

Hewlett-Packard 3000 Series

Product Enhancement

Hewlett-Packard continues to enhance the capabilities of the HP 3000 Distributed Mainframe Series. New peripherals, controllers, software, and services are all aimed at increasing system flexibility and ease of use. A recent December announcement of HP's emergency software support is a bonus for companies working on a multiple shift basis. A November announcement of HP's emergency software support benefits companies working on a multiple shift basis. A November announcement of the HP 2333A Cluster Controller allows users to connect 16 RS-232-C devices to an HP 3000 over a single line. The August announcement of the HP 2611A 600 line-per-minute printer offers a new choice for users of medium-speed line printers. July brought announcements of the 2700 Color Graphics Terminals, the APS/3000 Application Program Sampler, and HP Tool Set. June announcements of the the 2647F Terminal and HP 3000 Business Graphics Software just missed our publication deadline for our main report.

An *Emergency Software-Support Program* is now available for HP 3000 customers with software problems outside regular working hours. The service specifies that an HP systems engineer will return a customer's call within two hours. Typical response time is said to be shortly after the original call. If the problem can't be solved over the phone, a systems engineer will go on-site to provide additional assistance. The specified maximum response time for an on-site call is determined by the distance of the site from an HP field office and the level of software coverage contracted by the customer. A startup fee of \$250 is applied as a credit toward the first call if made within six months of the contract date. A variable fee, dependent on the type of problem, service, and options chosen, is charged for each call to HP's emergency-response center. Customers with HP's Customer Support Service (CSS) pay only for the call to the emergency response center; customers without CSS who need on-site support are charged for travel and labor.

The *HP 2333A Cluster Controller* connects up to 16 RS-232-C peripherals to an HP 3000 through a single line. The line may use either an HP DSN/Data Link for local connections with distances to four kilometers or a single modem for remote hook-ups. The cluster controller can accept from four to sixteen peripherals for connection to one or two HP 3000s. When two computers are connected, any device in the cluster can address or be addressed by either computer. The two lines can also provide redundant connections to a single computer to prevent line loss. Transmission from the controller to the system is at speeds up to 19,300 bps; transmission speeds from the controller to the peripherals are up to 9600 bps. The cluster controller and HP 3000 DSN/Multipoint terminal software combine to provide error-checking and retransmission to insure data integrity. The four-port cluster controller with a single HP 3000 access is priced at \$2820. The 16-port version is \$5,280. Software is \$1350 for the first copy plus \$75 monthly support.

The *HP 2611A 600 line-per-minute printer* features 132-column printing, a 12-channel vertical-format unit (VFU), a long-line interface (up to 500 feet), and an enclosed stand. Dual-power paper tractors, above and below the feed, combined with a paper puller improve print quality and reduce paper jams. The HP 2611A uses a 64-character ASCII set; an optional 96-character ASCII set is available with a 430 line-per-minute print speed. The printer is manufactured by Data Printer Corporation and includes a parallel differential interface for compatibility with the HP 3000 series. The HP 2611A is priced at \$18,110; the 96-character set option is \$1,420.

The *HP 2700 Series* of color graphics terminals features two models for business applications and two for technical applications. Two software packages, Autoplot/2700 and Paintbrush/2700, enhance the unit's stand-alone power. Local storage frees the host CPU for other uses. The vector list allows the user to pick, move, scale, or rotate an object using local manipulation. The terminal's 32K by 32K addressable resolution provides over one billion addressable points within the vector workspace. The HP 2700 terminals can display 16 of the 4,096 available colors at one time. A thumbwheel may be used to mix color changes in the screen. Selected colors can be stored as a palette and recalled with a single command.

The HP 2700 Model 50 is the basic unit and is priced at \$19,900. The Model 55 adds additional vector memory and cursor control via a graphic tablet. The Model 55 is designed for the technical user and sells for \$24,000. The Model 65 presentation graphics workstation offers extended capabilities for the graphics designer. The HP Paintbrush/2700 software is combined with Autoplot/2700 and the 13273T Graphics Tablet to "do for the chart-maker what word processing has done for the typist." The Model 65 sells for \$28,000.

Hewlett-Packard 3000 Series

Product Enhancement

➤ *HPToolset* is a Cobol II productivity aid and a welcome addition for the estimated 75% of the installed HP 3000 base who are currently running Cobol. It includes a workspace manager, a full-screen editor, an HP Cobol II program key, and HP Cobol II symbolic debugging. This combination eliminates the need to manage files while promoting an information sharing environment for the programmers. The workspace manager is said to manage all source files, versions of source files, "CLUE files, USL files, and program files. Since source files may be shared, individual and team programming efforts are simplified. The full-screen editor provides direct editing of text to simplify source-code entry and modifications. The Cobol II interface program key allows the user to compile, prepare, and run programs in separate steps through a GO key. The Cobol II symbolic debug locates run-time errors through variable and paragraph names rather than primitive-level memory locations and code addresses. The programmer can set breakpoints, trace/retrace execution, and display and modify data-item values.

The *APS/3000 Application Program Sampler* is an interactive applications program monitor designed to identify program bottlenecks, in Cobol, Pascal, Basic, Fortran, and APL code. It identifies procedures consuming a large proportion of CPU time. On-line histograms display CPU time spent directly in user code or indirectly in system services. Samples may be stored onto a disk file for later analysis. The *APS/3000* typically uses 2 to 3% of the available CPU time as overhead when using the default sampling rate. The sampling rate is adjustable by the user. The samples can be run on any HP terminal supported by an HP 3000 system using a current MPE IV operating system.

HPToolset is priced at \$5,000 with customer-support service at \$95 per month. *APS/3000* is \$2,500 with a \$45 per month customer-support charges. All prices are U.S. list; HP OEM and volume end-user discount schedules apply.

The new HP 3000 *Business Graphics Package* now includes *HPEasychart*, *HPDraw*, and an enhanced *Decision Support Graphics/3000 (DSG/3000)*. The entire package may be purchased at a discount or individual products may be purchased separately. All run on all the HP 3000 computers.

HPEasychart is designed for office users to produce quick charts. Small examples of pie charts, bar charts, line charts, or scattergrams are displayed. Up to six variables, each with as many as 70 values, may be entered. Plotting is done at the press of the Draw button.

HPDraw provides presentation text and figure design multicolor output on paper and overhead-transparency slides. Users perform high-quality visual-aid design, production, and revision through the use of menus keyed to their appropriate experience level (beginner, regular, or expert). *HP Draw* provides a choice of fonts, basic geometric shapes, symbols and simple figures.

The *DSG/3000 Decision Support Graphics* package provides chart design for more experienced users. Both computer-stored and manually entered data may be used in *DSG/3000*. It is especially useful for frequently updated charts when using data already in the system. *DSG/3000* also provides output either on paper or overhead transparency slides.

The entire *Business Graphics Software* package is priced at \$10,750. *HPEasychart* costs \$3000; *HPDraw*, \$4000, and the enhanced *DSG/3000* is \$6300. The *Business Graphics Software* package is also available in French, German, Italian, Dutch, Finnish, or Spanish.

The *HP2647F* is a multi-function intelligent graphics terminal which performs both as an on-line intelligent terminal or an off-line graphics workstation. The new unit is a raster-graphics terminal with 720 by 360 addressable points and an alphanumeric terminal with 24 rows of 80 characters. Programmers have 64K bytes of program workspace and Basic program control of the flexible disk, graphics and alphanumeric display, the programmable keyboard and some data communications functions. Each 5 1/3 inch mini disk holds up to 270K bytes of information, a second drive is available as an option. Mathematics, large character and line-drawing character and sets, as well as blinking, inverse-video, half-bright and underline, are standard on the HP 2647F.

A number of applications packages enhances the HP 2647F capabilities. *AUTO PLOT/47* enables users to produce pie, bar, and linear charts and text slides. *WORD/47* allows users to perform text processing functions through a combination of menu and command keys. Page formatting offers automatic page ➤

Hewlett-Packard 3000 Series

Product Enhancement



breaks, footing, headings, and file merging. Included with WORD/47 is FORMS/47 to design forms for data entry or documentation. LINK/47 is a menu-driven, file-transfer program to copy both ASCII and binary files between the HP 3000 and the HP 2647F's mini disk.

The unit has a U.S. list price of \$9,950. Delivery is estimated at eight weeks after receipt of order. The optional software pacs are priced as followed:

Graphics Presentation Pac/47	\$195
Project Management Pac/47	\$195
Statistical Analysis Pac/47	\$195
Math Analysis Pac/47	\$195
LINK/47	\$195
WORD/47	\$295

□