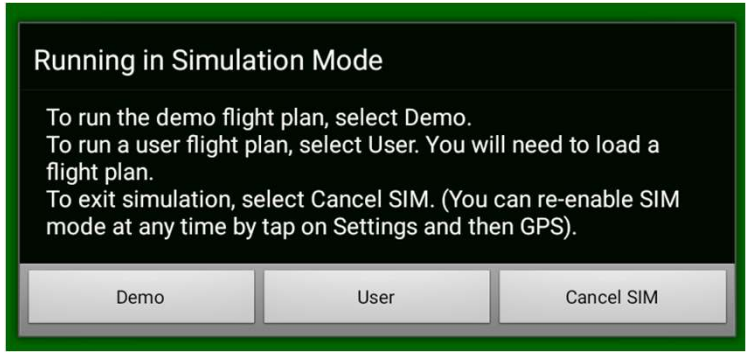
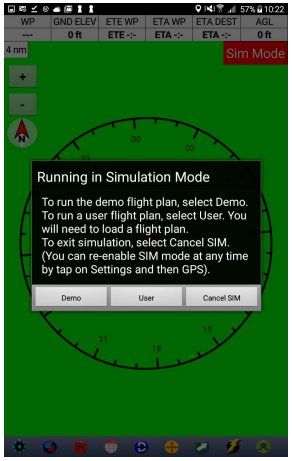
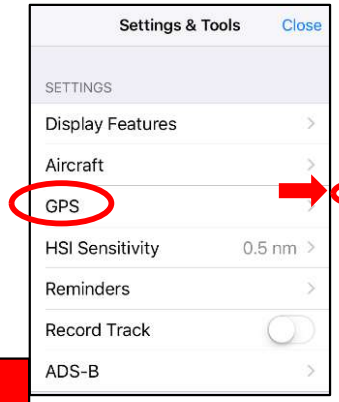


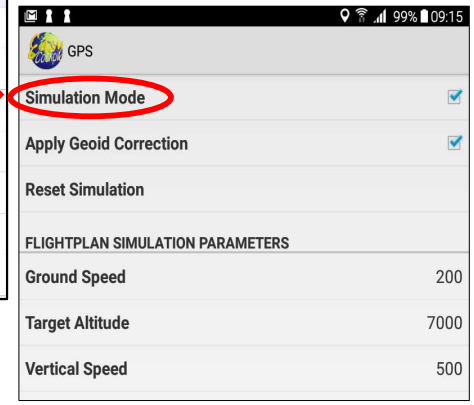


GPS : SIMULATION MODE

Flight Simulation Window opens when first using the app.
Here you have the options of flying a **Demo**nstration flight around the Cape Peninsula, or you can Fly a Simulation of any of your planned or saved routes (Flight Plan), when Simulation Mode is selected.
Or you can Cancel and access EasyCockpit right away.

To fly your own flight plan, Load that Flight plan, then under Settings – GPS – tick Simulation Mode. The app will start flying your route.
You can set the Groundspeed at which to fly (select a higher speed to get through quicker), which you can change at any time and set a Target Altitude which again you can change at any time.
And lastly a Vertical Speed at which to climb or descend to reach the target altitude.
The vertical speed is set at feet/minute.

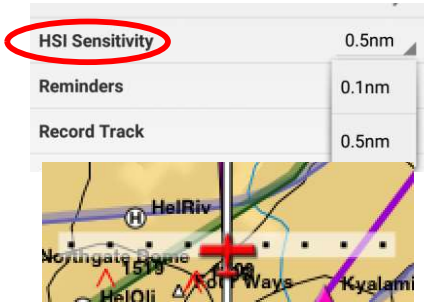




To STOP SIMULATION – go to Settings – GPS – Untick Simulation Mode

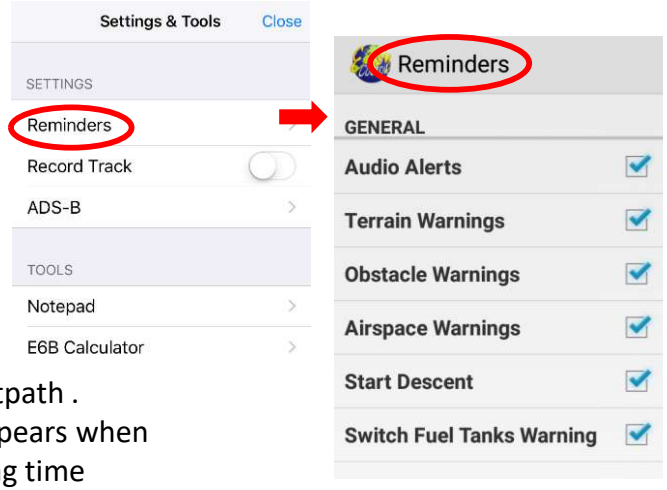
Things to remember:

-If you clear the flight plan: The simulated flight will then stop at its last position before the flight plan was cleared.
-If the flight plan is modified so that it only has 1 waypoint then the simulated flight/aircraft will stop at its last position.
-If you Load a flight plan with 2 or more waypoints: The simulated flight/aircraft will immediately jump to the starting waypoint and start flying at the selected ground speed towards the second waypoint. Its starting altitude will be the altitude of the first waypoint and it will then start climbing to the target altitude set at the vertical speed set.
-When the aircraft reaches the final waypoint of the flight plan, you can RESET SIMULATION to re-start flying the flight plan.



HSI SENSITIVITY (Horizontal Situation Indicator)
Sensitivity of the HSI needle can be set here. This shows your distance OFF TRACK. Each dot of displacement of the HSI needle represents either 0.1nm or 0.5nm per dot, left or right of the Trackline, depending on your preference. Your HSI needle must be selected under MAP OPTIONS for display.

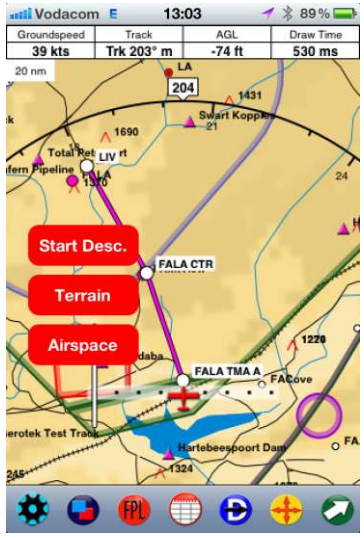
SETTINGS : REMINDERS
Used with discretion, these Reminders can be of great assistance during flight.
Bright Red Alert Boxes appear on screen with Warning Messages according to your selection.



REMINDERS : AUDIO ALERTS : Can be turned on to include Audio warnings in addition to visual Map warnings. Your device may be able to connect audio to your headset.

REMINDERS : TERRAIN WARNINGS : These warnings will appear and be heard (if Audio Alerts are on) when the aircraft approaches high terrain. Terrain elevation is checked 20º either side of the aircraft and triggers the Alert 2 minutes flying time ahead based on current ground speed and if the height between the aircraft and the top of the terrain is 500ft or less.

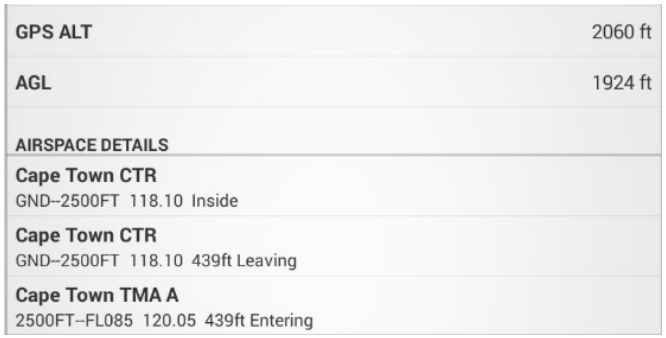
REMINDERS : OBSTACLE WARNINGS : An alert box pops up when obstacles are coming up on the flightpath . Only man-made obstacles higher than 200ft are included in EasyCockpit/EasyPlan data. The warning appears when approaching an obstacle **20º** on either side of the aircraft, when the obstacle is less than 2 minutes flying time Ahead based on current ground speed, and when the height between the aircraft and the top of the obstacle is 500ft or less.



This symbol displays the obstacles on the screen

Please note: The obstacles database at this stage is mainly for South Africa, but does include other Southern African Obstacles that we have been made aware of. Information is updated when updates are available but there is no guarantee that the details are accurate and up-to-date. All information must be used with caution.

REMINDERS : AIRSPACE WARNINGS : Turn on this function in order to display an Alert when an airspace is entered Horizontally or vertically. EasyCockpit measures ***3D Vertical Navigation*** and includes airspace warnings for predicted infringement warnings.



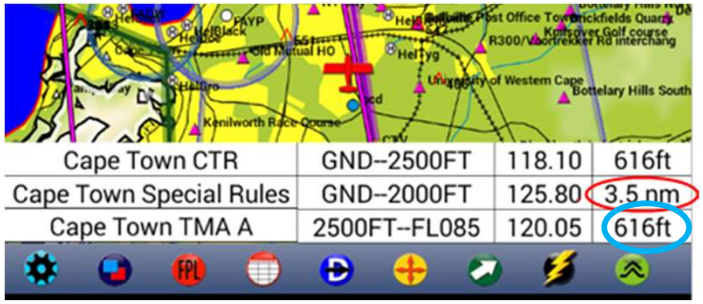
In the Flight Log dialog, EasyCockpit now lists 3 groups of airspaces:

- *Airspaces currently in*
- *Airspaces that will be left within the next minute*
- *Airspaces that will be entered within the next minute*

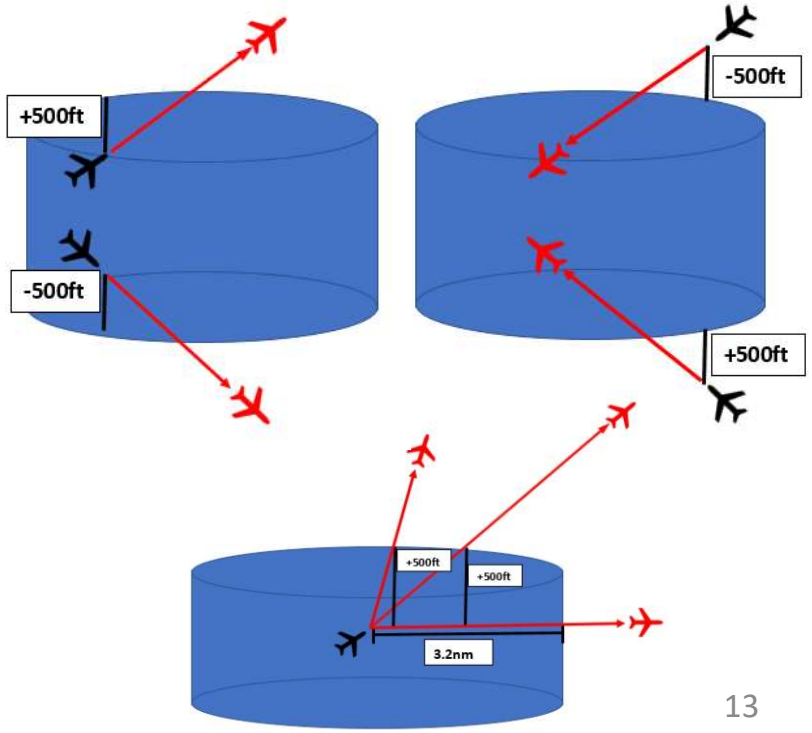
3D Vertical Navigation and Airspace Infringement Warning Feature

How it works

Once a second when it receives a GPS position update, EasyCockpit checks in 3D (Latitude/Longitude/Altitude) what airspace the aircraft is in. EasyCockpit also projects where the aircraft will be in 3D (lat/lon/alt) in 1 minute time by using the GPS ground track, GPS ground speed and by differentiating the GPS altitudes between each sample, to calculate a vertical speed.



The vertical speed calculation uses a 60sec filter to filter out any GPS altitude spikes that would otherwise result in an illogical vertical speed, e.g. 8,000ft/pm because there was a single 100ft spike in GPS altitude between 2 readings. By comparing what airspaces the aircraft will be in, given the 1-minute projection ahead, EasyCockpit will work out which airspaces will be exited in the next minute and which airspaces will be entered in the next minute. This will now also include airspaces during climbs and descends, while exiting and entering vertically without crossing the airspace's horizontal boundaries. The details on exiting/entering an airspace specify whether you will be exiting/entering vertically and if so, it will display the current vertical distance from your aircraft to the vertical bounds of the airspace in feet, and if you're going to enter the airspace laterally then the distance to the horizontal boundary will show in nautical miles.

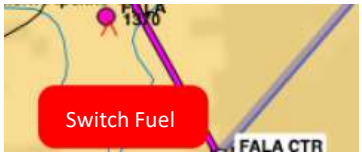


In terms of vertical entry or exit of an airspace the distance to the vertical boundary of the airspace can either be positive or negative based on whether the aircraft will cross the vertical boundary by climbing (positive) through the vertical boundary or will be descending (negative) through the vertical boundary. In the graphic examples on the right the black aircraft symbol is the aircraft's current position, and the red aircraft symbol is the aircraft's projected position in 1 minute's time.

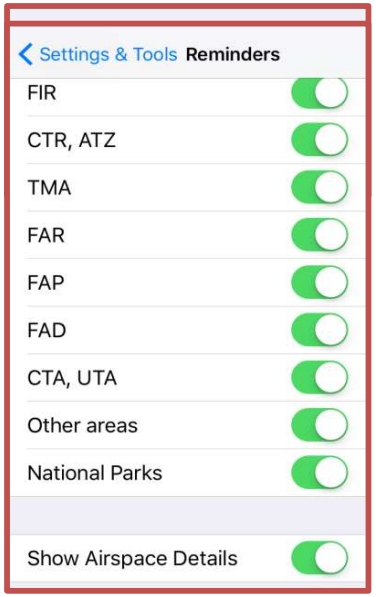
contd.

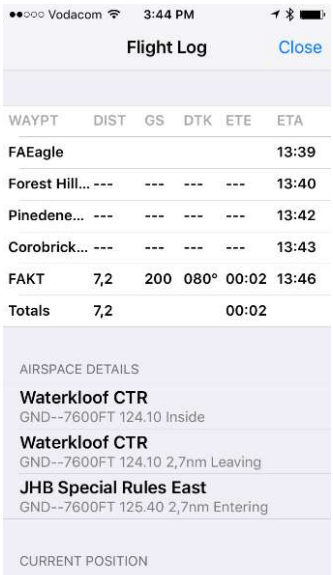
REMINDERS : START DESCENT : A reminder is triggered 1 minute before the required rate of descent will equal 500ft per minute, to arrive 1000ft above the destination airfield. The Descent speed input for the Aircraft settings, is used when performing the calculation.

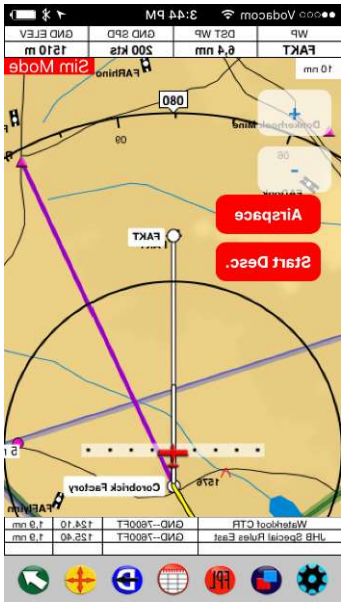
REMINDERS : SWITCH FUEL TANKS WARNING : This will activate your Aircraft setting for Switching Fuel Tanks and will prompt you accordingly. This Reminder may also be used for a general long-distance reminder such as FREDAS checks. Uncheck if this function is not required.
Ref : Settings & Tools / Aircraft settings for setting up this feature.



REMINDERS: AIRSPACES : Select the relevant Airspace Boxes for Airspace Warnings. All selected Airspaces will be displayed on the Map View, for example Prohibited (FAP) and Danger (FAD) Areas are highlighted with a thick red line and Restricted (FAR) Areas with a blue line. **Other areas** show the Special Rules areas and routings in **Purple,** so don't disable. In EasyCockpit *Map view*, tap on an airspace boundary line to view more information. Airspace Alerts and details show at the bottom of the screen in *Map View* as well as in the **FlightLog** View.







TIP	To avoid unnecessary Alerts, uncheck Airspaces that are well above your cruise level.