

Litho NOTES

A NEWSLETTER FOR NAVY
LITHOGRAPHERS

PRESSROOM PRACTICES

Human factors.—As most of you know, the graphic arts industry is growing at a fast rate. But, did you know that product quality is one factor that you can control. Poor printing is most often a function of people, and the resulting lack of quality is usually a by-product of poor planning, carelessness, and lack of communication. To implement a good defense in any quality assurance program you must be alert, be well-trained, be well-informed, and have a well-motivated work force. Each individual in the printing process must understand his or her role and how it fits into the total organization. If this is understood then he or she will understand their value.

Communication is the key.—In a well run printshop you will likely find that the key element is found in communication. This means that management talks to its workers, and the workers talk to management, and everyone listens. Without communication, people become frustrated and develop an "I don't care" attitude. A well managed printshop provides for two-way communication. Communication is maintained at two levels: verbal and written. You can support verbal communication with memos and notes.

Press maintenance.—Properly maintained equipment will produce quality work. You should know your press, keep it properly lubricated, conduct routine inspections for worn and malfunctioning parts and conduct daily safety inspection before starting your press for items such as loose screws which may pass through the press. Anticipating when a replacement part is needed, you

can prevent down time and loss of production. Parts that show wear-and-tear should have replacements on hand before an actual breakdown occurs. This allows you to continue your press schedule with little interruption.

Keep it clean.—Cleanliness is essential for quality printing. This applies to the press, the work table, and the surrounding area. As minor as it may seem, accumulated lint, spray powder, and dust are abrasive and will cause press malfunctions and excessive wear. Dirty rags and waste paper on the floor create both fire and accident hazards.

Clean rollers and bearers are essential to quality printing. Scum, roller streaks, and "hickies" are the result of dirty rollers. Bearers that have an accumulation of ink and dirt can cause an uneven pressure which will result in an unsatisfactory print and could possibly cause streaks.

The cylinders of the press should also be kept clean. Dirty or uneven cylinders will make it difficult for you to maintain an even overall pressure. Keep the cylinders clean of foreign matter, such as dried ink and rust. Use a pumice stone and oil to remove rust without marring the cylinder.

Another area that should not be neglected is the air and vacuum lines. These lines should provide maximum vacuum and air pressure. A partially plugged vacuum line will result in feeder trouble on your press. Plugged blower holes could cause a crooked sheet in the feeder and possible excessive wear on rubber suckers. On a large press plugged bleeder holes in the pre-timed valve could also cause a crooked sheet and excessive wear on rubber suckers.

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Avoid unnecessary adjustments.—

If you must make an adjustment to correct a malfunction, please diagnose the trouble first. Before you make the adjustment, mark the mechanism before moving it so you can return it to its original position. Your press will have less down-time if you avoid unnecessary adjustments.

More service calls are required when a press operator makes an adjustment and fails to solve the problem, and then does not return the mechanism to its previous position.

Safety practices.—Safety is everybody's responsibility. When safety rules are not followed, accidents will result. Safety cannot be over stressed and must be made an intricate part of the printshop. Most printshop accidents have common causes, which include:

- ☐ Running the press without the guards in place.
- ☐ Making adjustments while the machine is running.
- ☐ Reaching into the machine to clean, lubricate, or adjust without first shutting off the power to the machine.
- ☐ Wearing clothes that can become entangled in the moving parts of the machine.
- ☐ Cleaning moving parts while the machine is running.
- ☐ Wearing rings or watches on the job.
- ☐ Allowing grease and oil to remain on platforms or the floor around the machine.
- ☐ Failing to read and follow warnings and labels.

DANGER

**FLOOR SLIPPERY
WHEN WET**

DEFENSE PRINTING SERVICE MANAGEMENT OFFICE CHECKS IN EQUIPMENT EVALUATION REPORTS

by John Dominick, DPSMO

Editor's Note.—I received the following article from John Dominick, Defense Printing Service Management Office (DPSMO). Fellow LI's please take the time to read this report. This input is from the "Fleet LI" and comes from their deck plate. The information that LICS Johnson and LI2 Landrie provided is the result of their intensive on-the-job production with the equipment involved under adverse conditions and should be taken seriously. My congratulations to both LICS Johnson and LI2 Landrie for taking the time to provide their fellow lithographers with their valuable input, they could have just as easily kept this information to themselves, again thanks Larry and Mark, your input will help your fellow LI's, maybe not today, but in the future I am sure it will. *LICM Bob Carr*

Evaluation.—One of the things discussed at the LI conferences held earlier this year was the importance of feedback from the LI community regarding the testing and use of new technology in afloat printshops. This is one of the ways we at the Defense Printing Service (DPS) can tell if the new equipment being placed is reliable enough to maintain on the afloat printshop Allowance Equipment List (AEL). The following is a summary of reports received from LICS Larry Johnson regarding the ITEK 430 daylight camera and from LI2 Mark Landrie regarding the RISO 5600 duplicator.

ITEK 430 Daylight Camera.—LICS Johnson reported that the USS SARATOGA (CV-60) went online with an ITEK 430 on 15 January 1992. Concerning the installation, the Senior Chief points out that two separate power sources are required, one 30 amp 120v line for the camera and one 15 amp 120v line for the plate processor. Placement position of the camera should be carefully considered since room will be needed to move freely around the lamp arms of the camera. The Senior Chief's evaluation summary states the ITEK 430 is a time saver on straight line work jobs and on jobs requiring requiring halftones, the camera is easy to operate and to train on, and it is versatile in production of both line and halftone negatives, overhead transparencies, and plates. However, the Senior Chief also *emphasized* the ITEK 430 is a machine that requires a strict maintenance program and recommends daily, weekly, and monthly maintenance schedules be followed. Senior Chief Johnson also mentioned number of start up "bugs" and recommended some "fix" ideas that have been forwarded to A.B. Dick.

RISO 5600 Duplicator.—On 8 September 1992, LI2 Landrie, USS OGDEN (LPD-5), reported the performance of a RISO 5600 duplicator to the DPS Pacific Fleet Coordinator, Ms. Lorrie Mruk. The RISO 5600 not only operated reliably under normal conditions but continued to perform under typhoon conditions which caused the OGDEN to roll up to 22 degrees. In addition, the RISO 5600 continued to operate in temperatures exceeding 120 degrees, caused by the malfunction of the air conditioning system. The OGDEN was deployed with other ships equipped with offset print or duplicating shops that were *not* able to operate during the typhoon. The OGDEN actually supported the printing requirements of those offset shops in addition to their own with their desktop publishing (DTP) system and the RISO 5600. Riso, Inc. could not have written a better scenario.

Conclusion.—Senior Chief Johnson and Petty Officer Landrie are to be commended for their contributions. Cooperation and involvement such as this is *absolutely essential* in revitalizing the skill level of the lithographer and developing the afloat "Print Shop of the Future." DPS strongly encourages *everyone's* involvement in these efforts. The OGDEN, by the way, is the only afloat duplicating shop in the fleet operating without offset equipment, our first afloat "Duplicating Shop of the Future." The next goal is to establish the first full blown "Print Shop of the Future" and the challenge goes out to others like Senior Chief Johnson and Petty Officer Landrie to step forward in this effort.

Lithographer Conferences.—Please be advised that the next annual LI Conference is tentatively scheduled for 13 and 14 January 1993 in Norfolk, VA and 27 and 28 January 1993 in San Diego, CA. The first day of this year's conferences will be dedicated to equipment demonstrations which should prove to be very informative. Details will be forthcoming and we hope to surpass last year's attendance. You may contact John Dominick, DPS, Code 31 at (202) 433-7411 or DSN 288-7411 for more information.

What is PostScript

Did you ever wonder how PostScript works and how it relates to hardware?

PostScript (PS) is a high-level computer language most similar to Forth, but akin to Basic or Pascal. The principal difference between PS and other languages is its rich set of print operators. PS also varies from traditional computer languages in that it is the first fourth-generation language (4GL) to actually function successfully as a 4GL in the hands of non-computer programming professionals.

The PS production process essentially follows a fairly simple scheme: produce a PS file using a 4GL tool (such as PageMaker or Quark XPress); interpret the PS file (RIP); and generate a display list which is then imaged to the output device. Anything that is done to the file prior to RIPing (if legal within the language bounds) is device-independent in the sense that any imagesetter could, potentially, image the file.

With the production of a display list, the process becomes device-dependent, as the display list is native and unique to a particular type of imagesetter.

Type Terminology

Type terminology for desktop publishing has increased the traditional typography terms with new definitions of type-related subjects that are commonly used on your desktop publishing system. Here are a few new terms you should become familiar with:

- ❑ **ASCII.**—American Standard Code for Information Interchange. A computerized numbering scheme used to represent text character. Pronounced "as-ee."
- ❑ **Downloadable font.**—A font file that contains character descriptions that are copied from the computer and temporarily stored in the printer's memory while a document is printing.

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