



ECA

European Cockpit Association

AMC 20-25

Pilot's Point of View

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Aircraft Design and Operation (ADO) Committee

Issues

- **IT-Security**

Collateral Damage, inadvertent cross-application impacts

- **Human Factors**

GUI Design, Workload, Usability

- **Safety**

Safe & Reliable operation, Hardware considerations



IT-Security

Security threats in IT structures are on the rise. Though aviation is not targeted so far, it can be subject to collateral damage or future attacks.

- **6.1.1.1.4 EFB Data Connectivity**

It is crucial to protect

- connected EFBs from any threat from exterior
- essential aircraft systems from the connected EFB
- Certified applications from other applications

- **7.9 EFB System Security**

Securing an EFB is a continuous effort. It is necessary to update/upgrade means during the EFB lifecycle

- **7.10 Electronic Signatures**

Password policies strongly depend on the user's ability to create 'strong' passwords, thus training is needed.



Human Factors

An EFB must not increase pilot's workload during critical phases of flight.

Appendix D - The GUI and applications shall be designed in a way:

- Being easily legible under all lighting conditions with the given hardware and viewing distance
- Provide the information needed with minimum panning, zooming or other interaction
- Consistent GUI philosophy over various applications
- Shall make reasonable use of improved features by electronic presentation instead of just coping with shortcomings



Safety

An EFB can increase situational awareness and therefore safety, if properly done. Its installation shall support this.

The EFB shall operate in a safe, reliable way under all foreseeable environmental conditions:

- ECA strongly supports all means to fix an EFB on the flight deck, whether it is a mount, a fixed installation or a viewable stowage to provide easy access during all phases of flight.
- An EFB shall not endanger pilots by its mass, shape or battery induced risk



Summary

- ECA supports the AMC 20-25 in general
- ECA believes, that this AMC is only a minimum requirement.
- ECA is open to further discussions when technology progresses and new regulation is needed



Questions?



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