User Manual (Android)

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1. Getting Started

Welcome to AvPlan EFB for Android!

PLEASE NOTE: To access the manual for Apple iOS products (iPad or iPhone), please click here

Topics covered in this section:

- First Steps with AvPlan EFB
- Downloading AvPlan EFB
- Starting AvPlan EFB
- Licensing and subscriptions
- Activating a subscription
- Help
- Notice
- Downloading this manual as a PDF document

AvPlan EFB is the premier portable flight planning and electronic flight bag for Android tablets and phones for pilots.

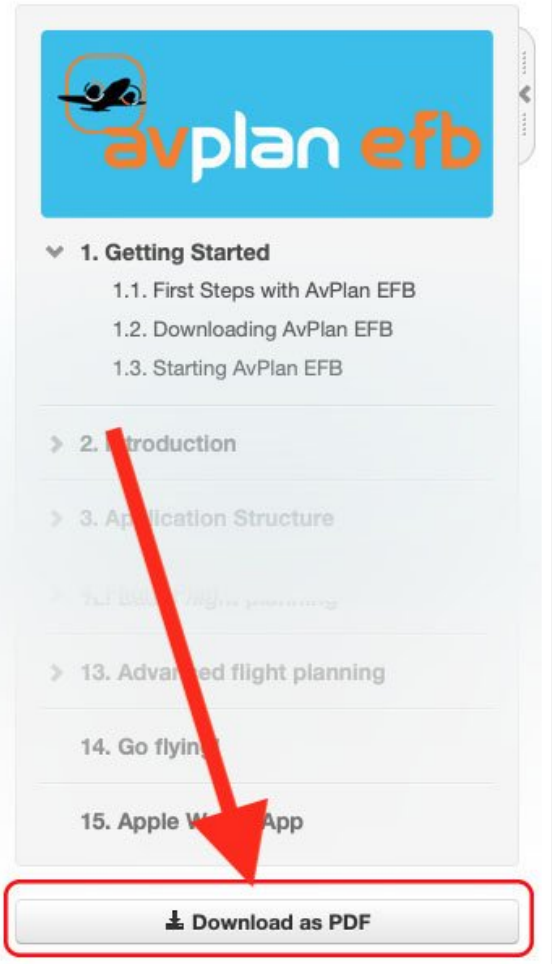
AvPlan EFB allows you to perform pre-flight planning activities including:

- Download and save copies of all aviation maps and aerodrome documents. These are then available to use when there is intermittent/no network access.
- Prepare a flight plan, download and incorporate winds.
- Download and save weather briefings from NAIPS/IFIS.

In-flight, AvPlan EFB can be used as an electronic flight log, greatly extending the Electronic Flight Bag concept. The AvPlan app can:

- Calculate departure, arrival times for all waypoints based on actual arrival times plus forecast winds.
- Display aircraft routing and current location on all maps.
- Log and display aircraft track on all maps.
- Display and quickly access the status of PRD areas.
- Provide easy access to AIP information.

Downloading this manual as a PDF



- If you'd like to download this manual (for printing, etc), there is a *Download as PDF* option at the bottom of the Table of Contents column. Remember to return periodically to download updated versions of the manual as the app is updated regularly.

- If you don't see the Table of Contents, it may have been hidden. You can return it by tapping the tab in the top-left of the page

1.1. First Steps with AvPlan EFB

To download, launch and start using the app:

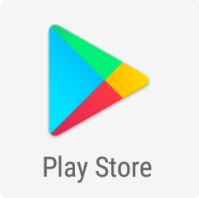
1. Download and install AvPlan EFB from the *Google Play Store*, then tap the AvPlan EFB icon on your devices' Home Page. If it's the first time you've downloaded and run AvPlan EFB on this device, you'll automatically receive a 30 day free trial.
2. During the opening sequence, you'll be asked for some permissions, select a Data Region and register with AvPlan EFB. Select the region (or regions) you will be flying in and create an AvPlan EFB login profile.
3. Visit the *Data Downloads* section (tap *Settings* > *Data Downloads*) and download the maps and airport documents you require so they can be accessed when offline.
4. Set up some aircraft details.
5. Create a flight plan.
6. Go flying!

1.2. Downloading AvPlan EFB

AvPlan EFB is a free download from the Google Play Store on your devices.

> ✻ If it's the first time you've downloaded AvPlan EFB on that device, the app will automatically begin a 30-day free trial.

1. Tap the *Play Store* app icon from your Android devices' Home screen.



2. Tap on the Search field at the top of the screen, type in *AvPlan EFB* and tap Enter/Search.
3. From the results, tap on AvPlan EFB, then tap the INSTALL button.

> ! Make sure you know your Google password, as you may be required to enter it at this point to begin the download.

4. Once the download has completed, you'll see an *Open* button. Tap it to start AvPlan EFB.

> Even if you've pre-purchased a subscription on our website, you'll still need to download and install the app via the steps above, as a download link is not sent to you during the purchase process.

1.3. Launching AvPlan EFB

From your Home screen, tap the *AvPlan EFB* icon:

When the app starts, you'll see a blue 'welcome' screen with a white rectangle in the bottom-right corner.

Any current subscriptions will be displayed in the list.

If the app pauses at this page, tap the *Login Details* and see if you can sign in with your AvPlan EFB credentials. If you have purchased a subscription on the AvPlan EFB website, it is important that the exact same email address/username is used to sign in to the app in order to connect the subscription.

1.4. Licensing and subscriptions

The App is available as a free download with a one month fully featured free trial via the Google Play Store. After 30 days, the app then requires a periodic subscription to retain access. There is a compulsory base subscription (either Essentials or VFR Standard), and then optional upgrades (for example IFR upgrade pack) can be added.

Subscriptions purchased via www.avplan-efb.com are set to automatically renew by default at the time of purchase. You can manage your subscriptions by going to the My Account page on our website.

> Note: Subscriptions are valid for a single pilot, covering a maximum of three (3) of their devices. Any combination of tablet or phone, Android or iOS is permitted in this device count.

- The AvPlan **VFR Standard** subscription enables use of the app, with the AIP, ERSA and VFR maps available (VTC, VNC, WAC, ERC Low and PCA). At the completion of the subscription period, the app will no longer function.

- The **IFR Upgrade** adds the ability to view approach plates and associated IFR documentation (i.e. DAP and IFR Charts (ERC H, ERC L, TAC)).

- The **AvPlan Essentials** subscription purposely hides away the complexity of the flight log and much of the pre-flight planning capabilities. A route can still be created on the map and flown, plus all of the usual weather-related information is still accessible. This can be great for student pilots, or those looking for absolute simplicity.

Optionally in Australia, a subscription to FlightAce® Country Airstrips Guide can be purchased.

- The **Country Airstrips Guide** is a professionally collated datasheet by FlightAce® for many small Australian ALAs. Each one has a mud-map and a standardized set of data fields.

1.5. Activating a subscription

Subscriptions can be purchased either over the phone during office hours or from www.avplan-efb.com.

To activate a subscription purchased via the website:

1. Press *Login Details* button on the bottom-right of the blue 'Welcome' screen.
2. Enter the exact email address and password used when purchasing the subscription.
3. Press the *Sign In* button, seen under your password. NOTE: If you haven't registered your email and password yet, tap *Register* instead.
4. A confirmation pop-up will appear when successfully signed in.
5. Press the Back icon.

If AvPlan EFB is already running, tap *Settings* > *My Account* and sign in using the procedure above. You can also reset or change your password here, too.

1.6. Help

- General information about the application is available at: www.avplan-efb.com/about-2/
- FAQs are also accessible from any browser by going to: www.avplan-efb.com/avplan/faq/
- For support enquiries, contact support@avplan-efb.com, or from within the app tap *Settings* > *Contact Us*.
  *****

1.7. Notice

Information contained in this manual is subject to change without notice.

AvSoft reserves the right to make changes to specifications and/or procedures without notice.

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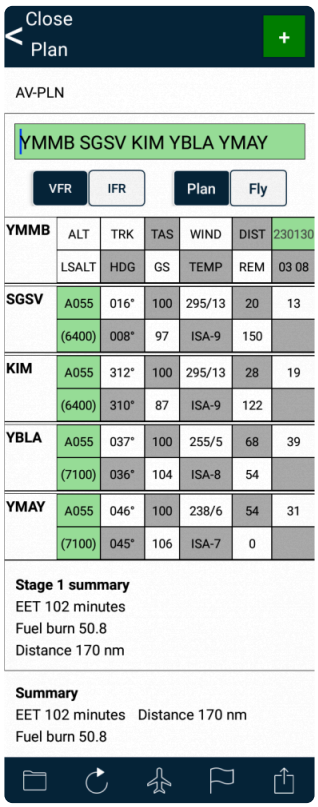
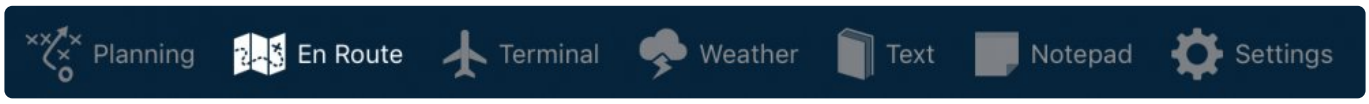
2. Application Structure

AvPlan EFB is significantly different from other EFB apps. It is structured around a flight plan, and not just as a GPS replacement. Your electronic flight log is always able to be visible if you wish and does not obscure any detail or functionality inside the rest of the application.



The flight plan can be displayed and hidden using the *Flight Plan Show/Hide* button on the left of the top menu bar.

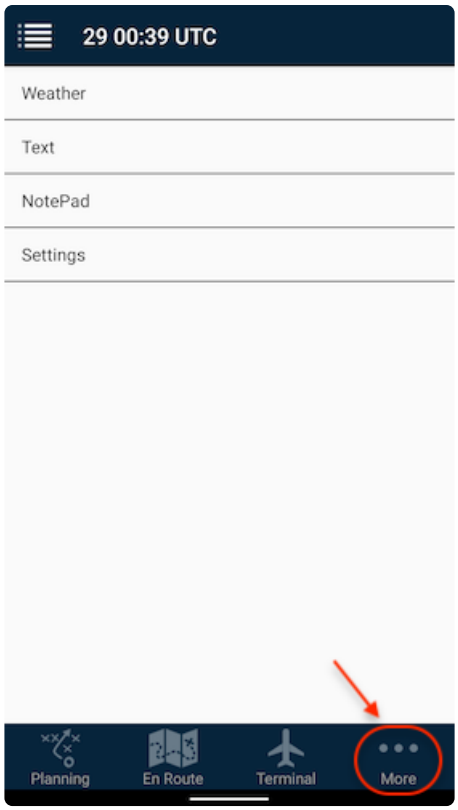


The other pane on the screen has a flexible view with the following tabs:

Planning	Where pre-flight planning and administrative tasks are found
En Route	Where all aviation maps are accessed
Terminal	Where airport/waypoint details or related documents are displayed
Weather	Where weather information is gathered and stored

Text	Where non-airport related documentation is accessed
Notepad	A freehand scratch pad to take down quick notes during the flight
Settings	Where the behaviour of the app is tuned

If you are using the app on a phone, the *Weather, Text, Notepad* and *Settings* tabs are combined into a *More* tab:

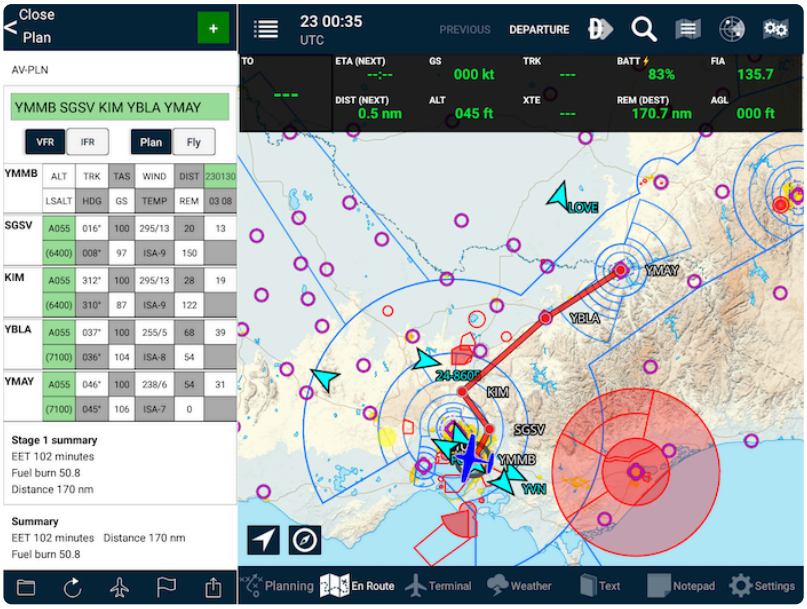


More tab

2.1. App Display Modes

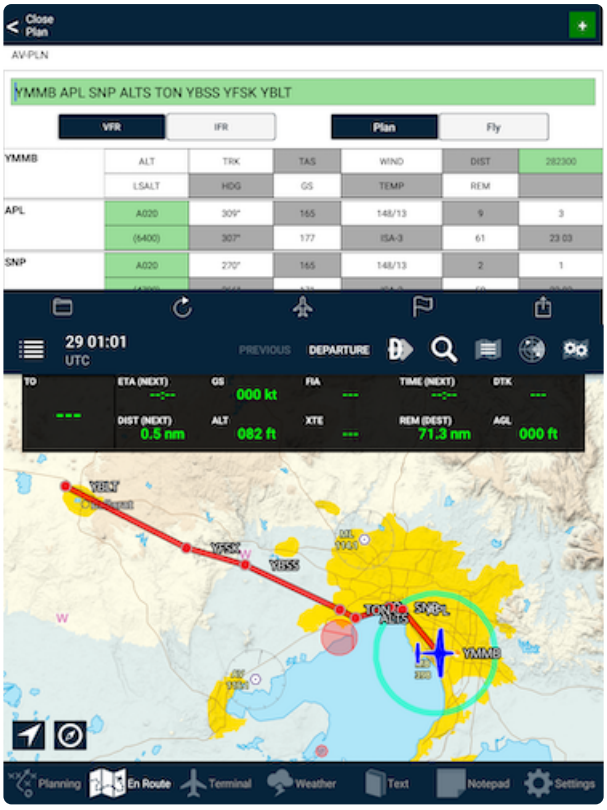
AvPlan EFB features a flexible display layout. The relative position of the Electronic Flight Log (flight plan) can be altered, depending on how you want to set up your device or the available screen size.

Landscape mode	



- In landscape mode, the flight plan appears on the left-hand side of the screen.

Portrait mode



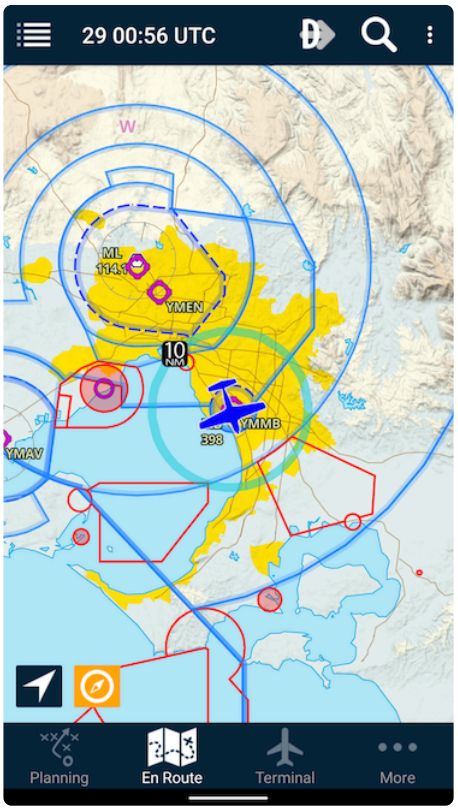
- In portrait mode, the flight plan appears above the map.

Full screen flight plan mode

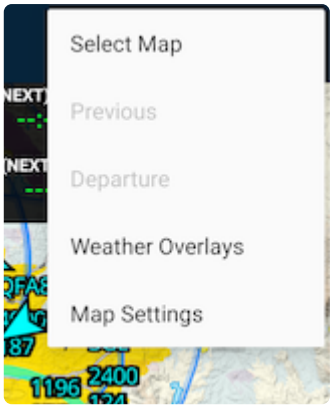
- Optionally, you can select to have a whole page/tab assigned to the flight plan
  - When this mode is selected, an extra tab appears in the bottom-left corner of the screen:

  - To set the app in this mode, tap *Settings* > *User Settings* and enable *Full Screen Flight Plan*.
    NOTE: Phones will <u>always</u> operate in full-screen flight plan mode (see below).

Phone mode



- The phone version of AvPlan EFB is essentially operating in the Full Page Flight Plan Mode at all times.
- The *Weather, Text, Notepad* and *Settings* tabs are combined in the *More* tab
- On the EnRoute tab, the Select Map, Next Leg/Departure, Previous Leg, Weather Overlays and Map Settings are found by tapping the icon in the top-right corner:



	Overflow menu
Essentials mode	
	If you have an AvPlan Essentials subscription (previously known as *Lite*), the detailed flight planning functionality is hidden away (i.e. the flight plan view). Creating and managing a route to fly is done on the EnRoute tab using the Nearest Items interface.

Essentials mode quick-reference:

Create a new route/flight plan	**Close route/flight plan**
• Tap the map to bring up Nearest Items • Tap the New Plan button at the bottom of the menu • Add plan waypoints via Nearest Items menu	• Tap the map to bring up Nearest Items • Tap the Close Plan button in the footer of the menu
Beginning a Direct-To	**Cancelling a Direct-To**
• Tap the map to bring up Nearest Items • Either: ◦ Tap the *Add/Direct-To* toggle switch at the top of the list and set it to *Direct-To* ◦ Select the desired point and tap the icon. or ◦ Tap on the place you wish to go to bring up the *Waypoint Details* menu. ◦ Tap the *Direct To* button at the top of the menu	• Either: ◦ Tap the *To* field in the HUD. or ◦ Tap the map to bring up Nearest Items ◦ Tap the *Close Plan* button in the footer of the menu

3. Flight Plan

- Flight plan index
- Flight plan view

3.1. Flight plan index

In the flight plan index, each plan is displayed with:

- Departure and arrival landing points, or a custom name entered by you.
- Distance and time.
- Flight rules.
- Aircraft callsign.

The status of the plan submission (feature coming soon!) is displayed as one of the following:

- Not Filed (Plan has not been sent to NAIPS).
- Filed OK (Plan has been successfully submitted).
- File Failed (Plan failed to submit correctly).

3.1.1. Creating a new flight plan

There are several ways to create a new flight plan:

Option 1:

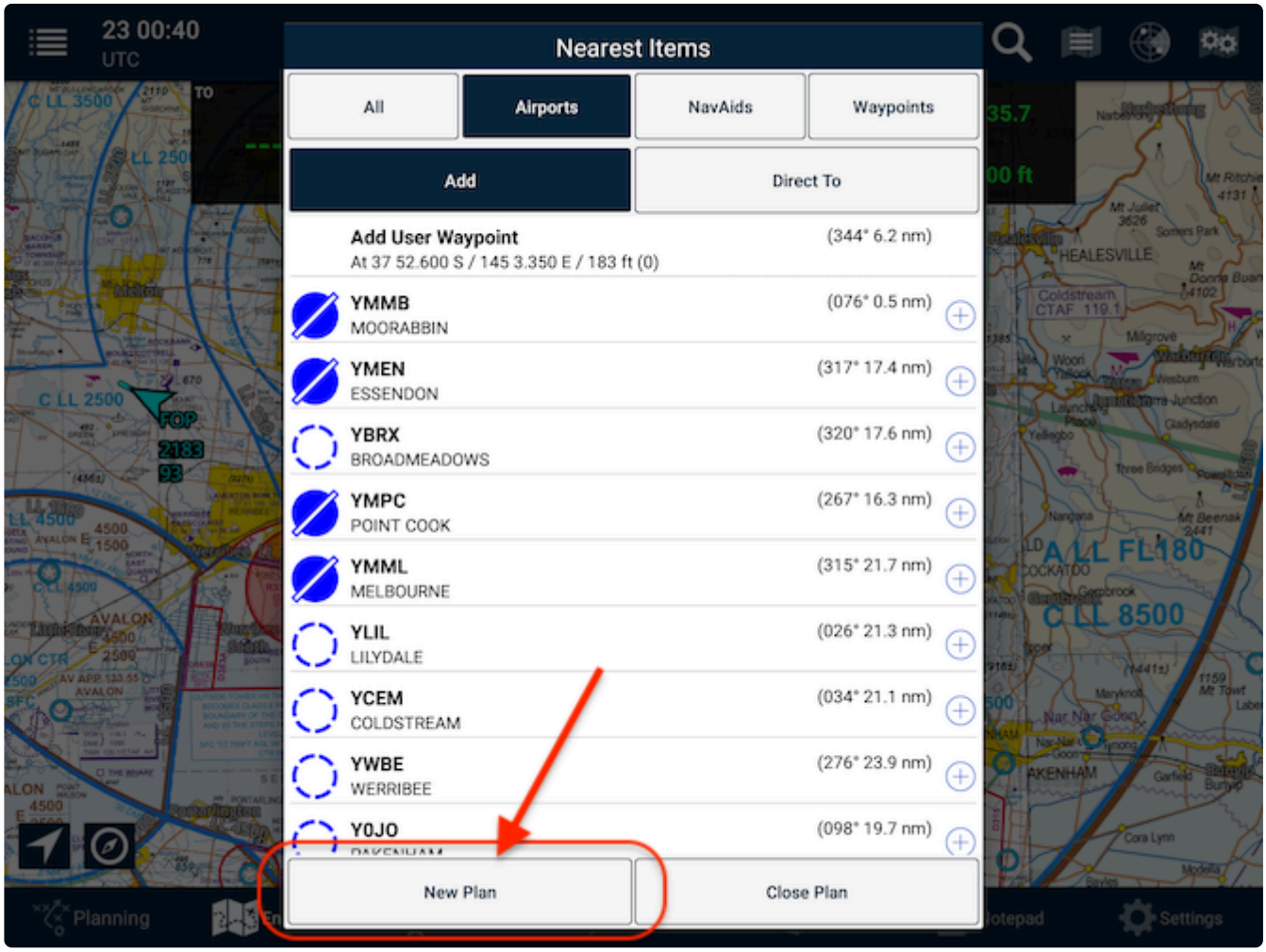
Tap the

button at the top right-hand side of the flight plan index (Stored Plans).

Option 2:

On the Enroute tab, tap the map and tap the *New Plan* button at the bottom of the Nearest Items menu.

NOTE: In Essentials Mode, this is the new plan creation method.



New plan via Nearest Items

3.1.2. Closing and saving your plan

To place your flight plan back in the Stored Plans list for later use:

Option one:

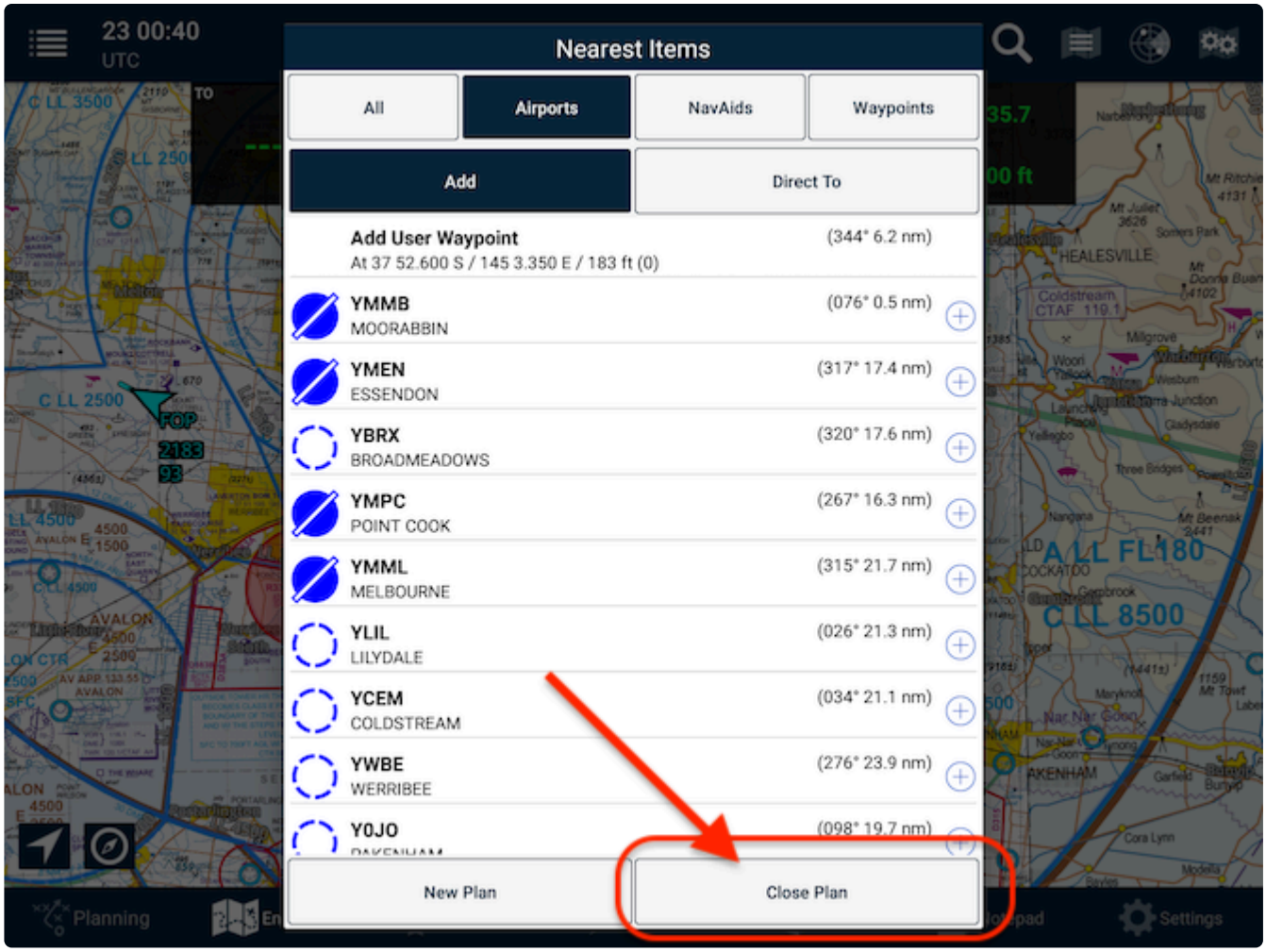
- Tap the < Close Plan button that appears in the top-left of the flight plan pane.
- You will be asked if you wish to close your flight plan.
- Tap *YES*.

AvPlan EFB will then store your flight plan and all associated data (track logs, times, etc).

Option two:

NOTE: Essentials users will need to use this method.

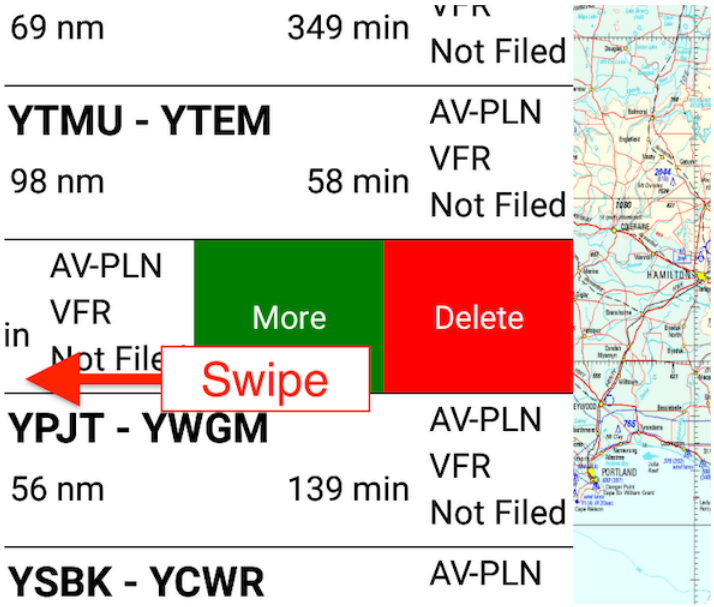
- On the EnRoute tab, tap the map to bring up the *Nearest Items* menu.
- At the bottom of the list, tap the *Close Plan* button.



Close plan via Nearest Items

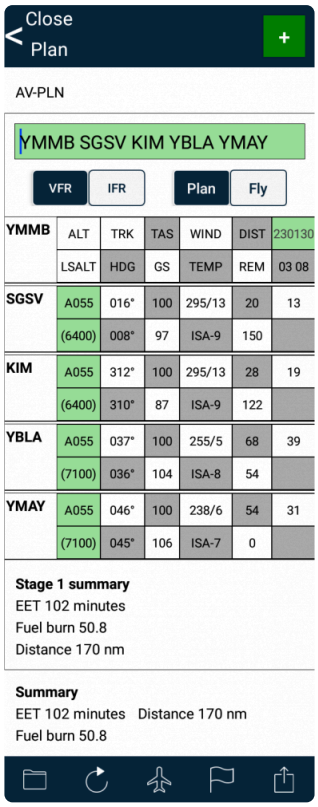
3.1.3. Deleting a flight plan

To delete a saved flight plan:



- Swipe from right-to-left of the row you want to delete.
- Press the revealed *Delete* button.

3.2. Flight plan view



The flight plan table contains information about the flight plan.

- Tap on a row in the flight plan as a handy shortcut to open that place in the Terminal pane.
- To hide/show the flight plan, press the Flight Plan icon on the top-left of the screen.

Note: All fields that appear within the flight plan table shaded green denote either the ability to add data to that cell, or to edit the automatically generated data placed in the cell by AvPlan EFB.

3.2.1. Flight plan table

The flight plan table contains information about the flight plan.

- Tap on a row in the flight plan to short-cut to the Terminal pane and details on that leg.
- To hide/show the flight plan, press the Flight Plan icon on the top left of the screen.

All fields that appear within the flight plan table shaded green are inviting you to either;

1. enter information in that cell, or
2. edit the automatically calculated information in that cell.

Green editable fields in the flight log

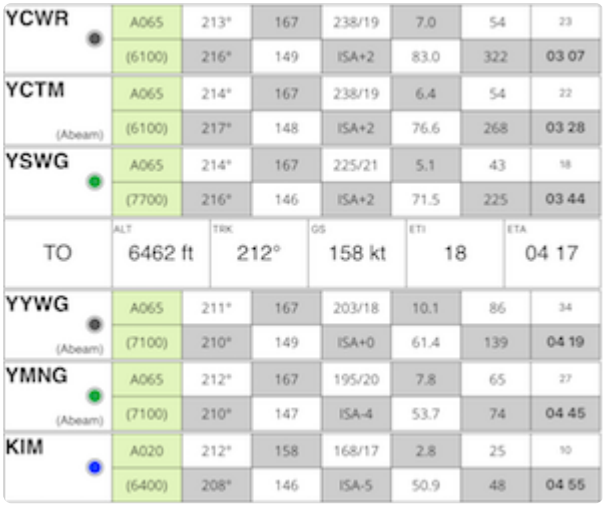
Each waypoint in your flight plan contains two rows of cells:

Left		
WPT ID	Contains the waypoint identifier, or User Waypoint name.	**Top Row**
ALT	Planned altitude for that leg. You can type either the flight level 'A' or 'F' style altitude figure (e.g. A015 or F220), or type the full number (e.g. 5500 or 25000) and AvPlan will automatically convert it.	
TRK	Planned track for the leg in ºmagnetic	
TAS	Planned True Airspeed for that leg.	
WIND	Planned wind for that leg in ºmag/speed in kts	
DIST	Distance in NM to the next waypoint	
ETD	Estimated Time of Departure. This field only appears in the first waypoint of a stage. Subsequent waypoints contain the Estimated Time Enroute (ETE) for that leg. The cell is expecting a six-figure entry (i.e. DDHHMM), however as a shortcut, if you are flying today simply type in the time (i.e. HHMM) and tap the return key. AvPlan will automatically enter the correct date.	
Bottom Row		
LSALT	Lowest Safe ALTitiude. The Grid LSALT will be placed in this cell as a placeholder. This figure will appear in parentheses. You can override the figure by tapping in and typing in your own user-calculated LSALT. To remove a user LSALT, delete the entered figure.	
HDG	Planned heading in ºmagnetic, accounting for forecast winds (unless the winds are toggled off, where the plan is presented in a zero-wind scenario)	
GS	Planned groundspeed in knots	
TEMP	Deviation from ISA in ºC	
REM	Distance in NM to the destination of that stage	
ATA	This field can either display Planned time of arrival (based on your ETD, which is displayed in *italics*), or it will display times based on your Actual Time of Arrival (ATA) in **bold**.	

TO row

In-flight, an extra row is inserted between the previous and next waypoints. This *TO* row displays live calculated data (recalculated every second) derived from your devices' GPS location.

As you fly past each waypoint in your flight plan, the TO row sequences down the waypoint list. Above the TO row is historical data (Actual time of arrival, etc), below is planned information (based on planned winds and performance calculated from the time you passed the last waypoint).



Electronic flight log in flight

Some of the information presented in the TO row can be replicated in the “HUD”. However, having the TO row inserted in the electronic flight log in this way makes a comparison of planned versus actual flight performance a breeze, therefore you can make informed decisions for diversions/extra fuel stops earlier and easier, should you experience un-forecast headwinds, etc.

3.2.1.1. Quick plan entry field

To quickly enter flight plan waypoints, tap within the Quick plan entry field and type their identifiers in order with a space between each. When finished, tap return on the keyboard and your waypoints will be entered into the flight plan below. Air routes can also be included in the plan.

Quick Plan Entry field

For example:

YMMB YTYA YTDN YLTV YMMB

Or you could include navaids:

YWGT WGT ELW MB YMMB

If some waypoints are already entered in your flight plan, typing more in the Quick plan entry field will add them to the end of the plan.

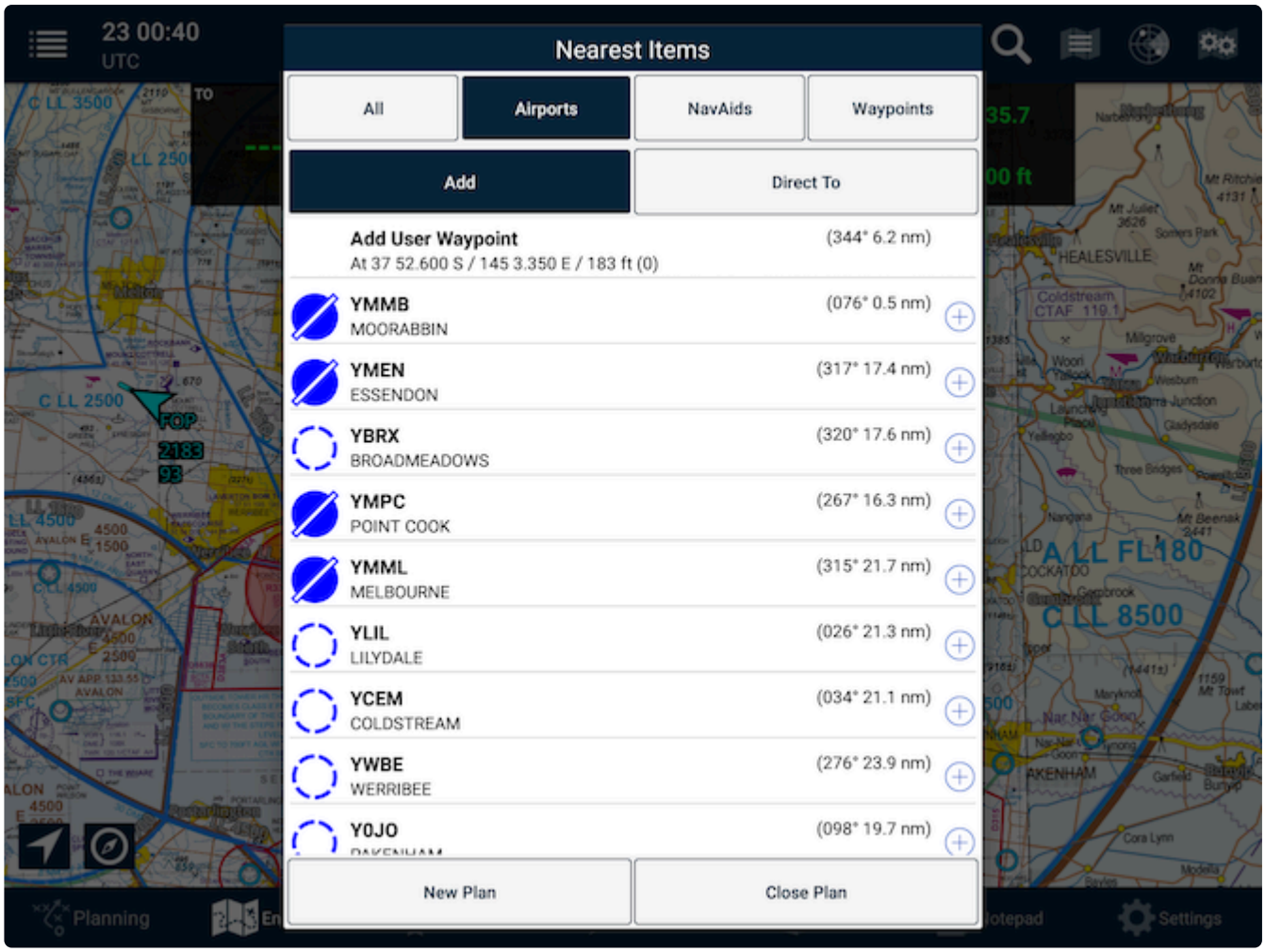
3.2.2. Adding waypoints to flight plan

Option 1:

Via the Quick Plan Entry field.

Option 2:

Via the Nearest Items dialogue on the EnRoute page.



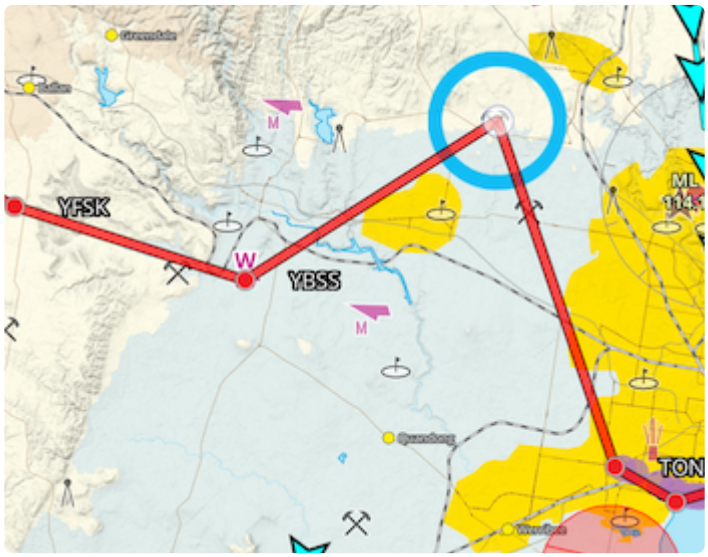
Tap the to the right of your desired waypoint to quickly add it to your plan.

If you tap on the row of the waypoint, rather than the quick add icon, select Insert from the *Waypoint Details* menu.

NOTE: Essentials subscribers will need to use this method.

Option 3:

Via ‘rubber banding’ the track line.



If you already have two or more waypoints in your plan:

- Press and hold on the track line in between the two waypoints. After two seconds, a blue halo will appear around your finger.
- Drag the blue halo across the map, near the place you’d like to add to the plan and release your finger.
- The Nearest Items menu will appear.
- Tap the blue plus icon next to your desired waypoint.

The waypoint will then be added in the correct order within the flight plan.

Option 4:

(feature coming soon)

Tap the button at the top of the flight plan. This opens the search window to add a single new waypoint to the plan. You can search for a waypoint identifier or a place name.

To manually add a new track point/waypoint to the plan:

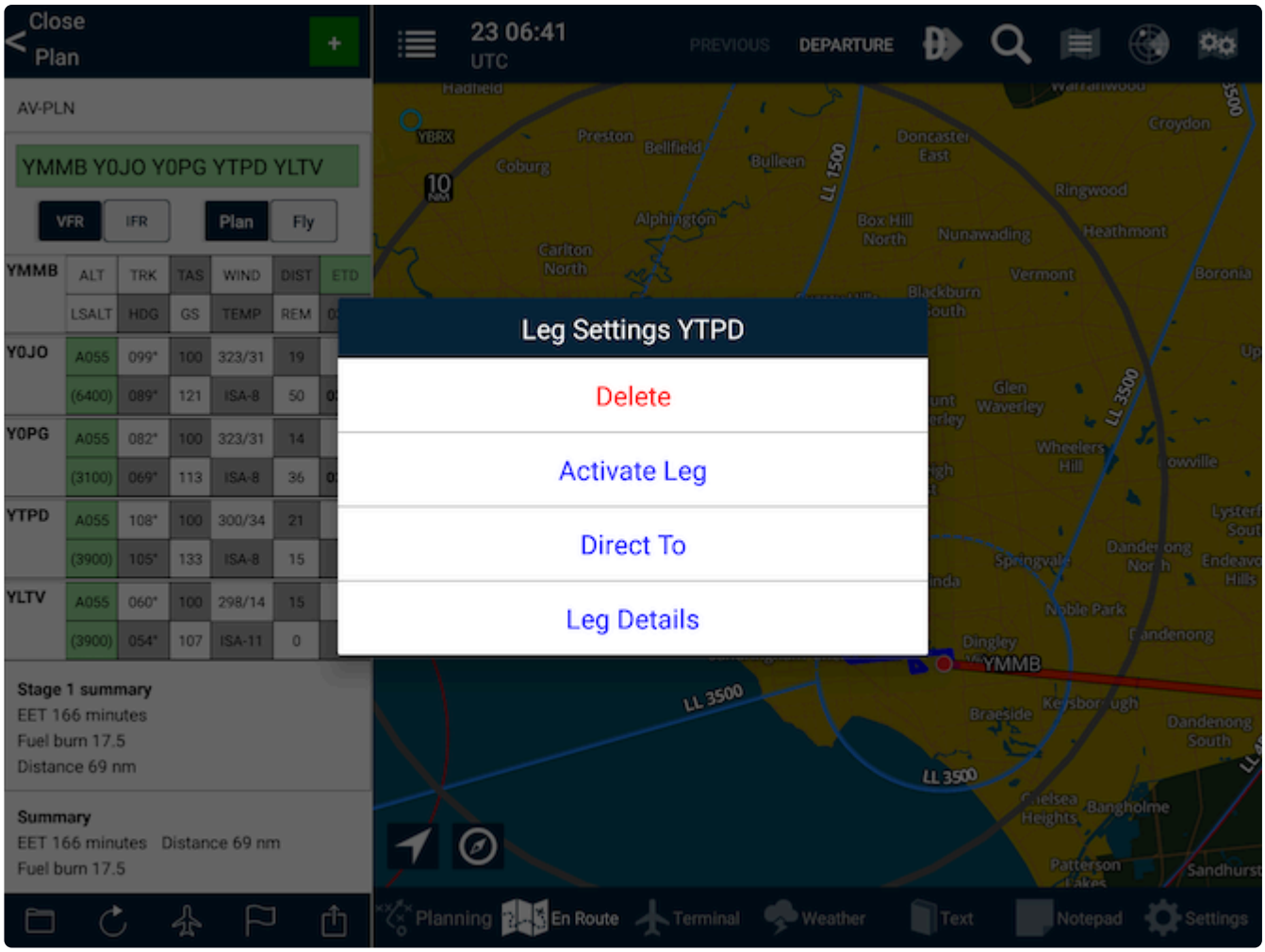
1. Either:
    a. Enter the Waypoint Identifier and results will automatically appear,
    or
    b. Enter the full or partial name and press Search.
2. Tap the desired waypoint's row to add it to the plan.
3. The Primary/Alternate/Direct To selection changes whether the waypoint added is a primary tracking point or part of the track to the alternate aerodrome. Direct To enables direct tracking to that point.

To dismiss the Add Leg view without adding a track point:
• Press Dismiss.

3.2.3. Deleting waypoints from a plan

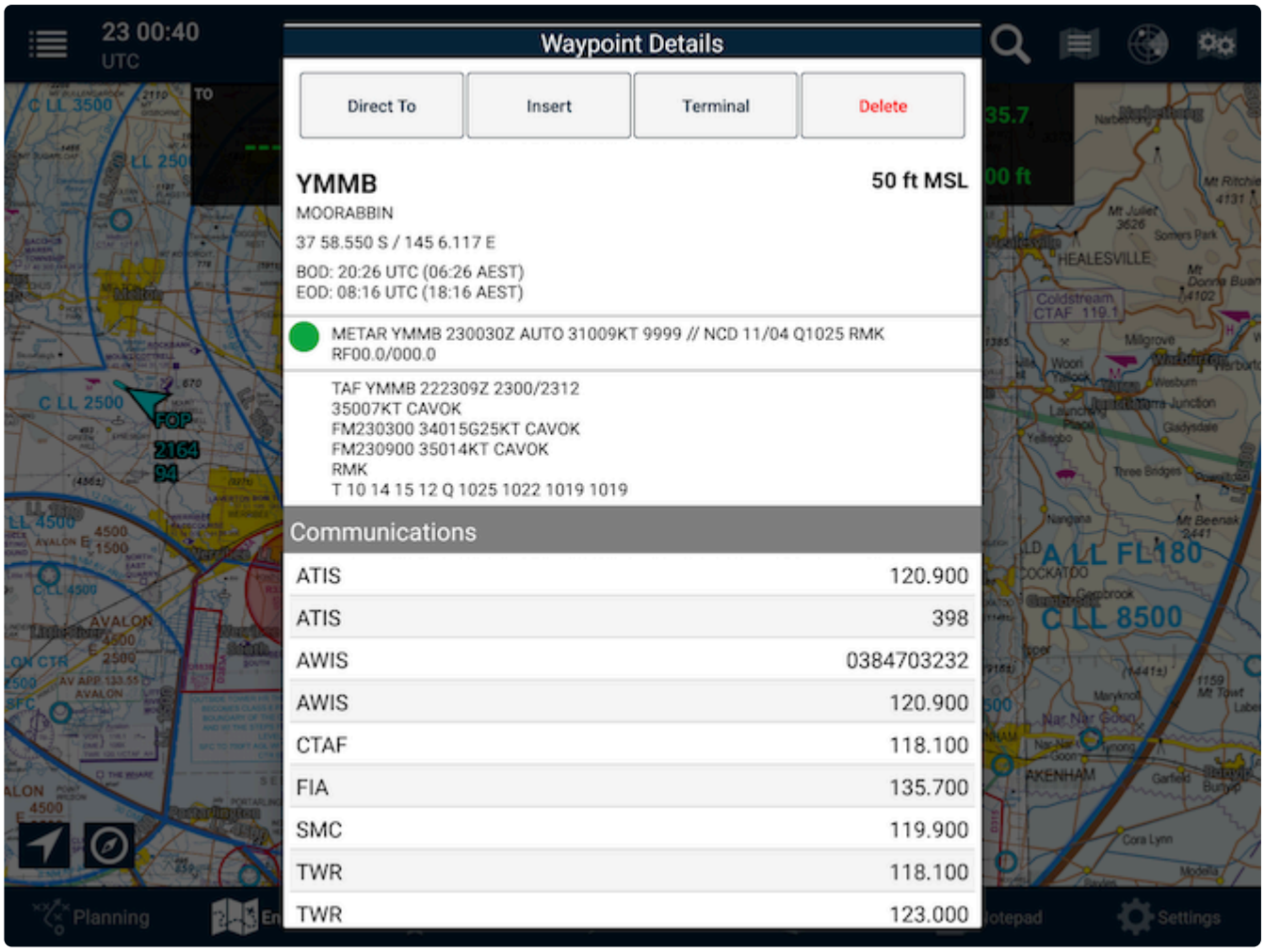
Option 1: Via the flight log

- Tap and hold on the waypoint in the flight log you wish to delete. Make sure you are tapping and holding anywhere other than the green shaded cells.
- From the Leg Settings menu, tap the *Delete* option.



Option 2: Via the Nearest Items

- On the EnRoute tab, tap directly on the waypoint you wish to delete.
- From the Waypoint Details menu, tap the *Delete* button in the top-right corner.



Option 3: Via the Quick Plan Entry field

- Tap in the Quick Plan Entry field to bring up the text edit cursor
- Drag the cursor to the end of the waypoint's identifier
- Use the delete key on the keyboard to remove the identifier's letters
- Tap the Return key

3.2.4. Flight plan controls

The flight plan displays the following icons at the bottom of each plan (from left to right):

- Edit mode toggle
- Refresh weather/re-calculate plan
- Aircraft profile/callsign edit
- Winds on/off toggle
- Send/Share Plan menu

3.2.4.1. Edit mode

The Edit Mode toggle button puts the plan in Edit mode.

Edit mode allows you to:

- Enter user winds in the winds column. To clear a user wind, delete the contents of the cell

- Manually enter TAS data

Buttons appear at the bottom of the flight plan (below the flight summary). These allow you to:

- Clear the plan for re-use:
    - Flight times, and tracklogs from the plan, so the plan can be reused.

Tapping the Edit Mode button a second time returns the flight plan to normal mode.

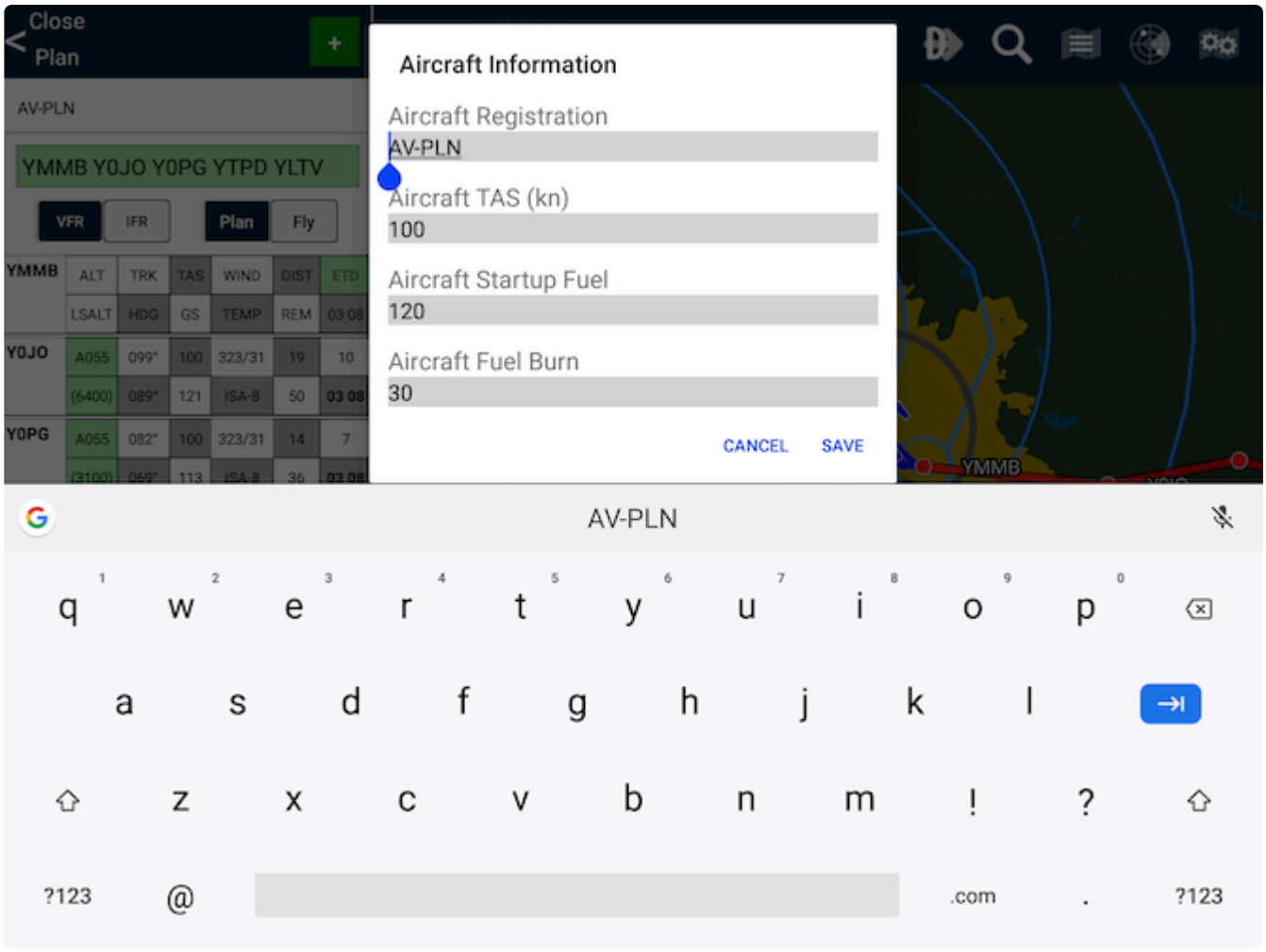
3.2.4.2. Refresh button

The Refresh icon will re-download wind information if it is greater than 15 minutes old, calculate and apply these new values to the plan.

If weather information is less than 15 minutes old, no weather is downloaded, only a recalculation is performed.

3.2.4.3. Edit aircraft information button

The Edit Aircraft Information button allows you to set aircraft details from the one automatically selected by AvPlan EFB.



Aircraft information input menu

When creating a new flight plan, AvPlan EFB automatically re-selects the callsign from this setting.

Winds toggle button

(Feature coming soon)

The Winds icon toggles the winds on or off within the current plan. Handy for planning flights in theory some time out (beyond current weather forecasts). The icon turns red when the winds are set to off.

Send/Share button

(Feature coming soon!)

The Send/Share icon allows you to:

- Email flight plan in GPX format (best file format to use for sending to other AvPlan EFB users)
- Send flight plan in GPX format to another app on your device (Cloud Ahoy, Google Earth, etc)

4. Planning

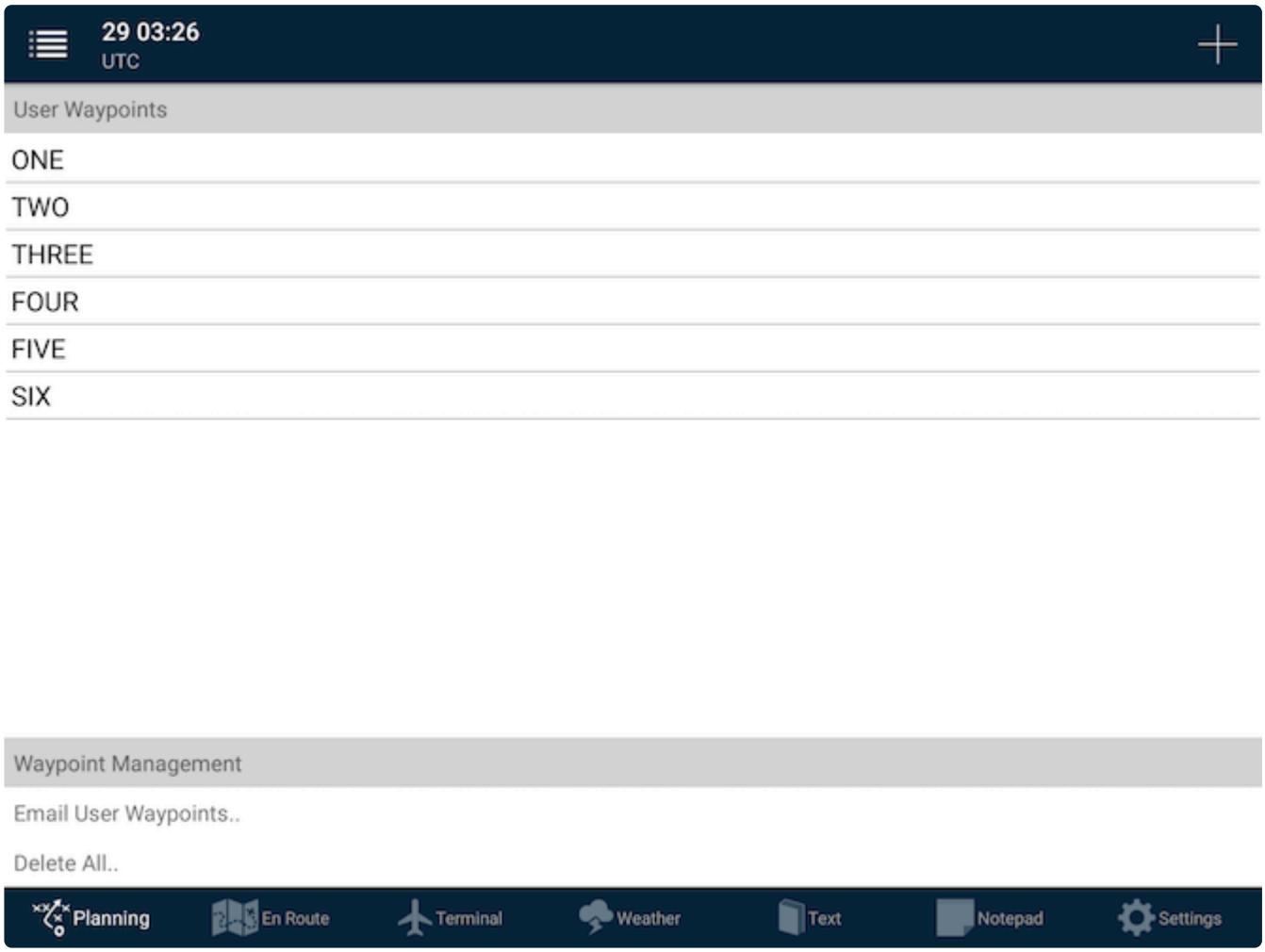
The Flight Planning tab will contain a list of flight planning tasks that if each is worked through one-by-one from top to bottom, you can be confident that you've covered your basic planning requirements.

At present, it offers:

- User waypoint management

4.1. User waypoints

User waypoints can be managed (added, edited, sent or removed) from within this window.



Adding a user waypoint

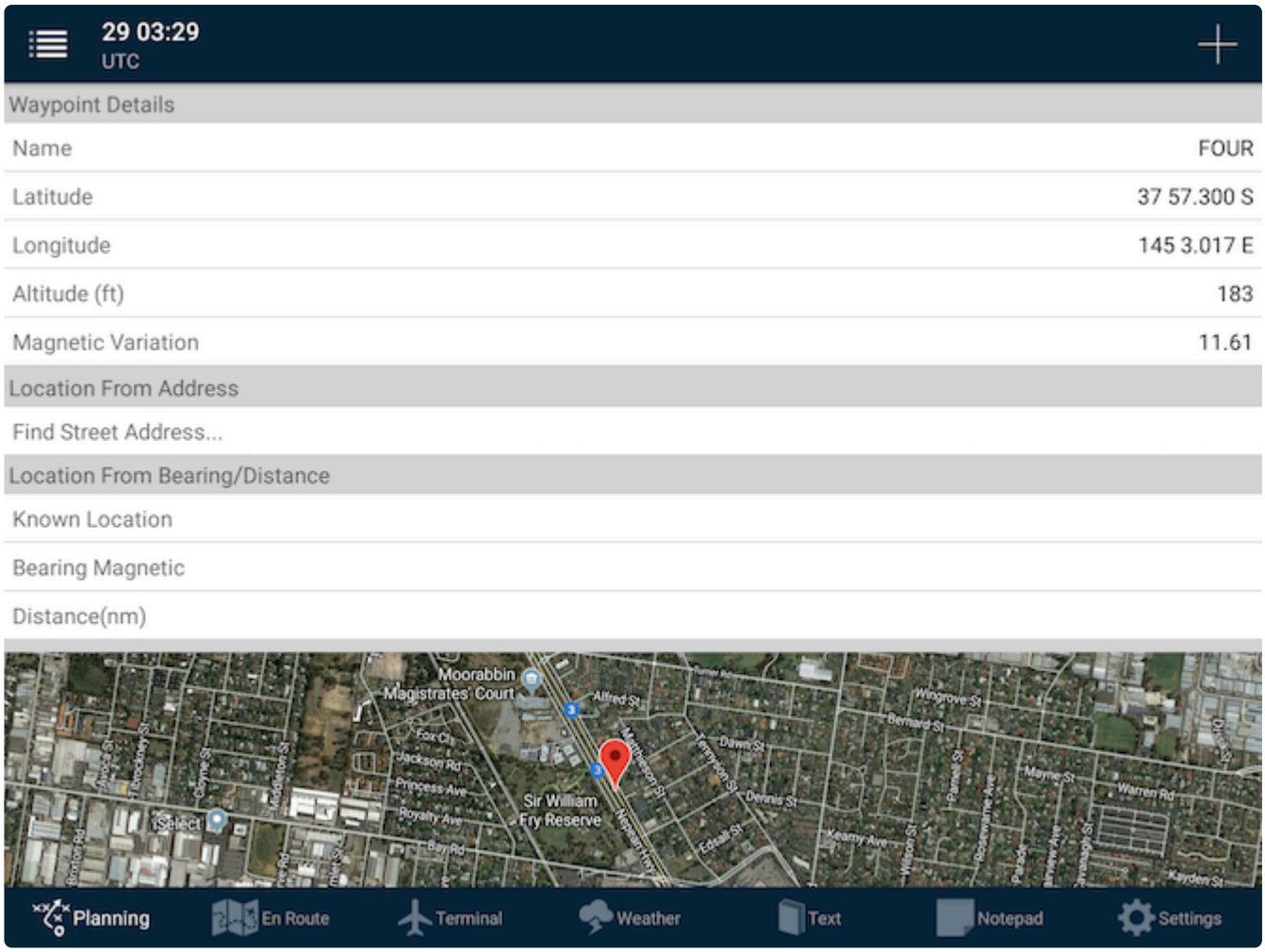
To add a waypoint, from the User Waypoints list, press the white + button in the top-right corner of the screen.

There are three ways to manually create a User Waypoint:

- Latitudes and longitudes can be directly entered in the format: DD MM.MM S or DDD MM.SS N
- User waypoints can also optionally be created from street addresses:
    - Tap the Find Street Address row to search for a known address.
    - Type in the address and tap the row from the results list. (The Latitude/Longitude will then be automatically entered)
- If you have a bearing and distance from a known aviation location, you can enter it here.
    - Use a known waypoint, such as YMML, NZAA or an IFR waypoint such as DOPKI or TOPIR.
    - Bearing (in degrees magnetic)
    - Distance (in nautical miles)

Editing an existing user waypoint

- To edit a waypoint, select a waypoint from the list and edit the figures in the Waypoint Details group as required.
- You can also use the satellite map at the bottom of the list to fine-tune the waypoint’s position:
    - Tap and hold on the red marker icon
    - The marker will rise up slightly. This denotes that the marker is ready to be moved. Slide your finger to the correct position.
    - Release your tap to set the marker in its correct position.
    - The latitude/longitude values will be automatically updated to this new position.



User Waypoint editing screen

Deleting a user waypoint

- To delete a waypoint, press and hold on the row and a Delete option will appear.

5. En Route

The En Route tab displays mapping information as well as other important data to operate your flight safely. AvPlan EFB can overlay all sorts of information over any map to ensure that you have all the information needed easily at hand, in a format that is easy to understand.

AvPlan EFB incorporates several vector-based base maps:

- VFR Light (contains the most terrain detail)
- VFR Dark (a simpler dark map, great for lower-performance devices)
- Satellite

On top of the base maps, AvPlan EFB combines all raster aviation charts into three seamless maps:

- MegaVFR, (or 'Sectional', depending on your devices' language setting)
- En Route Lo, and
- En Route Hi maps.

These maps become more detailed as they zoom in, automatically switching from a WAC view to a VNC to a VTC view (in the case of the Australian MegaVFR).

Icons found along the EnRoute title bar include:

	Direct To Button	Find waypoints and begin a direct-to
	Search Button	Search for airports, waypoints, helipads, airspace, PRDs, etc.
	Map Selection Button	Select between different available maps to display
	Weather Overlay Button	Select weather-related overlays to be displayed over the map
	Map Settings Button	Select many different display options

At the bottom-left corner of the map, the following group of buttons appear:

These are used to control the behaviour of the moving-map.

	Centre Map on Aircraft Button	Switches on/off centring the map on your current position
	Map Orientation Button	Cycles through different map orientations: Free Rotation, North Up, Planned Track up and Track up.

5.1. Own aircraft symbol

The aircraft position is overlaid on all map types.

The aircraft is colour-coded depending on the accuracy of the GPS fix:

	The aircraft is BLACK when the fix is >100m
	The aircraft is RED when the fix is <100m but no heading information is available
	The aircraft is (color-blue) BLUE when the fix is <100m and there is valid heading information

The default aircraft symbol can be changed under *Settings* > *User Settings* > *Default Aircraft Icon*.

5.2. Direct to

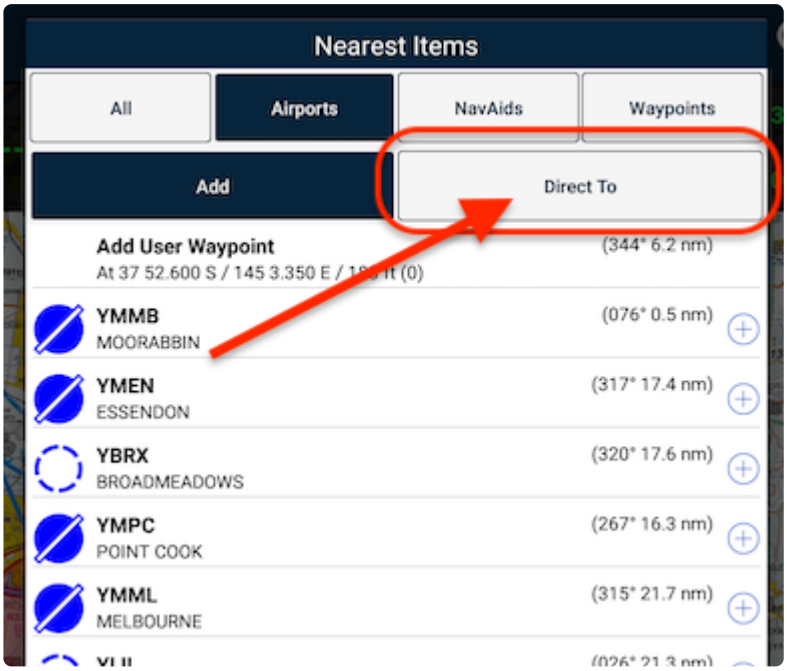
Within AvPlan EFB, there are many ways to initiate a direct-to.

Option 1:

- Tapping the Direct to button at the top of the EnRoute tab brings up a list of waypoints around your current GPS position.
- Use the options at the top of the list to filter the list down to only Airports, Navaids or Waypoints.
- Tap a row to begin a direct-to to that location.

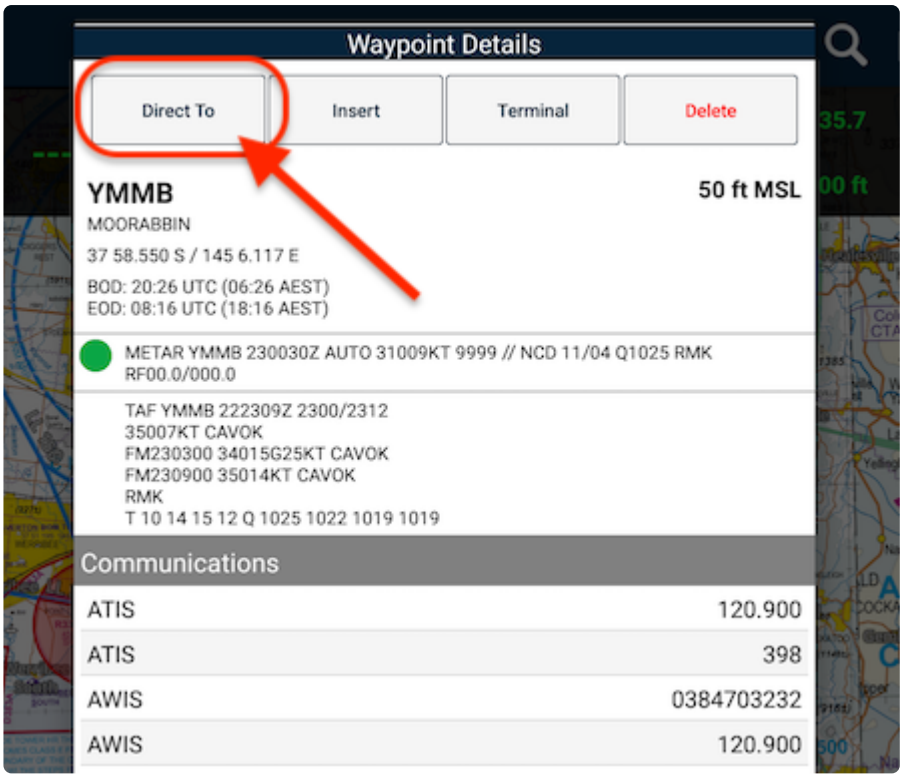
Option 2:

- Tap near the intended point on the map and the Nearest Items menu will appear.
- Tap the Direct-To switch at the top of the list and then tap the blue plus to track direct, at which time a magenta track line will appear from your present position to that point.



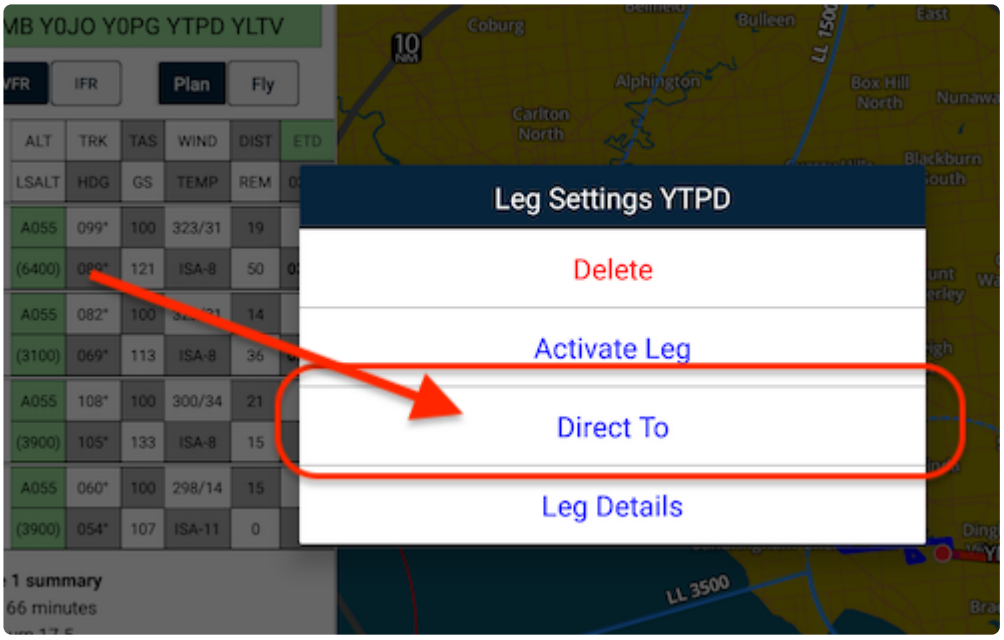
Option 3:

- Tap the waypoint you wish to track to on the map
- As it's already within your flight plan, the Waypoint Details automatically appears.
- Tap the *Direct To* button.



Option 4:

- Tap and hold on the waypoint in your flight log
- From the Leg Settings menu, select *Direct To*.



If you have initiated a direct-to leg to a waypoint that is already within your flight plan,

upon completing the direct to leg the app will auto-sequence to the next leg in the plan.

Cancelling a direct to

Option 1:

- Tap the TO field in the HUD.
- Essentials mode users can use this option

Option 2:

- Tap the map to bring up the Nearest Items menu.
- Tap the *Close Plan* button at the bottom of the screen. (this will also close a route/flight plan if you have one open)
- Essentials mode users can use this option

Option 3:

- Tap the Plan|Fly toggle to set it back to *Plan*.

Option 4:

- Manually sequence the flight plan (by tapping the PREVIOUS or NEXT buttons) to the waypoint you wish to fly instead of the direct to.

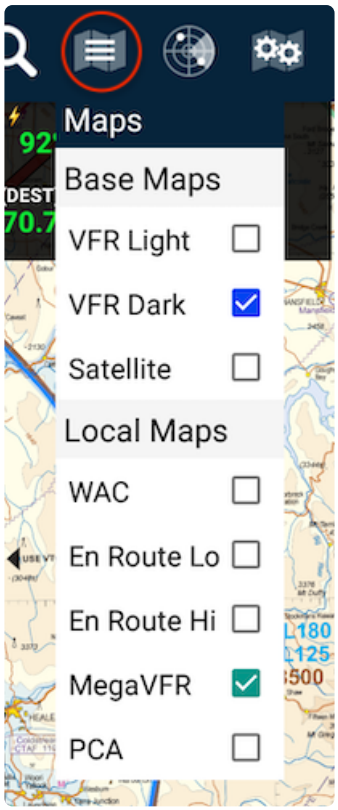
5.3. Search

The Search button allows waypoints and airspace names to be searched and located on the map.

Searches can be the waypoint identifier, full name, or even partial name. For example: Search *Ashb* returns all waypoints that contain a partial match.

Tap on a result to centre the map on its position.

5.4. Map selection



Map Selection menu

The Map Selection icon allows you to select a map to display. The maps are divided into Base Maps and Local Maps.

Base maps are the vector maps that underpin a selected raster map. You can deselect a Local Map and fly with the vector base map if you choose.

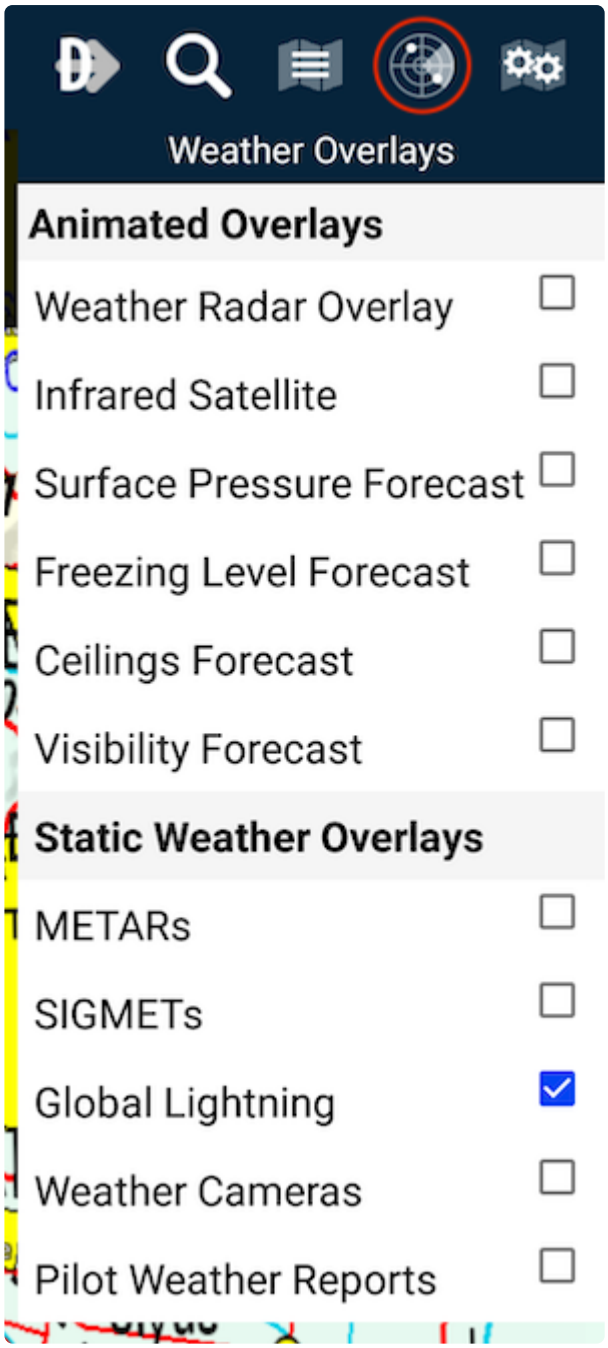
Local maps are the official maps from your region.

> For the best performance on an older device, it is recommended to choose the VFR Dark as a base map. The VFR Light has much more terrain shading detail, which some earlier devices may struggle to render.

Depending on the Language settings of your device, the *MegaVFR* might also be called *Sectional*.

5.5. Weather overlays

The weather overlays button displays available weather-related overlays on the map.



Weather Overlays menu

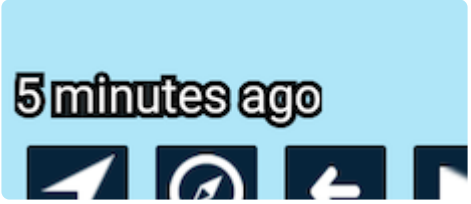
Multiple static overlays can be selected, whereas only one animated overlay can be displayed at a time.

5.5.1. Animated weather overlays

Animated overlays can be played in a loop, paused or stepped forwards/backwards, using the icons on the radar controls.

These controls appear at the bottom of the map page.

The timestamp for the snapshot is displayed in the bottom left-hand corner.



> ! A data connection (either via 4G or WiFi hotspot) is required to access these overlays in flight.

You can select from:

- Weather RADAR overlay. Note: this may lag actual rain by up to approximately 5-10 minutes.
- Infrared Satellite (cloud cover)
- Surface Pressure Forecast
- Freezing Level Forecast
- Cloud Ceilings Forecast
- Visibility Forecast

> ✻ Only one animated overlay can be selected at a time.

5.5.2. Static weather overlays

AvPlan EFB can overlay METARs, SIGMETs, PIREPs, Weather Camera Locations and Lightning on the map.

Tap the Weather RADAR icon and select from the five options below the Static Weather Overlays subheading. When METARs are selected, forecasts will automatically refresh in the background when panning around a map.

NOTE: Ceilings Forecast and Visibility Forecast options are only available to Premium/Pro subscribers

Only one Animated Overlay can be active at one time, whereas multiple Static Weather Overlays can be

selected at the same time. Once selected, the static overlays selection will be stored and displayed next time AvPlan EFB is launched.

METARs

METAR icons appear with wind indicators at METAR reporting locations. These are colour coded in the following format:

Green	VFR	Visibility >8km	Cloud >3000ft AGL
Blue	Marginal VFR	Visibility >5km	Cloud >1000ft AGL
Yellow	IFR	Visibility >1600m	Cloud >500ft AGL
Red	Low IFR	Visibility <1600m	Cloud <500ft AGL
Grey	No vis./cloud information		

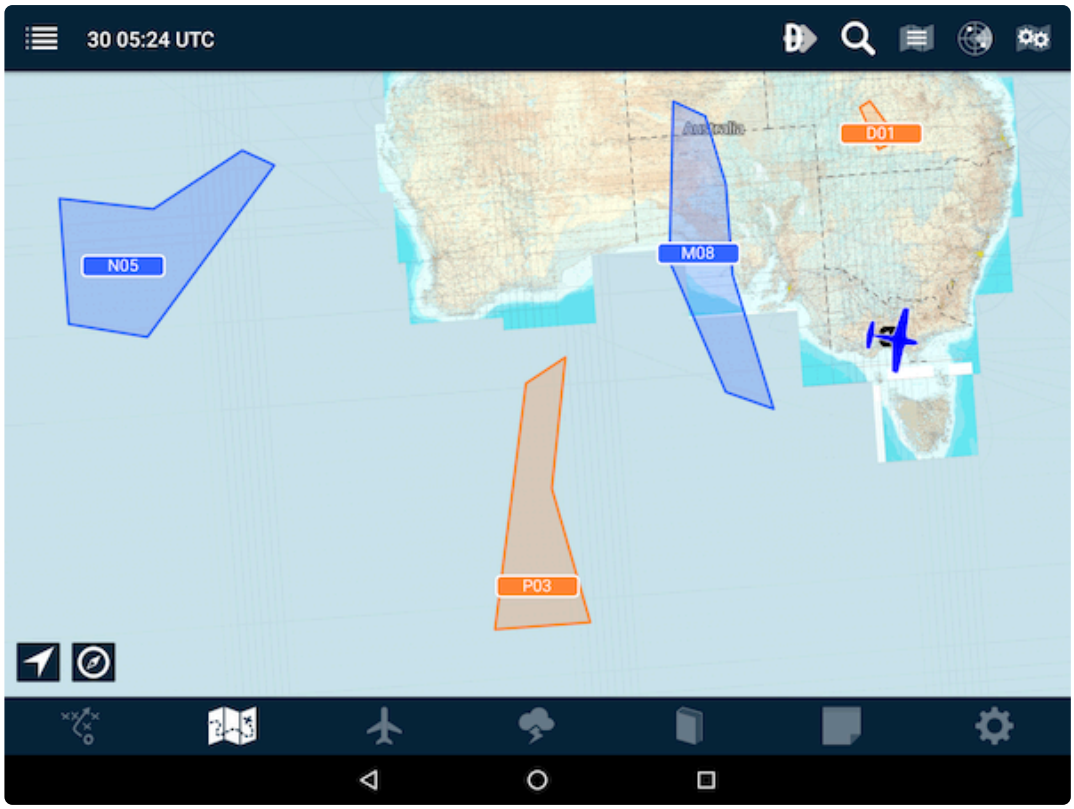
The wind vector points toward the upwind side of the METAR station. Each full ‘feather’ on the end represents the maximum wind speed (including gusts) rounded to the nearest 10. E.g. 4 ‘feathers’ ≈ 40 knots. Part ‘feathers’ will also display wind rounded to the nearest 5 knots.

METARs coded as SPECI have a red wind direction vector.

Tap on a METAR icon to display its full text. See above. Tap on the METAR text row to view the ‘plain English’ translation of the raw text.

SIGMETs/AIRMETs

When selected, any current SIGMETs and/or AIRMETs will display on the map.



SIGMET examples

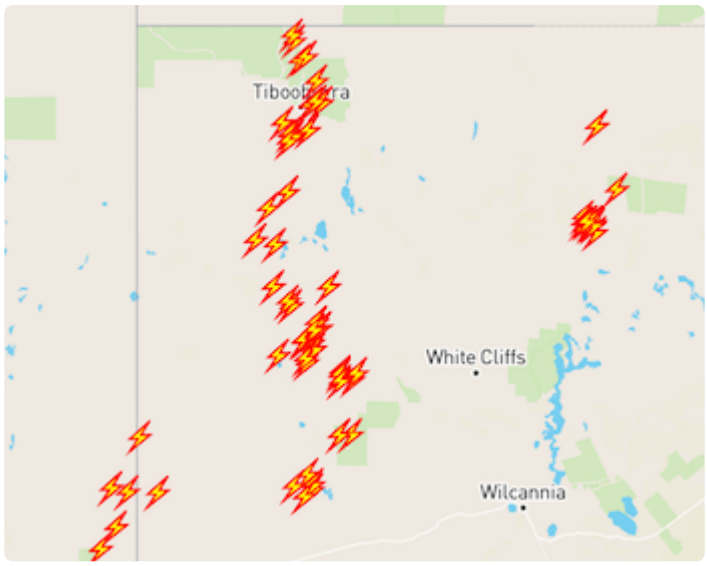
Tap a SIGMET Identifier label to view the SIGMET text. While it is selected, the boundaries of that particular SIGMET will change to red. This will help identify it when many SIGMETS are present in the same region.

The SIGMETs are colour-coded for easy identification:

- Severe Turbulence SIGMETs are orange.
- Severe Icing SIGMETs are displayed in blue.
- AIRMETs are coloured purple.

Lightning

When enabled, Lightning displays satellite-sensed lightning strikes worldwide within the last 10 minutes. The overlay updates every few seconds whilst the device is connected to data.



Global Lightning overlay example

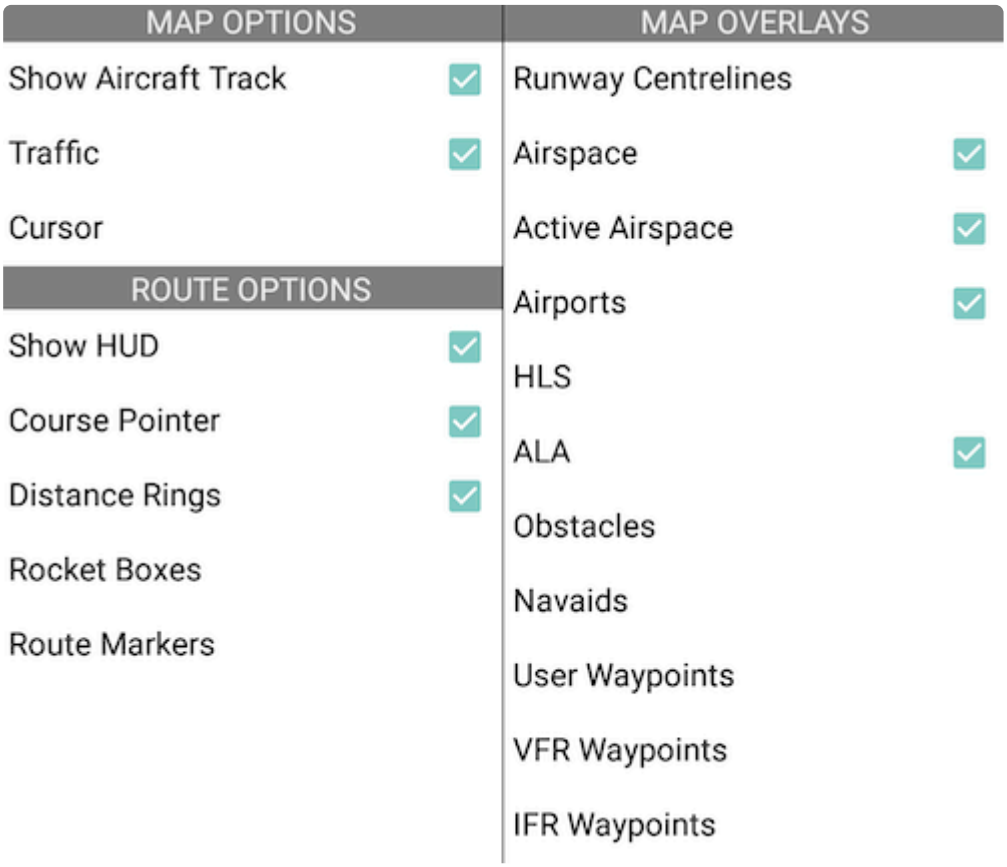
Pilot Weather Reports

At the time of writing, PIREPS are yet to be implemented in AvPlan EFB for Android. Coming Soon!

5.6. Map settings

The Map Settings menu is divided into two columns:

- **Map Overlays** includes the following items to be overlaid on any map:
  - Runway Centrelines
  - Airspace boundaries
  - Active Airspace (highlights region red on the map when PRD is active)
  - Airports (Certified,



Map Settings menu

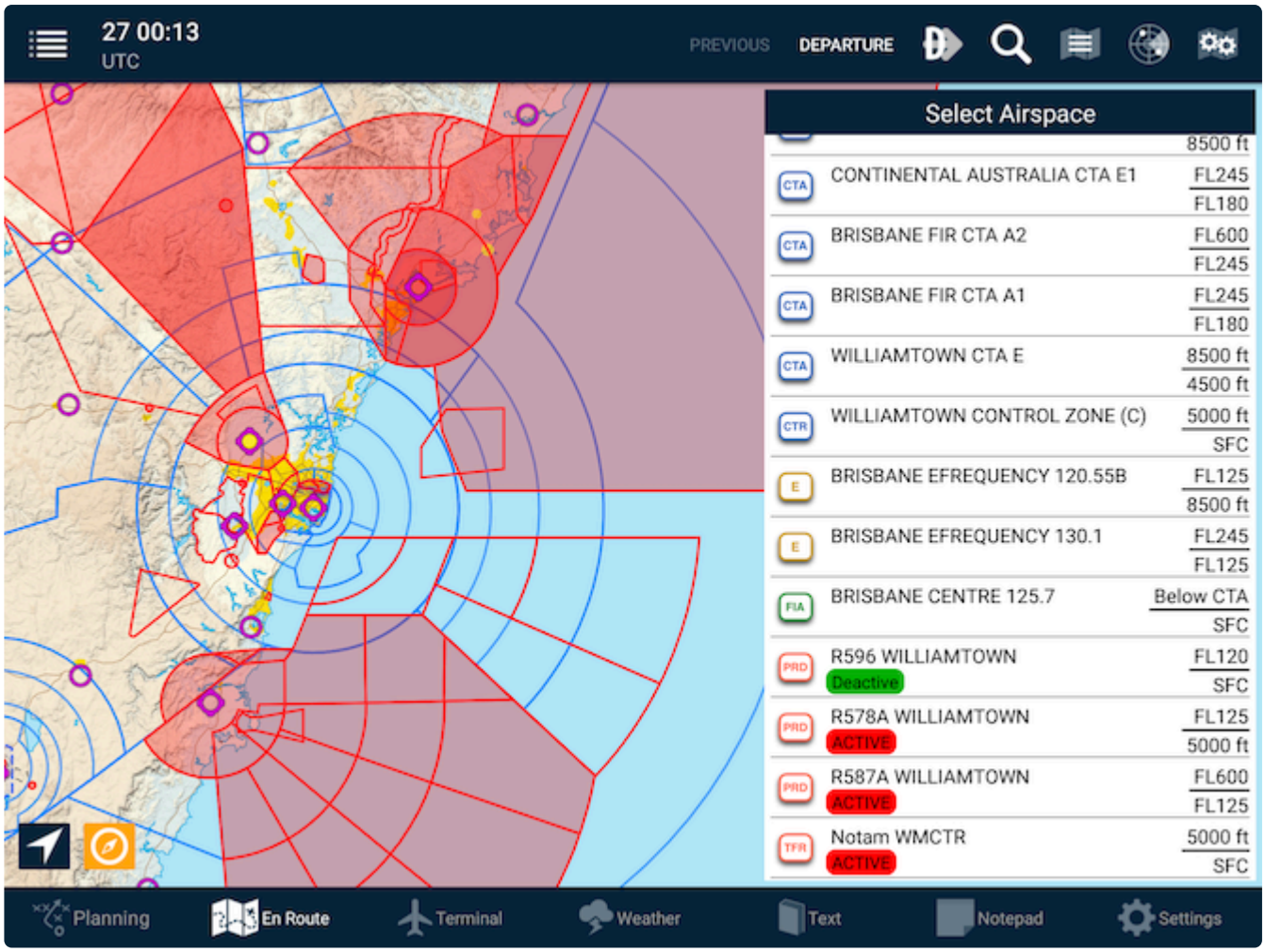
registered or military airports)
    - Helicopter Landing Sites (HLS)
    - Authorised Landing Areas (ALA)
    - Obstacles
    - Navigation Aids
    - User Waypoints
    - VFR Waypoints
    - IFR Waypoints

- **Map Options** includes:
    - Show Aircraft Track toggles the visibility of the aircraft tracklog.
    - Traffic toggles AvPlan Live traffic icons plotted on the map.
    - Cursor adds a dot over the centre of the map view. The Lat/Long at the centre of the crosshair is displayed in real-time at the bottom of the screen.
- **Route Options** includes:
    - Show HUD overlays live information about the current flight plan leg, current speed/course and ETA over the map.
    - Course Pointer adds an animated course indicator to the aircraft, displaying anticipated position in 2, 5 and 10 minutes' time (assuming groundspeed and track were to remain unchanged).
    - Distance Rings toggles visibility of 3, 10 and 25 nautical mile rings around your current aircraft position.
    - Rocket Boxes adds a brightly coloured box at the beginning of each leg containing the desired track and distance to the next waypoint.
    - Route Markers. *Coming soon!*

5.6.1. Active airspace

The status of Prohibited/Restricted/Danger airspace can be displayed on top of any map.

- Double-tap the map to display all airspace information above that point.



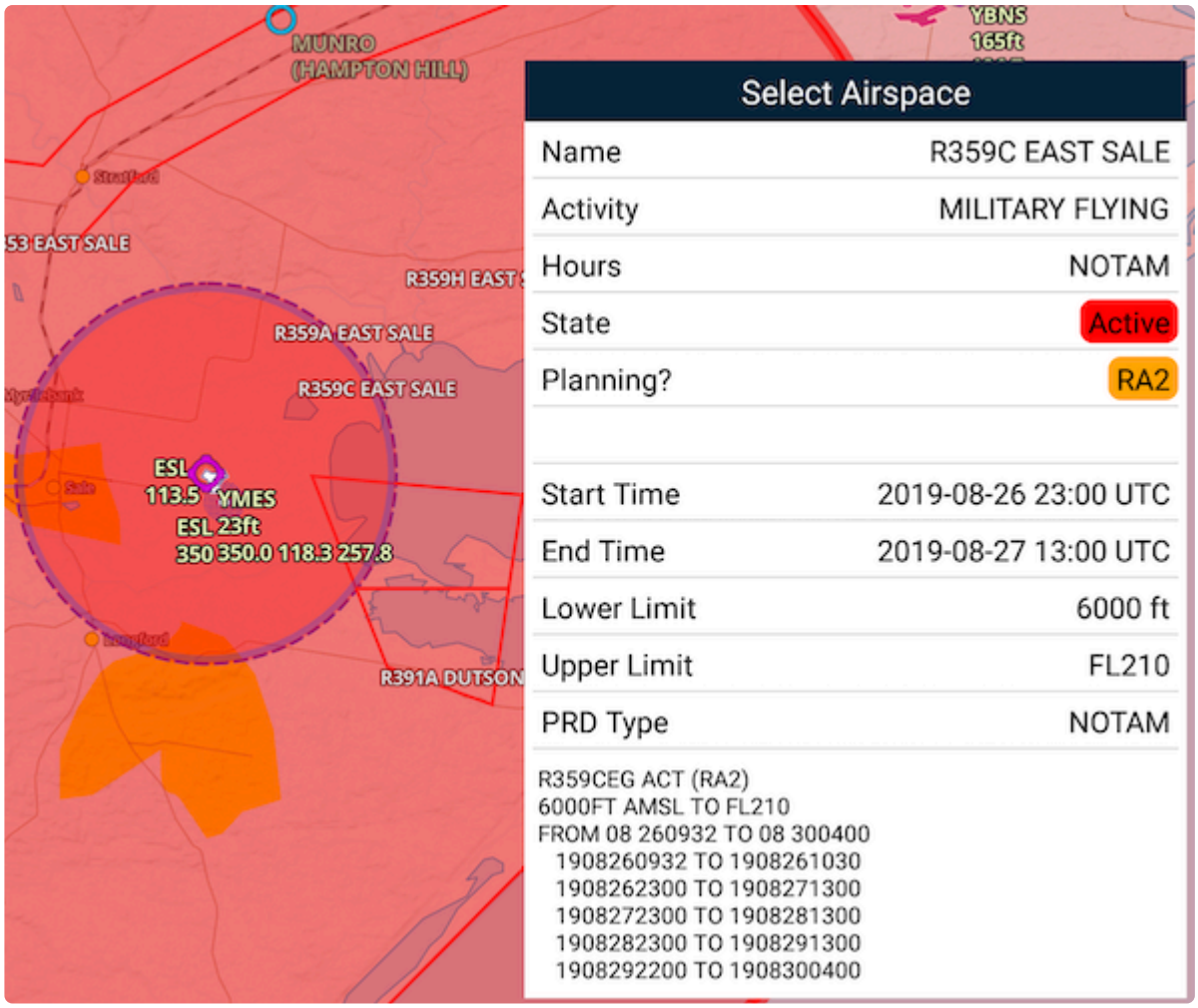
Active airspace example

- All controlled airspace will be listed.
- The QNH Forecast region will be listed.
- The FIA and frequency can be found here.
- Any PRD areas.
- Any NOTAM notified airspace (such as Low Jet Routes, UAV operations, Parachute operations, etc)

Airspace Colour Key	
Red	Airspace/NOTAM is active **now**
Yellow	Airspace/NOTAM is active in the future

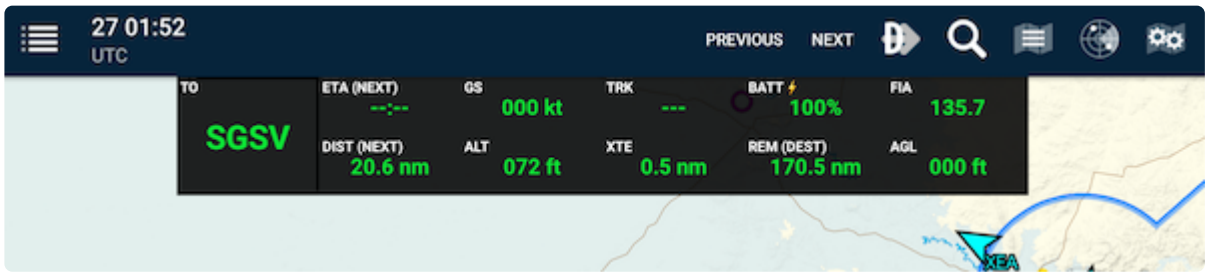
Viewing airspace information:

- Tap an entry in this list to highlight the boundaries on the map. Tap the devices' back button to return to the list or dismiss the Select Airspace menu.



Example of a selected airspace display

5.6.2. HUD



Heads up display (HUD)

A collection of live data can be overlaid on top of all maps, known as the Heads Up Display (HUD). This data can be individualised to show what you'd like to see while in flight.

To enable/disable the HUD:

- Tap the Map Settings button

- Select (or deselect) *Show HUD*

The HUD has the ability to display the following details:

Menu Option	HUD Cell Label	Description
	TO	Current active leg of the flight plan or direct-to
Empty		HUD Cell will be invisible
Altitude	**ALT**	GPS height above mean sea level
Latitude	**LATITUDE**	Current latitude
Longitude	**LONGITUDE**	Current longitude
Groundspeed	**GS**	Current groundspeed in knots
Distance	**DIST (NEXT)**	Distance in nautical miles to next waypoint/direct-to
Remaining	**REM (DEST)**	Distance in nautical miles to stage destination/direct-to
Height Above Ground Level	**AGL**	GPS height above terrain
Estimated Time Interval	**TIME (NEXT)**	Number of minutes (or seconds when <1 minute) to next waypoint
Estimated Time of Arrival	**ETA (NEXT)**	UTC arrival time at next waypoint
Estimated Time of Arrival Destination	**ETA (DEST)**	UTC arrival time at stage destination
Desired Track	**DTK**	Direction of currently active track/direct-to in º magnetic
Track	**TRK**	Your aircraft's current track in º magnetic
Cross Track Error	**XTE**	Number of nautical miles off your planned course
Timer	**TIMER**	Count-up timer. Tap once to start, a second time to stop and a third time to reset to zero
Battery Level	**BATT**	Your devices' current battery state. A lightning bolt icon (⚡) will display next to the cell label when the device is receiving charge
FIA	**FIA**	Flight Information Area radio frequency for the devices' current position

✻ Cells such as the TO, FIA, TRK and FIA flash several times upon updating information.

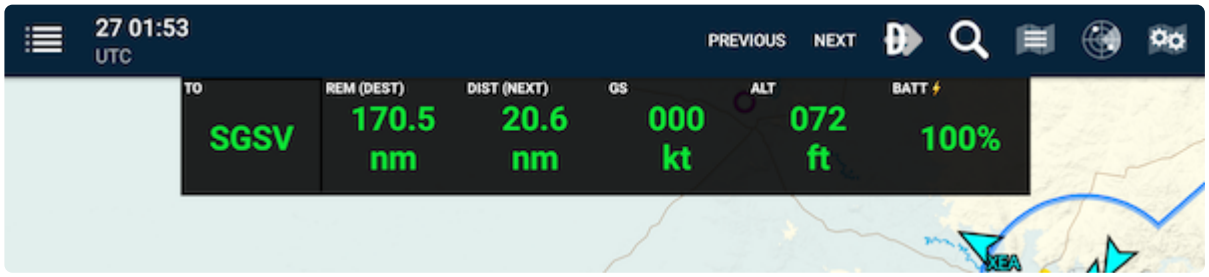
Personalising the HUD

To change a cell, tap and hold until the *Select Info* menu appears, then release. Tap the selection you wish to save in that position.

> The TO cell is the only field that cannot be made empty/invisible.

HUD text colour can be changed by going to *Settings* > *User Settings* > *Application Colours*.

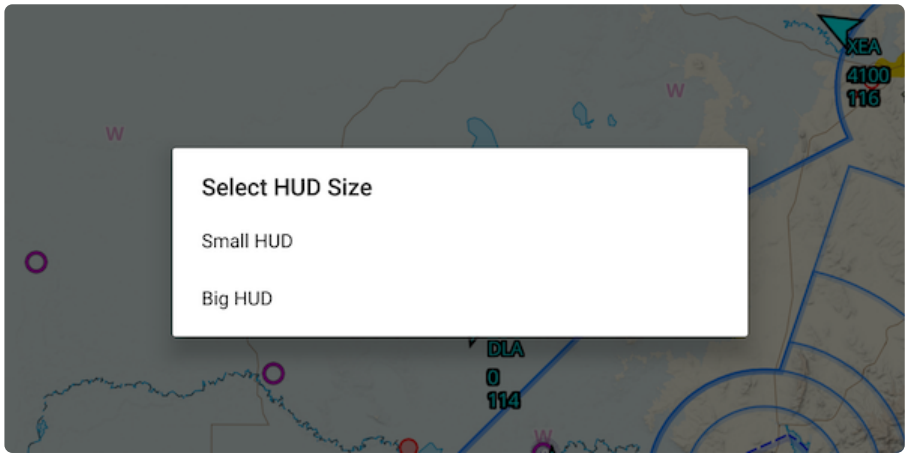
Little HUD and Big HUD



Big HUD example

If you wish to have much larger text in the HUD, you can optionally select the *Big HUD* mode.

To adjust the HUD text size:
*Press and hold on the *TO* field. Release when the *Select HUD Size* menu appears.



Select HUD size

*Select your desired text size from the menu.

> Fewer cells will be available in Big HUD mode as they are double-height. To display the most information, select Small HUD.

5.7. Centre on aircraft

The centre on aircraft button switches between to different modes:

	Free mode	Map is stationery, own aircraft symbol moves on the screen
	Locked mode	Own aircraft symbol is fixed on the screen, map moves below it

When active, the own aircraft symbol will stay in the middle of the page.

If you need to look away from that position, simply pan the map and the lock will unlock.

5.8. Map orientation

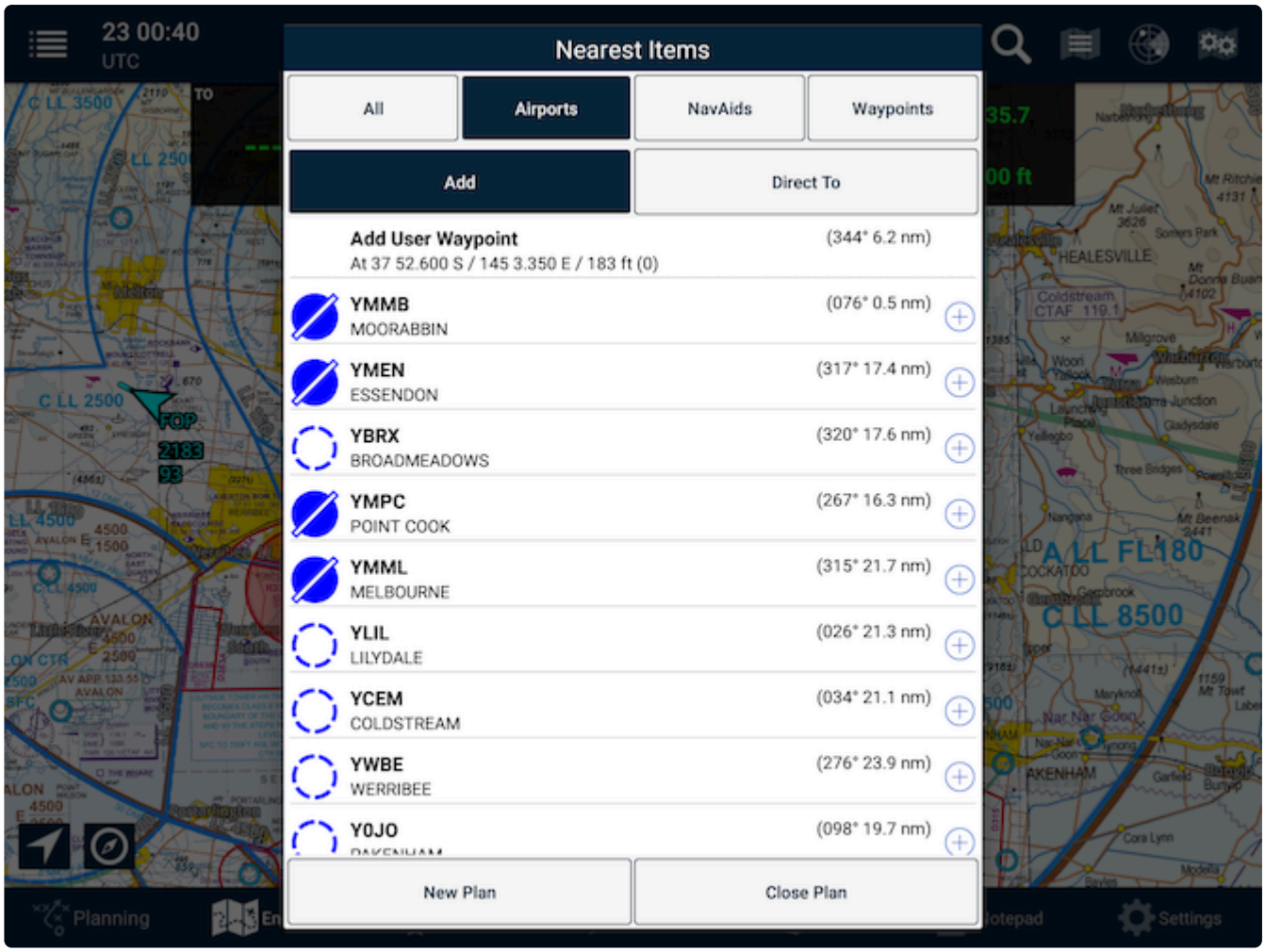
Tapping the Map Orientation button steps through the different orientation modes available:

	Free rotation	Use your pinch/zoom gesture but rotate the gesture to rotate the map
	North up	Locks the map with magnetic north at the top of the screen
	Planned track up	Keeps the current leg of your flight plan straight up and down the map
	Track up	Keeps the aircraft icon pointed to the top of the screen

5.9. Nearest items and Waypoint Details

Nearest Items

When you single tap on a map, the *Nearest Items* view appears. This view shows the airports, navigational aids, navdata waypoints and user waypoints around the location tapped.



Nearest items menu

You can change the types of items that are displayed in the list. If you just wish to see airports or just navaids, it can be selected at the top of the menu. If you've tapped on the map and you're not seeing the item in the list, you may need to adjust the scope to *All*.

The *Add|Direct To* toggle switch changes the behaviour when the Quick Action (+) icon is tapped on a row in the table, so one of the following occurs:

- In **Add** mode, the point is added to the end of the flight plan.
- In **Direct To** mode, selecting an item instantly activates the direct-to function to that location.

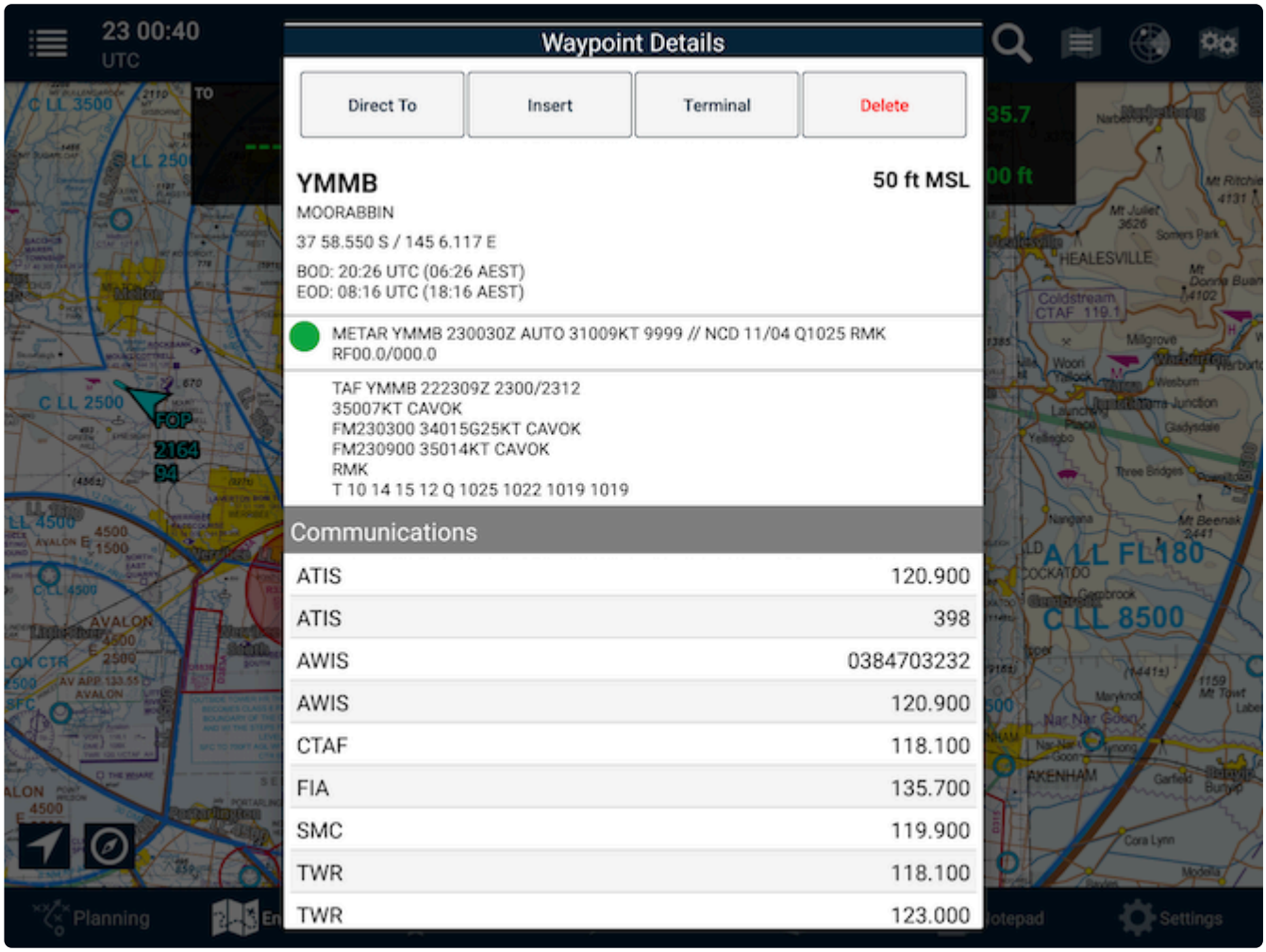
The first item in the table allows a user waypoint to be created at that location. When returning to the original view, this point can be added or inserted into the plan.

A new flight plan and even the closure of a plan can also be initiated from this view by using the buttons that appear at the bottom of the list.

Waypoint Details

- When you tap on the row of the item you'd like, the Waypoint Details page will open and display a handy shortcut to Weather, NOTAMs, plus ERSA and/or DAP pages for that location. Tap any row to view more. Direct To, Add to Plan, Terminal and Delete buttons are also included in this view, making it a very handy hub for many tasks – both during pre-flight planning and in-flight.

> Note: tapping directly on a waypoint already in a flight plan will take you directly to the Waypoint Details page.

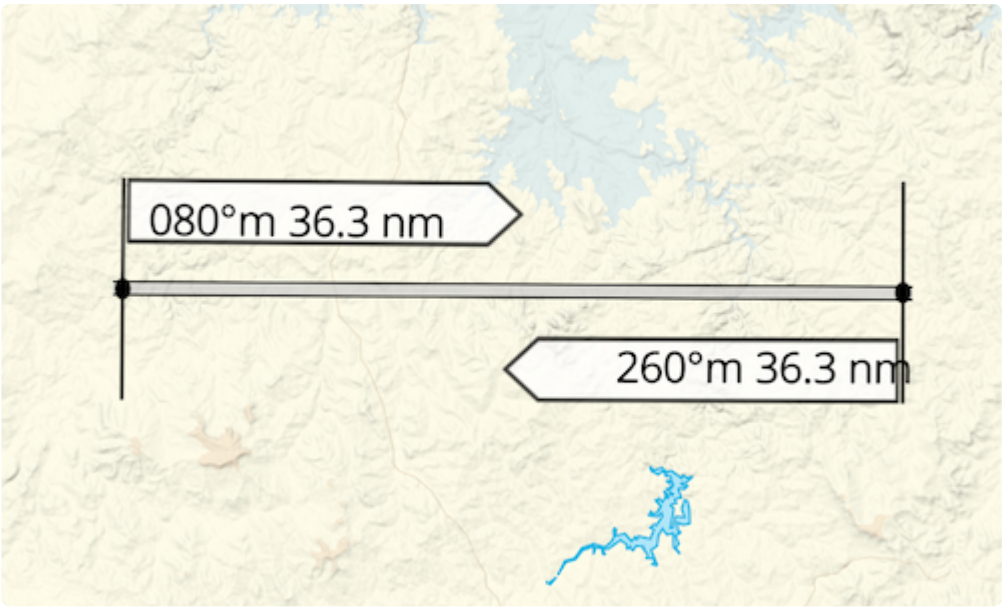


Waypoint details menu

5.10. Ruler

One thing that is eroded ever so slightly with electronic mapping is the sense of map scale; owing to the fact that it can be constantly panned and zoomed through multiple map types. On a paper map, you have only one map at a time and all remains fixed.

To remedy this, we have the digital ruler.



Ruler example

Displaying the ruler

Simply place two fingers slightly spread apart (as if you were going to zoom out, but don't) on to the map and hold for about two seconds. It's important that you don't move your fingers during the two second pause, as the map will then treat the action like a map zoom instruction.

Between and slightly above your fingers, the ruler should appear. It doesn't even have to be perfectly aligned with the objects you wish to measure at this time; because once it's visible, while keeping your two fingers on the screen you can then spread/contract/twist/drag to align it with your desired measurement.

Once the ruler is satisfactorily aligned, simply remove your fingers from the screen and the ruler will remain in place. You can even continue to pan around the map with one finger and the ruler will stay in the assigned position relative to the map.

The ruler displays the great circle distance between the end points, plus a magnetic bearing both to and from.

Clearing the ruler

To clear the ruler, you can repeat the process and create a brand new ruler somewhere else, or simply zoom the map slightly. The moment the map is zoomed in or out, the current ruler is cleared.

6. Terminal

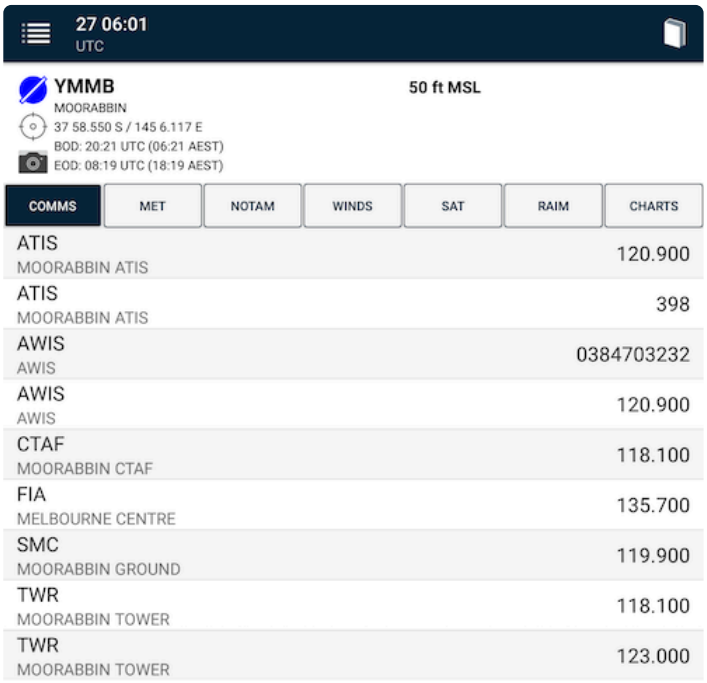
The Terminal tab displays detailed information about a particular location.

The last-viewed location will be displayed.

To view a different place:

- Tap the book icon in the top-right corner.

- Search for the full name or identifier code
- Tap its row in the results list to view that place



The Weather/NOTAMs page on the Terminal tab (see above) displays the plan details at that flight plan leg, plus applicable NOTAM and decoded TAF/METAR information.

It includes the *beginning of daylight* (BOD) and *end of daylight* (EOD) for the current day at that location. Times are in UTC and correspond to the beginning and end of civil twilight.

Terminal tab

Communications information and winds aloft information (if the point is a leg in the current flight plan) is also displayed on the Weather page.

Plain English weather

Tap the *MET* option to view the TAF, METAR, TTF METAR and/or ATIS for your airport.

Each one is broken out into its separate parts.

Notable features:

- The METAR column includes a density altitude calculation

- Current periods, INTERs or TEMPOs in the TAF are highlighted when they are active
- The Temperature and QNH table includes the interpolated value for the current time
- Nearby TAFs and METARs are accessible with just one tap

NOTAM

Each NOTAM will appear on its own card.

The age of the NOTAMs can be quickly established visually:

Less than 8 hours since issued	NOTAM card shaded yellow
Less than 2 weeks since issued	NOTAM card contains a black bar down the left-hand edge
More than 2 weeks since issued	NOTAM card completely white

Phone numbers within the text are highlighted. Tap them to begin a phone call to that number with the dialer/phone app.

The status is displayed at the bottom of each card in red text.

Winds

This page displays the forecast winds and temperatures at various levels above that point

Sat

This option displays a Google Maps satellite view of the position, which can be helpful for preflight awareness of the surroundings.

RAIM

This option produces a RAIM (GPS signal integrity) report for major airports in Australia.

Charts

A list of available documents and their *Saved/Not Saved* status for this place.

Tap the row of your desired document to view it. If the document is not downloaded, the app will download (data connectivity required) and save that document to the device.

7. Weather

The Weather tab displays a plethora of weather-related information.

Scroll the list on the left-hand side to display any of the following:

For Australia:

- Graphical Area Forecasts
- Area Briefings
- NAIPS Charts
- Satellite imagery
- Winds Aloft (Windy.com)
- BoM Charts
- Australian SIGWX Charts
- Australian Low-Level GPWT Charts (Grid Point Wind and Temperature)
- Surface Pressure Forecasts
- Various Wind Forecasts: 5000, 10000, 18000 and 38000 ft.

For New Zealand:

- MetFlight GA
- MetJet
- Satellite Imagery
- Charts (GRAFOR, SIGWX and SIGMET)
- Surface Conditions
- Wind Forecasts: 5000 and 18000 ft.

For the USA:

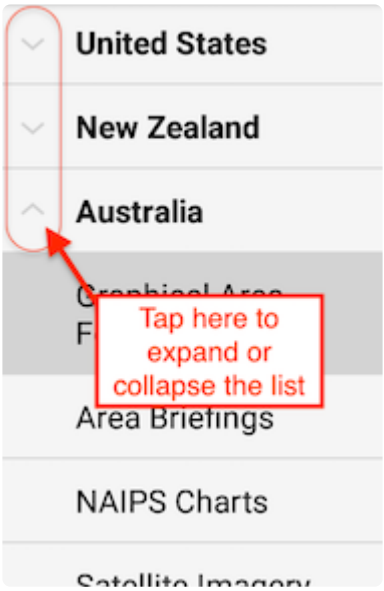
- Area Forecasts – Cloud
- Area Forecasts – Surface Conditions
- Low-Level SIGWX
- PIREPs
- Surface Analysis
- Surface Winds
- Various Wind forecasts: 3,000ft to 48,000ft

For Worldwide:

- Satellite Images

Tap on the text of the item you want to view. Tap *Close* to dismiss the chart.

The list for a particular region can be collapsed and opened by tapping the header of the region:



7.1. Australia

- Graphical area forecasts
- Area briefings
- Grid point wind and temperature charts

7.1.1. Graphical area forecasts

The Graphical Area Forecasts interface works in two modes; Overview Mode and Interactive Mode. Zoom in or out to move between the two different modes. Interactive mode is identified by the individual subdivisions dynamically appearing. This is still the same data as is in the GAF document, however, the raw information is gathered by AvPlan EFB and drawn dynamically.

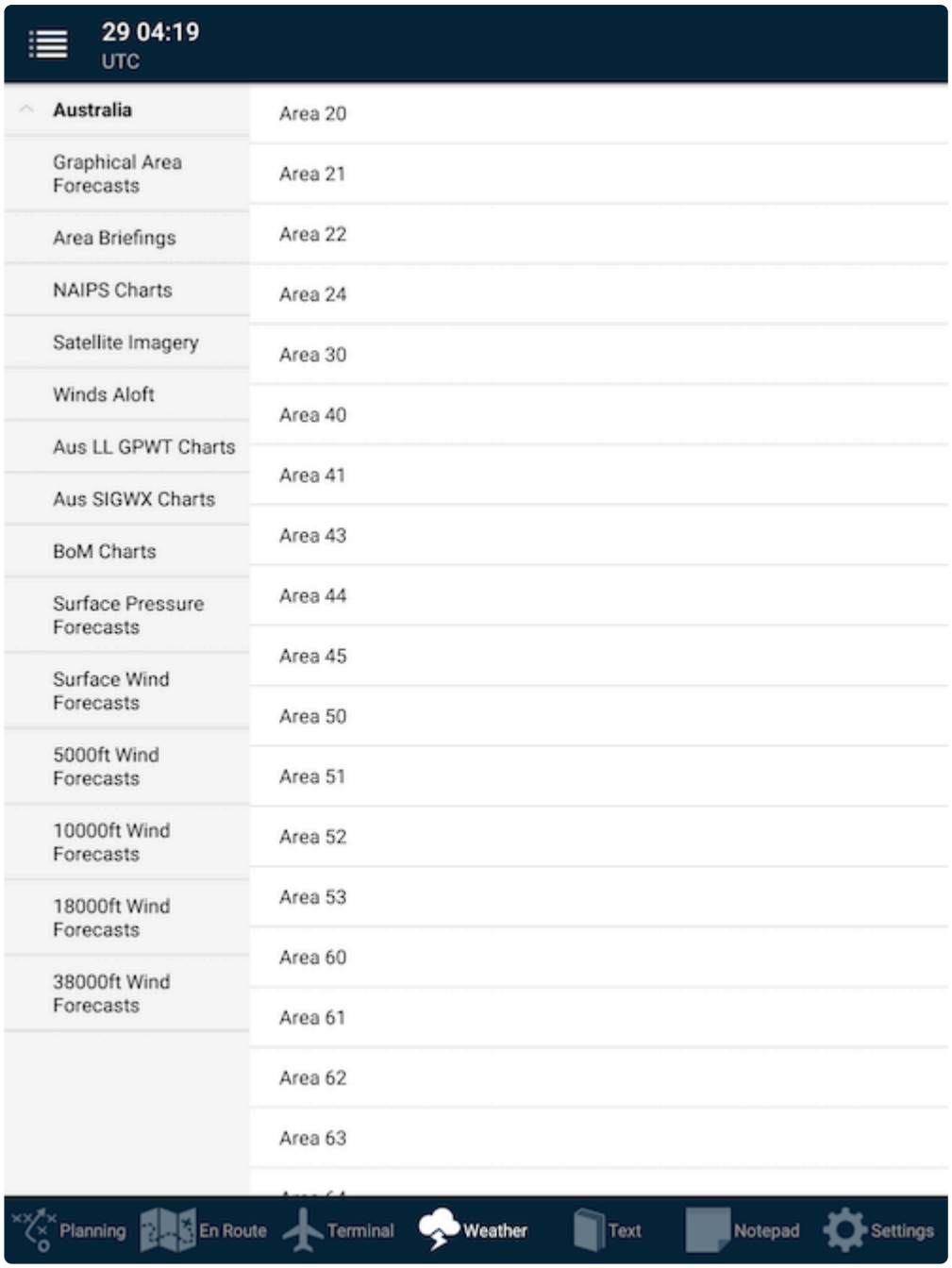
Tapping on the map within a region results in two different outcomes; depending on which mode you are currently operating in:

- Overview Mode (i.e. map zoomed out to view most of Australia)
    - Tap within a forecast region to view the original Graphical Area Forecast file exactly as supplied by the Bureau of Meteorology.
    - You can pan around this document, and pinch to zoom.
    - Tap the Close button to go back to the map.
- Interactive Mode (i.e. zoomed in until the individual weather subdivisions appear)
    - Tap within a division region (for example, Area ‘A’) to view a pop-up containing the text pertaining to that area only.
    - If you’ve tapped within a subdivision (for example, Area ‘A1’), any reference(s) to A1 within the text are highlighted.
    - AvPlan EFB extracts data from the text and depicts them on the map. For example, if the text references an individual airport/waypoint, or if a line between various airports/waypoints is referenced, they will automatically be depicted on the map so you don’t have to go searching for them.
    - Any current AIRMETs will also be depicted on the map as a purple shape. If you tap within the AIRMET, the AIRMET text will be appended at the bottom of the pop-up window’s list.

In both modes, you can select between the first forecast period and the second by tapping the *0-6 HR* or *6-12 HR* buttons.

7.1.2. Area briefings

Area Briefings are selected and downloaded here.



Tap on an area to download the latest briefing.

GAFs and GPWT charts are included in the Area Briefing. Scroll down to the very bottom of the briefing to view them.

7.1.3. Grid point wind and temperature charts

When the Aus LL GPWT option is selected, thumbnails of all available GPWT charts are displayed in a

grid view, grouped in the validity times. Tap on a thumbnail to view a chart.

GPWTs outline wind and temperature profiles for a three-hour period, from the Surface to 14,000 feet. Your flight plan route is overlaid as a red line on the charts, so you can visualise which grids your planned track passes through.

Each grid square contains three columns of data:

- Left column: Wind direction in two figures, rounded to the nearest 10° (e.g. 270° is displayed as 27, 090° is displayed as 09, and so forth)
- Centre column: Wind velocity in three figures
- Right column: Temperature (red for positive temps, blue for negative)

And six rows, each one representing an altitude AMSL:

- 14,000 ft
- 10,000 ft
- 7,000 ft
- 5,000 ft
- 2,000 ft
- 1,000 ft

7.1.3.1. Wind data used in flight plans

AvPlan EFB also receives the same information seen in GPWT charts, in a database format. The winds database package is downloaded in the background and applied to the flight plan automatically when planning below 14,000 feet AMSL. Where the flight is planned above 14,000 feet, AvPlan EFB moves seamlessly to the upper level global wind model.

The wind strength/direction for a planned leg is sampled from overhead the arrival waypoint for that leg, at the cruise/passing altitude set in the flight plan and expected time of arrival.

If your planned cruise altitude sits in between levels found within the database (e.g. 4,500ft AMSL), AvPlan EFB will perform a linear interpolation between the level below to the level above for both wind velocity and direction.

8. Text

The following documentation sections are available:

- AIP
- ERSA General
- DAP General
- AIP SUP
- CAO
- CAR
- CAAP
- NZ AIP

The *Saved/Not Saved* status of each document is displayed for each document. Tap on a document and it will be downloaded and saved to the device.

To bulk-download documents, tap *Settings* > *Data Downloads* > *Other Downloads*. Scroll down to the desired documents and tap the *Download* button associated with it.

Chart Legends

Select an item from the list in this window to view the chart legend area of an available map. You can pan around and pinch-to-zoom. Tap Close in the top right-hand corner of the screen to return to the list.

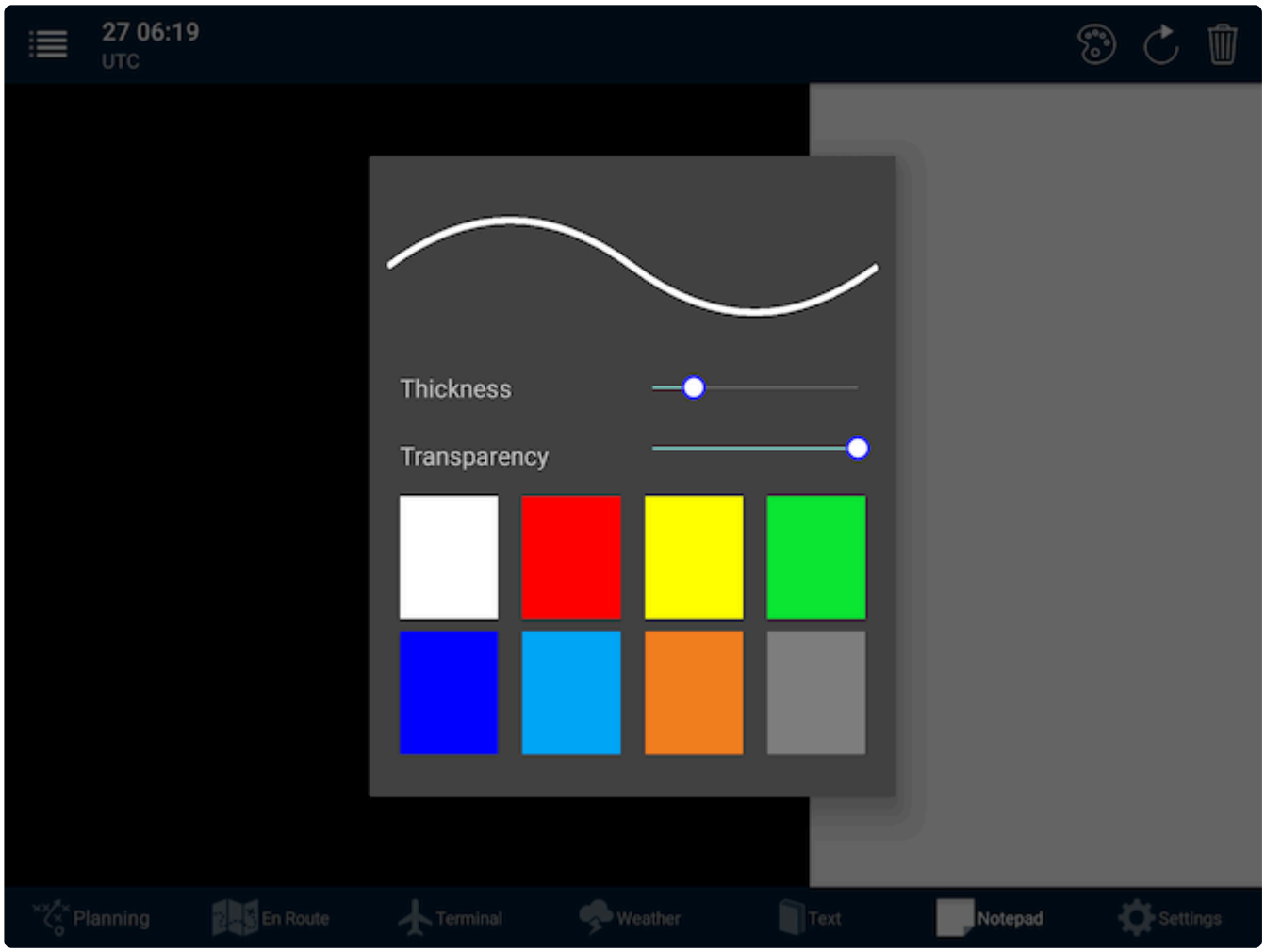
> Note: The currency date on the map legend does not indicate the actual currency of the map. It only indicates when the image for the legend was last updated. AvPlan EFB never uses mapping data past its validity date.

Documentation

This window contains a convenient shortcut to current AvPlan EFB user documentation and tutorials.

9. Notepad

The notepad allows you to take notes during or just prior to flight. You could note down the AWIS details before departure. Any notes placed here will remain until the Erase (rubbish bin) icon is pressed.



Drawing options in the Text tab

Tap the artist's palette icon (see above) to select between different pen widths and colours.

If an error is made, you can step back one stroke at a time by using the circular arrow icon.

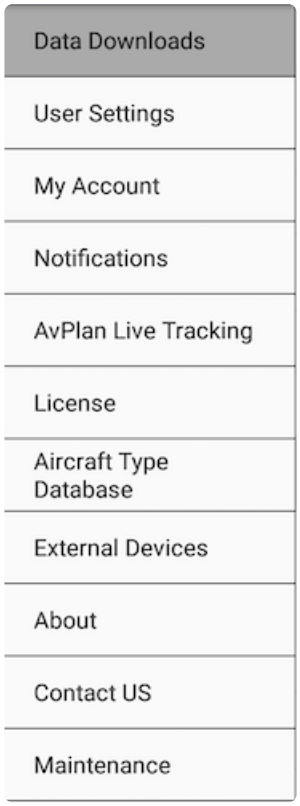
The rubbish bin icon can be used to clear the entire notepad in one sweep.

NOTE: Whilst the device is connected to data, any notes that are drawn will automatically sync to your other device(s) that are signed in to the same user.

10. Settings

The Settings tab is where AvPlan EFB options and app behaviours can be controlled.

From the main Settings menu, select the desired sub-menu:

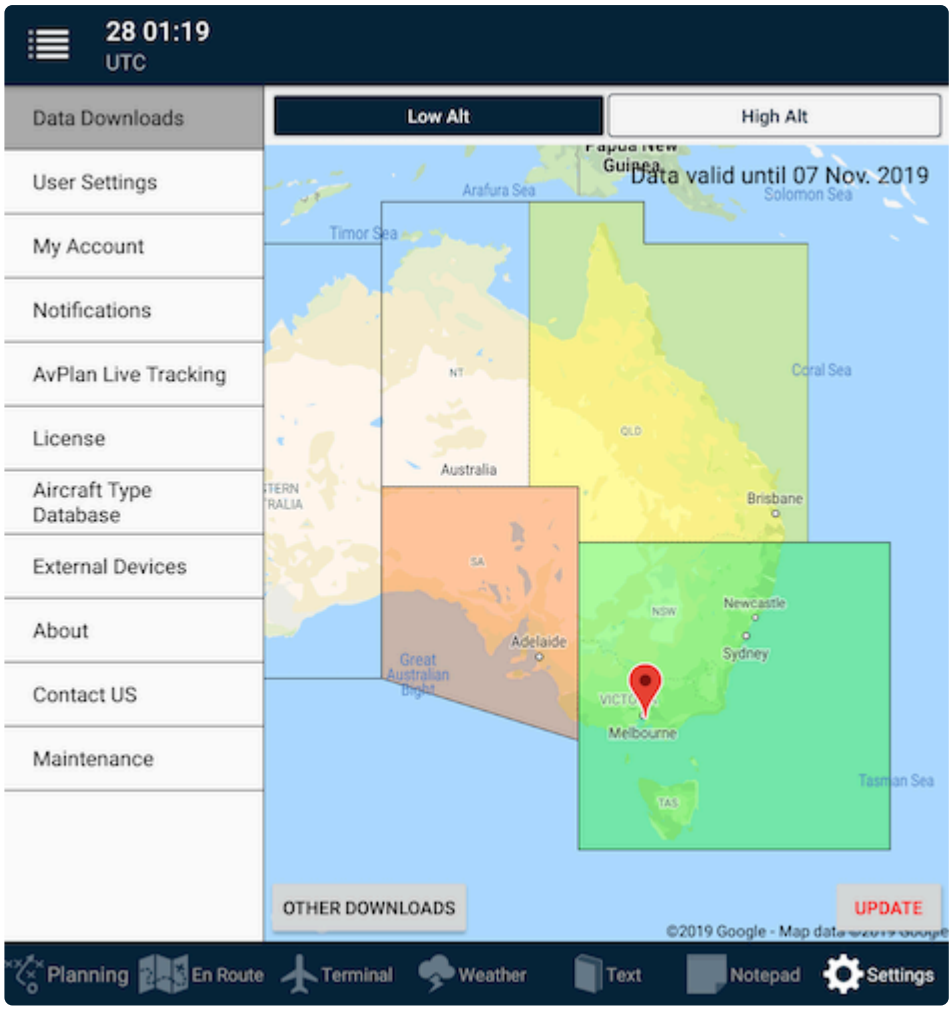


Further information:

- Data downloads
- User settings
- My account
- AvPlan Live tracking
- Maintenance

10.1. Data downloads

The Data Downloads page allows charts and documents (applicable for your subscription type[s]) to be downloaded and saved on your device ready for offline use.



Data Downloads page

Downloading a region

- To download the Mega Maps, ERSA/AIP and/or DAP pages, tap an area on the map and select the DOWNLOAD option. This will download all the required information for that area.

Depending on the current download status, the colour of the area changes (see above) for examples of each:

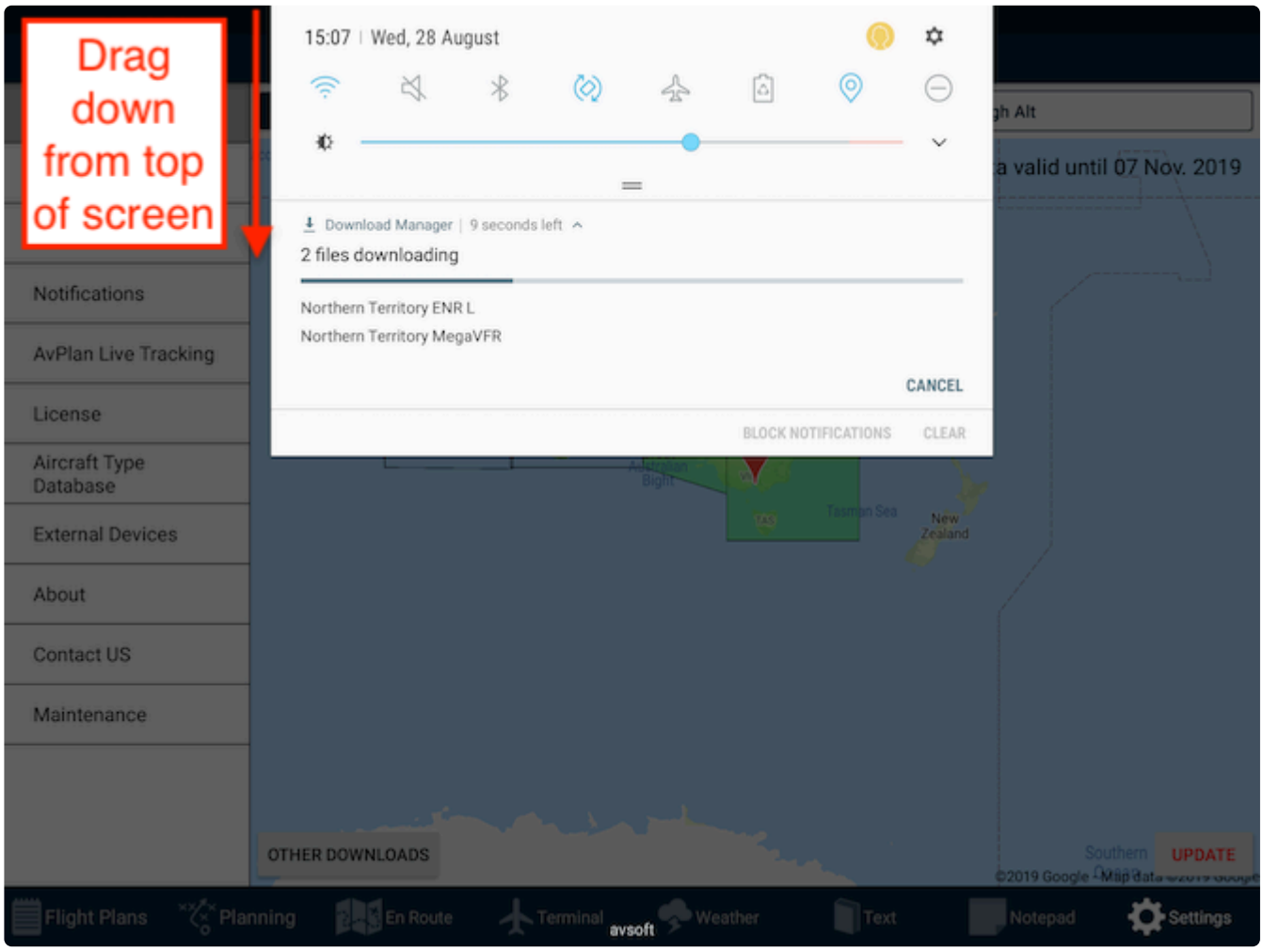
- Clear when no data has been downloaded (as per Northern Territory)
- Yellow when the area is currently being downloaded (as per Queensland)
- Orange if the area is only partially downloaded (as per South Australia)
- Green when all core information in that area has been downloaded and saved to the device (as per South East Australia).

When new data is available, the red Update button appears at the bottom-right of the screen.

- Tap this icon to download new data for all areas previously downloaded.

- To view the current downloading progress, drag down the Notification Shade from the top of the screen:

To switch to download the Enroute High map, tap the High Alt option at the top of the page, then tap the area you require.



Notification Shade

From the download notification, you can also cancel any current downloads by tapping the CANCEL button.

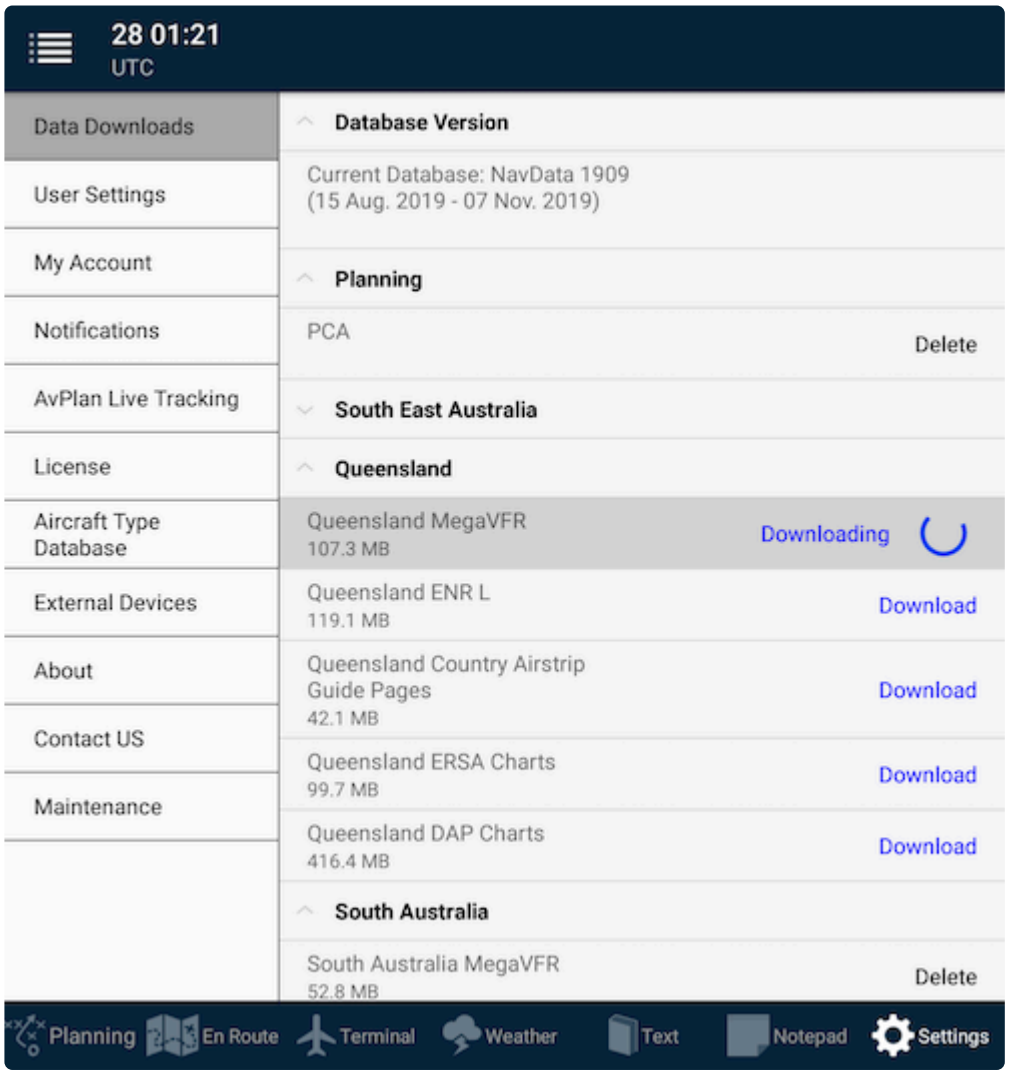
Deleting a region

To delete an already downloaded (or partially downloaded region):

- Tap the region you no longer wish to store on the device
- Select the DELETE option

Other downloads

The Other Downloads page presents all downloads for your selected data region(s) in a list form. This allows you to download individual components of the regions, should you choose to.



Other Downloads list example

The list can be expanded and collapsed by tapping on the subheading (bold text) rows.

Tap the Download button next to the option you'd like to download.

10.2. User settings

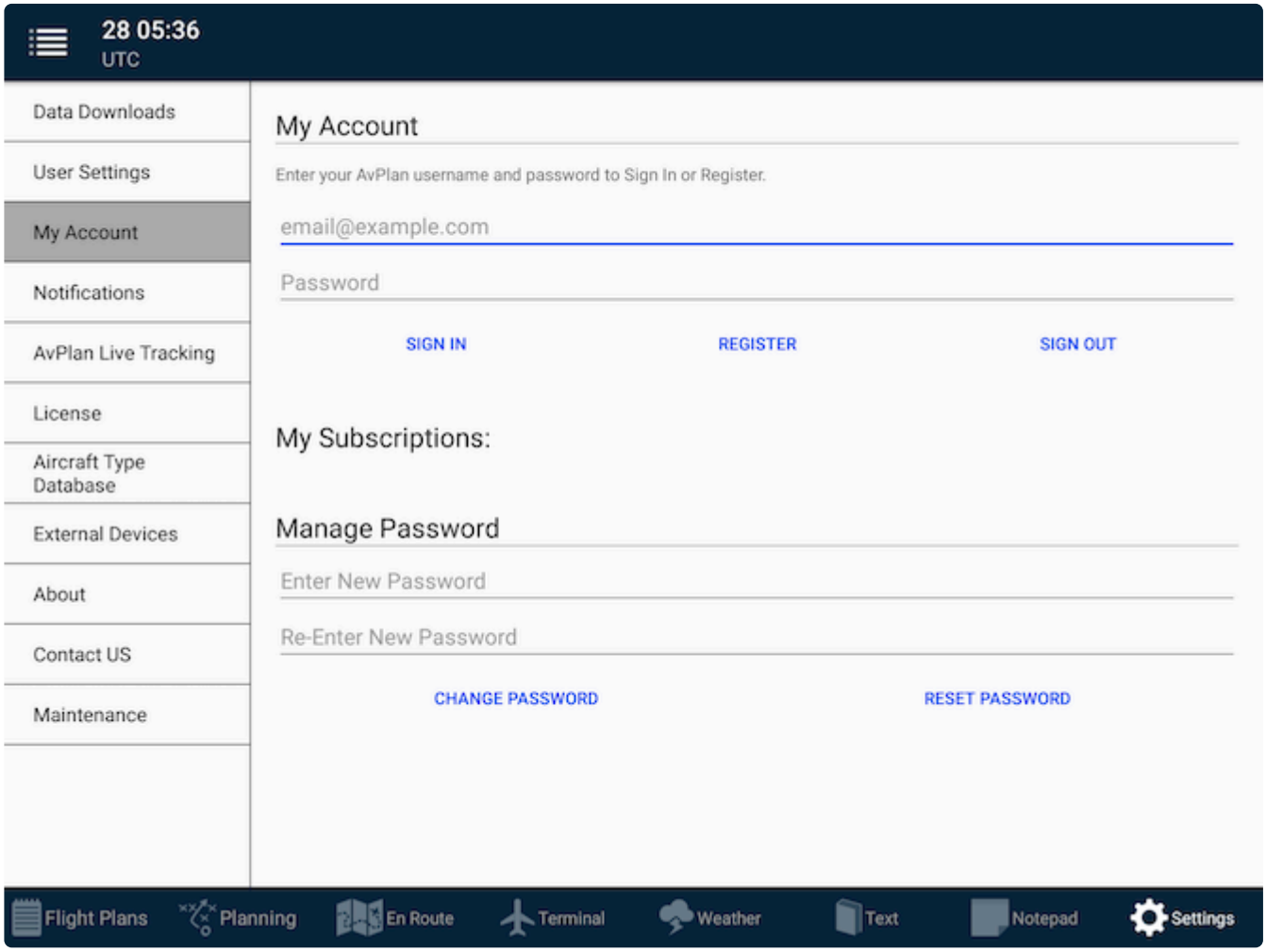
- Automatic Weather Downloads.
    - Disabling automatic weather downloads will stop AvPlan EFB autonomously downloading weather as a plan is built or during flight. When this option is set, you can download new weather by tapping the Refresh icon at the bottom of the flight plan.

- X-Plane/FSX/Elite flight simulator Interface.
    - Enabling the X-Plane interface will disable the inbuilt GPS and enable input from X-Plane. The IP address for your iPad will appear in this row.
- Waypoint auto-sequencing.
    - Enabling auto-sequencing will let the app automatically sequence to the next flight plan leg as each waypoint is passed.
- Distance Rings.
    - Allows you to manage which distance ring(s) and how they appear on the map.
        - Select any of 3 NM, 10 NM or 25 NM rings
        - The width of the distance ring as it appears on the map can be adjusted here too.
        - To change the distance ring colour, see *Application Colours* (below)
- Audible notifications and warnings
    - Select from the following options:
        - Altitude warning (verbal callout when passing below 500 feet AGL)
        - FIA frequency change
        - New track heading
        - Battery status and charge (callouts when the device is no longer receiving a charge and percentage as the battery discharges)
            - Connect your tablet to your headset either via music cable or Bluetooth.
- Default Aircraft Icon.
    - The default aircraft icon on the maps can be changed here. You may choose from a Jet, Helicopter Piston Twin or Piston Single.
- Storage Location
    - Allows the user to select between internal storage or an SD card (when installed). The main part of the application will always stay on the internal storage, however, if SD Card is selected large downloads such as maps and documents will be saved to the SD card.
- Show High Level Winds
    - Turns on winds >14,000 feet. When turned off, the app won't download upper winds.
- Full Screen Flight Plan
    - When this option is enabled, the electronic flight log becomes its own tab (rather than being a slider from the side or top/bottom of the screen). More info here.
- Flight plan syncing / Aircraft model syncing.
    - Coming soon!
- Detailed data areas
    - Select which data region(s) you wish to have displayed in the app.
- Other Settings
    - Application colours
        - Control the colours of:
            - HUD text
            - Recorded Track
            - Distance rings
            - Aircraft pointer.

- Send report
  - Coming soon!

10.3. My account

The *My Account* page allows you to link the app to the AvPlan Cloud server, which allows syncing of subscription details. You use login details to sign up with your email address and nominate a password or to sign in (if you've previously registered).



My Account page

> The same username (email address) and password used here is also used when interacting with our website. For example: For online subscription purchases and flight plan sharing to the internet via the My Account page of our website.

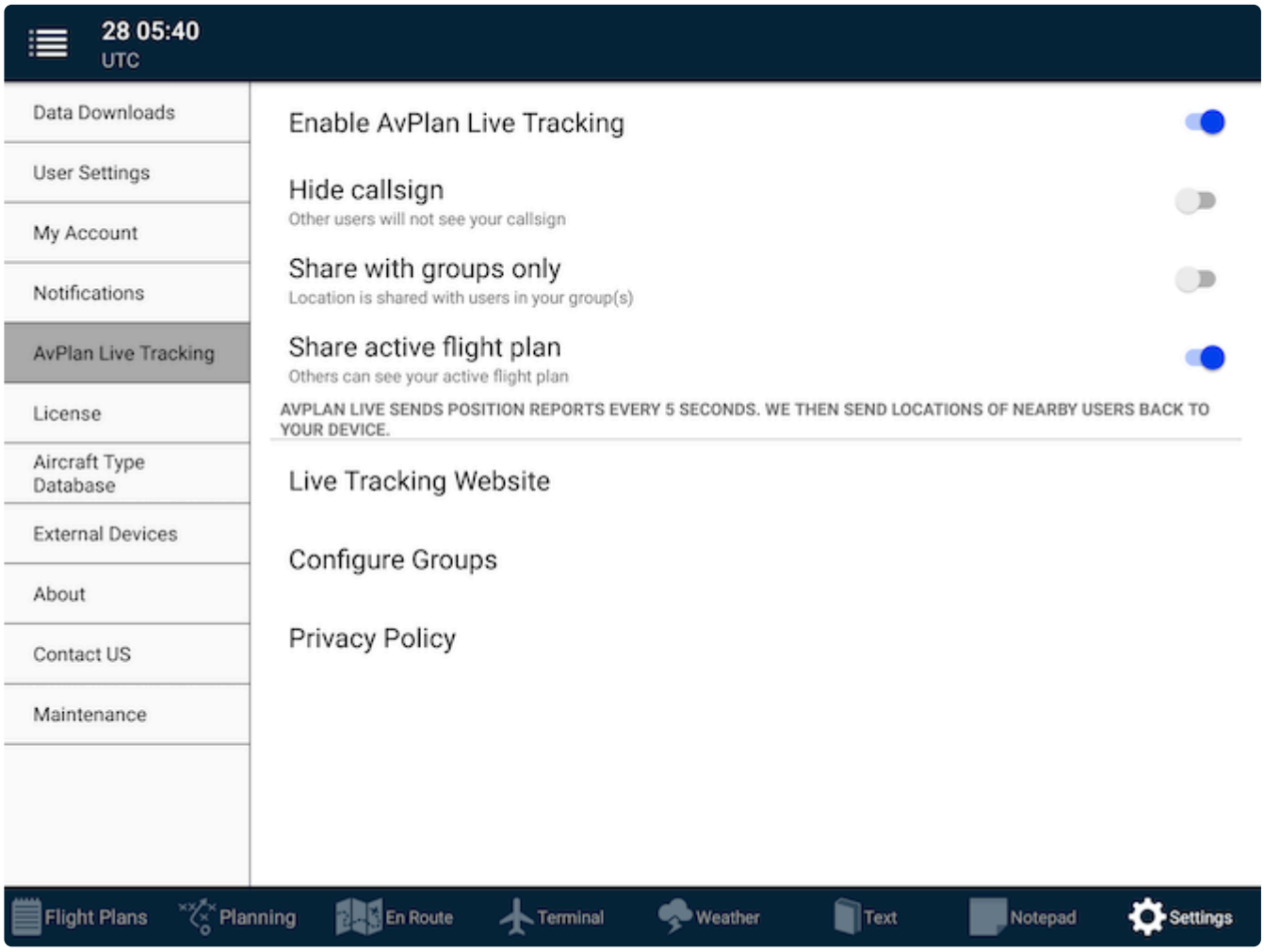
Your current subscription(s) will be displayed underneath the *My Subscriptions* text.

This page also allows you to manage your password by changing or resetting a forgotten password.

10.4. AvPlan Live tracking

AvPlan Live is a feature included with all subscription levels. When the feature is active and combined with a data connection, AvPlan Live provides:

- Live traffic from other AvPlan EFB users displayed on your EnRoute pane (updated every 8-10 seconds)
- Live flight progress sharing to a website so friends and loved ones can follow along using a web browser
- Create and send a special link to friends or loved ones so they can view your aircraft position any time you're in the air



AvPlan Live settings

These settings allow you to control how much information about your flight is shared with other AvPlan EFB users.

- If you only wish to share your traffic position, tick *Hide Callsign* and untick *Share active flight plan*.

    - Other AvPlan EFB users will then only see a traffic target with height and groundspeed figures.
- Advantages of sharing your details include:
    - The ability for others to contact you over the radio directly if they wish to ask you a question or let you know they're in the vicinity
    - The ability to see where you're heading, and possibly whether you'll be in conflict at some stage in the flight

10.5. Maintenance

Use these options to clean up the stored data:

Delete old data	Deletes any maps or documents that are out of validity date
Re-download NavData	Deletes and refreshes the downloaded navdata if you're experiencing an issue
Delete all forecasts	Deletes all downloaded and stored weather forecasts
Delete all track data	Removes all stored flown tracks from the devices' storage

Use these options with caution.

11. Basic flight planning

Begin a new flight plan

Tap the *New Plan* button from the Stored Plans list.

Add waypoints

Add at least two waypoints to create a leg in a single-stage flight plan. Add a third waypoint to create a second leg, and so forth.

Waypoints can be added in a number of different ways:

- You can add waypoints using the *Add Waypoint* icon (+) icon on the top right of the flight plan table). Waypoints can be searched using the identifier or full name.
- Tap on the desired waypoint to add it to your flight plan.
- Using the Nearest Items view, tap on a map close to the waypoint and press (+) on the row, corresponding to the waypoint to be added.
- Typing the waypoint identifiers in order in the Quick Plan Entry field, then tap the Return key on the keyboard

Set up aircraft details

- Select the Aircraft icon at the bottom of the flight plan table. Enter the details. These will be saved and used in future flight plans you create.
  Weather information for your plan is automatically downloaded and winds applied to your plan as it is created.
- To refresh forecasts select the Refresh icon at the bottom of the flight plan. When you don't have internet access, winds can be manually entered for each leg when the plan is in Edit mode.
  Winds are downloaded and are valid at the ETA for that track point, or two hours from the current time if no planned ETD has yet been set for the plan.

Entering a departure time

- To set an estimated departure time for your flight, select the green field marked ETD. This must be in the format HHMM or DDHHMM (see next point below regarding DTG).
- As a handy shortcut, if HHMM (i.e. just the time) is entered, AvPlan EFB will assume today's date (or tomorrow's if you're departing after midnight UTC time).
- When you initially tap in the field, a flashing cursor will appear inside along with the grey text DTG.

This refers to the Date Time Group, an internationally accepted standard six figure format for representing a date and time.

Go flying!

12. Go flying!

After you've prepared your flight plan, it's time to go fly it.

- Upon starting up your engine and awaiting the temperatures and pressures to stabilize, set the app to *Fly* mode

- At the correct moment of your choosing (it may differ between VFR and IFR pilots), tap the *Departure* button along the top of the En Route tab. This will log your actual Departure time and will this time be displayed in bold within the first waypoint of your flight plan stage.

> Note: Tapping the *Departure* button will also set the plan to *Fly* mode if it hasn't already been set.

- Now your flight plan is active, and your flight plan now effectively also becomes an electronic flight log.
- You will notice a TO row entered between your previous and next waypoints within the list. This row contains live GPS derived data updated every second, and you can easily compare between planned versus actual performance. If actual en-route winds turn out to be vastly different from those predicted in the forecasts, you'll be able to spot it quickly and easily. The flight log now becomes a powerful decision-making tool.

- If you are busy during startup and taxi, and you don't get a chance to tap *Fly* or *Departure*, AvPlan EFB will do those steps for you when you climb 100 feet above and depart beyond 3 NM of your departure airport. The Departure time noted may not be quite as accurate as when the pilot taps the *Departure* button at the correct moment, but at least it will be close.
    - Note: This automatic departure feature requires the following setting within *Settings* > *User Settings* to be in place:
        - *Waypoint auto sequencing* must be ticked

- Each time you pass a waypoint within the flight plan/log, the TO field will move down the list of waypoints accordingly. When moving from one leg to the next, your Actual Time of Arrival (ATA) is logged (bold text).
- If you are unhappy with the auto-sequencing, you can use the *Previous Leg* or *Next Leg* buttons as many times as necessary to manually cycle through to the correct leg.
- Tapping the name field (large white box on left edge of flight plan table) of an airport within your flight plan is a handy shortcut to the Terminal pane information about that place.
- AvPlan EFB will automatically sense when you land. Once you've taxied back to the parking area

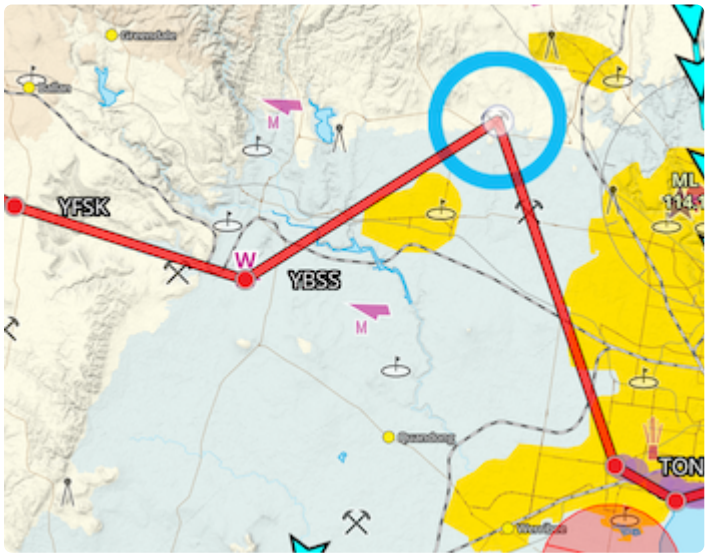
and shut off the engine, tap the *Plan* button. This will log your On Blocks time and cease track logging.

- Tap the < *Close Plan* button in the top-left of the flight log to place your plan back in the *Stored Plans* list.

Ultra Quick Guide

Welcome to the AvPlan EFB for Android's Ultra-Quick Guide. This is designed for users that have experience with a touchscreen environment, and/or experience using another EFB product. It is not designed to replace the User Manual.

Downloading required documents	• Tap Settings > Data Downloads. Tap on the region(s) you wish to fly in and select Download. The area(s) will turn green when the basic required documents (maps and taxi diagrams/approach plates etc) are downloaded.
Begin a New Flight Plan	• Tap NEW PLAN button at top of Flight Plan Index list or • Tap the EnRoute map to bring up the Nearest Items list. Tap the New Plan button at the bottom of the Nearest Items list.
Select a different aircraft/ callsign	• Tap the select callsign option at the bottom of the flight log.
Add waypoints to your plan	• Via the Quick Plan Entry field. or • Via the Nearest Items dialogue on the EnRoute tab.

	◦ Tap the to the right of your desired waypoint to quickly add it to your plan. ◦ If you tap on the row of the waypoint, rather than the quick add icon, select Insert from the *Waypoint Details* menu. ◦ NOTE: Essentials subscribers will need to use this method. or • Via 'rubber banding' the track line, if you already have two or more waypoints in your plan. Press and hold on the red track line until a blue halo appears around your finger:  ◦ Tap the to the right of your desired waypoint to quickly add it to your plan.
Single-tap the EnRoute map	• Brings up the Nearest Items list. This list is a search for ground-based places/ features around where you tapped. These include; airports/Heliports, Navaids, Waypoints, etc.
Double-tap the EnRoute map	• Brings up a list of airspace-related items. For example; prohibited areas, danger areas, NOTAMed airspace, etc
Going Flying	• Tap the Plan/Fly switch at the top of the flight log to switch to *Fly* mode. • Tap the DEPARTURE button at the top of the EnRoute tab to log your departure time and set your flight plan going.
Accessing Airport Details/ Documents	• Tap the airport's row in the flight log to open the Terminal tab to that place or • Tap the red waypoint dot on the EnRoute map's flight route to bring up the Waypoint Details menu

	or • Tap the EnRoute map near your place to bring up the Nearest Items list. Tap the place in the list to bring up the Waypoint Details menu.
Close Flight Plan	• Tap the Close Plan button at top of flight plan or • Tap the EnRoute map to bring up the Nearest Items list. Tap the Close Plan button at the bottom of the Nearest Items list.