HAWK T1/A

ADVANCED TRAINER

ELECTRONIC FLIGHT BAG (EFB)

Just Flight™

Electronic Flight Bag (EFB)

Please note that this manual is specifically for the Electronic Flight Bag (EFB) as installed in the Just Flight Hawk T1/A Advanced Trainer add-on for Microsoft Flight Simulator.

CONTENTS

EFB OVERVIEW

The aircraft is equipped with a tablet computer which is divided into two main areas:

1. An ‘Electronic Flight Bag’ (EFB) which can be used for viewing your simBrief operational flight plan (OFP), monitoring your position on a moving map, viewing your Navigraph charts and making notes.
2. An Aircraft app for controlling various aircraft options and payload.

The tablet can be switched on/off by pressing and holding the physical ‘Home’ button on its right bezel. The ‘Home’ button can also be used to return to the EFB menu from the Aircraft screen.

The EFB can be hidden by using the Norm/Ground Crew I/C VHF PTT switch located on the right side panel.

The Home screen of the EFB shows the icons of the various applications that are available to use. Pressing one of these icons will open the respective application.

The top bar of the EFB shows the current simulator time and date in the top left corner, as well as the current battery status of the tablet in the top right corner. The battery will drain over time if the aircraft's electrical power is switched off and will recharge once it is powered on again.

The tablet will automatically move between the front and rear cockpits depending on the selected camera view.

The tablet can be moved between two positions, the ejection seat or above the right console, using a clickspot on the outer edge (bezel) of the EFB tablet.

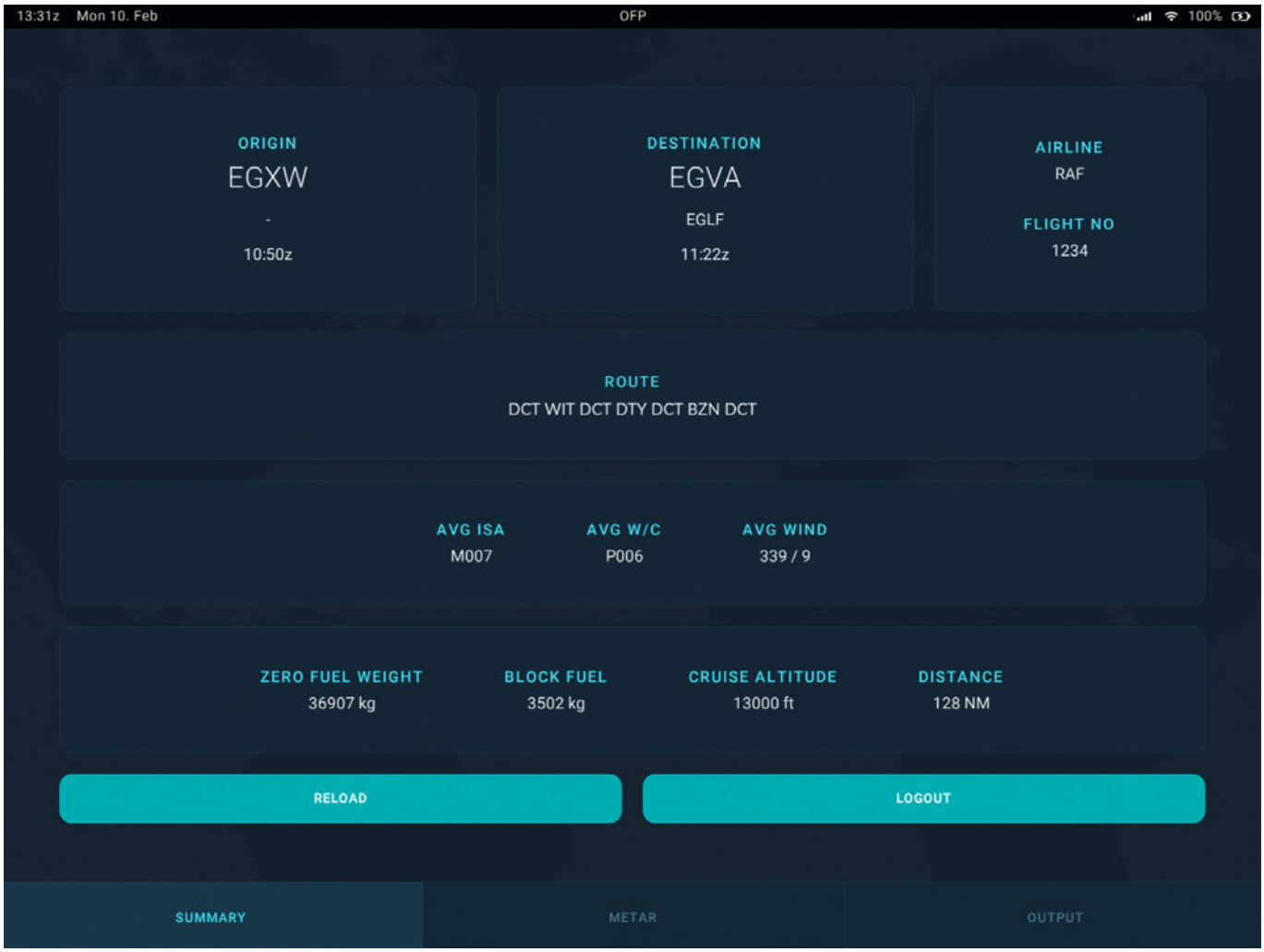
The background on the EFB can be changed to an image of your choice by replacing the wallpaper.jpg file in the following file directory: …Community\justflight-aircraft-hawk-t1\html_ui\Pages\VCockpit\Instruments\Airliners\JF_HawkT1\EFB\img.

OPERATIONAL FLIGHT PLAN (OFP)

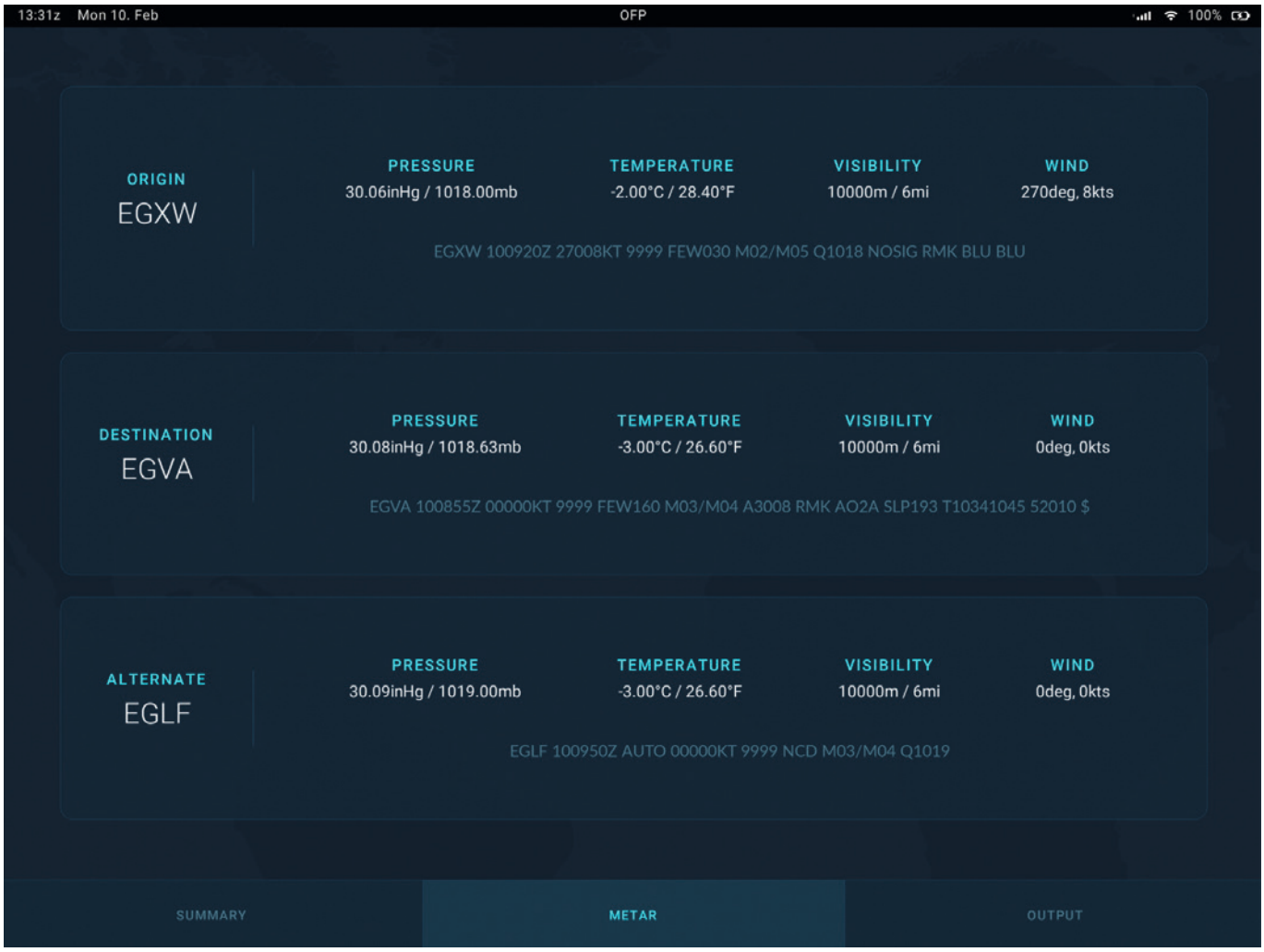
The OFP app allows you to view your latest SimBrief OFP and displays its information conveniently within the simulator.

On selecting the OFP app you will be prompted to enter your SimBrief pilot ID to access your last exported flight plan. Alternatively, you can choose to identify yourself via your SimBrief username by enabling the ‘OFP: Username login’ setting in the EFB settings.

Once you have entered your SimBrief credentials and pressed the ‘Continue’ button, you are presented with a summary of your active OFP, including origin and destination airports, scheduled timings, flight number, route information, weather, and fuel and payload.



Pressing the METAR button at the bottom of the page allows you to view the wind information for the origin, destination and alternate airports listed in the OFP. This information is shown in both raw and simplified forms.



To view the full OFP, press the OUTPUT button. The entire flight plan will then be shown in text form, which can be scrolled as desired by using the scrollbar to the right of the OFP output area. A four-arrowed icon at the bottom right corner of the page enables ‘click and drag’ scrolling on the page itself. With this option enabled, hold left-click anywhere on the page and move your cursor up/down to scroll the page.

The OFP data can be refreshed at any time by pressing the RELOAD button at the bottom of the Summary page; this will update the OFP to the last exported SimBrief flight plan.

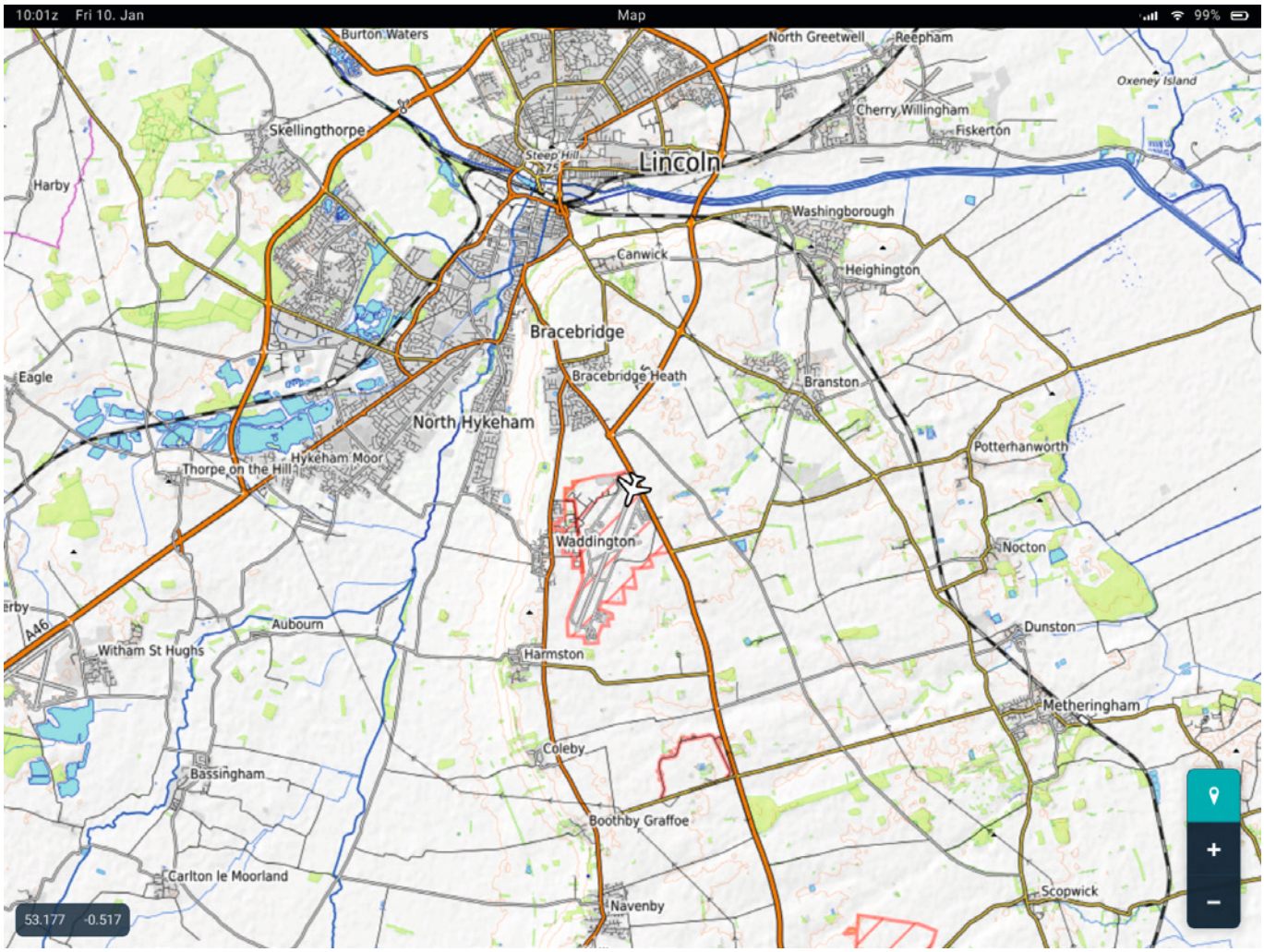
Note: *A free Navigraph/SimBrief account is required for this functionality.*

MAP

The Map app provides you with a moving map with visual data provided by OpenTopoMap.org.

By default, the map is set to track the aircraft's current position (displayed in the bottom right corner). It is also possible, however, to move the map manually by deselecting the aircraft icon in the bottom right corner of the display and then simply clicking and dragging anywhere on the map. Reselecting the aircraft icon will centre the view back to the aircraft's current position.

The map's zoom level can be adjusted via the '+' and '-' buttons.



CHARTS

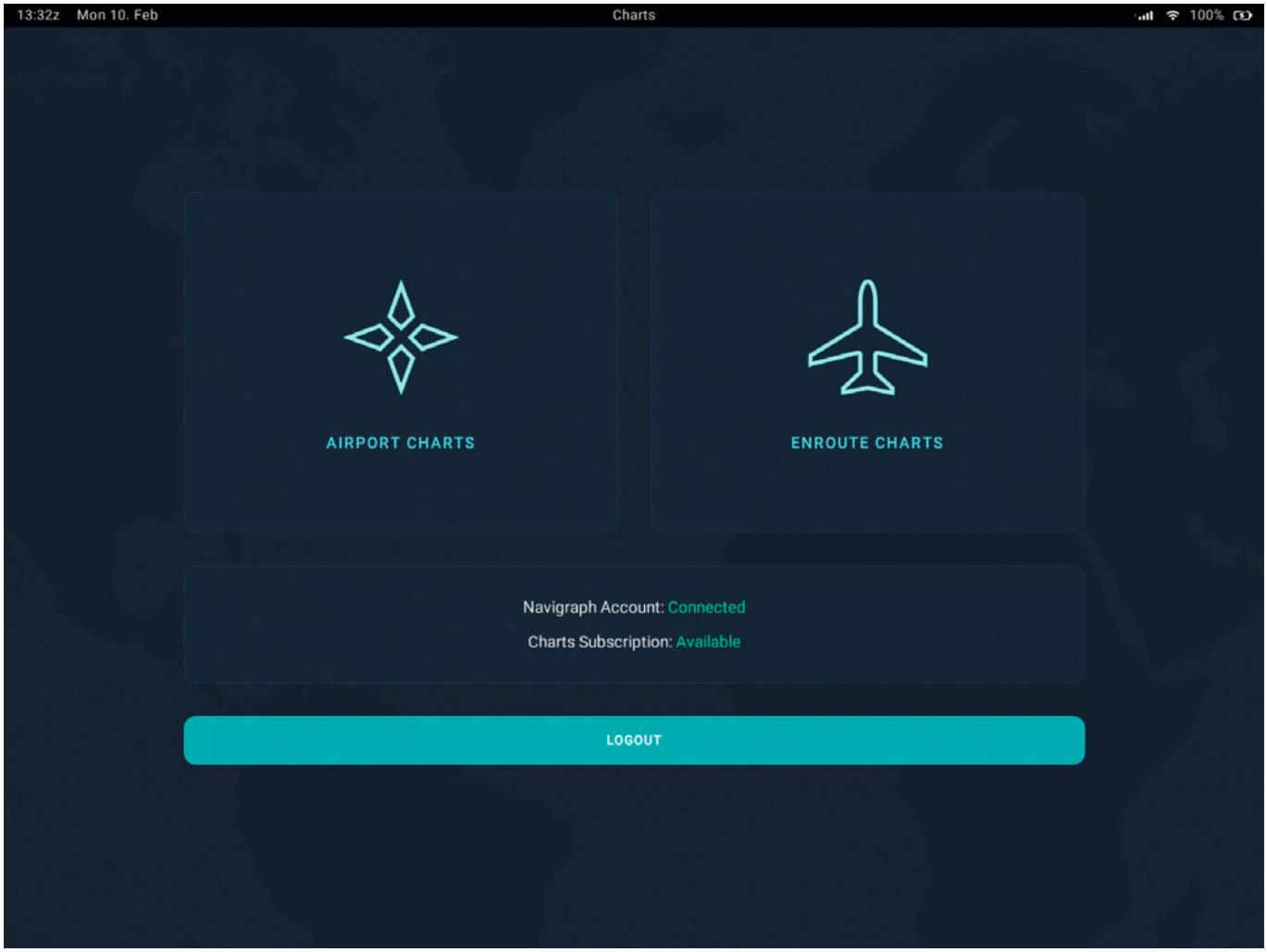
The Charts app allows you to browse aviation charts provided by Navigraph as part of an active Navigraph subscription. A login (via external link or QR code) is required to link the EFB to your Navigraph account when opening the Charts app for the first time. After opening the Charts app for the first time, follow the instructions on the EFB and your external internet browser to complete the linking process.

With a Navigraph account linked, two chart options will be available for selection: AIRPORT CHARTS and ENROUTE CHARTS. Clicking on one of these options will open the respective chart.

A LOGOUT button will unlink the Navigraph account from the EFB.

A ‘Navigraph Account’ field shows the current login status and the ‘Charts Subscription’ field shows the status of the Navigraph subscription.

Note: *A paid Navigraph subscription is required for the functionality described in this section.*



Airport charts

The AIRPORT CHARTS page allows you to search for and view charts for any airport in the world.

An airport's ICAO code can be entered in the ICAO code search field and the charts for that airport can be viewed by pressing the STAR/APP/TAXI/SID/REF buttons.

If a SimBrief OFP has been loaded on the OFP page, charts for the departure and arrival airports can quickly be accessed by pressing the DEPARTURE and ARRIVAL buttons.

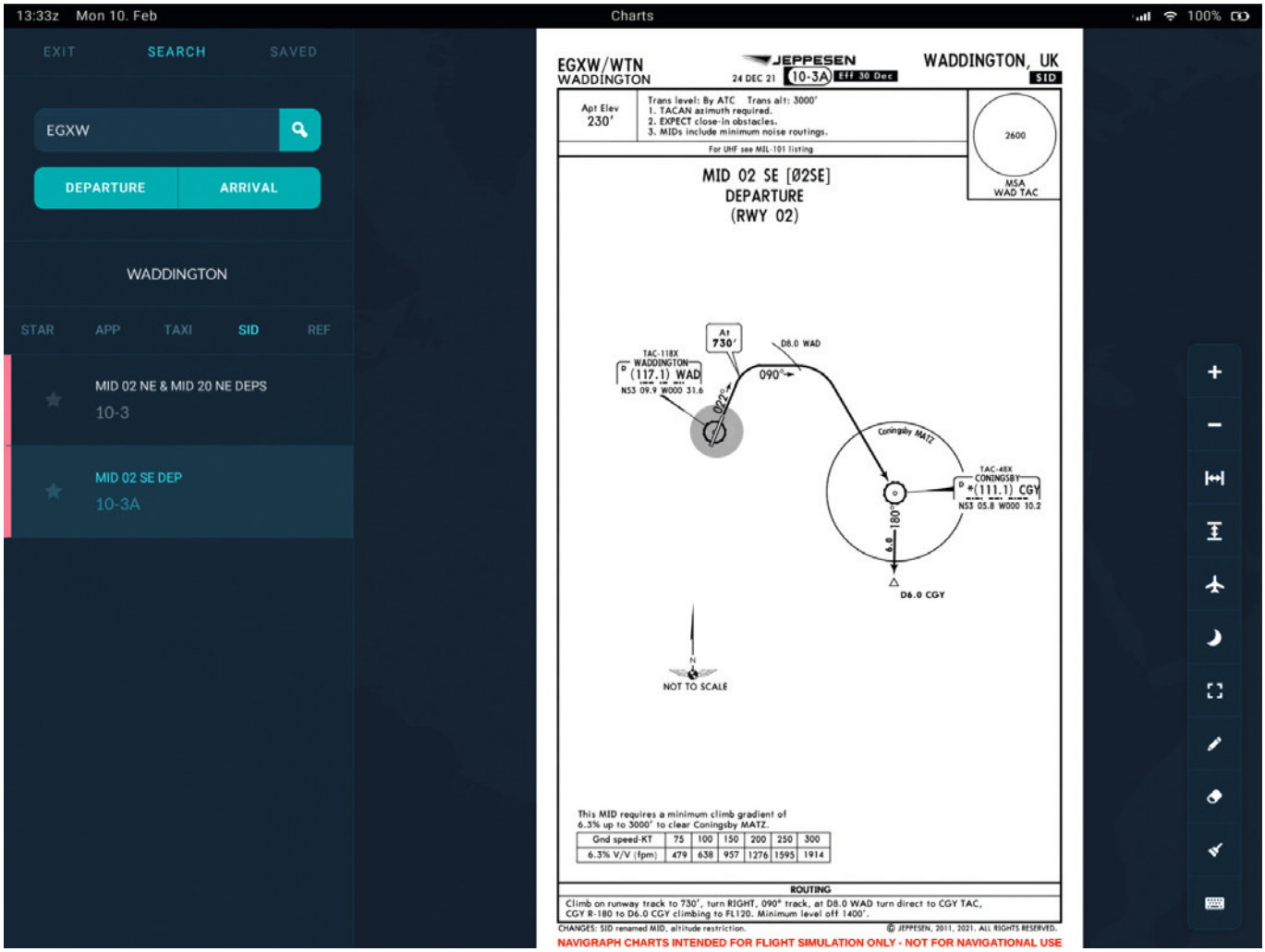
To view a chart, click on one of the charts listed on the left side of the page and the chart will open on the right side of the page. The active chart can be moved/resized/fitted as needed by using the controls at the bottom right of the page. Charts that provide georeferenced data will also display the aircraft's current position in the form of an aircraft icon.

Charts can be annotated by pressing the pen icon at the bottom right corner of the page and then moving your cursor across the page whilst holding left-click. Two eraser options allow you to either erase annotations via the same method or erase all annotations instantly.

To close a chart, click on the selected chart on the left side of the page or select another chart.

Charts can be saved for quick reference by pressing the star icon to the left of the chart's name. The star icon will change colour to indicate that the chart has been saved. All saved charts can be accessed by pressing the SAVED button at the top of the page. Saved charts can be removed from this list by pressing the star icon again.

Pressing the EXIT button at the top left of the page will return the EFB to the opening Charts page where the AIRPORT CHARTS or ENROUTE CHARTS pages can be selected.



Enroute charts

The ENROUTE CHARTS page allows you to view charts covering the various navaids and airways that are used for navigation between airports.

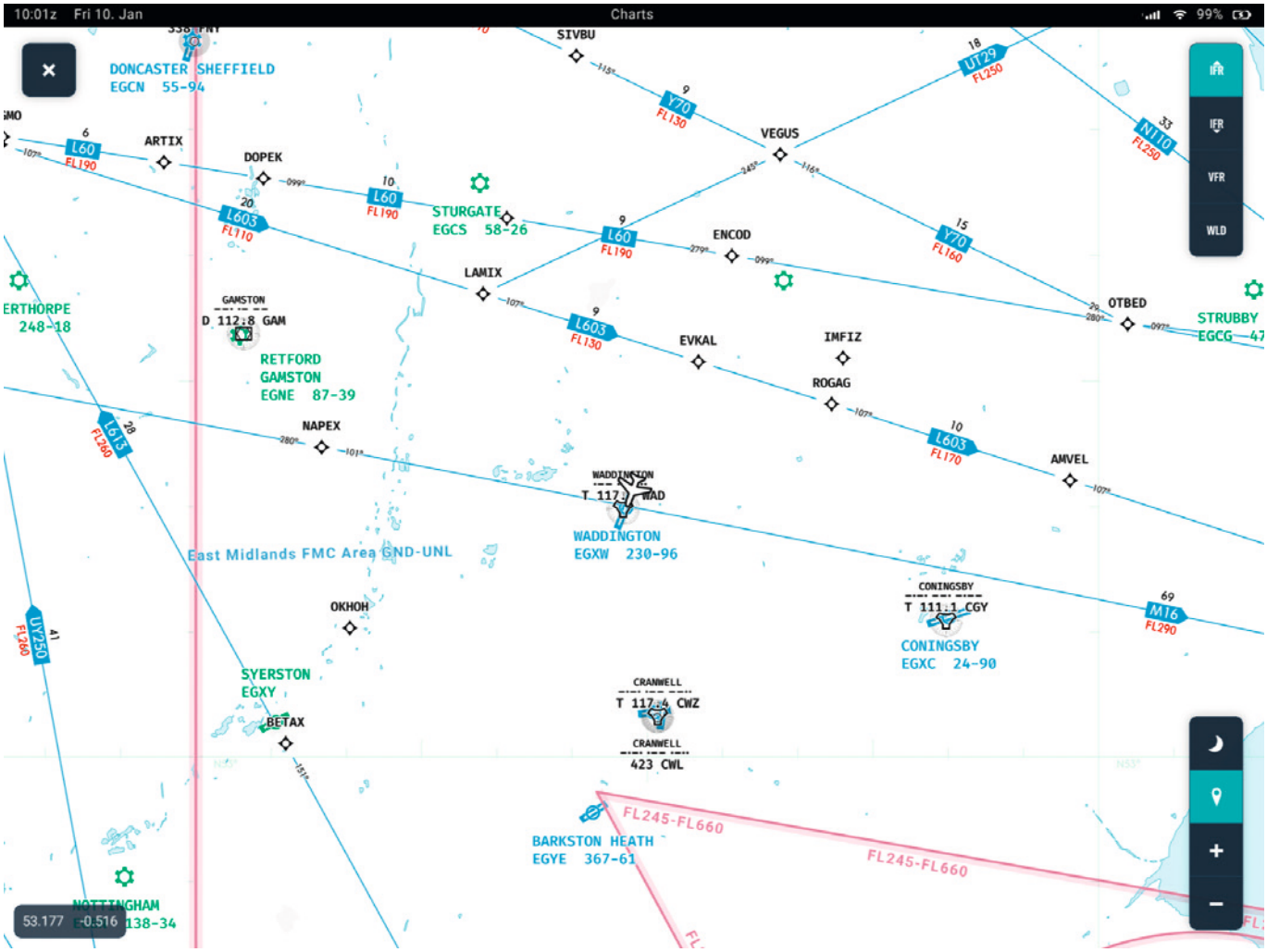
Four options in the top right corner of the page control which chart is shown:

- **IFR High Altitude** – High Altitude IFR charts designated for flights above 18,000 feet
- **IFR Low Altitude** – Low Altitude IFR charts designated for flights below 18,000 feet
- **VFR** – VFR charts
- **WLD** – world map

Various options at the bottom right corner of the page provide controls for zooming the charts in/out, following the aircraft's present position and toggling on/off dark mode.

The latitude and longitude at the centre of the chart are shown in the bottom left corner of the page.

Pressing the 'X' button at the top left corner of the page will return the EFB to the initial Charts page where the AIRPORT CHARTS or ENROUTE CHARTS pages can be selected.



AIRCRAFT

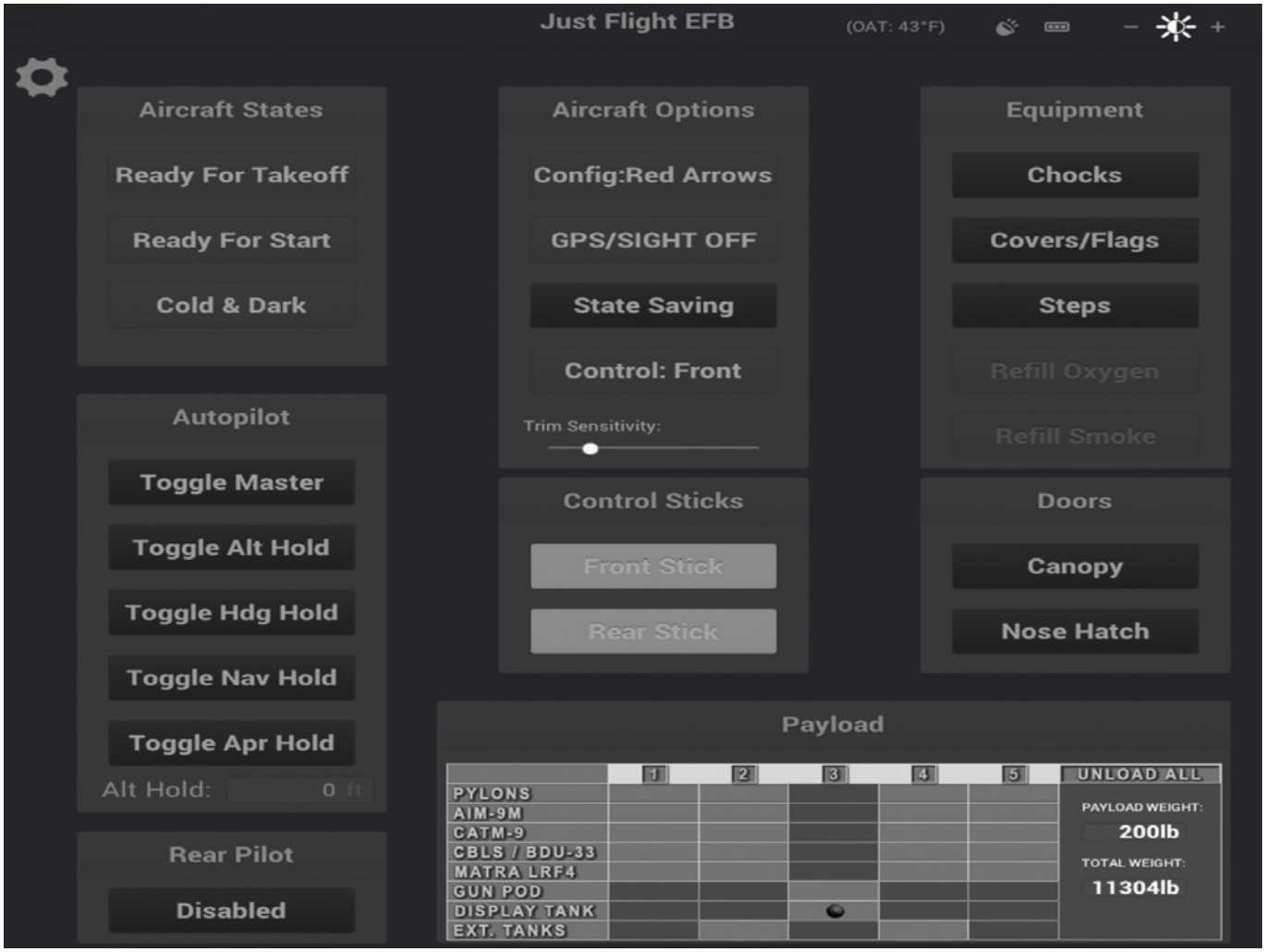
Selecting the Aircraft app from the Home page will launch the Aircraft screen, which allows you to control various aircraft options and payload.

The screen brightness can be adjusted with the plus and minus controls in the top right corner. The tablet battery status is also shown; this will drain over time if the aircraft electrical power is switched off and will recharge once it is powered on again. A speaker icon can be clicked to toggle the EFB sounds on/off.

The outside air temperature is shown on the top bar of the EFB in Fahrenheit or Celsius, depending on the selected MSFS unit of measure.

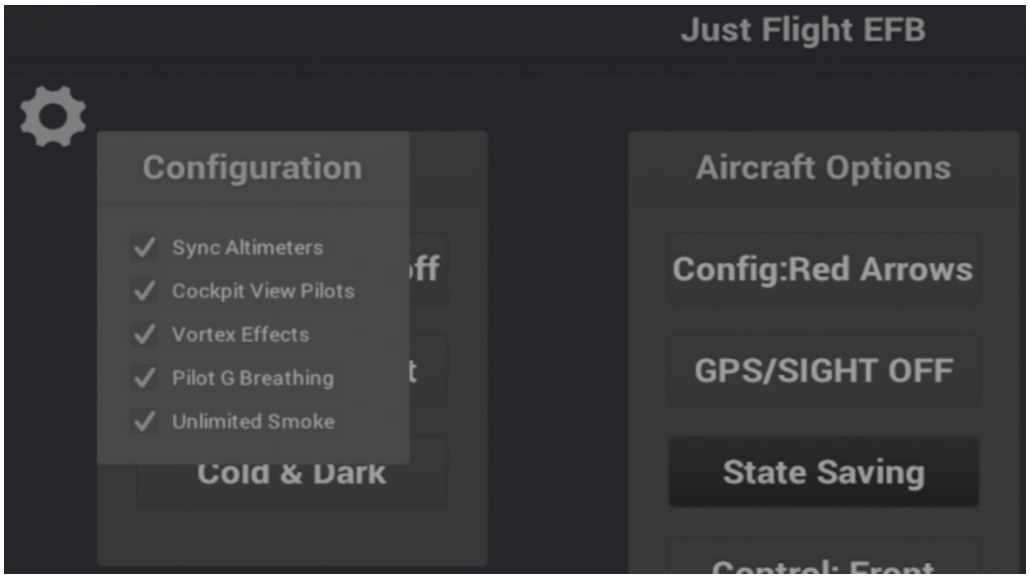
The tablet can be moved between two positions, the ejection seat or above the right console, using a clickspot on the outer edge (bezel) of the EFB tablet.

Please refer to the sections below for further information on the individual functions of the Aircraft page. You can return to the EFB from the Aircraft screen by either clicking the ‘Home’ icon or the physical ‘Home’ button.



Configuration

With the Aircraft menu selected, pressing the Settings ‘cog’ icon enables or disables the Configuration menu.



This menu has the following options:

Sync Altimeters – with the front cockpit selected using the Control button, the front standby, and rear main and standby, altimeter barometric settings will be automatically sync’d to the pressure you select on the front main altimeter. With the rear cockpit selected using the Control button, the rear standby, and front main and standby, altimeter barometric settings will be automatically sync’d to the pressure you select on the rear main altimeter.

Cockpit View Pilots – enables/disables the pilot models that are visible with the cockpit (internal) camera selected.

Vortex Effects – enables/disables the wingtip vortex effects.

Pilot G Breathing – enables/disables the G-force-induced pilot breathing sound, allowing you to use the default MSFS sound if you wish.

Unlimited Smoke – enables/disables unlimited smoke generation. With this option disabled, the amount of smoke stored in the display tank will realistically be limited to five minutes of white smoke and one minute each of red/blue/green smoke (figures taken from real-life display teams).

Aircraft states

Three aircraft states can be selected:

Ready For Takeoff – engine and electrical power on, flaps MID, lights on and parking brake on.

Ready For Start – electrical power on and ready for engine start, flaps up, lights on and parking brake on.

Cold & Dark – engine and electrical power off, flaps up, lights off and parking brake on.

The aircraft will automatically be configured in the Cold & Dark state when a flight is started at a parking/ramp/gate position, otherwise the Ready For Takeoff state will be selected. Restoration of a saved state, if enabled in the Configuration menu, will then occur.

Autopilot

The Hawk T1 is not equipped with an autopilot but, for convenience and when moving between the two cockpits, we have included buttons that allow you to control some basic autopilot modes:

- Toggle Master – autopilot master on/off
- Toggle Alt Hold – altitude hold mode on/off
- Toggle Hdg Hold – heading hold mode on/off
- Toggle Nav Hold – navigation hold mode on/off
- Toggle Apr Hold – approach hold mode on/off

A read-out indicates the currently selected altitude.

Rear Pilot

This option enables or disables the rear cockpit pilot, allowing you to simulate solo or dual training flights. When enabled, the co-pilot will be visible in the interior and exterior views and their weight will be automatically added to the aircraft payload.

Aircraft Options

Four aircraft options are available which can be used to configure the aircraft with various equipment:

Configuration – selects one of three aircraft configurations:

- **T1** – original RAF fast jet trainer without weapons capability.
- **T1/A** – T1 modified for tactical weapons training, with wing pylon-mounted ordnance and a centreline 30mm Aden gun. The cockpit is equipped with weapons controls and gunsight.
- **Red Arrows** – T1/A with wing pylons and weapons capability removed, and 30mm Aden gun replaced with a fairing for carrying display smoke diesel fuel and dye.

This option allows for the quick selection of aircraft configuration but it is also possible to use the other EFB options to futher configure the aircraft to your exact requirements.

GPS/SIGHT – selects one of three GPS/SIGHT configurations:

- **OFF** – GPS and gunsight removed
- **GPS** – SkyMap GPS fitted
- **SIGHT** – gunsight fitted
- **GPS + Gunsight** – SkyMap GPS and gunsight fitted

State Saving – enables or disables aircraft state saving.

The aircraft state can be saved and reloaded automatically between flights, allowing you to always return to your cockpit in the same state that you last left it.

Control – the Hawk T1 can be flown from the front or rear cockpit, with real-world solo flights conducted only from the front cockpit. The Control button allows you to quickly configure each cockpit for flight from the chosen cockpit.

The Control button has two settings:

- **Front** – selected when flying from the front cockpit. Front cockpit gunsight controls are enabled. Flap and gear selectors are configured for use from the front cockpit. EFB is moved to the front cockpit. Rear pilot is shown if enabled.
- **Rear** – selected when flying from the rear cockpit. Rear cockpit gunsight controls are enabled. Flap and gear selectors are configured for use from the rear cockpit. EFB is moved to the rear cockpit.

The Control button can also be triggered using the TOGGLE TAIL HOOK HANDLE and SET TAIL HOOK HANDLE control assignments.

Trim Sensitivity – a slider controls the sensitivity of the elevator trim. Moving the slider left will decrease the trim sensitivity and moving it right will increase the trim sensitivity. The chosen value will be saved between flights.

Control Sticks

Front Stick – toggles the visibility of the control stick in the front cockpit for better visibility and access to the instrument panel controls.

Rear Stick – toggles the visibility of the control stick in the rear cockpit for better visibility and access to the instrument panel controls.

Equipment

Chocks – enables/disables the aircraft's wheel chocks.

Covers/Flags – enables/disables the aircraft's covers and flags.

Steps – enables/disables the aircraft's access steps.

Refill Oxygen – refills the aircraft's oxygen system when on the ground.

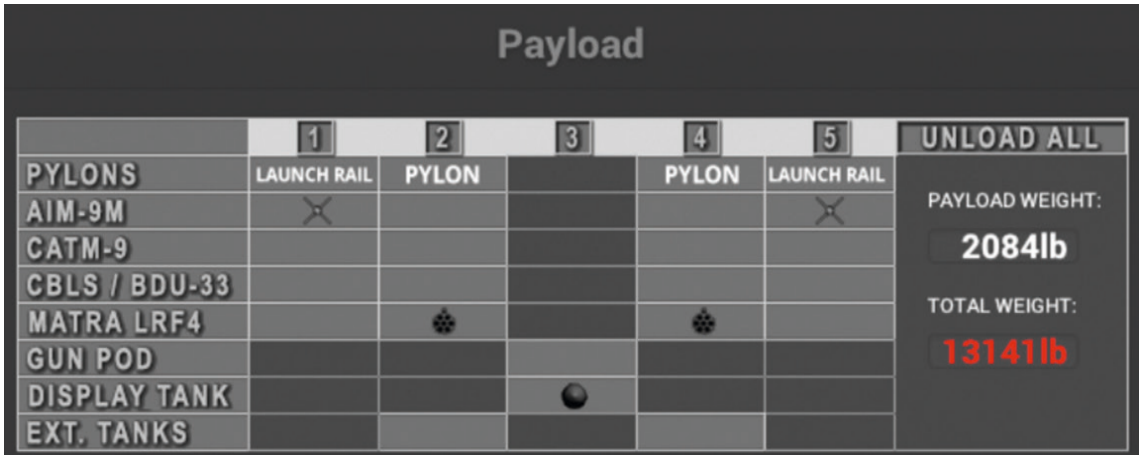
Refill Smoke – refills the aircraft's smoke system if smoke has run out with the Unlimited Smoke configuration option disabled.

Doors

Canopy – opens and closes the cockpit canopy.

Nose Hatch – opens and closes the nose hatch.

Payload



Allows you to configure the aircraft payload by clicking on the relevant numbered payload station (1-5) for the desired payload:

- **PYLONS** – pylon (for carrying practice bombs, rocket pods or external tanks), launch rail (for carrying Sidewinders) or none
- **AIM-9M** – live AIM-9M Sidewinder missiles
- **CATM-9** – captive Air Training Missile (inert practice Sidewinder)
- **CBLS / BDU-33** – practice bomb launcher and bombs
- **MATRA LRF4** – rocket pods
- **GUN POD** – 30mm Aden gun
- **DISPLAY TANK** – Red Arrows smoke tank
- **EXTERNAL TANK** – 100 Imp Gal (454 litres) fuel drop tank

An UNLOAD ALL button removes all payload.

Selecting an aircraft configuration (T1, T1/A or Red Arrows) will automatically select an appropriate payload for that configuration.

Due to simulator limitations, any payload changes made via the EFB won't be reflected on the MSFS fuel window, therefore the total payload and aircraft weights are also shown on the EFB and update in real time as configuration changes are made.

NOTES

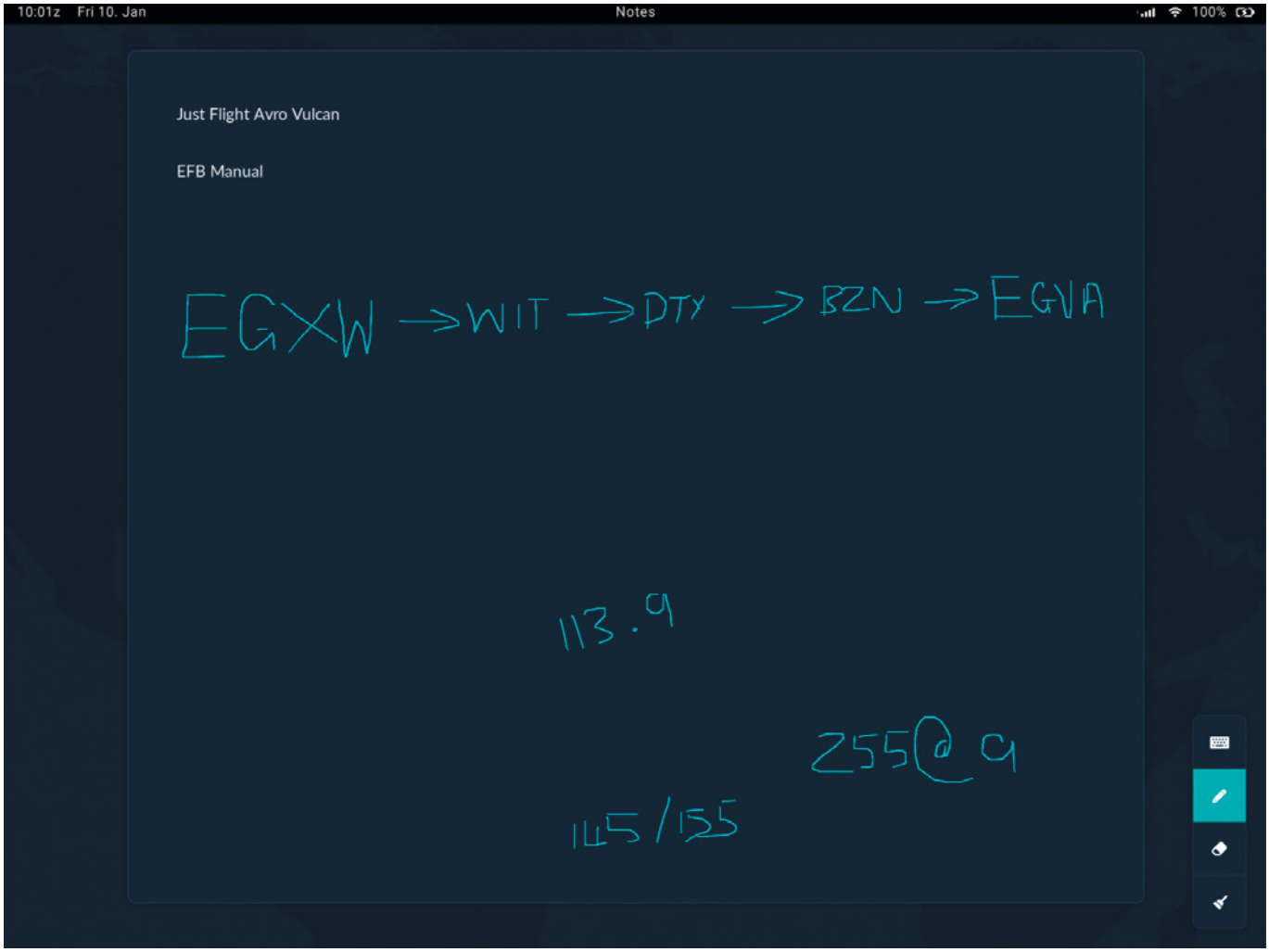
The Notes app acts as a virtual notepad for the pilot, allowing you to take text-based and handwritten notes on the fly (particularly useful for noting clearances and taxi instructions).

The Notes app supports standard keyboard inputs and will automatically display a scrollbar once the content exceeds the height of the input area.

An on-screen keyboard is also available. This can be toggled on/off by pressing the keyboard icon at the bottom right of the page. Once open, the keyboard can be moved freely to any position on the display by pressing and holding the top bar of the keyboard. To hide the keyboard, simply press the keyboard icon again (this feature is particularly useful for VR users).

To make handwritten notes, press the pen icon at the bottom right of the page and then left-click with your mouse and drag the pen to write on the screen. To erase text, press the eraser icon and, again with your mouse, left-click and drag to erase what you have written.

To erase all handwritten notes from the page, simply press the paintbrush icon at the bottom right of the page.



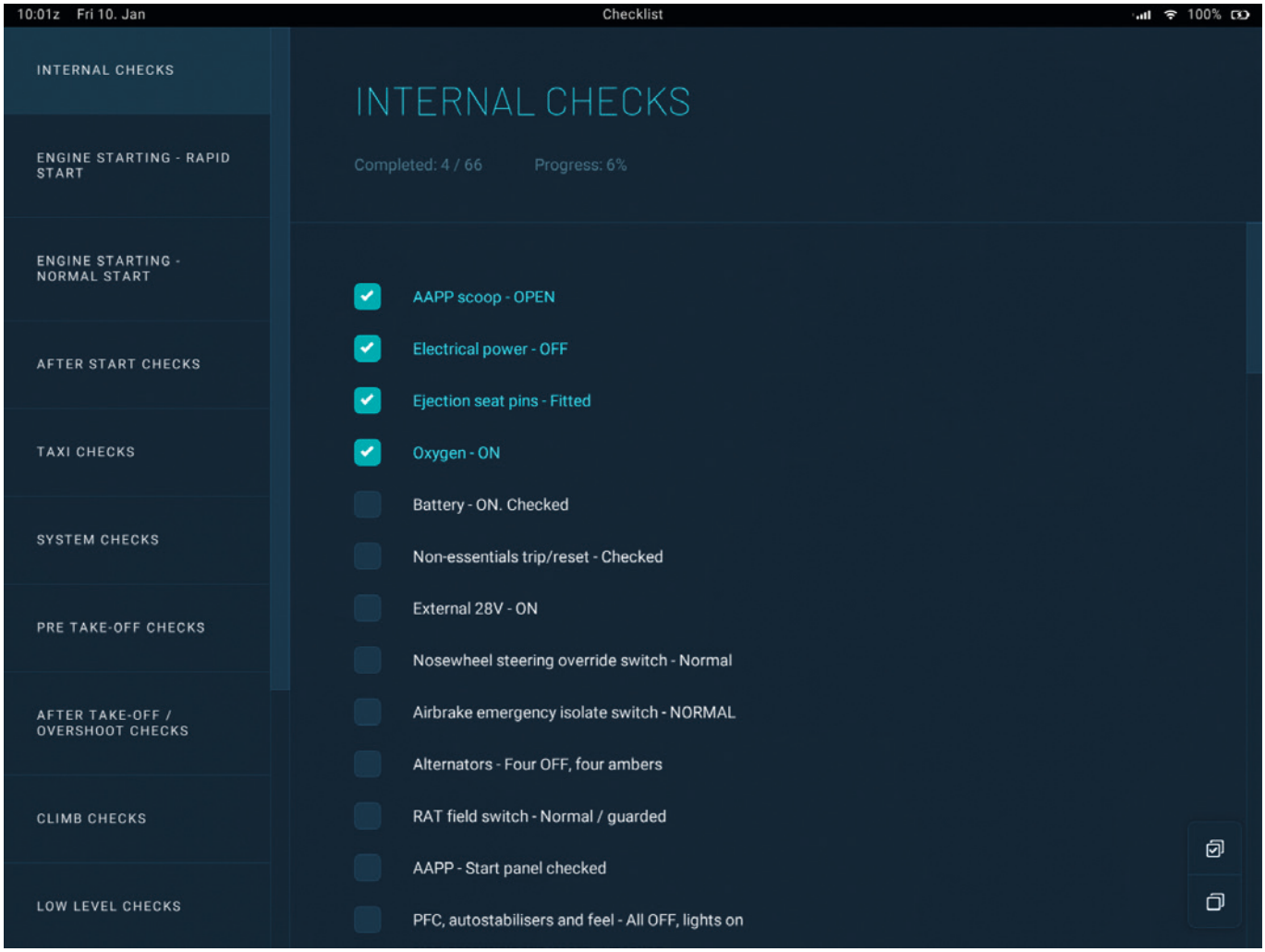
CHECKLIST

The Checklist app allows you to view all the aircraft's checklists on one easy-to-navigate page. The title of each checklist is shown on the left side of the page. Pressing the title of a checklist will open the respective checklist on the right side of the page.

Each step of a checklist has an item, action and a tick box which can be manually ticked to allow you to keep track of your progress. You can see your progress through the checklist at the top of the page.

Two controls at the bottom right of the page allow you to tick all boxes on the page or to untick all boxes.

Note: *The Checklist page on the EFB is intended to be used as a guide only. For automated checklists please use the interactive checklist menu within MSFS.*



TOD CALCULATOR

The top of descent calculator is a useful tool which allows you to calculate and view the exact point at which you should begin your descent.

The distance of your descent can be calculated based on the following four factors:

- Current altitude (feet)
- Ground speed (knots)
- Target altitude (feet)
- Desired angle (degrees)

Each of these factors is shown on this page, where text can be entered into each of these fields either via an external keyboard or via the on-screen keyboard which can be toggled from the lower right corner of the page.

Once values have been entered into each of these four fields, the calculator will then produce two outputs:

- Desired TOD distance – the ground distance covered between the start of your descent and your target altitude.
- Desired vertical speed – the vertical speed that the aircraft will have to descend at to meet the distance stated.

Note: *Desired distance, Desired vertical speed and Desired angle are all interchangeable values and can be toggled by pressing the arrow buttons in the fourth field.*

For ease of use, the CURRENT ALTITUDE (FT) and GROUND SPEED (KT) fields both have a SYNC feature; once active, this continuously inputs the aircraft's current altitude and ground speed into their respective fields. With this feature active, the calculator's outputs will be constantly updated as the aircraft's altitude and speed change during its descent.

SETTINGS

The Settings screen offers several options to adjust the look and behaviour of the EFB:

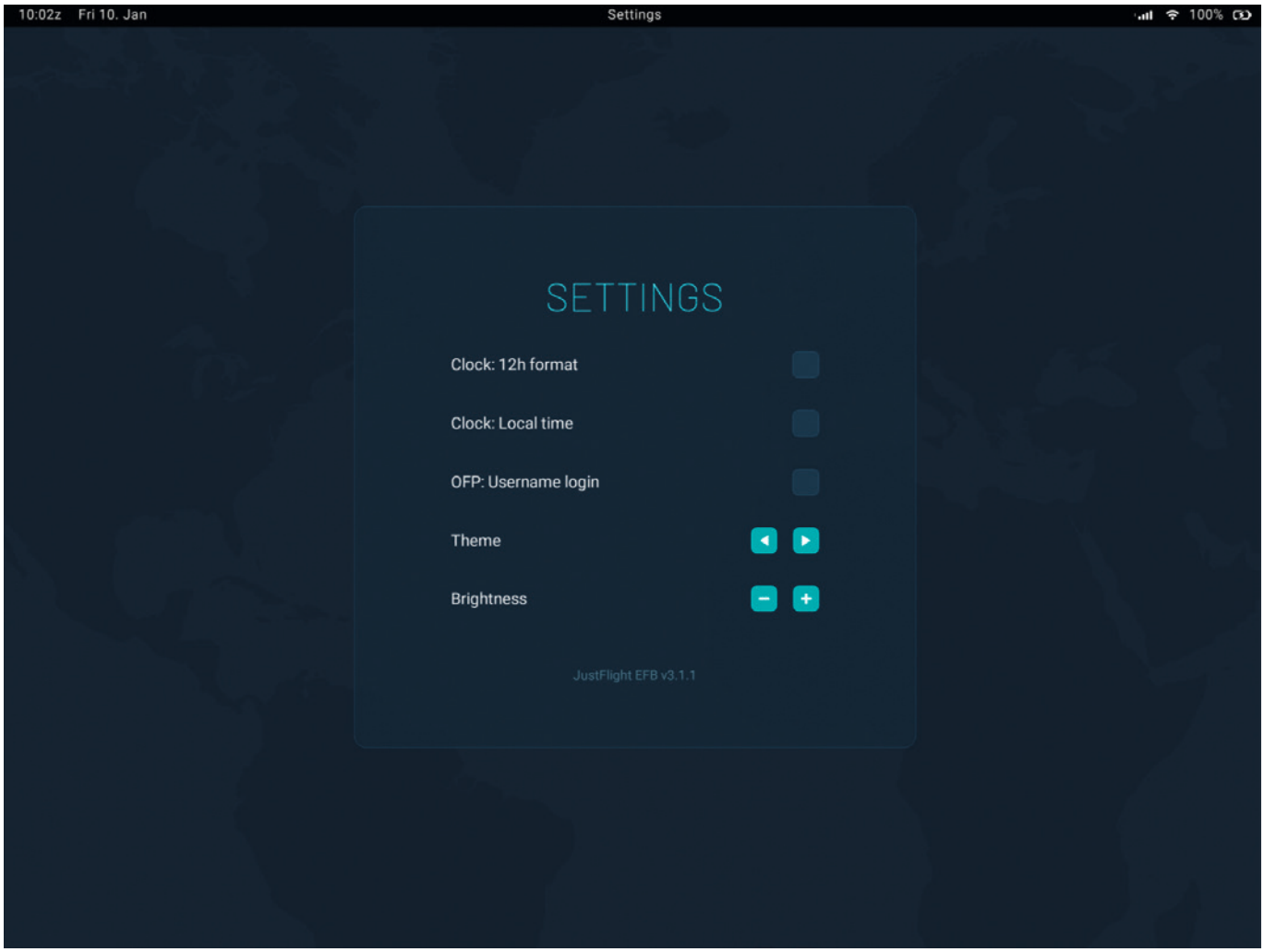
Clock: 12h format – toggles the 12/24-hour format of the top bar clock.

Clock: Local time – toggles between UTC and local time on the top bar clock.

OFP: Username login – allows SimBrief identification via username instead of pilot ID.

Theme – switches the EFB's colour scheme.

Brightness – increases/decreases the EFB's brightness.



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