

## Lido/mPilot 3.0 – EASA Non Technical Objection

27 February 2019

To whom it may concern,

Lufthansa Systems FlightNav AG has applied to EASA for an operational evaluation of the Lido/mPilot charts application developed for iOS (iPad). Lido/mPilot is a single application for the iPad, allowing the display of documents, en-route charts, and terminal charts. Lido/mPilot versions 1.0.8, 1.2.0, and 2.0.0 were previously assessed by EASA and found compliant to AMC 20-25. This letter concerns Lido/mPilot 3.0.0, for which differences were evaluated in 2018.

EASA evaluation was based on compliance data provided by Lufthansa Systems and on limited functional tests on a sample EFB. The requirements contained in Commission Regulation (EU) N° 965/2012 of 5 October 2012 (Air Operations Rules) have been considered together with AMC 20-25 (Airworthiness and Operational considerations for Electronic Flight Bags).

The main objective of the evaluation was to assess the compliance of the applications against the applicable guidance, evaluate the associated compliance dossier proposed by Lufthansa Systems and provide recommendations to the operators in terms of EFB training, procedures, and administration.

Recommendations were made by EASA and taken into account by Lufthansa Systems in version 3.0.0 or in future versions.

Lufthansa Systems has published a Human Machine Interface Assessment and Operational Risk Assessment document (version 1), which contains instructions and recommendations for the use of the Lido/mPilot application in compliance with the EFB regulatory guidance. The document covers considerations on the risk assessment, flight crew operating procedures, human factors and Human Machine Interface (HMI) considerations. Training considerations are provided in the Lido/mPilot v3.0.0 User Guide and are complemented by a web-based CBT (Computer Based Training).

EASA recommends operators to take into account the instructions and recommendations provided in these documents.

Details on compliance with AMC 20-25, highlighting areas of operator responsibility, are also contained in Lufthansa Systems' documents. Any AMC 20-25 paragraphs not explicitly addressed should be evaluated by the operator for compliance determination.

EASA recognizes that Lido/mPilot 3.0.0 satisfies the applicable guidelines of AMC 20-25 and has no technical objection to the grant by the National Authorities of an operational approval for the use of the application provided that the recommendations and operator instructions proposed in Lufthansa systems' documents and in Appendix 1 to this letter are taken into account.

This letter does not constitute an Operational Approval, operators remain responsible for demonstrating compliance with the EFB requirements and guidance of their National Aviation Authority.

Sincerely,



~~Carla Iorio~~

~~ETCs & Special Projects Section Manager~~

Ludovic Aron

Acting Head of Large Aeroplanes Department

cc.: EASA: Dimitri Garbi

## Appendix 1 – EASA Recommendations

It is recommended that the operator bases its evaluations and in particular its EFB risk assessment (as required by AMC 20-25 chapter 7.2) on the considerations contained in the Lido/mPilot Human Machine Interface Assessment and Operational Risk Assessment written by Lufthansa Systems.

In addition to those recommendations, to Lido/mPilot's User Guide, and to the guidance and requirements of AMC 20-25, it is recommended that the EFB flight crew and administration training covers the following areas of emphasis:

- Proper configuration of the application by the administrator and proper crew procedures to take into account operator's specificities and avoid nuisance alerts.
- Proper evaluation by the administrator that the iPad configuration and hardware specifications are sufficient to ensure a satisfactory performance of the application (access time, latency), in line with AMC 20-25 criteria.
- The display of own-ship position based on GPS should be deactivated.
- Flight crew: Importance of verifying prior flight the proper validity of the charts and documents databases.
- Flight crew: Use of the application during night operations and use of the independent brightness settings with respects to other EFB applications that might be installed.
- Flight crew: Use of the charts NOTAM is supplemental to the information required for dispatch. The pilots should verify the absence of out of screen content in the chart NOTAM window.