

INCH-POUND

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MILITARY SPECIFICATION

PRINTING PRODUCTION OF TECHNICAL MANUALS:

GENERAL REQUIREMENTS FOR

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE.

1.1 Requirements. This specification covers the requirements for photolithographic negatives, offset plates, direct image and camera-ready copy, reproduction assembly sheets and printing of Technical Manuals (TM), including changes, revisions, supplements and reprints.

1.2 Paragraphs with limited applicability. This specification contains paragraphs and specific requirements which are not applicable to all Services. Such paragraphs or requirements are prefixed to indicate the Services to which they pertain: (A) for Army; (N) for Navy; (M) for Marine Corps; and (F) for Air Force.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: HQ AFLC/MMDB, Wright-Patterson AFB, OH 45433-5000 by using the self addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC F5021

AREA TMSS

Distribution Statement A. Approved for public release; distribution is unlimited.

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2. APPLICABLE DOCUMENTS.

2.1 Government documents.

2.1.1 Specifications, standards and handbooks. The following specifications, standards and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

Military

MIL-M-38784	Manuals, Technical, General Style and Format Requirements
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(Unless otherwise indicated, copies of federal and military specifications, standards and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.1.2 Other Government documents, drawings and publications. The following other Government documents, drawings and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

PUBLICATIONS

Department of Defense

DOD 5220.22-M	Industrial Security Manual for Safeguarding Classified Information
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Government Printing Office (GPO)

Publication 310.1	Quality Assurance Through Attributes Program
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Publication 310.2	Solicitation Provisions, Supplemental Specifications, and Contract Clauses
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Joint Committee on Printing, Congress of the United States

Government Paper Specification Standards

(Application for copies should be addressed to the Superintendent of Documents, US Government Printing Office, Washington, DC 20402.)

United States Postal Service

Domestic Mail Manual

(Copies of this document may be obtained from any US Post Office.)

Navy

NAVAIR 00-25-150 Specification and Policy Guide for
Printing NAVAIR Technical Manuals

(Application for copies should be addressed to the Commanding Officer, Naval Air Technical Services Facility (Code 012), 700 Robbins Avenue, Philadelphia, PA 19111-5097.)

NAVPUBINST 5604.27 US Postal Service (USPS) Regulations
Governing use of Agency Official
Mailing Indicia

(Application for copies should be addressed to the Commanding Officer, Naval Publications and Forms Center (Code 100), 5801 Tabor Avenue, Philadelphia, PA 19120-5099.)

2.2 Non-Government Publications. The following document(s) form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents cited in the solicitation (see 6.2).

ANSI PH1.25-1983 Safety Photographic Film

(Application for copies should be addressed to the American National Standards Institute, Inc., #1430 Broadway, New York, NY 10018.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except

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for related associated detail specifications, specification sheets or MS standards), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS.

3.1 Photolithographic negatives. When specified, photolithographic negatives shall be furnished. Negatives shall be of highest quality standard photolithographic film and furnished in such condition that no additional work will be required on them prior to printing. Negatives shall have a film base (cellulose acetate, triacetate, polystyrene, polyester, vinyl, etc.) and shall conform to ANSI PH1.25-1983. Thin base film (less than 0.004 inch in thickness (see 3.1.4 for exceptions)) and paper base material shall not be used for negatives film. Film with a slight matte finish on the emulsion side is acceptable. Negatives determined to be unacceptable by the acquiring activity shall be replaced by the contractor at no additional cost to the Government.

3.1.1 Negative dimension. For layout purposes, negatives shall be trimmed so that regardless of length, the top margin shall be 1/2 inch plus or minus 1/8 inch from the printing area; regardless of width, the outside margin (side away from the binding edge) shall be 1/2 inch plus or minus 1/8 inch from the printing area. Therefore, in no case shall the margin from the printing area to the negative edge be less than 3/8 inch. The dimensions of single page negatives shall be uniform within a manual.

3.1.2 Opaquing. Unscreened negatives shall be properly opaqued to the extent necessary to eliminate blemishes on the film that would be reproduced by printing. Opaquing shall be accomplished on the emulsion side. Opaquing on screen negatives shall be away from the subject art/image area, to eliminate shadows and inadvertent paste-up lines that show up on the negatives.

3.1.3 Screen. For halftone and shaded negatives, a 120 to 133 line screen shall be used.

3.1.4 Emulsion. The emulsion side of the film shall be the reverse side of the finished negative. The film shall not be less than 0.004 inch thick. (A) (M) (N) However, when the acquiring activity has authorized the taping of halftone negatives onto the emulsion side, behind the window in the basic page negative, polyester halftone negatives shall be no less than

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0.002 inches thick and no more than 0.0024 inches thick and acetate halftone negatives shall be no less than 0.003 inches thick and no more than 0.0035 inches thick.

3.1.5 Outline halftone. (A) (M) (N) Square halftone negatives, without borders, shall be provided in all instances where this will satisfactorily portray the subject matter of the illustration. Silhouettes and vignettes shall not be used. Outline halftone negatives shall be provided only when required to properly portray the subject matter of the illustration.

3.1.6 Combination line and halftone. (A) (M) (N) Single negatives, either line or halftone, shall be provided where this will satisfactorily portray the subject matter of the illustration. Combination line and halftone negatives shall be provided only if required to properly portray the subject matter of the illustration, provided both line and halftone are to be printed in the same color.

3.1.7 Page and illustration negatives. All illustrations, line, halftone, and combination, except for color overlays, shall be positioned into the page negative by photolithographic methods or stripped (mortised). Strip-ins shall be held securely on all sides by lithographic masking tape permitting no admittance of extraneous light. Tape shall be placed on the glossy side (side opposite the emulsion side).

3.1.8 Color negatives.

3.1.8.1 Preparation (color separations). Negatives for each color page shall be prepared for the necessary primary process colors and black. When secondary colors are necessary, overprinting of primary colors shall be utilized. Shades of primary colors shall be obtained by using shading media on original art. Two color separation (overlay) negatives requiring two printings of the same color for the same page shall not be used; the two negatives shall be combined into one for that color. When approved by the acquiring activity, printing of multiple solids and tints in excess of four inks shall be accomplished by overprinting standard primary process color inks. Solids and screened tints of each process color shall be composited on one negative. Screens shall not exceed 133 lines per inch and standard process screen rotation angles shall be used. Printing of up to four hues, including black, in one publication, without overprinting of screened tints may be prepared for any 3 Pantone Matching System (PMS) colors plus black.

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3.1.8.2 Contents (register marks). Outside the final trim area, right reading emulsion side down, each color separation (overlay) negative shall contain, as a permanent integral part thereof, the publication number, figure number, page number, name of the color and/or PMS number, and the word "TOP" at the upper center. Each overlay in a set shall contain at least three register marks, one centered on each side, and one slightly off center at the top or bottom. These marks shall be outside the printable area. Matching register marks are also required on the black, or key, negative for each set. (Key punch or pin register systems, in place of register marks or color separation negatives without register marks shall not be used.)

3.1.8.3 Submission. All the negatives in a set making up each individual publication page (including the black, or key negative, plus the negative for each required color) shall be placed in a single envelope (one envelope per page). Each envelope shall show the publication number, page number, colors and security classification, if any. Security markings shall be in accordance with the requirements of DOD 5220.22-M.

3.1.8.4 Color page samples. As an aid in printing changes to color illustrations in the basic manual, the following shall accompany each set of color negatives and shall be placed in the envelope containing the appropriate negatives.

a. One printed page in color shall be furnished. Printing shall not be accomplished solely to provide this page. New color illustrations require no samples except as noted in 3.1.8.5.

b. Color pages being changed or reused shall be provided.

c. Minor changes may be marked on the printed page with colored pencils, or when additional color is added, a PMS number, name or color swatch of the color may be fastened to the page and keyed to the area to be printed in the added color. The additional colors, or change in color areas, shall coincide with the changed negatives.

3.1.8.5 Exact color duplication. When it is necessary that a specific color be produced by printing, a swatch of the required color shall be attached to the applicable negative and, when possible, the ink manufacturer and the ink color number shall be specified. When color swatches are not available, PMS color number codes shall be used.

3.1.9 Unacceptable negatives. Negatives which, for any reason, will not provide faithful and satisfactory reproduction shall not

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be accepted. Reasons for which negatives will not be accepted are in 3.1.5, 3.1.6, 3.1.8.1 and 3.1.8.2. Other conditions which make negatives unacceptable are:

a. Surface damaged by scratches, tears, cracks, or otherwise defaced in such a manner as to admit extraneous light or deface image when printed.

b. Improperly or too heavily opaqued, or where opaquing material has chipped off or dissolved from dampness or other causes.

c. Halftones that have opaqued highlights, or attempts to retouch by use of opaque. Retouching shall be accomplished on the original artwork.

d. Loose stripping or incorrect taping.

e. Gum from tape or opaquing material imprinted on adjoining negatives.

f. Areas that are not to be printed blocked out with masking papers.

g. Delivered in 'flats' of goldenrod or other masking paper.

h. Separate negatives for printing secondary colors in lieu of overprinting primary colors (see 3.1.8.1).

i. Color negatives that are out of register.

j. Negative is incomplete and/or would require additional work.

k. Negatives opaqued on wrong side.

l. Attempts to correct negatives by mortising words, sentences, paragraphs, publication number, page number, security classification, or any nonillustrative halftone material.

m. Halftone taped to blank window in lieu of stripping (mortising) and taping on the emulsion side.

n. Rolled or shipped in tubes.

o. Foldout pages that have been spliced or are creased.

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3.1.10 Scroll checklists. Scroll checklists shall be on UV emulsion, black image, sensitized on one side, matte on reverse side, .0043 inch thick mylar polyester film (Technifax part number P3200M or equivalent).

3.2 Offset plates. (A) (F) When specified, direct image offset plates (photo direct or equal), in exact printing size, capable of satisfactory quality reproduction for at least 1500 impressions of text, halftones and color (when applicable), shall be furnished.

3.3 Direct Image Copy (DIC) and Reproducible Camera-Ready copy (see 6.3.1 and 6.3.3). Unless otherwise specified, DIC shall be furnished, in lieu of photolithographic negatives or offset plates, for all manuals. When the capability to produce DIC does not exist, reproducible camera-ready copy may be furnished if approved by the acquiring activity. Changes, revisions and supplements submitted for existing TMs shall be on the medium specified by the acquiring activity. The DIC or reproducible camera-ready copy shall meet the following criteria:

a. Be prepared from the reproducible copy using a positive-to-positive (Xerography) process or as a laser print copy of not less than 300 Dots Per Inch (DPI) generated directly from the automated data base. Substitute reproduction methods using other than positive-to-positive process are not acceptable. The process shall not require generation of film negatives as a product or by-product of the process.

b. Pages furnished shall be high contrast positives, clear and legible with sharp, clear lines in both text and illustrations, and meet the requirements of MIL-M-38784 and not less than quality level three as specified in GPO Publication 310.1. They shall not contain any tape-overs or splices. They shall have a minimum three year shelf life. It must be one-to-one reproduction that does not require reduction or enlargement.

c. Be suitable for use by the government printing coordinator for any printing or reproduction process. Copy determined to be unacceptable by the acquiring activity shall be replaced by the contractor at no additional cost to the Government.

3.4 Sizes. Manuals shall be consistent with the sizes shown in Table I. Tolerances shall be consistent within each manual.

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When circumstances require acquisition of a manual of a size different from that cited in Table I, the dimensions and tolerances shall be as specified in the contract.

TABLE I. Standard manual dimensions.

Page Size - Measurements in Inches	Maximum Printing area	Maximum Width	Maximum Length	Minimum Width	Minimum Length
4 by 5 1/2 Single	3 1/8 by 5 \a	4 1/8	5 5/8	3 7/8	5 3/8
4 1/2 by 7 Single	3 5/8 by 6 1/2 \a	4 5/8	7 1/8	4 3/8	6 7/8
4 by 8 Single	3 1/8 by 7 1/2 \a	4 1/8	8 1/8	3 7/8	7 7/8
4 by 8 Foldout	19 1/2 by 7 1/2	24 \b	8 1/8	8 \b	7 7/8
4 1/2 by 8 Single	3 1/2 by 7 1/2 \c	4 5/8	8 1/8	4 3/8	7 7/8
5 1/2 by 7 Single	4 1/2 by 6 1/4 \d	5 5/8	7 1/8	5 3/8	6 7/8
5 1/2 by 7 Foldout	28 3/4 by 6 1/4	35 \b	7 1/8	11 \b	6 7/8
5 by 8 Single	4 1/8 by 7 1/2 \a	5 1/8	8 1/8	4 7/8	7 7/8
5 by 8 Foldout	25 1/2 by 7 1/2	31 \b	8 1/8	10 \b	7 7/8
5 by 8 Workcard	4 1/2 by 7 1/2 \e	5 1/8	8 1/8	4 7/8	7 7/8
8 by 5 Workcard	7 1/2 by 4 1/2 \e	8 1/8	5 1/8	7 7/8	4 7/8
6 1/2 by 9 1/2 Single	5 1/2 by 9 \c	6 5/8	9 5/8	6 3/8	9 3/8

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TABLE I. Standard manual dimensions - Continued.

Page Size - Measurements in Inches	Maximum Printing area	Maximum Width	Maximum Length	Minimum Width	Minimum Length
9 1/2 by 6 1/2 Single	8 1/2 by 6 \c	9 5/8	6 5/8	9 3/8	6 3/8
8 1/2 by 11 Single	7 1/4 by 10 \f	8 5/8	11 1/8	8 3/8	10 7/8
8 1/2 by 11 Foldout	36 by 10	45 \b	11 1/8	17 \b	10 7/8
17 by 11 Single	15 3/4 by 10 \f 16 by 9 3/4 \g	17 1/8	11 1/8	16 7/8	10 7/8
Scroll	2 1/2 by 91	2 3/4	96	2 11/16	12

\a Minimum margins: binding edge 5/8 inch beyond printing area; side away from binding edge 1/4 inch beyond printing area; top and bottom 1/4 inch beyond printing area.

\b Including required blank apron.

\c Minimum margins: binding edge 3/4 inch beyond printing area; side away from binding edge 1/4 inch beyond printing area; top and bottom 1/4 inch beyond printing area.

\d Minimum margins: binding edge and side away from binding edge 1/2 inch beyond printing area; top 1/4 inch beyond printing area; bottom 1/2 inch beyond printing area.

\e Minimum margins: 1/4 inch on all edges.

\f Minimum margins: binding edge 1 inch beyond printing area; side away from binding edge 1/4 inch beyond printing area; top 1/4 inch beyond printing area; bottom 1/2 inch beyond printing area.

\g Printing area for pages drilled on the 17 inch side.

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3.5 Retention of reproduction media- Reproduction media (photolithographic negatives, DIC, offset plates, camera-ready copy) retained by the contractor shall be stored in such a manner as to provide for a minimum shelf life of three years. The contractor shall provide fire protection for the reproduction media in accordance with a method approved by the National Fire Protection Association.

3.6 Reproduction assembly sheet/publications running sheet. Unless otherwise specified, a reproduction assembly sheet/publications running sheet shall be prepared in triplicate and shall accompany the reproduction media for any type of technical manual, change, revision or supplement. The assembly/running sheets shall be prepared in accordance with the following, as appropriate, and as shown on: (F) Figure 1, (M) (N) Figure 2, or (A) Figure 3.

3.6.1 DATE. The date the sheet was prepared shall be inserted in date block.

3.6.2 PUB DATE. The date of the manual (for basic) or change date (if for a change) shall be entered.

3.6.3 SHEET number. The number of sheets shall be inserted in the upper right corner; Sheet 1 of 3, Sheet 2 of 3, etc.

3.6.4 TITLE/NUMBER AND SECURITY CLASSIFICATION. This space shall reflect the publication number followed by the security classification. If the assembly sheet is for a change, the classification shown shall be for that particular change. An unclassified change to a classified manual would include the words "UNCLASSIFIED CHANGE TO A CLASSIFIED MANUAL."

3.6.5 DATE OF LAST REVISION. The date of the basic manual or revision date shall be entered.

3.6.6 WORK ORDER NO. This space shall be left blank.

3.6.7 PROGRAM WORK REQUEST. This block may be used for internal tracking or other control purposes.

3.6.8 ISSUE NO. Change 1, change 2, etc., as appropriate, shall be entered.

3.6.9 TYPE OF JOB. Mark appropriate box or circle appropriate word. If assembly sheet is for a change, the change number shall be included.

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3.6.10 Column heads.

3.6.10.1 FRONT COVER/INSIDE FRONT COVER/INSIDE BACK COVER/BACK COVER. If separate cover are required, an 'X' shall be placed in the appropriate spaces.

3.6.10.2 SYMBOL. If the material is all reproducible copy (including DIC) or all in negative form, the letter 'R' or 'N,' respectively, shall be placed on the top line for each sheet. If the material is in both reproducible copy and negative form, the letter 'R' or 'N' shall be placed on each line, as appropriate. If any material is a foldout page, the letter 'F' shall also appear on the appropriate line. (F) If the material is a change and pages of previously furnished material are to be taken from file, the letter 'B' shall appear on the appropriate lines to indicate these unchanged backup pages.

3.6.10.3 PAGE NO and PRINTED FOLIOS/Page numbers. This space shall list all pages, in sequence, including the title page, list of effective pages, pages numbered with Roman and Arabic numerals, suffixed page numbers and blank pages. Each page shall be listed separately. For running sheets, the pages shall be listed beside the appropriate 'TRUE FOLIOS' space to show the exact order of the pages in the manual. Changed, backup, and blank pages shall all be listed for manual changes.

3.6.10.4 FIGURE or FIGURE/TAB NO. This space shall list only the figure numbers of illustrations that are not mounted on the margin or reproduction media. (Artwork that is 'not mounted' is art which is separate from the page but must be included when printed.) Extra lines shall be used if a page contains more than one illustration. If the illustration is in negative form, the symbol '(N)' shall follow the figure number. Separate art (for example, an illustration without a figure number) shall be listed as 'Art A.' This space shall be blank if the illustrations are mounted on the margin or reproduction media copy or are already stripped into the page negative.

3.6.10.5 HALFTONE. This space shall list the quantity of separate halftone illustrations for each page.

3.6.10.6 LINE. This space shall list the quantity of separate line illustrations for each page when available art, in negative form, is to be stripped into a new page negative.

3.6.10.7 STRIP-IN. For original manuals, this space shall show the quantity of illustrations for a page for which it is necessary to prepare separate negatives to strip into the

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negative for the page. For all applicable strip-ins, the symbol "(N)" shall follow the number in the "FIGURE NO." column and special instructions for pickup shall be given, as necessary. (F) For changes, this space shall indicate the preceding information, plus the quantity of illustrations for which the unchanged art negative is already available and is to be stripped into the new changed page negative.

3.6.10.8 DRAWING NUMBER. The art control number, drawing number, contractor drawing control number, etc., shall be placed in this space, as appropriate.

3.6.10.9 COLOR. This space shall indicate the quantity of colors to be printed on a page. The specific colors, including black, shall be indicated in the special instruction column. When a page is to be printed in black only, this space shall be blank.

3.6.10.10 FOLD-OUT FOLDS. This space shall show the appropriate letter (A, B or C) or number (2, 4 or 6) corresponding to the fold used (see Figure 4).

3.6.10.11 FOLD-OUT PAGES/UNITS. This space shall contain the number of pages of each foldout including blank apron. Each multiple of the basic page, or portion thereof, shall equal one page. For example: In an 8 1/2 by 11 inch manual, a foldout 23 inches wide would be three pages; a foldout 27 inches wide would be four pages.

3.6.10.12 FOLD-OUT BLANKS. This space shall show the same quantity as inserted in the space for the printed side of the foldout page.

3.6.10.13 SPECIAL INSTRUCTIONS. This space shall be used to: list the colors, including black (color pages only), applicable to individual pages; give sheet size including blank apron; to provide essential information to the printer; to state which negatives are to be picked up from files; to explain any other assembly/print requirements which are not obvious or are not listed on the associated print request documents.

3.6.10.14 SUB TOTALS. The totals of each column shall be entered with the following variations.

3.6.10.14.1 PAGE NO. All single size pages, including blanks, shall be counted. Foldout pages shall not be included.

3.6.10.14.2 FIGURE NO. This space shall be left blank.

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3.6.10.14.3 COLOR. This space shall be left blank.

3.6.10.14.4 FOLD-OUT FOLDS. Each of the letters/numbers in this column shall be counted and considered single folds. This subtotal is actually a count of foldout sheets.

3.6.11 FINAL CHECK TOTALS ONLY. If more than one assembly sheet is required, these totals shall be inserted only on the first sheet.

3.6.11.1 TOTAL. This space shall show the total number of pages to be printed. The total shall be determined by adding together the subtotals in the "PAGE NO.," "FOLD-OUT PAGES" and "FOLD-OUT BLANKS" columns. This total shall always be an even number.

3.6.11.2 BLANK. This total shall be determined by adding together the sum of the single blank pages in the "PAGE NO." column and the foldout blank page subtotal in the "FOLD-OUT BLANK" column.

3.6.11.3 COLOR. This total shall be determined by adding together the sum of the single pages in the "COLOR" column and the sum of the color pages in the "FOLD-OUT PAGES" column. Note that this is a page total, not a total of the quantity of colors.

3.6.11.4 BLACK AND WHITE. This total shall be determined by subtracting the total number of blank pages (3.6.7.2) and color pages (3.6.7.3) from the final total (3.6.7.1).

3.6.11.5 STRIP-IN. This total shall agree with the quantity shown in the "STRIP-IN" subtotal column.

3.6.11.6 NEGATIVE ART. This total shall be determined by adding together the individual illustrations in the "FIGURE NO." column which are followed by the letter "(N)."

3.6.11.7 HALFTONE. This total shall agree with the quantity shown in the "HALFTONE" subtotal column.

3.6.11.8 LINE. This total shall agree with the quantity shown in the "LINE" subtotal column.

3.6.11.9 A or 2 FOLD, B or 3 FOLD, C or 4 FOLD. These totals shall be determined by grouping and then adding together the individual letters/numbers shown in the "FOLD-OUT FOLDS" column. For Navy reproduction assembly sheet, these instructions apply to the (front and back) F&B 2, 3, 4, and 5 UNIT or (one side only) OSO 2, 3, 4, or 5 UNIT blocks.

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3.6.11.10 2 COLORS, 3 COLORS, 4 COLORS, 5 COLORS. These totals shall be determined by grouping and then adding together the information shown in the 'Special Instructions' column. The variety of colors shall be disregarded. Example: If lines show two colors apply to three pages (regardless if they are black and red, black and yellow, black and blue), the '2 COLOR' total quantity is 3; likewise, if lines show three colors apply to six pages, the '3 COLOR' total quantity is 6.

3.6.12 TRIM. Unless otherwise specified, an 'X' shall be placed before '4 SIDES.' If trimming of three sides of the manual is authorized by the acquiring activity, an 'X' shall be placed before '3 SIDES.'

3.6.13 ASSEMBLER, ADDRESS, PHONE NO. This space shall contain the name, company or government address and business telephone number (including extension) of the individual who prepared the reproduction assembly sheet. (This information is necessary in case the printer or the acquiring activity responsible for sending the manual to a printer has questions regarding the assembly of the material. If the acquiring activity desires that the printer contact them, rather than the contractor's assembler, the acquiring activity may add such information in this block.)

3.7 Printing. Unless otherwise specified, printing shall meet quality level IV as specified in GPO Publication 310.1. Unless otherwise specified by the acquiring activity or the assembly/running sheet, all pages shall be printed head to head.

3.7.1 Paper stock and cover stock. The contractor shall use the type and color (if other than white) of paper stock, cover stock, insert, tab, and divider stock specified by the acquiring activity. The requirements of Government Paper Specification Standards, published by the Joint Committee on Printing (JCP), Congress of the United States, are applicable. Use of recycled paper is acceptable if it meets JCP requirements. (A) Covers for classified manuals shall differ in color from unclassified manuals.

3.7.1.1 Paper stock. Unless otherwise specified, pages of manuals shall be printed on JCP-A60 (50 pounds per 500 sheets) white paper. When specified by the acquiring activity, foldouts, flight manual checklists, job guides, workcards and similar manuals subject to heavy wear and tear shall be printed on JCP-040 (115 pounds per 500 sheets) white or yellow paper. (A) Yellow paper stock shall not be used. (F) All Technical Order Page Supplements (TOPS) shall be green paper stock.

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3.7.1.2 Cover/title page stock. (A)-(M) (N) Covers of manuals shall be printed on the stock designated by the acquiring activity. Types of cover stock are:

- a. JCP-K10 (110 pounds per 500 sheets) white, blue, buff, green, pink, salmon, yellow
- b. JCP-L20 (50 pounds per 500 sheets) gray, blue
- c. JCP-P10 (150 pounds per 500 sheets) natural
- d. JCP-Q70 (150 pounds per 500 sheets) gray
- e. (N) Linear Polyethylene Plastic Covers (natural/clear)

Title pages shall be printed on JCP-A60 (50 pounds per 500 sheets) white paper.

3.7.1.2.1 Hidden hinge covers. (N) When specified, front and back plastic covers shall be provided; each one piece of semirigid plastic with an integral hinge formed in the material 3/4 inch from the binding edge. The hinge shall be formed by heat and pressure, not by removing a portion of the material or scribing with a pointed instrument. The cover shall remain flat in normal use and be capable of closing readily under its own weight. All edges shall be cut clean.

3.7.1.3 Insert, tab, divider stock. (F) (M) (N) The acquiring activity shall specify the stock required for inserts, tabs and dividers. This may be:

- a. JCP-K20 (110 pounds per 500 sheets) white, blue, buff, green, pink, salmon, yellow
- b. JCP-P10 (150 pounds per 500 sheets) natural

3.7.2 Ink. Lithographic or other inks suitable for offset printing shall be used. The quality of ink used shall contribute to the quality of printing, produce sharp, clear and clean copy; shall not strike through or offset on other pages nor fade or bleach.

3.7.2.1 Colors (ink). PMS colors shall be the names and numbers of the colors specified by the acquiring activity. Colors produced by inks shall be true colors; for example, red shall be true red, not coral or magenta. The ink colors shall be intense and brilliant so that sufficient contrast shall exist between tones of the color when printed. When secondary colors are to be

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obtained by overprinting, primary color inks of sufficient transparency to produce the desired colors by overprinting shall be used.

3.7.3 Presswork. The impressions obtained by offset printing shall reflect exact reproduction of copy. Printing shall meet quality level IV for general TM printing or quality level III for color printing as specified in GPO Publication 310.1.

3.7.3.1 Page imposition. Pages shall be positioned to permit the specified borders to be maintained and the copy parallel to the edges of the pages when trimmed. Bleed borders shall extend to the edge of the page when trimmed. See Figures 5 thru 11 for impositioning of single sheets. See Figure 12 for impositioning of bleed borders. See Figure 13 for impositioning of foldout pages. See Figure 14 for impositioning of scroll checklists.

3.7.4 Reprints. (F) All reprints shall be identified as such by the word "REPRINT" set in capital letters in the lower left corner of the title page. Only those changes previously distributed shall be merged.

3.7.5 Variance in quantity. Unless otherwise specified, variance in quantity shall be limited to overruns in accordance with GPO Publication 310.2.

3.7.6 Binder Work. The binder work shall be accurate and conform to the following:

3.7.6.1. Trimming. Sheets shall be trimmed to maintain the borders specified in Figures 5 through 14, as applicable.

3.7.6.1.1 Single sheets. Sheets shall be trimmed on all four sides to form a finished sheet size in accordance with Table I and Figures 5 thru 11, except that when the sheet binding edge is perforated, trimming of three sides shall be permitted. The reproduction assembly sheet, and, in turn, the request for reproduction form, shall clearly indicate whether trimming shall be on three or four sides.

3.7.6.1.2 Foldout sheets. Sheets that exceed the dimensions for single sheets shall be trimmed to maintain the specified border sizes and, when folded, the linear dimensions shall conform to the size of single pages (see Figure 4).

3.7.6.1.3 Scroll checklist. Film shall be trimmed to form a finished size of 2 3/4 by 96 (maximum) inch size (see Figure 14).

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3.7.6.2 Folding. Foldout sheets shall be folded in accordance with the requirements of Figure 4. The side away from the binding edge shall be the side folded in. The outside edge of the page being folded shall be exposed. The outside edge of the sheet, after folding, shall measure 4 inches, 5 inches, 5 1/2 inches or 8 1/2 inches, as applicable, from the binding edge of the sheet. The sheets shall be folded so that the page number, figure number and figure title are visible. For 4 by 8 inch manuals: up to 10 3/4 inches, use A or 2 Fold; up to 17 1/2 inches, use B or 4 Fold; up to 24 inches, use C or 6 Fold. For 5 1/2 by 7 inch manuals: up to 15 1/2 inches, use A or 2 Fold; up to 25 1/2 inches, use B or 4 Fold; up to 35 inches, use C or 6 Fold. For 5 by 8 inch manuals: up to 13 3/4 inches, use A or 2 Fold; up to 22 1/2 inches, use B or 4 Fold; up to 31 inches, use C or 6 Fold. For 8 1/2 by 11 inch manuals: up to 23 1/2 inches, use A or 2 Fold; up to 38 1/2 inches, use B or 4 Fold; up to 45 inches, use C or 6 Fold.

3.7.6.3 Collating. Sheets shall be assembled in proper sequence and position.

3.7.6.3.1 Collating exception. When changes to a manual include single sheets and foldout sheets, the foldout sheets shall be assembled at the back of the single sheets, thus they may not be assembled in sequence.

3.7.6.4 Drilling. Unless otherwise specified, all manuals shall be standard drilled as shown in Figures 15 thru 18. Changes to, or reprints of, previously issued publications shall conform to the drilling of the basic publications. The reproduction assembly sheet shall clearly indicate the required drilling.

3.7.6.5 Binding looseleaf manuals.

3.7.6.5.1 Small manuals. Manuals of two sheets (three or four pages) or more and not exceeding 1/2 inch thickness at the binding edge, which are not to be bound by covers of separate material, shall be stapled on the binding edge. The staples shall be staggered, as required, to enable level packaging of the manuals. Manuals of two sheets shall be stapled when the binding edge is trimmed, not perforated.

3.7.6.5.2 Medium and large manuals. Manuals exceeding 1/2 inch in thickness at the binding edge shall be securely enclosed by shrink wrap (cellophane or plastic) to insure delivery of the manual without damage. If the contractor does not have shrink wrap capability, the manuals shall be tied twice around in both directions with a suitable binder's twine or in such a manner as

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to insure delivery without damage to the manual. (N) Binding shall be in accordance with NAVAIR 00-25-150.

3.7.6.6 Bound manuals. (A) Manuals shall be perfect bound or bound with fasteners, posts, shoe strings, or plastic combs as specified by the acquiring activity. When specified, binding stubs shall be required. (M) (N) Binding shall be in accordance with NAVAIR 00-25-150.

3.8 Workmanship. All operations such as imposition, press preparation, press operation and binding shall be performed to meet quality level IV for general TM printing or quality level III for color printing as specified in GPO Publication 310.1.

4. QUALITY ASSURANCE PROVISIONS.

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in this specification where such inspections are deemed necessary to ensure supplies and services conform to the prescribed requirements.

4.1.1 Responsibility for compliance. All items shall meet all requirements of Sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.

5. PACKAGING.

5.1 Packaging requirements. Unless otherwise specified, the material furnished in accordance with this specification shall be packed as follows.

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5.1.1 Preliminary technical manuals. Preliminary TMs shall be packaged flat in cartons or wrapped separately. Elaborate containers are unnecessary. The artwork and text material may be placed into one package, or may be in separate packages. Copies of large artwork to be used only for review purposes may be folded. Packaging need only be adequate for providing safe delivery and for providing protection against forms of damage that frequently occur during shipping.

5.1.2 Printing materials. Printing materials (photolithographic negatives, offset plates, reproducible camera-ready copy, direct image copy) shall be collated in numerical sequence except for foldouts. Foldouts shall be collated separately in numerical sequence. All printing materials (including foldouts) shall be packed flat and shall be double packaged. Printing materials shall not be folded or rolled. The interior material shall be waterproof and free of any chemical substance that would discolor or otherwise harm the printing materials. Printing materials shall be packed tightly with fillers or thicknesses of corrugated board added to insure protection and stability. The exterior package shall be a standard commercial carton at least equal to Interstate Commerce Standards and of sufficient strength to protect against damage during shipping. Cartons shall be able to withstand storage, rehandling and reshipping without the necessity of repacking. A slip of white manifold onion skin or other suitable white paper shall be placed between negatives, including foldouts. Printed TM pages shall not be used as slip sheets/fillers. Unless otherwise specified, packaging of the original artwork shall be the same as for other printing materials.

5.1.2.1 Container information. In addition to sender and addressee information, the exterior of each container shall bear the following:

- a. Technical Manual Identification number.
- b. Contract or Purchase Order Number
- c. 'Preliminary Technical Manual', when applicable.
- d. The word 'NEGATIVES,' 'OFFSET PLATES,' 'REPRODUCIBLE COPY,' 'DIRECT IMAGE COPY,' as appropriate.
- e. Number of containers in the shipment

5.1.2.2 Packing list. A copy of the letter of transmittal, or the packing list, shall be placed inside the carton or container.

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When a shipment consists of more than one container, the letter of transmittal or packing list shall be enclosed in the first container and shall identify the material that was packed in each container. If a letter of transmittal is used in lieu of a packing list or in addition to a packing list, it shall be processed in accordance with Section 126, US Postal Service, Domestic Mail Manual (DMM).

5.1.2.3 Printing materials from the printer. When the printer ships the printing materials to the acquiring activity, following printing, a printed copy of the manual shall be packed with the printing materials. Such printing materials shall be delivered by registered mail unless otherwise specified. When registered mail is used, the marking 'Registered' shall be preprinted on the permit imprint shipping label by the acquiring activity. Shipment of the printing materials shall be made within 72 hours after delivery of the printed manuals.

5.2 Shipping.

5.2.1 Printed copies. Unless otherwise specified, publications shall be shipped in accordance with the following instructions.

5.2.1.1 Initial Distribution (ID). When specified, the printing contractor shall make initial distribution shipments. This distribution shall be accomplished using shipping labels furnished by the Government or prepared by the contractor in accordance with (F) Figure 19 or (M) (N) Figure 20. The date of shipment shall be affixed at the lower right corner on each label. Distribution of 1 to 200 sheets (400 pages) to an addressee shall be made using a 9 1/2 by 12 1/2 inch No. 32 Kraft envelope. Distribution exceeding 200 sheets shall be packed in a standard commercial carton at least equal to Interstate Commerce standards and of sufficient strength to protect the manuals against forms of damage that frequently occur during shipping. Each carton must conform to postal regulations. (M) (N) When specified, the printing contractor shall make initial distribution shipments in accordance with NAVPUBINST 5604.27.

5.2.1.1.1 Shipments. Shipments shall be made by the most economical means as approved by the acquiring activity. Shipments of initial distribution made by mail to any one destination in the continental United States are limited to 120 pounds per package. (M) (N) Printed pre-addressed permit imprint mailing labels will be furnished by the Government for mail shipments. (F) Printed pre-addressed mailing labels bearing 'Postage and Fees Paid, USAF, Permit No. G-1' will be furnished by the Air Force for mail shipments.

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5.2.1.1.2 Weight limitations. Weight limitations on individual packages are as follows:

a. Shipments to addresses in the continental United States, Alaska, Hawaii, Puerto Rico, US territories and possessions and to APO or FPO addresses - 70 pounds (see exhibit 125.2, DMM, for specific size and weight limits applicable to a few APO/FPO).

b. Except as indicated in 5.2.1.1.3 c, shipments to addresses in foreign countries - 22 pounds.

Note: Customs tags may be required for shipments to foreign countries. Local post office will provide tags, labels, and information. If customs tags are required, contents of shipments shall be listed only as "Official Military Publications" "No Value" and sender will be the address shown in return address on mailing label.

5.2.1.1.3 Mail markings. Permit imprint mailing labels furnished printing contractors for the mailing of manuals shall bear the mail class thereon as follows:

a. Unless otherwise specified on the pre-addressed mailing label, for addresses specified in 5.2.1.1.2 a, the mail class shall be; First Class for envelopes under four ounces, Third Class for envelopes or cartons from four to 16 ounces and Fourth Class for envelopes or cartons over 16 ounces except when the package is being sent to a freight forwarder for shipment to a foreign government. All manuals sent to a freight forwarder shall be sent by traceable means. Manuals consisting of 24 pages or more, at least 22 of which are printed, may qualify for the cheaper special fourth class rate applicable to books. If qualified, the mail class shall be Special Fourth Class Rate.

b. All cartons and envelopes having the proportions of parcels, for APO and FPO addresses, must bear a required delivery date in the lower right corner of the mailing label. If the required delivery date requires that such cartons or envelopes be airlifted on the overseas segment of transportation, the marking MOM (Military Office Mail) shall be placed conspicuously on the address side between the permit imprint and the address. In addition, the MOM marking shall be placed on all remaining sides of parcels. The letters in stamped markings shall not exceed 1/2 inch in height.

c. For addresses in foreign countries, cartons and envelopes sent Third Class or Fourth Class must also be marked "Printed Matter" between the permit imprint and the address.

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Cartons and envelopes sent Special Fourth Class Rate must also be marked 'Printed Matter-Books.' (Consult local post office for weight limitations applicable to cartons and envelopes sent Printed Matter-Books. Weight limits vary from 11 to 22 pounds according to specific country of address.)

d. Shipments to individual addresses that require more than one package shall be clearly marked on the wrapping, but not on the mailing label, 1 of 2, 2 of 2, etc.

5.2.1.1.4 Additional mailing labels. When additional mailing labels in excess of those furnished by the Government are required for multiple shipments, the contractor shall prepare them in accordance with Figure (F) 19 or (M) (N) Figure 20. The return address and addressee shall be identical to that given on the original labels. The same endorsements shall be made on these labels as required on original labels.

5.2.1.1.5 Shipments to APO/FPO addresses. Whenever the total weight of mail shipments to APO/FPO addresses at New York, San Francisco, Seattle or Miami exceeds 5,000 pounds (Air Force - 1,000 pounds) (Navy - 120 pounds) they shall be consolidated on pallets for freight shipment (Government Bill of Lading) to the Bulk Main Centers (BMC) or Postal Concentration Center (PCC) at the port city. Shipments shall be prepared in accordance with the appropriate port city Military Mailers Guide and be attached firmly to pallets. To prevent crushing, stacking of packages shall be restricted to six or less. Each pallet shall be marked for delivery to the appropriate BMC or PCC. Labels on the outside rows of packages shall face the center of the stack so as not to be visible from the outside. Freight shipments to BMC and PCC shall be made up for delivery to:

- a. New York: New York Bulk and Foreign Mail Center
30 County Road
Jersey City, NJ 07097
- b. San Francisco: Postal Concentration Center
390 Main Street
San Francisco, CA 95104
- c. Seattle: Seattle Bulk Mail Center
34301 9th Avenue, South
Federal Way, WA 98008

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d. Miami: Jacksonville Bulk Mail Center
7415 Commonwealth Avenue
Jacksonville, FL 32099

At BMC and PCC, US Postal Service personnel will unload and accept shipment into the postal service.

5.2.1.2 Backup/replenishment stock. The publications remaining after initial distribution has been accomplished are known as backup/replenishment stock. Bulk shipments thereof to a storage depot shall be shipped in cartons suitable for reshipment by Government mail (maximum weight per carton is 20 pounds). Such cartons shall bear a printed label in accordance with (F) Figure 21 or (M) (N) Figure 22. When the container contains a reprint of a manual, the word "REPRINT" shall appear in the bottom right corner of the "Title" block in 3/4 inch bold type. Each carton must conform to postal regulation.

5.2.1.2.1 Backup/replenishment stock shipments. Backup/replenishment stock shipments of 120 pounds or less shall be mailed as ordinary mail; shipments exceeding these weight limitations shall be shipped by freight on a Government Bill of Lading (GBL). Addresses and applicable markings for GBL shipments shall be obtained from the cognizant transportation officer. Pallets shall not be used for freight shipments to addresses within the continental United States (except as authorized by 5.2.1.1.5) without prior approval of the office initiating the delivery order. (N) Backup stock shipment shall be in accordance with NAVPUBINST 5604.33.

5.2.1.2.2 High speed transportation. The acquiring activity, when necessary, will designate the quantity of backup stock that must be shipped by high speed transportation to the storage point.

5.2.1.2.3 Additional information. Additional information, as appropriate, shall be placed on the "Title" block of the shipping label for each carton as follows:

- a. "Basic issue of (publication number), dated"
- b. "Revision of (publication number) dated"
- c. "Change Number dated to (publication number) dated"
- d. "Reprint of basic (publication number) dated"

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e. 'Reprint of (publication number) dated up to and including Change Number dated

5.3 Classified material. Classified material shall be packed and shipped in accordance with the requirements of DOD 5200.1-R, DOD 5220.22-M, and the implementing Service regulations.

5.4 Reproduction media. When reproduction media is provided to a printing contractor for the making of negatives prior to printing, the reproduction media shall be packed in accordance with the requirements of this specification when such copy is returned to the acquiring activity.

6. NOTES.

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use.

6.1.1 Photolithographic negatives. When manuals are printed by the photo offset process, the negatives will be used to make press plates to accomplish printing.

6.1.2 Offset plates. Offset plates will be used to accomplish the actual printing.

6.1.3 Reproducible camera-ready copy. This copy will be used for printing by the Xerography method or for creating photolithographic negatives to be used for printing.

6.1.4 Direct Image Copy. This copy will be used on a copier or for making direct image masters or negatives.

6.1.5 Reproduction assembly sheet. This sheet contains the detailed instructions to the printer. Its purpose is to assure that the pages and illustrations of manuals to be printed will be assembled in proper sequence, pages will be folded as requested, and that printing is accomplished in the colors designated.

6.1.6 Printing. The finished printed manuals are used to disseminate technical information, instructions and safety procedures pertaining to the installation, operation, maintenance and modification of equipment and materials of the military services. The printed documents, excess stock, printing plates and any other related materials are not intended to be

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distributed or used in any way other than as specified by the acquiring activity. The Distribution Statement and Destruction Notice are applicable.

6.2 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and date of this specification.
- b. Issue of the DODISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (2.1.1, 2.1.2, 2.2).
- c. Whether photolithographic negatives shall be furnished (3.1)
- d. Whether direct image offset plates shall be furnished (3.2).
- e. If delivery of DIC shall be other than as specified in this document (3.3)
- f. Publication trim size (if other than as specified in Table I) (3.4).
- g. If reproduction assembly sheet/publications running sheet shall be other than as specified in this document (3.6).
- h. If marking for TRIM shall be other than as specified in this document (3.6.12).
- i. If quality level shall be other than as specified in this document (3.7).
- j. If printing of pages shall be other than head to head (3.7).
- k. If color and type of paper stock shall be other than as specified in this document (3.7.1.1).
 - l. Type of cover stock (3.7.1.2).
- m. If hidden hinge covers are required (3.7.1.2.1).
- n. Type of insert, tab and divider stock required (3.7.1.3).
- o. Which PMS colors shall be used (3.7.2.1).

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p. If variations in quantity shall be other than as specified in this document (3.7.5).

q. If drilling shall be other than as specified in this document (3.7.6.4).

r. Whether binding shall be with fasteners, posts, shoe string, plastic comb or binding stubs (3.7.6.6).

s. If packaging requirements shall be other than as specified in this document (5.1)

t. If packaging of original artwork shall be other than as specified in this document (5.1.2).

u. If shipping shall be other than as specified in this document (5.2.1).

v. When initial distribution is required by the printing contractor (5.2.1.1).

w. If mail markings shall be other than as specified in this document (5.2.1.1.3).

x. The quantity of backup stock (if any) that must be shipped by high speed transportation (5.2.1.2.2).

6.3 Definitions.

6.3.1 Direct Image Copy. One-to-one reproducible without paste-overs or mortises, suitable for using on a copier or making direct image masters. Quality should be such that if a negative were to be prepared, only the imperfection due to the quality of photolithographic film would require touch up before making the offset plates.

6.3.2 Direct Image Master. The chemically treated mat exposed using a direct image copy. The master mat is affixed to a press that uses direct image offset printing processing.

6.3.3 Reproducible Camera-Ready copy. Reproducible copy suitable for using to make negatives. Paste-overs and mortised changes are permitted. Copy can be larger than the printed version.

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6.4 Subject term (key word) listing.

Copy, Direct Image
Copy, Reproducible Camera-Ready
Negatives, Photolithographic
Plates, Offset
Printing
Sheet, Reproduction Assembly

6.5 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodians:

Preparing Activity:

Army - TM
Navy - SUP-10
Air Force - 16
Defense Logistics Agency - SCT

Air Force - 16

Review Activities:

Army - AT, AV, CE, ER, AL, MI, AR
Navy - AS, EC, MC, NW, OS, SH, TD, YD, SUP-10
Air Force - 99
Defense Logistics Agency - CT, GS, CS

User Activities:

Army - MD
Navy - CG
Air Force - 11, 13, 14, 15, 19, 84
Defense Logistics Agency - IP

Project: TMSS-0290

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PUB DATE		REPRODUCTION ASSEMBLY SHEET						SHEET / OF /				
NUMBER AND SECURITY CLASSIFICATION					DATE OF LAST REVISION		PROGRAM WORK REQUEST (PWRI)					
ISSUE NO		TYPE OF JOB (CIRCLE APPROPRIATE WORD)										
		ORIGINAL · CHANGE · REVISION · SUPPLEMENT · REPRINT · PICKUP REVISION										
* SYM- BOL	PAGE NUMBER	FIG/TAB NUMBER	DRAWING NUMBER	COLOR	FOLD-OUT			SPECIAL INSTRUCTION				
					FOLDS	UNITS	BLANKS					
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
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23												
24												
25												
26												
27												
28												
29												
30												
SUB TOTALS	TEXT/TEXT BLANKS							ONE FOLD	NEGATIVES	REPRO	APRONS	BLEEDS/TABS
FINAL CHECK TOTALS										Letter in this column means following: * SYMBOL R - Reproducible Copy F - Foldout N - Negative B - Backup (If all material is same, R or N on top line only is adequate)		
BLACK AND WHITE		BLANK		COLOR		TOTAL						
F&B 2 UNIT	F&B 3 UNIT	F&B 4 UNIT	F&B 5 UNIT	BACKUPS		ASSEMBLER _____ DATE/TELEPHONE _____ _____ TRIA 4 SIDES						
OSO 2 UNIT	OSO 3 UNIT	OSO 4 UNIT	OSO 5 UNIT									
2 COLORS	3 COLORS	4 COLORS	5 COLORS									

8 1/2 by 11 inch manual 4 Fold 3 Units - over 23 to 25 1/2 inches 6 Fold 5 Units - over 34 to 42 1/2 inches
 2 Fold 2 Units - over 8 1/2 to 17 inches 4 Fold 4 Units - over 25 1/2 to 34 inches 6 Fold 6 Units - over 42 1/2 to 51 inches

FIGURE 2. (M) (N) Sample reproduction assembly sheet.

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PUBLICATIONS RUNNING SHEET

SHEET NO. 1 of 1

NOTE: Publications requiring separate covers start with cover portion. Publications requiring self cover start with folio 1.

FRONT COVER	INSIDE FRONT COVER	INSIDE BACK COVER	BACK COVER
TRUE FOLIOS (Face Pages)	PRINTED FOLIOS/Page numbers	TRUE FOLIOS (Back Pages)	PRINTED FOLIOS/Page numbers
1	Title	2	A
3	1	4	11
5	111	6	iv
7	1-1	8	1-2
9	1-3	10	1-4
11	2-1	12	2-2
13	3-1	14	3-2
15	3-3	16	3-4
17	3-5	18	3-6
19	Index 1	20	Index 2
21	FP-1	22	FP-2 Blank
23		24	
25		26	
27		28	
29		30	
31		32	
33		34	
35		36	
37		38	
39		40	
41		42	
43		44	
45		46	
47		48	
49		50	

FIGURE 3. (A) Sample publications running sheet.

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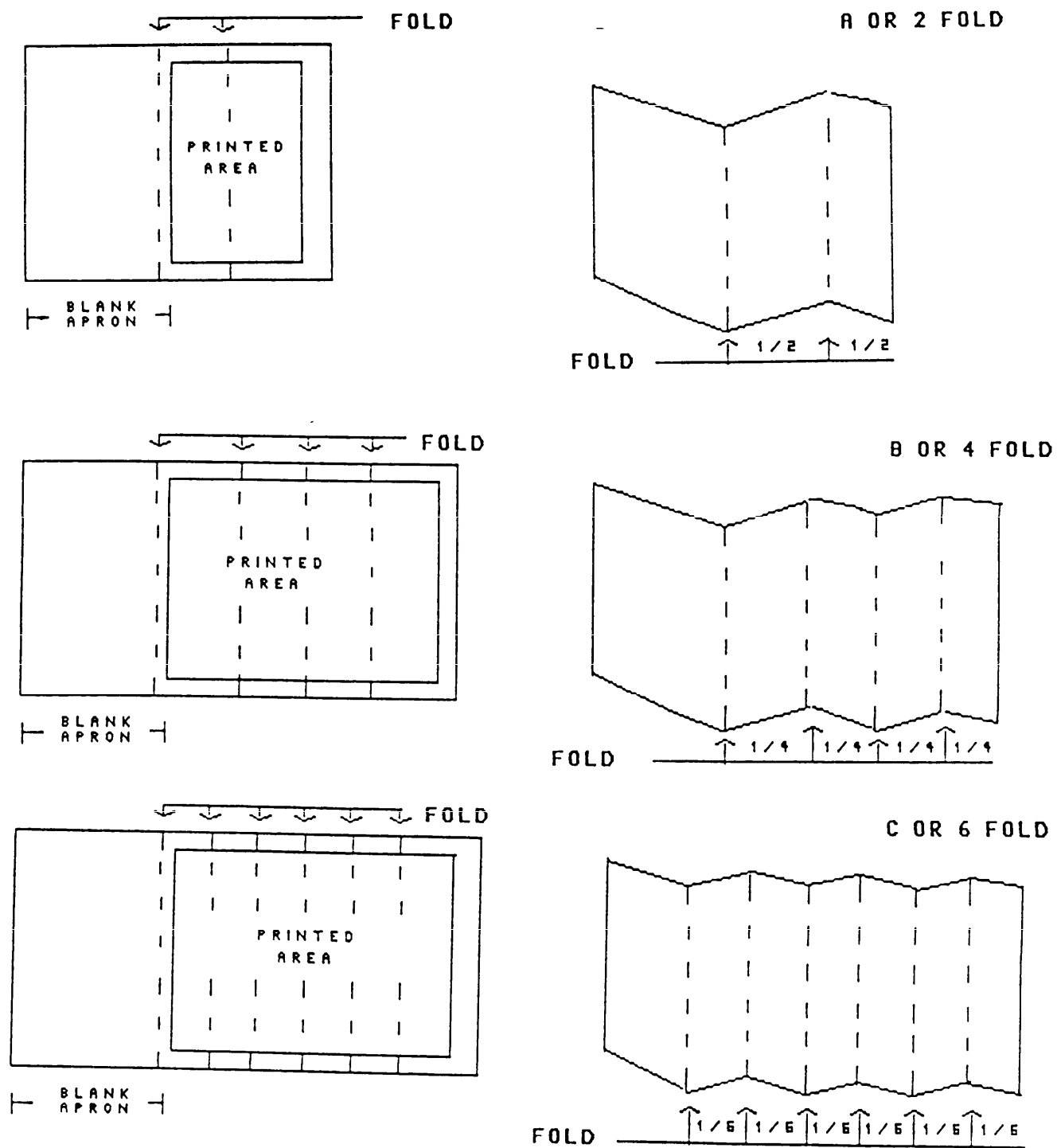


FIGURE 4. Folding of foldout sheets.

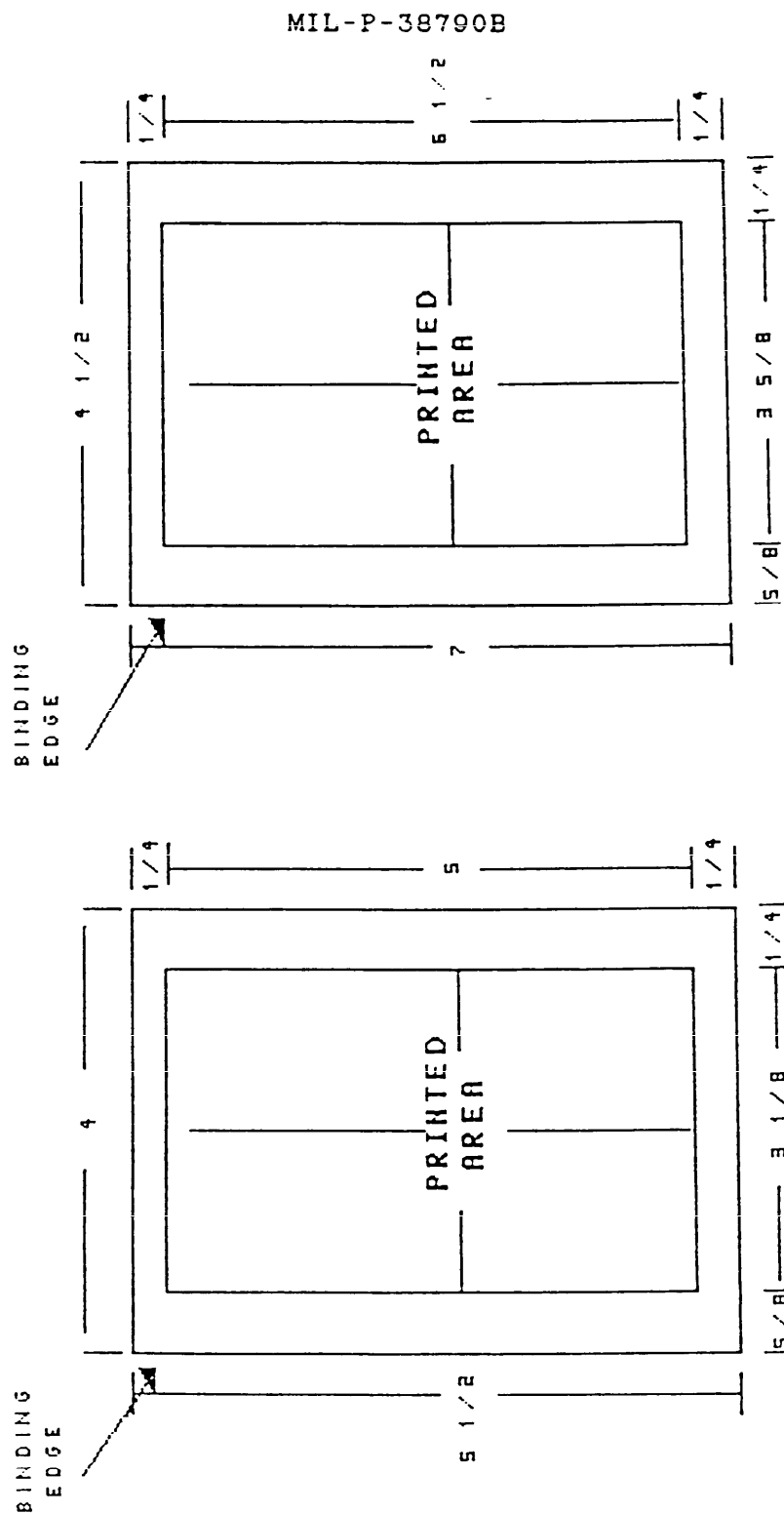


FIGURE 5. Dimensions of single pages after trimming, 4 by 5 1/2 and 4 1/2 by 7 inch manuals.

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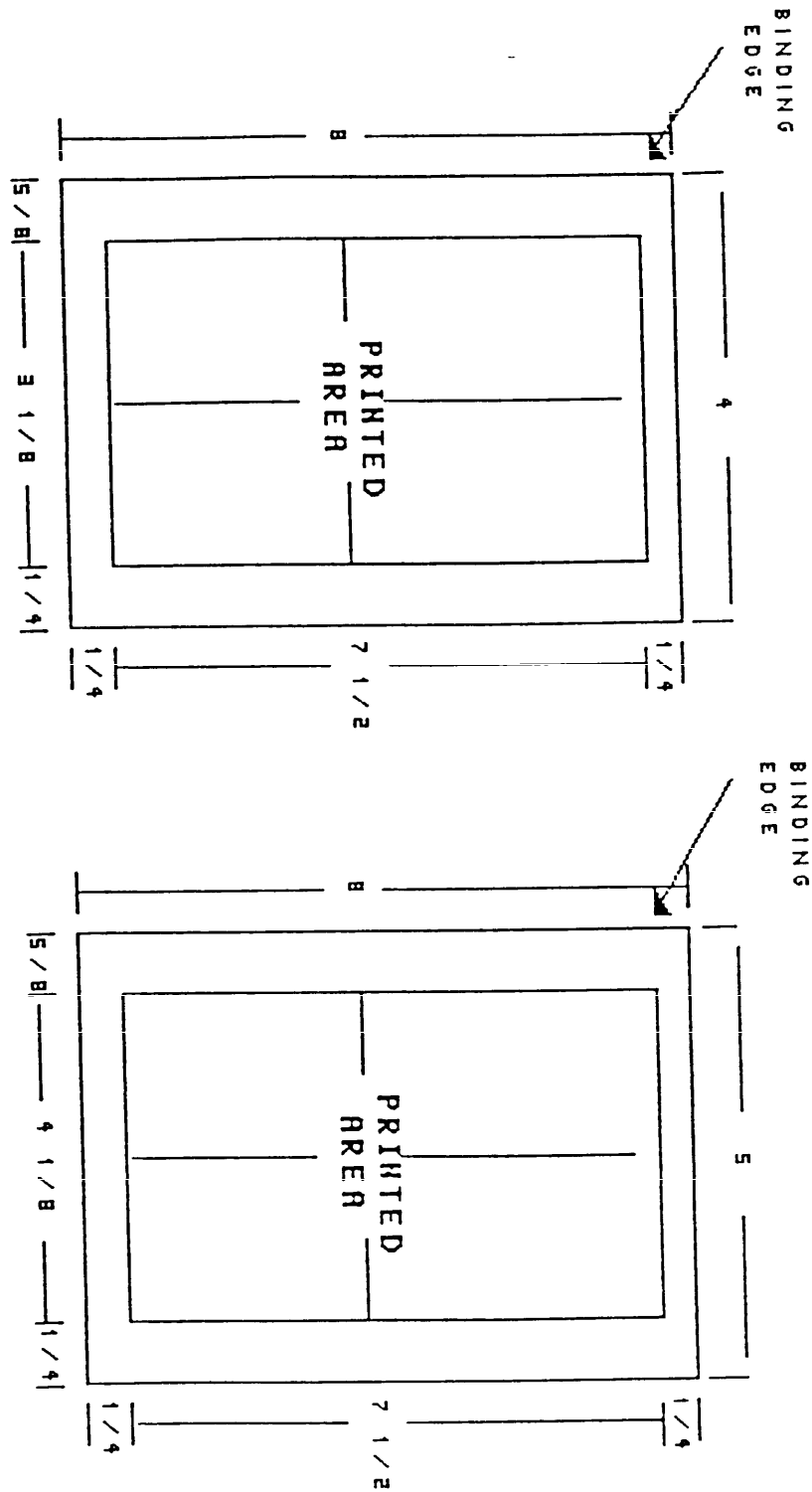


FIGURE 6. Dimensions of single pages after trimming.
4 by 8 and 5 by 8 inch manuals.

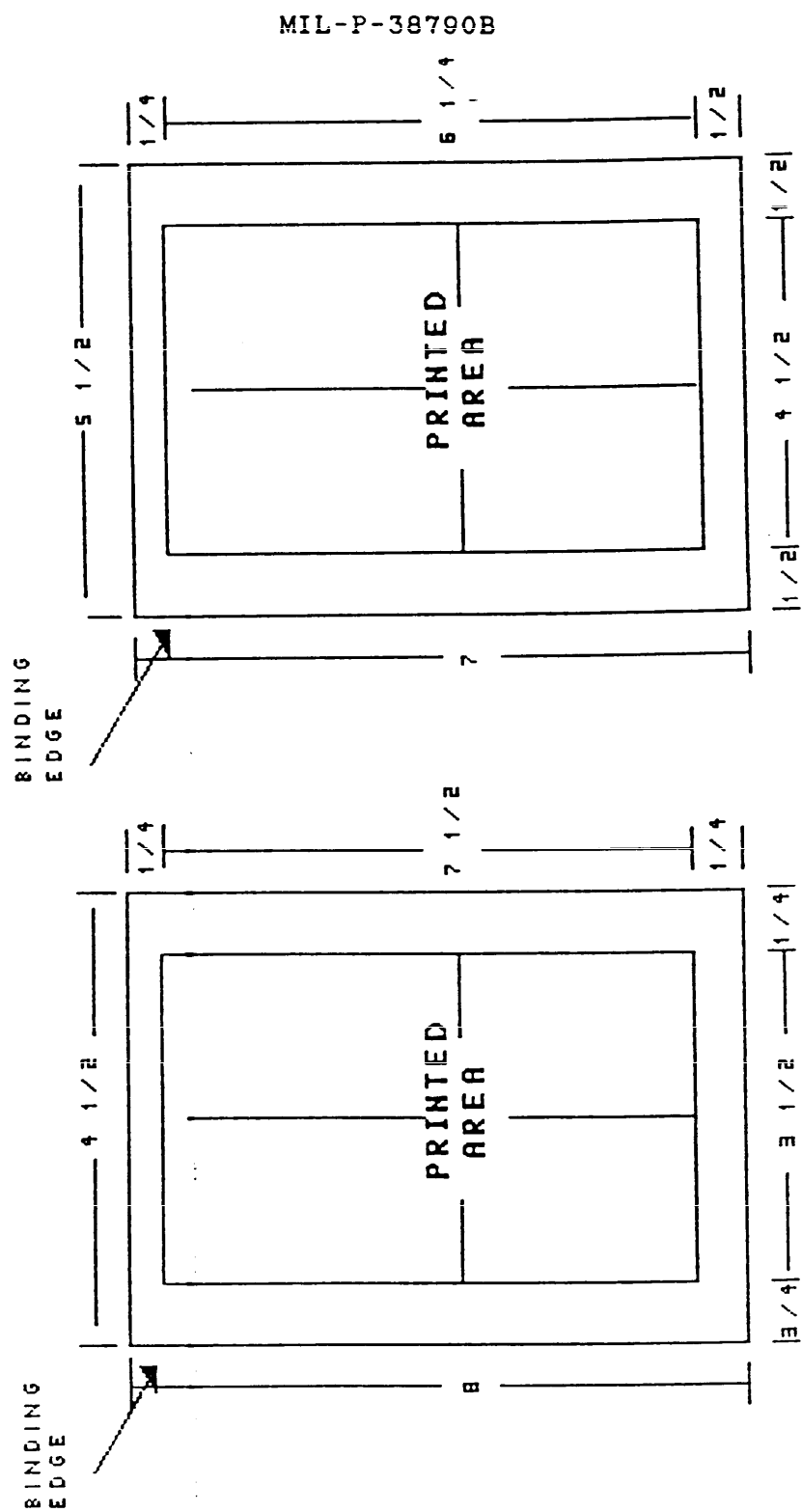


FIGURE 7. Dimensions of single pages after trimming, 4 1/2 by 8 inch and 5 1/2 by 7 manuals.

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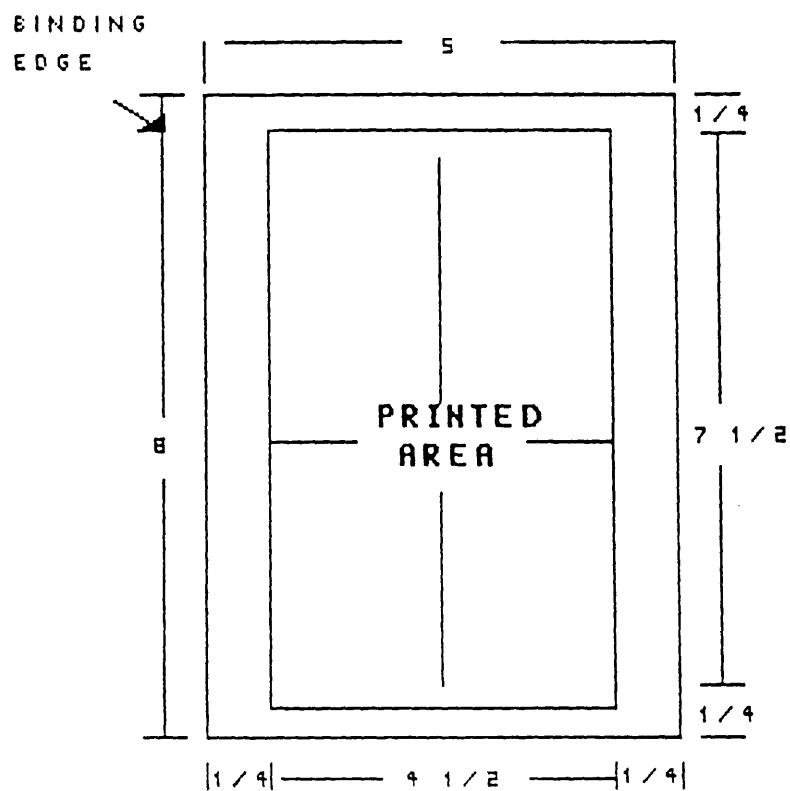
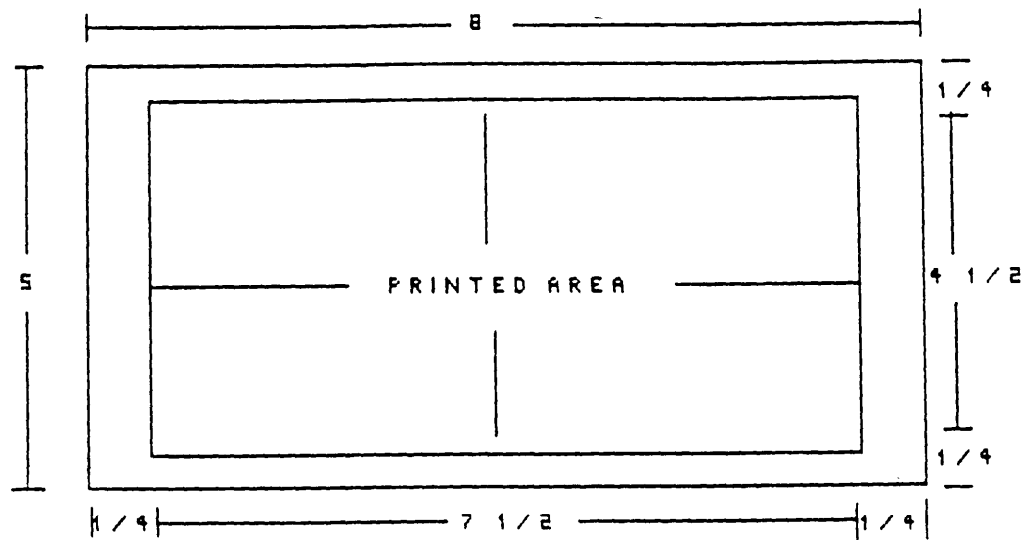
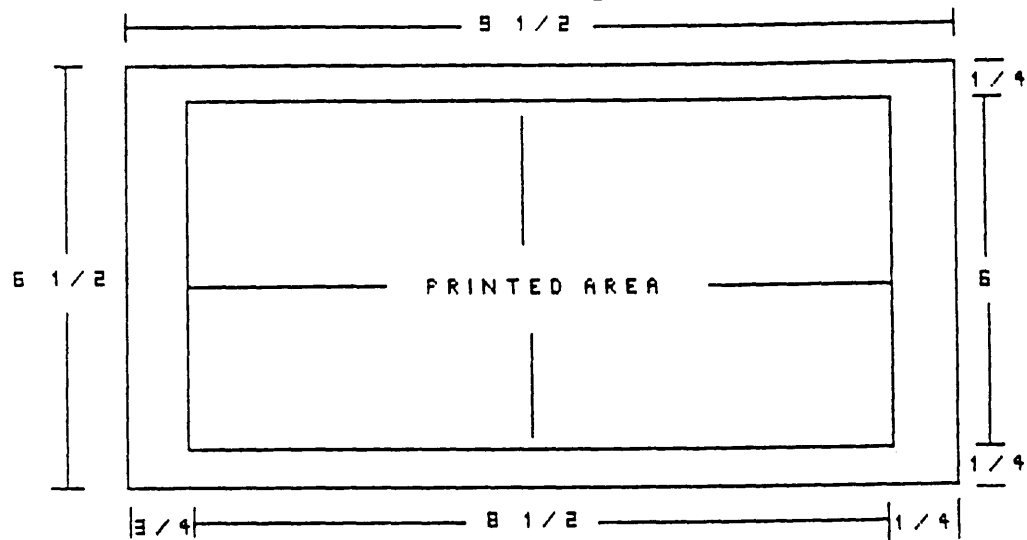


FIGURE 8. Dimensions of single pages after trimming, 5 by 8 and 8 by 5 inch workcards.

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**BINDING
EDGE**

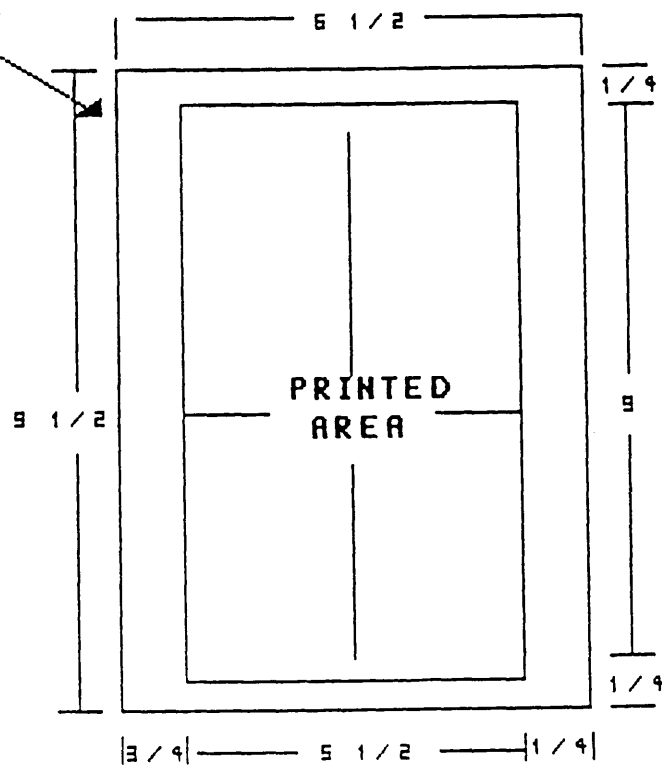


FIGURE 9. Dimensions of single pages after trimming,
6 1/2 by 9 1/2 inch manuals.

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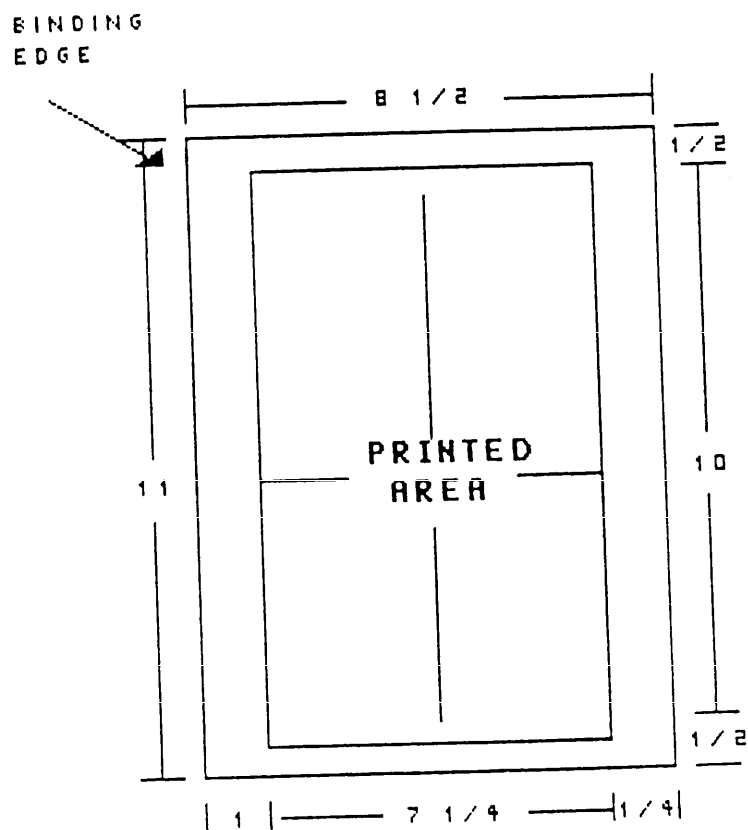
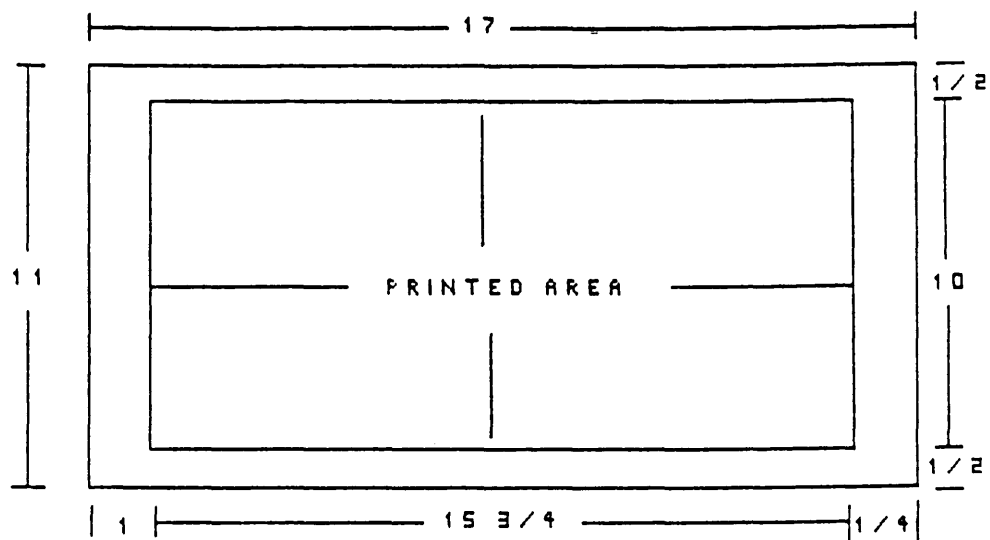


FIGURE 10. Dimensions of single pages after trimming, 8 1/2 by 11 inch manuals.

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BINDING
EDGE

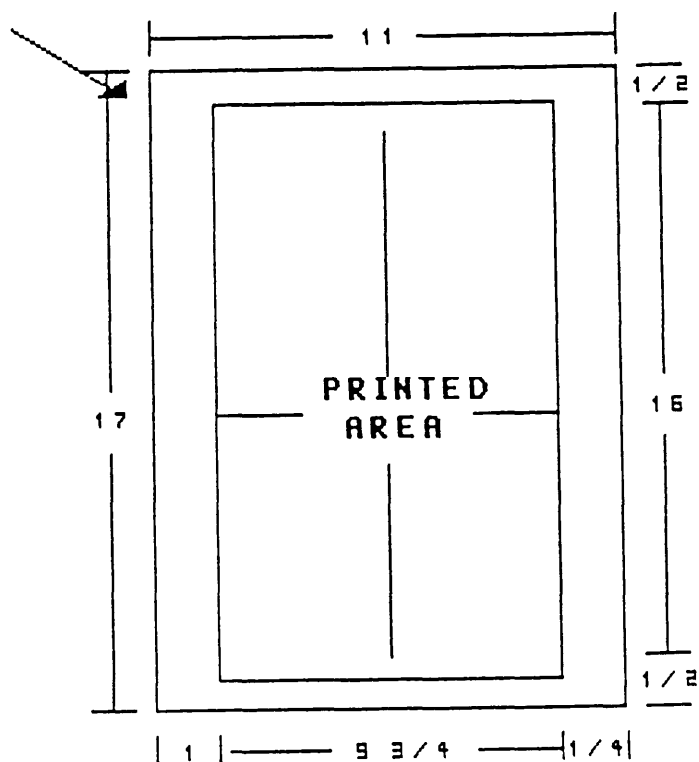


FIGURE 11. Dimensions of single pages after trimming, 17 by 11 inch manuals.

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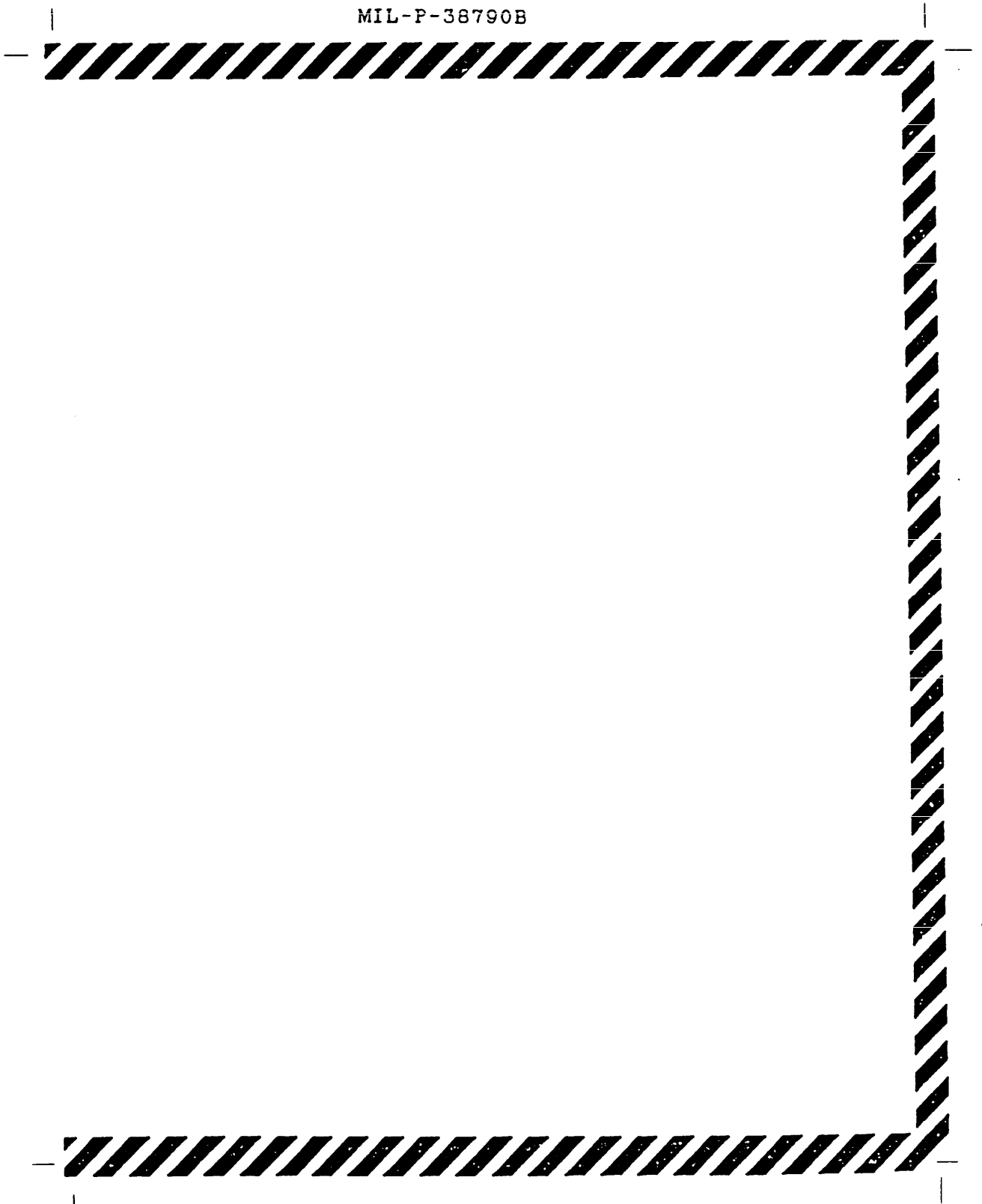


FIGURE 12. Impositioning of bleed borders.

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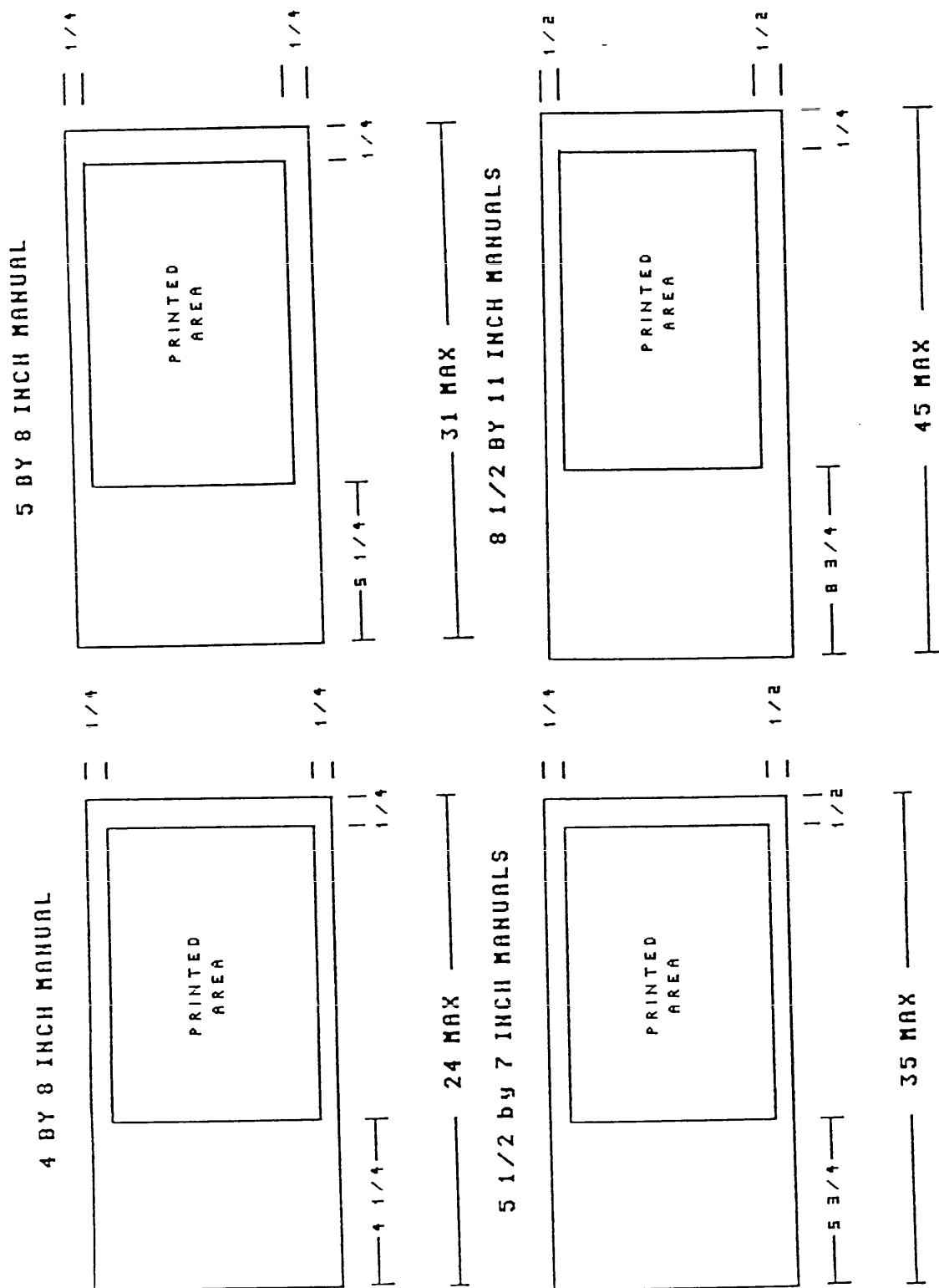


FIGURE 13. Impositioning of foldout pages.

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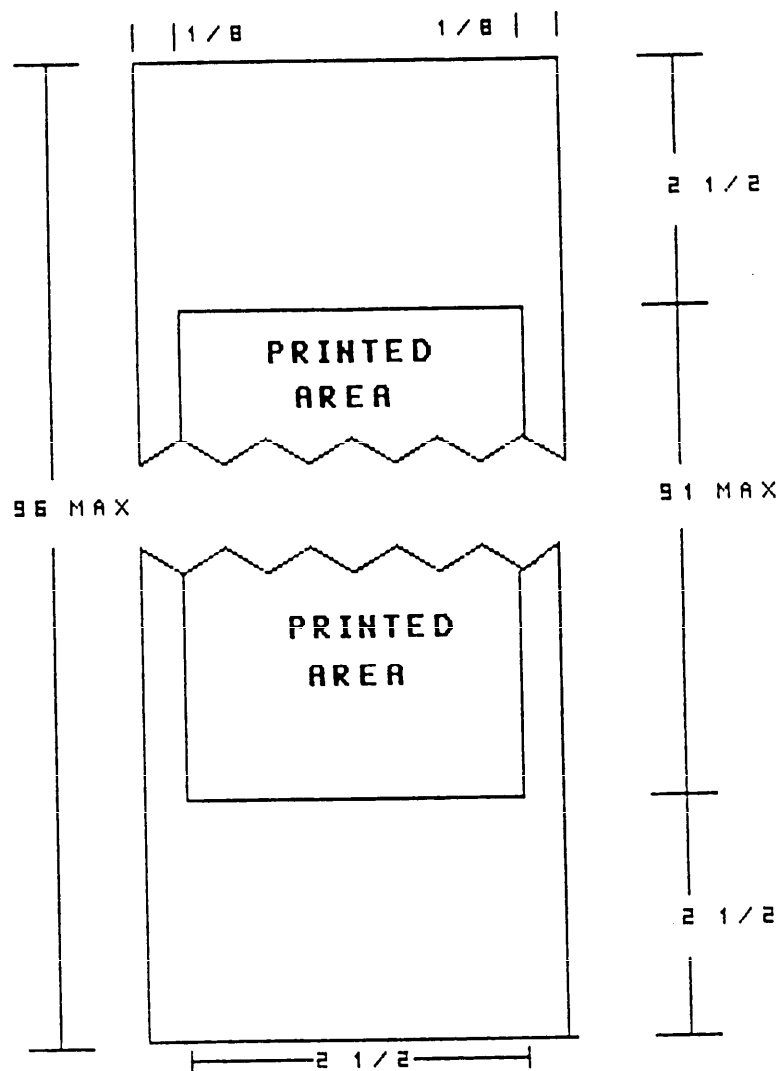


FIGURE 14. Impositioning of scroll checklist.

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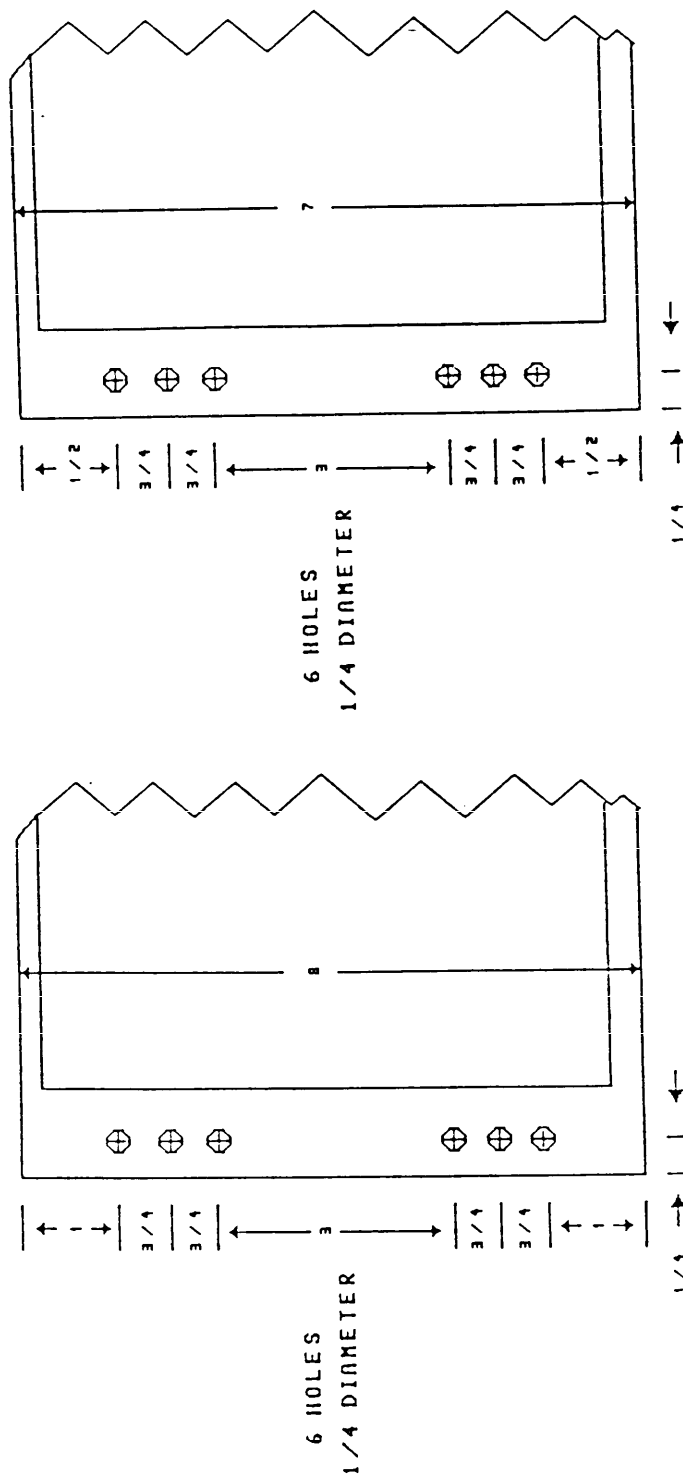


FIGURE 15. Drilling dimensions, 4 1/2 by 7, 5 1/2 by 7, 4 by 8 and 5 by 8 inch manuals.

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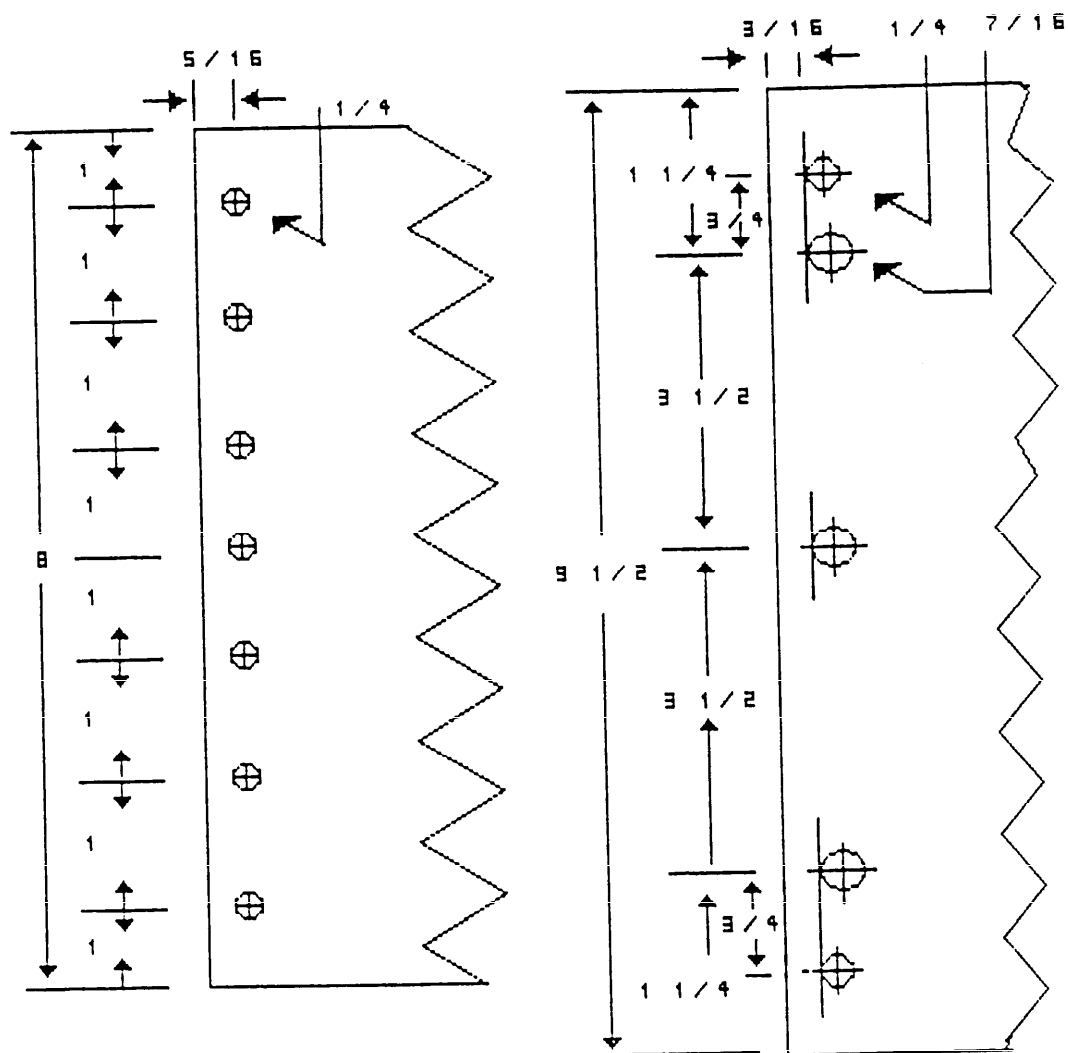
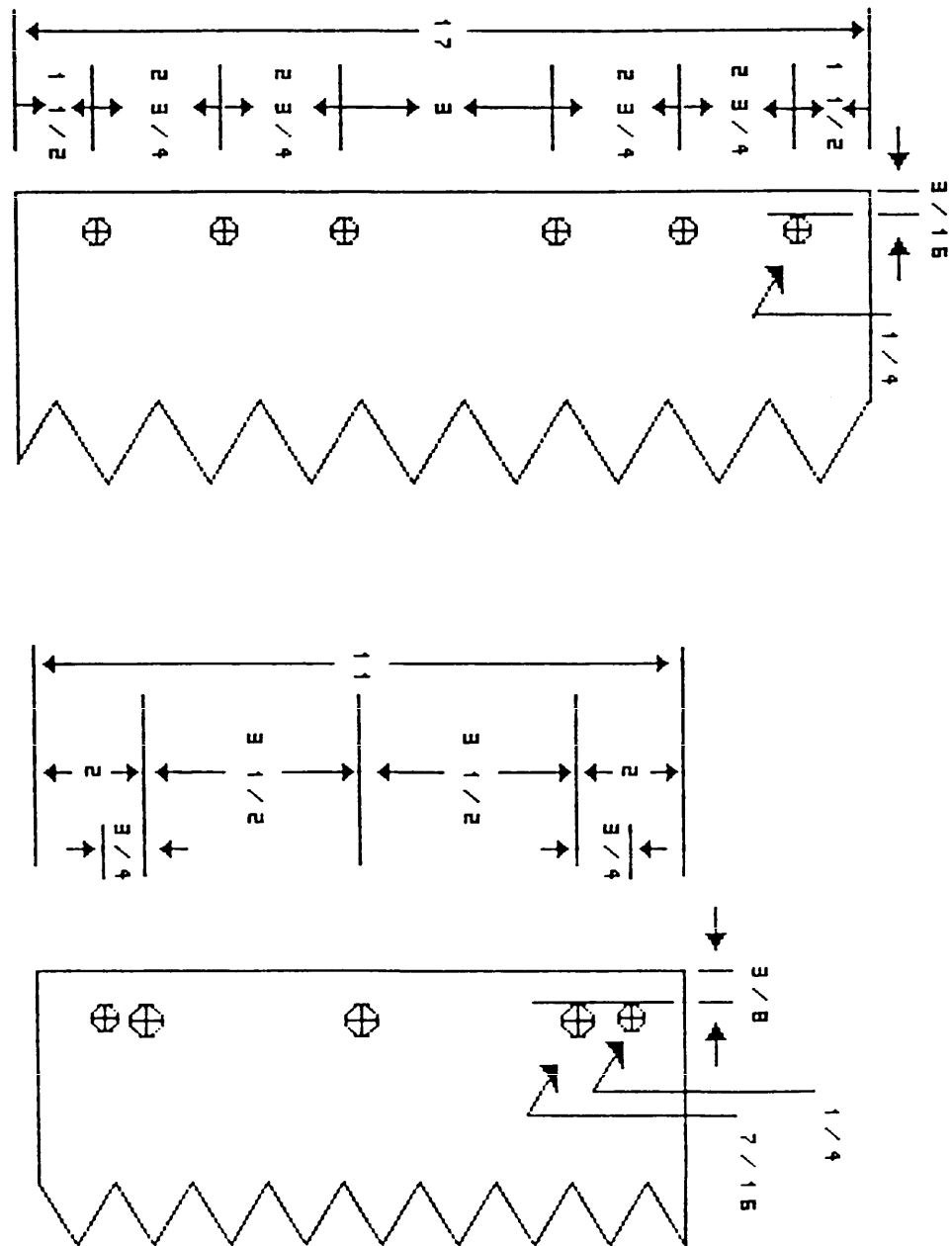


FIGURE 16. Drilling dimensions, 4 1/2 by 8 and 6 1/2 by 9 1/2 inch manuals.

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FIGURE 18. Drilling dimensions, 17 by 11 inch manuals.

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FROM:	TECHNICAL ORDER NUMBER/CPIN	QUANTITY

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE: \$300

T.O. - ID

LABEL EXPIRES

POSTAGE & FEES PAID
USAF
PERMIT NO. G-1

DATE MAILED

FIGURE 19. (F) Initial distribution label.

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NAVAL AIR TECHNICAL SERVICES
FACILITY, 700 ROBBINS AVENUE
PHILADELPHIA, PA. 19111
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



MOM

FIGURE 20. (M) (N) Initial distribution label.

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TO:	DEPT.
	DEPT. REQUISITION NO.
	G.P.O. JACKET NO.
	QUANTITY
	FORM OR PUBLICATION DATE
TITLE:	FORM OR PUBLICATION NO.
	G. P. O. ORDER NO.
FROM:	PRINT ORDER NO.

FIGURE 21. (F) Backup stock label.

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TO	DEPT.
	DEPT. REQUISITION NO.
	GPO JACKET NO.
STOCK NO.	QUANTITY PER CONTAINER
CONTROL NO.	PACKAGES PER CONTAINER
SUB. ID NO.	_____ PKGS. OF _____
TITLE	FORM OR PUBLICATION NO./DATE
	GPO ORDER NO.
FROM	PROGRAM /PRINT ORDER NO.

FIGURE 22. (M) (N) Backup stock label.

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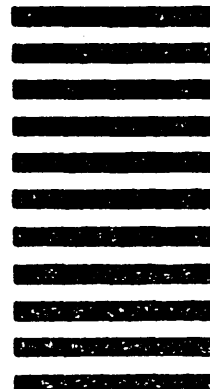
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