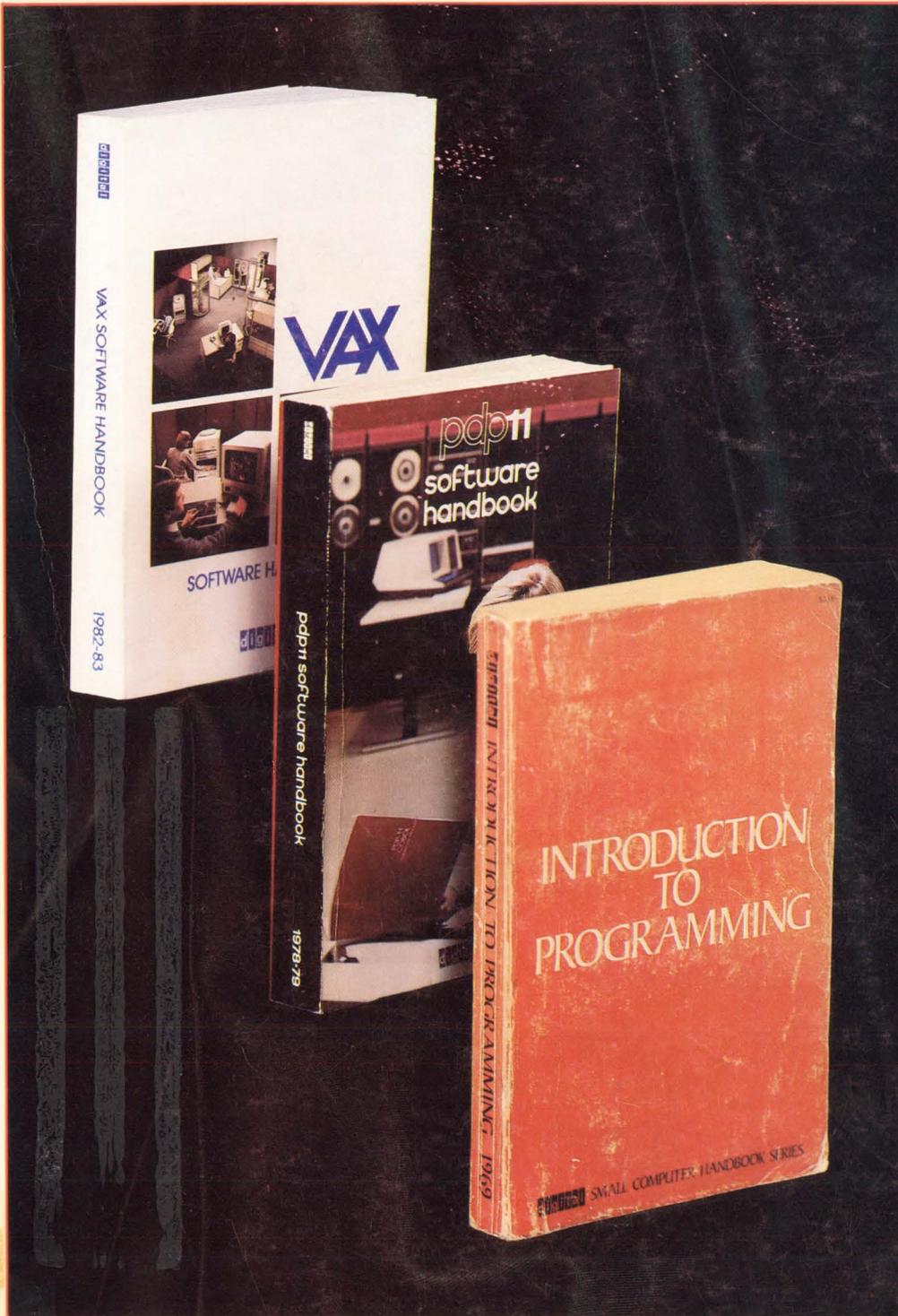


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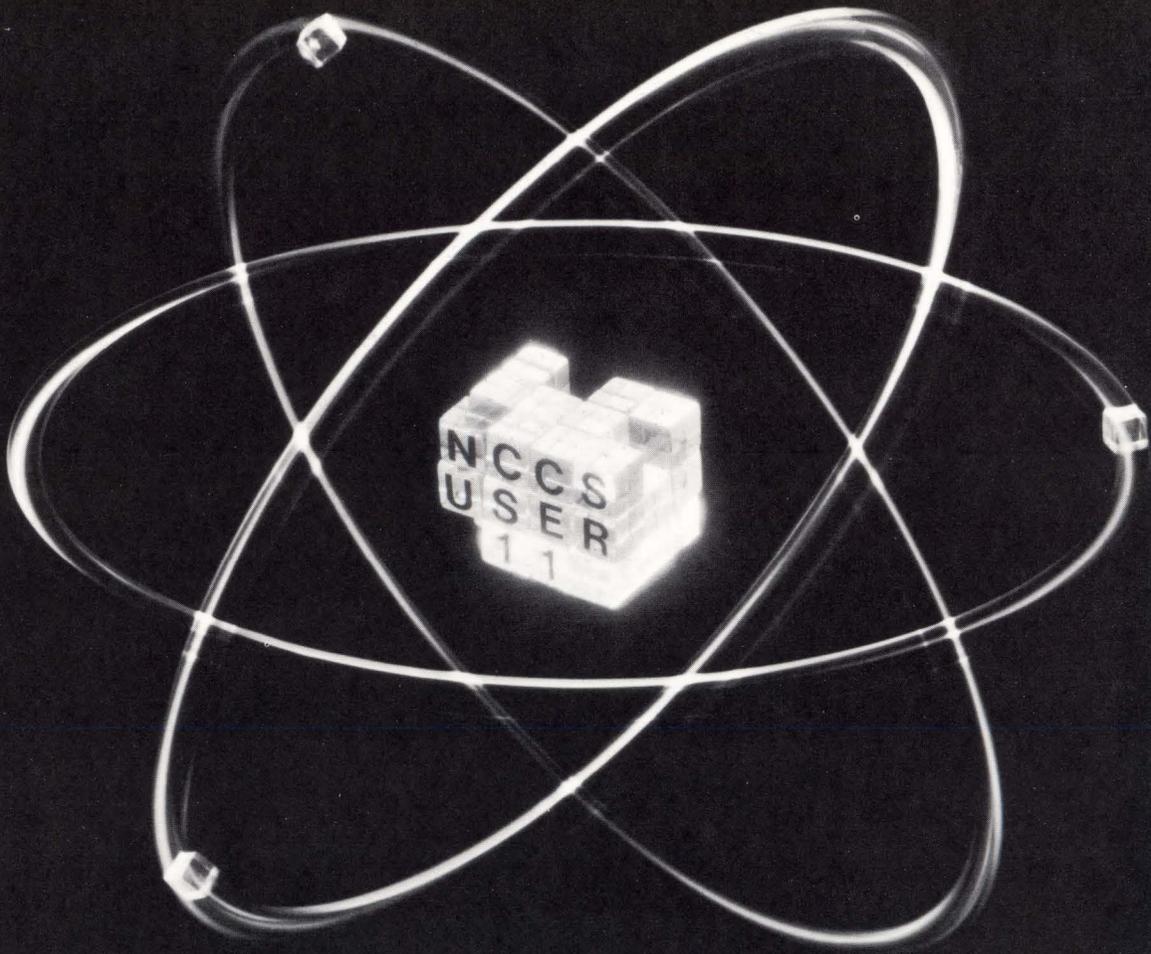
• VOLUME 1, NUMBER 1 • THE MAGAZINE FOR DEC USERS



INSIDE:

- New DEC Disks
- Do They Still Use Calculators?
- What I Learned About RT11
- A DIBOL Subroutine
- Megabyte Memory Now Available for Older PDP-11's
- A Timesharing COBOL for Small PDP-11's
- The Bridge
- DEC Timesharing (1965)
- Optimizing RSX-11M Terminal Response By The Use Of A Funnel Task
- DEXPO 82 & Beyond
- Interactive Russian Language Tutorial
- DEC Personal Computer Families
- ? Why TECO ?
- ? How TECO ?
- Structured Programming in DEC BASIC
- Word Processing with DEC Computers — Hints & Kinks
- More . . .

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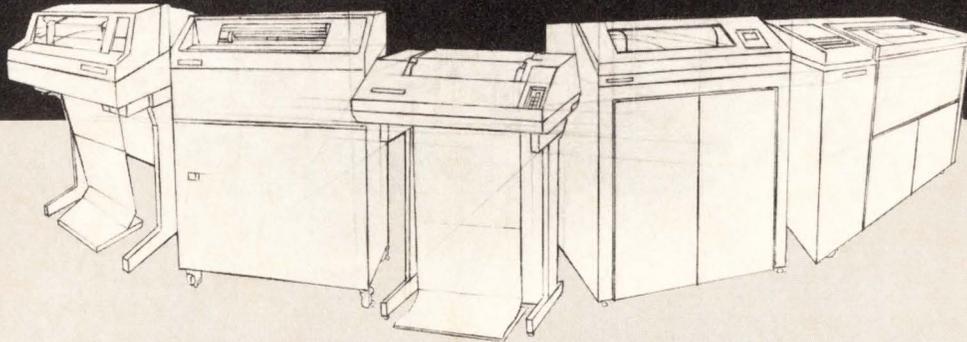
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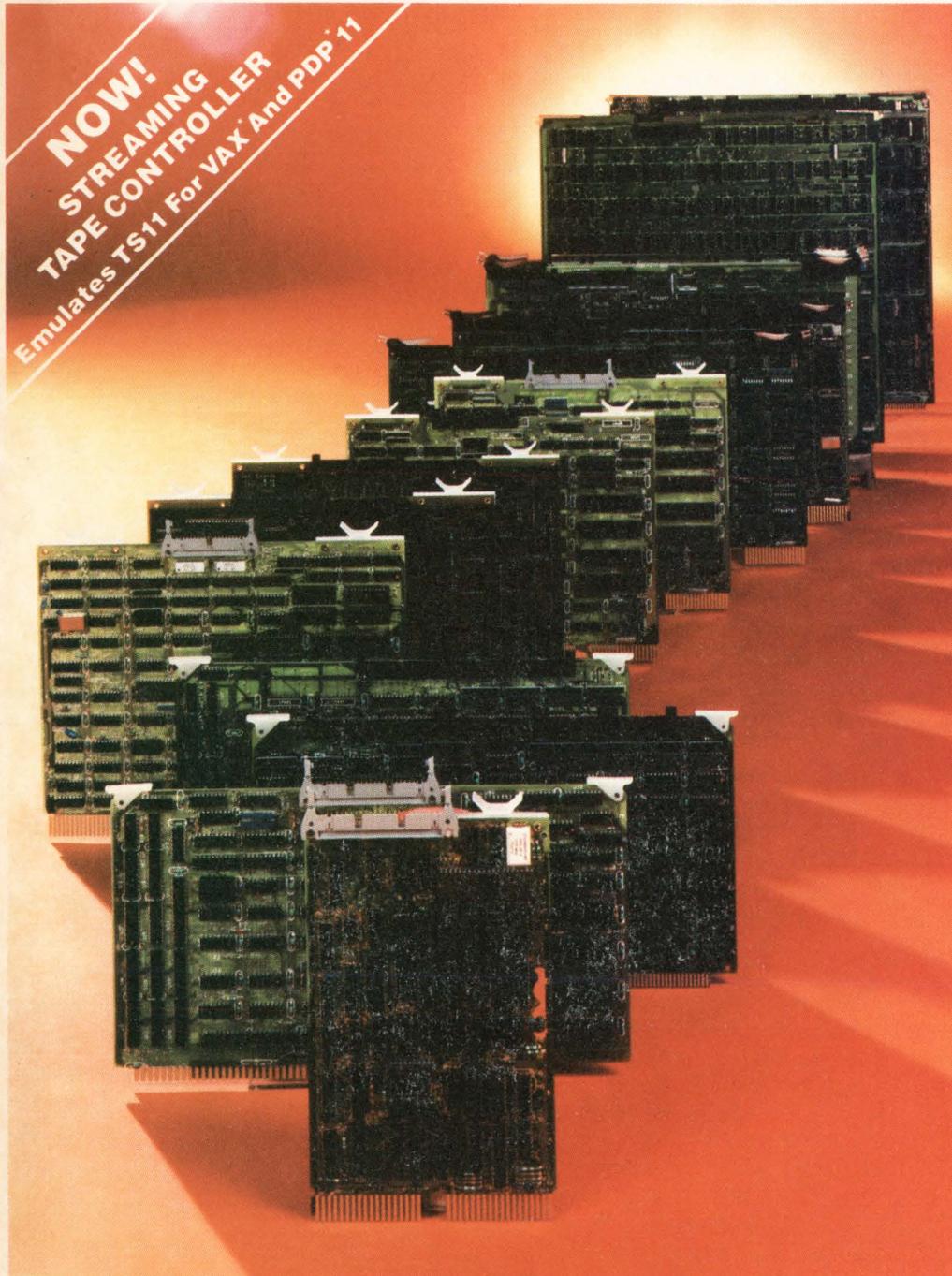
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CIRCLE D27 ON READER CARD

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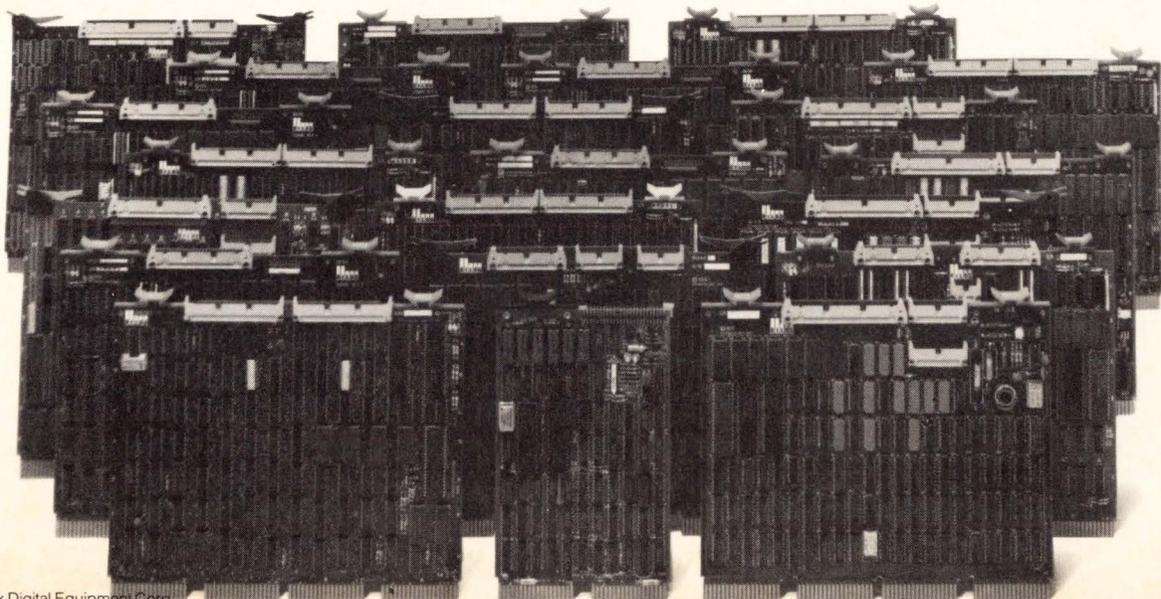
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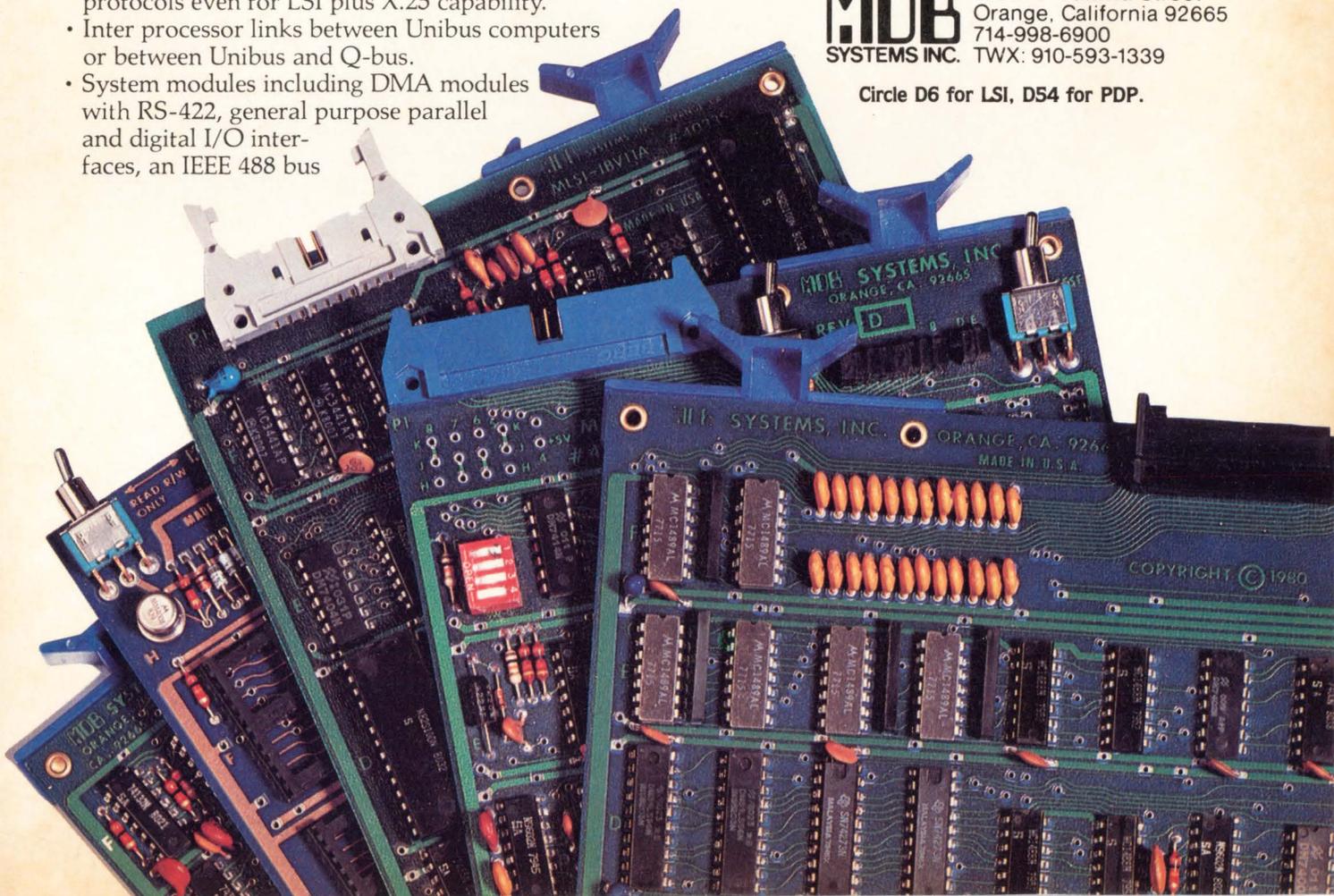
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CIRCLE D4 ON READER CARD



the larger 11's and VAX machines because of its very low cost per byte. The \$26,000 system price and \$19,000 add on cost makes it very inexpensive for those applications that need lots of data storage.

The UDA50 and the new disk drive offerings from DEC mark a turning point in DEC's disk history. These are the first large scale disk offerings from DEC that are competitive in every respect and the UDA50 opens a new controller technology. We can expect that the conventional disk subsystems now on DEC computers will lose value quickly when volume deliveries begin on these systems late this year. Opportunities will exist for some bargain hunting in the disk marketplace both before and after these new disk drives begin to appear. The UDA50 may be foretelling the demise of the massbus on the PDP-11/70 in favor of the UNIBUS UDA50. In the Atlanta DECUS meeting there were some ideas expressed that the 11/70 replacement will be a smaller (single board?) version of the '70', repackaged without the massbus, but with either (both?) a UNIBUS or a Q-BUS. Got that friends: a Q-BUS 11/70 with a UNIBUS UDA50! maybe, maybe not.

The disk drive technology is moving fast and DEC seems to be keeping pace, or maybe leading the pack. Next issue we will discuss the performance of these new systems and compare them to the existing disk drives available today. I'll also bet that the competition will be introducing some new hardware to compete with (read: more bang for the buck) these new, exciting products from DEC.

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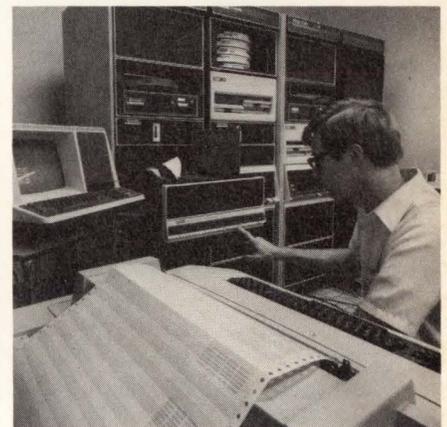
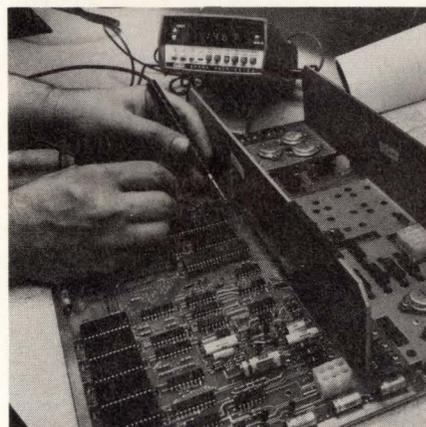
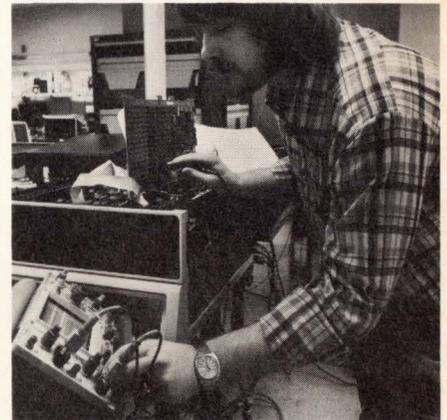
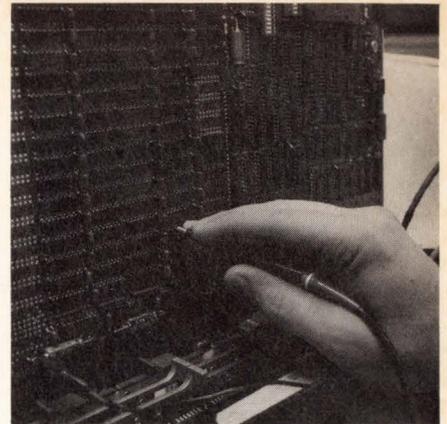
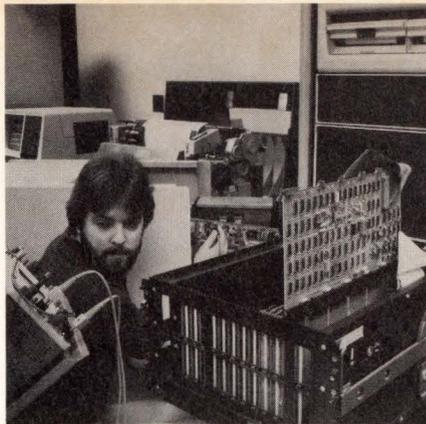
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| Any Combination of Speed, Parity, Bits, Flow Control, Field Selectable, Non Volatile Store. | ✓ | X | X |
| All Terminal/CPU Vendor Support Standard. | ✓ | X | X |
| Per Channel Flow Control In Band/Out of Band. | ✓ | X | X |
| EIA Controls. | ✓ | X | ✓ |
| Terminal Activated Diagnostics from any Terminal, Password Guarded. | ✓ | X | X |
| Terminal Activated Statistics from any Terminal. | ✓ | X | X |
| Channel Priority Selectable per Channel. | ✓ | X | \$200 |
| Link Speeds to 9600B. | ✓ | ✓ | ✓ |
| Remote Configuration, Diagnostics and Statistics Password Guarded. | ✓ | X | X |
| Price (based on US Domestic List). | \$1200 | \$1400 | \$1850 |

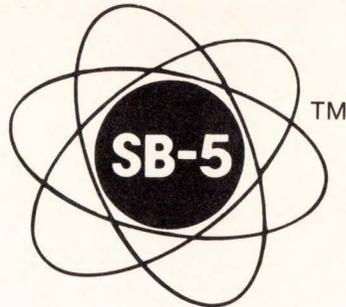
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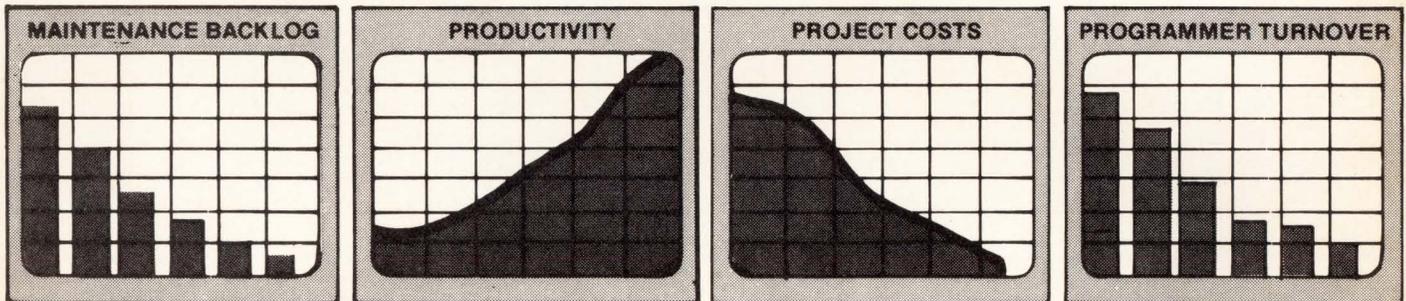
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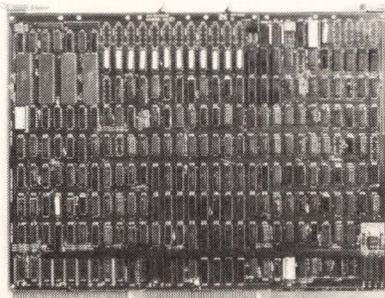
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Our new controller is fully embedded and designed expressly for the VAX-11/750 CMI bus structure. Yet it costs thousands less than DEC and other "boat anchor" designs. This software transparent controller emulates the DEC RH750 Massbus adapter with attached RM03, RM05, RM80 or RP06 drives.

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DEC USERS

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THE CHALLENGE:

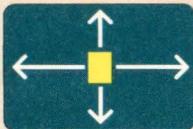
Almost any word processing software package will have such features as menus, editing, spelling error detection, list processing, cut and paste, automatic word wrap and automatic pagination. . .

. . . But can you tell the difference between run-of-the-mill software and a system that is really special?

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THE QUESTIONS:

1 EDITING



Which kind of editing operation is quickest to execute and easiest on the eyes of the word processing user?

- Full screen editing allowing for easy cursor movement around the screen?
- Moving the cursor around by doing a line count?
- Editing on the bottom line of text only?

2 DOCUMENT LAYOUT



Whatever document format you choose. . . you want to see what the finished article will look like. Should you. . .

- View it on the screen as it would come out of the printer?
- Run it through a pre-processor to see what it looks like and then if you like it, print it?

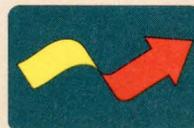
3 KEYSTROKES



Using a well designed w-p system, how many keystrokes should it take to execute the most often used w-p functions?

- One easy stroke with no codes?
- Two or more with complex w-p codes?
- Three or more?

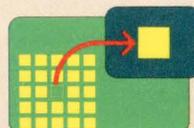
4 FLEXIBILITY



As the business manager of your company, you would like to find w-p software that you can tailor to your company's specific needs. Should you. . .

- Look for w-p software that allows you to change and add menus, and change function keys?
- Write your own custom software?

5 RETRIEVAL



If you want to retrieve information quickly from a large database, which w-p software should you choose?

- One that can access a particular record by going to it directly?
- One that searches through all the records on the database sequentially until it finds the right one?

6 COMPATIBILITY



As a manager of MIS, you want a w-p system that can be integrated with any other DEC compatible application software. Should you choose w-p software with. . .

- ASCII formatted files?
- Software which requires non-printing characters in it's file system?

7 MATH



Your company has a number of financial applications and is looking for a w-p package with math capabilities. Should you choose. . .

- On screen calculating allowing for editing, storing and recall of equations, calculations integrated with your word processing applications?
- Software where the math capabilities are tied to the list processing module?
- A separate math package?

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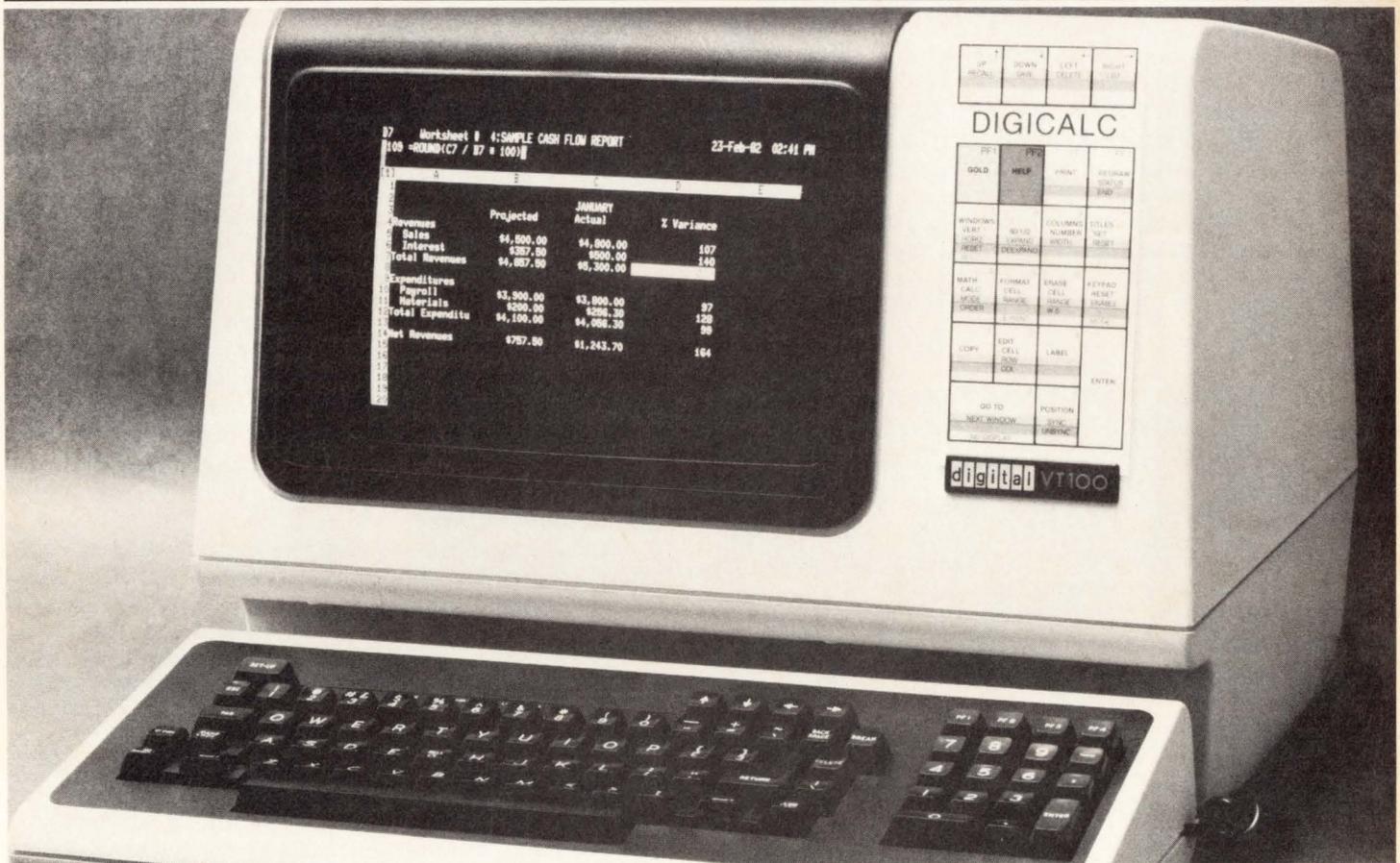
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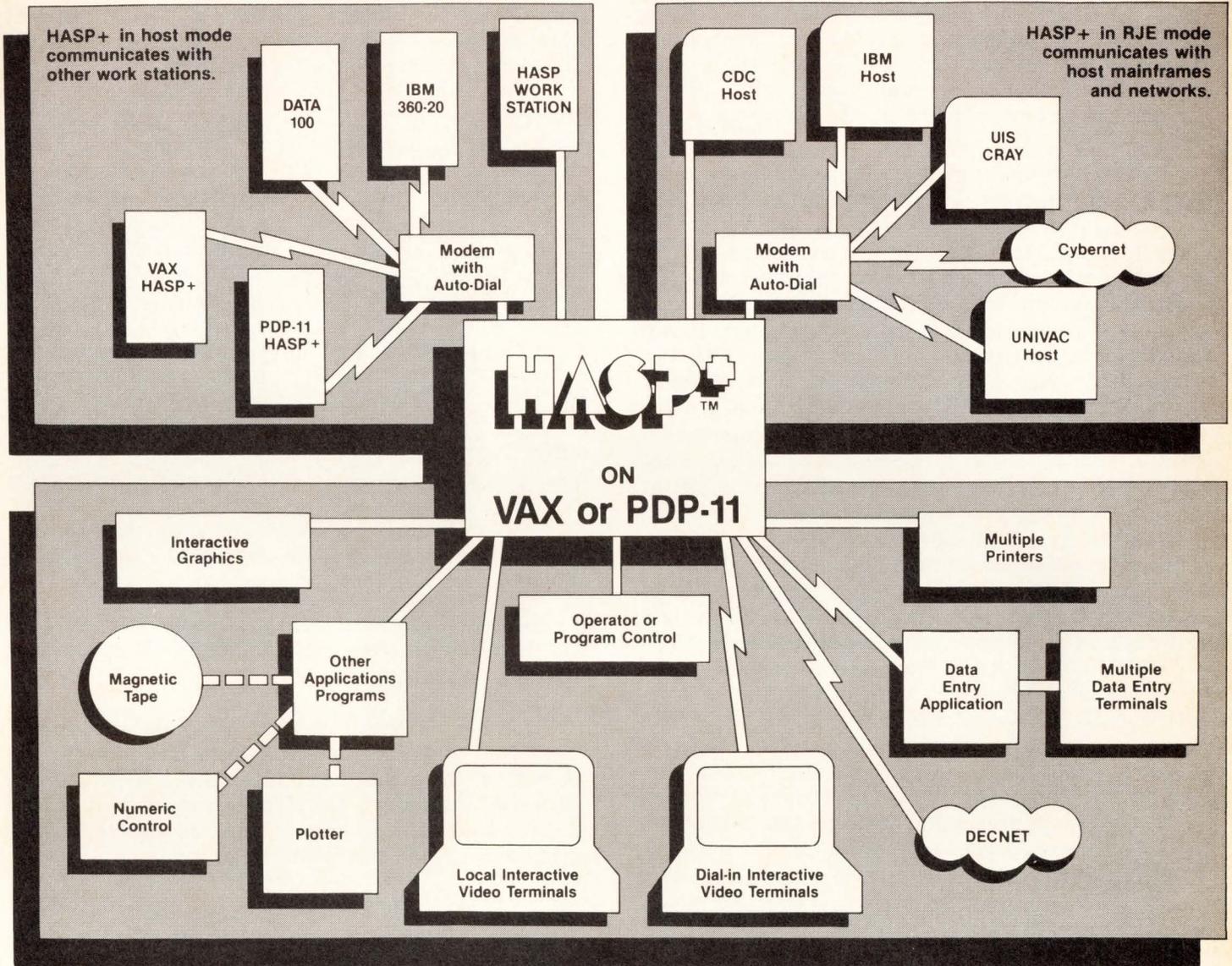


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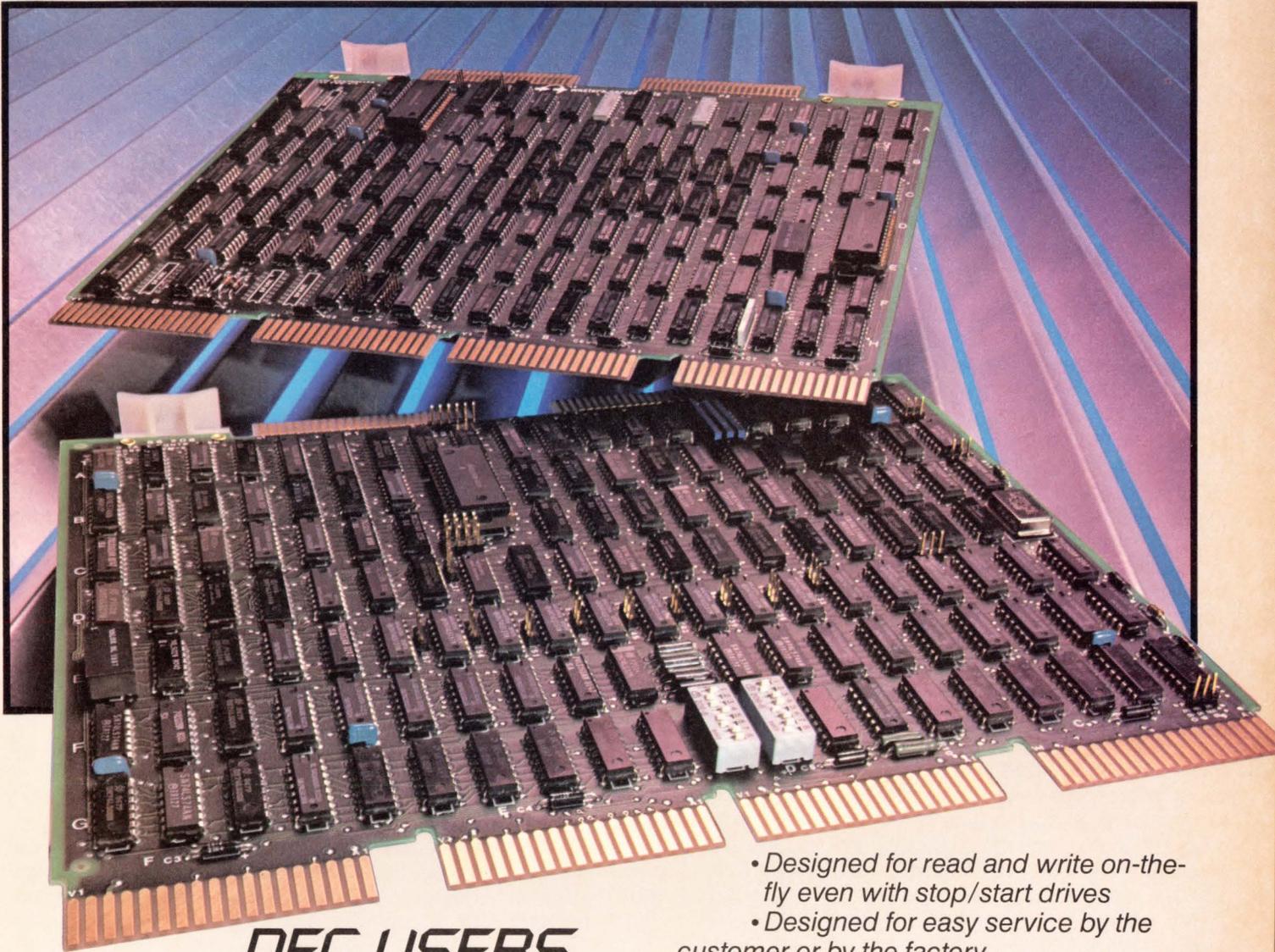


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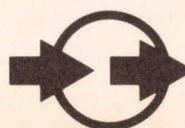
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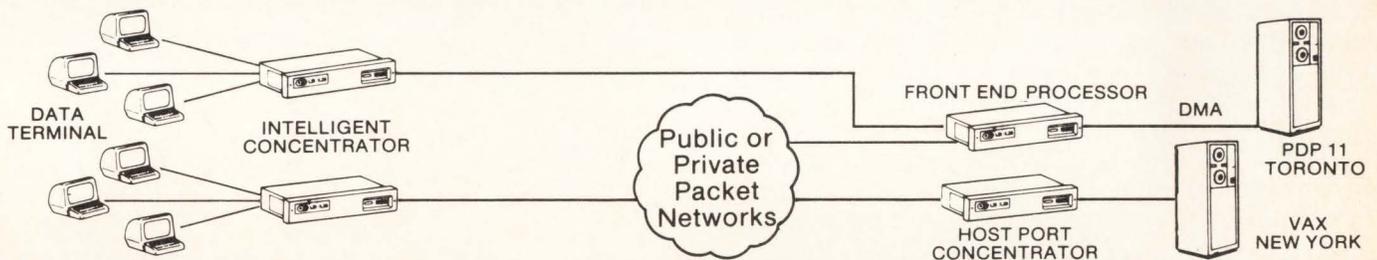
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| T04/C | Mag tape streamer coupler | TM11/TU10 |
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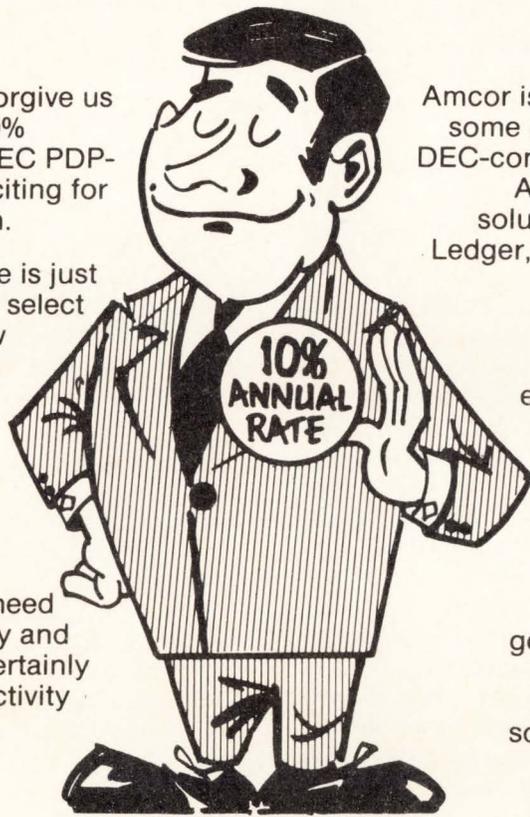
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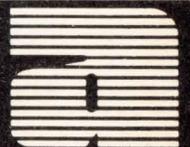
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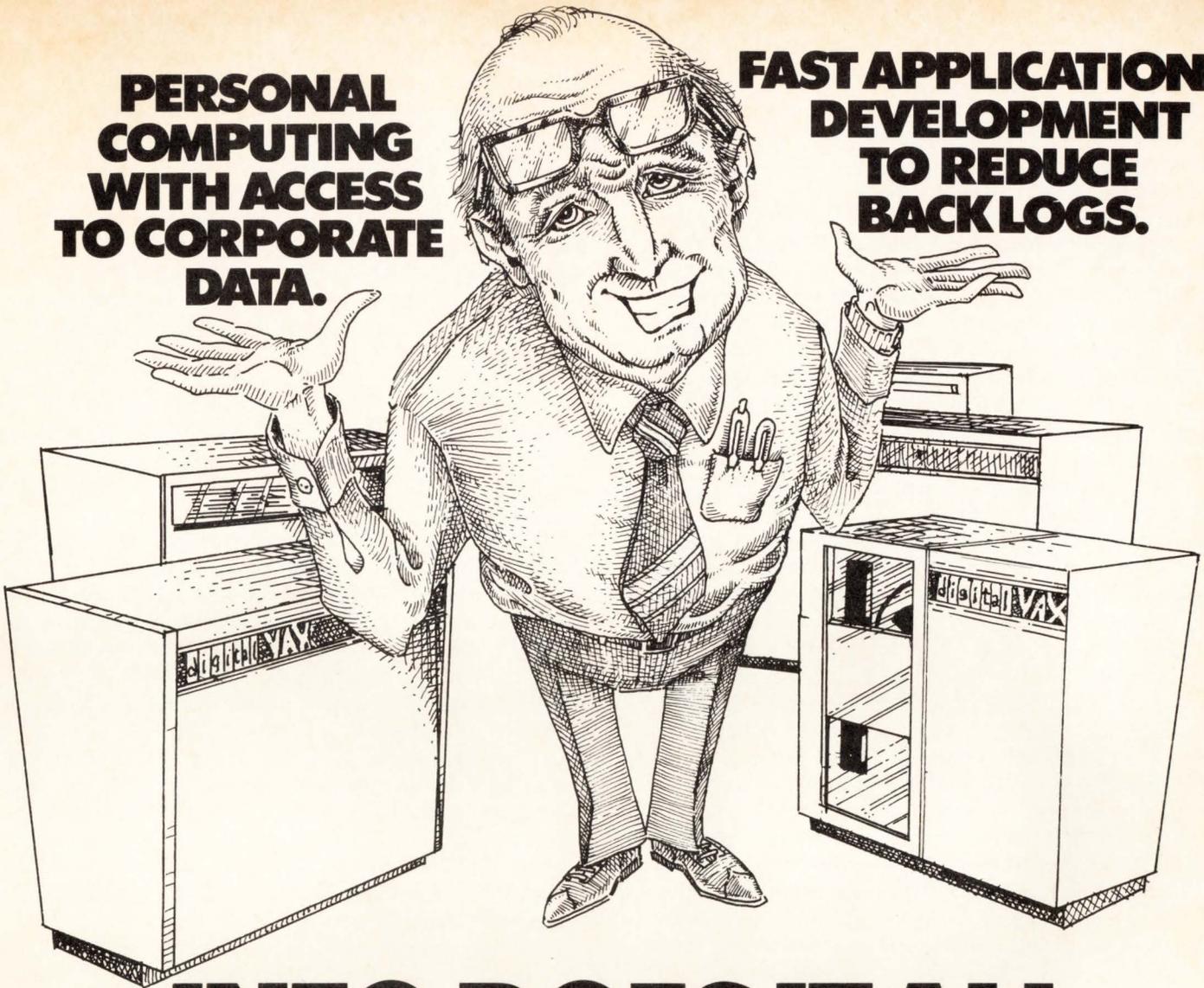
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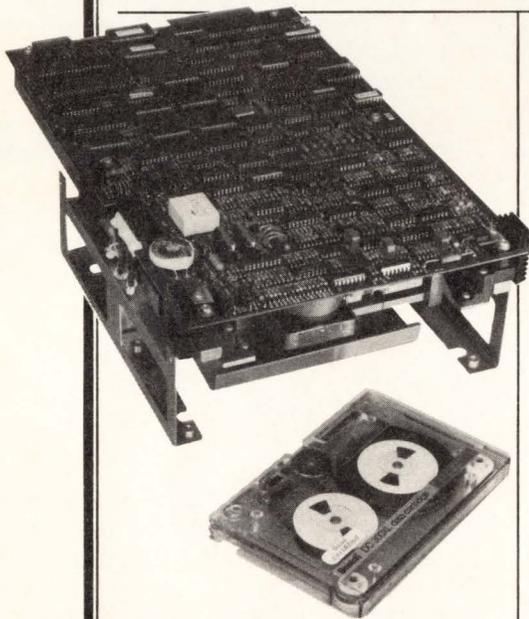
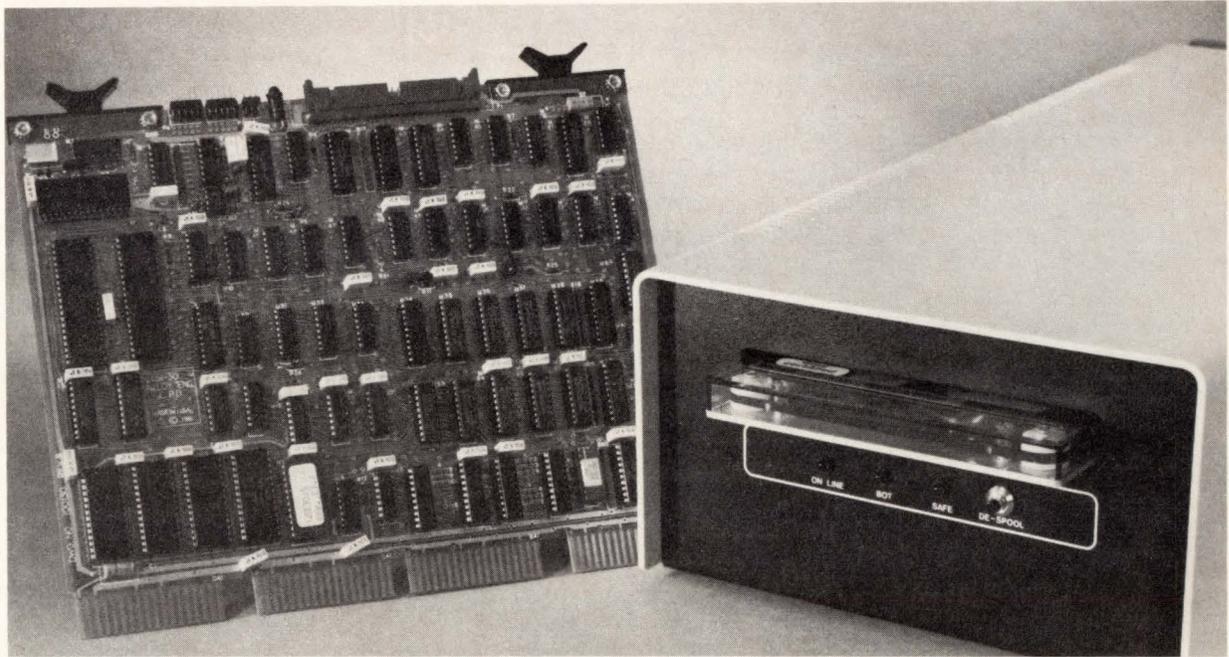


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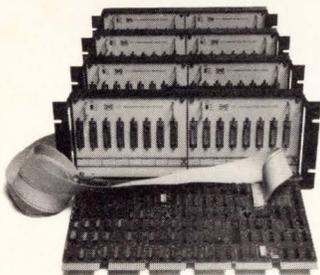
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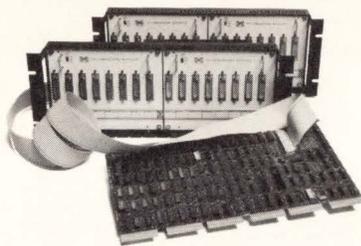
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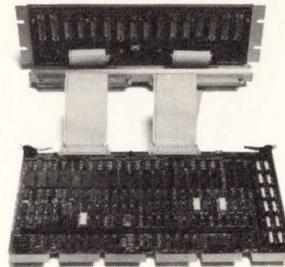
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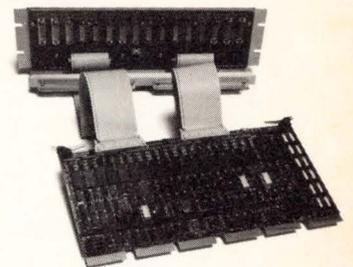
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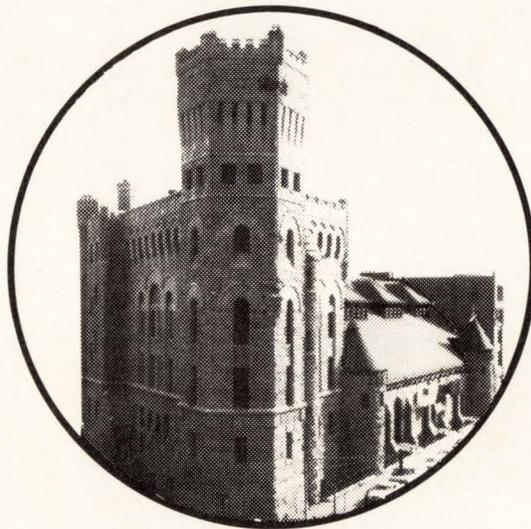
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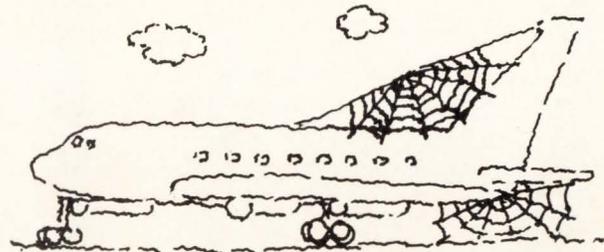
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Editor's Note: This article was reproduced exactly as we received it from the author. This was done to show you just how good word processing output can look directly from a computer. Word processing can be done using DEC's WPS-8 (a PDP-8/Floppy) word processing system alone or connected to PDP-11's and VAX. Data Processing Design's **WORD-11** runs directly on PDP-11's and VAX and is a superset of WPS-8. This article is applicable to all of these systems.

WORD PROCESSING WITH DEC COMPUTERS HINTS AND KINKS

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ABSTRACT

This paper discusses various handy hints and kinks associated with the use of Word Processing Systems on the PDP-8 and PDP-11 systems. While developed primarily with WPS-8, the routines and hints offered generally are applicable with WPS-11 and other commercially available systems currently utilizing the WPS-8 format. The discussion presented below consists of the various matters presented at the Spring 1980 Symposium in a Panel Discussion with Ms. Vicki Ann Rose, Digital Equipment Corporation, Merrimack, N.H., Mrs. Nancy Evans, Federal-Mogul Corporation, Southfield, MI and this author.

LIST PROCESSING HINTS

FIELD IDENTIFIERS AND DATA PROCESSING

The "lists" which are developed in list processing often are useful for data processing activities as well as many of the Word Processing and List Processing purposes. For PDP-11 users, many of the data files developed under Word Processing may be addressed directly by data processing. However, for PDP-8 users the WPS-8 files (which are saved in a format similar to COS-310) cannot be addressed directly by COS-310 or OS/8. While the WS-200 series originally was designed to provide for direct communication between Word Processing and COS-310, this feature no longer is supported and the WS-200, as with all other WPS-8 systems, requires conversion to utilize the files. (Conversion utilities for both COS-310 and OS/8 are available through the DECUS LIBRARY. These utilities transfer list processing type files between the various systems. The conversion procedures are not discussed in this paper.)

It is most helpful, therefore, to maintain the LIST FIELD IDENTIFIERS as upper case characters. While the DEC WPS manuals show the field identifiers (e.g. - <field1>) as lower case fields, such was not meant to be a required form for identifying the fields. The use of lower case by DEC was a throwback to computer manuals which used lower case to indicate operator decisions, as opposed to upper case which indicated mandatory acts.

Since each of the WPS-8 systems utilizes special characters to indicate lower (and upper) case shifts, any conversion program is going to require considerable additional (and wasted) time in order to perform the conversion, as each of the special characters will have to be stripped from the field before the data can be used by the data processing system.

If there is even the remotest possibility that your list files will be used in data processing, it is important to avoid the use of hard [the RETURN key] returns except at the end of a field identifier. In other words use one identifier for every line of text. For example:

DO NOT USE

```
<NAME>John Doe
<ADDRESS>123 Any Street
Our Town, U.S.A.
00123
```

DO USE

```
<NAME>John Doe
<ADDS1>123 Any Street
<ADDS2>Our Town, U.S.A.
<ADDS3>
<ADDS4>
<ZIP>00123
```

In many conversion programs, and nearly all data processing programs, the carrier returns within a field will be read as a terminator, and the information following the return will be lost during the conversion or use by the program.

While the use of several fields may appear somewhat cumbersome at first, the benefits soon become very apparent. Also, the more available fields, the easier it is to edit and to SORT!

SELECTION SPECIFICATION - TO SELECT ONLY IF SOME CHARACTER EXISTS

The DEC manuals fail to disclose the selection specification which can be used to select a record only if a field has information. The wild card specifications presented by DEC are <?> and <*>. The <?> is used to replace a letter (i.e., it must be preceded or followed by some character other than a <?>). The <*> is used to define a field as containing ANY OR NO characters.

From time to time it is necessary to select a record ONLY IF A GIVEN FIELD HAS SOME INFORMATION. There are two possibilities; the first example given is the most reliable:

- (1) if<field5> =<?><*>
then process record
- (2) not if<field5> =
then process record

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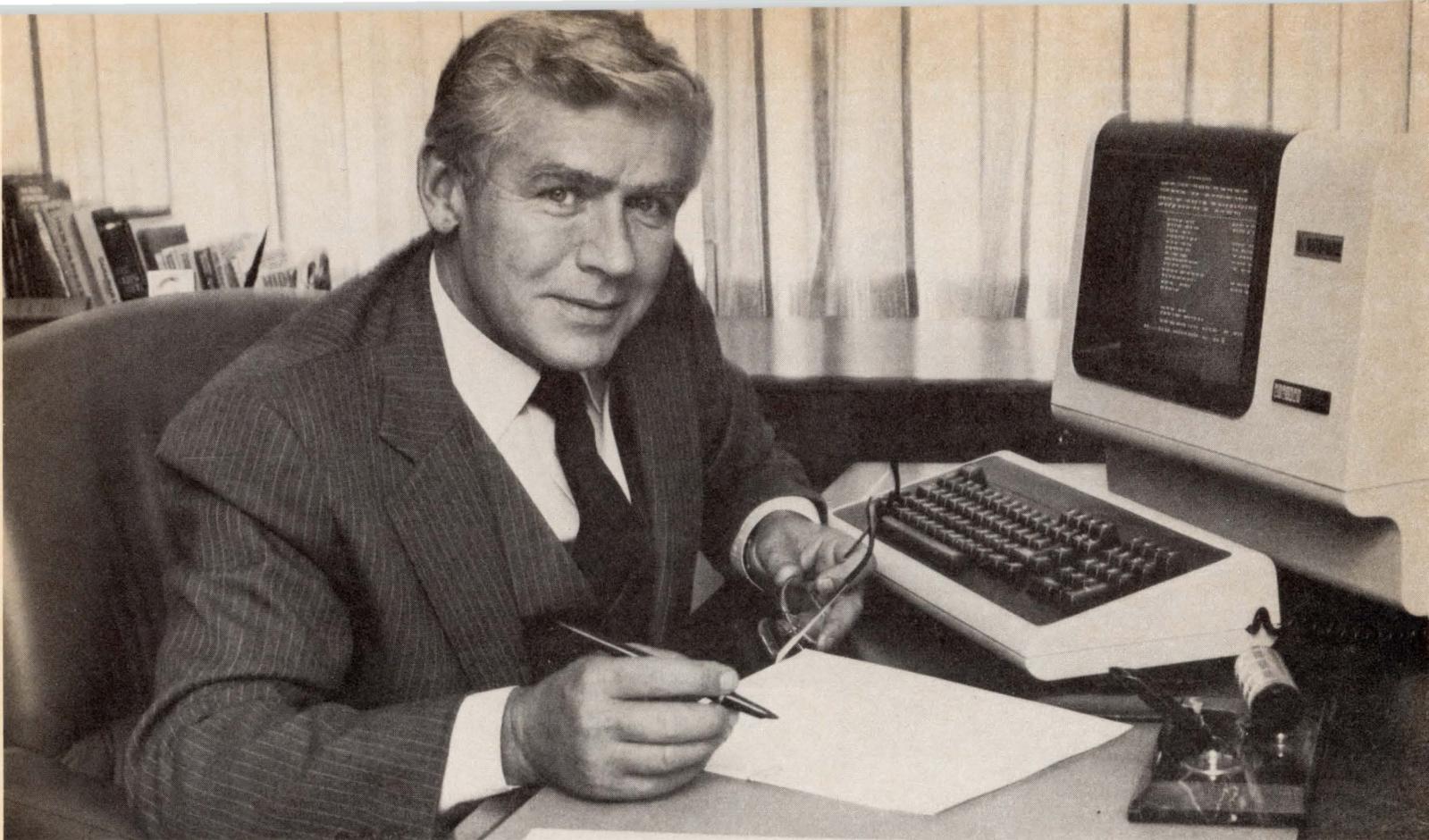
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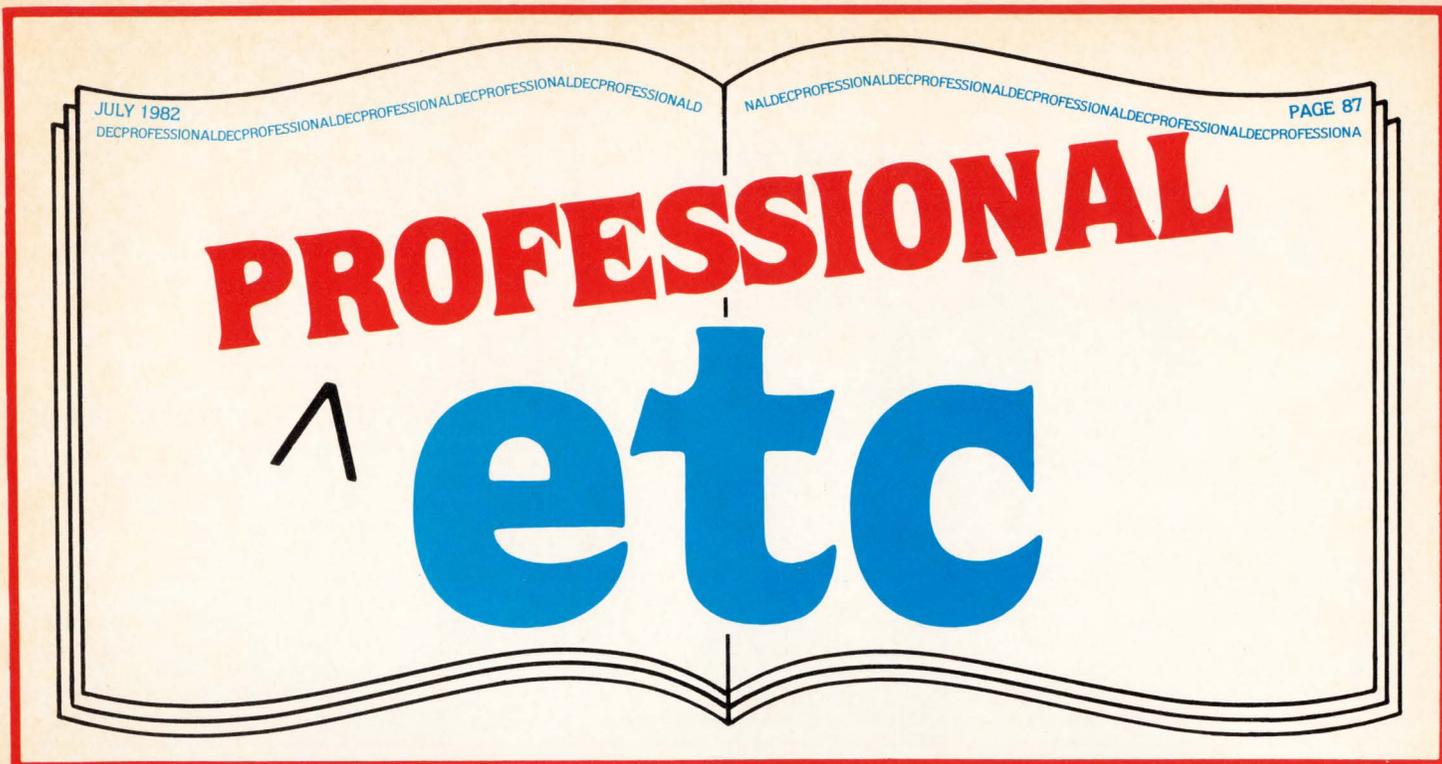
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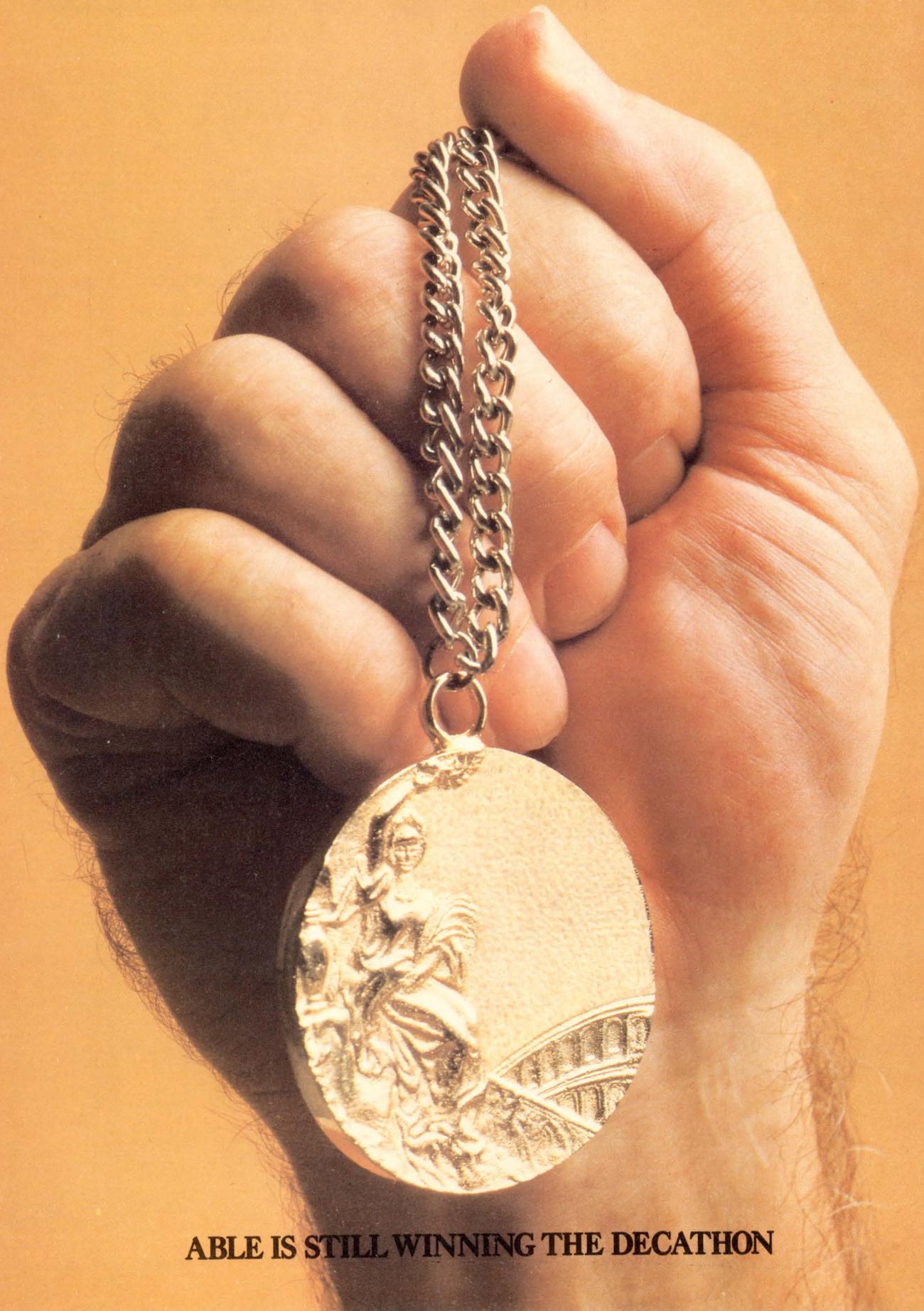
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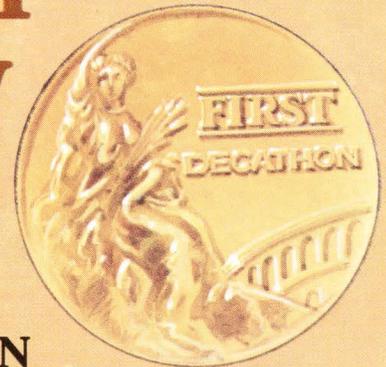
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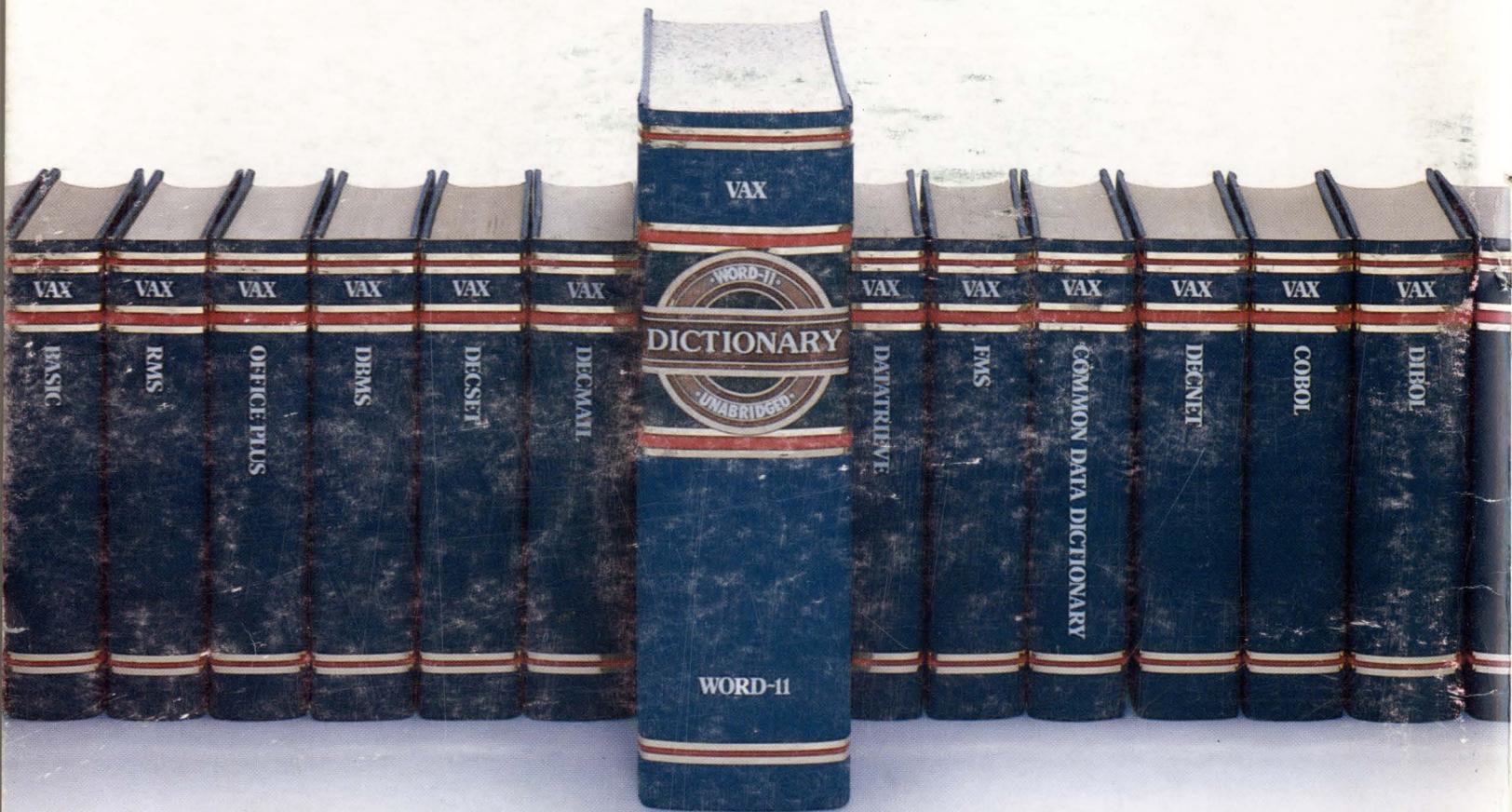
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