Electronic Flight Assistant

Streamlining from ground ops to cockpit

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In today's digital world, pilots need to consult multiple sources of information to prepare for and execute each and every mission. An array of applications serve different needs, but when they are not integrated, it makes the operational tasks complex and time-consuming.

Pilots analyse information such as mission management, data, flight documentation, cockpit check-lists, navigation charts, real-time weather

conditions, aircraft performance data and airport maps. The information may be in paper form or digital, coming from different applications. This in turn complexifies and creates an unnecessarily high workload for pilots who often have to transfer data from one source to another, inducing the risk of transcription inaccuracies and human error.

What if they could pass some of the tasks to a flight assistant? And what if that flight assistant was electronic?

Mission+ is a fully integrated platform that brings a new experience to pilots in the form of an Electronic Flight Assistant (EFA), the next evolution of the Electronic Flight Bag (EFB). It does the work for the pilot by gathering all the required information into one single application based on a central map display, ensuring a seamless experience.

Information is organised around the pilot's needs at each stage of the operational workflow to allow easy access to information and to enhance situational awareness for quick decision-making. The new platform adapts to each flight's operational context bringing the correct information at the right time. This reduces the number of data entries and enhances efficiency. Pilots' workload decreases, so they can concentrate more on flight operations.

Using a single tool, the pilots can now access in one shot:

- their pre-flight briefing package, thanks to Mission+ FLIGHT, the Electronic Flight Folder module;
- aeronautical data for en-route and terminal charts, using Mission+ MAPS
- graphical weather data displayed on the en-route map thanks to Mission+ WEATHER option.

And they can also do aircraft performance computations and access documentation at all stages of the flight, thanks to the integration of Flysmart+ into Mission+.

Pilots get an enriched experience when activating two or more modules within the application. For example, they can see different layers of aeronautical data and indicators at every stage of the flight enabling them to obtain the correct information at the right time when using graphical weather, NOTAMS information, etc. This enables them to focus on their flight and reduce their workload.



Mission+ FLIGHT module

What the pilots say

Mission+ has been designed by pilots for pilots.

From the initial phases of Mission+ development, NAVBLUE - the Airbus flight operations subsidary - worked closely with Airbus flight-test pilots and airlines from different regions of the world to co-develop the solution with their feedback. Pilots from these airlines shared with the NAVBLUE development team their daily operational challenges, requirements and desires, such as the willingness to get the right information at every phase of the flight. This input was analysed and translated into functionalities that will assist the pilots during their mission.



Interview with Captain Olivier ASPE, Airbus Instructor/Examiner and Flight Ops expert pilot

What key benefit does Mission+ bring to pilots and airline operations?

Many operational functionalities have been introduced, however one that is key is integration. Thanks to the use of connectivity (wifi, 3G/4G) and AID connection (FOMAX), this new platform eases the exchange and update of data between the different sources of information on both ground systems and avionics. This helps airlines to implement a paperless philosophy in the cockpit.

How does Mission+ help pilots during flight?

Today, we are moving from Electronic Flight Bag (EFB) standalone applications to an Electronic Flight Assistant (EFA) gathering all information pilots need in one platform. This is a significant upgrade to current ways of working with paper or standard EFBs. And it brings significant benefits such as time savings, reduced manual entries and risk of errors, enhanced pilot situational awareness...

Ultimately, pilots should be able to reduce their interaction with the tablet as much as possible. Pilots are working in a dynamic cockpit environment under time pressure - a good EFB application should take into consideration these constraints.

How was your personal experience with Mission+ in your recent flights?

I used Mission+ on the latest delivery ferry flights early 2022. Retrieving the electronic flight package for flight preparation and weather analysis, computing my performance for take-off, using the documentation and checklist... In flight, thanks to FOMAX, I had an accurate aircraft position and an automatic completion of the navlog. On arrival on the ground at a big airport, I took advantage of the Airport Moving Map (AMM). And I was able to electronically send the post-flight report to the dispatcher. Wow! I believe we have entered a new era of managing a flight in an easy way!

Which other developments do you anticipate in the future?

Mission+ will continuously evolve to include new functionalities such as a new aircraft performance and documentation module, flight optimisation features, integration with third party applications such as the technical logbook...

As for the charting function, the market will move towards dynamic data with the end of pdf terminal charts and the introduction of contextual data for a unique globe user experience is part of our roadmap.

Many opportunities lie ahead, within the limit of certification requirements. In the future Mission+could be connected to the aircraft Flight Management Systems (FMS) in order to ease and optimise mission preparation.

Interview with Shaun Wildey, Airbus test pilot, explaining how pilots can now focus on core tasks and contribute to increasing airline efficiency

Watch short video

Integrating with other functions

This all new platform is modular, allowing it to interface with applications from other suppliers, but fully integrated when functions are provided by NAVBLUE.

For pilots using Flysmart+, the Airbus aircraft performance calculations solution, this integration means quick and easy access to Flysmart+ from the Mission+ platform. The link is seamless as aircraft and flight data is automatically exchanged between Mission+ and Flysmart+, which allows to save time and to reduce manual entries and associated risk of errors. This integration also means that pilots have the possibility to consult documentation and the electronic Quick Reference Handbook (eQRH).

Connectivity

Optimised connectivity between on-board and ground systems reduces total workload. For example, all the flight information and parameters are consolidated in Mission+ and the pilot is able to review and send this information to the dispatcher without having to manually compile and validate it. The pilot's administrative tasks are reduced to a minimum, allowing them to better deal with more essential flight deck duties.

Mission+ adapts to Airbus' operational cockpit philosophy and other technologies like FOMAX. EFB connectivity with Aircraft Interface Devices (AID) brings benefits to operators, since it is possible to retrieve aircraft key parameters and to enhance the pilot flight experience with new capabilities: automatic display of the ownship position on the route, automatic fill-in of the navlog (fuel/time parameters), in-flight updates (weather, flight plans), etc.

Airlines can now transform their Electronic Flight Bag (EFB) into an Electronic Flight Assistant (EFA), thanks to Mission+. Pilots can find all the information they need for their flight, from preparation to final closure, in one single application. An augmented experience helps them with their decision-making and efficiency. Mission+ is available for iOS and Windows platforms, and for the navigation and mission management modules it can be operated on both Airbus and any other aircraft types.

NAVBLUE is an Airbus subsidiary dedicated to Flight Operations and Air Traffic Management solutions, and provides products and services on the ground and onboard any aircraft.

More about Mission+



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