION Nº field allows you to select the registration / tail number for editing, just like the above items. Additionally, the text field can be used to edit the current registration / tail number. Press the ‘Enter’ key on your keyboard after typing in the registration and then click APPLY to set it.

The ‘Dirt’ value can be adjusted by hovering your mouse cursor over the value and scrolling the mouse wheel. Clicking on the value toggles it between 0 and 100. This adjusts how clean or dirty the exterior of the aircraft appears to be.

Three options at the lower left of the page allow you to add, save and remove liveries:

ADD NEW LIVERY INDEX – clicking this will copy the current livery configuration into a new livery index at the end of the list.

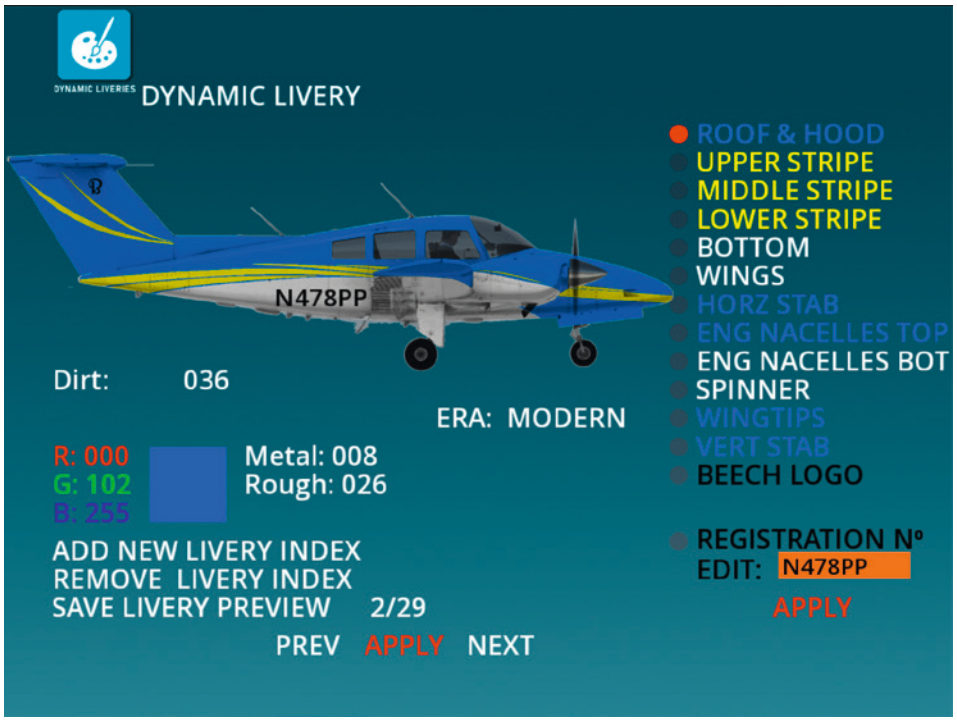
REMOVE LIVERY INDEX – deletes the current livery configuration from the list.

SAVE LIVERY PREVIEW – saves any changes you have made to the current livery configuration.

Controls at the bottom of the page allow you to cycle to the previous (PREV) and next (NEXT) livery configurations in the list.

Clicking APPLY at the bottom of the page will save the current livery configuration and generate the paint scheme. Please note this can take up to a few minutes due to the large size of the livery textures that must be generated.

The list of dynamic livery configurations is saved in the X-Plane 12 aircraft folder in the following file directory: ‘…\liveries\DynamicLiveryResources\DynLivPresets.json’.



FLIGHT COMPUTER

Left-clicking the FLIGHT COMPUTER icon on the homepage will launch the Flight Computer app. This lets you view a variety of information:

- Outside air temperature (OAT) – Celsius and Fahrenheit
- Groundspeed (GS) – nautical miles per hour, statute miles per hour and kilometres per hour
- Endurance – hours and minutes
- Range – nautical miles, statute miles, kilometres
- Nautical miles per gallon and statute miles per gallon
- Density altitude and pressure altitude (feet)
- True airspeed (knots), track (degrees) and drift (degrees)
- Fuel flow – kilograms and litres per hour
- Fuel used – kilograms and litres
- Headwind/tailwind component (knots)
- Crosswind component (knots)

The total fuel burn can be reset by clicking on the RESET FUEL BURN button.

The symbol in the upper right corner allows this window to be popped up into its own separate 2D window.

AVITAB (IF INSTALLED)

If the AviTab plugin has been installed in the user's X-Plane 'plugins' folder, an additional app will become available on the homepage, allowing access to the entire AviTab feature set.

CREDITS

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