

# AMIGA

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## SPECIAL PRINTER REPORT

- 24-Pin Power: The New Dot Printers
- Affordable Lasers
- 15 Print Utilities

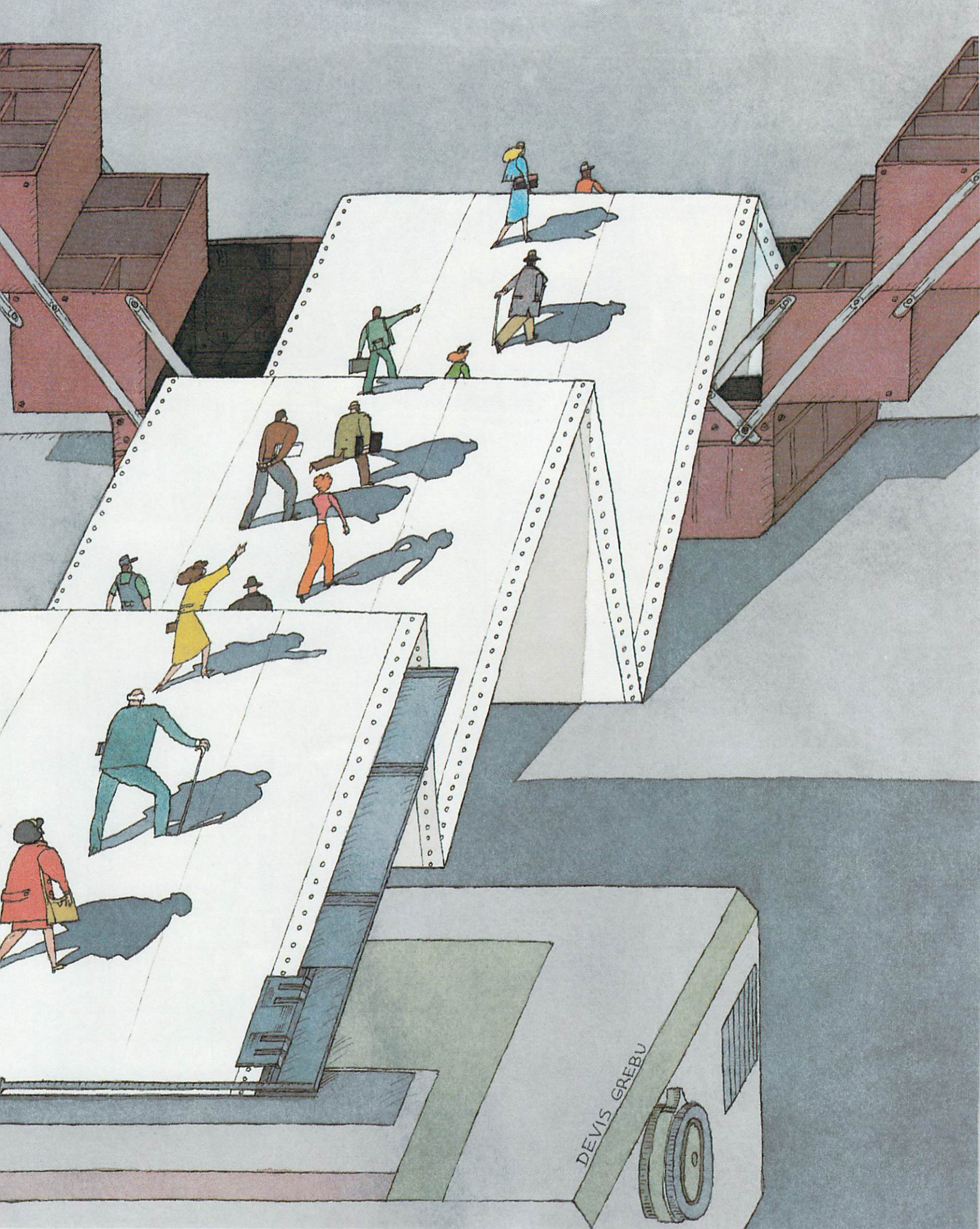
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# SPECIAL PRINTER REPORT-2

## PRINTER TOOLKIT

*We're taking a trip to the toolshed (no, not the one where you went for the proverbial "whupping" back in Grandfather's day). Instead, you'll find a handy toolkit of printer utilities there to help you with your special printing jobs.*

BY MORTON A. KEVELSON AND LOUIS R. WALLACE

IF YOU'VE BEEN able to get your hands on a copy of the new version 1.3 of the Amiga's operating system, you were probably impressed with the vastly enhanced printer support it offers. Yet, even with the dramatic increase in custom printer drivers now available to the Amiga, there will always be numerous specialized applications for which the standard equipment just won't do. That's why the following trip to our toolshed of printer utilities is a must visit.

Whether your printer is dot matrix or laser, whether you need screen dumps, window printouts, segmented blowups or detailed reductions, sideways-style spreadsheet printouts, high-resolution printed output from a CAD program, or whatever, the utilities outlined here should help you get the job done.

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### DOT-MATRIX PRINTER UTILITIES

**T**he ability to print the current contents of your screen is a useful, and often necessary option. Although the Amiga's multitasking capabilities let you open up as many windows as needed to preserve the output from a variety

of tasks, the actual display is still limited to approximately 2000 text characters at one time. AmigaDOS' DIR > PRT: command will redirect text output to the printer, as in the case where you wish to send a listing of the current directory to the printer. AmigaDOS, ►

however, has no built-in means of getting what is on the screen to the printer once it is on display. This is where screen dumpers come into play.

### SCREEN DUMPER UTILITIES

Your choices run the gamut from a limited utility on your Workbench disk, to public-domain/shareware offerings, and finally commercial-quality utility programs. (For a description of two shareware screen dumpers, see the accompanying sidebar "Public Dumping Permitted.")

The System drawer on your Workbench 1.2 disk contains a screen-dumper utility. To use it, either double click its icon on the Workbench screen or invoke it from the CLI. Once GraphicDump is initiated, you have approximately ten seconds to move things around, such as by clicking on front-to-back gadgets, manipulating the sizing gadgets and drag bars, and so forth, until the screen is organized to your satisfaction. Needless to say, this is not the best way to get a screen dump, but in many situations it can get the job done.

Among the commercial offerings is Discovery Software's Grabbit. Unlike many screen dumpers, it lurks in the background until activated by the appropriate hot-key combination. Grabbit will then take the front screen, place it into a RAM buffer, and send it to the printer according to the current settings in Preferences. Because it runs in the background, you can continue using your Amiga for other tasks during printing. If there is not enough free memory in which to set up a buffer, Grabbit will lock the front screen until the printout is complete. A second hot-key sequence lets you save the front screen to disk in the form of a compressed IFF-image file. The Grabbit disk contains AnyTime, another HotKey-driven utility, which will bring up a color palette with the appropriate number of colors for the current screen. You can then adjust the screen colors for improved viewing or for subsequent processing with Grabbit.

Although not really a screen dumper, Meridian Software's Zing!Keys contains a screen dumper among its myriad functions. The bulk of the program is a collection of keyboard macros and hot keys, with a facility for designing your own macros and hot-key functions. But at \$49.95, it does offer two utilities of interest: ZPDUMP, which sends the current screen to the printer, and ZSAVEIFF, which sends it to the disk as an IFF-image file. You can scale your printer dumps at 33%, 50%, or 100% of full size.

Computer Toolsmith's WindowPrint II differs from the other screen dumpers because it does not limit its attention to an entire screen. Instead, it lets you work with the contents of individual windows and portions of windows, as well as with the entire screen. WindowPrint provides you with complete dimensional control of your printouts; you can set them to fill automatically the entire width of the page or restrict them to pixel-for-pixel representation of the screen. You can adjust the height and the width of

the dump independently, from 0 to 200 percent of the screen size. WindowPrint II will also save selected windows to an IFF file for subsequent processing. There are also several useful supplementary utilities, including Snatch, which saves the current screen to disk when triggered by a hot-key sequence, and IFF-Icon, which lets you create Workbench program icons from IFF-image files.

### MURAL MAKERS

Under normal circumstances, the size of a printer graphic dump is limited to the width of the printer. But if you want a larger printout, it is possible to break up an image into a series of expanded image segments from within a paint program. DeluxePaint II, for example, allows you to "stretch" and then divide into such segments. The process, however, tends to be tedious and time-consuming. Fortunately, there is an easier way, as the following programs will demonstrate. These utilities let you blow up an image printout over several sheets for subsequent paste up.

HUGEPrint, by Hugh Crawford of Hugh's Software Ranch, allows you to partition an image in up to 16 strips. You set the width of each strip in Preferences, which also controls the characteristics of the printout. The total width of all the strips can be up to eight-and-one-half feet. Strips can be printed individually in the event a section of the mural is damaged and has to be replaced, or if the printer fails to complete the operation for some reason. You can also set the aspect ratio to generate either square pixels or video-proportioned pixels. (See the sidebar "Dots Enough" in the article "Lasting Impressions" in this issue for a specific application that uses HUGEPrint.)

Lightning Publishing's The Big Picture is a collection of 15 versions of itself—each of which is for a different printer. To set the size of the printout, specify the number of pixels in each direction, up to 9999 of them horizontally and vertically. The program determines automatically the number of strips required for the mural. The height and width values can be set independently. A height of zero results in a screen-proportioned print. The Big Picture does not display the image being printed; instead, the image data is pulled directly from the disk, processed, and sent to the printer. To avoid tying up a disk drive for what may very well be a lengthy printing task, it is a good idea to transfer the image to RAM: before using The Big Picture. Because the program does not use Preferences, it will not benefit from the new features in version 1.3. As a direct consequence, we found that only color murals could be made on our Canon PJ1080A. The Big Picture's working window contains gadgets for entering the size parameters, a file name, and the number of copies. Although the program was able to multitask, it tended to tie up the printer port even when it was not printing. We were also unable to close The Big Picture until it had the chance to actually print something.

There are several full-featured graphics packages



that also provide facilities for generating mural-size printouts. Because these are actually graphics programs rather than printer utilities, we will only make mention of them here. Consult the manufacturers directly (see the "Product Information" box) for further information about PAR Software's Express Paint 2.0, Electronic Arts' DeluxePrint II, and Unison World's Print Master Plus.

Designlab's Fine Print is an unusual program providing a use for one of the by-products of microcomputing—the well-worn printer ribbon. Although it was not ready in time for this roundup, we did see a preliminary version in action at AmiExpo in New York. Fine Print generates highly-detailed gray-scale graphics dumps of Amiga images by overstriking each dot as many as 15 times. The overstriking requires the use of the worn ribbons, as fresh ribbons will produce a solid black image. Because many nine-pin dot-matrix printers have resolutions as high as 240 dots per inch, it is possible to make fully-detailed, postage-stamp-sized printouts using a low-cost impact printer. (A Fine Print image will, of course, take some time to print.) Fine Print falls in our "Mural Makers" category, as it will print images over 100 feet tall. So start saving those old printer ribbons—there may be a use for them yet.

#### ODDS AND ENDS

The remaining printer-support utilities are very specialized and thus fall into this final "miscellaneous" category.

For some reason, the width of a spreadsheet always manages to exceed its height, usually by substantial

amounts. The traditional solution is to print out the spreadsheet in chunks and then cut and paste the pieces into the proper order. Micro-Systems Software's Flipside!, a sideways-style printing program, provides an alternative to this time-consuming process and is now available on the Amiga. All you need is a spreadsheet program that can save its data to disk as an ASCII file. Flipside! reads in the data from the disk file and, by using your dot-matrix printer's graphics capabilities, prints out the text sideways.

Hi-Tech Graphics' Plot-to-Print is intended for use with Aegis Draw or Draw Plus, MCAD, and DynamicCAD. CAD programs generally use plotters to obtain the detail required for engineering drawings. The resolution of a typical plotter exceeds 1000 dots per inch. Because plotters are expensive as compared to dot-matrix printers, very few users can justify their cost. Popular and relatively inexpensive CAD packages like the ones mentioned above support dot-matrix printers. Unfortunately, the dot-matrix printer support consists of no more than a bitmap-graphics dump of the image currently displayed—not a very satisfactory solution.

Plot-to-Print lets you utilize the full resolution of your dot-matrix printer with your CAD program. For Epson-compatible printers, the resolution can range from 60 horizontal by 72 vertical dots per inch to as many as 240 horizontal by 216 vertical dots per inch. To use Plot-to-Print, you must first persuade your CAD program to save its output as a disk file in the Hewlett-Packard Graphics Language (HPGL). Once the data is in HPGL format, you use one of the Plot-to-Print utility programs to convert the HPGL file to ▶

## PUBLIC DUMPING PERMITTED

THERE ARE A number of useful, and of course much less expensive, screen dumper utilities in the public domain or available as shareware (where you pay a voluntary donation to the author if you find the program of use to you). Several utilities contained in the Amicus public-domain collection of disks are shareware screen-dumper programs. Amicus disk number 8 contains three such programs, including Ned Konz' ScreenDump 1.1. When activated, ScreenDump opens at the bottom of the screen a window whose height is only that of a menu bar. When the screen you wish to print is on the display,

simply click on the menu bar to send it on to the printer. The hardcopy format is controlled from Preferences.

Brian Conrad's SHOWPRINT II.3, contained on Amicus disk number 22, is not, strictly speaking, a screen dumper. It is designed to load and display any IFF-image file and send it to the printer. It offers you complete control of the size, aspect ratio, and mode of the printout from within the program. Because it runs in the background, both the program and the displayed image can be placed out of sight once the dump is started. SHOWPRINT supports overscan

mode for images larger than the display screen. The program is menu-driven and easy to use. Additional documentation and a tip sheet will be provided to registered users.

#### ScreenDump 1.1

**Ned Konz**  
210 Oleeta Street  
Ormond Beach, FL 32074  
904/756-2983  
\$10

#### SHOWPRINT II.3

**DataWise Technologies**  
PO Box 62  
Touchet, WA 99360  
\$5

**MK**



a series of bitmaps on disk scaled to your specifications. Finally, using another Plot-to-Print utility program, dump these bitmaps to a printer. Although the package is a bit cumbersome, it does get the job done and the results are impressive. Hi-Tech Graphics is presently working on a more user-friendly version of the program. Plot-to-Print currently supports several printers, including the Epson nine-pin and compatibles, the Epson 24-pin, the Toshiba 24-pin, the NEC 24-pin, and the Canon PJ-1080A.

## L A S E R P R I N T E R U T I L I T I E S

**A**s you undoubtedly know if you already have one, a laser printer is an expensive acquisition. Yes, they *are* sophisticated printing powerhouses, but yes too, you want to get the most out of them for the least additional cost. Many software packages ideally suited to laser printers—such as desktop-publishing programs—are, unfortunately, also fairly expensive. But here's some good news for laser owners: There is inexpensive software that really does help you utilize your laser printer to its full capabilities—printer utility programs.

### TRAVELING WITH THE "JET SET"

The laser printers most often used on personal computer are the HP LaserJet series (and their numerous clones). Unfortunately, the HP is not a PostScript printer, meaning it does not have the special command language most often used for desktop publishing. Yet it does have its own commands, and, with careful planning, you can use them to create very impressive professional quality documents. (See the article "Lasting Impressions," in this issue for a more detailed description of the HP LaserJet printer.) To make this task easier, C Ltd has developed the Jet Set laser-printer utilities.

Jet Set provides you with an easy-to-use CLI-based interface for issuing commands to control the HP printer. With it you can download fonts to the printer, control the placement and appearance of your text, and even create many types of forms. The commands can be executed directly from the keyboard or from within a text file created by any text editor or word processor that allows you to save ASCII files.

The command set is quite extensive, with over 90 different commands available. These range from margin and page controls, to more standard printer commands like form and line feeds. There are commands to draw boxes, lines, and rules of various sizes and shades. You can also use Jet Set to download fonts to

the HP, and select them from within your document. You can position the cursor anywhere on the page at any time from within your document itself. Other features include mode-selection for switching between the various dot densities the printer can generate, and the ability to change from portrait (normal) printed output to landscape (rotated) output.

Another advantage to Jet Set will be apparent to users of Scribble! and Textcraft. By combining Jet Set commands with the documents generated by these widely used word processors, you can take advantage of the high-quality fonts that can be downloaded to your HP laser printer.

### POSTSCRIPT UTILITIES FROM THE "STUDIO"

If you do have a PostScript-based laser printer, such as the Apple LaserWriter or the QMS-PS 810, you might wonder why you would need or want laser utilities, seeing that your printer already has commands for formatting. In this case, the utility software makes it easier to access the PostScript features from within your documents, again without the expenses of a PostScript-based page-layout program.

Scott Anthony Studios has three different PostScript laser-utility programs. The first, LaserUtilities, Vol 1.2, is in many ways similar to Jet Set, as it allows you to turn your word-processing or ASCII text-editor files into a highly polished printed document by including embedded PostScript control commands within the document. These are easy-to-use, two-digit commands—such as /FS nn def (which defines a font-scale of size nn). Others are margin- and page-control commands that simplify the design and layout process. Text can be centered and boxed automatically, using various sizes of fonts and lines, with boxes filled with varying levels of gray shades. You can create circles and ellipses, and place bullets anywhere in the text in either plain- or filled-circle format, or as stars of varied size.

A second S. Anthony Studios PostScript utility, LaserUp! Print1.2, is a useful picture-printing program that can take any IFF-compatible bitmap image and print it on a PostScript page. The program is entirely menu- and mouse-driven, and it allows you to scale and position the image any way you wish on the page. A very simple pixel editor is included for fine detail "brush ups" of the picture. You can select any rectangular region of the image by placing a box around it and print only that region. You can wrap the image in any of a large number of border styles (included) and convert it to any of several different halftone types. You can add text to the picture if you wish.

Once defined, the picture can be printed to the PostScript printer in up to 48 shades of gray or saved as an ASCII text file that can be used with other PostScript packages, even on other computers. Finally, LaserUp! Print1.2 offers the ability to perform a four-color separation of the graphic image, printing or saving the separations as desired. The only draw-



# PRODUCT INFORMATION

## DOT-MATRIX PRINTER UTILITIES

**The Big Picture**  
*Lightning Publishing Consultants*  
1821 N. Ohio St.  
Arlington, VA 22205  
703/534-8030  
\$29.95  
*No special requirements*

**DeluxePrint II**  
*Electronic Arts*  
1820 Gateway Dr.  
San Mateo, CA 94404  
415/571-7171  
\$79.95  
*512K required*

**Express Paint 2.0**  
*PAR Software Inc.*  
PO Box 1089  
Elevator Way, Terminal #2  
Vancouver, WA 98666  
206/694-1539  
800/433-8433  
\$99.95  
*512K required*

**Fine Print**  
*Designlab*  
PO Box 419  
Owego, NY 13827  
607/687-5740  
\$49.95  
*No special requirements*

**Flipside!**  
*Micro-Systems Software*  
*distributed by Brown-Wagh*  
*Publishing*  
16795 Lark Ave., Suite 210  
Los Gatos, CA 95030  
800/451-0900  
408/395-3838  
\$59.95  
*No special requirements*

**Grabbit**  
*Discovery Software International*  
163 Conduit St.  
Annapolis, MD 21401  
301/268-9877  
\$29.95  
*No special requirements*

**HUGEPrint**  
*Hugh's Software Ranch*  
232 East 8th Street #1B  
New York, NY 10009  
212/353-2465  
\$49.95  
*No special requirements*

**Plot-to-Print**  
*Hi-Tech Graphics*  
PO Box 446  
Tallmadge, OH 44278  
Canon \$20  
Epson 9-pin \$25  
24-pin \$35  
*No special requirements*

**Print Master Plus**  
*Unison World*  
2150 Shattuck Ave., Suite 902  
Berkeley, CA 94704  
415/848-6670  
\$49.95  
*512K required*

**WindowPrint II**  
*Computer Toolsmith*  
*distributed by T & L Products*  
2645 Wilson St.  
Carlsbad, CA 92008  
619/729-4020  
\$34.95  
*No special requirements*

**Zing!Keys**  
*Meridian Software Inc.*  
PO Box 890408  
Houston, TX 77289-0408  
713/488-2144  
\$49.95  
*No special requirements*

## LASER PRINTER UTILITIES

**Jet Set**  
*C Ltd*  
723 East Skinner  
Wichita, KS 67211  
316/267-3807  
\$39.95

**LaserUp! Plot (\$49.95)**  
**LaserUp! Print 1.2 (\$89.95)**  
**LaserUtilities (\$39.95)**  
*Scott Anthony Studios*  
889 De Haro St.  
San Francisco, CA 94107  
415/826-6193  
*No special requirements*

back I found to Print1.2 is that it requires the printer to be interfaced to the Amiga via the serial port. All other S. Anthony Studios packages work on whatever is defined as the PRT: device.

The last of the S. Anthony utilities is a very specialized package, LaserUp! Plot, which converts CAD files created with Aegis Draw or Draw Plus from their vector-based object files to PostScript-described files. Once converted they can be quickly printed on your laser printer at the highest density available (300 dots

per inch). Most importantly, they can be included in other documents, where they can be resized and positioned as needed, just like any other PostScript defined image. ■

Morton A. Kvelson is a frequent reviewer and Louis R. Wallace is a contributing editor for AmigaWorld. Write to Morton at 2471 Bragg St., Brooklyn, NY 11235. Write to Louis c/o AmigaWorld, Editorial Dept., 80 Elm St., Peterborough, NH 03458.