

Information Bulletin no. 2017/0

INTRODUCTION TO "J-NEWS"



Dear Madam, dear Sir,

I am happy to introduce the number "zero" of DOA Dpt. Information Bulletin (*J-news*) to you.

Over the years, following some important PART 21 amendments such as FTOM, NVIS and EWIS related requirements, you, as DOA Holder's contact person, received formal letters from us, the EASA DOA Department.

Based on the feedback received from you, we decided to reinforce the direct communication with DOA Holders through the present Bulletin.

I-news has been designed to spread different kinds of information, such as upcoming regulation updates, upcoming events (e.g. workshops and training sessions).

The main objective of *J-news* is to disseminate Part 21 knowledge and the experience we collected in the past years e.g. in auditing activities or in projects with our product certification colleagues.

This should facilitate standardisation and prevent recurring non-compliances with Part 21.

It will also allow you as DOA Holders to keep up to speed and be aware of upcoming trends/changes.

On the following pages, you can find the first items we decided to present for your information, namely:

Item 1. Installation of medical gas bottles on rotorcraft

Item 2. "Zero-pax" cabin layout

Item 3. OSD contact list

Item 4. Coordination between design and maintenance organisations

These 4 items are intended to increase your awareness on typical changes to Type Certificate classification, on whom to contact for OSD matters and on the DO-MO relationship.

I hope that you, the "DOA Holders' Community" will welcome this initiative and we look forward to your feedback. The frequency of this publication will also depend on your response.

Yours faithfully,
Markus GÖRNEMANN
Head of the DOA Department



Classification of changes to Type Certificate

Item 2017/0/1

Installation of medical gas bottles on rotorcraft.

The installation of medical gas bottles and related dispensing components/systems on rotorcraft introduces functions whose failure could lead to a HAZ/CAT failure conditions. This shall trigger a "major" classification of the change to Type Design.

For instance, the installation of an oxygen system on rotorcraft is not envisaged since supplemental oxygen due to rotorcraft usual altitude operation, is not requested. Nonetheless, some unique cabin configurations such as those for Emergency Medical Service (referred later as EMS) foresee the installation of oxygen system for medical use. The most relevant hazard to the safe rotorcraft flight is the increased fire/explosion risk. This leads to an adjustment of original Type Certification basis through a CRI (another element triggering the "major" classification"), when it does not contain airworthiness requirements to be directly applicable to the installation of an oxygen system with reference to its specific fire/explosion threat.

Another example is given by the installation of some medical gases as the "Entonox": this gas is composed of 50% of medical oxygen, then the increased fire/explosion hazard for the safe rotorcraft flight must be evaluated.

Since "Entonox" is also composed of 50% of nitrous oxide, it is commonly used in EMS missions as analgesic for the relief of pain. Nevertheless it may have undesirable effects such as euphoria, disorientation, dizziness and tingling.

This specific "Entonox" characteristics poses an additional threat to rotorcraft safe operation since the impact of its operation, the possible failure modes of its components or its installation in combination with failure of other aircraft equipment must not negatively impact the performances of the flight / cabin crew which could create hazard to the safe rotorcraft flight. For example, any (undetected) leakage from "Entonox" pipes could affect the conditions under which the flight / cabin crew have to perform their duties.

Also in this case, an adjustment of original Type Certificate basis through a CRI is required.

Should you need more information, please get in contact with the DOA Team Leader allocated to your DO.

Classification of changes to Type Certificate

Item 2017/0/2 "Zero-pax" cabin layout

DOAHs often have the need to cover the flight of a/c with significant portions of cabin equipment removed (e.g. ferry of a/c from MO A to MO B with all passenger seats removed "Zero-pax configuration"). This has often been done via a minor change but the minor change route is questionable.

In all cases, the change alters the **Operating Limitations**: as a "zero- pax" (and zero cabin crew) configuration results in an Operating Limitation, consequently the change shall be classified as "major".

Furthermore removal of substantial portion of cabin equipment could have an appreciable effect on **weight** and **balance**: this is another element triggering a "major" classification.

Conclusions: due to the likely impact against W&B, Operating Limitations and Cabin Safety, these changes should be classified as "major".

A dedicated Certification Memorandum will be issued in the near future.

Should you need more information, please get in contact with the DOA Team Leader allocated to your DO.



EASA website update

Item 2017/0/3
OSD Contact list

With the implementation of the OSD principles in Part-21 (Regulation (EU) 748/2012), the EASA approved OSD are held under the ownership of the TC or STC holder. In accordance with 21.A.62, the TC or STC holder has an obligation to make the data available to end users (any person required to comply with the OSD). The OSD Contact list aims to facilitate the link between TC and STC holders and the Stakeholders who need access to the data, providing functional mailboxes or websites that Stakeholders can use for OSD matters.

The list is regularly updated and is based on TC or STC holder feedback and can be downloaded here.

http://www.easa.europa.eu/document-library/operational-suitability-data/osd-contact-list

Should you require any further clarification or need to modify the existing contact details, please contact OSD@easa.europa.eu



Good Practice

Item 2017/0/4

Coordination between design and maintenance organization

In Part-21 the relationship between design and production organisations is well described. This is not the case for the relationship between the design and maintenance and/or maintenance management organisations.

In general an approved maintenance organisation can only install approved modifications (and repairs). However, the first installation of an STC is often required before it is approved in order to demonstrate compliance with the certification requirements. In many cases, the STC will be installed on an in-service aircraft at an aircraft maintenance organisation with the assistance of the design organisation. EASA developed a good practice for the first installation of a change to a product, document EASA_S21_GP001 that helps to address all aspects that come along during the complete process from the establishment of the necessary arrangement up to the execution of the certification tests and the release of components and aircraft after completion of the certification.

The following steps of a typical first installation of an STC should be taken into account:

1. Arrangement.	5. STC development on aircraft
2. Relevant interface	6. Inspections and
3. Configuration management	7. Flight tests
4. Modified components	8. STC approval

EASA recommends that design organisations, maintenance and/or maintenance management organisations and National Airworthiness Authorities make use of the good practices of document EASA_S21_GP001.

Document is available here:

http://www.easa.europa.eu/system/files/dfu/approvals-and-standardisation-organisation-approvals-docs-good-practices-EASA S21 GP001 1209.pdf

Should you need more information, please get in contact with the DOA Team Leader allocated to your DO.

