



HAWK T1/A

ADVANCED TRAINER

ELECTRONIC FLIGHT BAG (EFB)

Just Flight

HAWK T1/A

ADVANCED TRAINER

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	3
OPERATIONAL FLIGHT PLAN (OFP)	5
MAP	8
CHARTS	9
AIRCRAFT	10
Configuration	11
Aircraft states.....	11
Autopilot	12
Rear Pilot	12
Aircraft Options.....	13
Control Sticks	13
Equipment.....	14
Doors	14
Payload	14
NOTES	15
CHECKLIST	16
TOD CALCULATOR.....	17
SETTINGS	18
CREDITS	19
COPYRIGHT.....	19

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.



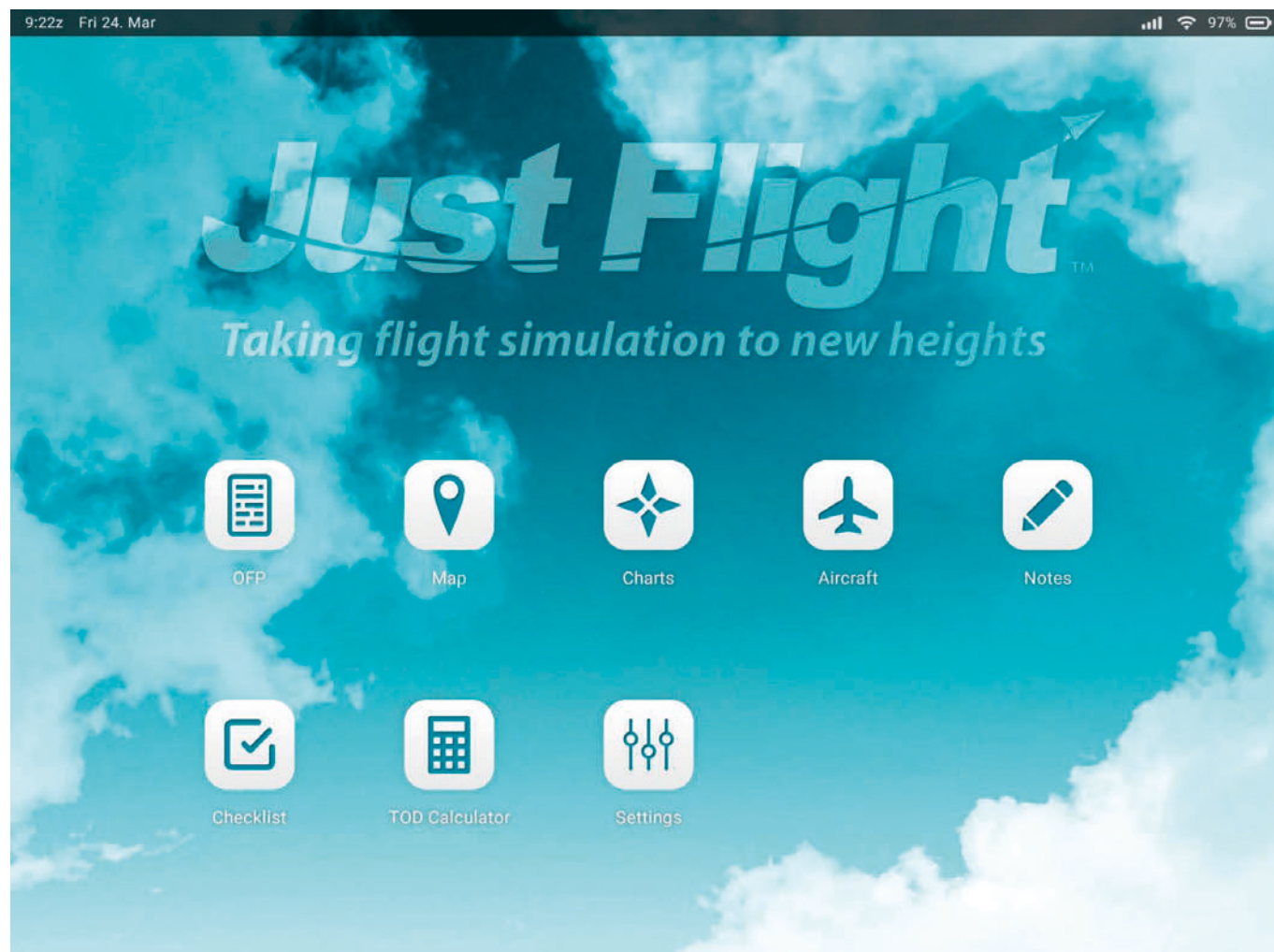
The Home screen of the EFB shows the icons of the various applications that are available to use. Pressing one of these icons will open the respective application.

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.

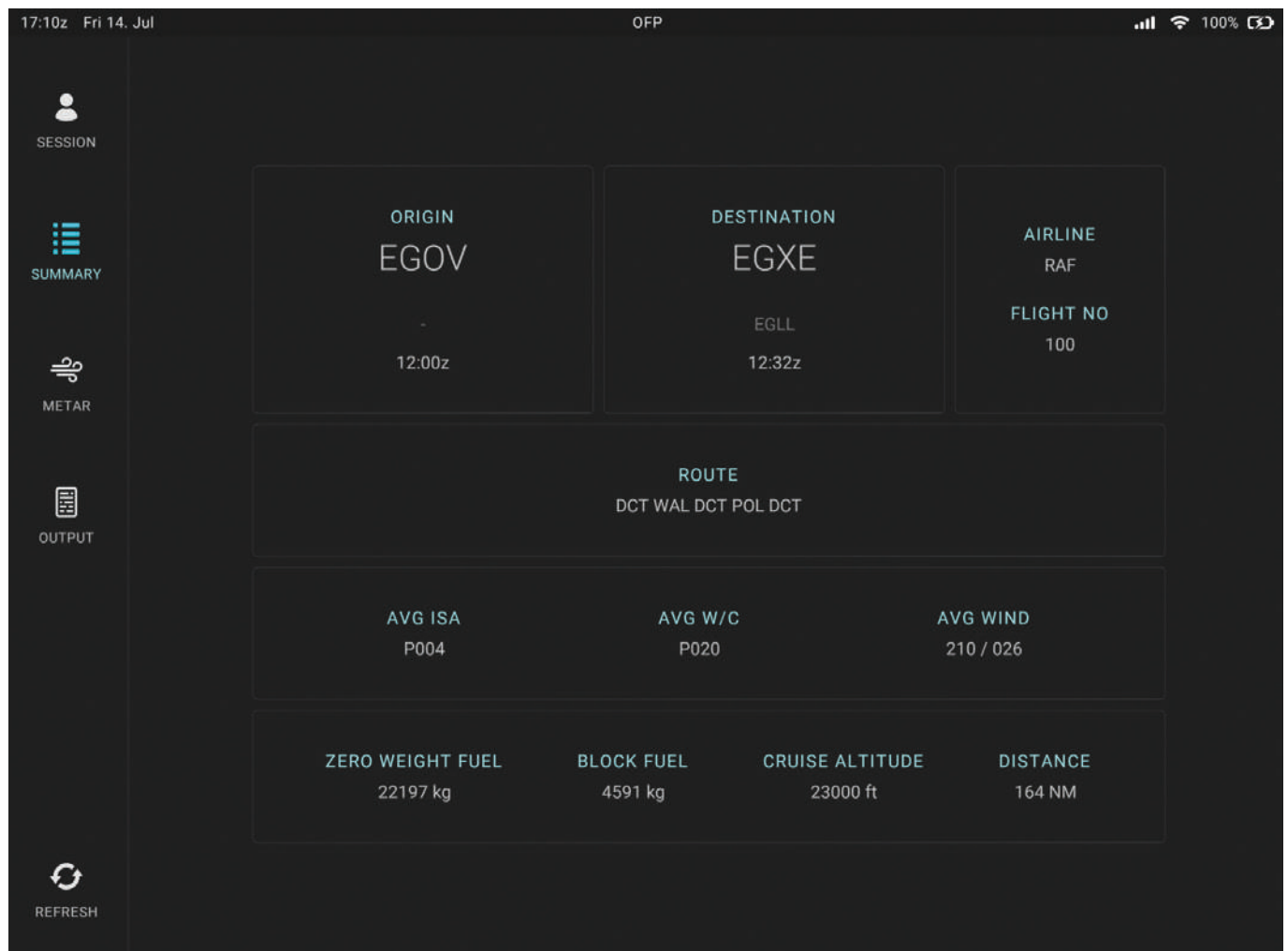


OPERATIONAL FLIGHT PLAN (OFP)

The OFP screen allows you to view your latest simBrief OFP and display its information conveniently within the simulator.

On selecting the simBrief screen you will be prompted to enter your simBrief pilot ID to access your data. Alternatively, you can choose to identify yourself via your simBrief username by enabling the 'simBrief Username Login' setting in the EFB settings.

Once you have entered your simBrief identification and pressed the 'Continue' button, you are presented with a summary of your active OFP, including airport codes, times, route information, fuel weight etc.



Pressing the METAR button allows you to view the wind information for your origin, destination and alternate airports. This information is shown in both raw and simplified forms.

17:10z Fri 14. Jul

OFF

100%


SESSION


SUMMARY


METAR


OUTPUT


REFRESH

ORIGIN (EGOV)

EGOV 141050Z 03002KT 9999 FEW002 SCT005 17/16 Q1003 TEMPO 5000 RA
SCT003 RMK YLO1 TEMPO YLO2

PRESSURE	TEMPERATURE	VISIBILITY	WIND
29.62inHg / 1003.00mb	17.00°C / 62.60°F	10000m / 6mi	30deg, 2kts

DESTINATION (EGXE)

EGXE 141050Z 13006KT 9000 -RA SCT006 OVC008 16/16 Q1006 TEMPO 3000
SCT004 RMK YLO1 TEMPO YLO2

PRESSURE	TEMPERATURE	VISIBILITY	WIND
29.71inHg / 1006.00mb	16.00°C / 60.80°F	9000m / 6mi	130deg, 6kts

ALTERNATE (EGLL)

EGLL 141050Z AUTO 19013KT 9999 BKN026 21/15 Q1010 TEMPO RA BKN014

PRESSURE	TEMPERATURE	VISIBILITY	WIND
29.83inHg / 1010.00mb	21.00°C / 69.80°F	10000m / 6mi	190deg, 13kts

To view the full OFP, press the **OUTPUT** button. Your 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.

17:10z Fri 14. Jul

OFF

AVG FF KGS/HR 2220
FUEL BIAS P18.0
TKOF ALTN

SESSION

SUMMARY

METAR

OUTPUT

REFRESH

ALTN EGLL
FL STEPS EGOV/0230/

DISP RMKS NIL

PLANNED FUEL

FUEL	ARPT	FUEL	TIME
TRIP	GXE	1324	0035
CONT 15 MIN		555	0015
ALTN	LHR	1562	0048
FINRES		878	0030
MINIMUM T/OFF FUEL		4319	0208
EXTRA		0	0000
T/OFF FUEL		4319	0208
TAXI	VLV	272	0020
BLOCK FUEL	VLV	4591	
PIC EXTRA			
TOTAL FUEL			
REASON FOR PIC EXTRA			

FMC INFO:
FINRES+ALTN 2440
TRIP+TAXI 1596

NO TANKERING RECOMMENDED (P)

I HEREWITH CONFIRM THAT I HAVE PERFORMED A THOROUGH SELF BRIEFING
ABOUT THE DESTINATION AND ALTERNATE AIRPORTS OF THIS FLIGHT
INCLUDING THE APPLICABLE INSTRUMENT APPROACH PROCEDURES, AIRPORT
FACILITIES, NOTAMS AND ALL OTHER RELEVANT PARTICULAR INFORMATION.

DISPATCHER: MARILYN GREENE PIC NAME: JAMES ALLISON, MAR

TEL: +1 800 555 0199 PIC SIGNATURE:

ALTERNATE ROUTE TO: FINRES 878
APT TRK DST VIA FL WC TIME FUEL

EGLL/27L 166 211 DCT LISTO L612 HON HON1H 290 M033 0048 1562

MEL/CDL ITEMS DESCRIPTION

ROUTING:

The OFP data can be refreshed at any time by pressing the REFRESH button in the left sidebar; this will update the data to your latest simBrief flight plan.

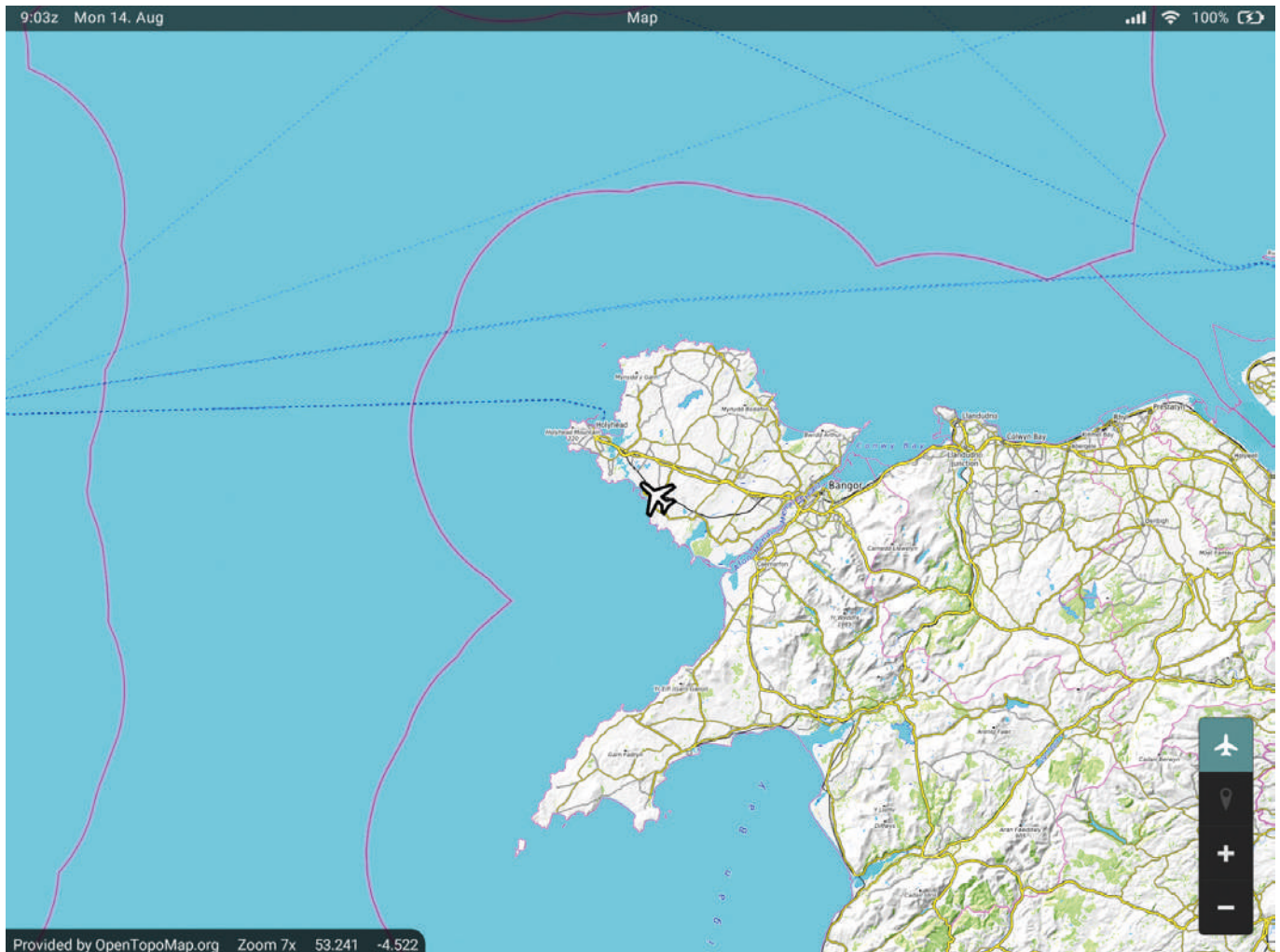
Note: A SimBrief account is required for this functionality.

MAP

The Map app provides you with a moving map based on visual data from [OpenTopoMap.org](https://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 pressing the aircraft icon in the bottom right corner of the display and then simply clicking and dragging anywhere on the map. Pressing the location pointer 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. Follow the instructions on the EFB and your external internet browser to complete the linking process.

With your Navigraph account linked, you can then enter an ICAO code in the 'ICAO Code' search field to view the various associated STAR/APP/TAXI/SID/REF charts for that airport.

If you have a simBrief OFP loaded on the OFP page, you can quickly access the charts for the departure and arrival airports simply by pressing the respective DEPARTURE and ARRIVAL tabs. This will list all relevant charts for that airport under the STAR/APP/TAXI/SID/REF headings.

To view a chart, simply press the relevant tab and the chart will appear on the right side of the page. The active chart can be moved/resized/fitted as needed by using the controls at the right of the document window. Charts that provide georeferenced data may additionally display the aircraft's current position as an overlay icon if applicable.

Charts can be saved for quick reference by pressing the star icon to the left of the chart's name. You can quickly access all of your saved charts by pressing the SAVED button at the top of the page.

To unlink your Navigraph account from the EFB, press the LOG OUT button at the top of the page.

9:03z Mon 14. Aug
Charts
100%

SEARCH
SAVED
LOG OUT

DEPARTURE
ARRIVAL
NONE

VALLEY

STAR
APP
TAXI
SID
REF

★

MID 01, 13, 19 & 31 DEPS (TO EAST)
10-3

★

MID 01, 13, 19 & 31 DEPS (TO SOUTH)
10-3A

EGOV/VLY
20 DEC 22 (10-3)

JEPPSEN

DEPARTURES (ALL RWYS) TO EAST

MID 01 [MID01E] MID 13 [MID3E] MID 19 [MID19E] MID 31 [MID31E]

TO EAST

NOT TO SCALE

SID	RWY	ROUTING/ALTITUDE
MID 01	01	Climb on runway track to D1.0 VYL or 540' whichever is later, turn RIGHT, 077° track, intercept VYL R-047, at D8.0 VYL turn RIGHT, 128° track, intercept VYL R-098 at or below FL110.
MID 13	13	Climb on runway track to D8.0 VYL, turn LEFT, 068° track, intercept VYL R-098.
MID 19	19	Climb on runway track to D2.0 VYL or 540' whichever is later, turn LEFT, 108° track, intercept VYL R-138, at D8.0 VYL turn LEFT, 068° track, intercept VYL R-098.
MID 31	31	Climb on runway track to D5.0 VYL, turn RIGHT, 128° track, cross VYL R-038 at or above FL050 (MAX FL110), intercept VYL R-098 at or below FL110.

Note: A Navigraph account is required for this functionality.

AIRCRAFT

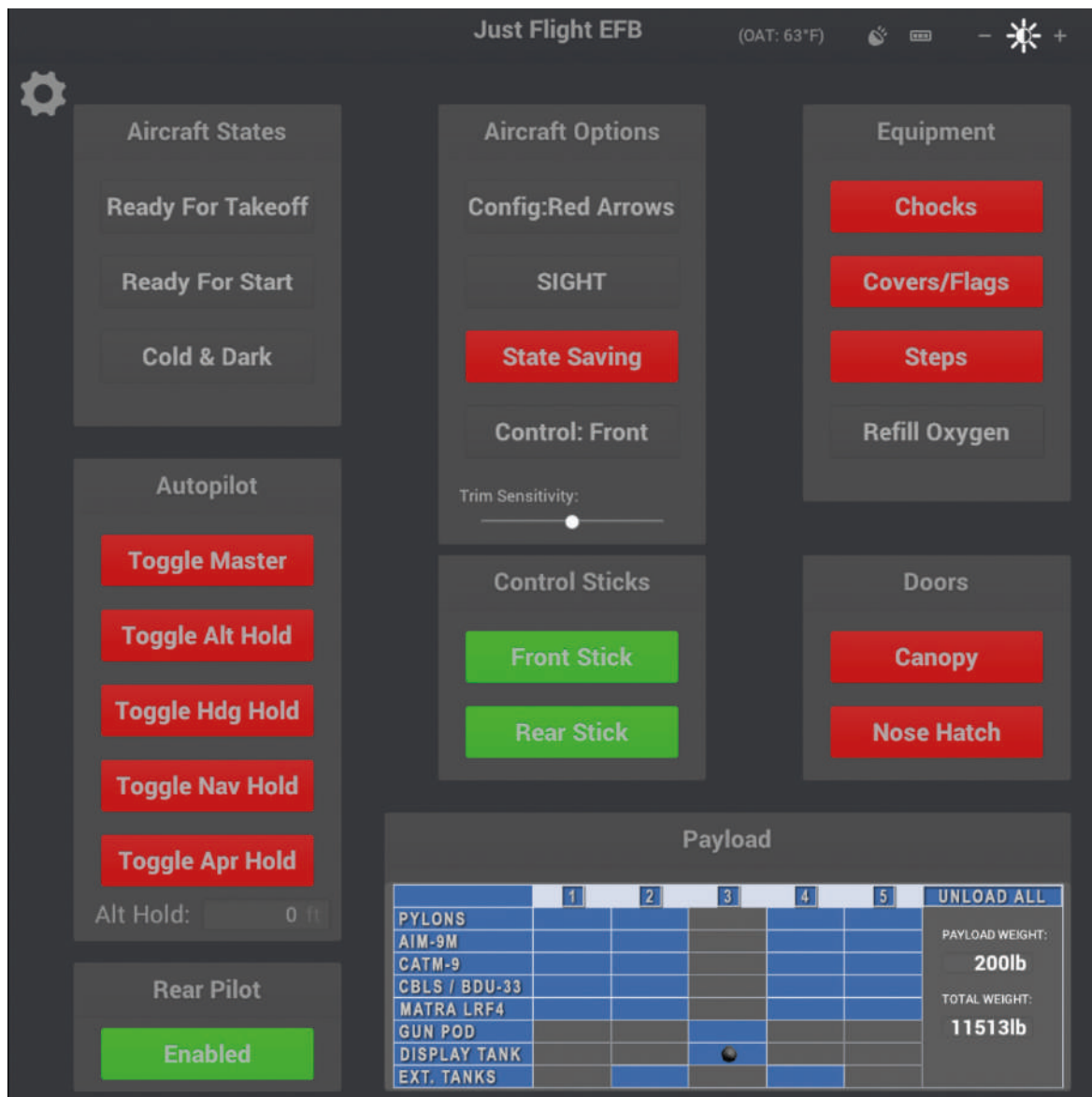
Selecting the Aircraft app from the Home page will launch the Aircraft screen, which allows you to control various aircraft options and payload.

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.

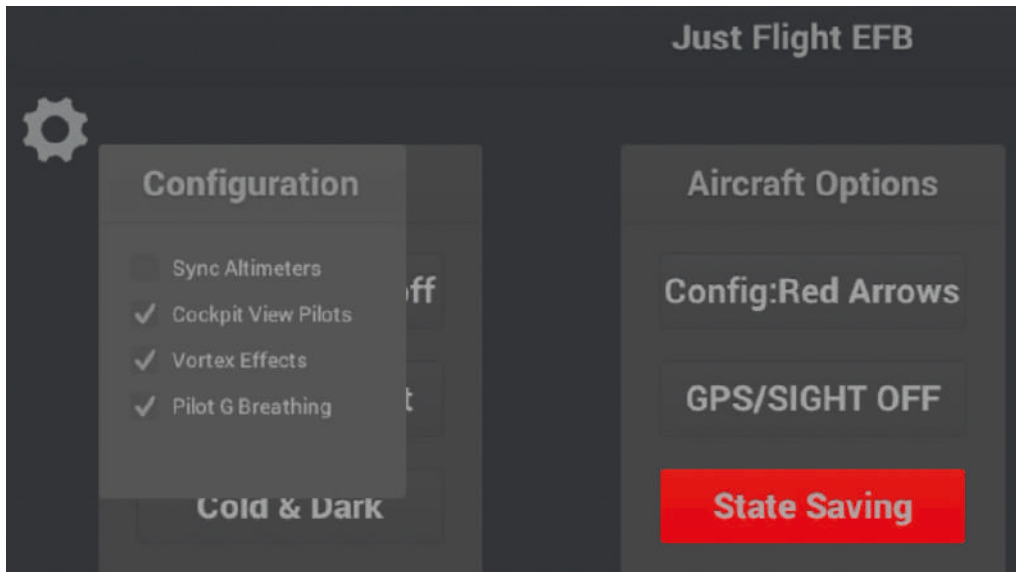
The tablet can be moved between two positions, the ejection seat or above the right console, using a clickspot on the outer edge (bezel) of the EFB tablet.

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.

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 further 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.

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

Enables or disables exterior aircraft equipment:

- Wheel chocks
- Covers and flags
- Cockpit steps

There is also an option for refilling the cockpit oxygen system when the aircraft is on the ground.

Doors

Canopy – opens and closes the cockpit canopy.

Nose Hatch – opens and closes the nose hatch.

Payload

Payload						
	1	2	3	4	5	UNLOAD ALL
PYLONS	LAUNCH RAIL	LAUNCH RAIL		LAUNCH RAIL	LAUNCH RAIL	PAYLOAD WEIGHT: 2284lb
AIM-9M	✕				✕	
CATM-9		●		●		TOTAL WEIGHT: 12172lb
CBLS / BDU-33						
MATRA LRF4						
GUN POD			●			
DISPLAY TANK						
EXT. TANKS						

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

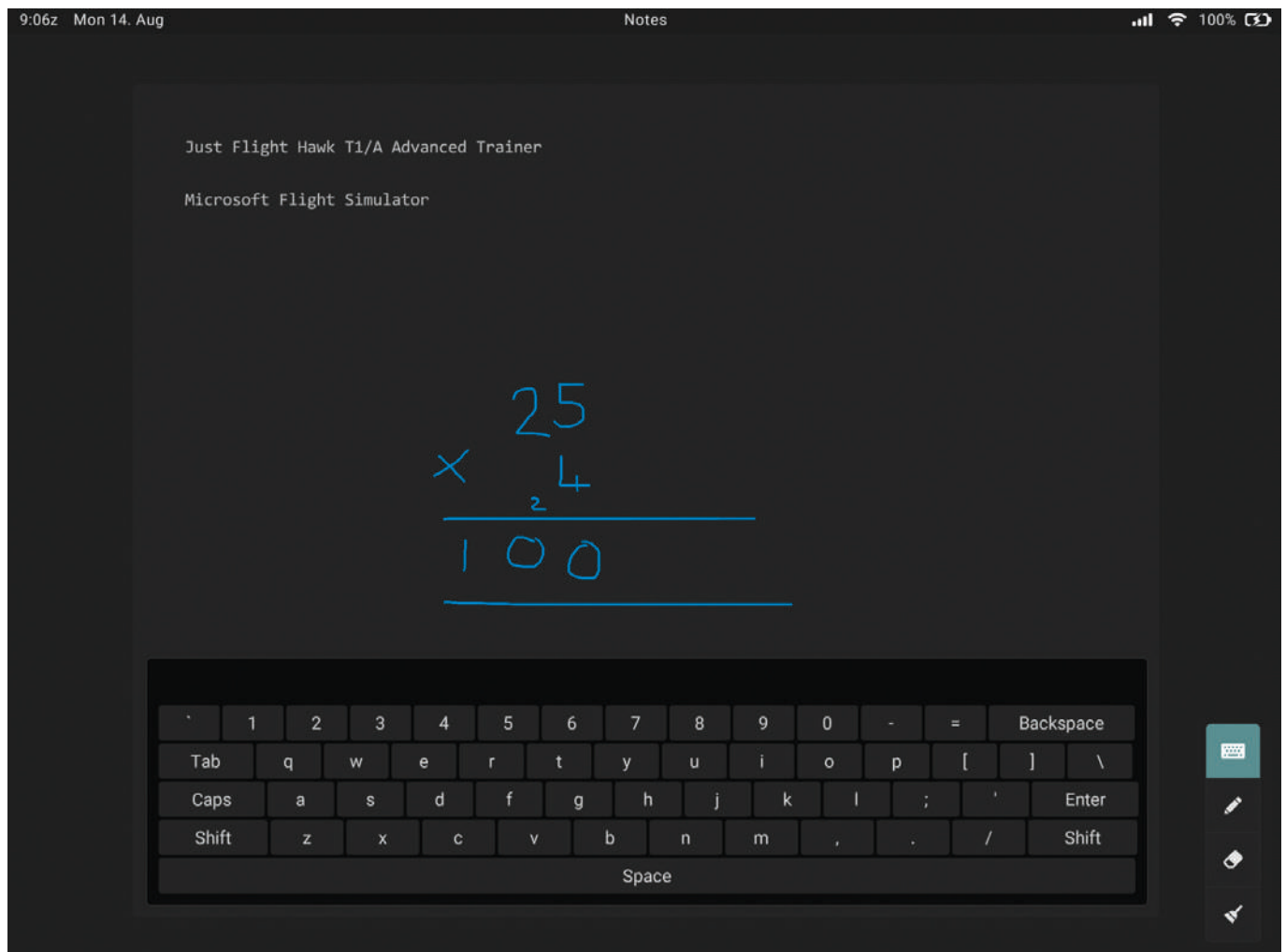
The Notes app acts as a virtual notepad for the pilot, allowing you to take text-based and handwritten notes on the fly (particularly useful for noting clearances and taxi instructions).

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.

The screenshot displays the Checklist app interface. At the top, the status bar shows '9:05z Mon 14. Aug', 'Checklist', and '100%' battery. The left sidebar contains a list of checklist categories: 'INITIAL CHECKS - FRONT COCKPIT', 'INITIAL CHECKS - REAR COCKPIT', 'STRAPPING IN CHECKS', 'PRE-FLIGHT CHECK COCKPIT', 'ENGINE START', 'AFTER START', 'TAXYING', 'BEFORE TAKEOFF', 'LINING UP', and 'AFTER TAKEOFF'. The main area shows the 'INITIAL CHECKS - FRONT COCKPIT' checklist. It includes a progress summary: 'TOTAL: 8', 'REMAINING: 5', and 'PROGRESS: 38%'. The checklist items are as follows:

Item	Status
Landing gear selector - DOWN	✓
Battery switches - OFF	✓
MCP coolant - OFF	✓
WCP - ALL OFF	✗
MASS - LOCK SAFE	✗
ISIS sight - OFF	✗
Stick top - SAFE	✗
Oxygen selector - ON, CONTENTS CHECKED	✗

At the bottom right, there are two icons: a checkmark in a box and a document icon.

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.

9:06z Mon 14. Aug Calculator 100%

Input Field	Value	Feature
CURRENT ALTITUDE (FT)	28000	SYNC
GROUND SPEED (KT)	420	SYNC
TARGET ALTITUDE (FT)	400	
DESIRED ANGLE (DEG)	3	Left Arrow, Right Arrow

Desired TOD distance: 87 NM
Desired vertical speed: 2127 ft/min

SETTINGS

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

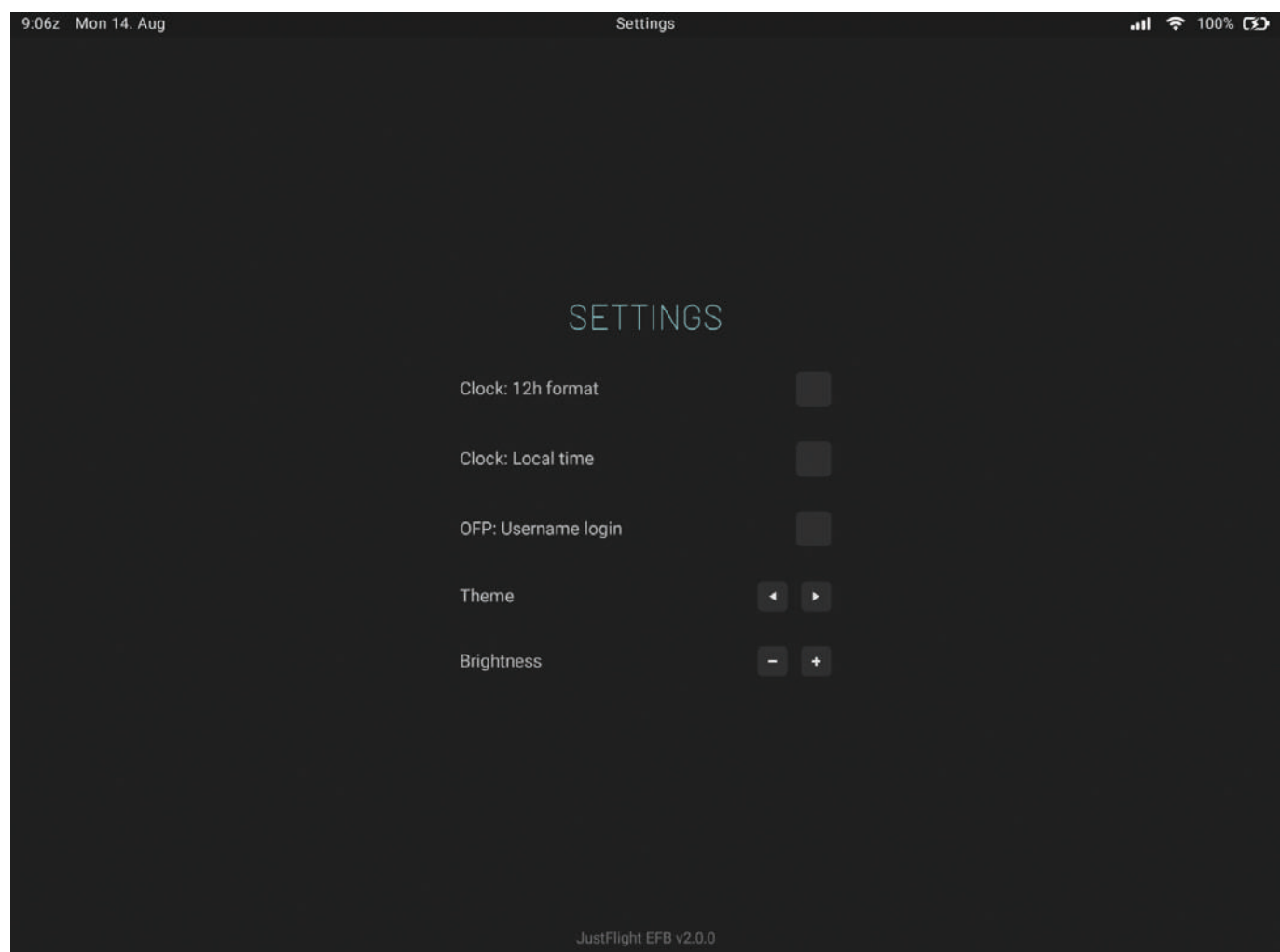
Clock: 12h format – toggles the 12/24-hour format of the top bar clock.

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.



CREDITS

Project management	Martyn Northall
EFB modelling and design	Mark Griffiths
EFB programming	Omniwise, Martyn Northall
Manual	Mark Allison, Mark Embleton
Design	Fink Creative

COPYRIGHT

©2023 Just Flight. All rights reserved. Just Flight and the Just Flight logo are trademarks of JustFlight London Limited, St. George's House, George Street, Huntingdon, PE29 3GH, UK. All trademarks and brand names are trademarks or registered trademarks of the respective owners and their use herein does not imply any association or endorsement by any third party.

