

Litho NOTES

July 1992

LAYOUT

Layout patterns provide the glue that combines type, graphics and white space. No matter if the layout is for a magazine page, brochure, display ad or any other application, the structural plan of a document needs to be well thought out to be successful.

A successful layout takes separate, unconnected parts and presents them in relative size and position to create a visual interest and promote a sense of order for the reader.

Achieving interest draws readers to the document initially.

Establishing order increases a reader's ability to perceive comfortably the content being presented.

Desktop publishing is making better designers of us all by encouraging us to work with a grid layout pattern or sometimes referred to as a template. A grid is an arrangement of guidelines that offers specific positions for text columns, margins and other major elements, as well as page numbers, running heads and other details.

Which Grid to Use When

The Graphic Design Standards, SECNAVINST 5600.20, provides guidance on grid use for a designer, but there's one item that is not covered, common sense. You should first think about the kind of project you are going to produce, and then the impact for you in designing it and for the readers who will read it.

A Designer's Viewpoint

Once you get the habit of thinking practically about each project's formatting decision, you'll be able to focus on the options that are logical and adaptable.

Consider the following:

- Content, purpose and target audience for the project

- Image of the sponsoring organization
- Tone or formality level of the content
- Variety of content components (all text and headlines? some line art? many photos? charts and graphics?)
- Page size and length of the project and its components
- Previous versions of the project (if any)

As boring as the concerns of content, purpose, etc. may seem, they're your first clues as to what you can do as a designer. By looking at what may have been produced previously, you can observe what's worked before—or what's been a disaster—and why.

The clues you gather from the above list will guide you in judging which layout decisions are going to be workable and acceptable. You may find that you are attempting to venture into formatting territory that's never been explored by the customer or supervisor. (A multi-column grid for technical documentation? Columns not centered on the page?)

You may be facing a firing squad if you're not sensitive to the ever-present subjectivity and the "that's the way we've always done it" syndrome.

A Reader's Viewpoint

Before committing to read a document, most people will examine quickly the overall appearance to determine what lies ahead. They're not usually in tune to which grid structure is being employed, or how. But they certainly can make judgments as to what looks appealing or is easy to read—or what looks dull, dry, or tedious to read.

When deciding how to format a document, remember who will be reading this piece. I may help to imagine yourself in that role too.

Consider the following:

- Their inherent interest in the content and their reasons for reading it (is it mandatory reading? is it for pleasure? could it save my job or life?)
- Their image of themselves and/or their graphic design sophistication
- Their education level and position
- Any impairments in vision or reading level
- Where they might be reading the document (at work? at home? in transit?)
- How thoroughly, deliberately they will be reading (committed block/s of time devoted to it? snippets of time?)
- How they might respond to the subject matter
- What they've seen/read similar to this (if anything)
- If you assume each reader has unlimited time, energy and interest in your document, you're likely to design a disaster of a piece.

Even if your subject matter is of keen interest or is essential reading, readers will balk at the appearance of hard work. And they'll struggle to wade through, comprehend and retain content that's presented poorly.

NAVEDTRA 71510

ADVANCEMENT HANDBOOK FOR PETTY OFFICERS

LITHOGRAPHER (LI)

The Advancement Handbook For Petty Officers, NAVEDTRA 71510, Special Publication, for the Lithographer (LI) rate is published and can be obtained from your ESO. The effective date for this new handbook is the 1st of January 1993. There are MAJOR revisions to the OCCSTDs listed in the Occupational Standards/Personnel Advancement Requirements (Supervisor Sign Off Sheet) Section D.

Also take note of the new Bibliography listing for the OCCSTDs listed in Section C.

FUNDAMENTALS OF FOLDING

Sheets can be folded in many ways. Because of today's equipment, the variations are endless. The buckle folders found in most commercial shops are usually equipped with three and sometimes four sections. A section is that part of a folder which stops the sheet and forces it to buckle, thereby creating a fold. Each section is adjustable. Despite the ability of these machines to handle all kinds of sophisticated folds, the customer should check with the binder to make sure his equipment can handle the folding requirements of the job. Folding equipment differs from one shop to another, and if printing is done according to bindery machines, the end result may be a confused binder who receives 10,000 sheets of something that cannot bind. A printer should always know the correct imposition for his bindery equipment.

The number of folding options may seem limitless. Like all machine operations, folding is accurate only to within certain tolerances. For example, if you flip through the pages of a book, you will see that the page numbers and running heads on a page are not perfectly aligned with those on the facing page. This is normal. Folding is an operation where each step is one of diminished accuracy. If the first fold is not exactly perfect, the inaccuracy cannot be remedied in the next fold. But it can become worse if the second fold is not true, and worse still on the third fold—and so on. Most folding tolerances can be held within 1/8th-inch (that is 1/16-inch either way), but even 1/8-inch can be critical. The point of all this: Beware of losing the image off the page. What is more apt to happen, and is almost as aggravating, is for the image to wander too close to the edge of the page, where it will look peculiar even though it is still there. As a rule, you should keep type at least 3/8-inch away from the trimmed edge.

Another source of exasperation is when material is designed to straddle the gutter between two facing pages. Crossover problems are so common that some people think there is no way to prevent them. One way is to plan this kind of illustration for the center spread of the signature. When this is impossible, alert the pressman and the binder to the situation, and they may be able to minimize the problem.

AS I SEE IT

LICM R.D. Carr
NETPMSA

CHANGES

Our rating is changing. We have new toys—laser printers, computers, desktop scanners, specialized software—all just to play the same game—produce a printed product. Is there a reason to panic? I don't think so, print will always be here. But, you must start changing your way of thinking, don't get caught up in the day-to-day humdrum, fussing about productivity without paying attention to tomorrow's problems. You might get blind-sided by a blast from the future. To be blunt, opportunities for the more traditional printed material are declining, while the market for digital electronic imaging has barely been tapped, this is even more prevalent in the LI rating as we are usually behind our civilian counterparts by more than a few years. DPS (Defense Printing Service) formally NPPS has been upgrading the Allowance Equipment List (AEL). Just a few new additions to the AEL will include the Itek 430 camera, the Riso, a digital duplicator, and upgraded software for desktop publishing.

DPS fully supports our community and has instituted annual technical assessment conferences which reviews the future skill, training, equipment, and career needs of the Navy Lithographer. The next conference is tentatively scheduled for 14 and 28 January 1993 in Norfolk and San Diego, respectively. I found that the conferences held this past January and February were very informative. I was able to see first hand the concerns of the fleet LI and their willingness to participate in the agenda, but I also saw a few individuals that are bucking the latest technology advances. We, as lithographers, need to come to the realization that we need to find the most efficient and effective way to produce printed products. Strategic thinking may open our eyes to some new occupational standards for the rating. After all, there's nothing like being in the right spot at the right time. And there's nothing worse than realizing five years from now that you were there, and didn't notice.

The problem of cutter crossover tells us something on a broader level that is basic and axiomatic: Namely, that folding (and binding and finishing generally) are the least accurate of the machine processes in the graphic arts industry. Commercial folding is accurate to units measured in sixteenths of an inch. Offset printing is far more precise. The tolerances are measured in thousandths of an inch. A color half-tone, for example, requires such accurate printing that each dot of a given color must be in register with the dots of the other three colors. Typesetting is equally precise.

With this in mind, the following five generalization on folding may help you in planning:

1. "Unbalanced" folds, where the edges do not align corner to corner, such as you see in road maps, are difficult for the binder to execute.
2. Any piece with more than five folds may add a burden to the binder's ability. If you reach this level of complexity, you should also reach for the

phone and consult the manufacture of your equipment.

3. The grain direction of paper influences folding. Paper grain should run parallel to the binding edge or spine of the piece. If it does not, the pages will not lie flat. Covers printed on heavier stock will not lie flat either, and the surface of the cover stock will often develop cracks and wrinkles.

4. The range of paper weights a binder can easily fold runs from 50 lb. to 80 lb. Anything lighter or heavier costs more to fold.

5. When in doubt about any folding configuration, consult your supervisor.

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