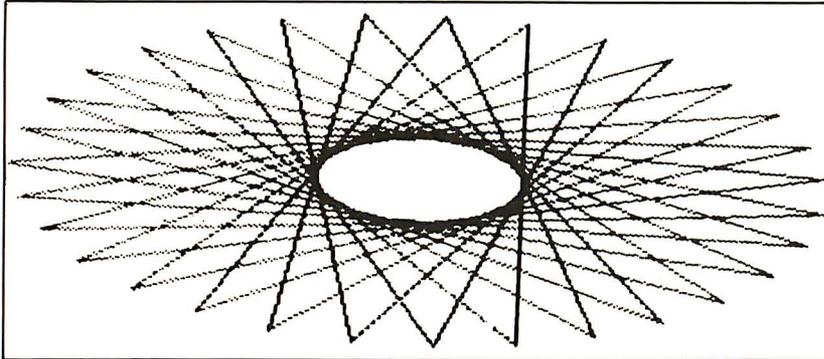


What's New?

SOFTWARE

High-Resolution Package for the AIM-65



The MTU K-1009-1C Text/Graphics Printout program permits the AIM-65 to print text and high-resolution graphics without modifications to the computer or the printer. The contents of the AIM-65 text buffer are reproduced as ten lines of up to 127 characters per line. The display is created as a 320-by-200 dot matrix. The program provides the

Quick Print mode that generates the image on one paper strip, and the Quality Print mode that generates the image as two 320-by-100 strips to be taped together. The program is priced at \$25 from Micro Technology Unlimited, 2806 Hillsborough St, POB 12106, Raleigh NC 27605, (919) 833-1458.

Circle 594 on inquiry card.

Genealogy Program

AppleRoots is a genealogy software package that can be used for human or animal genealogy. It has seventeen user-definable fields. Functions include system initialization; record entry, change, delete; print index or records; print list of children, family records, or four-generation pedigree chart. All printer functions can be displayed on the screen or sent to the printer. All functions are menu-oriented and no programming is required to customize the system for personal use. The package is written in Applesoft and requires one disk drive and an Apple II with 24 K bytes of programmable memory. The system sells for \$39.95 from Computer Data Systems Corporation, 695 E 10th N, Logan UT 84321, (801) 753-6990. Circle 595 on inquiry card.

Educational Software

Educational Software, 801 E 6th Ave, Helena MT 59601, developers of educational software for the preschool thru eighth grade student, has announced a line of programs for the home-computer user. The programs provide positive feedback and cover a wide group of subjects for the young home-computer user. The programs measure the user's performance during each session and are designed for easy modification by the consumer.

Circle 596 on inquiry card.

XYBASIC Interpreter for 8080, 8085, and Z80 Systems

XYBASIC is a language designed specifically for measurement and process control. It offers the standard features of BASIC plus machine-language linking, software interrupts, and bit manipulation commands. Versions are available for SBC/80, CP/M, ISIS-II, Intellec 8 Mod 80, and MDS-800 systems. The nonstandard XYBASIC versions, with a patchable I/O (input/output), make the language adaptable for 8080, 8085, and Z80 systems.

By allowing XYBASIC and the user's program to be placed in ROM (read-only memory), a program can be developed on the target system, put in ROM, and run. This eliminates the problems of floppy-disk program storage in hostile environments. XYBASIC options include a 9511 version utilizing the floating-point circuit, an EDIT version providing edit commands, an extended disk version for use with CP/M systems, and a real-time clock version for SBC/80s. XYBASIC is available in integer or extended forms. Versions start at \$350. Custom versions can be made. For information, contact Mark Williams Company, 1430 W Wrightwood, Chicago IL 60614, (312) 472-6659.

Circle 597 on inquiry card.

Apple Users Gain Access to Dow Jones News and Stock Quotes

Apple Computer Inc, 10260 Bandlely Dr, Cupertino CA 95014, (408) 996-1010, has introduced the *Dow Jones News and Quotes Reporter*, a software package that puts Apple users in touch with financial news. The program retrieves, displays, and optionally prints selected news stories from the *Dow Jones News Service*, the *Wall Street Journal*, and *Barron's* magazine, plus it can list price quotations for more than 6000 securities.

The user gains access through a telephone and modem, and, to access news stories, the user selects News Retrieval Service from the menu. Once a password has been verified, the user can select a news category or company, scan a list of headlines about it, and view the story. Stock quotes can be gained in the same way. The system will run on an Apple II or Apple II Plus with a minimum of 48 K bytes of programmable memory. Also required are a 16-sector format Apple Disk II with a controller, a modem, a video monitor, and a telephone. A printer is optional. Owners will receive \$25 of connection time when they purchase the package, which retails for \$95.

Circle 598 on inquiry card.

CP/M Advanced BASIC Compiler

This compiler, called the Topaz Compiler, produces a relocatable object file that is auto-linked with several libraries to produce a CP/M-compatible .COM file. Two types of floating points are available as well as integer and a fixed-point format. The compiler supports REPEAT...UNTIL, WHILE...DO, IF...THEN...ELSE, BEGIN...END, and CASE...OF techniques. All structured statements may be nested. The compiler supports double- and single-precision floating point, fixed-point packed binary-coded decimal, integer, string and character data types. Disk files may use a packed binary format or an ASCII (American Standard Code for Information Interchange) storage format. Any .COM file can be loaded and executed from control of a BASIC program. Commands can be executed under program control after the .COM file is finished. The price is \$249.95 from Midwest Digital, 863 Wood Ave, Wichita KS 67212, (316) 721-1671.

Circle 599 on inquiry card.

What's New?

SOFTWARE

Symbolic Disassembler for 6809 Computers

The 6809 symbolic disassembler is written for users of the 6809 microprocessor. DISASM6809 is re-entrant, able to be put in ROM (read-only memory), and position-independent. It is called as a subroutine once for each instruction to be disassembled. All necessary parameters, including the address of the user's output routine, are passed in registers. The disassembler can produce alphanumeric symbols in both the label and operand fields. Invalid op codes are detected. The program requires under 2 K bytes of space and uses approximately 32 bytes of memory on the calling stack. Output format is syntactically identical to Motorola's assembly-language definition. DISASM6809 is available as a commented assembly listing with instructions for \$25. Contact C R Bilbe, 6933 Cedarwood Cir, Colorado Springs CO 80918. Circle 600 on inquiry card.

Order-Entry Software Package for Small Businesses

Order Entry will handle the documentation and control of purchasing and sales. The information from Order Entry can be processed through the accounts payable, accounts receivable, inventory control, and general ledger programs from Compumax, updating these modules to reflect purchase and sales activity. Order Entry includes generation and printing of purchase and sales orders, computation of tax and registration of deliveries against outstanding purchase orders and of shipments against outstanding sales orders, along with complete purchase and sales order history reports. The program is available in Micropolis 1053/II (48 K), Apple II, PET (DOS 2.0), and Microsoft under CP/M versions. For further information, contact Compumax, POB 1139, Palo Alto CA 94301, (415) 321-2881. Circle 601 on inquiry card.

Microsoft BASIC Interpreter for the Z8000

BASIC-Z8000 is an interpreter for the 16-bit Z8000 microprocessor. This interpreter uses an expanded internal notation that takes advantage of the Z8000's 32-bit instructions. The accuracy of internal calculations is in excess of eight digits for single precision and eighteen digits for double precision. Variables are stored using the proposed IEEE (Institute of Electrical and Electronics Engineers) standards, allowing for a double-precision range of exponents from -308 to +308. BASIC-Z8000 is fully language-compatible with Microsoft's BASIC-80 and -86 interpreters, Release 5.0. Microsoft BASIC programs can be run on the 8080, 8086, Z8000 interpreters without modification. Evaluation copies of BASIC-Z8000 may be purchased for \$350 (extended) or \$600 (disk), from Microsoft, 10800 NE 8th St, Suite 819, Bellevue WA 98004, (206) 455-8080. Circle 602 on inquiry card.

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With BYTE's recent growth, we are now able to offer you more of the best articles and features about personal computing. Since much of the information in BYTE is supplied by you, the reader, you now have an even better chance to be a **paid** BYTE author. Our current needs include:

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- **Technical/Education/Languages Forums:** These forums allow readers to take a stand on various issues or to clarify points made in the magazine.
- **Programming Quickies:** Do you have a program you'd like to share as a Programming Quickie? Send it in with a page or two of explanation.
- **Systems Notes,** a new feature, is devoted to sharing both hardware and software tips and techniques that you've found useful for any microcomputer brand or homebrew design. We will pay \$20.00 for short submissions and the standard BYTE rate for articles that are one typeset page or longer.

We are interested in material about the Apple, Radio Shack TRS-80, Commodore PET/CBM, Exidy Sorcerer, Atari, Ohio Scientific, CompuColor, Microsoft BASIC, CP/M, and S-100-bus computers,

as well as other computer brands and homebrew designs. Undocumented information about a particular computer (eg: machine-language routine entry points) is also useful.

General Format and Treatment

All submissions, including letters and other nonpaid material, should be typed, double spaced, and on white paper. All listings should be computer printouts using a fresh ribbon and unlined white paper only. (Look closely at your printout to make sure that the typeface is as dark and solid as possible so that we can photo-reproduce it for the magazine printing.) Cassette tapes or 5-inch floppy disks are acceptable, as are 8-inch CP/M floppy disks. No unused submissions can be returned without a self-addressed envelope and sufficient postage.

We will accept or reject each submission within three months of receipt, four months for articles. Full payment for short submission or advance partial payment for articles and larger submissions will be sent with the letter of acceptance. Completing payment for articles and longer submissions will be sent at the time of publication. Standard BYTE payment, except where noted above, is \$50 per magazine page of material.

We hope to hear from you soon.

Would you like to know more about being a BYTE author? If so, then send a large, stamped, self-addressed envelope to:

Author Information
BYTE Publications
70 Main St
Peterborough NH 03458

What's New?

SOFTWARE

Civil Engineering Package

The USA Civil Engineering package from Universal Software Applications Inc, 13001 Cannes Dr, St Louis MO 63141, (314) 878-1277, consists of three independent programs. The first is the USA COGO Civil Engineering Coordinate Geometry program that can be used for right of way surveys, highway design, bridge geometry, interchange design, construction layout, airport design, and other applications. Some of the COGO commands included are distance, locate/azimuth, locate/bearing, inverse/azimuth, points/intersect, azimuth/intersect, arc/line/points, arc/arc/intersect, area, simple/curve, and deflection/LS.

The second program is available for roadway design or subdivision design; it is entitled the USA Earth Design Earthwork Quantities program. It features independent input files for vertical curve, existing ground, proposed section, and design requirements files. Output is by section and includes the station, eleva-

tion of profile grade, assumed factors for cut and fill, area, volume and accumulated volume.

Finally, there is the USA Stress Structural Engineering Systems Solver which performs linear analysis of elastic, statically-loaded plane-framed structures. Structure, number of joints/members/loadings, joint coordinates, member incidences and properties, loading, member and joint loads, tabulate, solve, and stop, and a host of other commands are included. Output consists of the input structure data for each loading condition, the horizontal, vertical, and rotation components of deflection at each joint, the axial forces, shear forces, and moments at the ends of each member or optionally at interior points. The programs will run on Z80, 8080, and 6502 systems with a minimum of 32 K bytes of memory. The one-time lease price is \$1000 for individual programs, \$2250 for all three programs, and \$1750 for any two.

Circle 603 on inquiry card.

Apple II Statistical Program

Rosen Grandon Associates has announced A-STAT 79, a general-purpose statistical package for the Apple II. The system is a subset language of the P-STAT 78 package for mainframe computers. The program can have as many as forty-five variables for each of 2000 cases. A-STAT is designed for market research, survey analysis, social and economic modeling, simulations, or teaching statistics. Statistical procedures include file definition and descriptive statistics, frequency distributions, bivariate frequency distributions, the

ability to create square correlation matrices, multiple regression and path analysis of linear combinations of variables, permanent file modification, variable transformations, and descriptive statistics file production, and more. A-STAT runs on the Apple II or Apple II Plus systems with 32 K bytes of memory and Applesoft in ROM (read-only memory), or 48 K bytes and Applesoft software. One or more floppy-disk drives are required. It is priced at \$100 from Rosen Grandon Associates, 296 Peter Green Rd, Tolland CT 06084.

Circle 604 on inquiry card.

Inventory-Control System for Cromemco Computers

Feith Software has announced the release of its inventory-control system for manufacturers, wholesalers, and retailers. It is designed to run on any Cromemco- or CP/M-compatible system having dual floppy-disk drives, 48 K bytes of programmable memory, and a

132-column printer. It features parts explosions of finished goods and assemblies, automatic generation of pull sheets, and it will remove parts from stock after a production run. A full audit trail of inventory transactions is maintained. The capacity of the system on a double-density 8-inch floppy disk is over 2000 inventory items and 2000 transactions per disk. Reports are pro-

COBOL for the TRS-80

Radio Shack COBOL can make the TRS-80 Model II compatible with many existing COBOL programs, including some written for mainframe computers. This development system offers multikey ISAM (index sequential-access method) files. Features include a one-pass compiler, full screen formatting, full ANSI (American National Standards Institute) Level 2 I/O (input/output), program linkage, and segmentation. The Radio Shack COBOL development system, with a reference manual, user's guide, sample program, and floppy disk is priced at \$299 from participating Radio Shack stores and dealers, and Radio Shack Computer Centers.

Circle 607 on inquiry card.

polyFORTH-CP/M

polyFORTH-CP/M from FORTH Inc can run on nearly any 32 K-byte or larger CP/M-based system. The program resides on a CP/M floppy disk as a command file. When loaded, it finds and links up to the CP/M I/O (input/output) drivers, initializes itself, and responds "up" on the system console. The program runs in place of CP/M, utilizing only the CP/M I/O drivers. FORTH Inc's 8080 polyFORTH system on a floppy disk and a manual containing the interface material are provided. A CP/M utility that allows transferring polyFORTH blocks to a CP/M file and transferring a CP/M file to polyFORTH blocks is also provided. Source code is supplied for the entire system. polyFORTH-CP/M is available from M & B Design, 820 Sweetbay Dr, Sunnyvale CA 94086, (408) 243-0834, for \$4750.

Circle 608 on inquiry card.

vided for economic order quantities, reordering, ABC analysis, and stock status. The package comes on an 8-inch floppy disk, with a manual and program listings for \$250. For details, contact Feith Software, Cedarbrook Hills A-1103, Wyncote PA 19095, (215) 887-9780.

Circle 605 on inquiry card.

Z8000 Software from Hemenway

The RAZ8002ML resident assembler, which includes the LINKZ8002 linking loader, comprises a two-pass macro-assembler and a one-pass linking loader. They are designed to run under Hemenway Associates Inc (located at 101 Tremont St, Suite 208, Boston MA 02108,

(617) 426-1931) HA-CP/Z8000 operating system in a 32 K-byte system. The RAZ8002ML has full macroassembler facilities and conditional assembly of up to eight nested levels. It produces a listing and a sorted-symbol table that generates relocatable and linkable object code. The program uses a hash-coded symbol table and binary search of the mnemonic table, and it allows separately

assembled routines to share data for production of programs suitable for ROM (read-only memory) circuits. All Zilog-defined op codes are recognized, and a set of pseudo-operation instructions is included. The program is priced at \$350.

Circle 606 on inquiry card.