

February 6, 2019

Dear Sirs,

The graphical display of dynamic oxygen calculators was recently accepted by the FAA to be listed in the next version of AC120-76. This application provides a fuel/oxygen solution compliant with the critical fuel scenario as defined in CFR121.646. This historically has been defined as the worst case scenario due to the complexity of the situation. Ergo360, software created by ADS, mitigates this hazard through increased situational awareness coupled with innovative human machine interface programs.

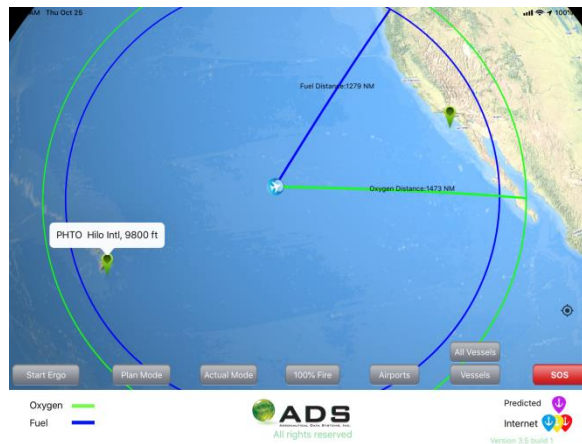


Fig.1

A new worst case scenario is developing mainly due to the exponential increase of lithium battery fires. The new scenario is an uncontrollable fire over water with a ditching in less than 15 minutes. The possibility of such an occurrence increases daily.

ADS would like to add another layer of data to the existing app (Ergo 360) and also receive similar acceptance from the FAA by adding another function to the list of EFB applications within AC 120-76. This new layer of information is similar to airport displays except it will display maritime assets (ships/vessels) worldwide in real time (internet required) or in a predicted position (no internet required).



Fig. 2

This innovation provides basic data for the pilot to decrease the time of rescue, while at the same time, increase occupant survival through increased situational awareness. This app can achieve further vessel refinement by use of the onboard weather radar.



Fig. 3

Concept of Use: It can allow the transfer of vessel position to be inserted into the aircraft FMS thus allowing the pilot to quickly identify maritime vessels to support search and rescue efforts after ditch procedures are complete. Currently there is no guidance for night time, reduced visibility or low ceiling ditching. This app will provide this information and use existing aircraft automation to fly the aircraft if available.



Fig.4

This app will also allow the pilot to send a distress text message via a dedicated maritime VHF frequency (channel 70) to all vessels within a range commensurate with the altitude of the aircraft (150-200nm). This distress message is in a format already used and familiar to mariners.



Fig. 5

The same radio can be used to communicate directly with the desired vessel intended for ditching. This feature will compliment current GMDSS and GADSS data transfer initiatives.



Fig. 6

This app does not supersede or contradict any existing procedure or regulation currently in existence, but does provide information in the same manner a pilot would utilize weather or wind information. It makes visible an asset which is worldwide and currently **NOT** readily available to the aviation community.

Please contact me if you have any questions.

Best regards,

Jim Stabile CEO
Aeronautical Data Systems Inc.