

Advisory Circular System



September 25, 2000

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

FOREWORD

The advisory circular (AC) system became effective in 1962. It provides a single, uniform, agency-wide system that contains all materials structured to give guidance and information to the public. The Federal Aviation Administration (FAA) has used this system to distribute advisory material of a nonregulatory nature to FAA recipients, industry, the aviation community, and the public. Promoting and sustaining this role requires close liaison between originators and personnel responsible for review and clearance of advisory circulars.

This order sets forth current and improved procedures for preparing and processing advisory circular information. It explains the way the system operates, lists the significant responsibilities of issuing offices, services, and regional components, and establishes standards for format, writing, and clearance procedures.

Preparers requiring additional assistance (i.e., placing a publication on sale, etc.) should consult with the appropriate Directives Management Officer (DMO), or Directives Management Representative (DMR). The Office of Performance Management, Standards and Information Division, APF-100, is available to assist originators and DMOs and DMRs.



Randall S. Fiertz
Acting Director of Performance Management

TABLE OF CONTENTS

CHAPTER 1. GENERAL	1
1-1. PURPOSE.....	1
1-2. DISTRIBUTION.....	1
1-3. CANCELLATION.....	1
1-4. BACKGROUND.....	1
1-5. EXPLANATION OF CHANGES.....	1
1-6. DEFINITIONS.....	1
1-7. RELATED READING MATERIAL.....	2
1-8. FORMS.....	2
1-9 REQUEST FOR INFORMATION.....	3
1-10. SCOPE.....	3
 CHAPTER 2. RESPONSIBILITIES	 5
2-1. OFFICE AND SERVICE DIRECTORS, DEPUTIES AND REGIONAL AIRCRAFT CERTIFICATION DIRECTORATES.....	5
2-2. OFFICE OF THE CHIEF COUNSEL AND REGIONAL ASSISTANT CHIEF COUNSELS.....	5
2-3. THE OFFICE OF PERFORMANCE MANAGEMENT.....	6
2-4. DIRECTIVES MANAGEMENT OFFICERS (DMOs).....	6
2-5. THE OFFICE OF PERFORMANCE MANAGEMENT.....	7
2-6. THE OFFICE OF PUBLIC AFFAIRS.....	7
2-7. WRITERS.....	7
2-8. REVIEWING OFFICES.....	7
2-9. USERS.....	7
2-10. THRU 2-12. RESERVED.....	7
 CHAPTER 3. AN OVERVIEW OF THE SYSTEM	 9
3-1. DESCRIPTION.....	9
3-2. TYPES OF ADVISORY CIRCULARS.....	9
3-3. ADVISORY CIRCULAR NUMBERING SYSTEM.....	10
3-4. SELECTING SUBJECT NUMBERS FOR ADVISORY CIRCULARS.....	10
3-5. ASSIGNING/OBTAINING CONSECUTIVE NUMBERS TO ADVISORY CIRCULARS.....	11
3-6. REVALIDATION.....	11
3-7. CHECKLISTS.....	11
3-8. MICROFICHED/PAPER ADVISORY CIRCULARS.....	12
3-9. THRU 3-12. RESERVED.....	12
 CHAPTER 4. PREPARATION AND PLANNING	 13
4-1. FORMATS AND PLANNING.....	13
4-2. SAMPLE FORMS.....	15
4-3. CHARTS AND GRAPHICS.....	16
4-4. KEYING ARTWORK.....	16
4-5. CLEARANCE PROCEDURES.....	16
4-6. SIGNATURE.....	19
4-7. REVISIONS.....	19
4-8. CANCELING ADVISORY CIRCULARS.....	21
4-9. FEDERAL REGISTER DOCUMENT DRAFTING.....	21

4-10. THRU 4-14. RESERVED.....	21
CHAPTER 5. WRITING STANDARDS.....	23
5-1. GENERAL REQUIREMENTS.....	23
5-2. WRITING RULES.....	23
5-3. REFERENCES.....	23
5-4. EMPHASIS ON TEXT.....	24
5-5. CAPITALIZATION.....	24
5-6. ABBREVIATIONS.....	24
5-7. QUOTATION MARKS.....	24
5-8. COPYRIGHTS, CREDIT LINES, AND ACKNOWLEDGEMENTS.....	24
5-9. LEGENDS FOR TABLES AND FIGURES.....	25
5-10. THRU 5-12. RESERVED.....	25
CHAPTER 6. PRINTING AND DISTRIBUTION PROCEDURES.....	27
6-1. PREPARING THE PRINTING REQUISITION.....	27
6-2. FREE ADVISORY CIRCULARS.....	27
6-3. FOR SALE ADVISORY CIRCULARS.....	27
6-4. DISTRIBUTION AND FILING.....	27
6-5. STOCKING AND ORDERING ACs.....	29
6-6. THRU 6-10. RESERVED.....	29
APPENDIX 1.....	A1-1
FIGURE 3-1.. GENERAL SUBJECT AND SPECIFIC SUBJECT NUMBERS.....	A1-1
FIGURE 3-1.. GENERAL SUBJECT AND SPECIFIC SUBJECT NUMBERS, CON'T.....	A1-2
FIGURE 3-2.. SAMPLE FAR GUIDANCE MATERIAL.....	A1-3
APPENDIX 2.....	A2-1
FIGURE TITLE 4-1. SAMPLE ADVISORY CIRCULAR MASTHEAD.....	A2-1
FIGURE TITLE 4-2. SAMPLE CONVENTIONAL TITLE PAGE WITH GPO SALES LINE.....	A2-2
FIGURE TITLE 4-3. SAMPLE ADVISORY CIRCULAR ISSUANCE RECORD.....	A2-3
FIGURE TITLE 4-4. SAMPLE CONTENTS PAGE.....	A2-4
FIGURE TITLE 4-5. SAMPLE FRONT (SEPARATE) COVER WITH ARTWORK.....	A2-5
FIGURE TITLE 4-6. HOW TO PREPARE FAA FORM 1300-2, CLEARANCE RECORD.....	A2-6
FIGURE 4-6a. SAMPLE CLERANCE RECORD.....	A2-7
FIGURE 4-7. SAMPLE PAGE CONTROL CHART.....	A2-8
APPENDIX 3.....	A3-1
FIGURE 6-1. SAMPLE PRINTING, BINDING, DISTRIBUTION, AND EDITORIAL SERVICES REQUEST.....	A3-1
FIGURE 6-1. SAMPLE ANNOUNCEMENT OF AVAILABILITY.....	A3-2

CHAPTER 1. GENERAL

1-1. PURPOSE. This order prescribes standards and procedures for the use of the Federal Aviation Administration (FAA) Advisory Circular (AC) System. The AC system provides guidance, information, and NONREGULATORY material to the general aviation community and to the public. This order contains information that will assist those responsible for disseminating Federal Aviation Regulation (FAR) related information.

1-2. DISTRIBUTION. This order is distributed to division level in Washington, regions and centers, and to all Directives Management Officers (DMOs).

1-3. CANCELLATION. Order 1320.46A, FAA Advisory Circular System, dated August 23, 1995, is canceled.

1-4. BACKGROUND. The Joint Committee on Printing and Binding Regulations (JCP), operating under the authority of Title 44, United States Code, directs Federal agencies to establish and maintain a program governing the preparation and production of publications. Since 1962, ACs have been used by FAA as a medium for publishing information of an advisory nature or to show a method acceptable to the Administrator for complying with a related FAR.

1-5. EXPLANATION OF CHANGES. The Office of Performance Management (APF), administers the AC system and processes ACs which will be signed by the Administrator, associate administrators, or certain assistant administrators. Previously, the Office of Business Information and Consultation (ABC) was responsible for these functions. This revision:

a. Updates current organizational changes and simplifies the order.

b. Documents the responsibility of the Office of Performance Management for publishing AC 00-2, Advisory Circular Checklist and Status of Other FAA Publications. The checklist keeps FAA users and the public informed of the status of advisory circulars and the status of other FAA publications sold by the Superintendent of Documents, U.S. Government Printing Office (GPO).

1-6. DEFINITIONS. The terms defined in this order apply to the AC system.

a. The AC System is a process for making available to the general aviation public information corresponding to the subject areas of the Federal Aviation Regulations (FARs) (Title 14, Code of Federal Regulations).

b. Advisory circulars provide explanatory and guidance material that is informational in nature and bears no semblance to regulatory-like language.

c. The AC Checklist contains titles and abstracts, as well as stock numbers and sale prices of ACs and other FAA publications sold by the Superintendent of Documents.

d. Announcement of Availability (clearance not required for this AC) is an advisory circular which carries the same AC number and title as the basic AC it is describing. It can also be issued for other FAA publications (internal directives, reports, charts) which are determined to be of use or interest to the public or offered "for-sale" by the Superintendent of Documents, National Technical Information Service, or some other source. (See paragraphs 4-1d(14), 6-4a(5), and figure 6-2.)

e. Camera ready copy is clean typewritten copy (single spaced), reproduction proofs, artwork, or previously printed material.

f. A Change is used to add new information to an existing AC. Issued only when the basic AC cannot be readily changed.

g. The Circle Folios are handwritten numbers that are circled. Circle folioing is shown in non-reproducible pencil on the bottom pages of manuscript or camera ready copy to indicate the sequence in which the material is to be printed and assembled. They are also used to indicate blank pages.

h. Contents lists in sequential order the content of the publication (Heading "Table of Contents" should not be used).

i. Covers. ACs not exceeding 32 PRINTED pages shall have self-covers; i.e., covers of the same paper stock as the inside pages. Separate covers may be specified or used for publications of more than 32 PRINTED pages. Separate covers should be used on ACs that are offered "for-sale" through the Superintendent of Documents.

j. Editorial Update is only used when an existing AC requires minimum changes to update "how to order" instructions for the benefit of the public. No initial external distribution is made on an editorially updated AC. Updated copies replace existing stock copies.

k. Federal Aviation Regulation is a rulemaking procedure that promotes and regulates civil aviation in a manner that will provide for the safety of flight, foster its

development, and provide for the safe and efficient use of the airspace.

l. Folio.

(1) page numbers printed on a page; (2) page numbers inserted on copy to indicate to printer the page layout of the publication and indicates blank pages as well as printed pages (see "circle folio").

m. Format is the shape, size, and the general make-up or arrangement of the elements of an AC. The elements in order of use include the cover, title page, table of contents, text, attachments (including bibliography, appendixes, glossary, and subject index). Every AC, depending on its complexity and purpose, does not have to include each element.

n. Image area is the exact area on a page within which printed material will print (show).

o. Manuscript is the completed typewritten text (double-spaced) submitted for composition (typeset, electronic publishing, desk-top publishing, etc.).

p. Microfiche is a sheet of film containing multiple microimages (up to 97 pages of text) in a grid pattern and a heading or title which can be read without magnification.

q. GPO Form 3868, Notification of Intent to Publish, is a key element in the decision of the Superintendent of Documents, U. S. Government Printing Office (GPO), to place a publication on sale. It provides information that will assist in adding publications to the Federal Depository Library System. It can be prepared by the originator and submitted to the Directives Management Officer (DMO) to notify the Office of Business Information and Consultation, Corporate Information Division, ABC-100, that a particular AC is planned for future issuance. Otherwise, ABC-100 will prepare this form.

r. Offices means offices and services in Washington headquarters and regional directorates who are responsible for clearing and approving ACs.

s. Page is the front or reverse of each sheet of paper in a publication (may be printed or blank). To clearly identify each numbered page of text, the word "Page" may also be shown.

t. Revision is the complete reissuance of an existing AC, usually when more than 50 percent of the text is changed.

u. Shall. The word "shall" is used by FAA in an imperative sense. It is mandatory. The word "shall" is not be used in the text of an AC.

v. Text is the main body of the subject material in the AC as distinguished from Contents, Glossary, Appendix, Index, or others.

1-7. RELATED READING MATERIAL. Use the latest edition of the publications listed below as reference tools:

a. Advisory Circulars (AC).

(1) AC 00-2, Advisory Circular Checklist.

(2) AC 00-44, Status of Federal Aviation Regulations.

(3) AC 11-2, Notice of Proposed Rulemaking Distribution System.

b. FAA Orders.

(1) Order 1320.1, FAA Directives System.

(2) Order 1710.11, FAA Publication Sales Services and Liaison with the Superintendent of Documents, U.S. Government Printing Office (GPO).

(3) Order 1720.18, FAA Distribution System.

(4) Order 1720.29, Superintendent of Documents Distribution of FAA Safety Related Publications.

(5) Order 2100.13, FAA Rulemaking Policies.

(6) Order 8000.51, Aircraft Certification Directorates.

c. GPO Style Manual.

1-8. FORMS. The forms associated with the issuance of an AC are as follows:

a. FAA Forms.

(1) FAA Form 1100-1, Directory-Distribution Change Notice, NSN: 0052-00-609-5004, Unit of issue: SE, available from FAA Logistics Center and SVC 121.23.

(2) FAA Form 1300-2, Clearance Record, NSN: 0052-00-506-7000, Unit of issue: SH, available from FAA Logistics Center, operating stock, and SVC 121.23.

(3) FAA Form 1320-10, Directives Typing Guide (odd and even), NSN: 0052-00-516-7003, Unit of issue: SH, available from FAA Logistics Center, operating stock, and SVC 121.23.

(4) FAA Form 1320-15, Advisory Circular Masthead (also used for changes and covers), NSN: 0052-00-885-7000, Unit of issue: SH, available from FAA Logistics Center, operating stock, and SVC 121-23

(5) FAA Form 1720-11, Publication(s) Request, available from SVC 121.23

b. WA Form 1320-1, Advisory Circular Issuance Record, available from SVC 121.23.

c. DOT Forms.

(1) Form DOT F 1700.3, Printing, Binding, Distribution, and Editorial Services Request, available from APF-100.

(2) Form DOT F 1700.15, Distribution Requirements, NSN: 0052-00-873-9000, available from SVC 121.23 and FAA Logistics Center, AML-1000.

(3) Form DOT F 1710.2, Request for Graphic and Photographic Services, available from Corporate Information Division, APF-100.

d. Form OST F 1700.6, Stock Level Notification. (This form is used to activate stock level requirements. It is sent from TASC, SVC 121.23, via APF-100, to appropriate DMOs so that stock can be replenished).

e. GPO Form 3868, Notification of Intent to Publish, available from APF-100. (This form is used when publications are to be offered for sale through the Superintendent of Documents, U.S. Government Printing Office (GPO)).

1-9. **SCOPE.** Issuances falling within the scope of the advisory circular system are FAR-related and provide guidance and information which correspond to the subject area of Federal Aviation Regulations (FAR's). The advisory circular (AC) shall make clear that the methods or procedures described are not necessarily the only ones acceptable to Federal Aviation Administration (FAA).

a. All descriptions of approved procedures that have been authorized by the FAR's are to be issued in the AC system.

b. The originator of a directive may issue an AC (Announcement of Availability) describing how to obtain the directive if it has use or is of proper interest to the public (see paragraph 6-4a(5)). This does not preclude originators from extracting appropriate portions of internal directives and issuing them as advisory circulars in lieu of distributing the directive itself. Arrangements may also be made, through ABC-100, to have a directive sold by GPO, if it is believed to be of sufficient interest to the aviation community.

CHAPTER 2. RESPONSIBILITIES

2-1. OFFICE AND SERVICE DIRECTORS, DEPUTIES AND REGIONAL AIRCRAFT CERTIFICATION DIRECTORATES (New England, Central, Southwest, and Northwest Mountain) responsible for review and clearance of ACs shall comply with the provisions of this order.

a. The office of primary responsibility (OPR) is the office that issues an AC.

b. Each approving official is responsible for:

(1) Determining the public's need for advisory information and guidance in the area of their organizational responsibility.

(2) Approving all ACs issued within their operating authority. This responsibility may not be redelegated, except as stated below:

(a) Exceptions.

1. Washington Headquarters Aircraft Certification Service (AIR) division managers may be redelegated the authority to approve/issue advisory circulars within their areas of responsibility.

2. Signing authority may be redelegated to division managers for those ACs that only provide directory and/or listing type information (e.g., AC 183-32, FAA Designated Maintenance Technician Examiner Directory). Division managers may issue an "announcement of availability" for ACs and other FAA publications that are sold by the Superintendent of Documents, U.S. Government Printing Office (GPO) or from other sources, such as National Technical Information Services (NTIS).

(3) Assigning to the AC its basic subject matter series number. (This number also relates to the distribution pattern given the AC, i.e., AC 20 series—Aircraft, AC 60 series—Airmen, and AC 90 series—Airspace). If the AC is offered for sale to the public the distribution pattern will be lessened to "FAA Only" with limited distribution to the military.

(4) Ensuring that material contained in draft advisory circulars does not conflict with policy, authorities, standards, and procedures stated in other official FAA documents.

(5) Ensuring that all ACs are issued in the format prescribed by this order.

(6) Ensuring that APF-100 is informed when the DMO is changed to assure continued communication between APF-100 and DMOs.

(7) Ensuring that the DMO and OPR are responsive to out-of-stock notices (Form OST 1700.6, Stock Level Notification) sent from the Transportation Service Center (SVC-121.23) through APF-100, by the response due date.

(8) Coordinating and controlling AC activities through their assigned DMOs.

(9) Coordinating ACs with appropriate other offices of interest.

(10) Coordinating all ACs, except directory type listings or announcements of availability, with established legal counsel offices within their jurisdiction. The Office of the Chief Counsel clears ACs for Washington headquarters and the Regional Assistant Chief Counsels clear ACs initiated by their regional offices. If the AC is a joint venture and is being signed by a director in Washington headquarters, it shall be cleared by the Office of the Chief Counsel.

(11) Referring to higher authority for approval those AC's that have raised issues that cannot otherwise be resolved.

(12) Issuing and updating ACs as necessary and establishing revalidation dates.

(13) Canceling, by memorandum to APF-100, any AC that has not been superseded by another AC identifier. The memorandum should mention that the AC is no longer beneficial to the aviation public. Signing authority for cancellation of an AC may be redelegated to the division manager of the OPR. (See paragraph 4-8.)

2-2. OFFICE OF THE CHIEF COUNSEL AND REGIONAL ASSISTANT CHIEF COUNSELS. Legal counsel offices throughout FAA, in conforming with the AC system and FAA rulemaking policies, shall clear all ACs that are not a directory-type listing or announcement of availability.

a. The Office of the Chief Counsel and Regional Assistant Chief Counsels are responsible for:

(1) Reviewing and clearing all draft ACs within their jurisdiction to assure that they are "neither used for nor have the effect of regulations." Reprints, announcements of availability, or directory type listings need not be cleared by legal counsel offices.

(2) Returning the draft AC with comments, if any, to the originator by the response due date.

(3) Notifying the originator, in advance of the response due date, that additional reviewing time (ordinarily not to exceed 30 work days) is requested, if necessary.

If more than 30 work days are needed, notification will be given.

b. The Office of the Chief Counsel:

(1) Issues AC 00-44, Status of Federal Aviation Regulations, as necessary.

(2) Serves as FAA's Liaison, Certifying and Authorizing Officer with the Office of the Federal Register, National Archives and Records Administration.

(3) Provides FAA users with guidance on how to prepare AC materials for entry in the Federal Register (see paragraph 4-9).

2-3. THE OFFICE OF PERFORMANCE MANAGEMENT has jurisdiction over the AC System Program.

a. The Standards and Information Division (APF-100) is responsible for the following activities:

(1) Coordinating throughout FAA the development and maintenance of the AC System.

(2) Evaluating agency AC system operations and recommending appropriate improvements for refining the system.

(3) Developing and reviewing the AC system's publication and distribution standards and procedures.

(4) Developing, maintaining, and publishing reports, checklists, and similar publications covering AC activity.

(5) Providing advisory assistance to offices and services throughout FAA in developing, improving, and implementing the AC System.

(6) Providing operational liaison for all FAA elements with the Office of the Secretary of Transportation (OST) and GPO for pricing FAA publications intended for sale and cataloging.

(7) Advising and assisting offices and services throughout FAA in the preparation, planning, and printing of ACs and, upon request, other publications.

(8) Arranging to publish appropriate listings and descriptions of advisory circular material (AC 00-2, Advisory Circular Checklist and Status of Other Publications).

(9) Assigning sequential numbers to ACs.

(10) Reviewing and clearing all ACs for conformance to agency, departmental, and Federal publishing requirements.

(11) Issuing AC 11-2, Notices of Proposed Rulemaking Distribution System.

(12) Maintaining a master microfiche reference file of all ACs.

b. The final reviewing control point is with APF-100 for the printing and distribution of advisory circular (AC) material.

2-4. DIRECTIVES MANAGEMENT OFFICERS (DMOs). DMOs shall assure that the following advisory circular activities are performed:

a. Managing, controlling, and coordinating all AC activities within their organizations.

b. Assisting AC originators in planning, developing, consolidating, selecting the correct distribution to reach the correct audience, and coordinating AC's from the draft stage to completion.

c. Ensuring that all ACs originated within their organizations meet the clearance, format, and writing standards of this order, and that these ACs are kept up-to-date in order to avoid reprinting obsolete material.

d. Ensuring that necessary preliminary clearances for forms and reports are obtained before any draft is released to outside clearing offices for comment.

e. Ensuring that the distribution listed on the printing request (Form DOT F 1700.3) is accurate for the intended audience.

f. Making sure that one copy of the signed original AC is sent to APF-100 for microfiche purposes.

g. Establishing within their organizations AC improvement meetings and arranging for short training sessions on AC preparation as necessary.

h. Maintaining complete case files on all ACs originated by their offices, or where case files are maintained on a decentralized basis, making certain that files are being maintained correctly.

i. Reviewing out-of-stock notices for ACs and determining in conjunction with the originator if reprinting, revising, or cancellation is necessary.

j. Acting as the central point for AC liaison between the originating office and APF-100.

k. Reporting to APF-100 any information necessary to ensure the accurate maintenance of the Advisory Circular Checklist. When organizational routing symbol changes take place, case files are transferred to another jurisdiction; or DMO is changed, APF-100 is to be notified in writing of such a change.

2-5. THE OFFICE OF PERFORMANCE MANAGEMENT. The Standards and Information Division (APF-100) acts as the DMO in processing ACs for final approval of the Administrator, associate administrators, and certain assistant administrators.

2-6. THE OFFICE OF PUBLIC AFFAIRS. The Office of Public Affairs (APA) issues the Guide to FAA Publications. The FAA Public Inquiry Center, APA-200, provides publication inquiry services.

2-7. WRITERS. Writers should become acquainted with applicable portions of this order before they start drafting of a planned AC.

a. Writers are responsible, through their supervisors, to their approving official for:

(1) Complying with the physical format requirements prescribed in this order and consulting with their DMO, if necessary, on any questions or problems which may arise.

(2) Familiarizing themselves with the writing standards prescribed in this order and writing in a style that can be easily understood.

(3) Assigning the correct (FAR-related) subject number to the AC.

(4) Consolidating ACs on the same subject, where possible.

(5) Determining approval authority to ensure proper clearance, and whether the AC should be for sale through GPO or free from FAA.

(6) Ensuring that draft ACs are cleared with the appropriate offices, including clearance requirements for proposed forms and reports.

(7) Ensuring that the final administrative processing of each AC is cleared through appropriate officials and the DMO.

(8) Ensuring that feedback on comments not adopted or those adopted in part is prepared and returned to the originator (e.g., office/service) of the comments.

(9) Conforming with all editorial rules and standards prescribed in the U.S. Government Printing Office Style Manual.

(10) Obtaining permission to use copyrighted material, when appropriate.

b. Joint authors should make sure that the proposed AC is reviewed and agreed upon by both parties before external clearances take place.

2-8. REVIEWING OFFICES. AC reviewers are responsible for giving high priority to clearing ACs from other offices. This review should be prioritized so that it would meet the issuing offices scheduled due dates and deadlines. (See paragraph 4-5b.)

2-9. USERS. Users who find a conflict in policy or technical content between any AC, agency directive, FAR, FAA policy, or other agency documents, shall notify the originator in writing with a copy to APF-1 so that the Office of Performance Management may be aware of the conflicting information.

2-10. THRU 2-12. RESERVED

CHAPTER 3. AN OVERVIEW OF THE SYSTEM

3-1. DESCRIPTION. This chapter describes the AC System, responsibilities for its operation, issuing authorities, authorized AC formats, standards, AC numbering system, preparation and clearance procedures, distribution and printing procedures. The AC system is designed to:

a. Set forth methods, procedures, and practices acceptable to the Administrator for complying with the Federal Aviation Regulations (FARs).

b. Recommend safe procedures, standards, and practices to all categories of operations in the aviation community.

c. Announce the availability of publications or reports of other agencies and give instructions for ordering.

d. Provide:

(1) Safety release material including reminders, warnings, and advice on specific hazards, and present safety information resulting from research studies.

(2) Information for the use of the air traffic control system.

(3) Information concerning the FAR criteria, standards, and specifications which must be met as a condition of participation in the Federal airports programs.

(4) Current information on agency-sponsored programs, meetings, or symposiums.

(5) Textbook and training manual type material on aviation operational and technical subjects.

(6) Listing of certificated operators, agencies, and registered aircraft.

(7) Guidance to applicants preparing to take written tests on the aeronautical knowledge requirements for airman certificates and ratings.

(8) Guidance to the aviation community on defense readiness measures.

(9) Preparation guidance to applicants for certification or rating flight tests.

(10) Syllabi of training lessons to assist those preparing to qualify for specific airman certificates and ratings.

3-2. TYPES OF ADVISORY CIRCULARS. ACs are written communications in which an FAA official issues explanatory and guidance material that is entirely informational in nature. They remain in effect until they are canceled by another AC identifier or because the information contained in the AC is no longer useful to the aviation

community and public. They are updated by changes or a complete revision. There are two types of ACs—standard and nonstandard (short and long).

a. Short ACs. Short (standard) ACs are used when the subject matter generally consists of 31 PRINTED pages or less. (See standard format, paragraph 4-1b(3).)

b. Long ACs. An AC is considered long when it consists of 32 PRINTED pages or more, and includes a Contents (not a "Table of Contents") page preceding the text (see paragraph 4-1b(4) on nonstandard formatting.) List in the contents page(s) each chapter, section, paragraph, figure, and appendix in order of appearance. Show the page number on which the division first appears. Do not list subparagraphs. Give the number of pages in each appendix in parentheses after the appendix title. List the contents of long appendixes. List illustrations at the end of the Contents listing under "List of Illustrations" or "List of Figures" or simple "Illustrations," or "Figures" as shown in figure 4-4. Make up the AC as follows:

(1) Cover. Prepare a front cover on FAA Form 1320-15 as illustrated in figure 4-5. Generally, print the front cover on 100 lb. vellum stock. Request on the printing requisition a back cover (page 4 of cover, usually blank) of the same paper stock (see paragraph 4-4d). Figure 4-1 shows the basic masthead for all ACs when the nature of the material does not require a different size, binding, or text presentation.

(2) Consolidated Reprint. Follow instructions provided in paragraph 4-1b(1)(a)(1) and (2) if cover artwork is required for a consolidated reprint notation.

(3) Masthead Sheet. Prepare a masthead sheet, FAA Form 1320-15, containing the basic information specified in paragraph 4-1d. Put the signature (see paragraph 4-6) and title of the approving official on this page also (or the second or third page if material runs over). Locate the masthead sheet on the first right-hand page after the cover. This sheet is illustrated in figure 4-1. Some nonstandard ACs (depending on format and design) have a title page rather than the masthead sheet when the usual AC paragraphs are not necessary.

(4) Contents. Prepare the contents beginning with the right-hand (odd-numbered) page following the transmittal masthead sheet.

(5) Text. Begin the text at the top of the first right-hand odd-numbered page after the contents.

(6) Reserving Numbers for Future. Looseleaf ACs designed for Change pages may plan for future inser-

tion of additional material by reserving the necessary chapters. Make the reservations as follows:

(a) Chapters and Sections. Show reserved chapters, sections, and paragraphs in the Contents. Do not use blank pages in the text to indicate reserved sections. Give the planned chapter or section title if known or simply word "RESERVED." For Example:

CHAPTER 14. [RESERVED.] or
CHAPTER 14.LIMITATIONS [Reserved]

NOTE: List the reserved paragraphs in the same manner in the Contents. Note brackets around word. "Reserved" to denote editorial action and not title of the paragraph.

(b) Paragraphs and Sections. Show reserved paragraph numbers in the text flush to the left margin as with any other paragraph. Show reserved sections centered on the page. For example:

131.-169. [RESERVED.] (flush with left margin)

SECTION 7. [RESERVED] (center on page)

3-3. ADVISORY CIRCULAR NUMBERING SYSTEM.

a. Advisory Circular (AC) Relationship to Regulations. AC's are classified by subject matter areas corresponding to the subchapter and Part titles of the Federal Aviation Regulations (FARs). ACs are identified by:

(1) GENERAL subject numbers corresponding to the related general subject titles of the FAR subchapters or

(2) SPECIFIC subject numbers corresponding to the related FAR Part numbers (see figure 3-1).

(a) FAR Related. A SPECIFIC subject number must be used whenever the AC is based on a FAR Part. For example, a circular pertaining to a specific regulation must be numbered to correspond not only to that Part but, whenever possible, to the specific SECTION NUMBER in the Part, such as AC 43.13-1). In addition, to help further identify FAR related material, the words, "FAR GUIDANCE MATERIAL," should be shown in the subject area of the AC. (See figure 3-2.) If the subject wording is long, place the words, "FAR GUIDANCE MATERIAL" centered on the black bar line above the subject area (see paragraph 4-1d(4) and figure 3-2).

(b) Subchapter Related. A GENERAL subject number must be used whenever the AC is based on a subchapter title area of the FAR (for example, AC 23-3).

b. Subject Area Numbers. The general subject numbers and specific subject numbers are shown in figure 3-1 (general subject titles are in all capital letters).

c. Breakdown of General Subject Area Numbers. When the volume of ACs in any one subject area warrants, a subsubject numbering system may be established. The general subject area number will be followed by a slash and a number to indicate the subsubject, i.e., 150/5100-3A. The subsubject number is taken from the latest edition of Order 0000.1, FAA Standard Subject Classification System.

d. Identification Numbers. An AC is identified by a general subject area number or a specific subject number followed by a dash and a consecutive number. Each "dash number" will be used only once with the same subject number. Revised circulars (excluding AC 00-2, Advisory Circular Checklist) will have a capital letter (A, B, C, etc.) after the original consecutive (identifying "dash") number. (For example, AC 23-3C indicates the third revision to AC 23-3.)

(1) Examples of AC Identification.

(a) General Subject Area AC. AC 20-127 (20 relates to Aircraft; -127 is the next available consecutive number ("dash number") assigned to AC 20).

(b) Specific Subject AC. AC 21.303-1 (21 relates to a specific FAR Part; .303 relates to a specific section in Part 21 entitled, "Certification Procedures for Products and Parts;" -1 is the first issuance to AC 23.303).

(c) Subcategory of Subject Area. AC 150/5200-3 (150 relates to Airports; 5200 is a subdivision of airports safety subjects, entitled "Airport Safety"; -3 is the third consecutive number issued in the AC 150/5200 series).

(d) Revised AC. AC 150/5200-1A (first revision of AC 150/5200-1).

3-4. SELECTING SUBJECT NUMBERS FOR ADVISORY CIRCULARS.

a. General Subject Area and Specific Subject Numbers. These numbers are assigned by the writer after considering the following points:

(1) The purpose of the advisory circular (AC).

(2) The needs of the user.

(3) The number that most closely pinpoints the subject. For example, when issuing pertinent information about aircraft performance rules for inspection, number it AC 43.15-. AC 43-15- is the FAR Guidance Material for Part 43 and not just general information on aircraft. The dash would be followed by the next consecutive number assigned by APF-100.

b. Multiple Choice Subject Area Numbers. If two or more FAR Parts are covered, choose the most distinctive

subject area number of the group and issue the AC under this number.

3-5. ASSIGNING/OBTAINING CONSECUTIVE NUMBERS TO ADVISORY CIRCULARS. The next consecutive number ("dash number") is assigned to the AC subject number by APF-100.

a. After the administrative clearance approving official has signed the Clearance Record, and the signing official has signed the Clearance Record and the original of the AC in BLACK INK, check with APF-100 for assignment of the next consecutive number to the AC. The next consecutive number can be reserved by telephoning APF-100. (This should only be done when the DMO has made final administrative clearance and the AC is ready for signature.)

b. After the assigned number and date are typed on the AC, deliver the completed Clearance Record (FAA Form 1300-2), the Advisory Circular Issuance Record (WA Form 1320-1), original and one copy of the AC, and the printing requisition (DOT F 1700.3) to APF-100 for processing.

c. APF-100 will review the AC for format, review the clearance record for legal counsel clearance, sign DOT F 1700.3 as the final clearing review point.

d. The original AC is controlled for further processing (checking for distribution pattern being used, stock requirements, assignment of printing requisition number, and so on). The Clearance Record, background, if included, and one copy of the AC Issuance Record are returned to the DMO for filing.

e. A copy of the AC is sent to the microfiche contractor to be microfiched. The contractor will send microfiched ACs to those addressees on the established "AC Microfiche Mailing List". (See paragraph 3-8a.)

f. If the AC is to be sold by the Superintendent of Documents, deliver the AC and the printing requisition to APF-100 for preparation of GPO Form 3638, Notification of Intent to Publish. APF-100 will arrange with the Superintendent of Documents, Documents Control Branch, to place any FAA publication on sale. (See paragraph 4-1b(4)(b) regarding sales of ACs.)

3-6. REVALIDATION. Advisory Circular revalidation is a continuous program to keep all ACs up-to-date. To make the program effective, DMOs must take positive action to ensure review of all ACs originated by their issuing office on a regular basis.

a. **Assigning Revalidation Dates.** When an AC is issued, the issuing office shall assign a date for its revalidation review. This date shall be no later than one year from

the date of issuance or last revalidation action. In addition, an AC must be revalidated each time reaches a point when reprinting is required to avoid reprinting obsolete material. (This should be done at the time a stock level notification (Form OST F 1700.6) is received by the DMO.)

(1) **Recording Revalidation Dates.** Record the revalidation date in the block provided on WA Form 1320-1, Advisory Circular Issuances Record. Each DMO is responsible for establishing and maintaining a system that will alert the DMO and the author of the approaching review date. One copy of WA Form 1320-1 may be kept by date in a revalidation file. The other copy may be filed by AC number for quick reference to all current ACs issued by the DMO's originating office.

(2) In advance of the revalidation date, the originator and the DMO shall review the AC and determine what action (revising/cancelling/reprinting) is necessary. Submit a route slip or informal memorandum to the Transportation Administrative Services Center, SVC-121.23, for a stock count to be sure that a sufficient supply of the AC is available before initiating action to reprint. Revise, change, or cancel the AC if the information contained in it is no longer beneficial to users.

(3) Establish a new review date at the time of completing any necessary action (revision or reprint). If the AC is determined to be fully current and effective at the time of the review, establish a new review date for the present AC. When a revised AC is issued, complete a new AC issuance record card and submit it to APF-100 with the revised AC. Periodic reviews of ACs by the originating office are encouraged.

3-7. CHECKLISTS.

a. AC 00-2, The Advisory Circular Checklist and Status of Other FAA Publications, is issued annually. Distribution of the checklist is made to all addressees on the AC mailing list. Additional copies of the checklist are distributed to the public from SVC 121.23, upon request. The checklist gives the AC number, title, date, a brief description, and the price and stock number if the AC is listed as being "for-sale" by GPO. It also gives complete ordering instructions for both free and "for sale" ACs.

b. AC 00-44, The Status of Federal Aviation Regulations (FARs), is usually issued on an annual basis. When enough changes to FARs warrant a new status report, AC 00-44 is updated and distribution is made to all addressees on each AC mailing list. Additional copies of the status report are distributed to the public from SVC 121.23, upon request.

c. The Guide to Federal Aviation Publications is distributed to the public from SVC 121.23 upon request. It

is designed to help customers identify and obtain FAA and other aviation-related publications issued by the federal government.

3-8. MICROFICHED/PAPER ADVISORY CIRCULARS. All materials issued within the AC system will be placed on 24X microfiche. APF-100 will monitor the AC microfiche system and examine the effectiveness of the system to ensure that it is working smoothly. Those who want to receive a complete set of microfiched ACs should notify APF-100 as mentioned in subparagraph a. below. Thereafter, each agency user on the mailing list will receive AC microfiche updates by mail from the designated microfiche contractor. (See paragraph 2-9(b).)

a. Microfiched ACs (selective mailing lists). The AC Microfiche Address File, maintained by the microfiche

contractor, will be the only mailing list used to distribute microfiched copies of ACs. The accessibility of complete AC information on microfiche can be made readily available to FAA users by submitting a memorandum, indicating the full mailing address, to APF-100.

b. Paper ACs (selective mailing lists). FAA users, as well as the aviation community and public, who are currently on selective (20, 21, 23, 33, 60, 70, 90, 120, etc.) AC mailing list will continue to receive paper copies through the use of these lists. The AC paper copy mailing lists file is maintained by Initial Distribution/Requirements, SVC 121.21. All requests for mailing list action should be sent to SVC 121.21 for processing. (See paragraph 6-4a(1)).

3-9. THRU 3-12. RESERVED.

CHAPTER 4. PREPARATION AND PLANNING

4-1. FORMATS AND PLANNING. Advisory Circulars are issued in a variety of formats. The format and style can vary based upon how the originator wants to release AC information to the users. **It is the responsibility of the WRITER with the assistance of the DMO, if necessary, to determine the format for an AC before copy preparation begins.**

a. The writing standards contained in chapter 5 of this order provide information on the general requirements to be applied when preparing an AC. However, to make it easier for the writer and for uniformity of style in numbering paragraphs and subparagraphs, etc., (within the AC and directives systems) follow the guidance given in Order 1320.1, FAA Directives System. This order gives detailed information on the preparation of text and gives guidance for numbering chapters, sections, figures, attachments, and appendixes.

b. Planning an Advisory Circular. ACs must be complete and up-to-date to be effective. While most ACs are distributed free to the public, there are others that are designed to be sold by GPO. Consult with APF-100 before planning an advisory circular format, distribution method or if a "for-sale" AC is contemplated. (See paragraph 6-4.)

(1) General Information. When preparing AC copy for publication try to minimize the number of pages.

(a) Select inexpensive paper stock (Text-C.W. Writing, Sub. 40 lb. weight) and print on both sides, head-to-head.

1. If an AC is originated in Washington headquarters and cover art is required for a CONSOLIDATED REPRINT NOTATION OR OTHER ART WORK, it may be requested from the Transportation Administrative Service Center, SVC 121.33, on Form DOT 1710.2, Request for Graphic and Photographic Services, through APF-100 before delivery to SVC 121.33. (See paragraph 4-4d.)

2. Advice on graphic services is also provided by the Multi-Media Division at the Aeronautical Center, the Logistics Division in the regions, and the Public Affairs Staff at the FAA Technical Center.

3. When preparing the printing requisition (Form DOT F 1700.3), order a two-piece cover on 100 lb. vellum. Mark (circle folio) the copy for the cover "Cover 1, 2, 3, and 4 blank", in non-reproducible blue pencil, if no printing or art appears on cover pages.

(b) Avoid the use of two-color art work, unless it serves a specific need or relates to the transaction

of public business. A written justification must accompany all requests for multi-color art work.

(2) Masthead Sheet. Prepare a masthead sheet, FAA Form 1320-15, containing the basic information specified below for standard and nonstandard ACs. (See figure 4-1.)

(3) Standard Format.

(a) ACs are issued in looseleaf form, punched for a standard three-ring binder. The first page is typed on FAA Form 1320-15, Advisory Circular Masthead sheet (see figure 4-1) followed by a series of pages, either typed on FAA Form 1320-10, Directives Typing Guide, or plain bond, containing the rest of the text. In this form, a standard AC is a single, integrated, self-transmitting publication unit. This format is generally used for a short AC. (See paragraph 3-2a and 6-4.)

(b) Although the AC system is basically designed for typewritten copy preparation, an AC may be set in type for offset reproduction, prepared for photocomposition or electronic publishing.

(4) Nonstandard Format.

(a) ACs are issued in a nonstandard format because the nature of the material may require a different size, binding, or text presentation. The majority of "for-sale" ACs are issued in nonstandard two-column format and are set in type. (For example, a flight training handbook (AC 61-21) requiring a spiral binding, or a technical publication (AC 00-6A, Aviation Weather) containing three-color art, or one having a wrap-around cover instead of a two-piece cover may all fall under the AC issuance system but require different methods of production.) This format is generally used for a long AC.

(b) ACs following a nonstandard format usually begin with a conventional title page containing the DOT signature, full title, AC number, department, agency, office, place of publication, and a GPO sales line. ("For-sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402") if AC is to be sold. (See figure 4-2 for an illustration.)

(c) Typeset Format. Use typesetting (photocomposition) or electronic publishing techniques when more economical or when a high grade printing product is required. Consult the printing organization serving you to determine the appropriate composition method. Organizations using office automation equipment may use plain bond paper for all pages following the AC masthead page. The AC masthead page may be duplicated on electronic

publishing equipment. The basic format for micro-comp typeset ACs is as follows:

1. Two-column (dual column), 20 picas wide, 2-pica center gutter.

2. Ten-point type.

3. Boldface type for chapters, figures, sections, paragraphs, and other headings. On large jobs anticipating many changes, it is more economical to "hold" or "save" the type and "pick up and correct" just in those places where changes occur. If OST is providing micro-comp service, specify on the Form DOT 1700.3, Printing Binding, Distribution, and Editorial Services Request, when you want type held.

(5) Issuance Record. Prepare an AC Issuance Record, WA Form 1320-1, containing the basic information specified on the form. This form is largely self-explanatory. (See figure 4-3.)

c. Placing Advisory Circulars on sale requires advance planning with the Superintendent of Documents, U. S. Government Printing Office (GPO). Originators must request APF-100 to make arrangements with GPO before they begin copy preparation. If GPO decides that there is a potential audience for the AC they will "ride" (print enough copies for GPO to sell) the DOT printing requisition. (See paragraphs 6-3 and 6-4.) The following applies:

(1) GPO will sell only those publications printed by GPO or ordered printed through GPO or the GPO Regional Printing Procurement Offices.

(2) GPO is the final authority for pricing and selling all government publications.

(3) If for some reason, GPO cannot sell the publication, a different copy preparation (standard format) may be required (see paragraph 4-1b(3)).

d. Paragraphs (mandatory and optional). The sequence of paragraphs in ACs is at the discretion of the author. However, standard paragraphs furnish the necessary guidelines for the author to follow to assure issuance of a clear and functional circular. All paragraphs of a CONVENTIONAL (standard) "AC" (which conforms to established standards) must have a number and title. The paragraphs defined below must be used as specified if the information is applicable and presented in the sequence listed. Use only the paragraphs appropriate to the AC you are preparing. DO NOT USE a paragraph entitled "HOW TO ORDER", as that is information for an "Announcement of Availability" only. Refer to Order 1320.1, FAA Directives System, for detailed information on numbering paragraphs and subparagraphs.

(1) PURPOSE. (Mandatory.)—Whenever there is more than one paragraph, always head the first paragraph "PURPOSE." Tell briefly why the AC is being issued and what it contains. Don't start the opening sentence with "The purpose of this AC ..." Start, for example, with "this advisory circular restates existing policy for ... and outlines new procedures to agree with recent regulation changes."

(2) EFFECTIVE DATE. (Mandatory, if applicable.)—For the date of the AC, always use the date inserted by the signing official in the "Date Approved" space of the FAA Form 1300-2, Clearance Record. When it is necessary to make provisions of an advisory circular effective on a date other than the approval date, head the next paragraph "EFFECTIVE DATE." This paragraph is required when an effective date is given for the AC.

(3) CANCELLATION. (Mandatory, if applicable.)—If an advisory circular cancels other ACs, forms, or reports, head the next paragraph "CANCELLATION(S)." Use special terms to cancel, such as, "AC 105-2B, Sport Parachute Jumping, dated 8/21/89, is canceled." (Although the AC system requires a revision "C" to cancel the previous issuance "B", the cancellation paragraph is helpful to users not familiar with the system and who may believe both AC's are current.) An AC may cancel another AC in a different series but no AC may cancel a portion of an AC. DO NOT CANCEL PARTS OF AN ADVISORY CIRCULAR.

(4) RELATED FAR SECTIONS. (Mandatory, if applicable.)—Use this paragraph to cite other related sections in the same FAR to which the AC relates. For example, the AC subject content may relate EQUALLY to sections 61.47, 61.53, 61.55, and 61.125 but the AC obviously could not carry all four section numbers. The AC would have the words "FAR GUIDANCE MATERIAL" typed in caps in the subject area of the AC or centered on the black bar line above the subject, as shown in figure 3-2. (See paragraph 3-2a(2)(a).) Likewise, use this same reference paragraph with referencing sections in any other FAR Parts, as section 65-83 or section 145.13.

(5) FORMS AND REPORTS. (Mandatory, if applicable.)

(a) List all forms and reports that are referenced in an AC in a separate paragraph or list them in appendixes. The relative importance of the forms or reports in the AC (for example, a short AC prescribing a new public use report form) may determine the location of these paragraphs.

1. Forms Listing.

(aa) Complete number and full title of form.

(bb) Ordering information such as form number, title, and unit of issues, (sheet, pad, etc.).

(cc) Source of supply and availability date. Be sure it will be available at the stocking location before you establish a mandatory date for its use. Remember to list the supply sources for the public and FAA.

2. Reporting Listings.

(aa) Report title and any other report identification.

(bb) Reporting period and due dates.

(b) Give detailed instructions in the text for preparation, signature, number of copies, and where to distribute them. Some forms show this information but if they do not, the AC will have to provide it.

(6) DEFINITIONS. (Mandatory if there are many terms having particular meaning as used in the subject AC.)—Use a “DEFINITIONS” paragraph whenever an AC introduces new terms, establishes a specific meaning to any term in the AC or when there are not enough terms to warrant a separate appendix.

(7) FOCUS. (Optional.)—This is an optional paragraph used to command the attention of a particular audience. (This paragraph might be used to alert an audience to pay particular attention to an AC which by its number or subject may appear to concern another audience. This paragraph is particularly useful (for alerting FAA personnel to the specific interest groups) because ACs have no DISTRIBUTION paragraph.)

(8) PRINCIPAL CHANGES. (Optional, but very helpful if the change is complex.)— This paragraph is used as the third paragraph to enumerate the changes made to the basic AC which was designed for a page change format. A general explanation of the number of minor changes is sufficient but significant changes should be listed and explained separately.

(9) RELATED READING MATERIAL. (Optional.)—Use this paragraph to give the reader a guide to other source material. (FAA may refer to commercial publications if they are an excellent source of limited specialized information. Some identification, usually the publisher, must be furnished to enable the reader to locate referenced material. DO NOT INCLUDE PRICES OF ANY REFERENCED READING MATERIAL.)

(10) BACKGROUND. (Optional.)—A background paragraph, when used, is limited to information that is essential to show the development of the need for the AC. (This paragraph is recommended when the action de-

scribed occurred several years earlier and its recital furnishes the basic explanation for the need for the new AC.)

(11) DISCUSSION. (Optional.)—This paragraph is used for long summaries of examination of technical material and may appear in different sections of an AC.

(12) REQUEST FOR INFORMATION. (Optional.)—If the author wishes to invite calls for further information or clarification, the last paragraph of the AC or the transmittal masthead of a long AC may read as follows: “REQUEST FOR INFORMATION: If you want more information or have questions about this AC, write or call (organization title, routing symbol, mailing address, and phone number)”.

(13) COMMENTS INVITED. (Optional.)—This paragraph is for the use of the office of primary responsibility who wants to collect helpful suggestions from the users for improvement or strengthening of the AC. (This paragraph should read as follows: “COMMENTS INVITED: Comments regarding this AC should be directed to: (organization title, routing symbol and mailing address)”.)

(14) HOW TO ORDER. (Mandatory in an Announcement of Availability AC.)—This paragraph is used in an AC announcing the availability of a “for-sale” AC or other FAA publications (internal directives, reports, charts) not given the usual AC distribution. DO NOT USE THIS PARAGRAPH IN THE “AC” ITSELF AS IT IS REDUNDANT THERE. (See paragraphs 1-5d, 6-4a(5) and figure 6-2.)

(15) REFERENCES. Do not use a REFERENCE paragraph. When helpful, place references in the text where their introduction is most useful. Reference publications by identifying symbol, and title for example, “AC 00-6A, Aviation Weather,” or “AC 00-46C, Aviation Safety Reporting Program.”

e. One-paragraph Changes. In a very brief change transmittal, an unnumbered and untitled single paragraph (single or double spaced) may be used if the standard paragraphs would serve no useful purpose. (An example would be a one-page CORRECTION NOTICE or an ERRATA SHEET to provide very brief changes to the basic AC.)

f. Appendixes. Use appendixes to ACs for long bodies of supplementary, illustrative, and other materials that cannot be incorporated into the advisory circular’s text or cannot be shown close to the subject matter.

4-2. SAMPLE FORMS. If an AC calls for the use of a form, use the following guidelines for presenting instructions for its use.

a. Insert instructions on the sample form itself when practicable. In some cases, the percent of reduction necessary to fit the form on the page makes the printed instructions illegible. It is then advisable to insert numbers in the blank spaces on the form and place the corresponding numbered instructions on another page which can be left unreduced in size. If a completed sample of an actual form is shown, write or stamp "SAMPLE" across the face of the form. (This is especially important when the form relates to air navigation, flight operations, or some other important function that the reader must not mistake as containing usable information.)

b. Avoid splitting detailed instructions on the use of a form between text and appendix or figure.

c. Give requirements on number and distribution of copies and mailing instructions.

d. Tell when and where to get the form.

e. Show a sample of a completed form as a supplement to text discussion when helpful.

4-3. CHARTS AND GRAPHICS.

a. Government Printing and Binding Regulations require that illustrative materials in the text be used ONLY when it relates directly to the subject matter and is necessary to explain the text. Insert a figure as close as possible to the referenced text.

b. Many complex procedures, requirements, and instructions can be clarified by using simple illustrations and charts. Use charts, diagrams, or other simple graphics where they will explain complex written text.

c. Professional services for artwork are available in the OST Transportation Administrative Services Center (SVC 121.33) through APF-100. Request such services on Form DOT F 1710.2, Request for Graphic and Photographic Services. Submit form to APF-100 for approval before delivery to SVC 121.33. Advice on graphic services is also provided in the Multi-Media Division in the Aeronautical Center, the Logistics Division in the regions, and the Public Affairs Staff at the FAA Technical Center.

4-4. KEYING ARTWORK.

a. Text. Both camera copy and typeset copy often include half-tones, line drawings, and color process art. Separate all artwork from the typed text and number each piece of art in the lower right-hand corner in order of its appearance in the text. Follow each number with the letter "a" indicating art (1a, 2a, 3a, etc.). Then insert these art numbers in RED INK in the text in the place where the art should appear so that the art may be scaled to size to fit that space. Circle the RED INK numbers in the text to indicate

that the numbers do not print—they are only instructions to the printer for art placement.

b. Camera Copy.

(1) Position the correctly sized art in the proper place in the text, center it over the legend, and secure with transparent Scotch tape down the sides (do not use rubber cement). Make sure tape does not cover any material to be printed. If art must be reduced or enlarged to fit the space, leave a blank space for the art and number the space in RED INK with the number of the piece of art to be inserted—1a, 2a, 3a, 4a, etc.

(2) Mount art that needs to be enlarged or reduced on separate illustration board or heavy paper and mark it with the correct art number, 1a, 2a, 3a, 4a, etc.

c. Typeset Copy. Mount all artwork on separate illustration board or heavy paper. If two or more pieces of art are mounted on one sheet, specify the percentage of enlargement or reduction. Number the pieces consecutively 1a, 2a, 3a, 4a, etc., and insert the circled corresponding number (1a) in the text where the art is to appear. The printer is allowed a three-page leeway for placing the art in the final page makeup. DO NOT MARK ON THE ART. Mark any printing instructions in the margin out of the image area (and out of camera range).

d. Cover. Number the COVER art separately as "cover 1-2, 3, and 4 blank," (if 2, 3, and 4 are blank). If the inside cover or back cover carry artwork, mark that art "cover 2" or "cover 4" as appropriate but be sure to account for "cover 3 blank" if cover 3 contains no art. (See paragraph 3-2b(1).)

4-5. CLEARANCE PROCEDURES. Originating offices are responsible for the substantive contents of each draft AC before releasing it. The drafts shall include all appendixes referred to in the text so that reviewers may comment on a complete package. Originating offices must insure that all affected offices (prior to legal counsel clearance) have an opportunity to review ACs concerning their functional or line responsibilities. Reviewing Offices shall give priority to clearing ACs from other offices. "No response received" will be entered for those office that do not respond.

a. Clearance Requirements.

(1) Clear ACs within the originating office or service first.

(2) Address clearance packages to other concerned offices, services or regional directorates after internal review. Approving authorities shall establish internal procedures for clearing ACs to make sure their comments are consolidated and submitted for consideration. DO NOT

COORDINATE WITH OFFICES NOT AFFECTED. Clear proposed ACs only with those organizations that are:

- (a) Responsible for standards, criteria, or procedures affected by the proposed AC.
- (b) Responsible for programs and activities which would be materially affected by the proposed AC.
- (c) Administratively or legally responsible for making a review of the proposed AC.
- (d) Originators of an AC you propose to cancel.

(3) If clearance is to be obtained from more than 11 reviewing organizations, do not use additional clearance forms to type all the routing symbols. Type a note across the clearance routing section on the original clearance form showing the routing symbols of all offices which are to clear the AC. Afterwards, reproduce required copies for submission to each reviewing office. On the top line of each copy enter the routing symbol of the designated reviewing office. When all clearance records have been returned, type each clearance routing symbol on a consolidated clearance form before submission for final approval.

(4) Clear all ACs with appropriate legal counsel. The Office of the Chief Counsel and/or the regional assistant chief counsel must be the last reviewing office so that any necessary changes required by the other reviewers will have been accomplished in the draft sent to the legal counsel.

b. Clearance Deadline/Due Dates.

(1) When. Decide on the deadline date for comments AFTER you get approval to release the draft AC. To determine the actual date, use your projected mailing-routing date, not the date of approval, as the starting point for the review period.

(2) Normal Deadlines. Give reviewers a MINIMUM of ten (10) work days after RECEIPT of the draft for clearing short or relatively routine or non-controversial ACs. Give them more time for lengthy or complex ACs. In particular, for ACs involving implementation of or compliance with FAR's, the Chief Counsel or Regional Assistant Chief Counsel should be given a minimum of 30 days for review. When clearing ACs with regional directorates, give an extra ten (10) work days if you want the input from these regions. Additional days may be granted at the discretion of the originating office. See paragraph 2-2 for clearance procedures with Legal Counsel Offices.

(3) Less-Than-Normal Deadlines. If you can't allow the "normal" deadlines, explain on the Clearance Record the reason for the short comment period.

(4) Extension of Deadline Dates. When the normal deadline date cannot be met, the reviewing official should request an extension from the originating office. This extension is not mandatory. If the reviewing office does not request an extension and has not responded by the deadline due date, the consolidated clearance record will be annotated with the words "No Response Received". This procedure does not apply to review by the Office of the Chief Counsel or the Regional Assistant Chief Counsels.

c. Preparation of Clearance Record.

(1) Prepare FAA Form 1300-2, Clearance Record. Use FAA Form 1300-2 as the official clearance and approval document for AC's. Before releasing a draft AC for comment, fill out specified blocks in accordance with the instructions contained in figure 4-6. Figure 4-6 shows a sample clearance form.

(2) Budget Impact. Advisory circulars are strictly informational and bear no semblance of directive or regulatory type language which would otherwise have an impact on agency resources. Since the information contained in an AC would have no impact on agency resources, put the statement "NO IMPACT ON FAA RESOURCES" in the reason for attached block on FAA Form 1300-2, Clearance Record. (Block 7, figure 4-6.)

(3) Attach to the Clearance Record any background material you consider helpful to a better understanding of the AC. Next, attach a copy of the draft AC including all appendixes and figures. In the case of many pieces of large, complex art containing color overlays, it is inadvisable to send them through the clearance process because the art may be damaged by too much handling. Be sure the art is properly keyed into the text (see paragraph 4-4) so that a reviewer may see what items are being illustrated and may review the corresponding legends. If necessary, the reviewer may go to the originating office to look at any of the art.

(4) Send enough copies to each reviewing office for internal clearance routing to prevent the necessity for each receiving office from having to make "additional copies." Other than the coordination required by paragraph 2-1b(10), limit coordinating points to only those offices having a real interest in the AC. As a general rule, clear ACs with offices concurrently, instead of one office after another.

d. Clearing Office Actions. Each office receiving a request for clearance must sign the FAA Form 1300-2 and return it to the originating office. An explanation of the

information required in the concur-nonconcur columns is given in the following subparagraphs.

(1) "Concur-No Comment." A check in the "Concur-No Comment" column indicates agreement with the draft AC to the extent it affects the functions and activities of the reviewing office. If the AC does not affect your office and should not have been sent to you for review, insert on the clearance form the statement, "Not of concern to us."

(2) "Concur-Comments/Changes Attached." A check in this column indicates that the reviewing office is in general agreement with the draft, but would like to have part of the AC changed. However, if the change is not made, the reviewing office can accept the draft as presented. **THE COMMENTS HAVE TO STATE CLEARLY THE CHANGES RECOMMENDED.**

(3) "Nonconcur-Comment Attached." A check in the "Nonconcur" column means that the reviewing office does not approve of the proposed AC as written. The reasons may include the effect that the AC will have on the user or that the AC may conflict with other agency issuances on the subject. **THE COMMENTS MUST CLEARLY IDENTIFY AND EXPLAIN THE REASONS FOR NONCONCURRENCE AND WHAT CHANGES ARE NECESSARY BEFORE CONCURRENCE WILL BE GIVEN.** Comments regarding grammar and spelling are not reasons for nonconcur comments.

FAILURE TO RESPOND WILL RESULT IN THE ORIGINATING OFFICE SHOWING "NO RESPONSE RECEIVED" ON THE CONSOLIDATED CLEARANCE RECORD.

e. Summary of comments not adopted. Originators shall prepare a briefing statement (summary of comments not adopted) for the approving official when substantive comments on a draft AC have NOT been accepted or only accepted in part. Each comment should be preceded by the paragraph number in the coordination draft AC. Include the:

(1) Reasons for nonadoption of substantive comments.

(2) Unresolved differences requiring settlement by approving official.

f. Obtaining Final Approval. Before sending an AC on for final approval, the appropriate DMO (or other official serving in that capacity) signs the Clearance Record on the "Final Administrative Clearance" line. This indicates that the AC has been reviewed and found adequate in:

(1) Presenting its subject matter clearly and concisely.

(2) Expressing agency policies, proper authority, and clear procedures.

(3) Avoiding conflicting information or duplications with other ACs (or that arrangements for revising other ACs have been made).

(4) Meeting the AC standards prescribed in this order.

(5) Including necessary background data, explanation of unresolved issues, and other relevant documents. The approval package should contain:

(a) **CLEARANCE RECORD.** (A consolidated clearance record.)

(b) **EXECUTIVE SUMMARY.** (Only if AC is to be signed by associate administrator or higher.) The executive summary should be no longer than 1 page and should contain pertinent information about the AC and mention relevant items that should be brought to the attention of the reviewing official.

(c) **FINAL COPY OF ADVISORY CIRCULAR.** Make all necessary changes and prepare final copy for printing.)

(d) **SUMMARY OF COMMENTS NOT ADOPTED.** Prepare a summary of comments not adopted as stated in paragraph 4-5e.

(e) **DOT FORM 1700.3, PRINTING, BINDING, DISTRIBUTION, AND EDITORIAL SERVICES REQUEST.** Chapter 6 provides information on preparing the printing requisition. (See paragraph 6-1.)

(f) **WA FORM 1320-1, ADVISORY CIRCULAR ISSUANCE RECORD.** Complete appropriate items on this form and forward to Directives Management Officer (DMO) for sequential numbering. (See figure 4-3.)

(g) **BACKGROUND MATERIAL.** Include a copy of the draft AC circulated for clearance, any AC's canceled, and any other pertinent material.

g. All ACs must have the signature and title of the office, service head or regional directorate (or authorized division manager) as provided in paragraph 2-1b(2), associate administrator, or Administrator or the designated acting official. The approving official signs the AC in **BLACK INK.** The approving official also signs the Clearance Record in the "Final Approval" block and enters the date of signature in the "Date Approved" block.

h. Clearances and Approvals of the Administrator, Associate Administrator or Assistant Administrator. Originators of ACs which require review or final approval of assistant administrators, associate administrators, executive directors or the Administrator send their ACs to the Office

of Performance Management (APF-100) which serves as the DMO for these officials. Before sending the AC to APF-100, complete all office and service clearances and indicate assistant administrator, associate administrator, or higher clearance needed. APF-100 completes all processing for top management approval of ACs and returns the approved ACs to the originators to prepare for printing and distribution. The final approval package shall include:

- (1) Final copy of AC.
- (2) A new clearance record for final coordination signed by the head of the originating office.
- (3) The consolidated clearance record(s).
- (4) An executive summary.
- (5) Summary of comments not adopted.
- (6) The clearance records and comments received during coordination.
- (7) A copy of the coordination draft (with clearance record).
- (8) A copy of the AC being canceled, if appropriate.
- (9) A completed WA Form 1320-1, Advisory Circular Issuance Record.
- (10) A completed Form DOT F 1700.3, Printing, Binding, Distribution, and Editorial Services Request.

i. **Feedback on Clearance Comments.** Originators shall explain to the reviewing offices whose substantive suggestions were NOT adopted the reasons for nonadoption. "Substantive comments" are those on "what" is said in an AC, not "how" it is said. The method of advising them is optional. It may be by letter of explanation, by a copy of the briefing statement that was sent to the approving official, by telephone or in person. A notation of the date and persons participating in the discussion should be kept in the case file.

j. **Obtaining AC Consecutive Number.** After the administrative clearance approving official has signed the Clearance Record and the signing official has signed the Clearance Record and the original of the AC in BLACK INK, contact APF-100 for assignment of the next consecutive number for the AC. Deliver the completed Clearance Record, the Advisory Circular Issuance Record, the original AC and one copy for microfiching to APF-100 for processing. (See paragraph 3-5 for more details.)

4-6. SIGNATURE.

a. Type the name of the signing official in initial caps and lower case letters flush with the left margin five spaces below the last line of text. In long ACs, the signa-

ture is at the end of the transmitting masthead sheet, FAA Form 1320-15. In short ACs, the signature is on the last page of text, or before appendixes, if any. On Change transmittals (FAA Form 1320-15 is also used), the signature is after the page control chart (see figure 4-7.) Type the signer's title in initial caps on the next line, flush with the name.

Donna McLean
Assistant Administrator for Financial Services

b. This signature format is not required on specially designed (see paragraph 4-1b(4)) "for-sale" ACs.

4-7. REVISIONS. The revised AC is reissued under the same AC number with the addition of the appropriate alphabetical letter—"A" for the first revision, "B" for the second revision, "C" for the third, and so on.

a. ACs are revised by issuing substitute pages with changed text, or by a complete revision. When it is necessary to issue a change or revision, get it to the user as far ahead of implementation as possible, so users can prepare for and install new procedures (not often required by an AC). Collect minor changes that do not significantly affect operations or methods and send them out at one time. Do not correct minor errors such as misspellings, punctuation, etc., except when making substantive page changes.

(1) **Complete Revisions.** Use the complete revision and reissuance method when 50 percent or more of the AC must be reprinted to incorporate the new or revised material. Also consider this method when numerous previous changes have affected the makeup of the AC.

(2) **Page Changes.** Issue substitute pages to incorporate new or revised material when less than one-half of the existing pages must be replaced and the AC complies with standard looseleaf format. Do not issue page changes to ACs that are two sheets of paper or less (pages 1 through 4) unless an emergency situation exists. (It would still require two sheets of paper (four pages) to issue the change—the transmittal sheet, and the revised page, two pages.) If possible hold the change to the AC until another one or two changes accumulate. Use FAA Form 1320-15, Advisory Circular Masthead, to transmit page changes to standard format AC's. Include the following information as necessary:

(a) Subject, as AIRPORT PAVEMENT DESIGN AND EVALUATION, date in numbers, as 1/30/87, AC number, and Change number. Figure 4-7 shows an illustration.

(b) Purpose. (Mandatory). Briefly tell why the Change has been issued in the PURPOSE paragraph. Explain the method of indicating changes to the text as: "The Change number and date of changed material, which

is indicated in the margins by asterisks (stars) vertical bars (when using electronic publishing) is carried at the top of each page. Rearranged pages having no new material also carry the new Change number and date. Pages having no changes retain the same heading information." If appropriate, explain further: "Because section 3 is entirely new, Asterisks/Vertical Bars appear only at the top and bottom of each page."

1. EFFECTIVE DATE. (Mandatory, if applicable)

2. PRINCIPAL CHANGES. (Optional, but very helpful if the Change is complex.)

3. CANCELLATION(S). (Mandatory, if applicable)

(3) Editorial Updates are used when an existing AC requires minimum changes to update, such as "how to order" instructions given for the benefit of the public. No external distribution is made on an editorially updated AC. This update usually takes place when AC stock is low or stock is depleted at SVC 121.23 and a reprint of the AC is necessary.

b. Identification of Changes on a Text Page. Changes are identified by typing an asterisk (star) or a vertical bar (when using electronic publishing) in the left margin at the beginning of the change and in the right margin at the end of the changed material. If a number of consecutive paragraphs are changed, place an asterisk/vertical bar at the beginning of each paragraph. Flag new material that runs for several pages in the left margin at the top of each page and in the right margin at the bottom of each page. Explain the markings in the Change transmittal as indicated above.

(1) Text. Use asterisks (*) or vertical bars (when using electronic publishing) in the margins to identify revised, added, or deleted portions of the text. (Vertical bars are preferred when using electronic publishing as they are more legible.)

(a) Type an asterisk/vertical bar in the left margin of the line where the change begins and another asterisk/vertical bar in the right margin of the line where the change ends.

(b) If a change runs for several paragraphs, place an asterisk/vertical bar in the left margin at the beginning of each paragraph and a closing asterisk/vertical bar in the right margin of the line where the change ends.

(c) If a change runs over to another page, mark the continuing line at the top of the page in the left margin. New material that runs for pages should be flagged

in the left margin at the top of the page and in the right margin at the bottom of the page.

(d) Delete any old asterisks/vertical bars on the page. Remember, any indicated changed material must agree with the new date at the top of the page.

(2) "Run-around" Text. Where existing unchanged text must be moved to another page to allow for inserting new text, do not flag the old text but change the date on the page because the page is changed.

(3) Unchanged Pages. Do not change the dates of pages that are picked up and reprinted "as is."

(4) Complete Revision. In a completely revised long AC, highlight the changes in a "Principal Changes" paragraph (see paragraph 4-1d(8)).

(5) Explanation of Marking System. Explain in the AC transmittal how changes are marked in that particular Change (see paragraph 4-7(b)(1) for wording).

(6) Deletions. Show deletions of any numbered subparagraph, paragraph, or section in the text and in the Contents (if listed there) to account for continuity of numbering. Show the Change number that deleted the material next to the "Deleted" notation. For example:

"7. [Deleted]—Change 2"

Mark the word "Deleted" with brackets to show that it is the editorial action taken and not the title of the paragraph.

(a) Chapter, Figure, or Appendix. Indicate where material is deleted any time the continuity of the text is affected. Remember to mark the Contents in a like manner if the title of the deleted material is listed in the Contents.

(b) Page Deletion. Show a page deletion in the text (where appropriate) or on the preceding page by arrangement of the page number, as follows:

(c) If page 12 is deleted, number page 11 as "11 (and 12)."

(d) If page 18 through 32 are deleted, number page 17 as "17 (through 32)."

(e) If page 19 is deleted but not 20, mark the center of page 19 "[Deleted]—Change 6."

(7) Canceled. If any ACs or forms are canceled, use a CANCELLATION(S) paragraph and list the items.

(8) Explanation. Use one or more paragraphs, as necessary, to explain major changes and supplementary material in the PRINCIPAL CHANGES paragraph.

(9) Other Information. Do not put permanent information or action instructions on the transmittal sheet. Transmittal sheets contain instructions for filing the pages attached to them.

(10) Signature. The signing official signs at the end of the page control chart or any other instructional information, flush left. The name is typed in initial caps with the title typed on the next line, flush left in initial caps and lower case. (See paragraph and figure 4-7.)

(11) Pen-and-ink Changes. DO NOT USE pen and ink changes. Whenever minor changes to an AC are necessary, issue page replacements.

c. Page Expansion. Pages may be added following a left-hand (even numbered) page only. Add a dash and consecutive number after the number of the preceding page. For instance, if a page is added between 26 and 27, it should be numbered 26-1. Numbering of additional inserted pages at that point would continue 26-2, 26-3, etc.

d. Contents Pages. Usually Contents pages will not have to be revised until the entire AC is revised. However, if added or changed material is extensive or important, issue changed pages or an entire Contents as appropriate.

e. Page Control Chart. Page control charts are placed at the end of the Changed text on the transmittal sheet to tell the user exactly which pages are to be removed or inserted. A diagram of a page control is shown below. Figure 4-7, gives a complete example of a Change page control chart.

**Note that dash-numbered pages are added only after a left-hand even page number. Double check the dates on the*

new insert pages to be sure they agree with the new dates on the control chart for those pages.

4-8. CANCELING ADVISORY CIRCULARS. Out-of-date ACs are a burden on the aviation community, the public, and on agency operations. Cancel an existing AC as soon as it has completely served its purpose and is no longer of value to users. The official who has the authority to cancel an AC must submit a memorandum, as described in paragraph 2-1(b)(14), to APF-100 through the responsible DMO. Canceled ACs are listed in Appendix 2 (Cancellations) of AC 00-2, Advisory Circular Checklist. ACs will be dropped from the checklist once cancellation notification is received by APF-100.

4-9. FEDERAL REGISTER DOCUMENT DRAFTING. When preparing a draft advisory circular (AC) for public comment you are encouraged to follow the guidelines contained in the Federal Register Document Drafting Handbook.

a. Guidance on Preparing Draft AC. The Office of the Chief Counsel, AGC-200, serves as FAA's Liaison, Certifying, and Authorizing Officer with the Office of the Federal Register, National Archives and Records Administration. In this capacity AGC-200 provides FAA users with guidance on how to prepare AC materials for entry in the Federal Register.

b. Clearance of Draft ACs. Draft ACs intended for public comment are to be coordinated with and cleared by the Office of the Chief Counsel.

4-10. THRU 4-14. RESERVED.

CHAPTER 5. WRITING STANDARDS

5-1. GENERAL REQUIREMENTS. Advisory circulars (ACs) are used to publish information of an "advisory" nature for the benefit of the aviation community and the public. ACs are not regulations and may not impose or lessen a burden on anyone, nor have a mandatory effect. ACs may not be used to add to, interpret, or relieve a duty imposed by a Federal Aviation Regulation (FAR). This chapter deals with the differences between ACs and regulations and provides guidelines for the wording to be used in ACs to avoid any semblance of regulatory-like language.

a. Avoid Regulation-Like Language.

(1) Words that have a mandatory significance as used in regulations such as "must," "shall," and "must not" **MUST NOT** be used in ACs. The word "should" is preferable.

(2) When advising on safety issues (such as installing new devices or utilizing advance techniques) avoid the use of words such as "urge," "encourage," or "strongly advise" as such words may be construed to encourage the public (reader) to adopt safety-improvement measures which exceed those prescribed in the regulations. Such language may also imply that those who elect only to meet the regulation requirements are somehow delinquent.

b. **Acceptable Means of Compliance.** Advisory circulars may set forth "acceptable means" or "methods" of compliance with a particular FAR. However, the language used to explain the compliance methods in the AC must not imply that it is the only or minimum acceptable means, nor require other methods of compliance to be "equivalent," to the one described in the AC. Avoid words like "amend," "equivalent," or "clarify." Use the word "policy" only when referring to established agency policy.

c. **Quoting Regulations.** Avoid quoting regulations if possible, as they are frequently amended and may necessitate an AC being revised only to up-date the FAR quotation. Rather, simply reference the FAR by basic Part number and section number where possible. If it should be necessary to quote a regulation, quote it exactly and completely. Do not paraphrase or "explain" the regulation as its meaning may be changed in some aspect.

d. **Incorporation by Reference into FAR's.** No document, including ACs, should be incorporated by reference into the FARs unless it is absolutely necessary. The Office of the Federal Register will not approve most federal agency documents for incorporation by reference. (See paragraph 4-9.)

5-2. WRITING RULES. Review the following general guidelines and use them in preparing advisory circulars:

a. **Active Voice.** The active voice should be the primary form of expression. It simplifies readability and provides more precise statements. The passive voice should be particularly avoided in descriptions of who is expected to act or not act and of sequential events.

b. **Who, When, and Where.** Identify WHO (pilot, owner, mechanic, etc..) should take action, WHEN to do it, and WHERE to send any material described in the AC. Once the actor has been identified, the description can be simplified by starting subsequent sentences with action verbs. For example, say: "Check the fuel source..." instead of "The fuel source should be checked..." after stating that action should be taken to avoid the use of contaminated fuel.

c. **Conditions, Limitations, and Exceptions.** When feasible, number or itemize conditions, limitations, and exceptions to avoid complex sentences.

d. **Guide to Style.** Follow the Government Printing Office Style Manual and the Word Division Supplement for punctuation, hyphenation, spelling, capitalization, abbreviation, and other style practices. Include special deviations on capitalization given in paragraph 5-5.

5-3. REFERENCES. References should be placed in the text where their introduction is most useful. Reference publications by identifying symbol and title. (See paragraph 4-1d(15).)

a. **Cross-references.** Keep cross-references to a minimum. Repeat brief items word for word, but cross-reference lengthy, technical details covered in other available sources or in another paragraph of the AC. To avoid repetition, do cross-reference other parts of the AC that are logically placed and completely covered. **DO NOT** cross reference common or previously defined terms.

b. Citations.

(1) **Rules for Use.** When necessary to use citations or other references, use identifying symbols and complete titles the first time they appear in the text, for example, AC 00-44, Status of Federal Aviation Regulations. Thereafter, refer to AC 00-44 or Status of FARs (AC 00-44). Notice that if you use the popular or shortened title for an AC, you must use its identifying number. Do not refer to material unavailable to the majority of the recipients of the AC. Reference forms initially by the complete form designation and number followed by a comma and the full title. Thereafter, it can be referenced by either the title or number or both as necessary for clarity to the reader.

(2) **Examples of References to Other ACs.**

(a) AC 43.13-1A, Acceptable Methods, Techniques and Practices—Aircraft Inspection and Repair (full title).

(b) AC 43.13-1A, section 2, paragraph 42. (Use this "short form" reference after the AC's full title is first used.)

(c) AC 00-44, Status of Federal Aviation Regulations, current edition (for ACs that are revised frequently, specify "current edition" so that the up-to-date version will be referred to and properly supplied to a requestor).

(3) Page Number References. Avoid referring to a page number in an AC because a change insertion may change the number of the page on which the material referred to is located.

(4) Units of Organization. Use complete official names of organizations and the alphabetical prefix in parentheses the first time they appear. Thereafter, you may use the alphabetical prefix (i.e., AAM, AFS, AIR).

(5) Reference to Offices. In ACs, use titles, not names of persons. Avoid using telephone numbers, room numbers, or other data subject to change. When such references are necessary, use them only in appendixes, if possible.

(6) Reference to Laws, Code of Federal Regulations, etc. Use the citation standards given in the GPO Style Manual. If in doubt, consult with the Legal Counsel office for regulatory citations.

5-4. **EMPHASIS ON TEXT.** Emphasize only those words, phrases, and sentences that are really important. Use CAPS or underlining to show emphasis (in typeset material, this will print in italic and varies from the directives system which only uses caps for emphasis).

5-5. **CAPITALIZATION.** Follow the accepted standards for capitalization as given in the GPO Style Manual in the preparation of all text material for advisory circulars. In addition, capitalize the word "Change" when referring to a transmittal to an AC (even when not used with the Change number). This allows the reader to distinguish immediately the difference between the word "change" and the publication issuance entitled "Change." This practice is also followed in the Federal Aviation Regulations when referring to a "Part" so that the regulation will not be confused with the word "part" used so often to mean an aircraft part. When referring to an FAR part, capitalize the word "Part" in the AC. (This is contrary to the usual practice of using the lower case for a shortened form reference.)

5-6. **ABBREVIATIONS.** Abbreviations are used to save space and avoid distracting the mind of the reader by a

needless spelling out of repetitious words or phrases. The first time an abbreviation is used, it should follow in parentheses the spelled out term it is abbreviating. Abbreviations should be unquestionably clear to the reader.

a. **Use In Parentheses.** Abbreviate the parts of publications when used in parentheses (chap., sec., par., p., pp., fig., app., etc.).

b. **Standard Usage.** Refer to the section in the latest edition of the U.S. Government Printing Office (GPO) Style Manual for more detailed descriptions of proper uses for abbreviations and spacing (for example, "U.S." is closed up).

c. **Technical Text Usage.** Refer to the American National Standard Institute Style Manual for abbreviations, signs, and symbols used in technical text and drawings.

5-7. **QUOTATION MARKS.** Use quotation marks for direct quotations, to give greater emphasis to a word or phrase, or to set off ordinary words used in an arbitrary way. Do not use quotation marks to enclose titles of chapters, sections, paragraphs of ACs. Do enclose title of other publications in quotes, or type in all caps, or print in italic. Refer to the paragraph on quotation marks in the punctuation chapter in the latest edition of the "GPO Style Manual" for more detailed examples.

5-8. COPYRIGHTS, CREDIT LINES, AND ACKNOWLEDGEMENTS.

a. **Use of Copyrighted Material.**

(1) If a writer decides to use material (usually art or photographs) already in print and copyrighted by a non-Government source, the writer must request permission in writing from the copyright owner (not the publisher) and the request must explain how the material is to be used by FAA. The letter must also request the copyright owner to state how he wishes credit or acknowledgment worded in the FAA publication using his material. The copyright owner's written permission to use his material must be retained in the case file. A copy of the copyright owner's written permission letter must be attached to FAA Form 1300-2, Clearance Record, for APF-100 review. If the owner does NOT grant permission, the writer must abide by that decision and seek another source for his material or prepare new original copy.

(2) Send the copyright owner a courtesy copy of the completed FAA publication even if he did not request a number of copies as a condition of his copyright use permission.

b. **Use of Federal Government Material.**

(1) **FAA.** ACs may be reproduced in part or in their entirety without permission from FAA.

(2) Other Agencies. Although Government publications cannot be copyrighted, the writer must advise another agency when he plans to use any part of that agency's publication (also as a protection, the material may be out of date or in need of correction). It is advisable to send the agency a courtesy copy of the FAA publication when completed.

c. FAA Credit Lines. Advisory circulars will not carry credit lines for FAA authors/writers, artists, illustrators, typographers, or editors.

d. Other Credit Lines. Do not place individual credit lines under each piece of copy to be acknowledged. Rather, include them all in one statement in one place in the publication in the foreword or preface of a nonstandard

AC or in a paragraph entitled, "Acknowledgments," "Credits" or "Introduction" in the body of the AC.

5-9. LEGENDS FOR TABLES AND FIGURES. Title illustrations as "FIGURES" (all caps) and number them consecutively throughout the text of a standard AC or number with the chapter or section number preceding the consecutive number as FIGURE 1-1, FIGURE 1-2, FIGURE 1-3, etc. (1-1 is FIGURE 1 in CHAPTER or SECTION 1, 1-2 is FIGURE 2 in CHAPTER 1, and 1-3 is FIGURE 3 in CHAPTER or SECTION 1). Place figure legends near (ABOVE OR BELOW) the corresponding illustration. Place figures near the text that mentions the figure. Table legends follow the same numbering system but place their legends ABOVE the table.

5-10. THRU 5-12. RESERVED.

CHAPTER 6. PRINTING AND DISTRIBUTION PROCEDURES

6-1. PREPARING THE PRINTING REQUISITION.

a. Use Form DOT F 1700.3, Printing, Binding, distribution, and Editorial Services Request, to order printing and distribution of an AC. The form is self-explanatory. (Figure 6-1 shows an illustration.) Questions or any uncertainties should be cleared with the local printing management organization of the preparing office. Order 1720.36, Procedures for Printing, Duplicating, and Copying, provides detailed instructions on printing procedures.

b. Attach to the printing requisition (DOT F 1700.3) the following items:

(1) Original and one copy (typewritten single-spaced if camera-ready, doubled-spaced typewritten copy if submitted for typesetting).

(2) Artwork (including cover art) if a separate cover is required.

(3) Special distribution lists or labels, if any.

c. Deliver the complete package to APF-100.

d. APF-100 will sign the requisition in the "Cleared by" space on Form DOT F 1700.3 and prepare GPO Form 3668, Notification of Intent to Publish, when required. APF-100 will then assign a printing requisition number and forward to SVC 121 by special messenger for printing and distribution.

e. When printing is completed, the original copy (with negatives if a "for sale" AC) is returned to the DMO of the originating office for future use.

6-2. FREE ADVISORY CIRCULARS. Free ACs are ordered and stocked by SVC 121.23. SVC 121.23 fills AC requests from internal users and the general public. Prepare Form DOT F 1700.3 as instructed in paragraph 6-1. Deliver the printing requisition and the complete printing package to APF-100 who will sign the printing requisition for AC clearance and for printing and distribution review.

6-3. FOR SALE ADVISORY CIRCULARS. "For sale" ACs are ordered and stocked by the Superintendent of Documents, U.S. Government Printing Office (GPO). GPO determines whether to sell a particular AC on advice of FAA and, in turn, will "ride" the FAA printing requisition. When an AC is to be sold by GPO, type in item 17 of the printing requisition (DOT F 1700.3), "Supt. Docs. To Ride For Sale Stock, GPO Form 3868 attached." If a single sale or subscription item, indicate this in item 17. APF-100 will prepare GPO Form 3868, Notification of Intent to Publish, and attach it to the printing request. (A completed copy of GPO Form 3868 is retained by APF-100.) APF-100 will

then deliver the complete package to SVC 121. (See paragraph 4-1c for more information.)

6-4. DISTRIBUTION AND FILING.

a. External Distribution. ACs which are less than 32 PRINTED pages may be distributed free of charge to the public. The Transportation Administrative Service Center, SVC 121.21, distributes free ACs using mailing lists prepared on the basis of requests from the public. Separate mailing lists are maintained for each AC SPECIFIC SUBJECT NUMBER. AC 00-2, Advisory circular checklist, issued in the GENERAL (OO) subject numbers is distributed to those who specifically request to be placed on the AC 00-2 mailing list. (See figure 3-1 for a more detailed description of general subject and specific subject numbers.)

(1) Subject Lists. Subject breakdown, by number, are listed in figure 3-1. A request for all ACs numbered in the 61 series will give the requestor all ACs numbered in that series. Likewise, a request for "all ACs numbered in the 60s" will give the requestor all ACs numbered 60 through 67. If a requestor ONLY wants all ACs relating to FAR Part 61, he must be certain to specify "AC 61" on his request. (See paragraph 3-8b.)

(2) Free AC Distribution (Exceptions). APF-100 should be consulted in determining when an AC of 32 or more PRINTED pages may be distributed free of charge when such free distribution is requested by the office of primary responsibility. Use FAA Form 1300-2, Clearance Record, "Reason for Attached", to annotate "Order 1320.46, paragraph 6-4a(2) Applies" when an AC of 32 or more PRINTED pages is to be distributed free to the public. The following are criteria which may be accepted as justification for free distribution of an AC of 32 or more PRINTED pages.

(a) Speedy distribution is necessary for the AC to serve its purpose.

(b) The content of the AC must be widely distributed for effective program operations. (This criterion should usually be employed only in the case of safety promotional material, reminders about specific hazards, information on use of the National Airspace System (NAS), and others which probably would not be purchased by the public but whose wide dissemination is considered vital to the agency's responsibility for promoting safety.)

(c) The material provides benefits to the public at large rather than special benefits to particular recipients.

(3) "For Sale" AC Distribution. Publications issued within the AC system consisting of 32 or more PRINTED pages (16 sheets) should be offered for sale to the public, through the Superintendent of Documents, U.S. Government Printing Office (GPO). (See paragraph 4-1(c) for more detailed information.)

(4) Restrictions on "For Sale" ACs. Advisory circulars sold by GPO shall not be distributed free to the public, except under exceptional circumstances where serious program requirements necessitate these publications be given to selected members of the public. Internal FAA distribution will be restricted on a "need-to-have" and "need-to-know" basis for all "for sale" items. In these limited cases, the originating office must refer to the latest edition of Order 1720.18, FAA Distribution System, and select the recipients on an "FAA-ONLY" or "FAA and GOVT" basis rather than AC category. This selection must be shown on the printing requisition (Form DOT F 1700.3) by proper distribution codes. "FAA-ONLY" reaches FAA organizations only and "FAA and GOVT" reaches FAA and other government agencies.

(5) Making the AC Available. In those cases where the "for sale" AC is given a limited internal distribution and none to the public, issue an "Announcement of Availability" under the same number as the sale AC. Tell the public what the AC is about, where and how to get it, the price, and the Superintendent of Documents stock number (SN). The SN and price of the AC will be supplied by GPO through APF-100. (See paragraph 4-1d(14) and figure 6-2.)

(6) Maintenance of Mailing Lists. JCP regulations require that the public segment of the AC mailing list be revised at least once a year in order to eliminate waste in Government funds caused by publications being improperly addressed or mailed to persons no longer desiring them. This process is done by the FAA through the Initial Distribution/Requirements, SVC 121.21. Those files which have been active during the year will be sent the annual canvass issue of AC 00-2, Advisory Circular Checklist. The canvass notice, included as part of the checklist, will request addressees to make any changes in requirements or address and return the canvass notice by the date specified on the notice. Those addressees not responding will be dropped from the list. FAA organizations shall keep their requirements current by submitting FAA Form 1100-1, Directory-Distribution Change Notice or Form DOT F. 1700.15, Distribution Requirements, in accordance with Order 1720.18, FAA Distribution System.

b. Internal Distribution. Advisory circulars are distributed internally to FAA offices and facilities by SVC 121.21 using distribution lists prepared in conjunction with the originating offices. Separate distribution lists are main-

tained for each AC subject series. Checklists and ACs issued in the GENERAL (OO) series are distributed to every addressee on each of the AC mailing lists.

c. Distribution Methods. There are three methods of distributing AC's to users.

(1) "Initial Distribution" ACs are distributed to FAA and the public (if not "for sale") through the Initial Distribution/Requirements Section, SVC 121-21. Various established AC mailing lists are used to distribute these copies.

(2) "Subsequent Distribution" ACs are distributed to FAA and the public (if not "for sale") by the Warehouse/Subsequent Distribution, SVC 121.23. FAA users complete FAA Form 1720-11, Publication(s) Request, and send to SVC 121.23 for copies from stock. The public writes directly to SVC 121.23 for subsequent copies (10 or less) of ACs. (See paragraph 6-5.)

(3) The Superintendent of Documents, U. S. Government Printing Office (GPO) distributes ACs that are "for sale". The public writes to GPO for copies. FAA users shall not go to GPO to obtain "for sale" publications. They may obtain extra copies of "for sale" publications from SVC 121-23. If more than 50 copies of "for sale" ACs are needed the approval of the originator is required, as these issuances have limited stock.

d. Filing Procedures.

(1) File ACs by subject number. File circulars having the same subject number by the consecutive ("dash") number (-1, -2, etc.). File basic AC numbers that have been broken down to a basic FAR section number at the back of that particular series by section number. For example, file AC 61.123-1 at the end of the AC 61 consecutive numbers (61-1, 61-2, 61-20) but after AC 61.117-1. (Many users prefer to keep FAR related ACs with the corresponding FAR Part number—that is, file all AC 61s behind FAR Part 61.)

(2) File all Change transmittal sheets at the back of the basic advisory circular after the action required by the page control chart has been completed. This will provide a reference authority for changes, and an accurate method for determining that all Changes have been received when checking the ACs currency against the AC Checklist.

e. AC Case Files and Reference Files.

(1) Case Files. The originating office is responsible for maintaining the official case file for each AC it issues.

(a) Contents. The case file must include:

1. The signed FAA Form 1300-2, Clearance Record, including all comments, which authorizes issuance of the AC.

2. The original camera copy or final page proofs, if typeset.

3. One copy of each version of all clearance drafts.

4. All pertinent background material.

5. A printed copy of the basic AC.

(b) Changes and Revisions. A new case file must contain the same material for each Change issued, each revision, and the supporting information for any cancellation.

(c) Disposal. When an AC is canceled, put the case file in the canceled file section. After a sufficient time has elapsed to make frequent reference to the AC no longer practical, refer to Order 1350.15B, Records Organization, Transfer, and Destruction Standards, for transfer and destruction guidance.

(2) Reference Files. Master reference files are complete files of all printed current ACs. These comprehensive files serve as a reference set for all personnel located in each office where they are required information. They serve principally as an accurate checkpoint for determining the latest AC information on all subjects of technical concern to the operating office and for occasional reference by personnel on subjects outside their basic functional areas. APF-100 will maintain the agency master set of ACs on microfiche for reference purposes.

6-5. STOCKING AND ORDERING ACs.

a. Warehousing publications. Advisory circulars are stocked in the departmental warehouse, Transportation Administrative Service Center, SVC 121.23. FAA headquarters personnel may order up to 100 copies of free ACs

from stock by submitting FAA Form 1720-11, Publication(s) Request to SVC 121.23. Give the AC number, title, number of copies required, and the routing symbol of the office you wish copies to be sent. Region, center, and field personnel should go through their local distribution point before requesting extra copies of ACs from SVC 121.23. The region/center distribution officer will fill requests from their stock on hand or order copies from Washington headquarters stock.

(1) Requests for more than 100 copies of a free AC must have the approval of the issuing office.

(2) Requests for "for sale" ACs must have the approval of the issuing office, as these ACs are stocked in minimum quantities.

(3) Requests from the public for free ACs should be directed to SVC 121.23, as it is the servicing organization designated to fill publication requests. However, when AC stock copies are depleted and requests cannot be filled, the originating office must take steps to fill such requests without further delay. (DMOs are notified (OST Form OST F 1700.6, Stock Level Notification) by SVC 121.23, through APF-100, when stock is low or depleted.)

b. The Superintendent of Documents, U.S. Government Printing Office (GPO) stocks selected "for sale" advisory circulars based on advance arrangements made through APF-100. The public must order "for sale" ACs from the Superintendent of Documents. (See paragraph 6-3.)

c. Purchasing Negatives of "For Sale" ACs. AC negatives that have public/industry interest will be sold by the GPO, Customer Service Department, Departmental Accounts Representative Division, Room C830, Washington, D.C. 20401. The originating office shall make duplicate sets of these negatives available to GPO, as necessary.

6-6. THRU 6-10. RESERVED.

FIGURE 3-1. GENERAL SUBJECT AND SPECIFIC SUBJECT NUMBERS

FIGURE 3-1. GENERAL SUBJECT AND SPECIFIC SUBJECT NUMBERS

General Subject Number(1)	Specific Subject Number(2)	Relative
00		GENERAL
	1	Definitions and Abbreviations
10		PROCEDURAL RULES
	11	General Rule-Making Procedures
	13	Investigation and Enforcement Procedures
20		AIRCRAFT
	21	Certification Procedures for Products and Parts
	23	Airworthiness Standards: Normal, Utility, and Acrobatic Category Airplanes
	25	Airworthiness Standards: Transport Category Airplanes
	27	Airworthiness Standards: Normal Category Rotorcraft
	29	Airworthiness Standards: Transport Category Rotorcraft
	31	Airworthiness Standards: Manned Free Balloons
	33	Airworthiness Standards: Aircraft Engines
	34	Fuel Venting and Exhaust Emission Requirements for Turbine Engine Powered Airplanes
	35	Airworthiness Standards: Propellers
	36	Noise Standards: Aircraft Type and Airworthiness Certification
	39	Airworthiness Directives
	43	Maintenance, Preventive Maintenance, Rebuilding and Alteration
	45	Identification and Registration Marking
	47	Aircraft Registration
	49	Recording of Aircraft Titles and Security Documents
60		AIRMEN
	61	Certification: Pilots and Flight Instructors
	63	Certification: Flight Crewmembers Other Than Pilots
	65	Certification: Airmen Other Than Flight Crewmembers
	67	Medical Standards and Certification
70		AIRSPACE
	71	Designation of Federal Airways, Area Low Routes, Controlled Airspace, and Reporting Points
	73	Special Use Airspace
	75	Establishment of Jet Routes and Area High Routes
	77	Objects Affecting Navigable Airspace

FIGURE 3-1. GENERAL SUBJECT AND SPECIFIC SUBJECT NUMBERS—Continued

General Subject Number(1)	Specific Subject Number(2)	Subject
90		AIR TRAFFIC AND GENERAL OPERATING RULES
	91	General Operating and Flight Rules
	93	Special Air Traffic Rules and Airport Traffic Patterns
	95	IFR Altitudes
	97	Standard Instrument Approach Procedures
	99	Security Control of Air Traffic
	101	Mooored Balloons, Kites, Unmanned Rockets and Unmanned Free Balloons
	103	Ultralight Vehicles
	105	Parachute Jumping
	107	Airport Security
	108	Airplane Operators Security
	109	Indirect Air Carrier Security
120		AIR CARRIERS, AIR TRAVEL CLUBS, AND OPERATORS FOR COMPENSATION OR HIRE: CERTIFICATION AND OPERATIONS
	121	Certification and Operations: Domestic, Flag, and Supplemental Air Carriers and Commercial Operators of Large Aircraft
	125	Certification and Operations: Airplanes Having a Seating Capacity of 20 or More Passengers or a Maximum Payload Capacity of 6,000 Pounds or More
	127	Certification and Operations of Scheduled Air Carriers with Helicopters
	129	Operations of Foreign Air Carriers
	133	Rotorcraft External-Load Operations
	135	Air Taxi Operators and Commercial Operators
	137	Agricultural Aircraft Operations
	139	and Operations: Land Airports Serving CAB-Certificated Air Carriers
140		SCHOOLS AND OTHER CERTIFICATED AGENCIES
	141	Pilot Schools
	143	Ground Instructors
	145	Repair Stations
	147	Aviation Maintenance Technician Schools
	149	Parachute Lofts
150		AIRPORT NOISE COMPATIBILITY PLANNING
	151	Federal Aid to Airports
	152	Airport Aid Program

FIGURE 3-1. GENERAL SUBJECT AND SPECIFIC SUBJECT NUMBERS, CONT.

	153	Acquisition of U.S. Land for Public Airports		
	154	Acquisition of U.S. Land for Public Airports Under the Airport and Airway Development Act of 1970		
	155	Release of Airport Property from Surplus Property Disposal Restrictions		
	157	Notice of Construction, Alteration, Activation, and Deactivation of Airports		
	158	Passenger Facility Charges		
	159	National Capital Airports		
	161	Notice and Approval of Airport Noise and Access Restrictions		
	169	Expenditures of Federal Funds for Nonmilitary Airports or Air Navigational Facilities Thereon		
170		NAVIGATIONAL FACILITIES		
	171	Non-Federal Navigation Facilities		
180		ADMINISTRATIVE REGULATIONS		
	183	Representatives of the Administrator		
	185	Testimony by Employees and Production of Records in Legal Proceedings		
	187	Fees		
	189	Use of Federal Aviation Administration Communication System		
190		WITHHOLDING SECURITY INFORMATION; WAR RISK INSURANCE; AIRCRAFT LOAN GUARANTEE PROGRAM		
	191	Withholding Security Information from Disclosure Under the Air Transportation Security Act of 1974		
210		FLIGHT INFORMATION		
	211	Aeronautical Charts and Flight Information Publications		
	212	Publication Specifications: Charts and Publications		
			FIGURE 3-1. GENERAL SUBJECT AND SPECIFIC SUBJECT NUMBERS—Continued	
			150/1900	Defense Readiness Program.
			150/4000	Resource Management.
			150/5000	Airport Planning.
			150/5020	Noise Control and Compatibility Planning for Airports.
			150/5100	Federal-aid Airport Program.
			150/5150	Surplus Airport Property Conveyance Programs.
			150/5190	Airport Compliance Program.
			150/5200	Airport Safety General.
			150/5210	Airport Safety Operations (Recommended Training, Standards, Manning).
			150/5220	Airport Safety Equipment and Facilities.
			150/5230	Airport Ground Safety System.
			150/5240	Civil Airports Emergency Preparedness.
			150/5300	Design, Construction, and Maintenance General.
			150/5320	Airport Design.
			150/5325	Influence of Aircraft Performance on Aircraft Design.
			150/5335	Runway, Taxiway, and Apron Characteristics.
			150/5340	Airport Visual Aids.
			150/5345	Airport Lighting Equipment.
			150/5360	Airport Buildings.
			150/5370	Airport Construction.
			150/5380	Airport Maintenance.
			150/5390	Heliports.
			150/5900	Planning Grants for Airports.
			NOTE: Within the General Subject Number Areas, specific selectivity in advisory circular mail lists is available corresponding to the applicable FAR Parts. For example, under the 60 general subject area, separate mail lists for advisory circulars issued in the 61, 63, 65, or 67 series are available. An AC numbered "60" goes to all numbers in the 60 series 61, 63, 65, 67. Breakdown of subject numbers. When the volume of circulars in a series warrants a subsubject breakdown, the general number is followed by a slash and a subsubject number. Material in the 150 series, Airports, is issued under the subsubjects as shown in figure 3-1.	

1 Based on FAR Subchapter Titles, Excluding the 210 Series.
2 Based on FAR Part Titles, Excluding the 210 Series.

FIGURE 3-2. SAMPLE FAR GUIDANCE MATERIAL.



Advisory Circular

Subject: FAR GUIDANCE MATERIAL:
AIRWORTHINESS AND OPERATIONAL
APPROVAL OF TRAFFIC ALERT AND
COLLISION AVOIDANCE SYSTEMS
(TCAS II) AND MODE S TRANSPONDERS

Date: 10/3/88
Initiated by: ANM-110

AC No: 20-131
Change:

1. PURPOSE. This advisory circular (AC) provides guidance material for the airworthiness and operational approval of Traffic Alert and Collision Avoidance Systems (TCAS II) and Mode S transponders. Like all AC material, this AC is not mandatory and does not constitute a regulation. It is issued for guidance purposes and to outline a method of compliance with the rules. In lieu of following this method without deviation, the applicant may elect to follow an alternate method, provided the alternate method is also found by the Federal Aviation Administration (FAA) to be an acceptable means of complying with the requirements of the Federal Aviation Regulations (FAR). Because the method of compliance presented in this AC is not mandatory, the terms "shall" and "must" used herein apply only to an applicant who chooses to follow this particular method without deviation.

2. RELATED DOCUMENTS.

a. Related Federal Aviation Regulations. Portions of the FAR, as presently written, can be applied for the design, substantiation, certification and operational approval of TCAS II and Mode S transponders. Sections which prescribe requirements for these types of systems include:

- § 25.301 Loads.
- § 25.303 Factor of safety.
- § 25.305 Strength and deformation.
- § 25.561 Emergency Landing Conditions--General.
- § 25.603 Materials.
- § 25.609 Protection of Structure.
- § 25.629 Flutter.
- § 25.1301 Function and installation.
- § 25.1303 Flight and navigation instruments.
- § 25.1307 Miscellaneous equipment.
- § 25.1309 Equipment, systems, and installations.
- § 25.1321 Arrangement and visibility.
- § 25.1322 Warning, caution, and advisory lights.
- § 25.1331 Instruments using a power supply.
- § 25.1333 Instrument systems.
- § 25.1335 Flight information systems.

FIGURE 4-1. SAMPLE ADVISORY CIRCULAR MASTHEAD

	<h1>Advisory Circular</h1>	
<p>U.S. Department of Transportation Federal Aviation Administration</p>		
<p>Subject:</p>	<p>Date: Initiated by:</p>	<p>AC No: Change:</p>
<p>These are instructions for using FAA Form 1320-15, Advisory Circular Masthead. Use this form for all AC's issued in the standard AC format (see paragraph 4-1b(3)). This form can also be used in non-standard AC's (see paragraph 3-2b(3)). Blank copies of this form can be obtained from stock. The preprinted black bar lines are shown on this form so that all typing can be contained within these lines, otherwise the typewritten text will be outside the image area and may not print. The following applies:</p> <ol style="list-style-type: none"> 1. Type SUBJECT of the advisory circular or any special information as "ANNOUNCEMENT OF AVAILABILITY" OR "FAA GUIDANCE MATERIAL" in ALL CAPITAL LETTERS following the preprinted word "Subject." Do not type subject beyond the thin bar line. 2. Type DATE in numerals, as 10/15/91. 3. Type AC NUMBER, as 150/5370-14. 4. Type ROUTING SYMBOL (initiated by) of preparing office, as AAS-100. 5. Type the CHANGE number only if AC is a change to the basic and a page control chart is illustrated to show pages removed and inserted and their dates. Otherwise, leave it blank. 6. Type the number of the first (PURPOSE) paragraph below the short bar line. Number paragraphs consecutively throughout, using Arabic numbers. Type the number at the left margin followed by a period (1.). Type the paragraph heading in all CAPITAL letters, two spaces after the paragraph number period. Succeeding lines return all the way to the left margin ("flush left"). 7. Type Name of signing official in Initial Caps flush left. Signing official must sign in BLACK ink. 8. Type TITLE of signing official in Initial Caps, flush left on the next line below his/her typed name. (Naturally, the signature line will be on the last page of the AC if longer than one page. For convenience, all examples are shown on the first page.) 		
<p>FAA Form 1320-15 (4-82) Supersedes WA Form 1320-2</p>		

FIGURE 4-2. SAMPLE CONVENTIONAL TITLE PAGE WITH GPO SALES LINE

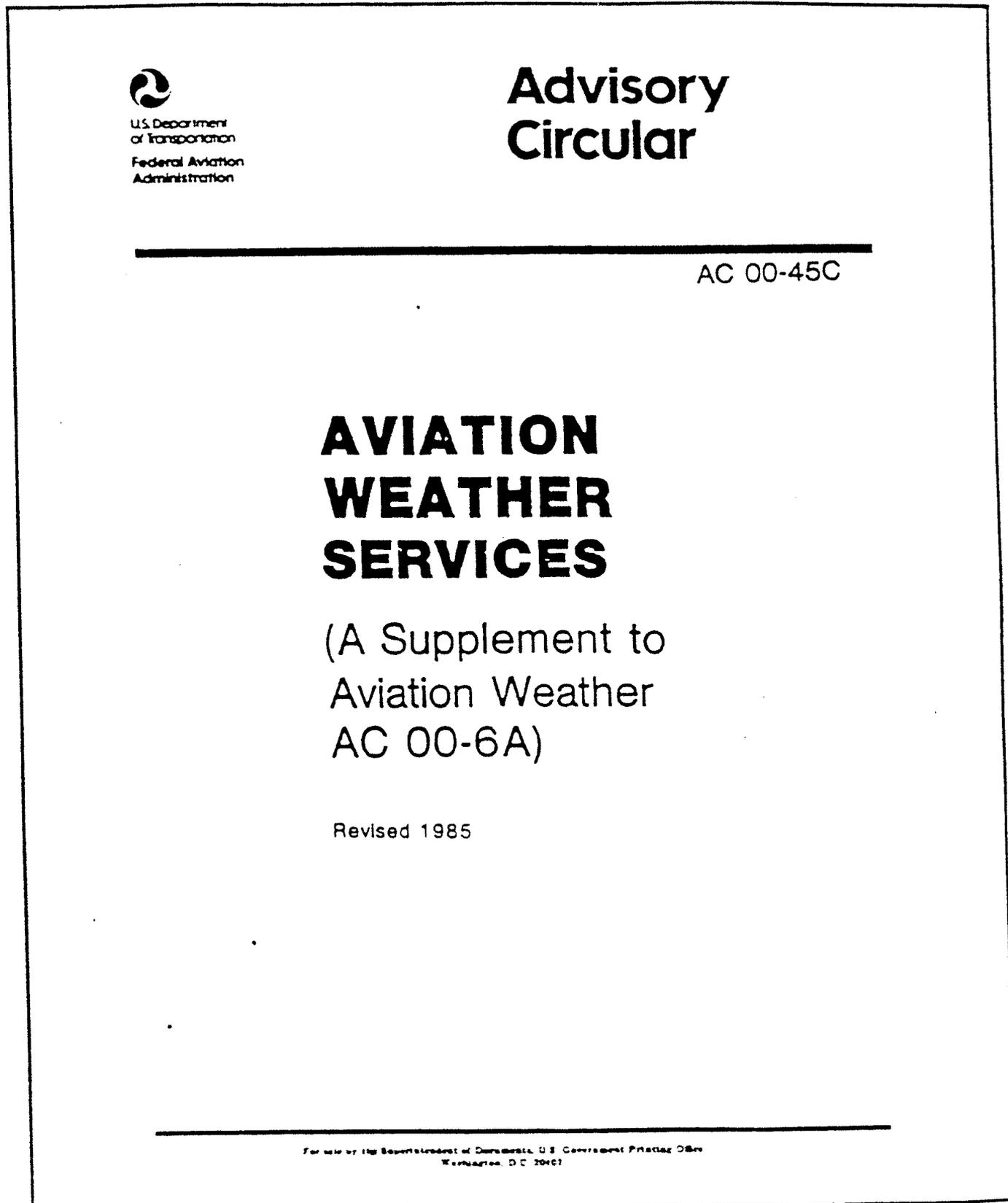


FIGURE 4-3. SAMPLE ADVISORY CIRCULAR ISSUANCE RECORD

AC NO. 90-23E	TITLE AIRCRAFT WAKE TURBULENCE
APPROVING OFFICIAL (Typed name and title)	
David S. Potter Acting Director, Flight Standards Service, AFS-1	
SIGNED	REVALIDATION
10/1/91	10/1/92
SUPERSEDED ADVISORY CIRCULARS (Give number(s) and date(s))	
AC 90-23D, Aircraft Wake Turbulence, dated 12/15/72.	
PURPOSE OF AC (This description will appear in the AC checklist published in the Federal Register)	
This advisory circular is intended to alert pilots to the hazards of aircraft wake turbulence and recommends related operational procedures.	
PROJECT OFFICER (Person knowledgeable about technical content)	
NAME Myron Clark	TELEPHONE 77301
ROUTING SYMBOL AFS-430	
WA Form 1320-1 (11-77)	ADVISORY CIRCULAR ISSUANCE RECORD

FIGURE 4-4. SAMPLE CONTENTS PAGE

CONTENTS	
5/31/91	AC 150/5390.3
Paragraph	Page
CHAPTER 1. INTRODUCTION	
1. General	1
2. Explanation of Terms	1
3. Site Considerations	1
4. Helicopter Usage	2
5. Federal (FAA) Role	2
6. State and Local Roles	2
7. Other Sources of Technical Assistance	2
8. Modification of Standards	3
9. Reserved	3
Figure 1-1. Example of Vertiport Construction Notice	4
Figure 1-2. Example of a Location Map	5
Figure 1-3. Example of a Vertiport Layout	6
Figure 1-4. Example of Notice Requirements	7
CHAPTER 2. AIRSIDE DESIGN	
10. General	9
11. Final Approach and Takeoff Area (FATO)	9
12. Touchdown Lift-Off Surface (TLOF)	9
Figure 2-1. FATO and TLOF Relationships	10
Figure 2-2. A Rapid Runoff Shoulder	10
13. Taxiways and Hover Taxiways	10
Figure 2-3. Hover Taxi Safety Area	10

FIGURE 4-5. SAMPLE FRONT (SEPARATE) COVER WITH ARTWORK

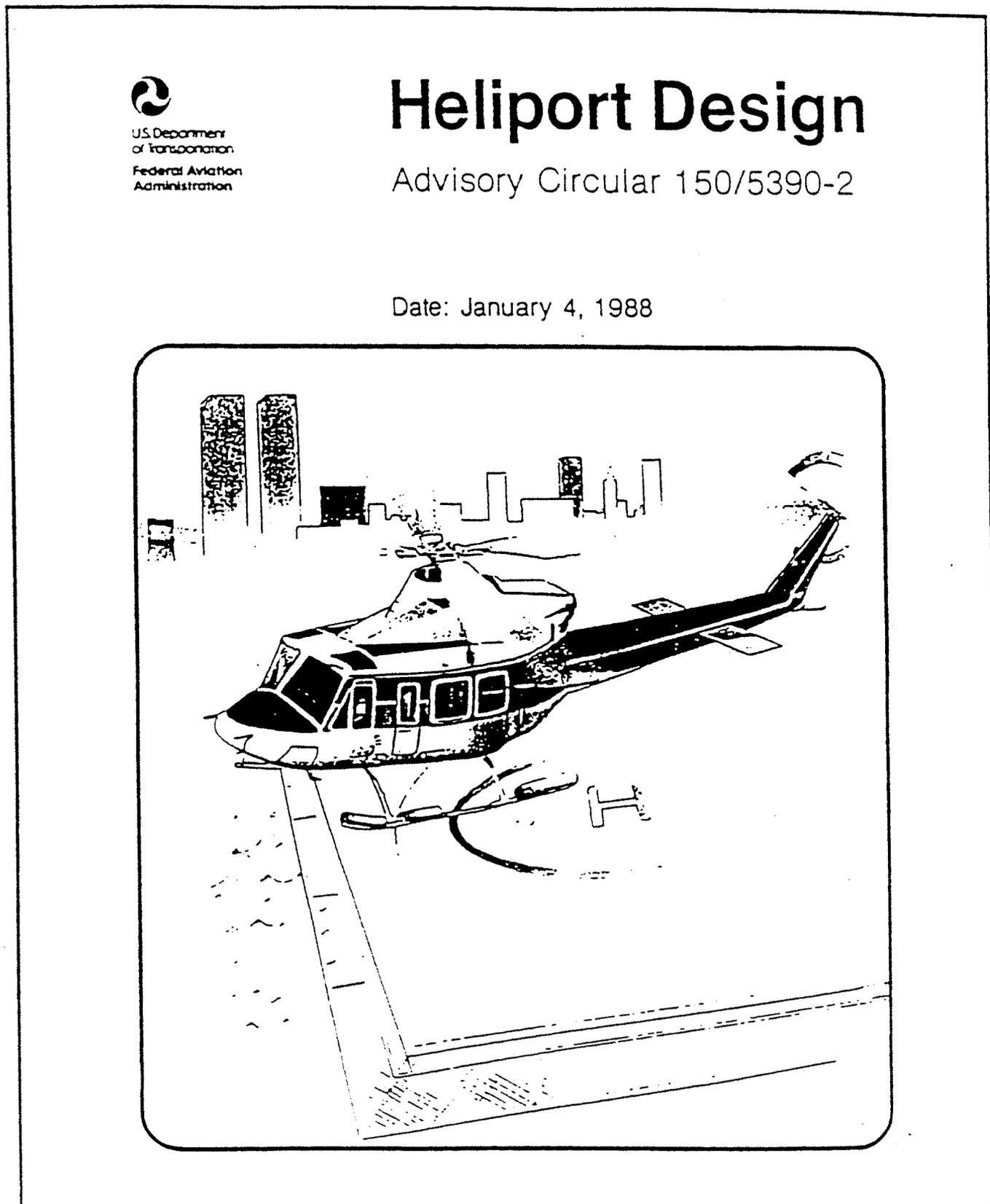


FIGURE 4-6. HOW TO PREPARE FAA FORM 1300-2, CLEARANCE RECORD

1. PREPARATION FOR RELEASE FOR

COMMENT. Prepare FAA Form 1300-2 in as many copies (copy from original) as are necessary to furnish a copy with each clearance draft AC being sent for coordination. The numbered instructions below correspond to the matching numbers in figure 4-6a, Clearance Record. Complete the form by inserting in:

- a. Block 1. The words "Advisory Circular."
- b. Block 2. Subject area number of the AC only, "AC 90- ." The consecutive dash number is left blank until the AC is approved.
- c. Block 3. Exact title of the AC.
- d. Blocks 4, 5, and 6. Name, routing symbol, and telephone number of person(s) who can answer questions about the contents of the AC (usually the preparer).
- e. Block 7. A simple explanation of the reason for issuing the AC, what group or purpose in the aviation community it will serve. The budget impact, if any. (See paragraph 4-5(c)(2).)
- f. Block 8. A description of the proposed distribution (i.e. AC 20 series, AC 60 series, AC 90 series, and so on). State whether the AC is to be sold by the Superintendent of Documents, (GPO) or issued free from FAA.
- g. Block 9. Routing symbol of the official approving the draft for comment.
- h. Blocks 10, 11, and 12. Initials, routing symbol, and date initialed by specialists providing internal (in-office) approval preceding release of draft for clearance. DMO must initial to show preliminary format review.
- i. Blocks 13 and 14. Signature, title, routing symbol, and date signed by official releasing the draft for clearance. He/She signs after block 10, 11, 12, 15, and 16 are completed.
- j. Blocks 15 and 16. Initials and routing symbol of forms control and reports control points, if such clearance is necessary. If not, DMO must certify, "NOT REQUIRED."
- k. Block 17. Deadline date for return of clearance drafts to originating office. (See paragraph 4-5b(2).)
- l. Block 18. Routing symbols of heads of all necessary clearance offices. For multiple simultaneous clearances, type a note across block 22 as follows:

"Note: This AC is being cleared with: AAA-1, AAM-1, AAS-1, AAT-1, AFS-1, AGI-1, AIR-1, AIT-1, ARP-1."

2. RETURN CLEARANCES TO ORIGINATING OFFICE.

Blocks 19 through 26 are for use by offices clearing the AC. Complete by inserting in:

- a. Blocks 19 through 21. Initials, routing symbols, and date of internal clearances prior to review by the authorized clearing official for the clearing office.
- b. Blocks 22 through 26. Signature and routing symbol of signing official for the clearing office listed in Block 18 and date of his signature. Place a check mark in blocks 24 through 26 to show action. If "Nonconcur" is checked in Block 26, attached comments must state what changes are required before concurrence will be given.

3. SENDING DRAFT FOR FINAL APPROVAL.

Blocks 27 through 34 are for use by office originating AC. Complete by inserting in:

- a. Block 27. An indication of "Yes," "No," or "Part" to show compliance with comments. Attach a brief statement (summary of comments) to explain comments NOT adopted. If the AC is cleared with several sources simultaneously, compile all Clearance comments and signatures on the original FAA Form 1300-2 before sending it to the DMO for signature (block 29) and the final signing official (block 32).
- b. Blocks 28, 29, and 30. Routing symbol, signature, and date signed by DMO of the originating office. This certifies final AC format review before submission to signing official.

4. FINAL APPROVAL.

- a. Blocks 31, 32, and 33. The routing symbol, signature, and date signed by the signing official of the originating office.
- b. Block 34. Routing symbol of office (usually DMO) to which AC should be returned for further processing after signature and assignment of consecutive number. This would include preparation of the printing requisition, obtaining GPO Form 3868 from ABC-100, if the AC is a "for-sale" publication, and any other necessary administrative transaction.

FIGURE 4-7. SAMPLE PAGE CONTROL CHART



US Department
of Transportation
Federal Aviation
Administration

Advisory Circular

Subject: AIRPORT DESIGN STANDARDS—
SITE REQUIREMENTS FOR TERMINAL
NAVIGATIONAL FACILITIES

Date: 1/30/87
Initiated by: AAS-110

AC No: 150/5300-2D
Change: 2

1. **PURPOSE.** This Change deletes the obsolete Category II and III obstacle critical area.
2. **PRINCIPAL CHANGES.** The adaptation of the obstacle free zone (OFZ), in AC 150/5300-4 and AC 150/5300-12, eliminates the justification for the CAT II and CAT III obstacle critical area. The FAA requirements for a CAT II and CAT III obstacle critical area has been rescinded. This Change deletes this obsolete obstacle critical area from the advisory circular.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
1 and 2	3/10/80	1	3/10/80
		2	1/30/87
7 and 8	2/10/80	7	3/10/80
		8	1/30/87

Leonard E. Mudd
Director, Office of Airport Standards

FIGURE 6-1. SAMPLE PRINTING, BINDING, DISTRIBUTION, AND EDITORIAL SERVICES REQUEST

U.S. GOVERNMENT PRINTING OFFICE: 1989-275-702

LOGGED IN BY: [Redacted] Checked areas for GPO Printing Branch use

1. PERSON TO CONTACT ABOUT THIS WORK Pat Reed		2. ROUTING SYMBOL AFS-13	3. TELEPHONE NO. 73712	4. AGENCY SYMBOL FAA	5. REQUISITION NO. 2-22618
4. TITLE OR DESCRIPTION OF WORK AC 120-57, Surface Movement Guidance and Control System 9-4-92			6. FORM NO. OR GPO PROGRAM NO.	7. RIDER REQUEST <input type="checkbox"/>	8. GPO REG. NO. 9. SCHED. COMPLETION DATE 10/16/92
5. PAGES (Sheet) (Bound) OF MATERIAL SUBMITTED SHEET(S) * 27 29		6. QUANTITY RANGE OF FINISHED FROM		7. FINISHED PRODUCT UNIT <input type="checkbox"/> BOOKS OR PAMPHLETS <input type="checkbox"/> BLANK BOOKS <input type="checkbox"/> BLANK FORMS <input type="checkbox"/> FOLDERS <input type="checkbox"/> SETS <input type="checkbox"/> SHEETS TO PAGE OR TABLET <input type="checkbox"/> OTHER (SPECIFY)	
7. APPROPRIATION 201.0/1150/973/2411		8. EST. COST (AGCY)	9. NET. COST	10. ACTUAL COST	11. DATE PRINTED AT GPO 10/16/92

PRINTING, BINDING, AND DELIVERY INSTRUCTIONS

TEXT	10. PAPER			11. INK	
	LEAD	WEIGHT	FINISHED SIZE	COLOR	COLOR NO.
C. W. Writing	20	8 1/2 x 11	white	black	
COVER					
OTHER (SPECIFY)					

12. PROOFS NO. YES <input type="checkbox"/> NO <input type="checkbox"/> WANTED <input type="checkbox"/>	13. PRINT <input type="checkbox"/> HEAD TO HEAD <input type="checkbox"/> HEAD TO TAIL <input type="checkbox"/> HEAD TO SIDE (NOT SAMPLE)	14. FOLD TO <input type="checkbox"/> NONE <input type="checkbox"/> PART <input type="checkbox"/> FULL <input type="checkbox"/> PART
15. GATHER (Assemble) <input type="checkbox"/> AS PAGES <input checked="" type="checkbox"/> OTHER (SPECIFY) follow circle folio		
16. FINISH OR DRILL HOLE SHAPE: <input type="checkbox"/> ROUND <input type="checkbox"/> SQUARE <input type="checkbox"/> RECT. HOLE: 3 <input type="checkbox"/> 3/8 <input type="checkbox"/> 1/2 <input type="checkbox"/> 3/4 <input type="checkbox"/> 1 HOLE CTR. TO CTR.: 4 1/2 POSITION: <input type="checkbox"/> LEFT <input type="checkbox"/> RIGHT <input type="checkbox"/> OTHER (SPECIFY)		

17. ADDITIONAL OR SPECIAL PRINTING AND BINDING INSTRUCTIONS (USE ADDITIONAL SHEETS IF NECESSARY):

* Insert 1a negative onto Page 10 of Appendix 2.
* Insert 2a negative onto Page 11 of Appendix 2.

RETURN ORIGINALS AND ALL NEGATIVES TO AFS-13 (Reed, Room 301)

18. DISPOSITION OF WORK	PICK UP <input type="checkbox"/> BY MAIL MESSENGER <input type="checkbox"/> CALL EXTER.	DELIVER TO <input checked="" type="checkbox"/> SHIPING OFFICE <input type="checkbox"/> FOLLOWING DATA <input type="checkbox"/> ATTACHED LIST
	QUANTITY (LIMITS) TO	

DISTRIBUTION INSTRUCTIONS

19. DISTRIBUTE TO	WASHINGTON HEADQUARTERS Std distribution for AC 120 series AFS-13 (10 cys) AFS-410 (30 cys) AFS-400/ATTN: B. Tysdal 20 cys -- Room 305	FIELD Std distribution for AC 120 series AAC-950 (80 cys)	MAILING LISTS Std distribution for AC 120 series
20. ADDITIONAL OR SPECIAL DISTRIBUTION INSTRUCTIONS (prepared by Temple, AFS-410) WASHINGTON HDQTRS DISTRIBUTION - CONT'D: M-443.2 (1000 cys for stock)			21. FOLD TO TOP <input type="checkbox"/> BOTTOM <input type="checkbox"/> OTHER (SPECIFY)

22. CHECKED BY (SIGNATURE): [Signature]

23. PRINTING REVIEW POINT (SIGNATURE): [Signature]

24. APPROVED BY (SIGNATURE): [Signature]

25. DATE: **9/28/92** 26. FORM NO.: **A 7-700** 27. DATE: **9-16-92** 28. FORM NO.: **AM-200** 29. DATE: **9/16/92**

Form DOT F 1702.3 (1-89) PRINTING, BINDING, DISTRIBUTION, AND EDITORIAL SERVICES REQUEST

FIGURE 6-2. SAMPLE ANNOUNCEMENT OF AVAILABILITY



U.S. Department
of Transportation
Federal Aviation
Administration

Advisory Circular

Subject: ANNOUNCEMENT OF AVAILABILITY—
REPORT NO. DOT/FAA/PP/92-5,
GUIDELINES FOR THE SOUND
INSULATION OF RESIDENCES EXPOSED
TO AIRCRAFT OPERATIONS

Date: 1/19/93
Initiated by: APP-510

AC No: 150/5000-9
Change:

1. **PURPOSE.** This advisory circular announces the availability of the report "Guidelines for the Sound Insulation of Residences Exposed to Aircraft Operations."

2. **BACKGROUND.** The Federal Aviation Administration's Office of Environment and Energy and Office of Airport Planning and Programming and the Naval Facilities Engineering Command contracted with Wyle Research to develop a report containing guidelines for the sound insulation of residences exposed to aircraft operations. The report provides a project management handbook for studying, initiating, and implementing residential sound insulation programs in neighborhoods around military and civilian airports. The information in the report is based on fundamental

acoustic principles supported by practical experience gained in numerous residential sound insulation projects across the country. The most successful solutions to problems typically encountered in these projects have been incorporated in this report.

3. HOW TO ORDER.

a. The report may be purchased from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161 (703-487-4650).

b. Orders should include the complete title and order number (ADA 258594). Customers should contact NTIS direct for the cost of this report.

PAUL L. GALIS
Director, Office of Airport Planning and Programming