

IN ENGLISH, PLEASE



L'anglais pour voler
disponible sur



par **DOMINIQUE DEFOSSEZ**
Author of *L'anglais pour voler*
• www.anglais-pour-voler.com

Follow Eliot on Facebook
for more practice between
two magazine issues.



Now on the Appstore, the collection of
"In English, please" articles from June 2007 to July 2015,
with audio recordings when available.

GARMIN AERA 660

This month « In English, please » borrows from *Flyer*, "the brightest general aviation title in the UK", an article written by Ian Seager who evaluates Garmin's latest aviation-specific portable GPS, the Aera 660, and compares its features with those offered by a combination tablet+app.

Not that long ago, the portable GPS market was where much of GA's innovation took place. In a few short years we went from bulky, bricklike boxes that had the capacity to track half a satellite for a minute or so every hour, to touchscreen colour units that never lost the signal and that brought a host of new features.

Then along came the iPad. It seemed the era of the bespoke portable GPS was coming to an end, the existing population of portable GPSs made extinct by the meteoric arrival of the iPad from Cupertino and the various apps it spawned all over the world. As the focus turned away from hardware and towards software, a collection of apps making planning, flying, administering and logging flights evolved. And then Garmin announced the area 660.

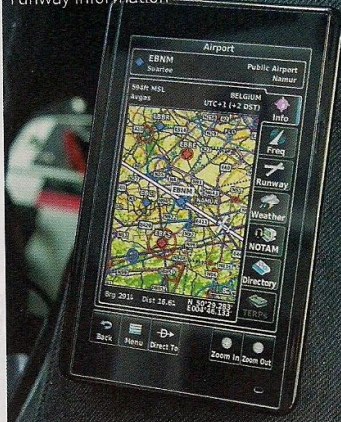
There's not much that takes us by surprise, but this did. Could a relatively small, bespoke aviation GPS costing the best part of £800 really compete with the best that

the iPad and Android tablets could offer? The 660 arrived in the office just before a couple of long flights, so we took it along for the best part of 12 hours' flying to find out... Within a couple of mm the aera 660 is pretty much the same size as the 550 but Garmin has managed to grow the screen by about 30%. The screen is bright, sharp, has good contrast and, in our experience at least, is easily readable in bright sunshine. Despite that screen being power hungry, the battery was good for nearly four hours between charges. If you are familiar with either the 550 series or 795 you'll be at home with the 660 menus and structures. The base map out of the box is Garmin's vector charts with varying levels of detail and airspace – personally, I prefer vector maps as they're well designed, they're better for scaling, changing orientation, keeping up to date and displaying relevant features, but I know some still love raster charts (digital representations of the paper versions) and these are

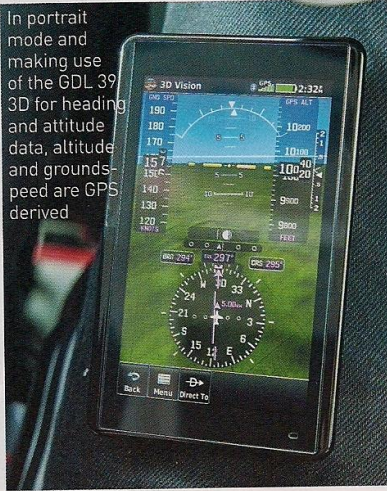
available to purchase and download from flygarmin.com – rates vary, but as an example, the NATS charts for the whole of the UK sell for \$79, France for \$90 or there's a European bundle for \$349. The 660 can be loaded with purchased, again from flyGarmin's 'flite charts', effectively digitised versions of national AIP plates, including the instrument approach plates. It's a useful backup, but in my view the charts are too small to rely on as your primary reference during an instrument approach.

There are a couple of extra features worth mentioning. The first is that if you have (or buy for about £675) a Garmin GDL 39 3D you will be able to pick up ADSB traffic that can be displayed on the aera. The 3D version of the GDL 39 also has a built-in AHRS that uses the 660's terrain database to provide you with a miniature PFD giving a virtual AI, groundspeed, GPS-derived altitude and heading. If you have a Garmin VIRB action cam you can control that remotely from your aera, useful if it happens

It's easy to drill down for more information such as frequency and runway information



In portrait mode and making use of the GDL 39 3D for heading and attitude data, altitude and groundspeed are GPS derived



The 'Nearest Airfield' page makes it easy to get started



to be mounted externally. In flight, the Garmin proved very easy to use; the new touchscreen has capacitive rather than resistive touch like the 550, and scrolling and pinching are quick, smooth and precise. As you'd expect there are lots of options for configuring the map, including the option to have the unit in landscape or portrait mode. Our overall impression? The 660 packs pretty much all of the nav functions that you'll need in an easy to handle unit. The screen is great, it's brighter and less reflective than an iPad and when the map and traffic are shown rather than approach plates it's certainly big enough. Adding the

GDL 39 3D brings extra backup to your installed AI, and as the amount of aircraft equipped with ADSB Out increases there's useful traffic information.

Pricewise the aera is more expensive than a topoftherange tablet and a copy of one of the leading apps. If you're finding it hard to kick your addiction to digitised paper charts, the price difference gets bigger still. In a feature shootout, the aera would put up a brave fight but would ultimately lose out to the apps, so why buy one? A couple of reasons: if screen contrast and brightness are uppermost in your list of must haves, the aera wins. If you want an aviationspecific

unit that doesn't distract you with email, films and apps for almost anything else you can think of (and a lot you can't) the aera's for you. If you want connectivity with the GDL 39 3D you'll need the aera (or Garmin's own app, Garmin Pilot); if you don't want to concern yourself with tablet operating system updates and other software installs that have unintended consequences for your aviation GPS, the aera is the way to go, and of course if space is at a premium the aera comes in a nice package that's not going to get in the way in even the smallest of cockpits. ●

Texte et photos : Flyer - Adaptation : Dominique Defossez.



Garmin's vector mapping is good, detail level can be easily changed, as can the displayed datafields

ADSB derived traffic from the GDL 39 can be shown on the map page and on the 660's dedicated page. As you can see, airspace warnings remain active



'Safe taxi' makes it much easier to find your way around when on the ground



VERDICT

PROS

Great screen
Great battery life
Interfaces with GDL 39 3D

CONS

More expensive than tablet + app
No ability to file flightplans
No ability to download Notam



Garmin aera 660, £769 - www.garmin.com

Garmin vocabulary

BULKY..... big, cumbersome
A HOST OF..... a multitude of
BESPOKE..... custom-made
SPAWNED..... gave birth to, generated
TO SCROLL..... to move up or down the screen
TO PINCH..... to squeeze with fingers
A BACKUP SYSTEM..... a standby system
A SHOOT-OUT..... a contest

A RASTER CHART is a direct copy or scan of an existing paper chart, displayed electronically. It looks identical to - and provides no more information than - a paper chart.

A VECTOR CHART is created by software. It is the graphic representation of a database. The look is different from a paper chart but it can display more information, depending on what has been stored in the database.

A RESISTIVE TOUCHSCREEN responds to the pressure applied to the screen by a finger, gloved or not, a stylus or anything that creates enough pressure.

A CAPACITIVE TOUCHSCREEN makes use of the electrical properties of the human body. It reacts when it comes in contact with a conductive object, such as an ungloved finger or a capacitive stylus.