





## EDITORIAL COMMENTS

This morning I received a call from an AT&T telemarketing representative with twenty questions about the computer business as we know it. The call sparked some continued thinking about where our market niche will be heading in the future. The very fact that they felt the need to call and ask the questions indicates to me that they don't know the answers either.

The goal of making UNIX a "shrink wrapped" commodity product is probably going to remain elusive for the industry. This doesn't bother me much, as the medical profession hasn't been able to make brain surgery a do-it-yourself process either. Some human endeavors will forever require skill and experience that is above average. It is a market that will be profitable for those who can deliver the products.

My response probably doesn't solve the problems of a national marketing manager for a major computer company so I have decided to devote this month's column to what I would do if I were that marketing manager. First I would look at the market to determine if anyone in it was enjoying success to any degree. I think there are two major competitors to UNIX in the market place today. The most successful is probably networks of PC's using something along the lines of Novell Netware. The second has to be IBM's proprietary mini's, such as the AS400.

The networks allow people, who first became involved with computers via their PC, to leverage their knowledge to a broader system. They can retain their Lotus 1-2-3, their WordPerfect, and their dBase IV while gaining resource sharing, electronic mail, and some other benefits. The key item in this process seems to be the ease of moving from an isolated PC to being a node on the network.

The IBM mini market has traditionally been driven by vertical purchaser's software and MIS departments. I have not met anyone who bought a mini because he was impressed with the word processing packages available on it. They are sold with software specific to the purchasers major business needs, and anything else it does is a surprise to the buyer.

Now we are in a position to market a system that addresses both of these worlds in an open and competitive product. With UNIX you can deliver everything that an end-user wants (i.e., UNIX versions of PC software or networks with access to 32-bit software), and everything the company needs in the form of powerful vertical market software. There is now a single tool that can serve the broadest possible market, kind of like when railroads standardized on a single track width.

The marketing problems for UNIX are much more complex than what the locomotive manufacturers faced. I have seen a lot of mini software that I thought was total junk. It was full of bugs and did an absolute minimum for the business that owned it. I have also observed businessmen trying to do Accounts Receivables on a spreadsheet and other horrifying examples of poor choices of weapons. It is going to take time to reach a "critical mass" of knowledge in the business community for the power of computers and UNIX to be appreciated.

It is my personal opinion that the biggest obstacle we face is the lack of exposure in business refresher courses at small colleges, technical schools, and universities. Business people are inundated by courses on simplistic PC programs, and IBM is very aggressive in pushing high-priced proprietary solutions. But there is almost no move within the UNIX community to address this imbalance. I can't imagine a software vendor not benefiting from a college seminar exposing their software, but I have never seen a Unix software vendor present a decent program in a college setting.

IBM has something of an answer in maintaining high prices on their hardware and software bundles, while PC's are legendary for the low price points at which they go to market. UNIX has a little of both worlds but maybe not the best parts. The low prices that we see on Intel 80386 systems have driven hardware down to some very low points. But software vendors see UNIX as their chance to recover profits lost in the MS-DOS arena. The effect seems to be a perception that UNIX software is too expensive.

After all of this, I am back to my usual conclusion. The real value in this equation is added by the system support people. If you fully understand how to deliver a complete solution to an end-user you should be in the driver's seat. You will have to be knowledgeable in the DOS environment, have some knowledge of networking, be able to deliver a vertical package as a key element, and then provide up to a year of continuing support. This makes the job facing a UNIX marketing director pretty formidable, and the future of those of us who can deliver, pretty secure. ■

## AGREEMENT

*Continued from front page ...*

stock and supply exchange parts has been developed over the years by Computer Support, and this level of service will be instrumental to the success of service providers across the country.

An important new service offered by Computer Support in conjunction with this support agreement will be Toll-Free 800 telephone service for end-users. This will not provide direct access to a technician, but will offer additional support to end-users. (See ad for more details.) This service will be in place by the end of September. "The Altos customers will be the big winners in this arrangement," Keairns said. "They will have continued support for all Altos models and the Computer Support tech team working for them." ■

## DR. ALBERT

*Continued from front page...*

Dear Dr. Albert,

On my Altos 2000 running UNIX 5.3 operating system, I ran into a problem when I exceeded 100 SIO devices. I cannot log into any ports above **tty99**. Can you help me?

Dear tty,

Then **inittab** file in the **/etc** directory defines the **tty** device. This can only be 4 characters long. When you add a device above 99, this appears in the **inittab** file as **tt100**, 5 characters. You must go into the **inittab** with your editor and change it to **t100**, 4 characters. ■

**ALTOGETHER** is published monthly by Computer Support of Sioux City, Ltd., for UNIX/XENIX multi-user computer dealers. If you wish to submit an article for publication, send it to:

**ALTOGETHER**  
P.O. Box 2159  
Sioux City, Iowa 51109

We reserved the right to edit all articles for space and style. Deadline is the first of the month of publication. CSSC also publishes **Bull'sEye** for Bull product dealers.



*Introducing  
The Computer Support "Answer Line"*

**1-800-475-0095**

As a part of our increased commitment to Altos Computer Systems customer support, Computer Support has installed a Toll-Free 800 number, available to **end-users**.

On page 4 of this newsletter is the questionnaire of information which we will ask an end-user prior to providing any support. Any user calling the 800 Answer Line will be required to provide all the information listed, **without exception**. The user may be connected directly to a technician when this information is provided, but we will always try to resolve the user's problem by working with a dealer in the user's area. The answer to the user's question will be forwarded to a local dealer by phone or FAX whenever possible, as a means of establishing a relationship.

This service is provided without cost to encourage all current Altos customers to remain loyal to the brand; which they will, if satisfied with the support they receive on their current system.

**This new service from Computer Support will not compete with a dealer's service; it will be an additional reason for a customer to buy an Altos.** If we uncover "orphan" end-users, we will "marry them off" to dealers servicing their area. If we cannot find a dealer who can help, a Computer Support technician, selected by Computer Support, will solve the immediate problem. In this situation, there will be a service charge to the end-user.



**COMPUTER SUPPORT  
OF SIOUX CITY, LTD.**

Order Desk (712) 258-8888 • Fax (712) 277-2638  
Tech. Support (712) 258-7777 • General (712) 277-0095



### 800 Altos Service Information\*

Date: [ \_\_\_\_ / \_\_\_\_ / \_\_\_\_ ] Time: [ \_\_\_\_ : \_\_\_\_ ]

End-user                      Yes                      No

Contact Name:              [ \_\_\_\_\_ ]

Telephone: ( \_\_\_\_ ) \_\_\_\_\_ Fax ( \_\_\_\_ ) \_\_\_\_\_

Dealer Name:              [ \_\_\_\_\_ ] CID? [ \_\_\_\_\_ ]

Address:                      [ \_\_\_\_\_ ]

[ \_\_\_\_\_ ] [ \_\_\_\_\_ ]

System Model              [ \_\_\_\_\_ ] Operating System [ \_\_\_\_\_ ]

Version [ \_\_\_\_\_ ]

Hardware Problem \_\_\_\_ OS Problem \_\_\_\_ Application Problem

General Description of Problem \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If Application:              Name of Application \_\_\_\_\_

Source of Application \_\_\_\_\_

Assigned to: \_\_\_\_\_

Response Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Time: \_\_\_\_ : \_\_\_\_

Response: \_\_\_\_\_

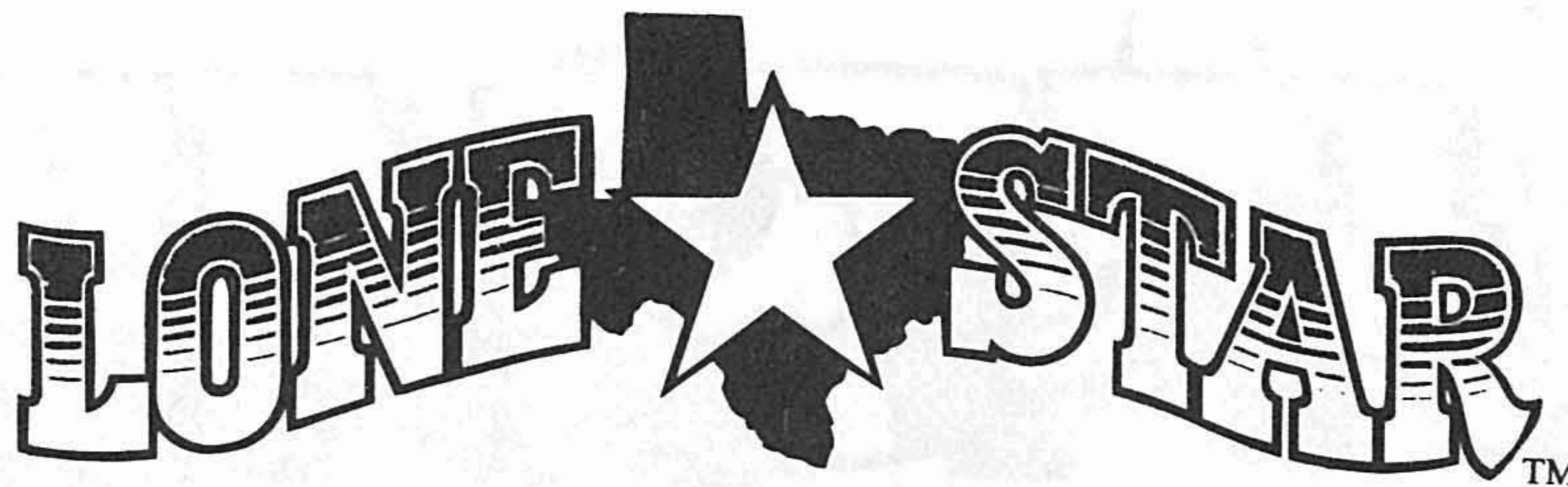
\_\_\_\_\_  
\_\_\_\_\_

How Delivered:    Phone    Fax    Dealer Assignment

Dealer Assigned              CID [ \_\_\_\_\_ ]

*\*See the ad on page 3 for an explanation of this questionnaire.*





13987 W. ANNAPOLIS CT.  
MOUNT AIRY, MARYLAND 21771 USA  
(301) 829-1622 FAX (301) 829-1623

INC.  
Est. 1979

---

# UNIX<sup>®</sup>WORLD

---

SEPTEMBER 1990

---

## Save Your What?

If you're the type that likes to skydive without a parachute, you won't be interested in Lone Star's Buttsaver. In spite of its unusual, albeit descriptive, name, the program does what it claims to do, restore accidentally erased files—be they ASCII or binary.

The program is not a disguised `rm` that keeps a file of deletions. Instead, it reads the file system's free list to identify the last real deletion made. I was impressed with the program's modest size: it's less than 18 kilobytes, and runs on SCO XENIX and Alto's UNIX.

Using the program is a snap: just type `buttsaver` right after erasing a file you wanted to keep. Command line options tell it the lost file's name, size, and type.

If you are trying to restore a binary file, execute Buttsaver as soon as possible. I encountered no problems unless I performed file operations—such as creating a file using `vi`—between erasure and restoration. The message here is to use the program as soon as you notice an accidental erasure.

With ASCII files, you have a lot more latitude. I created six files each of about 20 kilobytes, and each with a ".doc" extension. Later, I typed `rm *.doc`. Normally you would not imagine seeing any of the files again. I ran Buttsaver, which restored 130 kilobytes into a file named "saved". I was able to load "saved" into `vi`, and easily reclaim the original files.

With ASCII files, I encountered no difficulties, even when other file activates occurred before I could restore a file from its deleted state. For binary files, you need to run Buttsaver before executing any other programs to ensure that you undelete the file.

Buttsaver arrives on a single disk with four other files: `buttclean`, `quickly`, `qs`, and `rm1`. Pretty amusing names, you must agree. `buttclean` is a security freak's dream—it cleans out a specified amount of the free list to ensure that someone can't use a utility (like Buttsaver) to reclaim a file you really want erased.

`quickly` is a shell script that retrieves 300K from the free list. It's handy when you have just erased the \*.memo or \*.letter files in a directory. `qs` is a script for retrieving a single file erased using `rm1`. `rm1` is a substitute for `rm` that generates and maintains a log file showing the name and file size of deletions. While `rm1` can make file recovery easier, as you don't have to remember the file size and name, it is not necessary. Buttsaver works just as well with `rm`.

Buttsaver and Buttclean are not the only products from Lone Star. There's also Lone-Tar, an enhanced version of `tar`, SCO "Crash Recovery System," and Shell-Lock, a compiler for shell scripts. These programs list for \$285 each, except the recovery system is \$185, but can be bought at considerable savings if ordered as part of package deals.

If necessary, Lone Star will even provide an emergency mountable floppy that you can use to restore files. I don't understand why someone would not want to just keep the program on the hard disk, but if you don't want to, Lone Star will accommodate you.

For more information, contact Lone Star Software, 13987 W. Annapolis Ct., Mount Airy, MD 21771; 301-829-1622.

—Harry Avant, Editor-at-Large



# BUTTSAVER!

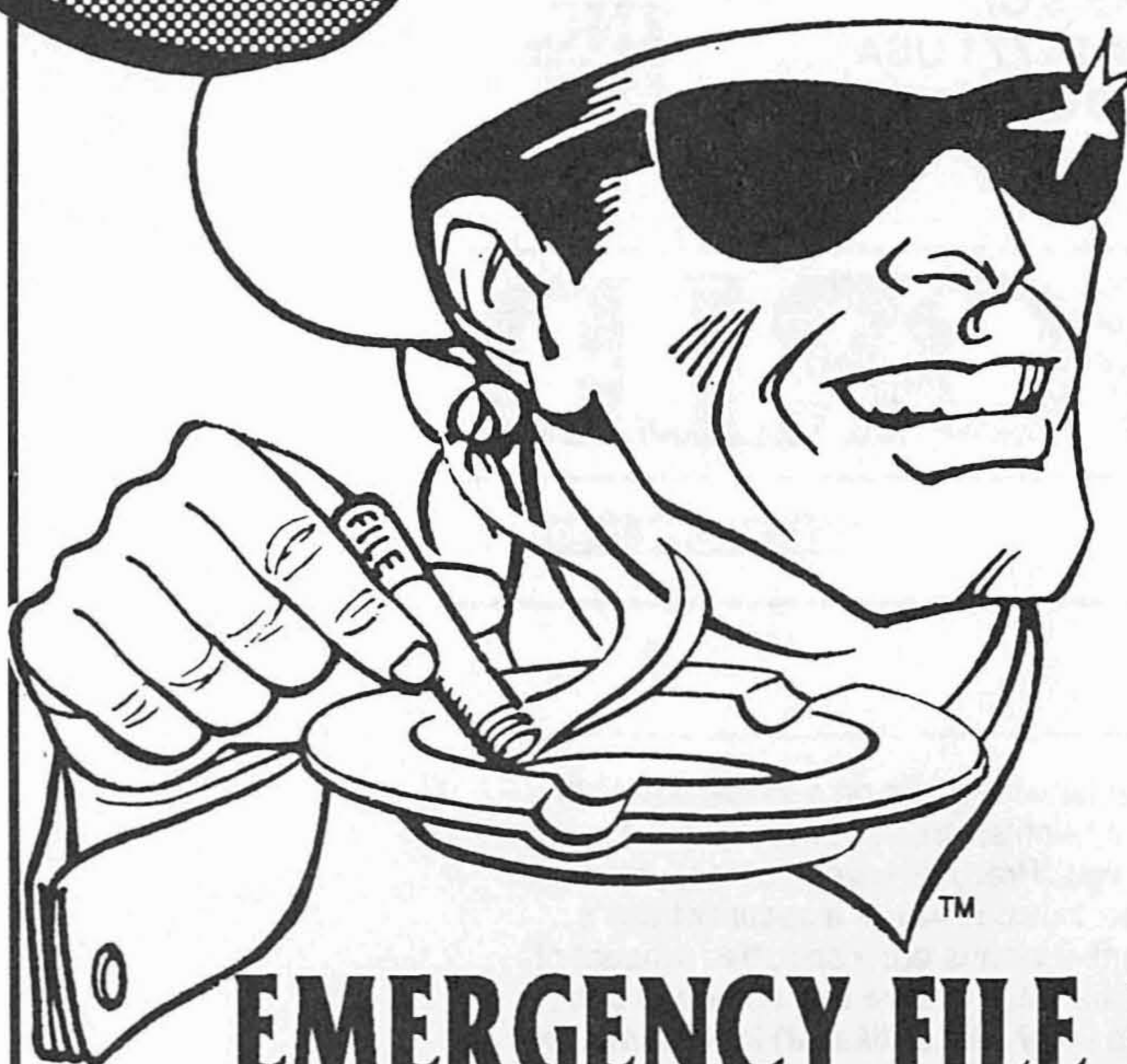
**Lone Star Software Corp.**  
13987 W. Annapolis Ct.  
Mt. Airy, MD 21771  
**800-525-UNIX (Sales)**  
**301-829-1622 (Support)**  
**301-829-1623 (Fax)**

Altos,<sup>™</sup> SCO,<sup>™</sup> Convergent,<sup>™</sup>  
NCR,<sup>™</sup> Unisys,<sup>™</sup> AT&T<sup>™</sup> ..... **\$185.00**

Add \$10.00 Shipping

— *Dealer Inquiries Welcome* —

*Excellent Margins*



## EMERGENCY FILE RECOVERY SOFTWARE

- 1 - **BUTTSAVER**<sup>™</sup> can bring back a file if you removed it using "rm", "mv", ">"
- 2 - **BUTTSAVER**<sup>™</sup> does not change your file system... it only inspects your file system causing no harm.
- 3 - Includes **BUTTCLEAR**<sup>™</sup>...a utility to clean out the free list in the event you removed a file that you want to make sure no one else can use **BUTTSAVER**<sup>™</sup> on. A great security feature.
- 4 - To avoid any misunderstandings...we are **NOT** renaming the "rm" command.
- 5 - Does **NOT** require any daemons running...making it possible to recover files even if **BUTTSAVER**<sup>™</sup> was not on the system at the time you wiped out that directory.
- 6 - Can recover binary, ascii, and data files directly from the free list. **BUTTSAVER**<sup>™</sup> works best with ascii files. A must for developers writing source code...or secretaries using word processing.
- 7 - Don't worry...we all make mistakes!!! So the next time you accidentally remove those files...call Lone Star Software. We've got the tools to literally "save your butt."
- 8 - **23-1/2 HOUR EMERGENCY DATA RECOVER SERVICE** Includes:
  - a. Recovering lost files.
  - b. Salvaging data from a corrupted "tar" backup using **LONE-TAR**<sup>™</sup>
  - c. Backing up data to a tape drive when the hard disk has bad sectors.
  - d. If you've got a modem...you've got a chance for immediate relief.
  - e. Call (301) 829-1622 if your data (or job) is on the line.

### OTHER GREAT UTILITIES AVAILABLE

BUTTSAVER, BUTTCLEAR, LONE-TAR, SHELL-LOCK and the artwork of "Mr. Lone-tar" are trademarks of Lone Star Talent, Inc. All Rights Reserved. All other trademarks are the property of their respective holders.

**LONE STAR**<sup>™</sup>



# Overstocked PC Hardware

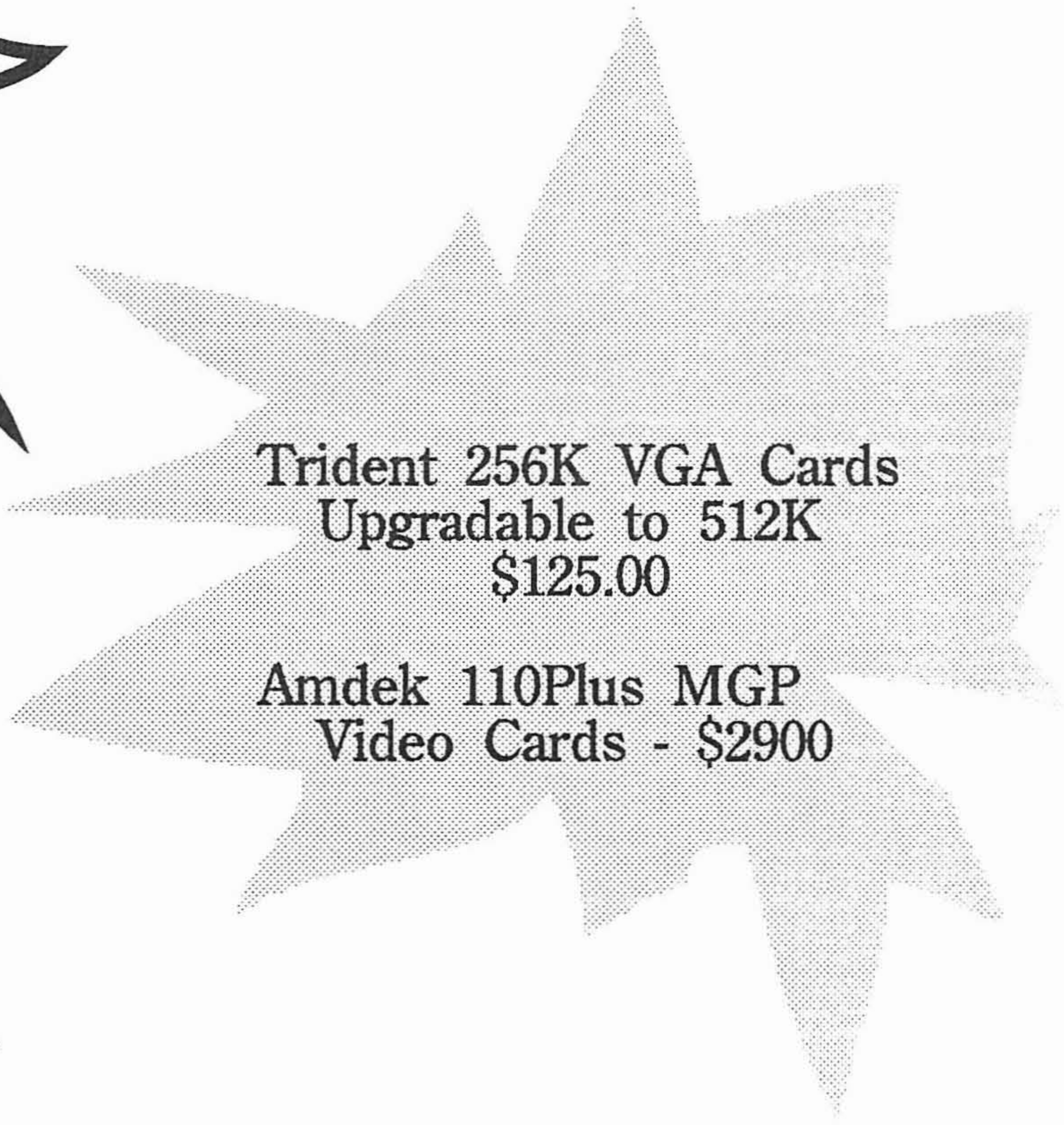
ALL NEW !!



HD-Floppy  
Controller - \$49.00

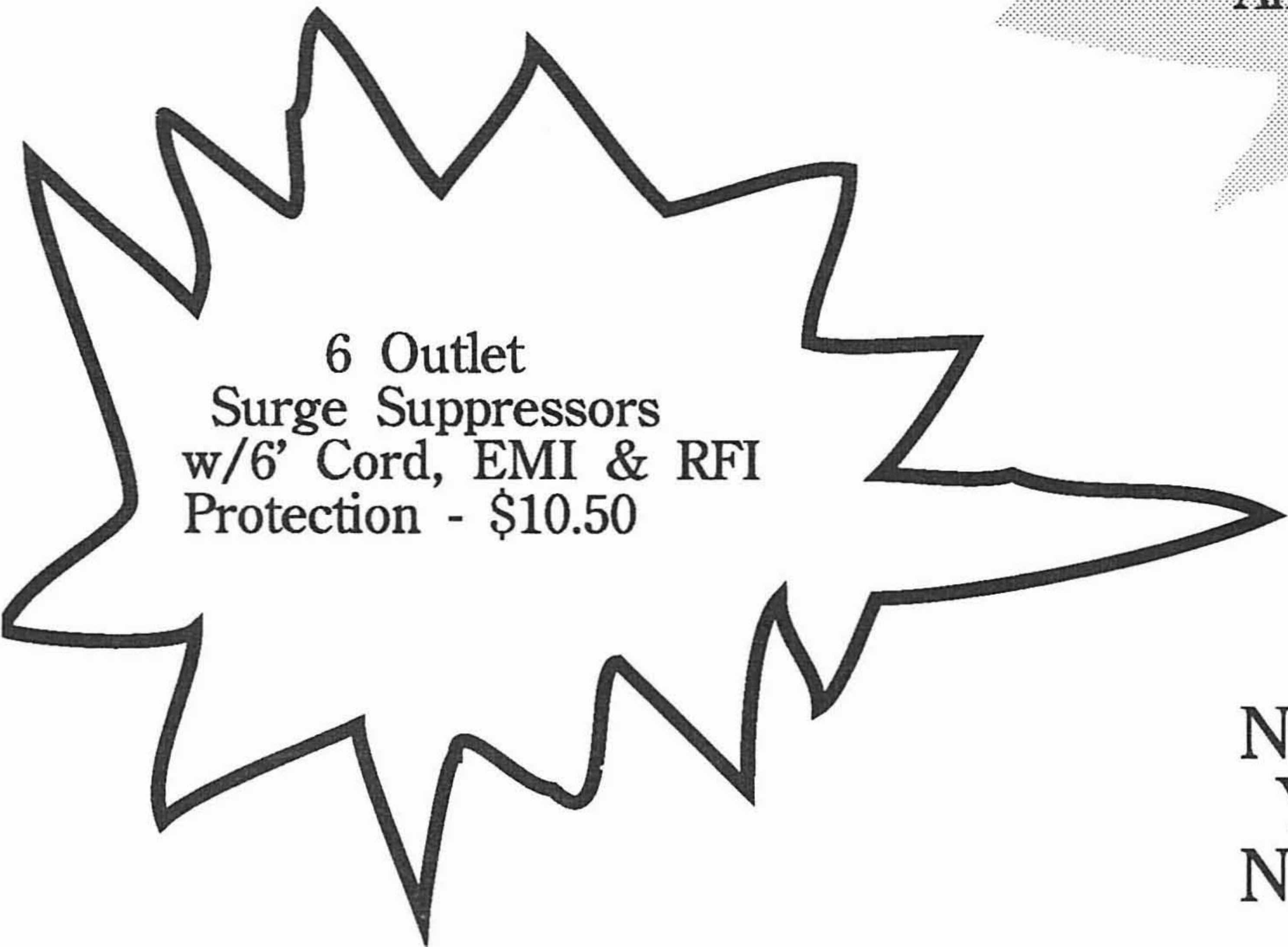
Prometheus 1200 baud  
External Modem  
w/Software - \$35.00

WYSE PC's 16 bit ST506  
From New WYSE Systems



Trident 256K VGA Cards  
Upgradable to 512K  
\$125.00

Amdek 110Plus MGP  
Video Cards - \$2900



6 Outlet  
Surge Suppressors  
w/6' Cord, EMI & RFI  
Protection - \$10.50

No Minimum Order!  
You Pay Freight  
No Handling Charge



**COMPUTER SUPPORT  
OF SIOUX CITY, LTD.**

Order Desk (712) 258-8888 • Fax (712) 277-2638  
Tech. Support (712) 258-7777 • General (712) 277-0095





**Used • Demo • New • Buy • Sell • Repair**

Altos Authorized

**Exchange Any Parts  
With Same Day Shipping**



Hard-to-get Altos  
parts and upgrades available for all systems:

**Repair, Exchange or Sale!!**

**\$2 Million+ inventory on hand  
to ship immediately.**

Software support is now available,  
and a large assortment is now on hand  
for many old and new models.



**ALL ALTOS PARTS and COMPONENTS AVAILABLE**  
All equipment guaranteed/Please call for quote



**Marcus Associates, Inc.**

New Phone 508-879-0909 • New FAX 508-820-0839



## SO YOU WANT TO BE A SALESMAN...

We are always talking about Value-Added. It's the only thing that really sets you apart in competitive hardware markets. Well, if your customers need high-capacity backup systems, Computer Support has a Value-Added "better idea" for you: a 1.3 Gigabyte capacity tape storage product that can be used on Altos computers!

You will find in this issue of *Altogether* a flyer describing the Archive Digital Audio Tape (DAT) product. This is a fully integrated digital data storage (DDS) tape drive that, **when modified by Computer Support**, can be used with Altos models 1000 and 2000 and it will be able to use the full 1.3 Gig capacity.

The DAT 1.3 is one of the new generation tape systems designed for high-volume fixed-disk backup, popular on DOS-based networks and UNIX systems. It can also be used to store graphic images and data files requiring high-speed access in an on-line storage environment. These tape drives are one of the best new technologies.

For increased profits on sales of backup storage devices, you would do well to consider this compact, high-speed tape drive. Hardware is easy to find, but it's the Value-Added that will increase your profits. Dealers can buy a DAT 1.3 with Value-Added modifications by Computer Support - for only **\$2995**. This is \$1000 less than similar drives. From now until October 31, 1990, 5 tapes will be included at **no cost** with every DAT 1.3 purchase.

Take time to read the specifications. This can be a profitable item for you and an excellent backup solution for your Altos customers...**only from Computer Support.** ■

# DAT 1.3

MODIFIED FOR USE  
WITH  
ALTOS COMPUTERS

# \$2995

*Until Oct. 31,  
Receive 5 tapes  
for DAT 1.3  
Free With Purchase*

**CSS** COMPUTER SUPPORT  
OF SIOUX CITY, LTD.

4200 West Gordon Drive  
Sioux City, IA 51109

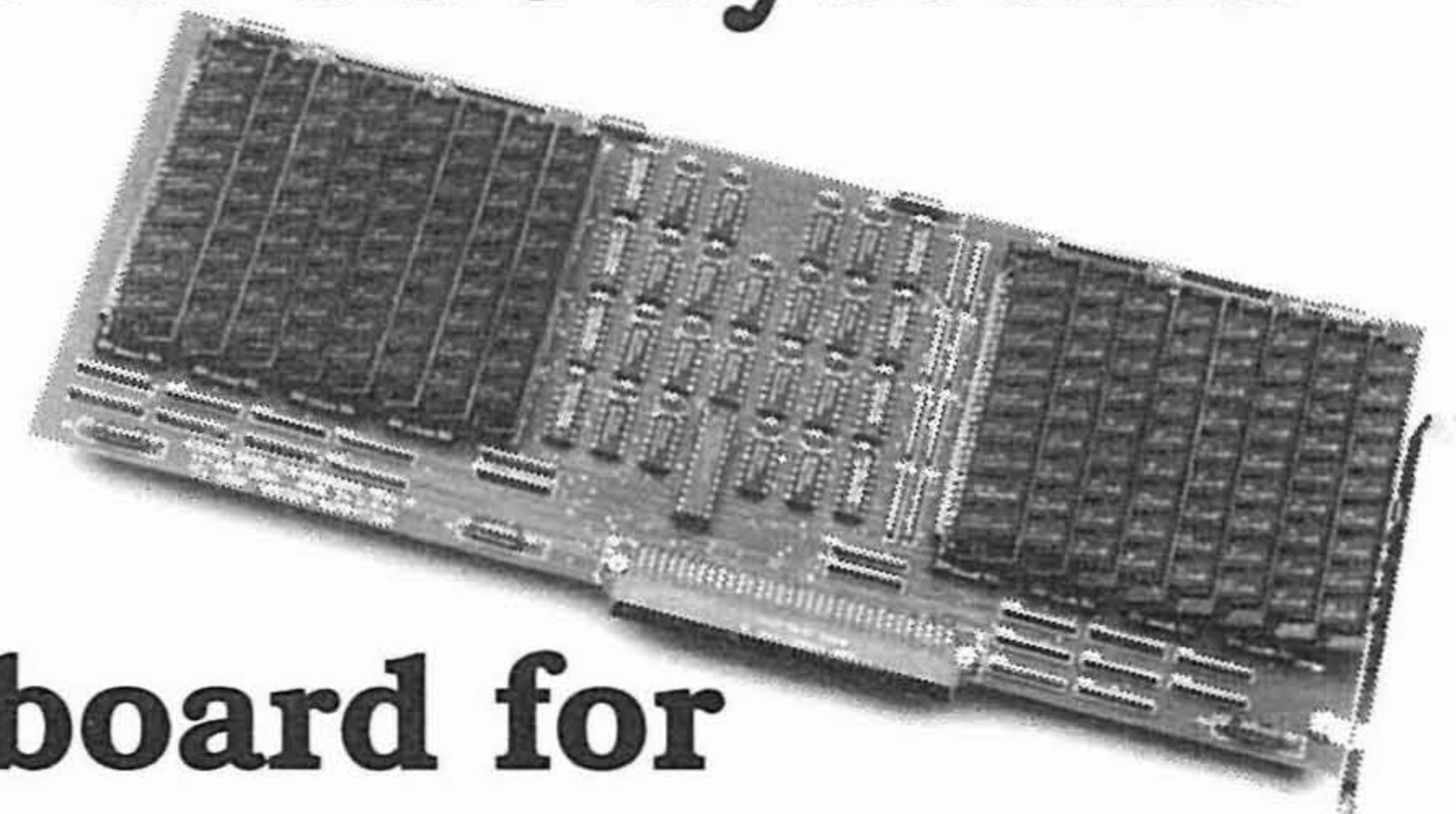
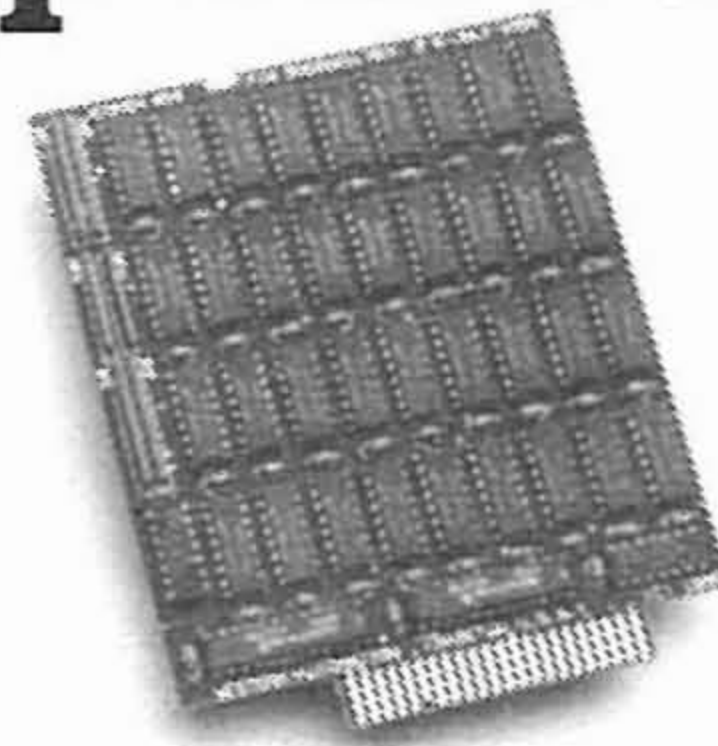
712--277-0095 ● Fax 277-2638

## UNIX IN THE WORLD

There has been a Cray X-MP supercomputer installed at Hydro-Quebec, the main supplier of hydroelectric power to Canada. It will simulate the power transport network as it behaves under stress. The system will be part of Hydro-Quebec's UNIX network serving engineers. The procurement order stressed UNIX standards, including TCP/IP, X-Windows and NFS. *UNIX TODAY!* Sept. 3, 1990 ...

A year ago, Koch Industries, an around-the-clock petroleum refiner made the transition to UNIX. The large refinery has since outgrown that first system and will now use a UNIX superminicomputer from Arix Computer. The new machine will run all of Koch's commercial business operations. There are 250 terminals at the refinery and users have access to everything via an Ethernet network. *UNIX TODAY!*, Sept. 3 1990. ■

**Western Automation is pleased to announce the addition of the Acumen 800 memory board for Altos 886 & 686 systems and the Acumen 5000 memory board for the Altos 5000 to its fine line of memory products.**



Western Automation also manufactures quality Acumen memory for the Altos 386 Series 1000 (16, 25 & 33MHz), 386 Series 500 and Altos 1086, 2086, 3086, 3068 and 386 Series 2000. Call for complete information on Acumen memory and INTERFILE disk drives.

**Acumen**  
by Western Automation

1700 North 55th Street  
Boulder, CO 80301 USA  
(303) 449-6408  
1-800-227-4637



