PLOTTERS FOR YOUR ATARI

Graphics hardcopies in color

by ERIC CLAUSEN

It's a vicious circle. . . . In fact sometimes it seems like an evil plot! (Sorry, couldn't resist.)

There hasn't been very much plotter hardware or software available for the Atari. And the few choices available are not widely publicized. So Atari owners naturally don't use plotters a great deal.

What's especially sad about this is most Atari owners don't even know that now they *can* use plotters to create colorful graphics in very high resolution.

Only in schoolrooms have Atari computers been widely used with plotters—typically with the narrow-width but capable **Atari 1020 Color Plotter**. (See adjoining story about 1020 availability.) This setup then runs **Atari Logo** software to produce beautiful hardcopy screen dumps of turtle graphics. Giving students colorful printouts of their classroom computer exercises can obviously enhance the learning experience.

WHAT'S A PLOTTER?

A plotter draws smooth, continuous lines with ballpoint pens or felt-tip pens that glide silently over the paper. Many plotters can be programmed to change pen colors automatically. Plotters generally can also be used to produce overhead transparencies for educational or business use.

Until recently, most Atari plotter software was in the public domain— useful enough programs but tending to lack the sophisticated polish of professional packages. It also was not easy to get hold of this software unless you were in contact with a users group or bulletin board.

But now several very sophisticated graphics packages have become available which support a number of plotters with the Atari.

PLOT, GRAPH & 1020

Dollar for dollar, the best Atari plotting value we found is **Screen Plot** and **B/Graph** software with the 1020 plotter! It's very satisfying to see an actual hardcopy of a microscreen that you've labored over for hours. And it's a whole new ballgame when you can print standard business graphics in flashy multi-colors.
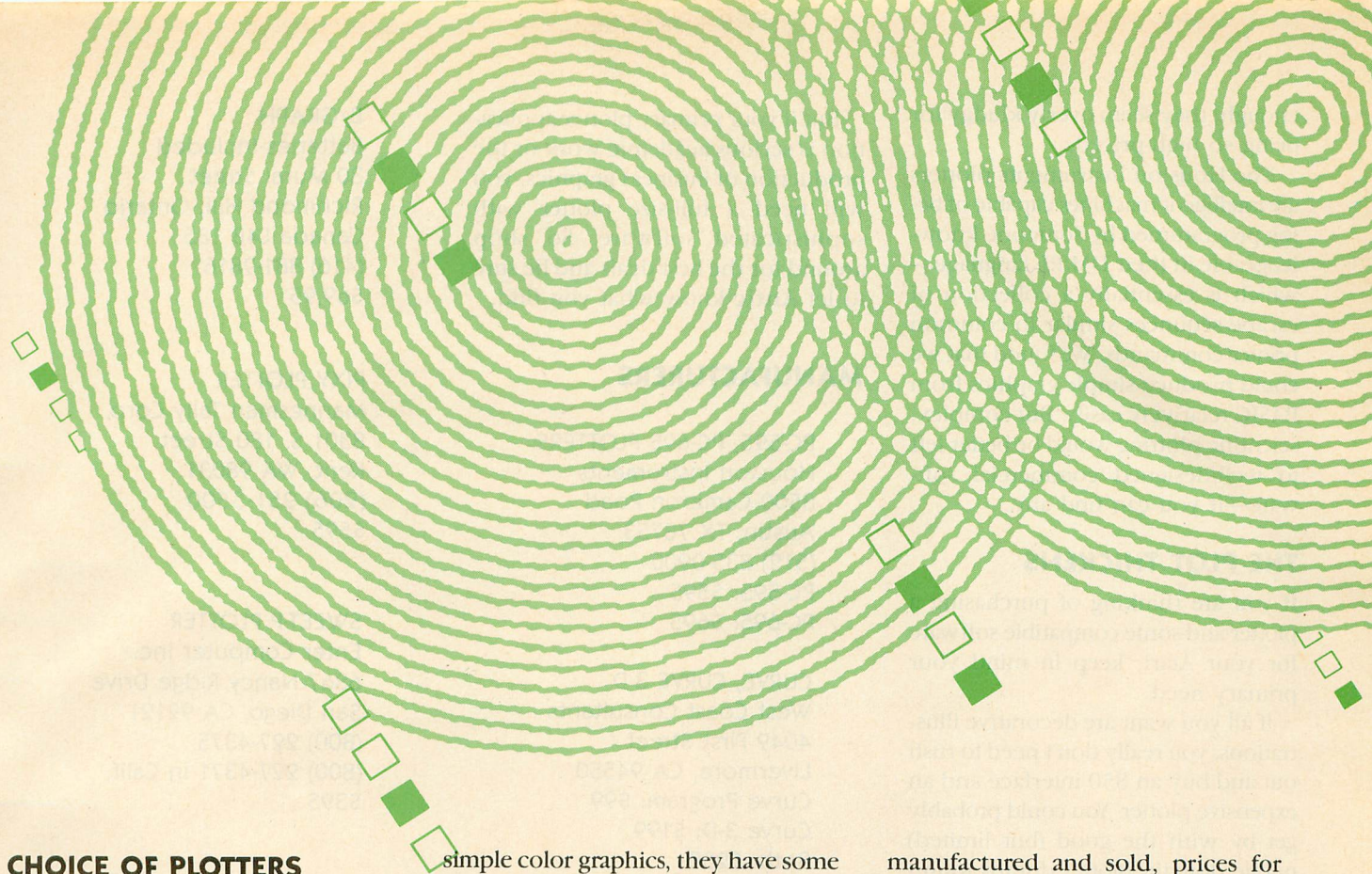
Screen Plot is a plotter driver by Robert Wilson and Batteries Included's Michael Reichmann. It costs $12.95 from the Antic Arcade Catalog (AP135). This easy-handling but versatile graphics dump program accepts files from a wide range of graphics software—including Micro Illustrator, AtariArtist, Atari Light Pen, Paint, MicroPainter, or your own GRAPHICS 8 files.

Last but not least, Screen Plot works with B/Graph ($69.95) the full-featured statistical graphing package from Batteries Included. This isn't surprising, because the authors of B/Graph also wrote Screen Plot. The two programs work together in an ideal partnership. B/Graph generates bar graphs, pie charts and line graphs on your video display. And then Screen Plot dumps the files to a color plotter.

The B/Graph disk has a BASIC file conversion utility called PICLOAD.BAS. After you image a B/Graph file to disk, LOAD PICLOAD.BAS from DOS and follow the menu prompts. Screen Plot will then be ready to dump your creation to the color plotter.

NOTE: If you bought B/Graph version 1.0 from Inhome Software instead of the more recent Batteries Included version 1.1, your disk does not contain PICLOAD.BAS. However, PICLOAD.BAS is in public domain and can be downloaded from DL4 in SIG*Atari on CompuServe.

CHOICE OF PLOTTERS

The plotters supported by Screen Plot software are the Atari 1020, **Radio Shack GCP-115, Mannesman Tally Pixy** and the **Sweet- P.**

The Atari 1020 and Radio Shack's CCP-115 were both produced by the same OEM (Original Equipment Manufacturer). They are virtually the same piece of equipment. For an Atari owner, the main difference is that the 1020 daisy chains right into one of your disk drive ports. But the Radio Shack requires connection to the parallel port of the Atari 850 Interface Module.

Although both of these plotters have been discontinued, thousands of units are still available at excellent prices.

It's easy and inexpensive to get an Atari 1020 by mail. See the adjacent list of suppliers, for prices as low as $39.

You can usually find a few 115's at the nearest Radio Shack store, at prices ranging from $99 to $119. Radio Shack is also a handy source of refill pens, usually at a little over $2 for a package of four colors.

But although the 1020 and the Radio Shack plotters do a nice job on simple color graphics, they have some major limitations. Most importantly, they only work with narrow 4½" paper and they only give you four colors!

Also, the ballpoint pens available for the 1020 and the 115 are messy to work with, have a short life expectancy and tend to produce uneven ink flow during the often lengthy time of a plotting session.

UPPING THE ANTE

On the other hand, the Mannesman Tally Pixy is a full-width, 8-color plotter. This would be a superb choice of hardware if you want to do serious academic and business applications on your Atari with Screen Plot and B/Graph, However, it is list-priced at $595 and requires the 850 interface.

The Sweet-P SP100 is a lower cost alternative to the Mannesman Tally. It's a full-size, one pen plotter reasonably priced at $395. Again, this also requires the 850 interface. The SP100 also has a very impressive big brother, the SP600. This is a fast, six color, full-size plotter—at the full size price of $1,095.

The unfortunate fact is that because comparatively few plotters are manufactured and sold, prices for good equipment tends to be high compared to dot-matrix and daisy-wheel printers.

Antic had the opportunity to check out two programs that connect an Atari to the professional-quality **Houston Instruments PC-595** ($595) and **PC-695** ($695) These impressive full-size plotters naturally need the 850 interface. And they also needed better software for their Atari hookup. . .

The programs, **Curve** ($99) and **Curve 3-D** ($199) are written entirely in slow, slow BASIC. Many of the mathematical calculations are performed on screen, perhaps to convince the user that the computer is actually doing something. Someone should have told the programmers they could have gotten a lot more speed by merely blanking the screen with a simple POKE.

Also the data input prompts are filled with irritating sound effects and silly graphics. Although these programs are graphically ambitious and do eventually produce some impressive printouts if you wait long

enough, they seem overly kludgy for being so high-priced.

The Houston Instruments plotters are intelligent machines capable of being programmed by someone knowledgeable in their DM/PL language—which is essentially a collection of escape sequnces similar to common printer commands. We found that we could produce simple graphics from BASIC relatively easily. But complex, scientific plotting would be better left to well-designed commercial software—if you can find any.

THE PLOT THICKENS

If you are thinking of purchasing a plotter and some compatible software for your Atari, keep in mind your primary need.

If all you want are decorative illustrations, you really don't need to rush out and buy an 850 interface and an expensive plotter. You could probably get by with the good (but limited) public domain plotter dumps found on CompuServe's SIG*Atari.

But if your primary plotter application is serious academic work or the production of business graphics, you will need a full-size plotter with sophisticated software. So shop around for the best deals and be sure to let **Antic** know what you find.

MANUFACTURERS

PC-595, PC-695 PLOTTERS
Houston Instruments
8500 Cameron Road
Austin, TX 78753
(512) 835-0900
PC-595: $595
PC-695: $695

CURVE, CURVE 3-D
West Coast Consultants
4049 First Street
Livermore, CA 94550
Curve Program: $99
Curve 3-D: $199
Both: $250

B/GRAPH
Batteries Included
30 Mural Street
Richmond Hill, Ontario
Canada L4B 1B5
(416) 881-9816
$69.95

PIXY PLOTTER
Mannesman Tally Corp.
8301 S. 180 Street
Kent, WA 98031
(206) 251-5500
$595

SWEET-P PLOTTER
Enter Computer Inc.
6867 Nancy Ridge Drive
San Diego, CA 92121
(800) 227-4375
(800) 227-4371 in Calif.
$395

ATARI 1020 COLOR PLOTTER: WHERE TO FIND IT

The Atari 1020 Color Plotter is another pre-Tramiel product that's usually not easy to find at your local computer store—even though Atari has told **Antic** it still has plenty of units warehoused.

In order to help readers get around this unavailability, **Antic** is printing here a list of dealers offering the 1020 plotter by mail at varying prices. Most of the companies named here were also on last month's list of Atari 850 interface suppliers.

American TV
15338 Inverness Street
San Leandro, CA 94579
(415) 352-3787
$54.50

B&C Computervisions
3283 Kifer Road
Santa Clara, CA 95051
(408) 245-2680
$60

CompuCat
24500 Glenwood Highway
Los Gatos, CA 95030
(408) 353-1836
$59.73, limited supply

CompuClub
P.O. Box 652
Natick, MA 01760
(800) 631-3111
$65

Computer Creations
P.O. Box 292467
Dayton, OH 45429
(800) 824-7506
$39

Computer Palace
2160 W. 11th
Eugene, OR 97402
(800) 452-8013
$99

Electronic One
P.O. Box 13428
Columbus, OH 43213
(614) 864-9994
$39.77

Gizzmoz
P.O. Box 1402
Concord, MA 01742
(800) 225-5800
$49.95

San Jose Computer
1844 Almaden Road
Unit E
San Jose, CA 95125
(408) 723-2025
$39

Southern Software
1579 Ruffner Road
Birmingham AL 35210
(205) 956-0986
$79.95