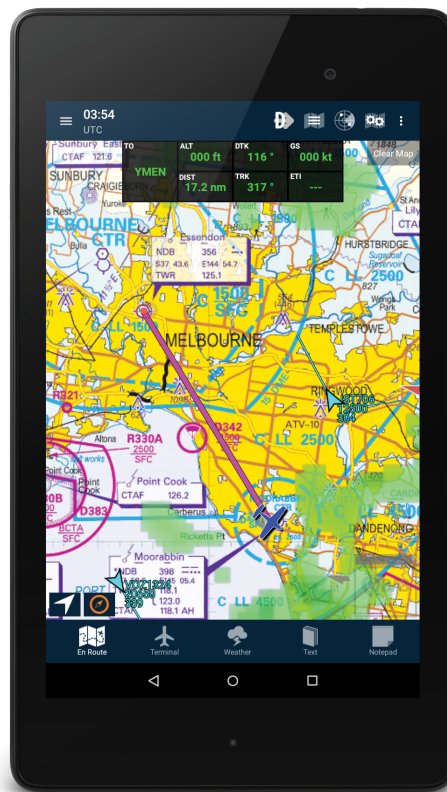




for Android



# User Manual

Version 2.2.2



# 1. INTRODUCTION

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Thank you for choosing AvPlan Lite, the premier portable paper replacement Electronic Flight Bag (EFB) for Android. It has been designed to be straightforward and easy to learn for those pilots who don't require a full suite of flight planning tools or require a simple-to-use backup to a full EFB.

AvPlan Lite is fully **CASA certified under CASR part 175.295** and allows you to:

- Download and save copies of all aviation maps, ERSA, DAP and AIP. Important when there is intermittent or no network access.
- Download and view NAIPS weather briefings, RAIM reports and NOTAMs.
- Display a direct-to or route plus the aircraft's current location on a seamless VFR or IFR map.
- At a glance, view flight dynamic flight information via the heads up display (HUD).
- Provide easy access to ERSA and/or DAP information at any stage of flight.

## 1.1 Help

Support for AvPlan Lite can be requested at: [support@avplan-efb.com](mailto:support@avplan-efb.com)

## 1.2 Getting AvPlan Lite

The app is available with a one month fully featured free trial. Simply download the free app from the Google Play Store as you would any other Android app. On completion of the trial period the aeronautical data will no longer be accessible.

After this trial period you will require the AvPlan Lite VFR subscription as a minimum to continue to use the app. There is also an IFR upgrade subscription available. Subscriptions are sold on a yearly basis.

**Note: Subscriptions are valid for a single pilot on a maximum of three devices.**

The AvPlan Lite VFR subscription enables full use of the app, with the AIP, ERSA (AU) and the local available VFR maps: Mega VFR, Mega WAC, ERC Low, PCA and Satellite. At the completion of the subscription period the App will no longer function.

Adding the IFR Upgrade includes the Departure and Approach Procedures (DAP) and ERC High map.

## 1.3 Licensing and subscriptions

Subscriptions can be purchased from [www.avplan-efb.com](http://www.avplan-efb.com). To purchase a subscription use the following steps:

AvPlan Website:

1. Navigate to the AvPlan website using your favourite browser and select the <Store> option from the list of options along the top of the home page.
2. Scroll through the list of options to find the subscription you require. To select the subscription, press the **Add to Cart** button to the below the subscription type.



3. Once you have made your selections press the **Checkout** button to the right of the store webpage. Review your selection and amend if required. PayPal is the only payment option currently available via the website. If you wish to pay via a credit card you can do so by phoning AvPlan directly (see website contact details).

**Note: If you are not already logged into the website, you will be asked to login before you can complete your purchases.**

The new renewal end date will be 12-months from the current subscription end date or the corresponding period from the purchase date, whichever is the latter.

## 1.4 Getting an AvPlan username

You can get an AvPlan username via the AvPlan Lite app or via the AvPlan website. Once you have your username configured you can use it to synchronise the subscription on all of your AvPlan Lite enabled devices.

If you don't have a username already, you will be prompted to register when you first attempt to make a subscription purchase from the AvPlan website. In the **Register** section of the webpage simply enter your preferred email address and a memorable password, press register and you're done.

From the AvPlan Lite app, select **My Account** from the settings menu, where you will be presented with the option to Sign In, Sign Up or Reset your password. As with the website enter your preferred e-mail address and a memorable password, press the **Sign Up** button and you're done.

## 1.5 A note to AvPlan EFB (iOS) users

If you have a current AvPlan EFB subscription for iOS and wish to use an Android device as part of your suite of three devices, your subscription will cover you for no additional cost. Simply enter the same email address and password either in the **Login Details** screen when you first start AvPlan Lite or tap **Settings > User Settings** and enter your details there. Remember your AvPlan EFB subscription can be utilised by one pilot on up to three devices. Pro users please note: Geo-Referenced plates are not yet available in AvPlan Lite for Android.

## 1.6 Starting AvPlan Lite for the first time

The first time AvPlan Lite is run, the app will complete the unpacking and setup process. During this time it will download some more data, so it is recommended that your device is connected to a good WiFi connection as mobile internet connections may incur extra costs.

Depending on your connection and device, this initial process could take up to a few minutes. It is best to leave the device to complete this task, as stopping in the middle of it could mean unexpected app behaviour in the future.

## 2. NAVIGATING AROUND AVPLAN LITE

AvPlan Lite is designed to be simple to navigate around. In most instances while utilising the app, the navigation buttons at the bottom of the screen are always visible. The currently selected page will be highlighted in white.

### 2.1 En Route page



- **Search Button:** Search for Airports or Waypoints and display them on the map.
- **Direct To button:** Displays a list of nearest items based on your current GPS position.
- **Map Selection:** Select from various map types. Mega VFR, En Route Low, En Route High, Mega WAC, Planning Chart (PCA) and Satellite map.
- **Rain RADAR overlay:** Overlays an image of the latest rain detection on the map. Toggle to switch on and off. Note that this feature requires an active data connection.
- **Map Settings button:** Toggle on/off HUD, Distance Rings, Traffic, Rocket Boxes or Aircraft Track.
- **Heads Up Display:** Shows you pertinent information at a glance during flight. Press and hold on a field to select desired information.
  - TO: Displays desired destination during a **Direct To** or next waypoint when a route is active. Tap and hold on this field to select between **Small HUD** (many boxes, smaller font) and **Big HUD** (less boxes, big font). The overall number of boxes will vary, depending on screen size.

TO	ALT	LATITUDE	LONGITUDE	REM	TIMER
YTDN	000 ft	-37°58.47'	145°05.38'	21.4 nm	0:00:51
XTE	0.0 nm	DTK	TRK	GS	TIMER
		---	163°	001 kt	0:00:00

Small HUD (default)

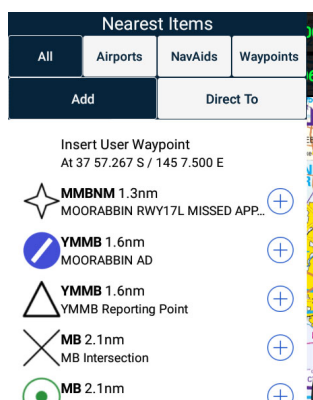
TO	ALT	LATITUDE	LONGITUDE	REM	TIMER
YTDN	000 ft	-37°58.47'	145°05.38'	21.4 nm	00:21

Big HUD

- EMPTY: No data will be displayed in this field
- ALT: GPS derived altitude AMSL
- LATITUDE
- LONGITUDE
- GS: Ground speed in Knots
- DIST: Distance in NM from your current location to next waypoint
- REM: Distance in NM from your current location to the next waypoint, plus the subsequent route distance to destination
- AGL: This feature is not yet implemented. Look for it in a future release.
- ETI: Estimated time interval (arrival at next waypoint in minutes)
- ETA: Estimated time of arrival at next waypoint
- DTK: Desired Track (Static bearing to waypoint)
- TRK: Current aircraft track
- XTE: Cross Track Error
- TIMER: Tap once to start, second time to stop, and a third time to reset.
- **Own Aircraft Position:** Displays current position and heading information.
- **Map Orientation Selector:** Tapping this icon cycles through various map orientations:
  - Free rotation (use pinch-method on the screen to 'twist' map)
  - North Up
  - Planned Track Up
  - Track Up
- **Centre Map on Aircraft:** When on (arrowhead turns red), it keeps the aircraft in the middle of the map as you fly along. When off (white arrowhead), the aircraft may fly off the edge of the map if left unchecked. A message will appear for a few seconds, alerting you to which mode the map is in.
- **Clear Map:** Removes currently selected route and clears the line(s) drawn on the map.
- **Screen Lock:** Toggle this to prevent the screen being accidentally pressed in flight.
- **Rocket Boxes:** Brightly coloured boxes that appear at the beginning of a leg, displaying the bearing (in °MAG) and distance to the next waypoint.




## 2.1.1 Selecting a destination via Nearest Items menu



A single tap on the map brings up the *Nearest Items* window. The airports (or helipads, if switched on) are listed in order from closest to the point you tapped, to the farthest away (with distance from your tapped position displayed).

Whereas, tapping the **Direct To** button (top right), lists the closest items to your current GPS position. The list results can be filtered using the controls at the top.

Tapping the **name** portion (i.e. the left side) of the list item will take you to the *Terminal* information pertaining to that waypoint/airport. That's where ERSA, Comms and TAF details, etc are found.

Tapping the **blue plus**  icon on the right initiates navigation to/from that place.

## 2.1.2 Direct to navigation



Once you've tapped the map to reveal the *Nearest Items* list, tap the **Direct To** button to ensure AvPlan Lite is in the Direct-To mode. Then, tapping the **Blue Plus** icon associated with your destination begins navigation immediately. AvPlan Lite will draw a line on the map from your current GPS position to the intended destination. This line is fixed, and does not move as the flight progresses; much like a bearing to/from a VOR. If you diverge track left or right (due to cloud, for example), you can easily return to the original track.

The HUD (Heads Up Display) will also now fully populated with information about the flight.

To fly *Track Up* or *Planned Track Up*, tap the **Map Orientation** button that appears in the bottom-left-hand corner of the map. This will cycle through the various rotation options.

To stop navigation and clear the map, simply tap the **Clear** button in the bottom-right-hand corner of the En Route pane.

## 2.1.3 Creating a User Waypoint

To create a new User Waypoint, simply tap the map at the position you wish to have a new waypoint, the Nearest Items menu will appear. The first item in the list will be **Insert User Waypoint** with a display of the Latitude/Longitude.

When you select **Insert User Waypoint**, you will then have the opportunity to edit the details of the waypoint.

Give it a unique name, then you may edit the Latitude/Longitude if necessary for even greater accuracy for a known point.

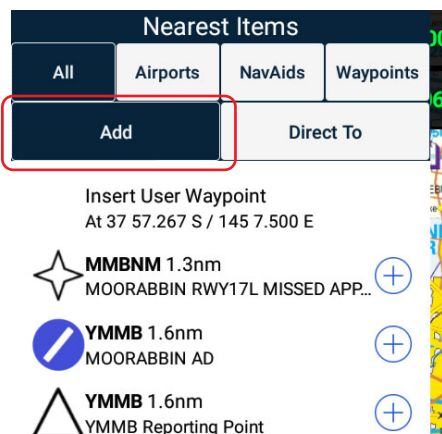
Once you're happy with the details, tap Save. To further manage User Waypoints, see 2.7.

## 2.1.4 Navigating to a User Waypoint

Now you have created your User Waypoint, you can tap the map once again to bring up the nearest items menu.

You should now see your waypoint as part of the list. Tap the **Blue Plus** next to it to initiate navigation to that point.

## 2.1.5 Building a multi-leg route

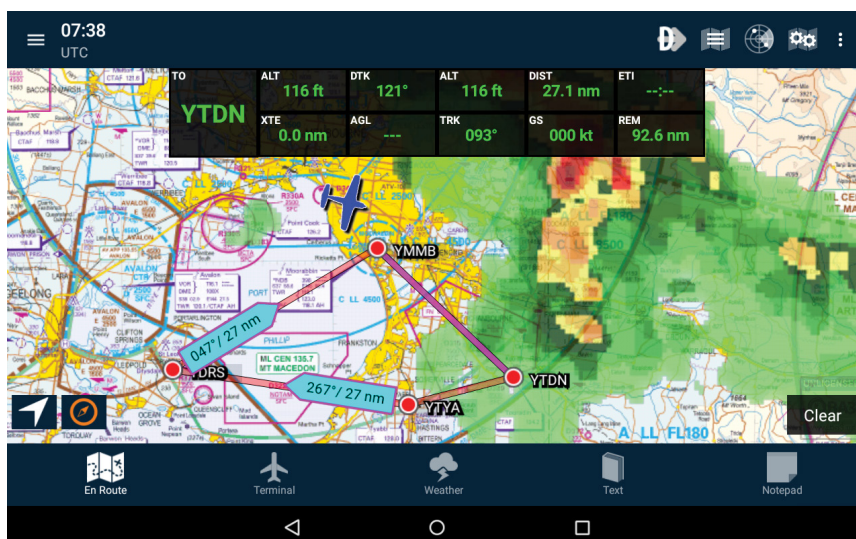


- Tap the map near your departure airport to reveal the Nearest Items, then ensure the *Add/Direct to* switch is set to **Add**.

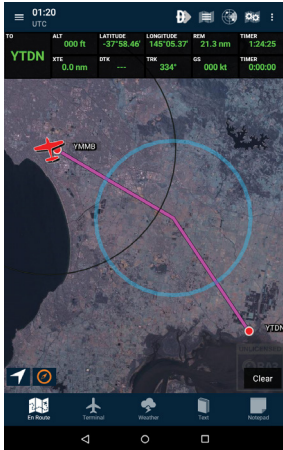
- Select your departure point from the list by pressing the associated blue plus icon. One red circle icon will appear on the map.

- Tap near your next intended turning point on the map. Select it from the list by pressing the blue plus icon. The second red circle icon will appear, with a track line between them.

Continue this until you've built your entire route. For example:



## 2.1.6 Rubber banding



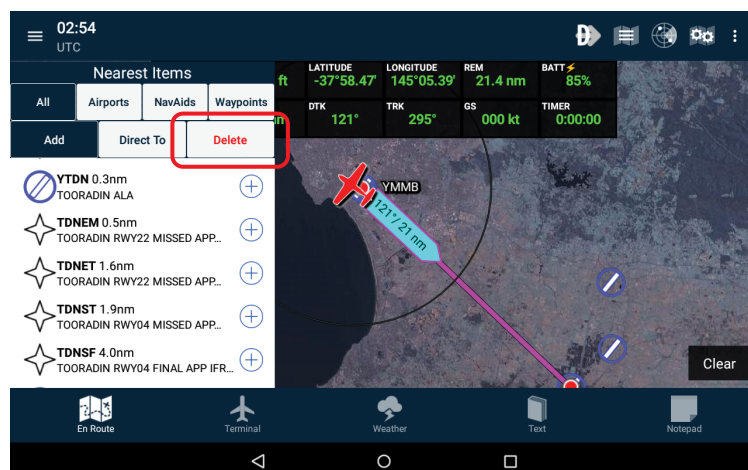
- Tap and hold a route line on the map. After a second or so, a blue halo will appear around your finger.
- Drag your finger near to the intended turning point, then release.
- Select the turning point from the list by tapping the associated **Blue Plus** icon.

## 2.1.7 Moving a Waypoint

- Tap and hold on the waypoint. As per rubber banding, wait for the blue halo to appear around your finger.
- Drag your finger to the new waypoint and release.
- Select it from the list by tapping the associated **Blue Plus** icon.

## 2.1.7 Deleting a Waypoint

- Tap and hold on the waypoint. As per rubber banding, wait for the blue halo to appear around your finger, then release. Where you release is not important.
- Tap the **Delete** button that appears in the *Nearest Items* menu.







## 2.1.8 Leg auto-sequencing

When it's time to fly your route, AvPlan Lite will automatically sequence the active leg as you pass each waypoint.

The leg lines will be colour coded on the map:

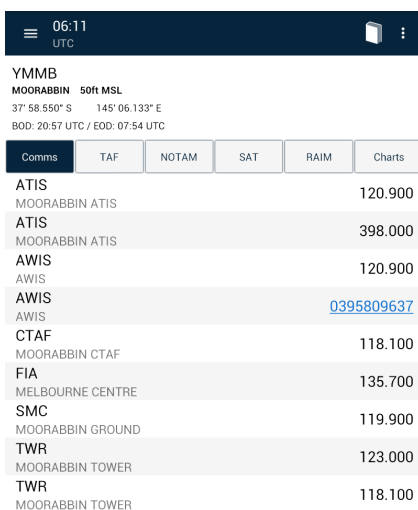
	Magenta: Current leg or Direct To
	Blue: Previously flown leg(s)
	Red: Future leg(s)

If you are unhappy with Magenta for the current leg, you may alter this colour in **Settings > User Settings > Application Colours**. See 2.6.3 for more information about User Settings.

## 2.2 Terminal page

The **Terminal page** is where airport details are accessed. When you first press the **Terminal button**, you will see an airport name with some of its details listed at the top.

The screen will default to the 'Comms' tab, which lists frequencies used when operating at or near the airport.



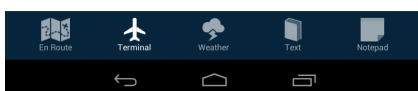
06:11 UTC	
YMMB MOORABBIN 50ft MSL 37° 58.550' S 145° 06.133' E BOD: 20:57 UTC / EOD: 07:54 UTC	
Comms	TAF NOTAM SAT RAIM Charts
ATIS	120.900
MOORABBIN ATIS	
ATIS	398.000
MOORABBIN ATIS	
AWIS	120.900
AWIS	<a href="#">0395809637</a>
CTAF	118.100
MOORABBIN CTAF	
FIA	135.700
MELBOURNE CENTRE	
SMC	119.900
MOORABBIN GROUND	
TWR	123.000
MOORABBIN TOWER	
TWR	118.100
MOORABBIN TOWER	

TAF, NOTAM and RAIM reports are instantly requested and returned when their button is tapped. No need for NAIPS logins, etc as this is already sorted for you.

Note that data connectivity is required to access these reports.

Viewing ERSA or DAP charts is simply a matter of tapping **Charts** and selecting the desired page from the list.

An alternate method of selecting an airport to view is to tap the **Select Airport** button (top-right). Airports can be searched either by their name (i.e. Bankstown), or their identifier (i.e. YSBK).



## 2.3 Weather page

This is where many kinds of weather products provided by NAIPS can be accessed.



They are grouped into four types:

- High Level Significant Weather Charts
- Infrared Satellite Images
- NAIPS Charts
- NAIPS Area Forecasts

To request an Area Forecast:

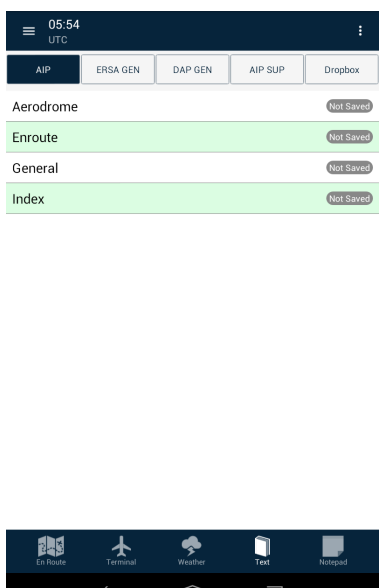
Simply tap on NAIPS Forecasts, scroll down until you find the correct area and then tap it to select.

Once it has downloaded, you can scroll left/right up/down, and even pinch to zoom. Also, zoom buttons appear in the bottom left-hand corner of the screen if you prefer zooming via that method.

To return to the list after reading the forecast, tap the Android **Back Button**. These come in different designs depending on the make of your device, but are usually an arrow or triangle pointing to the left.

## 2.4 Text page

The text page is where all non-Terminal related documents are found.



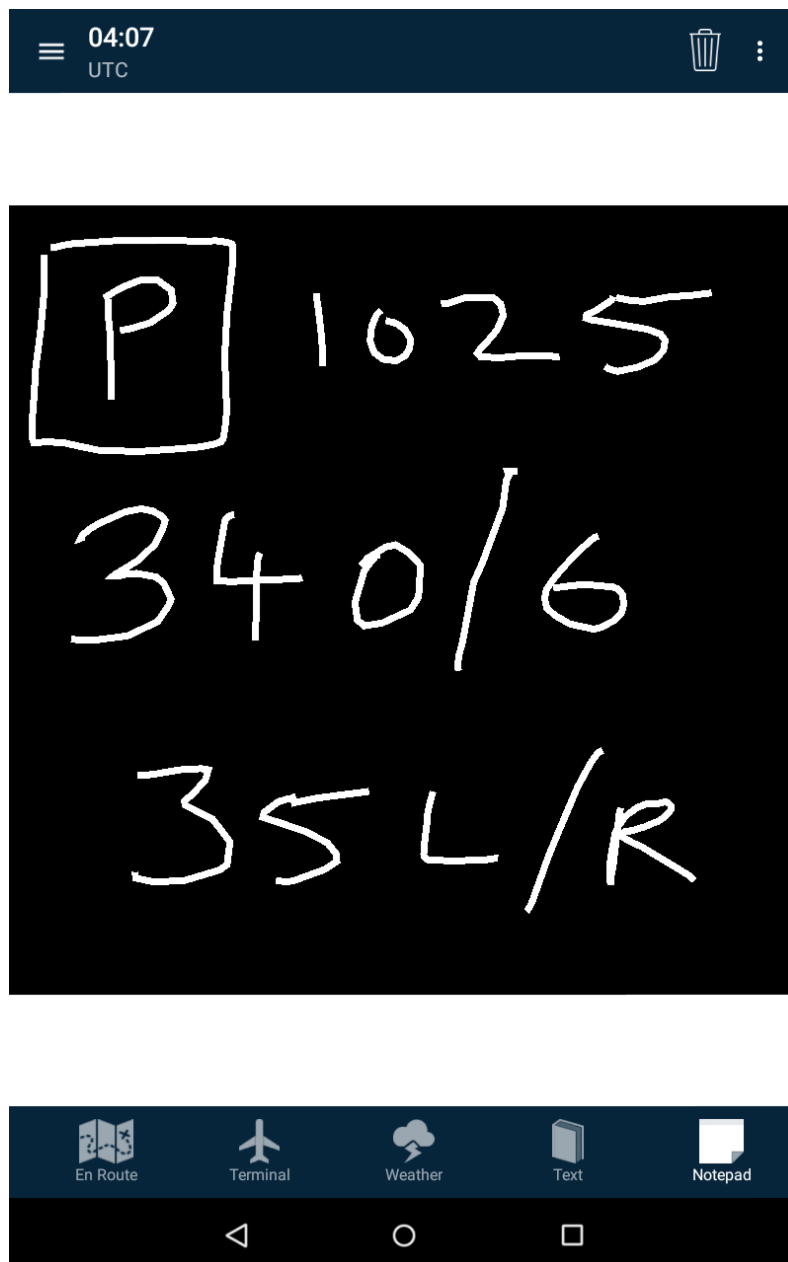
Available texts include the AIP, ERSA GEN (the non-airport specific pages of the ERSA), DAP GEN, AIP SUP and personal .PDF files stored in a specific folder in your Dropbox account.

To link your Dropbox account, tap the **Link Account** button in the bottom left-hand corner. Follow the prompts and sign in to your account. A folder will automatically be created in your Dropbox file system. Place any .PDF documents you'd like to be able to access within AvPlan Lite there.

## 2.5 Notepad page

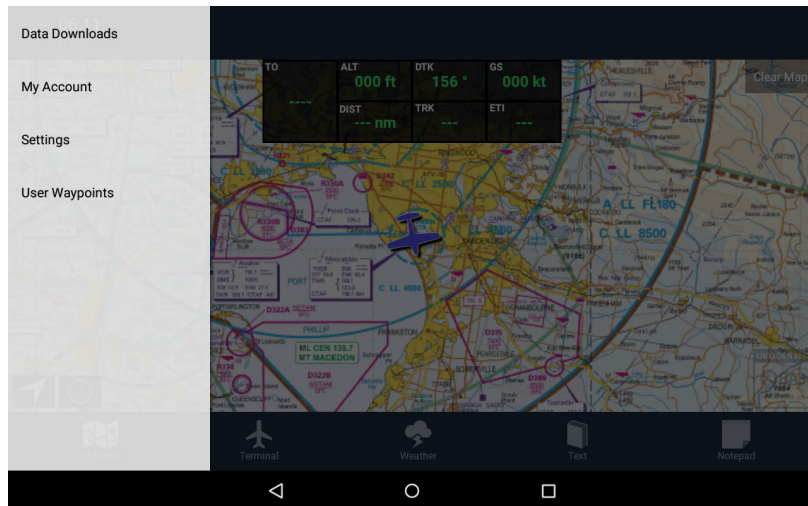
This is a very handy in-flight note taking tool. Simply scribble with your finger the information you wish to keep for future reference. It can be especially handy for taking down ATIS information, or noting aircraft registrations just in case direct communication is required.

To clear the area ready for reuse, tap the trash bin icon in the top right hand corner.



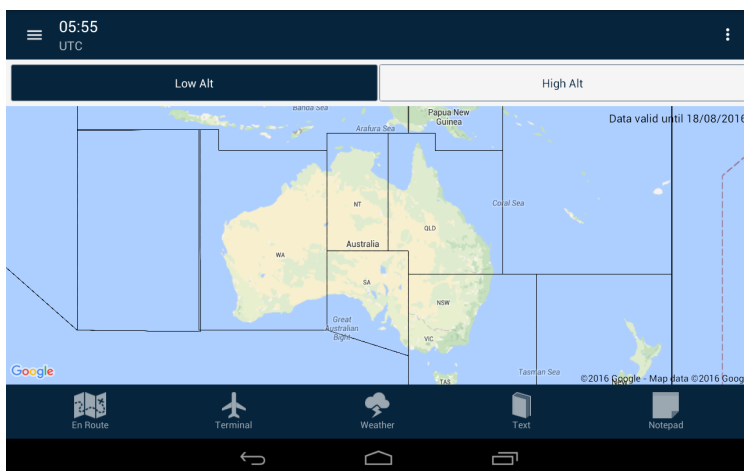
## 2.6 Settings Menu

Settings to personalise your AvPlan Lite are found here. To reveal the menu, either tap the three bar icon (to the left of the UTC Clock), or drag your finger from outside the left of the screen, in towards the centre of the screen. You will also be able to prepare your device for use in flight by downloading maps, charts and plates to be stored locally in memory and manage your login/subscription details.



### 2.6.1 Data downloads

Before taking AvPlan Lite with you in flight, maps and charts will need to be downloaded and saved to your device. Tap **Data Downloads** to access this.



Ensure you select either **Low Altitude** or **High Altitude** maps. This is selected along the top of the region map. Also ensure you are connected to a good WiFi or hotspot.

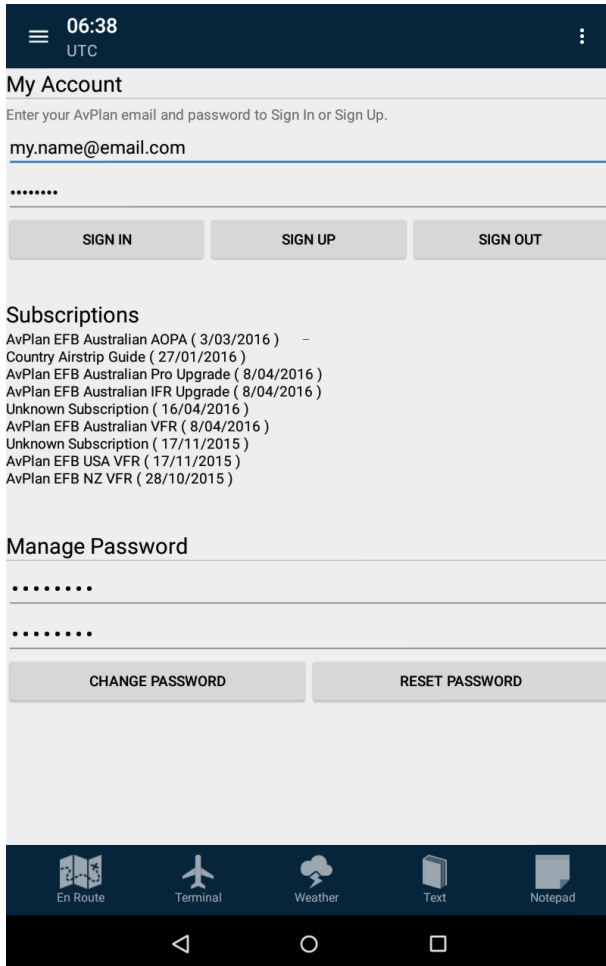
Note that the map is broken up into various segments. Search for the area(s) you'd like to have available on your device at all times (even when data connectivity is not available) and tap them. A list of the available downloads for your subscription is displayed.

Select Download/Update All to begin the download process. The status will change to *Downloading*, and will only begin for the sections you're subscribed to access. Downloads are managed by the Android download manager, so you can view their progress by dragging down the Notification Shade.

When the download is complete, the area you selected will be shaded green.

## 2.6.2 My Account

This is an important part of fully setting up and customising your AvPlan Lite experience.



**My Account**

Enter your AvPlan email and password to Sign In or Sign Up.

my.name@email.com

\*\*\*\*\*

**SIGN IN** **SIGN UP** **SIGN OUT**

**Subscriptions**

- AvPlan EFB Australian AOPA ( 3/03/2016 )
- Country Airstrip Guide ( 27/01/2016 )
- AvPlan EFB Australian Pro Upgrade ( 8/04/2016 )
- AvPlan EFB Australian IFR Upgrade ( 8/04/2016 )
- Unknown Subscription ( 16/04/2016 )
- AvPlan EFB Australian VFR ( 8/04/2016 )
- Unknown Subscription ( 17/11/2015 )
- AvPlan EFB USA VFR ( 17/11/2015 )
- AvPlan EFB NZ VFR ( 28/10/2015 )

**Manage Password**

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**CHANGE PASSWORD** **RESET PASSWORD**

**En Route** **Terminal** **Weather** **Text** **Notepad**

If this is the first time you have used AvPlan Lite, and you are making use of the free one month trial, you do not have to enter anything in the top two fields at this stage. Simply enjoy trialling the app.

If you'd like to sign up to our email database, type your email address and create a password for yourself then tap **Sign Up**.

If you have already purchased a subscription (either an AvPlan Lite subscription, or you wish to use your existing AvPlan EFB subscription), type the same email address and password that you use to login to access our website or your iOS app. Once that's all in place, tap **Sign In**. If you are not sure what your password is/was, you may elect to tap **Reset Password**. This prompts our server to generate a new password and send it to your email address.

When the sign in procedure is fully completed, AvPlan Lite will display a list of your current subscriptions with their end dates.

If necessary, you can also manage your own password via this screen. This can be used if a temporary password has been sent to you (see *Reset Password*, above). Ensure that you are already correctly logged in before trying to change a password.



## 2.6.3 User Settings

Here you have the opportunity to alter various options and personalise your AvPlan Lite experience.

### 2.6.3.1 Simulator Interface

AvPlan Lite can be used in conjunction with desktop flight simulators.

To enable and use the X-Plane interface:

- Enable the X-Plane interface in AvPlan Lite user settings. Note the IP address of your device (written below the option).
- In X-Plane enable sending of data to AvPlan:
  - a. Click on **Settings, Data Input and Output**.
  - b. Tick only the row labelled 'lat, lon, alt'.
  - c. Click on Settings, **Net Connections** and **Advanced**.
  - d. Enter your device IP address, and the port number is 49002.

AvPlan will receive location information from X-Plane.

To enable FSX interface, please download and follow this guide:

[http://www.avplan-efb.com/ext/AvPlan\\_FSX\\_Connection\\_Guide\\_v1-0.pdf](http://www.avplan-efb.com/ext/AvPlan_FSX_Connection_Guide_v1-0.pdf)

### 2.6.3.2 AvPlan Live

This option allows your live position data to be sent to our server (via an internet connection), once every 15 seconds. Further functionality around this feature is expected very soon, such as sharing your location to friends and loved-ones via our website, and also having other AvPlan users' positions displayed on your map.

### 2.6.3.3 Track

Track options allows you to turn off/on the track logging of your aircraft. You can also clear your track log history or export it as a .GPX file (for viewing in Google Earth, for example).

The colour your track log appears on the map can be changed in the Application Colours menu - see 2.6.3.7.

### 2.6.3.4 Distance rings

This opens a menu allowing you to alter the parameters of your distance rings. You may select between 3, 10 or 25 NM rings, and alter the thickness of the line.

### 2.6.3.5 Default Aircraft Icon

Select your desired aircraft icon to display your current position on the **En Route** page. If you'd like **Helicopter Landing Sites (HLS)** to be included in the **Nearby Airports** list, simply select a helicopter icon from the icon list.

All aircraft icons change colour depending on your current GPS accuracy:

- Blue: <50 metres (good accuracy)
- Red: 50 to 100 metres (marginal accuracy)
- Black: >100 metres (bad accuracy/no GPS signal)

### 2.6.3.6 Detailed Data Areas

The three other checkboxes all turn on and off data from various countries. To reduce data stored on your device, un-check the countries you do not need data/charts/text for and ensure Australia is checked. This will also reduce the number of options when searching for airports or waypoints.

Note: This is one of the options presented to you during initial install.

### 2.6.3.7 Application Colours

This menu is used to alter the colours of various features on the En Route page.

- HUD Text colour
- Track colour
- Route colour
- Distance Ring colour

Tap the coloured square to the right of the option to open the colour picker dialogue.

The bottom two boxes with an arrow between them contain the current colour (left) and the newly selected colour (right). Once you've selected the desired colour, tap the right-hand box to commit the change.

## 2.6.4 License

This is used to display the Software Licence Agreement.

## 2.6.5 About

Tap this option to display the current **Version Number** of your AvPlan Lite install.



## 2.6.5 Contact us

This is a convenient direct link to our support email desk if you have any further queries about AvPlan Lite.

## 2.7 User Waypoints

This area allows you to view all saved User Waypoints.

Tap one to select it and edit. Tap and hold to delete individual waypoints.

At the bottom of the screen, there is also options to manually add a User Waypoint (for example, if Latitude/Longitude is already known), and **Delete All**, which will remove all saved waypoints.

## 3. EXITING AVPLAN LITE

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Exit the app by pressing the back button several times you will then be asked if you wish to exit AvPlan Lite, with the option to cancel just in case - the last thing you want while in the air is for the app to exit on you with an accidental button push. You can press the **Home** button, which will background it temporarily.

In order to fully exit the app, you must use Android's multitasking or task manager. Each version is slightly different, but most involve tapping the task button and flicking the AvPlan Lite entry from the list. Consult your devices' user manual for instructions on how to launch and use your task manager.

