MOD-II/12/16
THE NEWSLETTER FOR OWNERS OF THE TRS-80™
MODEL II/12/16 MICROCOMPUTERS

The purpose of the MOD-II/12/16 NEWSLETTER is to provide and exchange information related to the care, use and application of the TRS-80 MOD II, 12 and 16 computers (TRS-80 is a registered trademark of Tandy Corp.). The MOD-II/12/16 NEWSLETTER is a user-supported publication and it greatly depends MOD-II/12/16 owners as sources of information. Please send us your questions or comments, ideas, hints for programming, stories, etc., to The Editor, MOD-II/12/16 NEWSLETTER, 50 North Pascack Road, Spring Valley, NY 10977.

*** SCRIPFIX 1.4 ***

SCRIPSIT may be unique among word processors for one special reason -- its way of storing files is totally different from BASIC or other word processors which store simple files in a standard diskette directory. For some reason Radio Shack made the file handling arrangements of SCRIPSIT deliberately obscure.

SCRIPSIT displays its own special directory, and you can't just look at the regular directory of that disk and copy it's contents to another disk using the regular file-copying commands. If you can't read your SCRIPSIT directory using SCRIPSIT, then you're sunk if you can't find a utility program to restore your disk.

SCRIPFIX is exactly that. It was developed by the 3C Custom Computing Company, and is a simple program tnat repairs damaged SCRIPSIT disks. The SCRIPFIX program is distributed on a standard format TRSDOS 2.x or 4.x data diskette, and requires 2 disk drives to run (the company will provide special services to single-drive owners upon request). You just place SCRIPFIX on one of your good TRSDOS system disks, then run the program. You are prompted to enter the drive number of the disk to be repaired, then SCRIPFIX will run for up to several minutes, depending on whether the diskette has a scrambled directory, or if sector header information has been damaged. If the diskette has damaged sectors, this process will take somewhat longer. As each document heading is found, it will be displayed on the screen. When the entire diskette has been processed, you will be asked to press <ENTER>, and the process is complete. When a damaged sector is found that contains document information, the program will display a "DAMAGED" indicator alongside the filename. Documents that are marked DAMAGED will not normally be recoverable. SCRIPFIX for TRSDOS 2.x is priced at $69.95, and the version for TRSDOS 4.x costs $89.95. For more information contact 3C Custom Computing Company Inc., 34 Scenic Hills Drive, Poughkeepsie, NY 12603; (914) 471-9318.

Software One has released a couple of interesting items for those running XENIX.

SPOOLUTIL gives you control over the text in your Model 16's print spooler -- it's a menu-driven program which allows you to manipulate the reports waiting for printing in the spooler queue. SPOOLUTIL allows you to suspend and then restart printing or cancel it altogether, change the sequence of items to be printed, list the print queue, print additional copies, and more. The user needs no knowledge of XENIX commands to use the program effectively.

USERMENU is a system that creates a user-friendly menu for each operator of your XENIX system. It allows relatively unsophisticated users easy access to XENIX commands and applications software by making simple menu selections. USERMENU also controls and monitors access to your system -- a must in sensitive installations where security is important. The system recognizes each user and presents a customized menu for that user -- a menu which displays only the choices allowed to that user. In addition, USERMENU will (optionally) keep logs on the activity of all users. Generation of menus is simple, and absolutely no programming experience is required to set up USERMENU.

SPOOLUTIL and USERMENU each cost $99, but may be purchased together for a special combined price of $185. To order or for more information, contact the manufacturer: Software One, 985 Torrey Hill Drive, Columbus, OH 43228; (614) 279-8493.

*** 16-BIT CP/M FOR THE MOD 16 ***

Now you can put 16-bit CP/M on your Model 16 or enhanced Model II or 12. Trisoft, in Austin, Texas, has developed CP/M-68K version 1.2, designed to run on the 68000 processor of the Model 16. CP/M-68K features a keyboard type-ahead buffer, a 68000 assembler, an overlay loader, new utilities, and a C compiler (with both standard and IEEE floating point math).

Here's the interesting part: this 68000 CP/M will run in conjunction with CP/M 2.2. While your Model 16's 68000 chip is running CP/M-68K, you can load and run CP/M 2.2x on the Z-80 chip simultaneously! The software automatically senses the version and disk format of your CP/M 2.2 (Pickles & Trout, Lifeboat or Aton) -- operation is transparent to the user. Naturally, it also supports your hard drive. You can reportedly leave an application running under CP/M 2.2 on the Z-80 and go back to CP/M-68K to do another job at the same time.

Languages available for CP/M-68K include: BASIC-68K (at $295), and CBASIC-68K, PASCAL-68K, PASCAL-MT+, and FORTRAN-77 (each at $495). (BASIC-68K is a P-code compiler version, while CBASIC-68K and the other compilers all generate native 68000 machine code.) BASIC-68K compiles and runs in 128K, the four 68000 compilers all require 256K memory to compile programs (but the resulting executable code can be run on installations with less memory). All languages give you full access to as much RAM as you can stuff into the machine.

For more information, contact Trisoft, 4102 Avenue G, Austin, TX 78751; (512) 453-2233.

Here's a letter from Roma L. Bergen, Manager, Informations Systems, Diversified Paratransit, Inc., 1416 East Mission Blvd., P.O. Box 1329, Pomona, CA 91769; (714) 622-1313:

"We have been operating on the TRS-Xenix system for approximately 3 months now and I was very happy to receive my first issue (#12) of your publication. I knew others had to have some of the same problems/questions I was having, but had been unsuccessful in making contact with them.

I appreciated the letter from John Anderson of The Well-Bred Loaf, Inc., particularly in regards to Banners. I do wish, though, that he had specifically mentioned what modification he made. For the edification of both you and your readers, following is the one I found successful:

Edit the etc default file by typing:

```
ed/b/etc/default/1pd <ENTER>
S/1/Ø <ENTER>
W <ENTER>
Q <ENTER>
```

This edit disables the function and totally eliminates the banners.

I have found the save instructions given in the December '83 issue of Microcomputer News very effective. I would make one recommendation to readers though, and that is: forget the restore command. A much simpler and faster method of restoring data is to load the backup diskettes during step 3 (The Firsttime Program) during installation. This presumes, of course, reinstallation from scratch, but then so does any use of backup material on a Hard Disk system. When the system requests "First Floppy," go ahead with the install disks and then continue with your backups. Pressing "ENTER" a number of times is certainly easier than restoring each disk.

Profile 16 (Multi-user) is now available. A word of caution is called for. This system, exclusive of data files, requires 1.9 Mb of storage. I firmly believe that it is worthy of this space allocation, but then I didn't have to purchase new storage capacity.

I am looking forward to future issues and to hearing from more readers using Xenix."

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This letter is from Roger C. Gledhill, Gledhill Associates, 6675 Crane Road, Ypsilanti, MI 48197; (313) 434-9777:

"I enjoy reading the Mod II Newsletter. There are several questions that have come to mind over the years that I am finally getting around to writing to you about. In issue #3 you said that the issue was printed on the NEC Spinwriter. How do you get the underlining that you used? Can it be done with VEDIT or does one need a particular editor like WordStar? Also, how do you get the superbold type? What thimble is used and how is the character communicated to the printer? How do you get the double columns per page?

printers. In WordStar's INSTALL program, the NEC Spinwriter is listed in a menu -- you just select it, and your WordStar is installed all ready to use the NEC's underlining, boldface, super- and sub-scripts, reverse tractor feed (if available on your printer) and other special print features. The multi-column work in the Newsletter is still done by manual pasteup -- WordStar does do columns but you still can't put two columns of fully justified text side-by-side and have them both print out properly justified.

As to your problem with the Ready light -- does your printer have an On-Line switch, or a Reset switch? Most printers power up in an off-line condition, and you have to push an on-line button to get the Ready light to come on. Others, like the NEC Spinwriter that prints this newsletter, power up in an on-line condition and will display an Alarm light to indicate that you are off-line (due to paper out, ribbon out, or other problem). To turn the Alarm light off and put the printer on-line, you press a Reset switch. It seems that there must be <u>some</u> type of control on your printer that turns your Ready light on and off.

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This letter is from Stephen T. Dias, Whole Earth Energies, Inc., P.O. Box 11366, Fresno, CA 93726; (209) 445-1422:

I have several questions which I have not been able to get answered.

1) Using Profile Plus with Prosort, Proforms and Archives with either my Model II, with a single drive expansion bay, or my Model 12, two drive unit, I have experienced greater sales than expected. My data file of 500 records is full. I have started another data disk but of course, my record (file) count starts at record number one (1) again. Is there any way I can have profile start counting at any other number than one?

2) Using SCRIPSIT version 2.1.0, after I finish printing a document, I would like to immediately return to that file instead of going through the Menu/Open Document procedures. Is there a way to return directly to that file after printing?

3) Using R.S. Payroll version 2.0, I would like to add the option of having the program print my Quarterly Reports for California. Any good program additions out there?

4) Having several R.S. programs, I find it very difficult to remember, log or otherwise keep track of which new patches I have installed and what the current version number is this week. I sure would like a way each program would identify itself upon boot-up or a DIR call.

5) Does DOSPLUS II work with the Racet Computes MODEL II SPEED-UP program?

Editor's Reply -- There's no need to run SPEED-UP with DOSPLUS II. DOSPLUS II has already optimized so many of the Model II's functions so well that it is far faster than TRSDOS to begin with.

Your difficulty with record numbers in Profile is a typical one for people whose needs are greater than what their system can handle. The true record numbers of items in each separate disk file will always have to start at one -- the only thing you might be able to do is dedicate a small field in each

What causes and what is the cure for the fact that the NEC Spinwriter
5530 does not always come on when it is turned on? Often I have to turn
it off and then on again. I was told that it cannot be turned on at the
same time as the computer so I put it on a separate switch but still it
does not always show the READY light when I turn it on. I guess that I am
an idealist with my equipment and want it to work with perfect precision
every time. Can you or your readers help?

I have tried to get a detailed memory map of the Model II from Tandy
without success. They claim that this is proprietary. This seems to keep
me from having the complete control over the machine with Radio Shack
products that I have with CP/M. I would be curious to know if many of
your other subscribers are troubled by Tandy's secretiveness? There is so
little in the popular literature about the Model II compared to the Model
I, Model III and Model IV that it makes me regret the purchase choice and
it is keeping us from buying the Model 12 or 16. It is this fact alone
that has caused us to buy and recommend to our clients that they buy
other brands. If you would invite Bob Snapp to make his disassembly
available through you, it would be appreciated by many Model II owners.
Also, maybe you could publish a memory map that you acquire from him or
elsewhere. How about it? I agree with you that the Models II, 12 and 16
are among the best designs on the market but I get really fed up with
Tandy's proprietary attitude and what appears to be artificial
incompatibilities that they have created. It seems to me that their
machine would have been even more successful at every step of the way if
they had stayed with S-100 and CP/M compatibility. Many who do not have a
TRS-80 computer would buy their software, and many would buy their
hardware who presently do not because they do not want to be locked into
Tandy. Pickles and Trout is so protective about information that it does
not help to say that CP/M is available for the Model II. They are no
better than Tandy. They give no SYSGEN, MOVCPM, or BIOS as most other
companies do. Many of the other firms, such as COMPU-PRO will give the
purchaser all of the information in the world without trying to keep so
many secrets. If COMPU-PRO had the distribution network that Tandy has,
they would conquer the world.

Pickles and Trout have a program called TRS2CPM which transfers a file
from TRSDOS to CP/M but there seems to be no way to transfer a file from
CP/M to TRSDOS. Is there a technical reason for this? Do you know of a
program which is the inverse of theirs? The only ones I have seen are
quite expensive and the basic problem does not seem to be one that is so
complicated that it appears to be worth so much for a solution. Why do
you suppose P & T does not provide the software?"

Editor's Reply -- In regard to your comments about CP/M -- Pickles & Trout
is not the only CP/M running on the Model II/12/16. They probably can't
conceive of anyone wanting to go back to TRSDOS for any reason after using
CP/M, so it didn't occur to them to include a transfer utility that works in
that direction. We've been using Lifeboat CP/M for years with consistently
good results. Lifeboat CP/M still comes with SYSGEN and MOVCPM and also
includes utilities called PUTFILE and GETFILE that will transfer files both
ways between CP/M and TRSDOS format data disks.

For all of our word processing, we use a CP/M-based Model II with QCS 10Mb
Hard Drive and WordStar, driving our very old but still very hard-working
NEC Spinwriter, with an Elite 12 thimble. You don't have to use WordStar,
since most good word processors give you complete instructions on how to get
special printing effects like underlining and boldfacing on popular

record to your own assigned reference number for each customer or whatever. We don't know enough about Profile's capabilities to advise exactly how to do this. We hope that another reader may know the answers to your other specific questions about Radio Shack software problems.

We receive many letters from people whose needs have gone beyond the capability of their systems, or who can't seem to find a floppy-based program that has the capacity they need. People expect more from their computers these days, and the answer is the same for many people: the best thing you can do for your large data files on Profile -- or any other kind of system, from accounting to word processing -- is get a hard disk drive.

*** INCOME TAX SOFTWARE FOR 1984 ***

Here's one for TRSDOS users: from Gooth Tax Programs comes a collection called 70 TAX PROGRAMS, for use before filing in April 1985 (this material is from an advertisement by the manufacturer). These programs are designed as an aid to the individual or professional tax preparer, and are supplied on 3 diskettes for use under TRSDOS 2.0b. The programs are said to be designed for easy use and accuracy -- you just follow the form or schedule closely, and all inputs and results from calculations are confirmed in a screen display before printing. Prints in IRS-approved REVPROC format printing.

70 TAX PROGRAMS includes: Forms 1040, 1040A, 1120, 1120S, 1065 and 1041; Schedules A, B, C, D, E, F, G, R, SE and W; and Forms 1116, 2555, 2106, 2119, 2210, 2440, 2441, 3468, 3800, 3903, 4136, 4137, 4255, 4562, 4684, 4972, 4797, 5695, 5884, 6251, 6252, and 6765.

Also available is the TAX PREPARER HELPER, a collection of 12 programs that include Income Statement, Rental Statement, Supporting Statement, IRA, ACRS, 1040/ES, W-2's and others.

Prices are $99 for each package. For more information, write Gooth Tax Programs, 931 South Bemiston, St. Louis, MO 63105.

For those with CP/M-based systems, there's MICRO-TAX BRONZE and MICRO-TAX SILVER, two extremely sophisticated and comprehensive packages from Microcomputer Tax Programs, Inc.

MICRO-TAX BRONZE is a complete individual 1040 package designed for individuals or professional tax preparers. MICRO-TAX BRONZE allows you to organize your data entry in a sequence similar to manual tax preparation, or compute and input forms out of sequence if you wish. All of the program's functions are accessible from a main program menu. The BRONZE package handles forms 1040, 1040A, 1040ES, 2106, 2441, 5695; and Schedules A, B, C, D, E, F, G, SE, and W.

MICRO-TAX SILVER is a highly enhanced version intended for the professional tax preparer, and it includes every feature of the BRONZE package, with added features for handling a large client database, plus a wider range of forms -- every form listed for the BRONZE package, plus Schedules R and RP and Forms 1116, 2119, 2210, 2440, 3468, 3903, 4136, 4137, 4562, 4684, 4797, 4952, 4972, 6251, 6252, 4835 and 4255. Additional State packages are available to interface with MICRO-TAX SILVER, and both the SILVER and BRONZE packages print IRS-approved substitute forms.

Here are some features common to both the BRONZE and the SILVER package:

Menu Driven -- All functions are accessible from a system menu divided into two groups -- one for functions required to process each client, that is, to select schedules, input data, compute, and so on. The second group of functions are utilities used to operate the whole system -- for example, copying a data file or listing clients on a specific disk.

Print Questionnaire -- Lists the full set of data entry questions with the input prompts as they appear during the data entry process.

Select Schedules and Forms -- Schedules can be added, deleted or changed at any time.

Multiple Schedules -- Sometimes you will need to file more than one of a given form for a particular client. If your client has seven rental properties, you will need to file three Schedule E's; if that client has two employers for which he has business expenses, you will need to file two 2106's. The packages can handle up to 100 sets of additional forms and schedules for C, E, F, 2106, 4797, and 6252.

General Sales Tax -- The amount entered on Schedule A is compared with the sales tax deduction computed automatically. The program will use the LARGER of the computed amount or the amount you input.

Computing -- The results from the data entered and computations on all supporting forms are integrated into the final 1040 automatically. The program automatically computes: underpayment penalties, self-employment taxes for both taxpayer and spouse, income averaging, alternative minimum taxes, estimated tax vouchers, and investment interest expense.

Display Recap -- The program produces a very detailed display of the tax computation, including: total income, total adjustments, adjusted gross income, tax computation, total taxes, total credits, net taxes and credits, total payments against taxes, refund (or tax due) amount, percentage of this year's taxes paid in by the taxpayer, savings (if any) from utilization of income averaging, deductions from Schedule A, credit carryovers and capital loss carryovers.

Print Options -- The programs are designed to print the tax data in several ways: 1) on green-barred paper for IRS-approved computer-generated substitutes; 2) on continuous white paper for making a photocopy with a transparent tax form overlay; or 3) users of the SILVER package can print directly on tractor-feed 1040 forms. If you have entered more data than will fit on the standard form, the system creates a supplemental schedule and prints a cross-reference on the return itself. The supplemental schedules will be printed following the printing of the return.

Taxnet -- A teletext support network which a user can obtain by subscribing to THE SOURCE - an extra-fast way to receive updates or get help.

These additional features are included only with the full SILVER professional package:

Depreciation Module -- This is a complete Asset File Maintenance and Depreciation Computation System. The Accelerated Cost Recover System (ACRS), Section 179 Property and methods used prior to ACRS are included in the system. A separate Form 4562 and detail schedules are produced for each type

of depreciation. The total depreciation automatically carries to the applicable forms and schedules. The system automatically switches to straight line from declining balance if more advantageous. Calculates excess depreciation. You only have to enter the module once, as it alternatively rolls over from year to year. Methods of depreciation include: straight line, declining balance, sum of the years digits, unit of production method, operating day method, income forecast method, low income housing, expense under Sec. 179, public utility property, regular ACRS, and straight line ACRS.

Batch Compute/Print -- Rather than completely process an individual client's return from data entry to printing, some users operate in a "batch mode." Using the program in a batch mode, you can enter data for a number of clients at one session without computing or printing their returns, Then, at a later time, you can use the batch system to compute and/or print the returns in a group.

Transmittal Letter -- The program will generate a transmittal letter that you can use to inform your clients of their tax liability or refund due; give them filing instructions; and if estimates are applicable, give instructions as to the amount due and date due.

Both the BRONZE and the SILVER program require CP/M and two disk drives. The MICRO-TAX BRONZE package sells for $295 and the complete professional MICRO-TAX SILVER package costs $995. This is such an outstanding package, we've decided to sell it ourselves, so if you're interested, you can order directly from H & E Computronics, Inc.

*** ARTIFICIAL INTELLIGENCE ***

If you're interested in artificial intelligence, maybe you'd like to do some experimenting of your own -- with LISP, the preferred language of the artificial intelligence community, on your Mod II/12/16 (with CP/M). This is UO-LISP, the powerful microcomputer implementation of LISP, considered ideal for introducing newcomers to this powerful and innovative language. It includes all the usual LISP Interpreter functions, data types, LISP Structure Editor, Optimizing LISP Source Code Compiler & Assembler, Assembly & LISP code intermixing, Compiled Code Library Loader, numerous Utility packages, the high level language RLISP and a comprehensive 150-page user's manual. The package is available for $49.95. For more information or to order, contact Northwest Computer Algorithms, P. O. Box 90995, Long Beach, CA 90809; (213) 426-1893.

*** LET'S TALK ***

LET'S TALK is a communications package that allows easy file transfers between different types of computers. The program is currently available for the Model II, 12, 16 and Models III and 4, as well as the Tandy 2000, the IBM PC and PC/XT and the Compaq computer. LET'S TALK allows any of these computers to communicate directly with each other -- either in a "conversational mode" or to transfer files back and forth, including BASIC and VisiCalc files. The program can send or retrieve files of any size from unattended computers, at three different speeds. LET'S TALK sells for $179 and the package includes all diskettes needed for all of the computers listed. For more information, contact Good Software Corp., 12900 Preston Road, Dallas, TX 75230; (214) 239-6085.

*** AUTOMATIC PERIPHERAL SWITCHING ***

A new automatic peripheral switching device allows you to maximize the use of a single printer or modem by sharing it among several computers. This unit is unlike most switching devices, which either require that you throw a physical switch on the box or have special software installed on your computer to control the switching from one device to another. Instead, the automatic switch scans the incoming lines from up to eight computers looking for one making a peripheral request, and connects that computer to the peripheral.

If this device were combined with a good high-speed printer buffer (like the Printer Optimizer, described in our catalog) it would be a fantastic system for a large typing pool. The computers would connect to the automatic switch, the switch would connect to the printer buffer, and the buffer would connect to the printer. When a computer tries to send text to the printer, the automatic switch connects that computer to the printer buffer; the buffer very rapidly receives and stores the text being sent by the computer, and starts printing the job on the printer. As soon as the text is in the buffer's memory, that computer is freed to go on with other work, and the automatic switch can quickly continue scanning to see if any other computer needs to send text to the printer. If so, then the next operator's text is sent into the buffer queue, where they "wait on line" with any other documents waiting to be printed. This would be an excellent low-cost alternative to equipping a business with a more expensive multi-user system or local-area network. Operation is totally transparent to the user and requires no programming knowledge to use or install. The automatic switches, available for either RS-232 Serial or standard Centronics Parallel interface, come in four models: to connect two computers to one peripheral ($200), four computers to one peripheral ($250), six computers to one peripheral ($300) or eight computers to one peripheral ($350).

For an even lower-cost solution, there are also manual switches available -- you just reach out and flip a switch on the box to connect your computer to the peripheral, then send your data to the device. Prices for RS232 Serial versions are: $59 to connect two computers to one peripheral, $99 to connect four computers to one peripheral. Prices for Centronics Parallel versions: $99 to connect two computers to one peripheral, $179 to connect four computers to one peripheral.

Included with each order is a free book, "Serial and Parallel Explained." For more information or to order automatic or manual peripheral switches, contact the manufacturer: Rose Electronics, P.O. Box 742571, Houston, TX 77274; (713) 240-ROSE.

*** TYPESETTING WITH YOUR PERSONAL COMPUTER ***

A professional typesetting job can do wonders for the visual impact of important press releases, annual reports and other documents. It still looks a lot better than the best text that a letter quality dot matrix or daisy wheel printer can produce. For several years now, people have been using microcomputers to prepare text for computer typesetters. New services have also been operating that receive files prepared by customers -- either transmitted by modem or by shipping a diskette -- and typeset the text, returning the results to the user by overnight delivery the following day. This has made it feasible for many people to use typesetting for more kinds of documents than ever before. But until now, it would be difficult to get top-notch results without a lot of experience.

The way that these services make typesetting affordable is simple -- they make the customer do all the work, and the customer also takes the blame for any errors made. All that the service does is run your file through their typesetting computer. <u>You</u> will have to input a lot of typographic codes embedded in your text, most of them a bit more complicated than ordinary word processing codes. When you send in your prepared text, your codes are translated to drive the typesetter, selecting the typestyle, point size, line spacing, line width, and dozens of other functions to select special symbols, do tabular material, set foreign language accents, and do special effects like making a neatly ruled box around a block of type. The typesetter simply acts on the codes you input. To make your text come out right might take a lot of trial and error -- and you pay for typesetting all the errors. And since you don't see the results of your transmission until the following day, it would take quite a bit of experience to get consistently good results.

Until now, that is. One such typesetting service has put together a unique manual for their system that goes far beyond being just an instruction manual. The company is Intergraphics, of Alexandria, Virginia, and their telecommunications typesetting service is available for a flat $2 per thousand characters typeset, with a minimum $5 plus shipping (the telephone transmission is toll-free). A fully automated system developed by Intergraphics handles processing of numerous simultaneous transmissions at 300 or 1200 baud, as well as typesetting code translation and billing. All text is returned to the customer the same day if received before 2:00 PM Eastern Time.

The new edition of their manual, called "High Tech Typesetting," is not just a manual -- it's a book that reveals the mysteries of typesetting to those with no previous knowledge of this ancient art. This book is very possibly one of the best books ever produced to teach the fundamentals of typesetting to a beginner, and it includes hundreds of additional useful tips on layout techniques, instructions for how to do your own pasteup, and just about everything a novice would need to know to produce a book, newsletter, or camera-ready advertisement. The book starts with the elementary commands for point size, typeface, line length, and line spacing (called leading). The user learns how to embed instructions into a document using any word processing software. Each section mentions the most frequently made errors, and shows numerous examples to show what kind of type a sample coded text file will create when it is run through the typesetting system. Here's what their samples look like:

```
{f385}{p14}{l16}{m20}Chapter One{ql}
{a6}{p11}{l12}Introduction to Commands{ql}
{a4}{f383}{p9}{l10}The four basic commands for typesetting
correspond to the print wheel, margin, and line spacing on
a typewriter.{ql}
```

Chapter One

Introduction to Commands

The four basic commands for typesetting correspond to the
print wheel, margin, and line spacing on a typewriter.

Also included is a complete list of 215 typefaces, hundreds of sample formats, instructions on communications equipment, a quick reference card with all typesetting codes shown, editorial terms and conventions, how to make corrections, design hints, special effects like kerning, expansion, reverse print and slanted type, and a detailed guide to the most difficult part of typesetting -- copyfitting (this means making a certain amount of copy precisely fit a certain amount of space). The book even includes

several BASIC programs to help you estimate type sizes and other measurements.

The "High Tech Typesetting" manual is 7" x 10" with 224 pages and is available for $15. For more information contact Intergraphics Inc., 106A South Columbus Street, Alexandria, VA 22314; (800) 368-3342 or (703) 683-9414.

*** TANDY'S CP/M 3.0 -- AS REVIEWED BY PICKLES & TROUT ***

Pickles & Trout sent some information that they felt might be of interest to our customers, so we thought we'd pass it along here:

"If you remember, Tandy announced CP/M 3.0 (officially called CP/M-Plus) for TRS-80 Models II, 12, and 16 in January 1983. Our copy finally arrived "hot off the press" on May 15, 1984. As we were eager to see what it could do, we immediately sat down at a Model 12 to try it out. This is a brief report of what we found:

1. There are two versions of CP/M-Plus, "banked" and "unbanked." We quickly learned that the banked version requires 96K of RAM and would therefore not work on the Mod II. So we called Tandy, Fort Worth. Their technical support staff told us that the banked version would only run on a Mod 12/16B that had been altered with a "RAM upgrade kit" (price and availability unknown). It will apparently never work on older Mod II's and 16A's, the machines that the majority of Mod II/12/16 owners have.

2. So we took the "non-banked" version out of the box and used it to make backup copies of the master diskettes. This was easy (although slow), since they provide a copy disk utility that works something like the GS option in the P & T Menu. Once we started to play around with their utilities, it was also easy to find the system's main problems/bugs. Here's a partial list of what we uncovered:

   ● Don't expect to run this system on a single-drive computer. You can't even PIP files on a machine of this type.
   ● Don't try their 19200 baud rate option. It is too far off frequency to work with standard RS232 devices.
   ● Don't try to program <F1> and <F2> with 20 characters each (as they say you can), since each key holds only 19 characters. We might also add that Tandy's documentation doesn't tell you how to program these keys, they can't be edited, and you lose the ability to use CTRL-A and CTRL-B.
   ● Don't try to figure out what you did wrong to create a non-bootable disk (which we did more than once while playing). It seems to be impossible to determine how a diskette is configured unless it can be booted.
   ● Don't expect much help from the 37 page pamphlet that describes Tandy's part of the system. This documentation assumes that everything will work successfully every time and that you're a CP/M buff.

3. We haven't fully tested the system's hard disk utilities, but we've done enough to determine that it is very inflexible. You can't put more than one logical drive on a disk, you can't store TRSDOS and CP/M files on the same disk (a strange omission given Tandy's past dedication to TRSDOS), and you have no control over the number of directory entries, etc. on a hard disk logical drive.

11

4. Having played with the system on a Mod 12, we decided to test it in a standard work environment, on different machines and with application software. We first took it to an older Mod II. CP/M-Plus booted with a LOST DATA ERROR. Tandy's documentation doesn't even mention this error (nor the SEEK error we subsequently got on a third Model II). So we moved on to yet another Mod II.

5. We then faced the problem of choosing an application package with which to experiment. The basic difficulty here is memory. The unbanked version of CP/M-Plus only leaves the user with a 47K TPA. This is too small for many programs now on the market and many others will only work with greatly reduced speed and efficiency.

   We decided to try it with WordStar because we knew that it would fit and that many of you use it. We quickly discovered that Tandy's VT52 terminal driver is not on the WordStar menu, meaning that we had to use MicroPro's "custom install" option. Normally, this isn't too much of a problem (at least not for experienced CP/M users), but due to difficulties with Tandy's documentation, it took 3 of our people more than 3 hours to figure it all out.

6. Tandy's CP/M-Plus assumes that all storage media are always perfect, so there are no utilities for testing/checking hard or floppy disk drives.

   To sum up, although there are undoubtedly some neat features in CP/M-Plus, most of them are only available if you can run the "banked" version of the system (i.e., if you own a Model 12 or 16B) and, in general we don't believe that they warrant the extra costs involved in installing an "upgrade kit." We also don't believe that the "unbanked" version of the system will ever be viable, simply because its 47 Kbyte TPA is too small for too many important programs. These are the reasons that we decided not to implement CP/M-Plus when it first became available."

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