



## PMDG UNIVERSAL FLIGHT TABLET



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## A TABLET WITH SOME APPS:

The first thing to understand about our Universal Flight Tablet is that it is not “just an EFB” it is an ecosystem designed to gather many aircraft and simming-related functions into a usable space to make your simming experience simpler and more enjoyable.

Much like a smartphone or a tablet used in the real world, we designed the Universal Flight Tablet to serve as a garden where various apps will live and operate. Most of these apps will come from us here at PMDG. Still, we have designed the technology in such a way that partnered PMDG developers may also be able to have their applications and functions represented in a manner that fits logically and aesthetically.

In the beginning, PMDG developed applications such as an EFB application and a Performance calculator are included. Also included in the initial batch of PMDG-designed apps are SimBrief integration and Navigraph charting features for customers with Navigraph accounts. New features to control the aircraft options and PMDG functions will follow in short order, similar to how they are already controlled via the FMS.

In the future, our Global Flight Operations project will interface with the user via an application on the tablet. Of course, the applications can share information, just as the tablet shares information with the aircraft systems.

One of the project's guiding principles was that the tablet should be 100% optional. We know many users have their own solutions for the offered functionality. That is why you can remove the tablet, and functionality like aircraft configuration is not done via the tablet (instead, that is done via the CDU).

The tablet is available in all the PMDG 737 models and will be present upon delivery of the PMDG 777. It is fully compatible with all 3<sup>rd</sup> party liveries (assuming they are done to the published standards).

## FUTURE

This current version is by no means the end of the development. This is just the beginning. The tablet is a framework that will include more features as time progresses. We will be listening to your suggestions and working to integrate the ones we like during future updates. You will see updates regularly.

## SHOWING AND HIDING THE TABLET

When the tablet is not visible, you can activate it in our 737's using the CDU menu via PMDG SETUP > AIRCRAFT > EQUIPMENT > Page 16 of 17 (OPT EQUIP 4). As with all settings, this is stored per aircraft.

As with all displays, the EFB can be undocked by clicking on it with the Right ALT button pressed. You must use the home button (on the tablet bezel) to return to the desktop.



## USE OF EXTERNAL SERVICES

To fully experience the tablet's valuable flight planning and navigation features, it is important to have access to good data. In the real world, well-known external providers, such as Jeppesen, provide the data. For the PMDG tablet, this data comes from Navigraph. While the tablet is perfectly functional without this outside subscription, the data provided by the simulator platform isn't sufficient to do some of the really neat chart and navigation features of the tablet. You can find Navigraph at [www.navigraph.com](http://www.navigraph.com) and SimBrief at [www.simbrief.com](http://www.simbrief.com). We recommend their services highly.

## FLIGHT PLANNING

In their own words: *"The SimBrief Dispatch System is the web's most comprehensive FREE virtual flight planning service. Features include detailed fuel calculations for over 120 aircraft types, an extensive route database, real-world weather forecasts, current NOTAMs, ETOPS planning, and much more!"* We consider it a nearly indispensable service for our customers. The tablet gets your flightplan directly from the SimBrief server.

## CHARTS

The PMDG tablet can load the charts provided by Navigraph. These charts are from Jeppesen, and almost all charts from their library are available and updated monthly. To see them, you will need a paid account at Navigraph. When the charts are geo-referenced (not all are), it is possible to superimpose your location on the charts.

## NAVIGATION DATA

We strongly recommend using the Navdata services of Navigraph to keep the navigation data in your simulator up to date. If you connect to services like VatSim, IVAO, or PilotEdge, having the latest navigation data on your system is very important.

## KNOWN LIMITATIONS AND ISSUES

There are a few issues that you might encounter—some because of simulator limitations, some by design, and some we have not included.

- The brightness slider does not affect the undocked gauge. This limitation of the simulator platform is unlikely to be resolved.
- The undocked gauge only shows the display, not the full tablet, so the HOME button is unavailable. Pressing HOME in the VC will still work, however.
- You can choose to have the tablet displayed or not, as is your preference. The usual PMDG Options/Functions remain available via the FMS menus and will eventually be in a tablet app.
- Some users may experience a bit of lag when the tablet is first opened. This lag comes from loading the chart tiles and is just temporary.
- The runway length calculations are based on the simulator's data, which is occasionally incomplete or inaccurate.
- Navigraph has recently published a solution for updating navigation data on Xbox, and PMDG is integrating this solution.

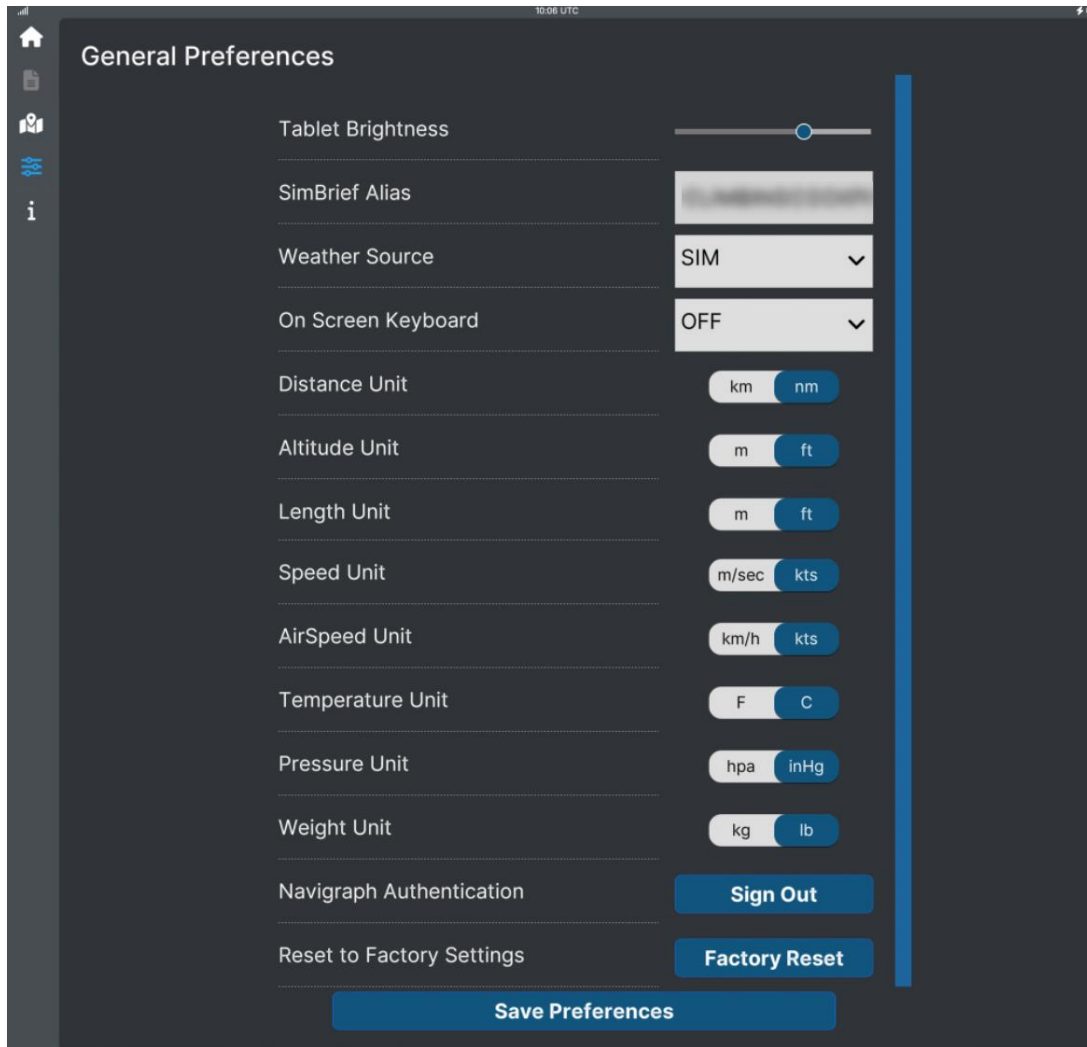
If you have any problem with the tablet or want to ask a question (or even make a suggestion!), please use our support forum. <https://forum.pmdg.com/forum/main-forum/pmdg-tablet>

If you prefer support via e-mail, please use <https://support.pmdg.com/Main/>

We are unable to do support on other forums or platforms.

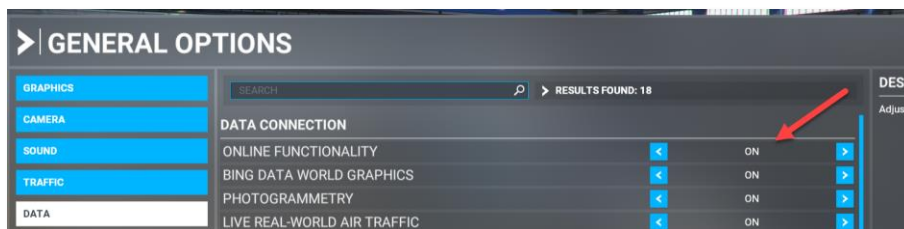
## SETUP

After these files are installed, the best thing to do is to check the General Preferences (found in the EFB application) and see if all is set to your liking. Not only do you set the Units, but also your SimBrief Alias here. If you have a Navigraph account, you can authenticate your account to the tablet.



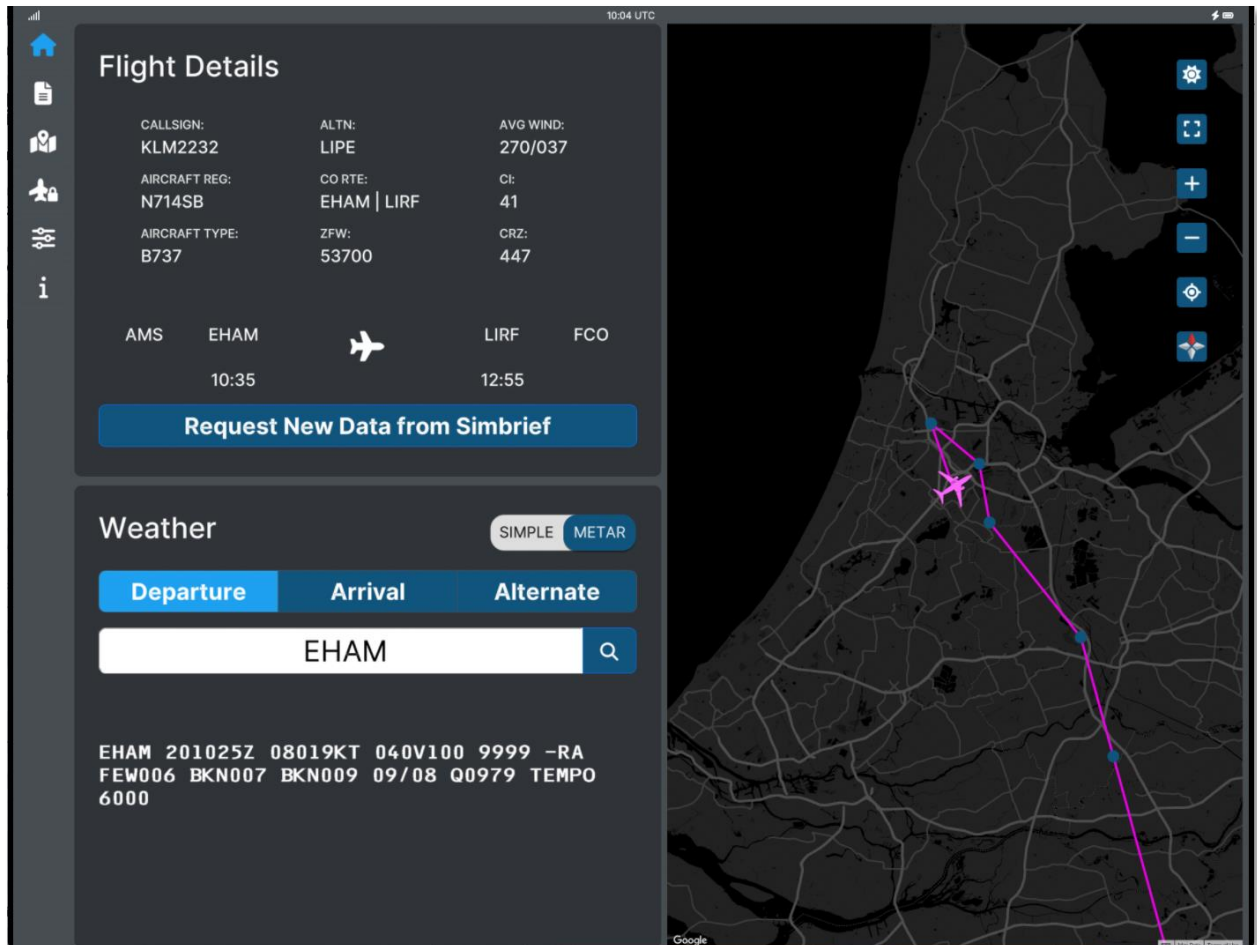
A factory reset might solve things if anything in the tablet fails to work (certainly after an update).

Please note that Online Functionality in the simulator must be activated!



## THE FLIGHT PLAN AND CHARTS APPLICATION

This application handles your flight plan and the display of aviation charts. **After you open the application, we strongly advise you to load a SimBrief flight plan, as many functions will be unlocked with a valid flight plan.** After that is done, you will be presented with a screen like this:



The icons on the right side can be used to control the display of the map, and all have a help text that will display when your mouse cursor is on it. Left click and hold lets you drag the map around.

The locations for the weather are preloaded from the flight plan (but you can insert an ICAO code), and the weather can be displayed as a METAR or in a simplified format.



Let's look at the map. The control icons should be clear; just a comment on the last one. This toggles the display from the 'standard' topographical map (from Google, in this case) to one of four Jeppesen charts. Please note that a Navigraph chart account is required for this!

Zooming out (depending on your internet connection, you might see some delay as the tiles are loaded), you can see your whole route and the waypoints of the flight plan.

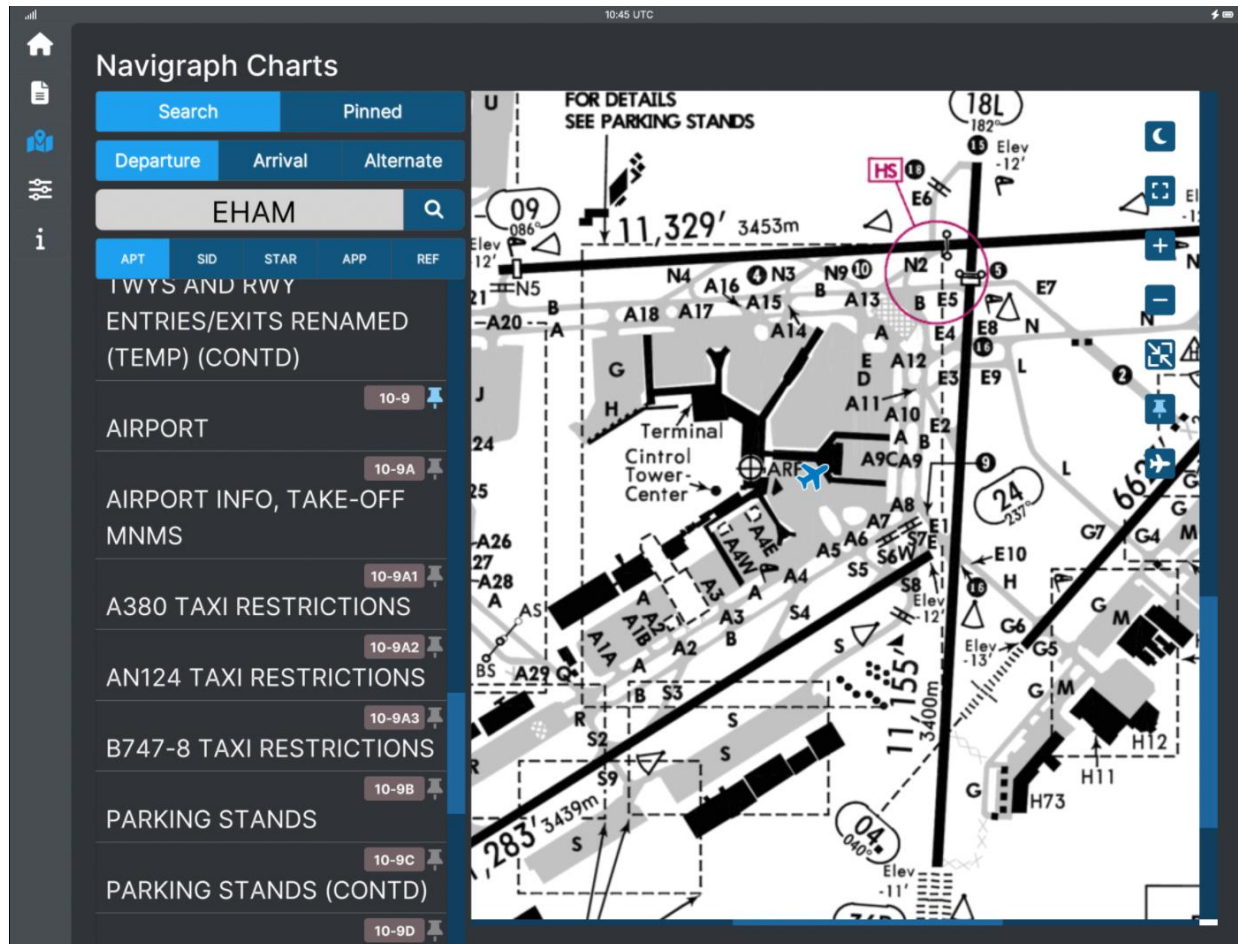
You can choose between a world map (shown here), a high and low IFR chart, and a VFR chart. The aircraft will be shown on the chart. This is a very useful chart for a quick overview of the airport, your location, and the taxiway layout. Further details on the taxiways can be found in the airport charts.

The second icon on the left side of the display opens the complete flight plan. You can scroll and zoom. The zoom option is useful for the weather charts! Of course, right-click and hold allow you to move around as well.



## CHARTS

The third icon opens the charts menu. As before the Departure, Arrival and Alternate are prefilled; you can call up those charts by clicking the icons. Inserting an ICAO code and searching is always an option.



The small aircraft icon toggles the aircraft location on the chart between aircraft/dot and off. The chart will be remembered as a favorite when you click the pin icon.

Note that not all charts are geo-referenced, unfortunately. When they are not, there is no display of the aircraft symbol on the map possible. This is, for example, the case with parking stand charts.

## LITTLE NAV MAP

You use that fantastic freeware tool? It has a Flight Plan export to SimBrief option that will make the flight plan usable.

### PERFORMANCE TOOL

The tablet's second application currently (!) is a performance calculator. It will take information from weather servers, flight plans, and aircraft and calculate departure and landing data. Before the calculations can be done, all fields will need to be filled.

### TAKE OFF

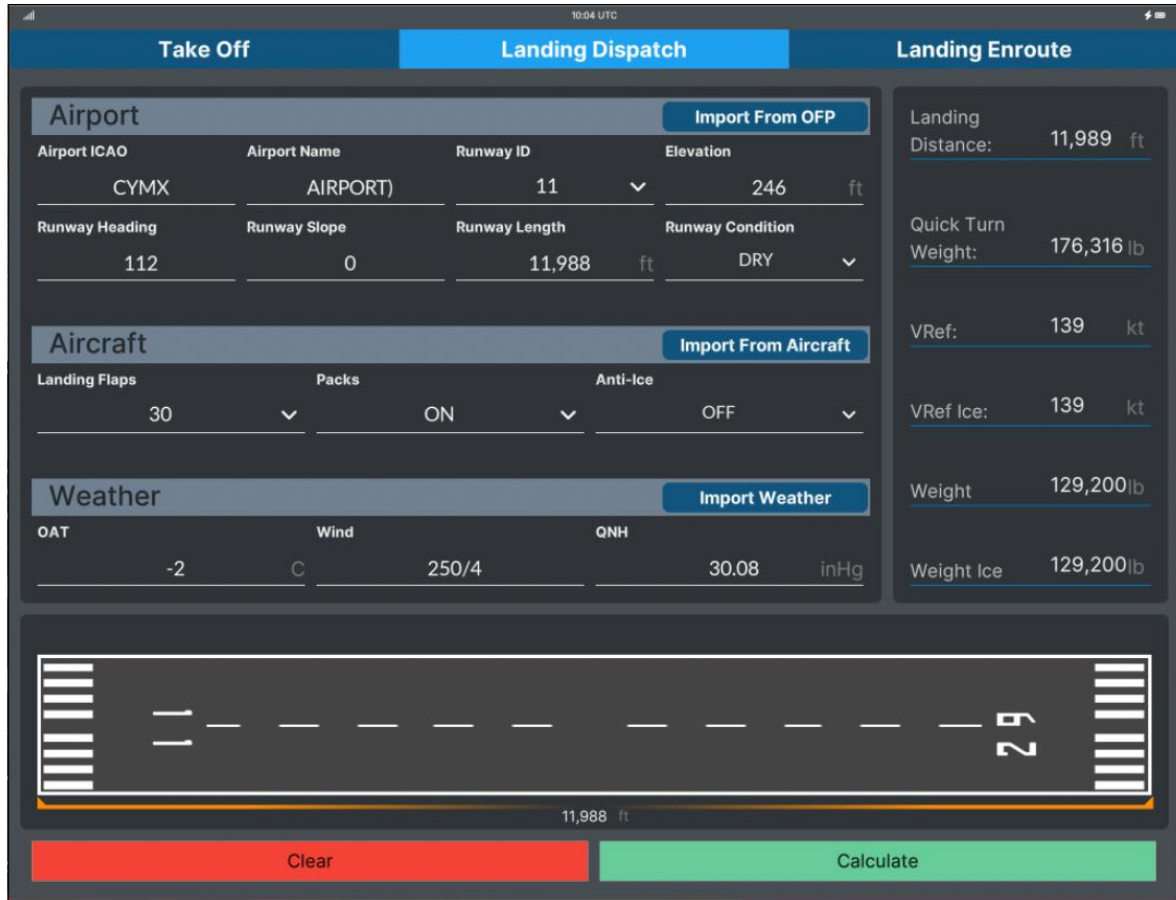


The screenshot shows the 'Take Off' performance calculator interface. It is divided into three main sections: 'Airport', 'Aircraft', and 'Weather'. The 'Airport' section includes fields for Airport ICAO (EBBR), Airport Name (BRUSSELS AIRPORT), Runway ID (07L), Elevation (131 ft), Runway Heading (63), Runway Slope (0), Runway Length (11,936 ft), and Runway Condition (DRY). The 'Aircraft' section includes Take Off Flaps (OPTIMUM), Rating (OPTIMUM), Anti-Ice (OFF), Weight (144,097 lb), CG (22.33), and Packs (ON). The 'Weather' section includes OAT (10 C), Wind (070/3), and QNH (30.21 inHg). On the right side, there is a vertical list of performance parameters: Accel Height (1,500 ft), Flaps (5), N1 (89.67), RTG (TO), Sel Temp (42 C), Trim (6), V1 (134 kt), VR (137 kt), V2 (141 kt), VRef (142 kt), and Weight (144,097 lb). At the bottom, there is a visual representation of the runway with a displaced threshold of 852 ft and a total length of 11,936 ft. Below the runway diagram are 'Clear' and 'Calculate' buttons.

When the selected runway has a displaced threshold, this will be shown. If you wish to take off from a runway intersection, insert the runway length by editing the displayed Runway Length.

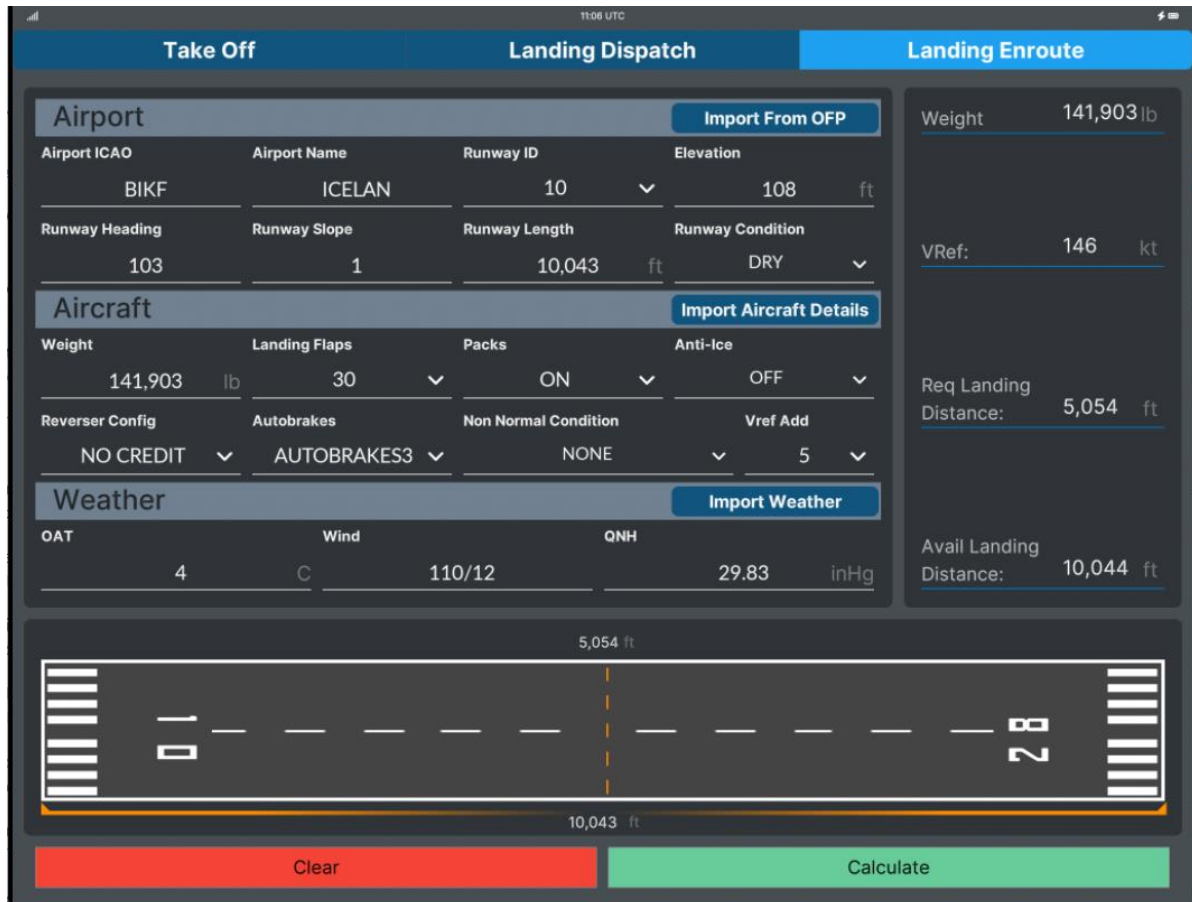
### LANDING DISPATCH


The Landing Dispatch uses the data from your flight plan and is available before take-off.



### LANDING ENROUTE

The Landing Enroute will calculate your landing weight, VRef speed, and required runway length. Note the dotted line on the runway showing the length of the runway you will need to stop.

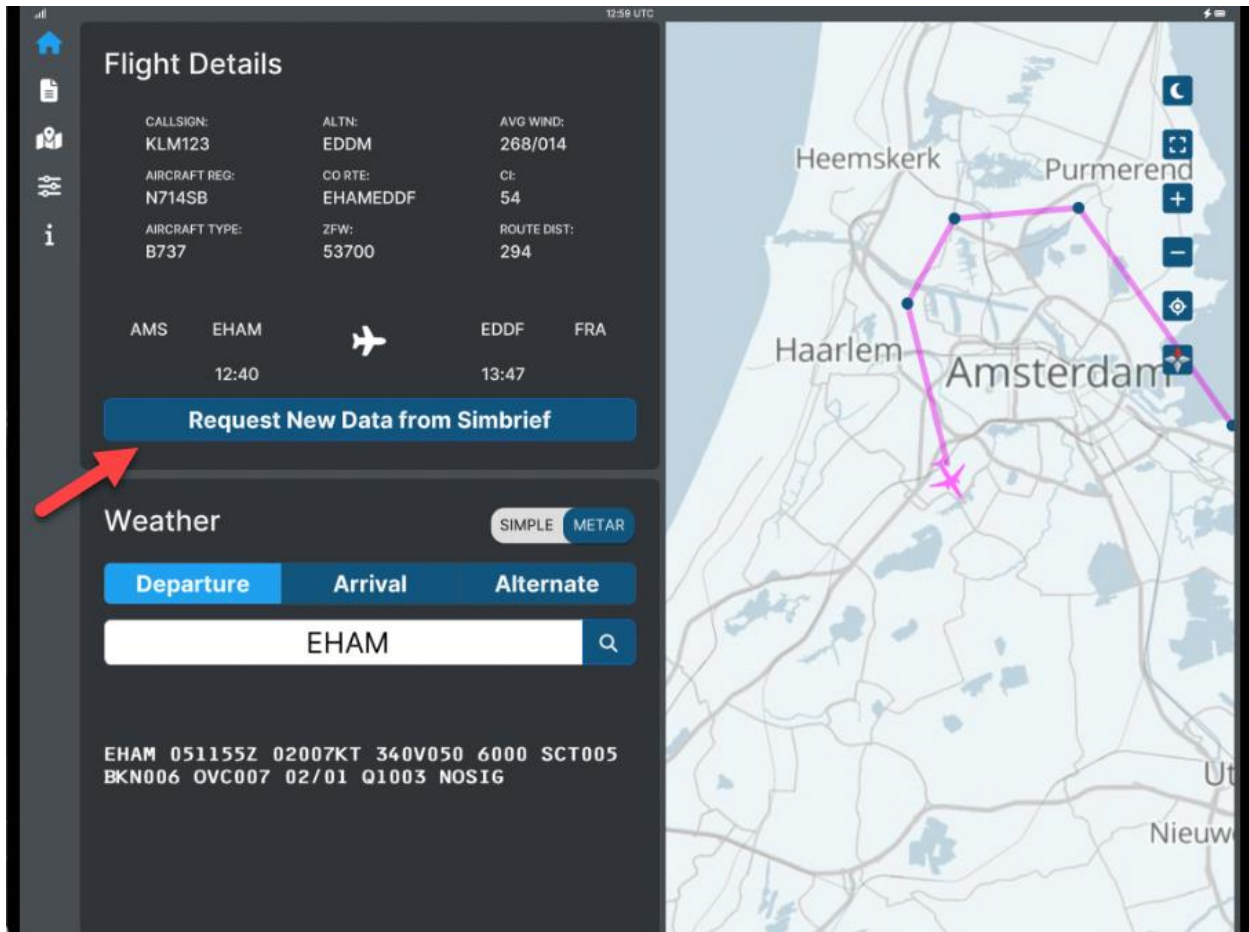


Take Off				Landing Dispatch				Landing Enroute			
<b>Airport</b> <span style="float:right">Import From OFP</span>								Weight: 141,903 lb			
Airport ICAO	Airport Name	Runway ID	Elevation	Runway Heading	Runway Slope	Runway Length	Runway Condition	VRef:	146 kt		
BIKF	ICELAN	10	108 ft	103	1	10,043 ft	DRY	Req Landing Distance:	5,054 ft		
<b>Aircraft</b> <span style="float:right">Import Aircraft Details</span>								Avail Landing Distance: 10,044 ft			
Weight	Landing Flaps	Packs	Anti-Ice	Reverser Config	Autobrakes	Non Normal Condition	Vref Add				
141,903 lb	30	ON	OFF	NO CREDIT	AUTOBRAKES3	NONE	5				
<b>Weather</b> <span style="float:right">Import Weather</span>											
OAT	Wind	QNH									
4	C 110/12	29.83 inHg									
<div style="text-align: center;"> <p>5,054 ft</p>  <p>10,043 ft</p> </div>											
Clear						Calculate					

## IMPORT FLIGHTPLAN, WEIGHT/BALANCE, AND FUEL

The UFT makes configuring your aircraft a lot easier as it can download a lot of data from SimBrief (this would be from your company's Flight Operation center in real-life)

### LOADING THE ROUTE



Create a flightplan at SimBrief and import it



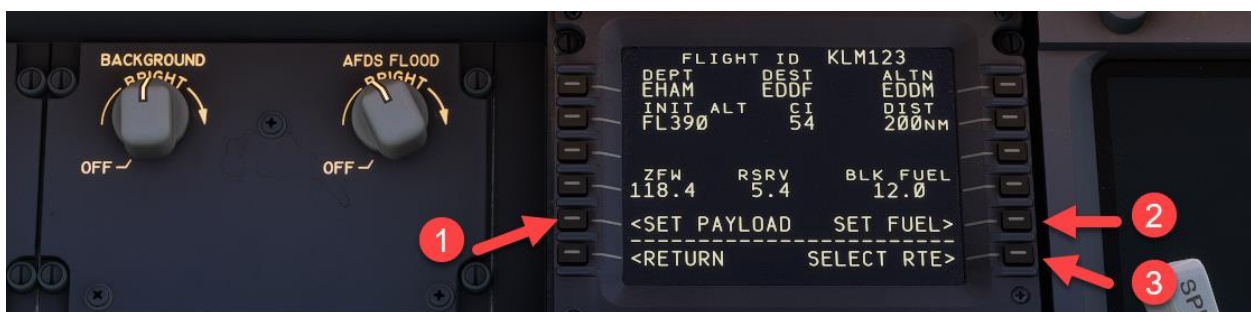
Open the FMC menu.



Open the ROUTE page and click FLIGHT PLAN REQUEST (without entering the Origin and Destination).



Select the SIMBRIEF route.



Select SET {AYLOAD and SET FUEL options. Next, click SELECT RTE.



Select LOAD. This can take a few moments, just as it would in the real world. These ACARS options are often rather slow. Of course, you will still need to insert your SID and STAR, as these are not part of the flight plan!



Now click ACTIVATE, and the EXEC button and your FMS will have the route from your flightplan.

### LOADING PERFORMANCE DATA

Select INIT REF to open the PERFORMANCE INIT page.



Select PERF INIT REQUEST to request the performance data. Again, this might take a moment.





Select LOAD to insert the data and press the EXEC button to confirm.

Please note that the cruise altitude is not taken from the SimBrief flight, as it is often low. Instead, the FMS will calculate a more suitable cruise level based on the standard tables. If you insert your level, select the final cruise level, ignoring step-climbs. Also, note that we inserted transition altitude and transition level.

If you rather see this in a video we can recommend the one done by Emi, one of our testers,

[https://www.youtube.com/watch?v=jULzuMZI\\_LE](https://www.youtube.com/watch?v=jULzuMZI_LE)