



OPERATIONS ADVISORY NOTICE (OAN)		 Transport Malta Flight Operations Inspectorate Civil Aviation Directorate Transport Malta Centre Triq Pantar Lija LJA 2021 Malta
OAN Number: 06/21 	Issue Date: 22 December 2021	
REV 1		
Subject: Flight Operations using Airbus eQRHs		

1.0 INTRODUCTION

The purpose of this document is to provide Airbus operators with a list of requirements that must be complied with when applying for approval for use of the electronic QRH EFB application (eQRH) in flight operations.

2.0 IMPLEMENTATION

The introduction of electronic QRH EFB applications in aircraft operations falls under changes requiring approval (CAT.GEN.MPA.141). Such applications are classified as type-B EFB applications and approval is required in accordance with SPA.EFB.100.

2.1 Application Requirements

To obtain operational approval for the use of the Airbus eQRH EFB application, the operator shall provide evidence of compliance to the requirements listed in SPA.EFB.100 (b), through Form 166, namely:

1. a risk assessment related to the use of the eQRH application and its function(s), identifying the associated risks and ensuring that they are appropriately managed and mitigated
2. the human-machine interface of the eQRH application has been assessed against human factors principles.
3. an EFB administration system has been established, and that procedures and training requirements for the administration and use eQRH application have been established and implemented; these shall include procedures for:
 - i. operating the eQRH application.
 - ii. the management of changes to the EFB.
 - iii. the management of eQRH data.
 - iv. eQRH application maintenance; and
 - v. eQRH data security.
4. the EFB host platform is suitable for the intended use of the EFB application.

Operators shall adopt the recommendations as outlined in the latest version of the Airbus eQRH User and Compliance document (currently at revision 3.1) and any subsequent revisions, namely the following:

- To ensure accessibility and usability of the SMOKE/FUMES/AVNCS SMOKE⁽¹⁾ and SMOKE REMOVAL checklists with the eQRH application, unless the EFB devices in use are qualified to sustain temperatures more than 55°C, then a laminated hard-copy of the said checklist/s shall be made available to at least one flight crew member in the flight deck.

⁽¹⁾ including Lithium-Battery Fire/Smoke checklists.

- To ensure accessibility and usability of EMERGENCY EVACUATION checklists, unless the EFB mounts are robust enough to endure high g-loads⁽²⁾, then a laminated hard-copy of the said checklist/s shall be made available to at least one flight crew member in the flight deck.

⁽²⁾ Refer to section 7 (Operational Shocks and Crash Safety) of EUROCAE ED-14 / RTCA DO-160G for Category B equipment

- Minimum required for Dispatch = 1 EFB device (including mount) on Pilot Monitoring side + Backup. The means of backup must satisfy the following criteria:
 - The backup means must be readily accessible and usable at any time by both pilots
 - The backup means should include at least the following data: Abnormal and Emergency procedures, OEB data, data of OPS section of the Airbus QRH and any customised QRH data if deemed necessary by Operator (following internal evaluation).

The preferred means of backup for the authority is to have an **additional** EFB device or a hard-copy of the QRH. The backup shall be checked and monitored as any other EFB device or company-controlled document and kept up-to-date with the latest data. The backup shall be carried on board at all times, even when not required, and should not be provisioned on an ad-hoc basis.

If a third EFB device is carried on board the aircraft, procedures must be in place to ensure that the minimum charge before dispatch conforms with the minimum requirements set by the operator.

- Flight crew, EFB Administrators and Documentation administrator/s (i.e. persons who modify the data content of the manuals) shall be appropriately trained (and also checked in the case of flight crew) as per recommendations listed in the eQRH User and Compliance document.

In addition to the above, the following additional TM-CAD requirements shall be complied with:

- In case of operators using suction-cup EFB mounts, these **shall** be replaced every six (6) months as part of the maintenance tasks related to the EFB system. (GM1 CAT.GEN.MPA.141(a))
- The use of the Normal Checklist in hard copy shall be retained for the first 6 months during the evaluation phase as minimum
- The operator shall ensure that whenever any aircraft modifications affecting eQRH data are installed on a particular aircraft, procedures are in place to ensure that flight crew are fully aware of this revised data and the eQRH data is updated as soon as practicable following mod accomplishment.

- For portable EFB devices, a Mobile Device Management (MDM) system shall be installed to ensure full EFB device control (hardware & software)

Finally, following an internal risk assessment done by TM-CAD, operators are requested to consider the following when carrying out their risk assessment to implement eQRH in their operations:

- Lack of access to the Runway Condition Assessment Matrix (RCAM) in the eQRH application. Operators are requested to assess any risks as a result of this change. An acceptable mitigation would be to customize the eQRH to have an additional tab with a link to the RCAM. Other mitigation measures put forward by operators will be considered.

Flight Operations Inspectorate