

NEW FORMAT

You probably don't need to be told that the newsletter looks a little different. I have switched to 12-pitch type to pack 20% more information to a page. My intent is to try and keep the size of the newsletter down to one ounce and therefore 15 cents for the Post Office. A similar concern is the reproduction costs. With the present membership size, the least expensive reproduction is still Xerox. That's costing 10 cents a printed page. A 10-page newsletter costs \$1.15 to produce and mail. A 14-page newsletter in an envelope costs \$1.75. This is a problem that has to be solved. Any ideas? It's not that I'm complaining. The growing pains that result from a little group becoming a sizable group (and hopefully a large group) are just bothering me a bit.

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MUG OBJECTIVES

My emphasis at the moment is on data transfer (both hardwired and via modem), the software vendors directory, documentation of PDS, the expansion of the membership, and a MUG library.

I've ordered some MOD I drives so I can generate and copy disks in that format. My feeling about a library is this. If you send me a disk with a program, I'll copy the program to a master library disk, copy the master disk to your disk, and then return your disk. No cost if you submit a program and also include return postage. You must also write me a note which states that this program is not a copyrighted product. There will be ABSOLUTELY no copyrighted material on the library disks. Even if I wasn't afraid of going to jail, free distribution of a product which someone is selling will only insure the continuation of the lack of detailed, "good" software. I'd appreciate, but don't demand, a text editor file or a note which describes the program and the lines that may need modification for different systems. Actually, "routine" is probably a better word than "program". If we get a library of BASIC and assembly language routines, we can create the programs together.

If you don't send a routine, a copy of the disk will cost \$20. This includes the cost of the disk, packaging and postage.

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COMMUNICATION VIA MDOS

Dave Land, at The Computer Center, 5815 Johnson Dr., Mission KS 66202 (913-432-2983), has a COMM program for general purpose communications. It can serve as the core for modem transmissions. While not cheap (\$250), it is written in assembly language for the Micropolis system. Source code and a sample assembly is provided. Prime mode of operation uses line edit files for sending and receiving data. Dave tells me that the price includes custom configuration, meaning all the personal help you need to get your particular application up and running. He may, if the market demands, produce a less sophisticated version in a "configure-it-yourself" form for a lower cost. The program is for Micropolis Version 4 PDS on either MOD 1 or MOD II. Computer Center also carries the I/O boards and modems. Future details for COMM, and for some other software for Micropolis which Dave has, will be reported on as soon as I receive the info.

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RUMORS

Is it true that CP/M, no matter what version or language, interpretive or compiled, doesn't know how long a file is? Doesn't tell you a file is write protected until

you try to close it? Has inferior error checking capabilities and therefore allows more errors on the disk? (Does Micropolis ever allow an error? I've never seen one.) Reads and writes more slowly to disk than Micropolis operating systems? Is it also true that Micropolis hardware is more durable and dependable than any other disk on the market? That the Micropolis Rigid Disk OSM is vastly superior to MP/M? Well, I don't know the answers for sure. What I do know is that the more I talk to users, dealers, and vendors, the more I become convinced that we've made a correct decision in buying Micropolis, and that the MUG should continue to concentrate on Micropolis operating system based S/W.

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MICROPOLIS NEWS

Karen Leeds is the new editor of the Micropolis News. The next issue is scheduled for April 1981. For all of you who didn't get your Micropolis drives as add-ons, and therefore don't get the News, drop Karen a line, along with \$5. That price is supposedly for a year's subscription, but the grape vine has it that no one has ever been asked for a renewal fee, or has been dropped from the mailing list. Contact Karen at Micropolis Corp., 21329 Nordhoff St., Chatsworth CA 91311.

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VENDOR DIRECTORY UPDATES

The CCA Data Management System, list #195 of last month's directory, is now manufactured and marketed by Custom Electronics Inc., 238 Exchange St., Chicopee MA 01013, (413) 592-4761. Custom Electronics was not on the Micro-Serve list. I am told that Creative Computer Applications no longer exists. Also change the address and phone for Micropolis, list #489, to 21329 Nordhoff St., Chatsworth CA 91311, (213)709-3300.

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RIGID DISKS

Micropolis is currently producing 12 rigid disks daily. Only one of these is allocated to subsystem (S-100 add-on) use. Distributors are quoting 5 to 6 months delivery time. Micropolis is still getting a few bugs out, however, and expects to push up production in the first quarter of 81 when the system is in top notch shape.

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LETTERS

Buzz,

Thank you for your letter of September 9 informing us of the existence of MUG. We are very happy to see an organization of this type surface, as the MICROPOLIS NEWSLETTER has failed to meet the needs of Micropolis users due to infrequent publication.

As a professional programmer and a user of both CP/M and Micropolis operating systems, I am fully aware of the vast superiority that MDOS and Micropolis BASIC have over other systems "tied" to CP/M. As a result, we have chosen to offer our software only to users of Micropolis systems at the present time. We are currently developing MICROSOFT versions to expand our customer base, but the translations are not easy in regard to file access and our MICROSOFT systems will run more slowly because of the CP/M operating system.

You may be interested to know that I have written an article that has been accepted by INTERFACE AGE Magazine that explains the features and functions of Micropolis

BASIC. Look for it in an upcoming issue.

Enclosed with this letter are descriptions of our currently-available small business systems written in Micropolis BASIC. In addition, we are offering the following development aid package consisting of several useful programs supplied in standard 8080 source code on diskette in LINEEDIT compatible files. The price of the development package including all the programs below and assembly listings with instructions is \$300.00.

DATASMITH DEVELOPMENT PACKAGE

BASIC TO LINEEDIT. Converts programs written in Micropolis BASIC to LINEEDIT compatible text files. Expands Micropolis one-byte op-codes to text and generates LINEEDIT line numbers. Allows use of the LINEEDIT global change features for program modification and is a good source of text for transmission via modem, etc.

LINEEDIT TO BASIC. Converts LINEEDIT text files to executable BASIC files. Expands op-code text to Micropolis one-byte op-codes and removes LINEEDIT line numbers. Use for re-converting files created with the BASIC TO LINEEDIT program.

(Note: The above two programs are useful (necessary?) for Dave Land's COMM. -ED)

VARIABLE LISTING. Generates a listing of all variables and arrays used in a Micropolis BASIC program. Used by system developers to determine which variables have been used and which are free for definition.

MULTIPLE MERGE. Works in the same manner as the Micropolis MERGE command, except will LOAD, MERGE, and SAVE up to 10 BASIC programs using the same MERGE code without operator intervention. Useful for serializing commercial programs or merging in hardware-dependent code in several programs.

SYSTEM LIST. Lists on the system printer up to 10 programs written in Micropolis BASIC without operator intervention. Automatically wraps on lines exceeding 132 characters and leaves margins at the top and bottom of standard 66 line forms. Each new program starts at the top of a new page. Useful to list entire systems consisting of several programs in BASIC. No need to LOAD and LISTP multiple programs.

Buzz, I will be glad to offer any help I can concerning the internal workings of BASIC or MDOS. We have had to investigate many non-documented aspects of the systems in order to write the above programs and to get the most out of the software. Therefore, please feel free to call me any time.

Burks A. Smith, President
DATASMITH Micro Software Systems, Box 8036, Shawnee Mission KS 66208, (913)381-9118

The other Micropolis BASIC programs offered by DATASMITH are:

PAYROLL (\$350) Eleven programs. Support 290 (hourly & salaried) employees (more if run in batches), ten department names, five fixed and five variable deduction descriptions, separate accumulation of regular, overtime, holiday and vacation time; and more. Generates Employee Master List, Data Input Forms, Comparative Reports, Payroll Report, Company & Department Totals, Paychecks, and W-2 Forms.

BOOKKEEPING (\$250) Eight programs. Generates Chart of Accounts, Comparative Period Reports, Checks with Automatic Posting, Balance Sheet, Profit & Loss Statement, Journal Listing, and Audit Trail.

Both systems run on MOD I or MOD II. Require 80-column terminal and 80-column printer and 40K of memory. Customization to your peripherals included in cost. Menu driven.

Burks is also developing data base management, inventory, accounts receivable, and other business software.

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Buzz,

Thanks for the back issues of the MUG. I hope your membership is growing so that the work you are putting into this project is adequately repaid. The lack of information about MDOS software is abominal and there is a great need for a news service such as the MUG.

I am also enclosing some information about some of the programs that my company has developed and/or is working on. We are developing commercial software for MDOS, CP/M and TRSDOS systems in the tax planning and the financial planning fields. (We have just gotten delivery of CP/M and do not yet have any of our programs converted.)

Vernon K. Jacobs, President

Syntax Corporation, 4500 W. 72nd Terrace, Prairie Village KS (913) 362-9667

The Micropolis BASIC programs offered by Syntax are:

TAXMATCH (\$350) Generates individualized checklists of tax planning options and strategies.

SHORTAX (\$250) Facilitates "What if?" types of tax computations and tax forecasting.

G/LEDGER (\$300) Generalized accounting that can be adapted to any type of business.

FINCAL (\$50) Computes present values, interest rates, accumulated amounts, bond yields, amortization schedules and depreciation schedules.

MAILIST (\$50) Stores, updates and prints 4 line names and addresses.

Programs in development:

EZYPLAN Helps you write reports, maintain files, and create financial forecasts.

PENPLAN Helps financial and tax consultants to determine the type of pension plan best suited to client.

LIFEPLAN Computes the amount of life insurance required for client.

In addition to developing software, Vernon is editor of TAX ANGLES, a monthly tax planning newsletter, and the author/publisher of the FINANCIAL SYSTEMS REPORT - a newsletter about computer services for financial and tax consultants.

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Buzz,

Particularly want to know more about how our MDOS & BASIC work so that we can write better BASIC programs.

Dick Cook

2407 West Gilmer, Ennis TX 75119

Dick: So do I. If any of you have documented bits and pieces of the system, drop me a line so we can put the puzzle together - stuff like record formats for various file types, entry points, space allocation, token definition.

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Buzz,
MUG is good! Could our group get better prices from Systemation if we order as a group? I am interested in at least three pieces. In Micropolis BASIC what is the memory address accessed by the IN(2) command on an MZ?

Howard M Shere
MSU, 410 E. Wilson Hall, East Lansing MI 48824

Howard: I've talked with several vendors and it seems that MUG members will be able to purchase at discounted prices from some of them. (See the Shapiro letter which follows) Systemation and DATASMITH are still considering the situation. Although the outlook is good, they don't want to disrupt agreements with their retailers and are trying to find a solution which is equatable to all. I'm sure I'll have a firm answer by next month.

You are addressing the I/O bus, not memory, with the IN and OUT commands. IN(2) transfers the data from I/O port 2 to the A-register. If you have a Bitstreamer II board, this port contains commands and status for the Serial-A channel. Port 3 contains the data. It's probably the same for a Bitstreamer I, although I don't have the manual.

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Buzz and MUGgers,
I joined the MUG late but have certainly enjoyed the four newsletters so far. I especially like the information about our language, i.e., the GOTO statement. I hope you continue to feed us these tidbits. Since I joined late, I have a long list of comments.

Would it be possible to type up a directory of all the members and update it monthly with the newsletter? I would like to know who is in our MUG and some facts about them. How many members do we have now?

In the first issue you talked about the Systemation compiler. I have been interested in it since it was first announced. All I get lately when I call is an answering device. Do you know when it will finally hit the market? I have a couple of friends who have gotten tired of waiting and have given up; they have gone to other compilers. In one issue you talked about the SIZES statement. Will the compiler have a SIZES statement and therefore variable accuracy? In reference to clearing the screen, let me offer my method. I use, as briefly mentioned in issue #2, the define function for my ADM-3a, i.e.,

```
DEF FNB=CHAR$(26)
```

Later in program, the screen can be cleared by using PRINT FNB. The only line requiring change between systems is the DEF line. You also referred to trying to locate a table in memory. I took the time when Ver. 4.0 came out to type my entire RES into LINEEDIT. I can therefore cram everything in close and have space inside RES. I use this space for a printer routine and an auto load program. But you could use it for your tables. I am willing to share my "RES" and also Ver. 4.0 with anyone owning a Micropolis drive; since Micropolis said they wouldn't mind as long as the person owned a Micropolis drive. Therefore there is no reason for anyone to have the slow Ver. 3.0.

Issue #2 also talked about rounding. In my amortization schedule program, I use the following and have accurate dollars and cents. . .

```
R=INT((R+ .005)*100)/100
```

This method uses the "any fraction 1/2 cent or greater-round up" rule.

Here is a cheap and dirty little program to check video (or printer) using the "Barber Shop Pole" effect written in basic:

```

10 DIM A$(0,250):REM Extends the length of only one variable
20 A$(0) = "ABCDE.....,..!=-.'-":REM make the number of characters in A$(0)
equal to width of your screen.
30 PRINT A$(0)
40 A$(0)=RIGHT$(A$(0),LEN(A$(0))-1)+LEFT$(A$(0),1)
50 GOTO 30

```

Now, one final request - would you leave a little wider left-hand margin (3 to 5 characters) on the newsletter for holes?

Joe Callaway
1728 51st St West, Birmingham AL 35208

Joe: It's certainly possible to create a MUG directory. At the moment, all I have is a name and address file. That won't give you the facts you want. Creating such a data base has been on my "to-do" list for some time. When it gets done, I still wouldn't want to publish it monthly - might not want to put it in the newsletter at all - because of the space it would take. We presently have approximately 80 members and it's been growing at 3 or 4 a week. To list the information I have on each of you might take a half page. The whole newsletter could be taken up with a list of just the new members for the month. Some members might not find that as interesting as others. The point to all this is; Yes, I need to create such a document. But information of large size may have to be distributed external to the newsletter. Other types of documents in this category will be the finished software vendors directory, extensive system documentation notes, listings, explanations, and operating instructions for large programs.

The Systemation compiler is still in a stage somewhere between de-bug and final proof tests. While we can criticize Systemation for their delay, we must appreciate their belief in not releasing a semi-complete package. It really is a large, powerful program. The compiler will have a SIZES statement. By the way, to all of you who try to call Systemation, you will almost always get an answering device. USE IT. Systemation is only a 2-man show and they feel that collecting the calls and answering them in one block of time is a better use of their time than to have their concentration interrupted many times a day. They will call you back. Leave two numbers if you are going to change locations where you can be reached.

I'm a bit uncertain about the need for the DEF function. It's true that I've been told before that one had to use it for terminals. In a short time I'll have a terminal so I can compare the differences in terminal versus memory map activities. For the moment, I don't see any functional difference between the following statements:

```

DEF FNB=CHAR$(26):PRINT FNB
or PRINT CHAR$(26)
or S$=CHAR$(26):PRINT S$

```

A multiple set of control characters doesn't seem to change anything. I use PUT 9 CHAR\$(27);CHAR\$(53) and PUT 9 CHAR\$(27);CHAR\$(52) to get my serial TI 810 in and out of 8 lines-per-inch mode.

Reassembling RES to compact it is a good idea for the single user who needs space, Joe. You have to change the EQU's in SYSQ1 and SYSQ2, of course. For the MUG, it may not be as useful. Some manufactures (Vector Graphic, I think) use parts of the "free" space for system software. If we change the Micropolis locations, we may not have a common structure that supports all members. It's sure worth looking into, however. Be careful with your distribution of RES, or any other

copyrighted software. Although you are probably correct about Micropolis' attitude, you should get a letter from someone stating that fact before you share your module.

I like your rounding algorithm, and have borrowed it for my latest billing system. Thanks. The Barber Pole routine is interesting. After playing with it for awhile, I offer these comments. You can extend the length of a single string variable by just a DIM A\$(250). You could also initialize A\$ to contain all characters and just print the portion of A\$ which will fit your screen. For example:

```
10 DIM A$(250)
20 A$="ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890-^[\\]
   !#$%&'() =~{|};:~*~./<>?"
30 PRINT LEFT$(A$,63): !for SOL, use 79 for VG
40 A$=RIGHT$(A$,LEN(A$)-1)+LEFT$(A$,1)
50 GOTO 30
```

And one final answer - Yes, I'll leave space.

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ED Note: I wrote Joel Shapiro asking about the availability of the data base program, published in last month's MUG, on MOD I; about the difference between it and DATABASE TWO, which he sells for \$125; and about other S/W he has available. His (edited) reply follows. (All letters are edited, by the way. Not because I'm trying to keep things from you, but because some parts only make sense to me.)

Buzz,

The updated disk (data base program) will be available on MOD I as soon as they are returned from the fella who agreed to copy them for me. I've been charging \$25 for the MOD I version because of the additional shipping, packaging, etc. As you know, the updated disks are being shipped with a new sort program that is much faster than the original. I don't have any idea when MICROCOMPUTING will publish the article describing it so the only way it's being distributed at this time is on the disk. For those members requiring many sorted lists the new routine will prove invaluable.

The basic differences between the published database system and DATABASE TWO are: A few more prompts and error traps, a machine-level sort routine and a super instruction manual. The reason the price is higher is for the hand holding involved and general overhead absorption. We would rather absorb our overhead with commercial sales than penalize the hobbyist and personal computer user.

Our plans for 1981 are to market all of our packaged programs for very low prices in "no-frills" packaging. The programs will still be very complete and thoroughly tested but the instruction manual will not be enclosed in an expensive binder and reduced cost packaging will be employed. We anticipate a maximum charge for any program to be around \$50. As the majority of our work is in the area of custom systems and software, many of our ideas (?) and routines will be available to the general user in this price range.

The majority of our programs will be available in Micropolis BASIC, CBASIC2 and BASIC-80. Source code is supplied for all programs as we want the user to be able to make changes if required for his application. We have several Utility Programs and Programmer Aids (Sorts, Searches, etc.) that will be available in Assembler source code. Machine-level subroutines will be supplied without source only when we feel that relocation could cause problems.

I could make our programs available to group members at reduced prices (low cost versions) prior to their release to the public. I'm enclosing data on three packages for a start. These will be available to members for \$30 each and are in the low cost package. The published price hasn't been set at this time but will be a bit higher. Of course, at this price I can't afford to send descriptive literature to prospective buyers, but the data can be contained within a future newsletter. The programs are available only on MOD II; we'll have to work something out for the MOD I users. Members should identify themselves when they order.

In addition, I've enclosed a description of a new sort program, WAMSORT.

If these are acceptable, we'll make more of our programs available to the group. There is a lot of software here and it should appeal to most users.

Joel Shapiro
Bonjoel Enterprises, P.O. Box 2180, Des Plaines IL 60018 (312) 297-2921

The Micropolis programs offered by Bonjoel are:

DATABASE TWO WITH UTILITY PROGRAM PACKAGE. Provides the following functions as an enhancement to the DATABASE TWO system.

- (1) A file recovery program which will allow the user to reset the end-of-file marker if power was removed from the computer during a data input operation.
- (2) A backup copy utility which allows the user to make copies of DATABASE TWO files with relative ease. This program sizes itself to system memory for speed in transferring data to the copy file.
- (3) A program that lists all of the data regarding the structure of a DATABASE TWO file for operator reference.
- (4) A program which lists all available files on a disk and is used to produce a report which will provide file location to the operator.
- (5) A program that generates a directory of all DATABASE TWO files and which can be computer accessed by application programs. The resultant file is compatible with all functions provided by the DATABASE TWO system.

The Utility Program package is sold only in combination with the DATABASE TWO system. The utility functions are called from the main program menus. The combined package is available on MOD-II media for \$150. (\$30 to MUG members in low cost packaging version)

DATABASE TWO FILE MODIFICATION PROGRAMS. Two sets of programs are provided which will enhance the use of the DATABASE TWO system.

One set of programs allows the user to download data from a data file into another file by selecting the fields to be transferred. Additional new fields can be added to the destination file resulting in a new master file without requiring the user to reenter data already in files. This also allows the user to modify existing data files in that fields can be added, deleted or changed in size.

The second set of programs allows the user to perform mathematical operations between fields in up to four different files and store the resultant data in any field or file he desires. As all of the programs are oriented to the operator, it is a simple means for the user to generate applications programs which require only the arithmetic manipulation of numbers.

As the files which result from the use of these programs are compatible with the DATABASE TWO system, all functions of that system apply as well. Available as a package on MOD-II media for \$100 (\$30 to MUG members in low cost packaging version). Requires a 48K minimum system.

INVENTORY ONE. This system, which consists of ten programs, is a complete basic inventory control system for the small business. The system, although compatible with DATABASE TWO, does not require the use of that system for its operation. The system is capable of creating, maintaining and modifying its files as well as providing many utility operations such as backup copy file generation, sorting, etc. Generates nine basic reports including inventory, orders, vendor listing, reorder status, receiving, stock locations, parts lists, cost lists and price lists. Use of the DATABASE TWO system in conjunction with the inventory files provides additional reporting and utility functions.

Intended for the business just starting into structured inventory control with the use of a computer, and is available on MOD-II media for \$125 (\$30 to MUG members in low cost packaging version).

WAMSORT. An assembly level sort subroutine called from any Micropolis 4.0 BASIC program. Capable of sorting any string array used in this BASIC. Capable of supporting an integer tracking array which can be used to retain record numbers in disk sorting operations. As a reentrant program it is loaded only once during program execution. Array definition can be changed within the program so many different arrays can be sorted in a program. In addition to sorting an entire array, can sort any part of an array, providing for block sorting for a group of elements. Occupies less than 750 bytes of memory. Assembler source code is supplied.

Available for version 4.0 BASIC only, on MOD II disk, for \$30 (\$20 to MUG members, full package).

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Buzz,

The reason I am joining is that we are having a very hard time finding Micropolis software. Our word processor is running under CP/M; however, we do not have a BASIC for our CP/M and I do not feel like buying any.

So, that leaves us with MDOS and its BASIC. My real problem is that I do not have enough time to structure some programs, even some simple ones such as a loan amortizer. We would be most willing to pay any reasonable fee for some programs that would run with Micropolis BASIC.

If the group includes anyone from the San Francisco area, I would appreciate their contacting me. Perhaps I could get together with them for some programs for the office.

Steven Guralnick, Attorney at Law
15 Southgate Ave., Suite 246, Daly City CA 94015 (415) 992-9200

Steven: I hope you're swamped with help as a result of your request. Also note the FINCAL program of Syntax Corp. mentioned in an above letter, as well as the rest of the software discussed in this issue.

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Buzz,

With a Vector MZ, how do you RUN a BASIC program directly (on boot)? I have a TRS-80 and RS232 at home. How can I run the hundreds of programs (BASIC and/or machine language) with the MZ?

Pierre Brehon
Residence La Vence Bt D, Chemin du Pignonnet, 13100 Aix-en-Provence, France

Pierre: I sent you a copy of the BASIC "Load and Go" program which was printed in the last Micropolis News. Systemation also sells an Auto Load program. I spoke with Tim Mathews, the Micropolis programmer who wrote "Load and Go", and he gave permission for reprinting for the rest of the members who don't get the News. Due to space limitations, I elected not to reprint it. I think I'll just include it on a library disk instead. As for the Tandy interface, it's a great idea. Seems simple enough - just put a modem on each machine's serial port and talk away. Software to implement it is not quite as simple. I'm working on the concept and will keep all of you informed.

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1/1/81

FIRST CLASS MAIL
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Published monthly by the MUG
Subscription (August through July) rates:
U.S., Canada, Mexico; \$12/year; Other, \$20/year
Mid-year subscribers receive current year's back issues.

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