A HMI DESIGN APPROACH FOR THE FUTURE FLIGHT DECK
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aimed at developing solutions to extend aircraft operations in degraded visibility conditions, to achieve All Condition Operations.

2009-2014

Main advantages

- The parallel and iterative design and evaluation processes help to mitigate the discomforts that the new technological solution can bring to the final users and their working practices.
- Following a context related HMI philosophy, custom to fit the project needs, facilitates the consistency between all the technologies developed and helps to ensure a good overall integration.
- By continuously refining the process and applying it within several projects and for different technologies, it is possible to build up on a more consolidated HMI Philosophy.

The approach

The parallel and iterative design and evaluation processes help to identify, prevent and mitigate HF related issues at early stages of the flight deck development.

2013-2016
ACROSS

aims at developing solutions to reduce pilots' peak workload and support them in dealing with difficult situations, thus enhancing safety and performance.

HF and Usability experts
Operational experts

Paper Mokups
Working prototypes

HF and Usability Expert Evaluations
Real time simulations

State of the art
Requirement definition
Technology Operational Concept
Use Cases

Task Analysis
Cognitive Walkthrough
Modelling
Prototyping and Simulations
Observations

Regulations, Standards and Good practices

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Type of Methods

HF and Usability Expert Evaluations
Real time simulations

Type of expertise

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