

# An Informal Guide to Writing a Doctrinal Publication

## The Assignment

The Marine Corps has assigned you to write a doctrinal publication because of your particular experience and knowledge. You are or will become a doctrinal subject matter expert (SME), and you will add to your knowledge by research and contacts with a wide variety of sources. You also must work with others on doctrinal agreement among Marine Corps publications and with joint doctrine. Though you may not be a professional writer, your writing skills can be honed for the job. This guide is intended to help with the thinking and writing process.

To begin this effort, the Director, Doctrine Division, has described the writing assignment in terms of *who*, *what*, *why*, *how*, and *when*.

*Who* are the readers of this book? What grade of officer, what grade of enlisted, what specific educational level, and what experience level? Members of Department of Defense, Congress, general population? Researchers, civilian contractors, foreign military? If your readers are all specialists, you can write accordingly. If they are more diverse, write so that all groups can understand and find what is pertinent to them.

*What* does this audience need to know? Their need for information is your subject matter. You are the SME. The subject matter is not everything that *you* know.

*Why* do they need this subject matter? What job will they be better able to do? What is that job's ultimate Marine Corps or joint purpose? What issues will they want resolved?

*How* will the publication be used? Is it a place to look up single items? It may be a reference the reader will keep close at hand. Will it state the steps in a procedure so the reader will do a job systematically, correctly, and completely? It may be a tool for trainers and a reference for learners. Will the reader read to understand, digest, and later make better decisions? The reader may read it attentively only once. Usage affects the content and organization of thought, and it may determine style or size.

And *when* is the deadline for completion of the publication? For the writer, the important date is the date it is ready for signature. It takes several months after signature for a printed book to reach its readers. However, an electronic copy may be made available meanwhile. When setting a target date for signature, the

Director, Doctrine Division, will assess the need in the field for this book along with other considerations.

Your assigned Doctrine action officer, a Marine within Doctrine Division, will help you with setting further milestones and other steps along the way.

### **Task Definition**

From the stated guidance, from an approved concept paper, and from other sources, you begin to define the task. This task definition is cloudy at first but gains clarity as you work with it. Use it to judge the masses of information that come your way. As you reject some information and search out other information, your task definition gets clearer and clearer. As the task definition continues to evolve, it helps organize the subject matter. At its briefest, the task definition can be stated as—

“This reader (*a person with a specific job or responsibility*) needs this information (*specific expertise*) for this purpose (*military function or role*).”

Clearly, the narrower the definition, the easier the book-writing job will be. One kind of reader using one kind of expertise for one purpose might be the easiest. In fact, you may have several kinds of readers, more than one area of special knowledge, and perhaps more than one purpose. As you define your task, your subject matter may appear to expand—but it may be only your understanding that is expanding. Focus closely on your objective, and redefine the task with your new insights.

As you know, only a word or two in a mission statement can have far-reaching implications. Your assignment is your mission statement. If ever you think that your task definition has significantly changed, talk it over with your assigned Doctrine action officer.

It may have been your experience that the more you know about peripheral activities, the better able you are to run a unit. It may seem that similar reasoning should apply to a book. However, at this moment you need to head in the opposite direction. What does your reader absolutely *have* to know? Ruthlessly exclude everything else. Get the essentials on paper first. Think of the peripheral later. If it is really helpful, it will fit in somewhere.

**Milestones**

The Director, Doctrine Division, has set milestones in the publication's plan of action and milestones (POA&M). Your aim is to acquire all the help you can from the expertise resident in the Marine Corps and then to circulate a “coordinating draft” to all those who can help improve your publication. See also “Staffing” on page 15.

**Writer's Responsibilities**

The following chart summarizes how you and Doctrine share responsibility.

Event	Doctrine Director	Doctrine AO	Proponent Writer	Editor	Illustrator	Remarks
1. Assign	A	X	C	C		Set purpose, scope, & target audience
2. General outline	A (AN)	X	X, C	R		Team (AN)
3. Research		C	X			Team (AN)
4. Detailed outline	A (AN)	A	X	R		Staffed via msg (AN)
5. Research		C	X			Team (AN) —ad hoc or standing committee
6. Write		C	X	C (AN)	C (AN)	
7. Review author's draft		X	X			Informal staffing/ conference
8. Rewrite		C	X	C	C (AN)	
9. Field coordinating draft	A	X	C			
10. Revise CD		C	X	C (AN)	C (AN)	
11. Final edit & illustrate	A	A	C	X	X	

X=ACTION A=APPROVAL R=REVIEW C=COORDINATION  
AN=AS NECESSARY

**Personal Computers and Tape Recorders**

If you are not already acquainted with personal computers (PCs) and Ami Pro, now is the time to learn. Your local information systems coordinator, or ISC, should be able to provide you with equipment, software, software manuals, and

any other directions for users on your network. For the moment, you need to know only how to access the system, how to input, how to save your input, and how to get out. There are many other aspects of the software and the networks that you can learn later.

Some people find that the initial stages of writing are made easier by talking into a tape recorder. To some, speaking is a more accustomed mode, and this step may bridge a gap between the words in your head and those on the page. To others, this looks like double the work. For those who have never done any lengthy writing, or have not done it for years, speaking as if to an audience or class and recording it on tape may be a way to start. You can then transcribe those words into a word-processing software. After you have done this once or twice, you may find that you can continue writing without this step.

### **Organization of Your Thoughts**

With your assignment fresh in your mind, make a simple list of the topics or tasks you think must be addressed. Your Doctrine AO may also provide a rough outline to help you get started. Just list these ideas and your own one after another, giving a separate line to each. You may feel that you need to do “research” before you do this. Wrong! You have at this moment a very valuable perspective which you will soon lose. You are aware of the questions that arise in the field and the problems that you yourself solved. You remember the times when you said, “I wish someone would . . .” and “There ought to be some guidance somewhere on . . .” Now you can do something about those lacks.

### **Sorting**

When you have run out of ideas, review your list and start sorting the items into groups. You may want to print out the list, cut the lines apart with scissors, and move them around on top of your desk until you have several groups of ideas that seem to belong together. You can also do this in Amipro by using “Outline Mode.”

If you have a few single items, let them be single. You don’t have to force a relationship just yet. Keep it in the form that has meaning for you. You may see that one of your topics that must be addressed is really a part of a broader topic and won’t be understood without it. Add the broader topic and group the two together.

## Sequencing

Now take your groups and singles and put them into some kind of sequence. If one group of things must happen before another group of things, perhaps chronological order will work for these two groups. Must your reader understand one group or item before he can absorb the full force of another? That could mean that you need to deliver some facts before you talk about actions. Does one set of ideas relate to a larger world than another set? That could mean that you will describe a wider operational scene before you describe a tactical part of it. It could mean that you describe something in general to orient the reader for the following particulars. Does one idea relate to most times and places, while another is specific, relating to one time or one place? You may want to state a rule before its exceptions. Can a chain of logic be constructed to flow from a mission or purpose which then justifies many other actions? This is a good backbone for many books. Is your main topic a function that threads through several missions or touches on different units? Then the function must be the backbone. When you have your ideas roughly in order, you have the beginnings of an outline.

## Using a Working Outline

If you have not yet learned how to “cut” and “paste” in Ami Pro, do so now so that you can print out the sequence achieved above. Your original list of ideas has been reshuffled into a list containing pairs and groups. Once they were all soloists; now you have some duets and trios. Leave an extra line space above each group. On this blank line, write a title for the whole group, or else just draw a line to indicate that something needs to be filled in later. Whatever you put on that line later will become a paragraph title (or head), a section title, or a chapter title. Meanwhile, as you research and think further, you will be collecting ideas to toss into these categories. You can add new topics, expand a topic into a category, and rearrange further. This is your working outline.

Sometimes you have an idea for a head or topic title, but nothing further turns up to go with it. Try to find at least three things to say. If you can't, you have something like a movie set for a Western—all storefront, no store. It may be there is something false about the idea, or perhaps the thought is covered elsewhere as part of another idea.

Your major topics—chapters or sections, whatever they may turn out to be—may be kept in folders if you like to work that way, or piled up in separate piles on a bookcase, or recorded in separate files on your PC—whatever works

for you. You may add and subtract from the outline, and you can even throw it away and start over. But you have a starting point. Remember that this outline not only becomes a plan for writing, but it also wins approval, or “sells” your concept of the book to others. Use plain, meaningful, concrete words for your topics, not the dressier (and maybe emptier) words that the salesman side of you may be tempted to use. Those who approve the outline will expect to see those topics covered somewhere, but not necessarily in the same sequence as the outline. The outline’s real purpose is to help you construct a sound, strong structure for your book. That convinces in and of itself.

You may wonder if you can bypass this process by following an outline of another book that looks similar. Did that book successfully meet its purpose? You can benefit from studying other good books by asking why or how they are good. That leads to insight; following a standard pattern does not. We are making hand-tailored garments here—not ready-to-wear. Success is fitting *your readers’* need. *Listen* to what readers say.

### **Keeping on the Beam**

Compare your outline to the original concept of the book, that is, to your task definition. Does it fulfill that purpose, supplying the target audience neither too much information nor too little? Do you think the original concept should change? Should you revise your military purpose, subject scope, or target audience? Whenever a change in those three main items is suggested, think carefully. Do not add material to your book because it is convenient for somebody else. The new material may be better delivered in a message or in some other publication or through some other media. A suggested change in concept will almost certainly mean that you review your research, rethink, and rewrite. And this consequently will mean a delay in reaching your goal. Furthermore, a change often has a ripple effect on other manuals. Focus on your purpose, and resist impulses to change it. If after mulling it over you still want to change the concept, discuss it thoroughly with your Doctrine AO and others who know your field well. It is normal for your concept of a book to become clearer while working on it. Growing clarity sometimes feels like change.

Sometimes you are working in a subject area on which several books are being developed. Yours is one part of a larger field. Even with the friendliest of discussions, you cannot know what will be in another author’s book until it is written. You must go ahead and write your own as best you can.

### **Support from Doctrine Division**

In addition to the guidance already indicated, you may also get help from other Doctrine AOs. Each one not only has expertise in a special field but also is abreast of developments in other Services' doctrine, joint doctrine, and pertinent combined doctrine. Among these, one who is helpful to every writer is the terminologist who knows not only the meanings of new terms but also the discussions behind them.

Doctrine's Combined Branch has a compilation of international agreements which sometimes have to be incorporated into doctrinal manuals. Combined Branch can help you by referring to an index, Allied Administrative Publication (AAP) 4, *NATO Standardization Agreements and Allied Publications*, and a database. Contact Combined Branch for guidance on your topic.

Publications Branch takes care of printing and distribution as well as production of final publications. In Pubs, you will find artists and editors as well as the editorial assistant in charge of distribution. All are available for consultation at any time, though Pubs reserves detailed work for final approved drafts.

### **Support from MC Research Center**

When you need further research sources, contact the MC Research Center at Quantico. The Research Library has directories, including points of contact and telephone numbers, for all major libraries and an interlibrary loan service. The reference librarians can access on-line computer services that reach main information centers. They will tell you where you can get an item or service or if it is unavailable.

The Research Center also maintains a collection of historical OHs and FMFMs, lists of uncatalogued studies and reports, and a collection of Congressional Armed Services Committee hearings dating back to the 1940s.

Reference Hours:	Monday through Friday	0930 to 1800
	Saturday	1000 to 1800

Reference Librarians: Dolores Knight, Ralph Lowenthal, Linda Resler—DSN 278-4409, (703)784-4409

**Computer-accessible card catalogue and MC manuals.**

Check your PC to see if you can access the Marine Corps On-Line Library System (MCOLLS) which will carry not only the automated catalogue for the library, but also “On-line Books” and “Doctrine.” When this system works, you will be able to mail these documents to yourself. Among them are useful bibliographies, such as “Cold Weather Operations and Training, A Reference Bibliography.” Your ISC can tell you how to access this resource. The reference librarians can tell you how to navigate in it.

### **Access to the Defense Technical Information Center**

The Defense Technical Information Center (DTIC) carries most Department of Defense technical reports. You can also ask for a bibliography on a military subject and abstracts of works you think might be helpful. The Research Library can access DTIC or tell you how you can do it from your location.

### **Documentation of Research**

The first step in research is to acquaint yourself with what has already been done on your subject. There may be a draft done by a predecessor. Look at it objectively. You may want to build on it; you may want to start over. Then you may want to read related works and new works.

How do you record your findings? Sometimes you xerox and highlight significant text. Don't forget to record the source. Include the following information as it appears on the printed matter: complete title, author's name, date published, publisher's address, and page numbers. For publications from other Services, this means category of publication (such as FM), full title, source (Army school, for instance), date, and page and/or paragraph numbers. Some people like to put all this information on index cards.

Sometimes you may want to write a few lines restating a nugget of information in the terms that are significant to your readers. Then your notes along with their source can be placed in the outline category where you'll use that nugget. Do the same with ideas you receive in conversation. Quickly write the gist of it clearly enough so it will make sense when you refer to it later. Put the idea and its source with the subject matter where you think it belongs.

When you come to a knotty problem—something that needs to be stated carefully—write a version just for discussion. Get others' responses to it. An accumulation of these notations will help your writing later. Even more important,

they may help you get your publication approved and signed. A listing of who (or what units) contributed to your book will be required when the book goes for signature to the commanding general, MCCDC. Sometimes specific statements are challenged, and you may be glad for this foresight.

### **Facts from the Field**

Use your own sources. You are encouraged to go to people in the field and gather their thoughts on the spot. When you make such a trip or phone call, record the conversation while it is fresh in your mind. You need the exact words of your sources (and name, position, and phone number, of course) as closely as you can remember them, and especially if you disagree. You will exercise your own judgment later on the use of the information gained through this method. If possible, develop your own small circle of advisors. These are people who are able, willing, and interested. In other words, they have expertise in some area, they will spend time for you, and they want to contribute. You can show them your initial unpolished draft and get a thoughtful response on its content. Once you have found these golden few, do not overwork them or you'll lose them. Show them the difficult or controversial parts.

### **Art Research**

Around this time you may be wondering what to do about art. You turn to art because it explains something more effectively than text alone. You may get an idea for what you want from an existing piece of art or a published book. When you make a copy of that piece of art, be sure to record on the copy its source: category of publication, title, publisher or Service originator, date, page. If the source is a civilian publication—and sometimes even when it is a government publication—the art is copyrighted. In that case, Publications Branch usually redraws it. If for some reason the original must be used, Doctrine must ask the owner for permission to use it, and this usually takes an inordinate amount of time—several months—and may cost money as well.

If the original is only an idea of what you want, write and/or draw your changes on the copy. Describe what you want in terms of what the reader must understand (for example, “Marine is pressing out on the inside edges of his skis”). Don't worry if you can't draw it. You should talk with the artist before the art is actually drawn and will see revisions of it. For right now, you are compiling ideas only. To collect several different views of the same thing is not overkill. Almost always the extra versions help the artist.

You can also scan uncopyrighted art into your document, paste in clip art, or

draw it in AmiPro or Freelance Graphics. It is not worth your spending a great deal of time drawing since final art will be done better by an artist and much more quickly. However, in an instance where important information is conveyed through art, you may be able to work directly with a Pubs artist on a sketch for your coordinating draft. Ideally, maps, tables and wiring diagrams are integrated into the flow of thought where the reader can best use them. But this flow is not expected in a coordinating draft, nor is the final art. The draft is only a vehicle to elicit more contributions.

### **The Writing Job**

When do you start to write? In fact, you have started. It is a good idea to write something every day, no matter how rough. Do not skip a day and try to make it up by working twice as hard the next day. This is something like stoking a fire. It's easier to keep it going than to start over. Oddly enough, problems get solved while you are apparently not thinking about them so long as you keep the furnace warm.

Begin at the beginning—page 1. Write down your thoughts as fast as you can and without going back. Just pitch forward and keep on going until you run out of energy or ideas or both. Put down a good block of copy—5 or 10 pages or more. Then go back and revise. Then take another leap forward. Then go back to page 1, and revise again. Revision is at least 50 per cent of the job. Keep on leap-frogging this way at the same time as you read and research. Yes, you need to verify and check your facts, but you already know more than you think.

### **Boobytrap 1: Good Stuff Found Elsewhere**

In the course of research, you may run across a particularly cogent, hard-hitting expression of some topic that needs wider circulation. It's said better here than you have ever seen before. You'd like to get it out to the world. It relates to your work. But does it belong in your book? Relationship alone is not sufficient reason. Everything is related to everything else. To whom does this need to be said? Where? Go back to the original task definition of your book. Does this attractive jewel fit within that? By now, you are better acquainted with the content and purpose of other books in the doctrine inventory. Would this material strengthen some other book? If so, it is better published as a change to that book. Changes can be gotten out fairly quickly. Your book is not a storehouse. It is a tool made for a particular purpose. Usually the best tool is not a multipurpose tool.

### **Boobytrap 2: Cut and Paste**

Sometimes you run across pages of material that you'd like to lift word-for-word mostly because it provides technical details and it seems to be the best source for accuracy. You fear that any change will damage this accuracy. However, you rarely can lift entire pages from another book word-for-word without losing the thread of your own story. If it is in another Marine Corps publication, it may not be necessary to lift it at all. If your readers have or can get the publication, refer readers to that source instead of repeating it. If the material is technical, perhaps it should be made available in a technical manual. Or perhaps you can summarize the other publication or use some key phrases only. It may be that you need to think: why is this material important to my reader? Then restate it. Pull out of it those items your reader wants to know. You do not help your reader by oversupplying information just in case it may help. Part of the writing job is to expose the significant by cutting away the superfluous.

### **Boobytrap 3: Copyright Infringement**

Always check your sources for copyright. While most government publications are not copyrighted, they sometimes use material that has been copyrighted. If copyrighted material (text or art) has been used, you will usually find a notification on the first page or first few pages. In most commercial publications, the copyright owner is stated on the reverse of the title page.

If you feel you must quote another publication, you must provide the source. You will have it if you have documented your sources as recommended in this guide: title; author (or agency); date; publisher (if not government-originated); and page number. If necessary, Publications will write the owners for permission to use their work. This takes time; if the need for permission is discovered after publication production has begun, obtaining permission will delay the publication. Even if it is not legally necessary to get permission for a short quotation, it is still necessary to document your source. It is also courteous to acknowledge the originator of an idea, even if you only paraphrase it.

### **The Alphanumeric Numbering System**

For some writers, the alphanumeric paragraph numbering system is a stumbling block. Those writers can ignore it for the moment. Just group your thoughts under centered or flush left titles and leave some space between groups. Concentrate on writing a title that closely describes the block of information under it.

When you've done that for all parts of a chapter, a numbering system will fall into place more easily.

For those who want a format, the one we use follows. However, beware of using the format to do your thinking for you. You may have gotten into the habit of using numbered and lettered paragraphs as a way to separate ideas, perhaps as a guide to making decisions or breaking down an action into several steps. In a publication, a numbering system collects ideas together. It unifies thoughts by placing them in a logical sequence and emphasizes relationships among thoughts by grouping or subordinating them. Its purpose is to help the reader find information. For that reason, the titles you use in the following format probably help the reader more than the numbers and letters.

## **Chapter 1** **Chapter Title**

### **1001. Paragraph Title**

The first digit of the paragraph number refers to the chapter, the second to the section (0 if no section), and the last two digits refer to the paragraphs within that chapter. If you have a **1001**, you should have a **1002**. If you have an **a**, you should have a **b**. This applies to all paragraphs and subparagraphs.

**a. Title.** This subparagraph is titled or not as you wish. If you use a title, it should be a breakdown or a logical part of the subject stated in the paragraph title. If **a** is titled, **b** should be titled also. If you have broken a thought into parts and have named one part accurately, the rest of the thought has a different name or names.

(1) Titled or not as you wish. If (1) is titled, (2) should be titled also.

(a) Usually not titled. Sometimes this subparagraph consists of only one sentence. Are you sure this one sentence is a thought important enough to stand alone? Perhaps a bulleted list will suffice.

(b) If you have an (a), you also have a (b). Same rule applies. This gives you three levels of subjugation under a paragraph. Try not to go further than that.

## Significance of a Numbering System

Whatever numbering system is used in a manuscript, it guides the presentation of thought in the publication's final typeset design. Size and kind of type and placement on the page reflect the importance you indicated when you assigned numbers and letters. Often the numbers and letters can be dropped and the type and design alone can signal the relative importance of ideas. Sometimes a parallelism can be shown better by a presentation side by side or by repeating a motif or style. Sometimes a visual signal must be created to flag the reader that a particular kind of information follows. Sometimes a particular sequence of thought is better presented separately, possibly with accompanying art. Both editor and visual information specialist are thinking of these possibilities when they work with you on the organization of your book. Design should help carry thought rather than straitjacketing it into an inflexible, routine, or unsympathetic design. The firmness and consistency of the underlying thought structure make better design possible.

## Editorial Guides

Publications Branch has some abbreviated style guides for quick reference. If you want the authorities, they are—

United States Government Printing Office *Style Manual*

Joint Pub 1-02, *Department of Defense Dictionary of Military and Associated Terms*

NWP 1-01, *Naval Warfare Publications System*

NWP 1-02, *Naval Terminology* (available only on CD-ROM)

AAP 15, *Glossary of Abbreviations Used in NATO Documents*

MCO P1070.12, *Marine Corps Individual Records Administration Manual*

MCO P5600.31, *Marine Corps Publications and Printing*

*Webster's Third New International Dictionary*

*The Gregg Reference Manual* (for grammar)

*The Chicago Manual of Style*

FMFRP 0-14, *Marine Corps Supplement to the DOD Dictionary of Military and Associated Terms*

## Other Writing Guides

If you want to know how another Service does this, see TRADOC Pamphlet 25-34, *Desk Guide to Doctrinal Writing*. Much of this guidance for Army writers also applies to us. Another book that is slender, but helpful is *Revising Business Prose* by Richard A. Lanham, a copy of which may be borrowed from the

library.

### **Grammar Check**

Some writers like to work with Ami Pro's Grammar Check which may be accessed as either an icon or a function of "Tools." Grammar Check points out some of the standard ways to improve writing—less passive voice, less government jargon, fewer prepositional phrases—but it can't address sense (one of the many reasons you have an editor). It helps mostly in saving time. It can lead you directly to sentences and words that can be improved. Some people like it.

### **Reading Grade Levels**

Department of Defense requires that military publications meet the needs of the readers by being written at or below their reading grade level (RGL) and that no publication should be higher than 12th grade RGL. For practical purposes, this means that any publication with enlisted readers should be written at an RGL no higher than 10th grade. If your readership can be identified by military occupational specialty, the RGL can probably be stated more exactly. Marine Corps University has these statistics, and they are very much worth getting if your publication or certain parts of it are addressed to those at the lower levels.

When your text is beginning to shape up into good paragraphs, you should obtain its RGL. This can be done through Grammar Check in the Ami Pro software. Select the Fleisch-Kincaid formula since that is the one Department of Defense uses. You can also figure it out by hand using the following formula—

$$\text{RGL} = [ (\text{number of words divided by number of sentences}) \times 0.4 + (\text{number of syllables divided by number of words}) \times 12 ] - 16$$

Take samples of about 150 words for every 10 pages of manuscript.

If the text RGL is lower than its readers' RGL, fine—leave it that way. If your text works out to be higher than its readership (or higher than 12th grade), bring it down by shortening sentences and using simpler words. Keep rewriting and testing the text until it meets the need. Remember that if the Marines in a military occupational specialty test at an average 10th grade level, many of that group read at below 10th grade level. And you want to reach all of them. Simple, clear writing is not easy, but it is worth the effort.

## **Logical Organization**

Before your publication goes to its reviewers, write a complete outline of the book using all heads and paragraph numbers. Print it and study it. This almost always reveals illogical organization. Do not try to do this job in your head while leafing through the manuscript. Print the outline. You have to see it before you can fix it.

## **Staffing**

### **Author's Draft**

Staffing of your work is essential to the orderly development of your draft. Only through staffing can you receive the views of others. The benefit is reciprocal; your work impacts on theirs, sometimes in unforeseen ways. At this point, the draft should be clear, concise, and organized well enough so that readers who do not share your specialty can easily find the topics that concern them. The paragraphs or sections should be sufficiently well developed so that if readers disagree, the text to be rewritten can easily be identified. You should have confidence that your text is at least founded on good reasoning and thorough research in your subject.

Since it is impossible to know who has a contribution and who does not, it is important to give a wide variety of subject matter experts a chance to review your author's draft. Better to overdistribute than to omit someone who may have valuable information. Your Doctrine AO may help with a cover letter or routing sheet and by providing circulation via E-mail and printed copy. You should allow a reasonable time to respond. For less than 50 pages of a printed draft allow at least a week for reading plus time for printing (about 3 weeks) and mailing (about 1 week for local distribution). Ask for suggested changes in writing. Keep a record of the responses. Your aim is to have concurrence or suggestions from all key subject matter experts. When Doctrine presents the book for signature, a summary of these contributors should accompany it.

With some publications, a “murder board” attended by those particularly interested can elicit discussion and revision. If you think that is the best way to tackle your publication, plan to keep on meeting with the same persons until the issues are thoroughly aired and resolved.

### **Coordinating Draft**

After you revise your author's draft, the Doctrine AO will disseminate it as a coordinating draft. This should be done electronically so far as possible and by mail when needed. You and your Doctrine AO determine the coordinating draft distribution. Responses will be sent to Doctrine Division with information copies to the proponent. Upon receipt of all responses, you and the Doctrine AO will review them to determine what changes need to be made to the publication. Difficult or contentious issues may require further coordination or resolution by the Director, Doctrine Division. Once all changes have been agreed upon, you will revise the coordinating draft into a final draft.

### **Final Production**

#### **Getting Your Manuscript to Publications Branch**

After your revision, your Doctrine AO and Director, Doctrine Division, will decide if the manuscript is ready for final production. One person—you or your Doctrine AO—will then work with Publications Branch during this last phase which sometimes requires considerable rewriting and creation of art. The Publications Workorder (page 30) is used by your Doctrine AO to deliver the manuscript to Publications. Notice that it requires the signature of your Doctrine AO, the terminologist, and Director, Doctrine Division. Your Doctrine AO will obtain these signatures and forward the job to Publications. Notice that the project also includes an Ami Pro disc, a printout of it, and a picture of every piece of art with its source identified. If any of this art is on Freelance, an electronic copy of the Freelance file is also required.

Notice also that the workorder requires a distribution list. See “How to Determine a Publication’s Distribution,” on pp 31-32. Provide your input to the Doctrine AO who will develop the distribution list and deliver it to Publications.

#### **Work Flow at Pubs**

When your project goes into final production, it will be assigned a priority by the Director, Doctrine Division. At the first opportunity, an editor and artist will be assigned. Their main concern is successful communication of your thought to your readers. They will scrutinize your draft closely, and many new questions will arise. If you are the assigned responsible person, they will want to talk to

you. Coordination is not easy at long distance. Try to be available, and keep your draft at hand with all of the ongoing revisions. Expect that some conversations may be lengthy. Pubs people must understand your intent in order to carry out the mission (to borrow from maneuver warfare). When something from an editor or artist arrives in the mail for you to check, try to respond quickly.

Once a project is in production, Pubs people work on it every day until it is done. Each skilled person contributes as and when needed. Delays, if any, are caused by equipment breakdown or someone's absence (it could be yours), or another priority assignment. Usually the editor concentrates closely on the publication first, followed by an artist, and then a page layout person (where art and text should be fitted together smoothly), and then proofreaders. Both editor and artist can make a major contribution since they see the work with fresh eyes and ask the kinds of questions a reader might ask.

Usually several projects are in production at once. Most people are double-hatted—an editor on one project could be a proofreader on another, and a page-layout person on a third. The editor assigned to your publication is the shepherd, keeping track of where each part is and what is happening to it.

Meanwhile, though maintaining this flow determines what Pubs does most days, we also do other jobs. For example, editors review projects of high visibility, outlines, or partial drafts by beginning writers. Artists set up photo sessions. We input the distribution you give us into a database that determines its mailout from the warehouse in Albany, GA. We assign publication control numbers. We make out print orders. We monitor stock and order reprints.

The assigned responsible person is an integral part of production and okays the final version. A copy of this approved publication will go from Pubs to the Doctrine AO, then to the Director, Doctrine Division, and on for signature by CG, MCCDC. The signed publication returns to Pubs which oversees printing and distribution.

### **Varieties of Editorial Input**

An editor can take an unrevised, very rough manuscript and make something usable and readable out of it. This is the way many textbooks are produced. In other cases, an editor focuses on accuracy in sentences and titles, and this is closer to what some newspaper and magazine editors do. Other periodical "editors" are actually writers who work hard on news value, significance, and readability. Their work is often edited by other editors. Some editors are mostly

readers who are interested in the writer's intent and may advise on the audience's reaction. Their contribution is to see sales potential, a function agreeable to both writer and publisher. "Editor" means largely what the organization needs to get done. That need also determines what an editor will do for you. The kind of edit chosen for your book will depend partly on what it requires and partly on how much editorial time is available at Pubs to devote to it. The editor's job is to make your book better.

**Copy edit.** At a minimum, every manuscript will be copy-edited. This means that the draft will be checked for grammar, punctuation, and spelling. In addition, the copy editor will do the following:

—Verify references. Titles, numbers, and dates are checked against a standard reference source.

—Check historical dates, geographical spellings, and names.

—Compile or check a glossary of acronyms and abbreviations used in the book. Provide a copy of a glossary of definitions to Doctrine's terminologist so that any recent changes in Joint Pub 1-02 definitions are incorporated.

—Verify the table of contents and all internal references. (If the text says "See ship in Figure 1," the editor looks at Figure 1 to see if it is there.)

—Maintain consistency of style. This means visual style as well as spelling and punctuation variants. For editorial style, we follow the GPO stylebook. For visual style, we follow one of several standard styles used before or a new one that may be originated for a particular book. If the book's organization does not support a style, it will be returned to the responsible person with an explanation of what needs to be done. (Style also means "level of discourse." For us, this varies once in a while. When it does, we try to maintain the same tone or level throughout the one publication.)

**Full edit.** A higher-level edit is concerned with the content and purpose of your book. In addition to a copy edit, a manuscript may also get this more significant edit which addresses questions such as the following:

—Does the content of the manual live up to its title and its place in the Doctrine architecture? If not, it may need new copy, or the title and number may change, or the architecture may be modified.

—Do all members of the target audience get the information they need?

—Are the doctrinal connections clear? For example, do principles set forth in a “higher” (usually more abstract) publication guide actions in a “lower” (usually more technical) publication?

—Is it organized well? Is the sequence logical? Can all readers easily find the topics they are seeking? Does the information in a section or paragraph belong where it is? Do the titles really describe the information in the following text?

—Do sentences in a paragraph flow well? Are there connectives between paragraphs, between sections, and between major ideas?

—Does the visual pattern support the thought (so that a minor topic does not look like a major one, for instance)? Can a better way to present information be suggested?

—Can redundancies be eliminated? Can cloudy text be clarified? Is passive voice avoided so that the reader knows who does what?

**Layout or makeup edit.** The page layout function overlaps with that of a visual information specialist, designer, or illustrator (see below). It is the job of preparing the camera-ready mechanicals which are what the printer photographs. If a book is solely text, an editor usually uses certain page-makeup and typesetting conventions to put your book in a professional-looking final format. Some of this professional look depends on the capacity of the software. Ami Pro is not the most professional software. We recognize its limitations and try to work around them.

Most drafts have some art, either previously prepared by an artist or by an editor, or in sketches. The editor reviews this art before it goes to the artist. Out of the coordination among editor, artist, and writer, some ideas may go out of the text and into art, or vice versa. The page layout person also works with the artist and editor to relate text and art as envisioned.

Some books are mostly art; they may be best put together by a layout artist or designer with reviews by editor and writer. Others may require considerable input by an editor to make all information fit with art on a page. These may be heavily rewritten and should be reviewed carefully by the writer in the course of production. It is important that these reviews be made quickly since the layout of later pages can be affected.

## Working With an Illustrator

Often something said well enough in text can be said even better in art. “Art” in a publication refers not only to photos and line drawings, but to tables, charts, diagrams, and all hybrids of them. Often they are prepared by an illustrator and editor in concert. If you have ideas for new art, but don’t quite know how to get what you want, a visual information specialist or an illustrator may listen to your ideas and provide a sketch. That often suffices for a coordinating draft. However, the best art support, as well as editorial support, comes from Pubs people who have read your book from beginning to end and have studied its purposes closely. Most of the time Pubs can devote that kind of attention only during final production, and it often results in major changes in art as well as in text.

Our illustrations currently are prepared on Freelance or Ami Pro or are hand-drawn. One illustration can take up to several days to draw. To correct it may necessitate starting again from the beginning. To avoid this, and the resulting delay, here are some important tips:

—Communication among the writer, the illustrator, and the editor is key. The writer must convey the *meaning* he/she is attempting to communicate through art. Then the writer, artist, and editor all become more effective in their own roles. Helpful ideas begin to flow from their interaction. Almost always the resulting art expresses the intent in unforeseen ways and better than expected.

—Thorough research is critical. If, while answering an illustrator’s questions, you think “I’ll have to check that with So-and-so,” tell the illustrator not to do the art until you have checked.

—Attention to detail is also essential. Even an apparently tiny detail could be the deciding factor as to how an illustration is designed and drawn. Never ask the illustrator to “go ahead and draw” an illustration before all information is researched and confirmed. Guessing about details or filling in the blanks later just adds to Doctrine’s contributions to the recycling bin.

—Make sure that any sketches you do to guide the illustrator are legible. You do not have to be a Rembrandt yourself, but the illustrator should be able to read what you have sketched.

—Final camera-ready art is not used to “see how it will look.” That is what sketches are for. The illustrator will provide you with plenty of those for you to OK before the final art is drawn. Final camera-ready art is just what it says: this is what the printer will print. Once made, it is carefully filed for use in a revision or in other future publications. That’s one reason why we ask you to

identify the sources for your incoming art.

—NEVER make corrections or write on a camera-ready illustration. Usually the artist or editor will give you a copy of the art, not the final art, for your OK. You can recognize final camera-ready art by its paper (shiny photographic stock) or its rough surface or the visible pen strokes or white inking. In most cases, you will see copies of the final art as it is produced. When the entire publication goes to the writer for a final OK, usually most parts have been reviewed at least once. The final check is mostly a formality, and a signature of approval is then required. If you should have the camera-ready final page with art pasted down or paperclipped to the page (unlikely unless you are physically present), make a copy on the copy machine and write on the copy.

### Revisions

On a regularly scheduled review cycle, or at any time Doctrine Director indicates, the designated proponent reviews a book to see if it should be revised or rescinded. This could result in a change consisting of a one-page letter with perhaps a few new pages; a complete rewrite causing republication and redistribution; cancellation; or no action.

To make this decision, the writer or proponent reviews the entire book critically. One or two glaring faults may have precipitated a suggestion to revise it. The danger here is that the writer may simply write new copy to tack on to the old when something more fundamental is needed. Perhaps a new “higher” point of view (operational versus tactical, for instance), a different target audience (those who direct versus those who implement, perhaps), or a new development in the field (maybe operational maneuver from the sea is one) requires a new presentation. Sometimes new material can be added seamlessly, but not always. Rethink. Why is the book needed? Who needs it? Is that person’s need fully answered? Review the entire text to be sure that the new thinking is reflected throughout. A major change in one’s mental picture can mean quite minor changes in the numbers of words added to or changed in a book. It is more likely, however, that we do not see or we underestimate the ripple of change that can flow from a new idea.

Then there is the opposite situation where a multitude of minor changes spot every page, giving it the appearance of a major revision. Yet perhaps a great many are merely acronym or terminology changes. These can be easily made by pen changes (which can be easily specified in a change letter). The result may be only a few pages of text change plus a letter specifying pen changes. Compared to the revision initially contemplated, this outcome saves both time and money.

In most cases, begin by handwriting corrections in a copy of the book. Cross out deletions; write in additions. Write legibly. If the room in the margins does not suffice, attach a separate piece of paper with the new copy identified as, for instance, “page 39, insert A.” Then show the correct placement by writing “Insert A” and arrowing it in where the new copy should begin on page 39. This procedure will save time in production and dollars in printing because Pubs tries to adjust the existing page to accommodate new copy. We avoid printing new pages if possible.

Before setting to work, think of the developments in the world that encompasses this book. Is an important decision to be made soon that might cause us to scrap the contemplated change or revision? Could a forthcoming conference end with a decision for a major revision instead of a minor one? (Attend the conference before finishing the manuscript.) Is there some looming event that may cause readers to need this change soon? (Maybe preparedness is more important than economy this time.)

A writer or proponent should think also of other assigned publications. What is the relative importance of this publication? The answer might help work out a schedule.

### **Multi-Service Publications**

If a proponent or writer wants a Marine Corps designation on another Service’s publication, Doctrine has to officially request the other Service’s proponent to add the Marine Corps designation. For Army pubs, we write the originating school and TRADOC simultaneously. Pubs usually prepares the letter using a standard format. A proponent or Doctrine AO may want to pave the way by a personal telephone contact, and this conversation can be referenced in the letter. However, unless the book wanted happens to be in the course of production, we probably will not see a published multi-Service pub for a long time. The other Service continues to work on its own schedule which may not require a revision for some years.

In its letter requesting Marine Corps designation, Doctrine usually states that we want to provide input to the development of the publication. Then the originator should send us coordinating drafts and the final draft. Even if a proponent or writer does not want to provide input to a publication, Doctrine still needs to know what is in it before requesting the CG’s signature.

The writer or proponent also prepares a distribution list, just as we do for our own publications. See “How To Determine a Publication’s Distribution,” pages

31-32. From the distribution list, Pubs determines the total number to be printed for and charged to the Marine Corps, and Pubs so informs HQMC (where the money is). Pubs also assigns a publication control number (PCN) which is the number Marines use to order the book. Pubs inputs the distribution list, the PCN, and other information to the Marine Corps Publications Distribution System (MCPDS), as we do for our own books. Doctrine thus becomes the sponsor of this book in the MCPDS system.

When the other Service's approved final draft arrives, the Doctrine AO prepares the route sheet requesting the CG's authentication signature. This step has to take place briskly since the book is finished, and its proponent is understandably impatient to get it to the printer. The other Service needs not only the Marine Corps' authentication signature but also the total quantity we want printed, the PCN, the address where copies are to be sent, and the chargeable account. If Pubs has not sent this information previously, it must be done right away. Pubs must have the date of signature by the originating Service, or the database will not transmit this information. Pubs has a standard letter with which to transmit this final information which completes Doctrine's part of the action.

It is not always necessary to apply a Marine Corps designation. If a writer's only intent is to distribute the book to the Marine Corps, our action is relatively easy. Prepare a distribution and give it to Pubs. Pubs will prepare a letter authorizing purchase of a sufficient quantity of books and will input the distribution to MCPDS. When the books arrive in Albany, the warehousepersons will mail them to the recipients the writer has chosen. This distribution does not automatically bring us changes or revisions, however. If you want to keep it in stock, you will have to reorder the revision. Also, since this action is completed by others, getting the books actually delivered to Albany is uncertain.

### **Addenda**

You will find the following items at the end of this guide:

**Task Definition Record.** Use this form to record your initial assignment. Update the information as necessary as you progress.

**Copy-editing Checklist.** This list summarizes what a copy editor does. You may want to use it yourself before you send out a coordinating draft.

**Writing Checklists.** Use these reminders before sending your publication to Doctrine for final production.

**Publications' Workorder.** This form accompanies your manuscript when it goes Pubs. Notice the coordinations required in the last four lines. The Doctrine AO will take care of these.

**How To Determine a Publication's Distribution.** You and your Doctrine AO can use this how-to guide to specify what units will get your publication.

**Task Definition Record**

**Title:**

Marine Corps Doctrinal Publication \_\_\_\_\_

Marine Corps Warfighting Publication \_\_\_\_\_

Marine Corps Reference Publication \_\_\_\_\_

Other Publication \_\_\_\_\_

**Military Purpose:** (How does this information serve the Marine Corps? Brief statement which is the substance of what will also be in the prom page of the manual.)

**Target Audience:** (Who is this publication written for? Average rank, kind of unit. Non-Marine readers?)

**Subject Scope:** (How wide is the area you will cover? Does this publication begin where another one ends? Does it focus on principles or on detailed techniques? What is the concept on which this publication is based?)

**Supersession (if applicable):** (If when this book comes out, another book dies, has everything important been saved?)

**Milestones:** (What dates are important to meet?)

Outline: \_\_\_\_\_ (date)

Coordinating draft(s): \_\_\_\_\_ (number & date)

Other: \_\_\_\_\_

## Copy-editing Checklist

### 1. Check for typographical errors.

- Are words misspelled?
- Are letters or words transposed? Are any words or phrases left out?

### 2. Check for consistency.

- Are all heads in the same type and positioned the same way on the page?
- Are all paragraphs indented the same?
- Are words spelled and capitalized or lower-cased the same way throughout?

### 3. Check for punctuation errors.

- Is the comma used in a series and between independent clauses?
- Are words hyphenated when they should be?
- Are sentences end-punctuated correctly?

### 4. Check for grammatical errors.

- Do subject and verb agree?
- Are all sentences complete sentences (no run-ons)?
- Are subordinate clauses and phrases placed for clarity?

### 5. Check for organization.

- Does the information included in a section or paragraph belong with the rest of that section or paragraph?
- Are chapters and sections arranged in logical and useful sequence?
- Is there redundancy?

### 6. Check format.

- Does manuscript follow a consistent design throughout?
- Does the format suit the purpose of the publication?

### 7. Check abbreviations and acronyms.

- Are abbreviations and acronyms defined the first time they are mentioned?
- If numerous (more than 10), are they listed in an appendix?
- Have you verified that the acronym or abbreviation you are using is used correctly? (Have you checked in FMFRP 0-14 or Joint Pub 1-02?)

### 8. Check for accuracy.

- Is the text accurate to the best of your knowledge?
- If you aren't sure, have you checked confusing text with other publications?

### 9. Check pagination.

- Is the front matter (those pages that appear before the first chapter) numbered in small roman numerals?
- Are all chapters numbered in the same way (i.e., 1-1, 2-1, or 1, 2, 3, etc.)?
- Have you allowed for blank pages? (Reverse of the title page is blank, and the blank is counted as a page, though no number is printed on it.)
- Are right-hand pages numbered with odd numbers and left-hand pages numbered with even numbers?

#### **10. Check table of contents.**

- Are the listings in the table of contents consistent throughout (i.e., if sections are listed in one chapter, are they listed in all chapters)?
- Are the listings stated exactly as they appear in the body of the manuscript?
- Are all important items listed in the contents?
- Are page numbers correct for all parts?

#### **11. Check figures and tables.**

- Are figures and tables referenced in text before they appear in the manuscript?
- Are figures and tables numbered correctly?
- Does the figure or table appear on the same or facing page as its first reference?
- Are figures easily readable (are they large enough to present the information they are intended to convey, and is the layout clear)?
- Are captions and titles placed and capitalized consistently throughout?
- Are captions in the same type throughout, and are they spaced the same way (i.e., with the same space after the figure number, etc.)?
- Are figures clear; will they reproduce clearly; has original art been supplied whenever possible?
- Are callouts consistent in all figures?
- Are tables presented consistently throughout (i.e., if 2,000 uses the comma in one table, do other four-digit numbers use the comma throughout; are line weights and type sizes consistent; are same styles used for notes)?

#### **12. Check references.**

- Are references listed correctly in “References”?
- Are titles and authors spelled the same way in the text as in “References”?

#### **13. Check footnotes.**

- Do the numbers run consecutively throughout the chapter or document?

- Does the footnote in text appear on the same page as its reference?
- Are all footnotes listed in the same way and in the same position on all appropriate pages?
- If the footnote cites a specific reference, is it listed in “References”?

### Writing Checklists

After completing your manuscript, ask yourself the following questions:

Does the book convey its purpose and scope in the opening presentation, carry through the stated theme in the following discussion, and end with a conclusion or summary?

Is the title as short as it can be, and does it accurately describe the contents?

Do all paragraphs in a chapter relate to that chapter topic? Does each paragraph have its own topic, often stated in a topic sentence? Is the thought carried by transitional expressions (a word, phrase, or sentence) that relate the ideas in the current paragraph to the next paragraph or to a preceding one?

Is the development of important topics suitable to their importance?

Is the language concise and clear? Are all expressions straightforward and easy to understand?

Do illustrations (art, photographs, tables, and charts) clarify thought and do they appear as closely as possible to their first reference in the text?

**Before submitting the document for editing**, be sure that it includes the following:

- Wording for cover and/or title page.
- Table of contents.
- List of illustrations and tables, if appropriate.
- Complete double-spaced, typed text.
- List of references and sources.
- List of acronyms, abbreviations, and symbols, if appropriate.
- Rough sketches, finished art, or glossy prints of all illustrations.

**And finally also—**

- Disable any password protection or file locking you may have used.
- Proofread and spell-check the entire manuscript.
- Save the document to one of the following formats:
  - Amipro 3.0 for Windows, or Wordpro
  - Word Perfect 5.0 for DOS.
- Keep your own electronic file copy and hard copy of text and art.



**Publications Workorder**

**To: Publications**

**From Writer/AO:** \_\_\_\_\_ **Phone:** \_\_\_\_\_

**Project Title: MCDP/MCWP/MCRP** \_\_\_\_\_

**Military Purpose:** \_\_\_\_\_  
\_\_\_\_\_ (Brief statement which is the substance of what will appear in the prom page or foreword.)

**Target Audience:** \_\_\_\_\_ (Average rank, kind of unit)

**Distribution: Attach list** \_\_\_\_\_

**Supersession:** \_\_\_\_\_ (Category, number, and title. Include any Marine Corps publication whose content is superseded.)

**Forms:**

\_\_\_\_\_ Prescribes a form? (If so, current form is included.)

\_\_\_\_\_ Reproduces a form? (If so, prescribing directive for completing is cited.)

**Copyright:** \_\_\_\_\_  
(If your publication contains copyrighted material, state source.)

**Art:** Attach a list of your figures in numerical sequence with the source (publication and page number) cited for all old or recycled art.

**Special Production Needs (such as binding or size):**

\_\_\_\_\_

**Remarks:** \_\_\_\_\_

\_\_\_\_\_(Conference planned? Writer out-of-town?)

**Coordination: Initial and date:**

**AO** \_\_\_\_\_

**Terminologist:** \_\_\_\_\_

**Branch Head:** \_\_\_\_\_

**Director, Doctrine:** \_\_\_\_\_

## How To Determine a Publication's Distribution

The distribution list is a very important part of publication production. Without the correct distribution, a publication will not get to those who need it. The writer and action officer identify what units will receive a publication and how many copies each unit will receive by annotating a list. Publications will provide the list upon request. After the Doctrine AO has identified the distribution wanted on the list, Publications inputs the information into a database which the warehouse at Albany, GA, also uses. When printed copies of a publication arrive at the warehouse, the mailout clerks print labels from this database. Then the publication is mailed accordingly.

The list to be used shows an IAC (individual activity code) in the first column. This is a number that stands for a unit address. When a unit changes its address, that information is entered into the database, but the IAC remains the same. An IAC is a 7-digit number that helps locate the different units.

Example: 7230033. The first 4 digits tell where/what each unit is: 7230 tells that all these activities are located at Quantico Marine Base. The last 3 digits tell what that particular unit is: 033 is Doctrine Division.

The second column shows the number of copies wanted, and the third column shows the unit to which they will be sent. The writer/AO writes what he/she wants in the middle column, "# of Copies." If the writer/AO decides that every unit under a particular IAC will receive the same number of copies, use a "blanket number" on the first line of the IAC group. In the example below, each MEU will receive 1 copy.

Example:

<b>IAC</b>	<b># of Copies</b>	<b>Activity</b>
10250XX	001	MEU
		11
		32
		34
		37
		38
		48

If the writer/AO decides each unit needs a different number, specify that number by writing the number in the “# of Copies” column next to the unit. Each of these units below will receive different quantities as indicated.

Example:

<b>IAC</b>	<b># Copies</b>	<b>Activity</b>
203000X		MAW
	001	1
	005	2
	010	3
	015	4

The Doctrine AO sends the completed list to Publications where the information is input to a system called MCPDS (Marine Corps Publications Distribution System). Using the same computer system, Publications also assigns a publication control number (PCN). Units ordering publications from the warehouse in Albany use this PCN. The PCN is listed in the MCBul 5600 and is also placed on the publication itself.

If there are any questions on the distribution list, the writer may call Diane Lewis at (DSN) 278-6035 or commercial (703) 784-6035 or send questions by E-mail.

### Writer's Responsibilities in Producing a Doctrinal Publication

Event	Director	AO	Writer	Editor	Illustrator	Remarks
1. Assign	A	X	C	C		Set purpose, scope, & target audience
2. General outline	A (AN)	X	X, C	R		Team (AN)
3. Research		C	X			Team (AN)
4. Detailed outline	A (AN)	A	X	R		Staffed via msg (AN)
5. Research		C	X			Team (AN) —ad hoc or standing committee
6. Write		C	X	C (AN)	C (AN)	
7. Review author's draft		X	X			Informal staffing/ conference
8. Rewrite		C	X	C	C (AN)	
9. Field coordinating draft	A	X	C			
10. Revise CD		C	X	C (AN)	C (AN)	
11. Final edit & illustrate	A	A	C	X	X	

### Art Guidelines for Writers

1. Doctrine needs your input on content, not polished art. Most art will be re-done by skilled artists at Doctrine. If you are not skilled in a graphics program, it is OK to use stick figures in a rough sketch with notes to explain what the

reader should learn from it. Most art will be redone by skilled artists at Doctrine. DO NOT buy or learn an art program just to construct simple diagrams or floor-plans. A self-taught person may spend hours to do a relatively clumsy electronic version that can't be used while an artist with a good program can whip it out in a few minutes.

2. If you prepare electronic art, do it in black and white in a Freelance, Power Point, or CorelDraw program. Remember that the color drawing you prepared for a demonstration or draft will become black and white in the final publication. Colored lines will become dotted or dashed lines; color blocks will become shades of grey or patterns such as diagonal lines or other kinds of conventions.

3. Complete the text BEFORE you do a sketch or plan a photo shoot. Some drawings are actually what the writer constructed to get a grip on the material. Sometimes that is good for the reader also, sometimes not.

4. If you want to take photos, PLAN every shot beforehand.

5. Use a professional photographer. It may be noble to do it yourself on a weekend, but it may also be a waste of your time.

6. Photos should be in black and white. Prints should be no smaller than 5 x 7 inches, preferably 8 1/2 x 11. A good digital photo is preferred, but we can work with an ordinary camera shot. Call Doctrine Publications if you have further questions (DSN 278-3610).

7. Place the photo shoot in either its natural background or a studio with extra lighting and plain white background. The object is to obtain a shot that needs NO touchup. No wrinkled sheets, no lightplugs in the background, no extraneous elbow poking in.

8. Models in a photo shoot must be in the correct uniform, without any jewelry on the hands, and using up-to-date equipment and accessories. Models should not be smiling or laughing.

9. The subject matter expert must be on the spot to pose the scene correctly. The photographer determines lighting and angles. Take several shots of each step in a procedure. It is better to have more photos than you use than to recreate the same setup later.

10. When showing a sequence of actions, DON'T change the actors in the middle. Don't change clothes or locale.

11. Photos intended to be the basis for line drawings should also be posed carefully and shots should be taken at different angles. If the artist has to draw vehicles crossing a hilly landscape, for instance, the equipment will be seen from different angles.