## **EGN** Success Story

## LPV Certification for Embraer E-Jet Family by Honeywell

March 2017



Credits: Embraer 175

Embraer achieved certification of the latest Honeywell Epic Load 27.1 Next The retrofitting costs are \$83k per tail with an additional \$66k for those units Generation Flight Management System (NGFMS) for the Embraer E-Jet family (E170 / 175 / 190 / 195) in July 2016 (see link). Apart from major improvements in flight planning, performance predictions and efficiency, this upgrade enables operators to access to the latest next generation airspace navigation procedures including LPV approaches.

LPV Approach capability was already certified and available today on the Embraer ERJ-135/140/145 as part of the FMS 6.1 Enhanced retrofit package to the FMZ-2000. With the certification of Epic Load 27.1 and the NG FMS, LPV approachbecame a selectable option on the E-Jet E1 too.

The Epic Load 27.1 retrofitting package includes the Basic NG FMS software, the Boeing platforms would be around 2020. upgrades to the GNSSU and antennas along with the latest displays software upgrades to deliver LPV functionality to this workhorse of many regional fleets.

requiring also an upgrade to Pentium-M (i.e. those manufactured before Q2

2010 approx.). Honeywell has also enabled the development of LPV capabilities to other platforms such as Airbus A350s through their Multi Mode Receiver (MMR).

On the Boeing side, they are also working on the development of a next generation Multi-Mode Receiver with SBAS capability to respond to the FAA's ADS-B out mandate; however, full LPV capability is not offered so far by Boeing in any of their programmes, being customer demand the driver for its introduction. According to our records, an optimistic timeframe for its entry into service in





