United Kingdom Overseas Territories Aviation Circular

OTAC 119-9

Flight Safety Documents System

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Effective on issue

GENERAL

Overseas Territories Aviation Circulars are issued to provide advice, guidance and information on standards, practices and procedures necessary to support Overseas Territory Aviation Requirements. They are not in themselves law but may amplify a provision of the Air Navigation (Overseas Territories) Order or provide practical guidance on meeting a requirement contained in the Overseas Territories Aviation Requirements.

PURPOSE

This Overseas Territories Aviation Circular provides information and guidance to Air Operator Certificate holders on the organisation, design and use of the flight safety documents system required under OTAR Part 119.65.

RELATED REQUIREMENTS

Each Air Operator Certificate holder is required to use and maintain a safety management system (SMS) in accordance with OTAR Part 119.59. The flight safety documents system described in this OTAC will then be integrated and managed within the operator's SMS. General guidance on SMS is provided in OTAC 119-3 'Safety Management Systems'.

'Quality Assurance' requirements are contained in OTAR Part 119.67.

The requirements for commercial air transport operations manuals are in OTAR Parts 119.71, 121.1250 and 135.1250.

CHANGE INFORMATION

Second issue. Updating of: references that have changed, amending the definition of SMS and updating of weblinks within the document. ICAO reference included for the origin of the information contained in paragraphs 5 to 9.

ENQUIRIES

Enquiries regarding the content of this Circular should be addressed to Air Safety Support International at the address on the ASSI website www.airsafety.aero or to the appropriate Overseas Territory Aviation Authority.

CONTENTS

1   Definitions

The following definitions are reproduced from OTAR Part 1 for ease of reference:

Flight safety documents system means a set of inter-related documentation established by the operator, compiling and organizing information necessary for flight and ground operations, and comprising, as a minimum, the operations manual and the operator's maintenance control manual.

Quality assurance means all those planned and systematic actions necessary to provide adequate confidence that a system, component, or facility will perform satisfactorily in service.

Safety management system (SMS) means a systematic approach to managing safety, including the necessary organisational structures, accountabilities, responsibilities, policies and procedures.

2   The concept

2.1   Operators are responsible for providing a variety of documents to those involved in their operation, for the purpose of giving the necessary policy guidance and specific instructions for carrying out operations in a safe and proper manner, and in accordance with the requirements.

2.2   These documents, considered together, comprise the operator's flight safety documents system. Clearly the operations manual and the operator's maintenance control manual will be significant elements. Other documents also need to be considered, such as standard operating procedures (SOPs), flight reference cards, checklists and even instructions of a temporary nature. Electronic documentation is increasingly being used for some purposes as an alternative to paper.

2.3   The concept of a flight safety documents system is that operators should adopt an integrated approach and consider their operational documents as a complete system. It is important for operational documents to be consistent with each other, and consistent with regulations, manufacturers' requirements and human factors principles. It is also necessary to ensure consistency across departments as well as consistency in application.

3   Benefits

3.1   The International Civil Aviation Organisation (ICAO) found that it was possible to see an association between identified deficiencies in operational documents and accident rates. Deficiencies in operational documents are considered to have been contributing factors in a number of accidents and a great many incidents worldwide. This led to the development of the standards and recommended practices (SARPs) in ICAO Annex 6, to emphasise the need for operators to adopt an integrated approach and to consider their operational documents as part of a complete system.

3.2   Considering the flight safety documents system as a whole is intended to result in improved safety; and therefore there is the potential to reduce losses to the operator that might otherwise be incurred, directly or indirectly, as a result of incidents or accidents. It is also an important part of the safety management systems (SMS), as operators must adopt a systematic approach to managing safety generally throughout their organisation.

4   Guidance

4.1   The following material provides guidance on the organisation and development of an operator's flight safety documents system. It should be understood that the development of a flight safety documents system is a complete process, and changes to each document comprising the system may affect the entire system.

4.2   The guidance in this OTAC addresses the major aspects of an operator's flight safety documents system development process, with the aim of ensuring compliance with OTAR Part 119.65. The guidance takes into account current best industry practices, with an emphasis on a high degree of operational relevance.

4.3   Guidance applicable to the development of operational documents has also been produced by other government and industry sources and is available to operators. Some additional sources of information are provided in paragraph 10 below.

Note: Paragraphs 5 to 9 are based on information contained within ICAO Annex 6 Part I, Attachment F - Flight safety documents system.

5   Organisation

5.1   A flight safety documents system should be organised according to criteria which ensure easy access to information required for flight and ground operations contained in the various operational documents comprising the system and which facilitate management of the distribution and revision of operational documents.

5.2   Information contained in a flight safety documents system should be grouped according to the importance and use of the information, as follows:

(a)   time critical information, e.g. information that can jeopardize the safety of the operation if not immediately available;

(b)   time sensitive information, e.g. information that can affect the level of safety or delay the operation if not available in a short time period;

(c)   frequently used information;

(d)   reference information, e.g. information that is required for the operation but does not fall under b) or c) above;

(e)   information that can be grouped based on the phase of operation in which it is used.

5.3   Time critical information should be placed early and prominently in the flight safety documents system.

5.4   Time critical information, time sensitive information, and frequently used information should be placed in cards and quick-reference guides.

6   Validation

The flight safety documents system should be validated before deployment, under realistic conditions. Validation should involve the critical aspects of the information use, in order to verify its effectiveness. Interactions among all groups that can occur during operations should also be included in the validation process.

7   Design

7.1   The flight safety documents system should maintain consistency in terminology and in the use of standard terms for common items and actions.

7.2   Operational documents should include a glossary of terms, acronyms and their standard definition, updated on a regular basis to ensure access to the most recent terminology. All significant terms, acronyms and abbreviations included in the flight documents system should be defined.

7.3   The flight safety documents system should ensure standardization across document types, including writing style, terminology, use of graphics and symbols, and formatting across documents. This includes a consistent location of specific types of information, consistent use of units of measurement and consistent use of codes.

7.4   The flight safety documents system should include a master index to locate, in a timely manner, information included in more than one operational document.

Note: *The master index must be placed in the front of each document and consist of no more than three levels of indexing. Pages containing abnormal and emergency information must be tabbed for direct access.*

7.5   Each copy of, for example, a manual should normally bear a serial number, and a list of holders should be maintained by the person responsible for issuing amendments. Where this system is not used, the operator should have satisfactory alternative arrangements for controlling the issue and amendment of manuals. Each manual should bear a title and list of contents, giving a clear indication of its scope. At the front there should be an amendment page to indicate amendment number, date of incorporation and the signature or initials of the person(s) making the amendment. Amended pages should be dated. The arrangements of pages, sections, paragraphs, etc. should be orderly and systematic to facilitate immediate identification of any part of the subject matter. The standard of printing, duplication, binding, section dividers, indexing of sections, etc. should be sufficient to enable the document to be read without difficulty and to ensure that it remains intact and legible during normal use.

7.6   The flight safety documents system should reflect the application of quality assurance principles; and comply with the requirements of the operator's quality system, if applicable.

8   Deployment

Operators should monitor deployment of the flight safety documents system, to ensure appropriate and realistic use of the documents, based on the characteristics of the operational environment and in a way which is both operationally relevant and beneficial to operational personnel. This monitoring should include a formal feedback system for obtaining input from operational personnel.

9   Amendment

9.1   Operators should develop an information gathering, review, distribution and revision control system to process information and data obtained from all sources relevant to the type of operation conducted, including, but not limited to, the State of the Operator, State of Design, State of Registry, manufacturers and equipment vendors.

Note: *Manufacturers provide information for the operation of specific aircraft that emphasizes the aircraft systems and procedures under conditions that may not fully match the requirements of operators. Operators should ensure that such information meets their specific needs and those of the local authority.*

9.2 Operators should develop an information gathering, review and distribution system to process information resulting from changes that originate within the operation, including:

a) changes resulting from the installation of new equipment;

b) changes in response to operating experience;

c) changes in an operator's policies and procedures;

d) changes in an air operator certificate;

e) changes for purposes of maintaining cross fleet standardisation.

Note: *Operators should ensure that crew coordination philosophy, policies and procedures are specific to their operation.*

9.3 A flight safety documents system should be reviewed:

a) on a regular basis (at least once a year); and

b) as part of the change management process, for example:

- major events (mergers, acquisitions, rapid growth, downsizing, etc.);

- technology changes (introduction of new equipment);

- changes in safety regulations.

9.4 Operators should develop methods of communicating new information. The specific methods should be responsive to the degree of communication urgency.

Note: *As frequent changes diminish the importance of new or modified procedures, it is desirable to minimize changes to the flight safety documents system.*

9.5 New information should be reviewed and validated considering its effects on the entire flight safety documents system.

9.6 The method of communicating new information should be complemented by a tracking system to ensure currency by operational personnel. The tracking system should include a procedure to verify that operational personnel have the most recent updates.

9.7 The amendment of documents in manuscript is not acceptable. Changes or additions, however slight, should be incorporated by the issue of a fresh or additional page, dated accordingly, on which the amendment material is indicated by a vertical line in the margin.

10   Useful references

Developing Operating Documents - A Manual of Guidelines;
NASA/Ames Research Center, October 2000

This manual provides comprehensive practical information for developers of
operating document systems and was used by ICAO in developing guidance to
support the SARPs in Annex 6. Although 180 pages long, the manual has been
specifically designed to be used as a resource, rather than to read cover to cover.
For example, Part 1 provides twenty-one guidelines to assist operators in
compiling and organizing the information necessary to operate the flight
department of an airline. Subsequent parts address the design of documents;
production and maintenance; and electronic documentation. This manual was
distributed to the aviation industry on CD in 2001.

Available on the ASSI website.

CAP 676 - *Guidelines for the Design and Presentation of Emergency and
Abnormal Checklists (Issue 3)*; UK CAA, August 2006

This guidance material is intended to promote best practice for aircraft
manufacturers, operators, pilots and their trainers in the design and use of
emergency and abnormal checklists. It will assist the flight crew to manage and
contain abnormal and emergency situations that adversely affect flight safety by
providing guidance on human factors best practice throughout the design process.
A CHecklist Audit Tool (CHAT) has been provided to enable all concerned to audit
and improve both existing and new checklists and verify their usability.

Available on the CAA website - Publications Search.

CAP 708 - *Guidance on the Design, Presentation and Use of Electronic Checklists*
(First edition); UK CAA, reprinted March 2005

This guidance material is intended to promote best practice amongst UK aircraft
operators with regard to electronic checklists by maximising the potential safety
benefits. This publication complements, and is intended to be used in conjunction
with CAP 676 above.

Available on the CAA website - Publications search.