

GHANA CIVIL AVIATION AUTHORITY

Advisory Circular AC-00-003

DEVELOPMENT AND PREPARATION OF TECHNICAL MANUALS BY AIR NAVIGATION SERVICE PROVIDERS (ANSPs)

SECTION 1 - GENERAL

1. PURPOSE

This Advisory Circular (AC) is issued to provide general information and guidance on the development of manuals by Air Navigation Services Providers (ANSPs), as required by the Ghana Civil Aviation Directives. It also provides guidelines on the process required for reviewing, and acceptance or approval of the manuals.

2. STATUS OF THE ADVISORY CIRCULAR

This AC is an original issuance.

3. BACKGROUND

- A. The provisions in the Ghana Civil Aviation (ANS) Directives require the development of various manuals for their implementation by Air Navigation Services Providers (ANSP).
- B. The number and type of documents will depend on the type and volume of service provided. Guidance and procedures for the format, development, approval, distribution and amendment remains common to all types of manuals irrespective of the type.

4. APPLICABILITY

This AC is applicable to Air Navigation Service Providers (ANSPs) providing the following services in Ghana:

A. Air Traffic Services



- B. Aeronautical Information Services
- C. Communication, Navigation and Surveillance / Aeronautical Telecommunication Services
- D. Aeronautical Meteorology
- E. Aeronautical Search And Rescue
- F. Aeronautical Cartographic Services
- G. Instrument Flight Procedure Design

5. RELATED DIRECTIVIES

- A. This AC is related to the following Parts of the Ghana Civil Aviation (Air Navigation Services) Directives:
 - i. Part 15 Aeronautical Information Service (AIS)
 - ii. Part 19 Rules of the Air
 - iii. Part 20 Meteorology for International Air Navigation
 - iv. Part 21 Aeronautical Charts
 - v. Part 22 Units of Measurement for Air Ground Operations
 - vi. Part 23 Aeronautical Telecommunication (Subparts 23.1 23.7)
 - vii. Part 24 Air Traffic Services (ATS)
 - viii. Part 37 Aeronautical Search And Rescue (SAR)
 - ix. Part 38 Instrument Flight Procedure Design

6. ACRONYMS

- AC Advisory Circular
- ANS Air Navigation Service
- ANSP Air Navigation Service Provider
- GCAA Ghana Civil Aviation Authority
- GCAD- Ghana Civil Aviation Directives
- DG Director General
- SRD Safety Regulation Department

7. BACKGROUND



- A. The provisions in the Ghana Civil Aviation (ANS) Directives require the development of various manuals for their implementation by Air Navigation Services Providers (ANSP).
- B. Some of these Manuals include but not limited to the following:
 - i. Operations Manual of the ANSP
 - ii. Training Manual of the ANSP
 - iii. Contingency Plans and implementation Manual
 - iv. Safety Management System (SMS) Manual
 - v. Quality Management System (QMS)
 - vi. Maintenance Management Manuals
- C. The number and type of documents will depend on the type and volume of service provided. Guidance and procedures for the format, development, approval, distribution and amendment remains common to all types of manuals irrespective of the type.

SECTION B - GUIDANCE AND PROCEDURES

8. ADEQUACY OF PROCEDURES

- A. The manual shall comply with the requirements of the Directives, be consistent with safe operating practices and based on sound rationale or demonstrated effectiveness.
- B. The following should be clearly demonstrated:
 - i. **OBJECTIVE.** The objective of a procedure provided in the manual.
 - ii. **LOGICAL SEQUENCE.** Procedures are to flow in a logical sequence rather than a narrative format. The most effective procedures are usually simple and each contains only the information necessary for accomplishing that procedure.

iii. GENERAL CONSIDERATIONS:

 The procedure must be an acceptable method for accomplishing and achieving the intended objective.



- 2. The individual responsible for each step of a procedure must be clearly identified.
- The acceptable standards of performance for a procedure are to be stated if those standards are not commonly understood or clearly obvious.
- 4. Since a variety of personnel with differing degrees of expertise are involved in the procedures, adequate information concerning the accomplishment of a procedure must be provided for the least experienced individual.
- 5. A procedure may be described very briefly and concisely when the user is capable of achieving the objective without extensive direction or detail. When the user has limited training or experience, a procedure must be described in enough detail for the user to correctly accomplish it.
- When the user has limited access to other sources of information and guidance while performing a procedure, enough details should be provided to make the user independent of other sources of information.
- When a form, checklist, or tool is necessary to accomplish a procedure, the location of that item must be indicated in the procedure.
- Enough time should be available under normal circumstances for the user to accomplish a procedure. If sufficient time is not available to the user for accomplishing a procedure, either the procedure itself or the user's duties must be revised.



9. The procedure must be tested to ensure that it is fit for the purpose before approval for use.

9. REVIEW OF MANUALS

 A. Manuals must be reviewed periodically to ensure compliance with current Directives, safe operating practices and procedures.

10. SUBMISSION OF THE MANUALS FOR REVIEW.

- A. For the initial approval copies of the manuals to be approved shall be submitted to the Authority both in hard and soft copies for review. A comprehensive review shall be conducted by the Authority to verify that the manuals conform to the format and style as follows:
 - i. **FORMAT.** The manuals have been prepared in conventional manual format and provided in both hard and soft copy.
 - ii. **INTRODUCTION OR PREFACE.** The first page shall contain a brief description of the manual, its intent and intended users. This page shall contain a section for endorsement by the approving Authority. The introduction or preface section shall also contain a statement of compliance to the Procedures and shall be signed by the Accountable Manager. This section emphasizes that the procedures and policies in the user manual are expected to be used by the company personnel.
 - iii. REVISION CONTROL. The manuals shall be bound in a manner easy to revise and shall contain a revision control page or section from which the user can readily determine whether the manual is current or not. This page or section should follow the cover page. The control date of the most recent revision of each individual page must appear on each page. A bulletin system may be established to bring temporary information or changes that should not be



- delayed by a formal revision process, to the attention of the user.
 The bulletin system should have a means of control that includes giving bulletins a limited life and systematically incorporating them into appropriate manuals in a timely manner. Users should be able to easily determine whether they possess all current bulletins.
- iv. TABLE OF CONTENTS. Each manual shall have a table of contents containing lists of major topics with their respective page numbers.
- v. A STATEMENT OF COMPLIANCE. If applicable, the Manual shall include a statement that indicates where in the manual each regulatory requirement for the manual subject has been compiled with.
- vi. **REFERENCES.** Manuals may include references to other manuals when it is necessary to clarify the intent of the text or when it is useful to the user for looking up specific subject matter. References should not be made to Advisory Circular (AC) as these sources are advisory. Operators should use caution when adapting the text of advisory documents into their manuals. AC text may not necessarily translate into a Directive.
- vii. **DEFINITIONS.** Significant terms used in manuals should be defined. Any acronym or abbreviation not in common use should also be defined.
- viii. **ELEMENTS OF STYLE.** Manuals should be composed in the style of general technical writing. This style should be clear, concise, and easy to understand.

11.THE APPROVAL AND ACCEPTANCE PROCESS



- A. The satisfactory manuals will be issued with an approval note by the Authority. The approved manuals shall contain the following:
 - Control sheets, shall have the Authority stamp with the phrase GCAA Approved, the effective date of approval and signature on both copies.
 - ii. One copy of the approved manual will be returned to the ANSP with a notification letter stating that the material is approved. The letter will also contain a statement advising the ANSP to maintain, for its records, the signed control sheets with the approval annotation.
 - iii. Each approved manual shall have an approval note on its front page.

12. DISTRIBUTION AND AVAILABILITY OF MANUALS

- A. It is required that a complete manual (or set of manuals) is maintained at the operational units for easy of reference.
- B. The manual may be provided in conventional paper format or in another form that is convenient for the user.
- C. Each employee to whom the manual or a user manual is furnished must keep it current

13. AMENDMENTS TO THE APPROVED MANUALS

- A. The Authority will review all amendments to the manuals and during this process it will not limit itself to the amendments alone but also the impact of the changes on the overall manual system.
- B. Continuous review of the manuals by the ANSP is necessary because both the aviation environment and the operations are constantly changing.

SIMON MOLAI ALLOTEY

GHANA CIVIL AVIATION AUTHORITY



DIRECTOR GENERAL GHANA CIVIL AVIATION AUTHORITY