Tandem said it would -market the machine, ralled Dynamite, to be hooked up to its line of mainframes, which are designed to run despite malfunctions. Tandem said it won't market Dynamite as a stand-alone personal computer, but will sell it to its mainframe customers.

Tandem's current 635 X ine of terminals can only manipulate data from the mainframe. A Tandem spokeswoman said the Dynamite can be used as the same terminal for Tandem mainframe data as well as for the day-to-day business that personal computers accommodate. Dynamite can run most IBM PC software, Tandem said.

The Dynamite model costs $\$ 2.995$ and comes with two floppy disk drives and 256 kilobytes. Each kilobyte equals 1,024 bytes. or stored characters. Tandem said it would introduce a $\$ 3,995$ model in December with one floppy disk drive and a 10 -megabyte hard disk drive. Each megabyte equals one million bytes.

Tandem also introduced two dot-matrix printers for $\$ 595$ and $\$ 895$

## PS of Indiana

## Cleared to Borrow

## Up to $\$ 320$ Million

Bya Wall Street Joural Staff Reporter
PLAINFIELD, Ind.-Public Service Co. of Indiana said the state Public Service Commission agreed to let the utility borrow as much as $\$ 320$ miliion and, under that approval, authorized a $\$ 310$ million line of credit from 22 banks, led by Chase Manhat$\tan$ Bank, New York.

The utility said the money will be used to pay $\$ 164$ million borrowed mainly for construction purposes, including the canceled Marble Hill nuclear project, and $\$ 145$ million borrowed for nuclear fuel.

The new loans are due Oct. 31, 1985. The utility said the banks could agree to extend the deadline or renegotiate the loans. The company said the, agreement includes restrictions on its capital spending and sale of assets.

As security for part of the loans, the company sadd it will issue $\$ 125$ million in firstmortgage bonds to the lenders.

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## - TRANSWORLD <br> I CORPORATION

To holders of Warrants issued under a Warrant Agreement dated as of October 1, 1979 between Trans World Corporation and Morgan Guaranty Trust Company of New York, as Warrant Agent

Pursuant to Section 8 of the above referenced Warrant Agreement (Warrant Agreement), the Warrants issued thereunder (Warrants) are exercisable at any time on or prior to the ciose of business on October 1, 1986. Transworld Corporation (Company) may, however, accelerate this expiration date if the Common Stock shall have had a closing market price of $125 \%$ of the Purchase Price, as defined. for 45 consecutive trading days. As of October 4, 1984, the closing market price of the Common Stock had exceeded $\$ 27.44,125 \%$ of the current Purchase Price, for 45 consecutive trading days. The Company has chosen to accelerate the expiration of the Warrants and hereby notifies all holderi that the expiration shall be 5:00 p.m.. Eastern Standard Time on December 3, 1984.

## Instructions for Exercise of Warrants

In order to exercise the warrants a holder must do the following

1) Complete the Form of Election to Purchase on the reverse side of the

Warrant Certificate

Tandem Computers Inc., Cupertino, announced it has reached a joint agreement with Indiana Bell Telephone Co. Inc., Indianapolis, to market the tele-
phone company's service order entry package to the telecommunications industry. Tandem manufactures computer systems and networks.

Times Tribune $10 / 11184 \mathrm{p} C 1$

## veen cable and telephone

tburn," said John Tracy, United States Telephone ng telcos had won "parity ffered by both operating in long negotiations with ion Association (NCTA)
holding companies spoke in its final form, although is "unfair," giving cable ge.
interest to teicos-data hip and pole attach-

Sources said the prime obstacle in the House-Senate conference was between Sen. Robert Packwood, ROre., who opposes all restrictions on cross ownership, and House telecommunications subcommittee chairman Tim Wirth, D-Colo, who favors the ban.
Meanwhile, in a surpise move, Sen. James Sasser, D-Tenn., threatened to introduce an amendment to the vital continuing budget resolution that would force the FCC to treat small business users with up to 4 lines the same as single-line telco customers and impose a $\$ 4$ cap on access fees paid by consumers and small businesses
Earlier this year, the FCC delayed levying access charges upon residential and single-line businesses until June as it wrestled with a resolution of the

Danforth denied his bill was protectionist but said Americans must not act like "chumps" and allow the country to become a "dumping ground" for offshore manufacturers. He said he would reintroduce the legislation in the new congress.

Danforth's bipartisan bill, the Telecommunications Trade Act, was criticized by NATA members at the meeting, including NATA president John Spievak.

Spievak and others told the senator he didn't understand that the domestic interconnect inclustry, so long legally monopolized by Western Electric, did not possess the manufacturing capacity to keep pace with the demand for technologically advanced products demanded by the market

## ne Bill A Cliffhanger

acceptable to both
The major obstacle both in last week's conferencing and in conferencing during preceding weeks was Sen. Paul Laxalt, RNev., according to congressional staffers, who said Hughes battled with Laxalt aides for hours last week until the compromies was reached.
Prior to last week, the bill was reported stalled on Laxalt's desk, as the senator, a member of the Senate Judiciary Committee, was troubled by criticisms of the bill leveled by two such opposite forces as the Justice Department and the American Civil Liberties Union

## Broader Definitions Sought

Justice had introduced a computer crime bill of its own, calling for a broader definition of protected federal databases but a narrower view of federal jurisdiction, preferring to leave most private-sector incidents to state prosecutors.

At a hearing on another computer crime bill sponsored by Rep. Ron Wyden, D-Ore., that would specifically protect medical databases, Justice attacked both the Wyden and Hughes bills as "flawed" and "a piecemeal approach" to computer crime. Wyden's bill passed the House only recently and was also set to expire without Senate action before the session ends this week.
Justice continued its attack on fughes's bill in a letter to Sen. itrom Thurmond, calling the bill ieriously defective," "virtually , 2enforceable" and suffering rom "convoluted and amJiguous wording.
"The legislation, if enacted," wrote assistant attorney general Robert McConnell, "would make 3 federal prosecution virtually mpossible. In fact, the legisition would present prosecutors ith a problem in determing ien how to charge an offense
under its provisions," Justice also criticized the Hughes bill, for protecting federal information only if the information is classified national defense, foreign relations or atomic data Justice's own bill, McConnell noted, provided much broader definitions of protected information, including criminal records, social security information, census information and confidential business information, such as records of federally insured financial institutions.
Curiously, the American Civil Liberties Union, which also wrote the Senate Judiciary Committee to criticize the Hughes bill attacks the Justice bill for precisely those broad definitions.

## ACLU's Stance

ACLU attorney Jerry Berman explained that Hughes's bill left too many unanswered questions regarding just what defined illegal computer use-whether computer crime required a break and entry into another's database or if it covered any crime using a computer-and whether digitized computer communications would be covered by federal wiretap provisions.
A member of Wyden's staff said that the Oregon congressman's medical records bill was also embargoed at Laxalt's desk, and that Wyden had given up on its passage this year. The congressman is expected to try again next year, possibly with the co-sponsorship in the Senate of Sen. Max Baucus, D-Mont., assuming that both Wyden and Baucus win reelection
But Hughes and members of his staff, apparently elated at being able to salvage their bill after many hours of conference, were too tired to discuss possible plans to resubmit next year any provisions of their bill that didn't make it out of conference.

## Tandem Sued By SEC; Settles On Same Day

By JULI CORTINO

CUPERTINO, Calif.-The Securities and Exchange Commission last week filed suit against Tandem Computers Inc. to stop Tandem from "further violations of the anti-fraud, reporting, recordkeeping and internal control provisions of the federal securities" laws.
Tandem, without admitting or denying the allegations, settled with the SEC on the same day the suit was filed.
The charges stemmed from an SEC investigation into Tandem's restatement of revenues and earnings for fiscal 1982. In its complaint, the commission said Tandem, beginning in the second guarter and through the fourth quarter of 1982, "recognized significant amounts of revenue for which, in some cases, Tandem did not have signed customer purchase orders or contracts on file."
The SEC complaint charged that Tandem, that year, overstated its fourth quarter revenue by $\$ 13.5$ million. Overstatements in the third quarter amounted to $\$ 5.4$ million and in the second quarter fotaled $\$ 6.8$ million.
For the year ended Sept.30, 1982, Tandem stated that revenue was up 61 percent over 1981 to $\$ 335.9$ million. The company also said net income amounted to $\$ 37.3$ million.
In December 1982, Tandem publicly restated its fiscal 1982 revenue to $\$ 312.14$ million. Net income was revised downward to $\$ 29.9$ million.

The SEC complaint charged Tandem with sloppy internal accounting controls and keeping inaccurate books.

The manufacturer of NonStop computer systems consented to a judgment enjoining the company from further SEC violations. No monetary fine was levied against Tandem or its chief executives.

The judgment requires Tandem's outside auditing firm, Arthur Anderser and Co., to conduct a review of Tandem's internal controls this year and for an additional two years.
James G. Treybig, Tandem president and chief executive officer, was named as a defendant in the SEC complaint. Robert C. Marshall, the company's senior vice president and chief operating officer, was also named in the suit, as was Tandem's former controller, Henry V. Morgan.
Morgan resigned from Tandem last February.

A Tandem spokeswoman said the case "was finished." She said the SEC judgment did not ask the company to do more than it has already done. In early 1983, the company said it had tightened its accounting procedures and instituted stricter internal controls.

## Apple Case: I'm Innocent

SAN FRANCISCO-One of two Taiwanese businessmen indicted on charges of smuggling Apple II look-alike computers from Taiwan into the U.S. pleaded not guilty last week.
Teh Yi "Denny" Huang, owner of Data Borgeest in Campbell, Calif., submitted his plea of innocent on all nine counts to U.S. Magistrate Frederick WoeInen.
Bail of $\$ 100,000$ was set by the magistrate. A public defender was also appointed for Huang. who said he could not afford his own attorney

Huang faces smuggling and conspiracy charges, along with charges of copyright infringement.

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October 8, 1984
SECTION: SOFTWARE \& SERVICES; Tools; Pg. 80
LENGTH: 253 words
HEADL.INE: PBL ASSOCIATES, INC.;
Inventory Management and Accounting; Purchasing and Receiving; Order Entry and Invoicing

## BODY:

PBL Associates, Inc. has introduced three distribution application software packages that operate on Tandem Computer, Inc.'s Nonstop superminicomputers.

The Inventory Management and Accounting, Purchasing and Receiving and Order Entry and Invaicing systems are said to use distributed data processing to provide immediate on-line access to data from all the user's sites. The packages include a security system, the vendor said.

With the Inventory Management and Accounting System, inventory operations from shipping to receiving are monitored. Each item and lot can be located by warehouse, area, aisle and bin; classified by product family, group and class; and assigned ownership by company, division and department, the vendor said.

The purchasing and Receiving system provides on-line, multicompany, multidivision control and processing of purchasing and receiving functions, the vendor said. The package reportedly handles traveling requisitions and open and blanket purchase orders. It also consolidates multiple requisitions and purchase orders.

The Order Entry and Invoicing system provides on-line entry, editing and inquiry capabilities that reportedly enable the user to take orders over the phone and answer questons about orders, pricing, product information and account status.

The programs are priced at $\$ 50,000$ each for a perpetual license.
PBL Associates, 10 Cottage Ave., Point Richmond, Calif. 94801.

## Tandem Charged

## With Inflating Its

## FY 82 Revenues

WASHINGTON - After a secret, 2 year investigation, the Securities and Exchange Commission last week charged Tandem Computers, Inc., with violating federal law by overstating its revenues up to $\$ 25.7$ million for the last 9 months of the firm's fiscal year ended Sept. 30, 1982.
The commission's complaint, filed in Federal Court in California, also named as defendants Tandem president James G. Treybig, senior vicepresident and chief operating officer Robert C. Marshall, and former controller and-vice president Henry V. Morgan.

Without admitting or denying the charges, all the defendants agreed to the entry of a court order enjoining them against future violations of federal securities law.
The company also agreed to submit to independent annual reviews of its accounting methods for 3 years.

The SEC said Tandem's illegal revenue recognition practices included shipping computer systems to its own warehouses and counting those shipmints as having gone to paying customer sites. "In some cases," the SEC suit charged, "no final purchase of the equipment was consummated."

On the same day the suit was filed last week, the SEC and Tandem said they had agreed on a settlement calling for a permanent injunction against Tandem violating SEC reporting practices in the future. Tandem said, in reaching its settlement with the governement, it was not admitting its liability in the case.

The SEC said Tandem overstated revenues by $\$ 6.76$ million for the second quarter ended March 31, 1982, and inflated the following quarter's revenues by $\$ 5.42$ million.

Further, the SEC charged that Tandem's press release claiming a gross of $\$ 91.18$ million for the fourth quarter of fiscal 1982 inflated those revenues by about $\$ 13.5$ million.

Tandem, for 1962, originally reported revenue from the year of $\$ 335,899,000$ and earnings of 95 cents a share. Later in the year, however, the company was forced to restate its revenue down by $\$ 23.75$ million to $\$ 312,143,000$ and its earnings down to 76 cents a share. The restatement came after Tandem's accounting firm, Arthur Andersen, recommended the move. The SEC, however, said Tandem initially kept some of its revenue recognition practices secret from the accounting firm.

The SEC noted that, in the third quarter of Tandem's fiscal 1982, the company's originally reported revenues declined from $\$ 85.6$ million the previous quarter to $\$ 84.4$ million. The complaint said "During the fourth quarter, Tandem's management told Tandem's sales managers that major emphasis must be placed on getting customer orders and that it was imperative that profitability in the fourth quarter increase over the third quarter." In the fourth quarter, the SEC said, Tandem's improperly-recognized revenues rose to $\$ 13.5$ million or 13 per cent of its total revenues for the quarter. In the second and third quarters, the percenstage of Tandem's improperly-recognized revenues was 8 and 6 per cent. according to the SEC.
The SEC said Messes. Treybig. Robert C. Marshall, and Henry V. Morgan all "aided and abetted" Tandem's alleged violation of regulalions.

Tandem's revenue reporting practies during that period, according to the SEC, included shipping equipment to warehouses rather than customer sites when conditions in completing the sale remained to be satisfied. Tandem employes, however, "prepared shipping documents for the warehoused equipment which con-
veyed the appearance that the equipmint was being shipped directly to customers, " according to the SEC. In some cases, the conditions were not fulfilled and the purchase was never made, the SEC said.

The complaint said Tandem also lacked adequate documentation and order processing controls.

The settlement of the case which was the result of an informal investigation begun in October 19 was approved by a federal judge last Wednesday. Tandem has already amended the periodic reports questioned by the agent required to restate revenues and earnings further. The company said no fine was levied.

## TANDEM COMPUTERS INFORMATION CENTERS

| Corporate Information Center: | Bldg. 3, Loc. l; |
| ---: | :--- |
|  | Phone $725-x 6343, ~ x 6213, ~ x 7121, ~ x 6971 ~$ |

Business Information Center: Loc. 4; Phone 725 - x7590, x5703
Walsh Communications Library: Bldg. 3, Loc. 103; Phone 748-2658
Ridgeview Technical Information Center: Loc.100; Phone 996-6579

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HOURS: 8 a.m.- 5 p.m. Mon - Fri, other times card-key access STAFF: Jane Differding, Information Specialist Barbara Nepple, Information Centers Technical Assistant Heidi Robertson, Information Centers Technical Assistant Selma Zinker, Information Centers Manager

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TO: Field Marketing Personnel
FROM: Steve Schmidt
Vice President, Product Management and Strategic Planning
REGARDING: IDC Report of Tandem Low-End Pricing Strategy Says Tandem Priced Competitively to Series /l
Attached please find a copy of the International Data Corporation's (IDC) report on Tandem's new low-end pricing strategy. This that Tandem systems are now new low-end pricing strategy and claims consulting organization. customers, typically large end -user has been distributed to its

Tandem's announcements. be aware of an outsider's perspective on about Tandem, this report widdition to informing IDC's customers media.

# INTERNATIONAL DATA CORPORATION 

1333 Lawrence Expressway, Suite 220. Santa Clara, CA 95051 • (408) 244.5710

Tandem Broadens Product Line

Tandem has recently revamped their product line (announced August 20, 1984) to allow the large user organization to take better advantage of the inherent capabilities of their systems. Although there are no major new product introductions, the company has lowered pricing and developed packaged system solutions to better meet the needs of the user. The actual changes in pricing and configuration follow closely the move toward development of the corporate information architecture now yoing on at many large user sites.

The particulars of the announcement include,

- Two bundiled NonStop 1+ systems, a 2 processor and 4 processor configuration, without mirrored disks and controllers that sell for 32 percent and 12 percent less than previous cumparavie configurations.
- A bunciled NonStop II system that is base priced at $\$ 129,500$, a 24 percent reduction.
- The development of a trade-in program that allows users to move from the NonStop $1+$ to a NonStop II or TXP, or from a NonStop II to TXP and receive a credit from Tandem for 60 to 80 percent of the current list price.

On the face of things it may appear that these announcements are little more than price restructuring, however that is a very elementary viewpoint. To go along with these single quantity price reductions is a very aggressive discount schedule. For example, the smaller NonStop it in a quantity of only 20 systems is priced at $\$ 55,000$. This has important implications for system/site selection choices.

What this means to the user is slightly more difficult to explain. Transaction processing applications are one of the crucial areas of new application development in many large organizations. At the present time, many of these applications are implemented on systems that are designed to support this transaction environment as well as other systems tortured into supporting on-line environments. The problem arises when the actual geographic sites that are part of the transaction environment are not of sufficient size to justify the installation of a $\$ 100,000$ and above transaction processing system.

The result has been that the transaction systems are used where they can be justified, and smaller minicomputers are used where a transaction system's price used to be excessive. Because of this, non-compatible software environments exist, line costs reach larger proportions aue to inefficient concentration, and excessive system overhead happens due to all the "conversion" of data streams. The Tandem announcement helps to limit this problem for transaction applications.

The new pricing of the Tandem system allows for the installation of a totally compatible system at sites where the previous choice was a minicomputer of the Series/1 class (larger 4955 and 4956). This may sound a bit hard to believe, and in fact is at first glance. Yet looking at the quantity price of $\$ 55,000$ which includes peripheral devices ana software for applications and operating system, the prices are quite equal. For comparison, a 4956 model Series/l configuration with sortware and similar hardware would list in quantity 1 between $\$ 50,000$ ana $\$ 60,000$. Of course, IBM does offer volume discounts, but through more efficient application environments with single vendor solutions, the cost difference is minimal. Also, the upgrade policy announced allows users to be assureu of a very high residual value.

For users, this announcement helps to prevent problems that arise in transaction applications where three environments have necessarily existed, the mainframe, transaction application system, and small mini at the geographic site. In being able to put transaction computing systems at more of the individual sites, coherent information from the transaction system as a whole is more valia, and immediacy of the data base is improved.

In lowering the cost of their entry level systems, Tandem has mace it easier for users to develop a transaction application without worrying if all sites that need systems will be able to cost justity them. The product line from Tandem now stretches from price points equal to the larger Series $/ 1$ all the way to 308 X class machines. This increased flexibility in the choice of specific equipment at each individual site could make transaction applications feasible that previousiy inciuded too many smaller sites where transaction systems were not affordable.

## LEVEL 1 - 3 OF 4 STORIES

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October 4, 1984, Thursday
SECTION: SECTION II; International Companies; Pg. 21
LENGTH: 378 words
HEADLINE: SEC revenue claim accepted by Tandem
BYLINE: BY LOUISE KEHOE IN SAN FRANCISCO
BODY:
TANDEM COMPUTER has been charged with overstating its income in fiscal 1982 "in an effort to show increased profitability." The Securitities and Exchange Commission announced the charges against the California maker of " fault-tolerant" computers and three of its top executives on Tuesday. The company promptly announced that it would enter a "no contest" plea to the charges.

The SEC alleged that Tandem violated securities laws by overstating its revenues in the 1982 fourth quarter by at least $\$ 13.5 \mathrm{~m}$, in the third quarter by at least $\$ 5.4 \mathrm{~m}$ and in the 5 cond quarter by $\$ 6.8 \mathrm{~m}$, keeping inaccurate books and failing to maintain adequate internal accounting controls, the complaint further accused Tandem of having falsified its books and records regarding sales and shipments of computers in 1982.

In December 1982 Tandem revisd previously released earnings and revenues. The company stated, at the time, that it had inadvertently included in 1982 sales shipments that were made "within hours after midnight" at the close of its fiscal year. Income for the year was restated as $\$ 29.9 \mathrm{~m}$, down from $\$ 37.3 \mathrm{~m}$. Revenues were revised to $\$ 312.1 \mathrm{~m}$, down from the original $\$ 335.9 \mathrm{~m}$.

According to information supplied by the company, Tandam uses more than 150 of its own non-stop computer systems in over 600 locations to control its internal business operations. The SEC complaint stated, however, that Tander recognised revenues without signed purchase orders or contracts and recognised revenue on orders subject to unsatisfied conditions.

According to the SEC complaint, Tandem's auditors, Arthur Andersen \& Co recommended that Tandem adjust its fourth-quarter earnings by $£ 18 \mathrm{~m}$, but the company cut its proposed revenues by only 2 m in its initial statement.

The SEC charges come as the result of a two year enquiry which has not been previously revealed.

Tandem said that it has consented to an agreement whereby the company will be enjoined from further violations and will review its financial practices for two years. The company said that it would plead no contest, without admitting guilt, in order to avoid distracting its management from day-to-day operations of the company during what could have been an extended legal battle with the SEC.

## PEOPLE



Aregon International,
videotex company, announces the appointment of Richard Osborne (above) as managing director. He was previously managing director of Rank Phicom Video Duplication. Anthony Chandor, former Aregon managing director, becomes chairman.

- Tandem Computers has made four new sales appointments in the London area. Under newlyappointed district sales manager Michael Lambert, who joins Tandem from MAI, three separate teams are created. The major accounts team, based in the City and headed by Richard Launder, who has been with Tandem for 15 months, will market to key existing and potential customers, primarily in banking and finance. A team headed by Nick Bull, who joins Tandem from Datagraphix, will attend to existing accounts covering other industries and applications. The new business team will be headed by Denis Saunderson, who has been with the company for four years.

Allied Aims has appointed Mike Brereton software product manager, with special responsibility for the Computer Automation SyFA minicomputers installed throughout the Allied Breweries group of companies. He was previously network planning manager responsible for evaluating the software and hardware market for Allied Lyons.

E A founder and board member of the Unix/USR/Group, Brian Clark has joined the newly formed UK subsidiary of Pyramid Technology as systems analyst. He comes from Wicat Systems, where he was sales support engineer for Unix users. Prior to joining Wicat, he was with Gould SEL as senior support analyst on Unix for the company's 32 -bit range.


- Apollo Computer (UK) has appointed Len Greenwood product marketing manager, and he will have overall charge of the third party software supplier agreement for the UK and Europe. He joins from Comsat (UK) where he was UK sales manager.
- Masscomp, a supplier of highperformance 32 -bit Unix-based computers and workstations, has made Frank Turner country manager for the UK. He will oversee all business operations including OEM and user sales and support. Turner held senior management positions with DEC for 10 years. Before that he served as country manager for Data General in its Benelux operations.
- Bleasdale Computer Systems has appointed Michael Woods training manager. He joins from Intelligence (UK) where he was customer services manager.
- Arthur McGowan is now national sales maanger of Delta Data Systems. His 17 years in the computer industry have included sales appointments with ICL, Xerox Data Systems and most recently with Northern Telecom Data Systems for eight years.
- Ian Brameld, has been appointed marketing director of AIM, a services and systems company in Hull. Previously with Advanced Marketing Management, he will be responsible for AIM's marketing in the UK and overseas.


Compsoft, a microcomputer database management systems house, has appointed Richard Bassin (above) business development manager. He joins the company from Vector International where he was responsible for UK and European marketing of the company's software products. Prior to Vector, he was senior account manager with Computer Sciences Cosporation.


Two new product development systems engineers have been ajpointed by Thorn EMI Computer software's Altergo Products division, Audre Cumming, formerly a regional support analyst with Datapoint (UK), join the company to work on a number of new projects, including the developmen of a communications program generator. She has some 13 years' data proces sing experience, including programming analysis and support on /BM,ICL and DEC installations. More recently she spent three years as system manager of a substantial Microdata installation. Also joining is Steve Far
rington, previously chief systems progranmer of Rail rington, previously chief systems programmer of Rail Car Services.

## David Ratchelous has been ap-

 pointed to head a newly-established technical intelligence unit within RTZ Computer Services. His brief will be to gather information and maintain the company's awareness of technological innovations across the three operating divisions of DEC Software, Consultancy and Information Services. He has been with the company for eight years.Paul Kennedy has been appointed sales engineer o Schaffner, the new UK subsidiars of the Swiss-based manufacture of mains interference filters ang specialised instrumentation. Ho has a number of years' eng: neering experience in the electronics industry with Lyon Instruments, Capital Electroniq Developments and Capital Powe: Devices.


8 THE WALL STREET JOURNAL, Wednesday, October 3, 1984

## Tandem Computers Is Charged by SEC With Overstating Fiscal 1982 Revenue

By Michael. W. Miller Staff Reporter of Tun Wall. Stheet Journal.

SAN FRANCISCO-The Securitles and Exchange Commission charged Tandem Computers Inc. with violating securities law by overstating its fiscal 1982 revenue. The company was ordered to undergo annual recompany was ordered its accounting procedures for three years.

Tandem, a Cupertino, Calif., mainframe computer maker, said it consented to the SEC order without admitting or denying the allegations. Tandem said it gave its con sent to avoid "the extensive commitment" of time and money that litigating the matter of time and mone involve.

The consent decree, which requires ap-
The consent decree, which requires ap-
proval by a federal judge, also enjoins Tanproval by a federal judge, also enjoins Ta
dem from further securities violations.

The complaint follows a nearly two-year unpublicized SEC investigation of Tandem, related to its restatement of revenue and earnings for fiscal 1982. As previously reported, in December 1982, Tandem lowered its fiscal 1982 revenue $7 \mathcal{F}_{c}$, or $\$ 23.8$ million, and its profit $20 \%$, or $\$ 7.4$ million.

At the time, Tandem said about half the misbooked revenue involved computer shipments made "hours" after midnight at the
close of the fiscal year, Sept. 30. The balance involved sales that didn't have sufficient documentation, Tandem said.

In its complaint filed yesterday, the SEC contended that Tandem knowingly overstated its revenue in its initial earnings statement, released Nov. 1, 1982. The complaint further accuses Tandem of falsifying its books and records regarding sales and shipments of its computers in 1982.
The SEC also charged that Tandem violated securities law by failing to devise and maintain an adequate system of internal accounting.

The commission called into question accounting practices similar to those Tandem cited when it announced its restated revenue: recognizing revenue without signed purchase orders or contracts on file; recognizing revenue on orders subject to unsatis fied conditions, and recognizing revenue on shipments that took place after the end of
the fiscal year
According to the complaint, Tandem didn't disclose these practices to its outside auditors, Arthur Andersen \& Co., "at various relevant times" in fiscal years 1982 and 1093. The complaint states that Arthur Andersen found in its audit for 1982 that many transactions were improperly recorded that year and recommended that Tandem adjust its fourth-quarter revenue down $\$ 18$ million. After discussions, Tandem cut its proposed revenue $\$ 2$ million in its initiai statement, the complaint says.

According to an SEC lawyer, Claudia Belcher, the SEC began its investigation in late October, before the November statement and the December restatement. She declined to say what motivated the SEC to investigate. Ms. Belcher added that the in-

## (3y) RomeoyJulieta <br> IMPORTED HANDMADE cigars

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quiry was limited to fiscal 1982.
Ms. Belcher said the complaint states that Tandem decided to audit its 1982 figures further after it was notified of the commission's inquiry. Tandem's vice president, fiance, Jeanne D, Wohlers, said the company expanded its audit because a routine year-end review brought to light "informa-year-end review brought to light informadion that led to the restating of the results."

## Computer <br> FMrniture

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The Securities and Exchange Commission filed suit against Tandem Computers Inc. of Cupertino in federal court Thursday, charging Tandem with committing fraud and inflating profits and revenues in its fiscal year 1982
Tandem immediately issued a statement saying it agreed to the SEC's terms, which still must be approved by a federal court judge. Tandem neither denied nor admitted the allegations.
"This closes the book on the entire event," said Jeanne Wohlers, Tandem's vice president of finance.

## Dow sinks 8

## The New York Times

NEW YORK - The stock market finished with moderate losses Tuesday in more active trading as investors remained cautious mainly because of fears that interest rates will remain high over the short term.

At the conclusion of trading, the Dow Jones industrial average was down 7.62 points, to $1,191.36$, its lowest close since
Aug. 2, when it ended at $1,166.08$.
"The reoccurrence of rising shorthterm interest rates is of reeping the

SEC lawyer Claudia Belcher said the two-year investigation found that Tandem had sloppy "revenue recognition" practices. Tandem was counting unconfirmed and undelivered orders for computers as actual sales and thereby inflating revenue numbers, she said.
The SEC has ordered that Tandem's outside accounting firm, Arthur Andersen \& Co., perform special audits of Tandem's accounting of sales for its fiscal 1984, 1985 and 1986 years to ensure the company improves its meth-
ods.

The SEC didn't fine the three Tandem executives named in the suit, but it eme points, hits lowest level
market nervous and in a narrow range," said Trude Latimer, vice president of Evans \& Co.
Latimer noted that unless this changed, or exceptional economic developments appeared to compensate for the rate advances, "the market is not apt to launch an upward move." In the overall market Tuesday, losing issues on the New York Stock Exchange outscored gainers by 917 to 520 . Volume on the Big Board expanded to 89.4 million shares from 73.6 million shares the
day before.

There was little in the economic news to inspire equities Tuesday. In the credit markets, prices had minor changes as investors remained apprehensive about the heavy supply of Treasury issues expected later this month. The two other significant market indicators also finished lower. The exchange's composite index lost 0.58 , to 94.38; while Standard \& Poor's 500 stock index fell 1.03, to 163.59 .
Some of the sizable bank issues were under selling pressure after an analyst
is seeking a permanent injunction that would forbid Tandem from repeating the alleged former practices, Belcher

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The three executives are: James G Treybig, president; Robert C. Marshall, chief operating officer, and Henry V , Morgan, former controller, secretary and treasurer. Morgan resigned from Tandem in February to take another job.
The SEC began investigating Tandem informally in October 1982 after it was tipped off that Tandem wasn't following standard accounting procedures for orders. Separately, Arthur Andersen \&

## Computer World 1018184 p 131

## Tandem to target airlines

CUPERTINO, Calif. $\qquad$ Tandem Computer, Inc. has recently announced joint ventures to develop an airline reservations system and to market a number of application software packages for the airline industry.

Partners in the ventures are Bedford Associates, Inc., a Norwalk, Conn.-based software company; Linjeflyg AB , a subsidiary of the Scandinavian Airlines Systems Group (SAS); and Scanator AB, a software marketing and management consulting concern jointly owned by SAS and Enator AB , an international consulting firm.

The reservation system, Spar, was designed by Linjeflyg and will be operational in December 1985, Tandem said. Bedford will develop a standard version of the Spar system, which will be marketed in North America by Bedford and Tandem and in the rest of the world by Tandem and Scanator.

Larry McGraw, Tandem's vice-president of marketing and service support, said the airline industry has indicated a need for Tandem's faulttolerant, on-line transaction processing in their DP strategies. "The major airlines see a need to offload their existing systems, most of which were designed in the '60s," he added.

LEVEL 1 - 3 OF 7 STORIES
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October 8, 1984
SECTION: COMPUTER INDUSTRY; Pg. 131
LENGTH: 186 wards
HEADLINE: Tandem to target airlines
DATELINE: CUPERTINO, Calif.
BODY:
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## Harris, Tandem to build satellite net for Zapmail

Federal Express Corp. has named Harris Corp. and Tandem Computers, Inc. as contractors for the first phase of a satellite-based data communications network designed to support Federal Express' Zapmail service.

The network is scheduled to replace a terrestrial sys-

## lity of lal rom

tem servicing 16 cities in July 1985.

The satellite-based network will carry Zapmail, a mail service where documents are electronically delivered to distant Zapmail facsimile centers for hand delivery within two hours.

## Net equipment

The network will comprise Harris satellite group equipment, Tandem network interface products and Tandem Nonstop TXP computers. The computers, supplied under a separate contract, are already in operation.

Harris officials said they will supply earth stations utilizing Ku -band communications technology and its proprietary Delta Gain sixmeter antennae.

Tandem's proprietary satellite communications interface equipment will reportedly link the earth stations to the Tandem computers.

LEVEL 1 - 1 OF 7 STORIES
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October 8, 1984
SECTION: COMMUNICATIONS; Pg. 89
LENGTH: 167 words
HEADLINE: Harris, Tandem to build satellite net for Zapmail
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## Dhlocue

## Is your firm affected by the increasing

 presence of digital transmission?Tony Nuzzetti, North American sales operations supervisor, Fairchild Camera and Instrument Corp., Mountain View, Calif:
"We have six multipoint digital lines across the U.S., and we use digital transmission in all of them It is a much better grade of data communications than analog. You also have one point of contact, so when you have trouble, within 20 minutes you know where your problem lies.'

Larry Marks, data network manager, Tandem Computers,

Inc., Cupertino, Calif::
'Digital transmission has been getting cheaper. The more the traditional modem manufacturing companies come out with those terminating devices on the lines the more cost-effective these cir cuits will be. They are not very cost-effective right now because the termination devices provided by AT\&T are significantly more expensive than equivalent analog circuits.
'They are probably more reli

## Don't get burned by the Network Dragon!

dence of that yet - that is, not the terminating equipment, but the lines themselves. They do seem to have better characteristics with respect to error rates, so we are very interested in them. But we are also interested in packet networks.
"Given a choice between analog, digital and packet networks, if they were all priced the same, I would go to packet networks. There are still some barriers to digital. Right now, there is a lack of digital tails - the circuits that run from the telephone central offices to the customer premises in a number of locations. If you want to sum it up, I am not wildly excited.

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Jobn Joy, data processing man ager, city of Portland, Maine:
"After the reconstruction of our public safety building, where the fire and police headquarters are located, we installed in the street our own private conduit between this building and City Hall.

We installed our own wire to eliminate the need to rent phone circuit from the telephone company. We do all our own digi tal transmission over our own pri vate line.'

Gene Doucette, telecommuni cations analyst, Hewlett-Packara Co., Palo Alto, Calif.
'In the case of data communi cations, we have some Dataphone Digital Service lines from our cen tralized computer system here to the Washington, D.C., area and to Spokane, Wash.
"Our experience with these digital lines has been very good as far as error rate is concerned. The bit error rate on these lines is far far lower than on analog lines. We are probably seeing half the errors we would see on analog facilities.
"The prime advantages of digi tal transmission are lower error rates and, in the case of voice, better voice signal quality. Digital transmission has been in existence for many years with message telephone service, and it is becoming a larger portion of the overall Bell System

## IETIERS

## Home on the Farm?

To the Editor:
Whoever chose the landscapes containing saguaro cacti for use with an article on Wyoming needs a vacation - part of the vacation to be spent here in Wyoming to see what our state looks like and part to be spent in Arizona and New Mexico to see where the sa guaro cacti do grow

And I believe that in all proba bility, Mr. Adams lives on a 1,000 acre ranch, not farm.

Lowell Ray Anderson Cody, Wyo
Editor's note: We'll take the vaca tion, but in all deference to John Q. Adams, he insists that be lives on a 1,000-acre farm, not ranch. He told our reporter: "Everyone wants the romance of being known as a rancher even if they bave four or five acres. They tell me in California it is worse, that anyone who bas an acre bas got a ranch. Tbis land bere is a farm.

On Communications wel comes letters from its readers Letters should be typed, dou ble-spaced and no longer than 150 words. They should be addressed to Editor, Computer world On Communications, 375 Cochituate Road, Box 880 , Framingbam, Mass. 01701.

## SEC files

## against Tandem

2-year-old investigation into finances is over

## By Rob Hof

Times Tribune staff
The Securities \& Exchange Commission Tuesday charged Tandem Computers Inc. in Cupertino with y's mistaming from the companances.
The computer maker and the EC Tuesday announced an imme diate settlement of the case, pendng approval by a District Court udge, that would end the SEC's inestigation into Tandem's book keeping and require Tandem to allow auditors to check its books Under years.
Under the consent decree, neither Tandem nor current or fordoing but an SEC attriney wrong commission stll believe Toldem deliberately misstated its sales and profit.
In December 1982, the computer maker lowered its previously announced profit and sales figures by about 20 percent after discovering disrepancies between figures from its own accountants and those from independent accountant.
Tandem explained the differsome sales that were completed atter the fiscal year ended as having been completed before the year ended. It also counted some equipment as having been shipped before it left warehouses.
Those errors resulted in Tandem cutting its 1982 profit from $\$ 37.3$ million to $\$ 29.9$ million and sales rom $\$ 335.9$ miliion to $\$ 312$ million, an action that caused its stock price to drop drastically at the y were recorded in followinual ers in the The SEC had cal year
ith fraud Both charged Tandem three officers were company and making false statements to the SEC, keeping faulty records and having inadequate internal fina cial controls. The officers were James Treybig, president and chief executive officer; Robert C. Mar

Please see TANDEM, D-5

# 5 Snechaw Tandem listed inflated profits, suit charges 

Wire Services and Staff Reports
SAN FRANCISCO - The Securities and Exchange Commission filed suit today in federal court charging Cupertino-based Tandem Computers Inc. and three senior officers with fraud and allegedly inflating Tandem accounts to show increased profits.

Without admitting or denying the allegations of the complaint filed by the SEC which focused solely on fiscal 1982, Tandem said

See TANDEM, Back Page


## Tandem accused of fraud

TANDEM, from Page 1 A it consented to the entry of a judgment enjoining it from violations of the federal securities laws and requiring Tandem's auditors to conduct annual reviews of the company's internal controls this year and for an additional twoyear period.

Tandem said it consented to the entry of a judgment to save the time and money need to litigate the case with the SEC.

The suit charges the computer firm with overstating its net income and revenue in a press
release and in quarterly financial statements filed with the commission for three quarters in 1982.

The complaint states Tandem overstated revenue in a press release for the fourth quarter of 1982 by "at least $\$ 13.5$ million."

The suit also charged the firm overstated revenue in two quarterly reports by $\$ 6.7$ million and $\$ 5.4$ million.

Named in the suit were Tandem president James G. Treybig, chief operating officer Robert C. Marshall and controller Henry V. Morgan.
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## Tandem's new personal computers

Times Tribune staff
Tandem Computers Inc, in Cu pertino Monday introduced its first full-fledged personal computers to complement its large fail-safe computers.

Tandem's computer is compatible with personal computers made by International Business Ma chines Corp. But the Cupertino maker of large computers is avoiding the dangerous retall territory that other makers of personal computers have found treacherous.
Tandem plans to sell the person-
al computers, called the Dynamite new Tandem software packages. family, only to customers of its The packages will allow data from larger machines.

We are not competing in ComputerLand," spokeswoman Gina Burr said.

Burr said the computers, which Tandem manufactures in its Austin plant, are not a completely new product for the company, since it has been making computer terminals for three years.

The Tandem personal computers, both of which will run most IBM programs, can be used with the large computers to be transferred into the personal computers.

The first personal computer model, with a disk memory capacity of more than 360,000 characters and a main memory capacity of more than 256,000 characters, is available now for $\$ 2,995$. The second model, which has a larger Winchester disk drive with a capacity to hold more than 10 million characters, will be avaltable in December for $\$ 3,995$.


From top: J.Peter Grace, June M. Collier, James G. Treybig, R. Gordon McGovern


Excellence in management can be measured many ways. The traditional yardsticks-profitability, return on investment, what the company's stock is trading at-are readily apparent. Positive numbers translate easily into recognition and reward for the chief executive.

However, society today is redefining what it expects of business. New rules are being imposed by government, and the heightened expectations of employees and local communities are changing the role of the corporate chief executive. Some CEOs are adapting to that new role, and establishing a new standard for excellence in management. Their efforts, however, are too often overiooked. Sometimes they are misunderstood and bring criticism rather than a pat on the back for the CEO because the payback to the corporation is not readily evident. Worse yet, too many CEOs try to ignore the shifts taking place in the business environment and go on with business as usual.

Corporate America has to get more involved in understanding and dealing with shifting societal attitudes. To recognize the efforts of CEOs who have ac-
cepted that challenge-and to stimulate others to do the same-INDUSTRY Week eight years ago established the Excellence in Management Award. The honorees are chosen in four categories: Those who have become involved in defending and explaining the private enterprise system; those who have reached for new plateaus of public service within their communities; those who have worked to bridge the gap between business and government; and those who have broken new ground in management's relationship with its employees.

This year's search for four outstanding CEOs began months ago when we invited readers to suggest corporate leaders for the honor. The IW Editorial Board then spent many days reviewing the nominees.

The four executives selected were honored at a luncheon at the Plaza Hotel in New York last week. Each was presented a distinctive glass sculpture, the Lalique Eagle, carved in France and mounted on an ebony base by Tiffany's. They are:

- J. Peter Grace, chairman and CEO, W. R. Grace \& Co. New York, for outstanding efforts in improving understanding between business and government.
- June M. Collier, president and CEO, National Industries Inc, Montgomery, Ala., for outstanding efforts in promoting the private enterprise system.
- James G. Treybig, president and CEO, Tandem Computers Inc., Cupertino, Calif., for outstanding efforts in promoting a positive employee-relations philosophy.
- R. Gordon McGovern, president and CEO, Campbell Soup Co., Camden, N.J., for outstanding efforts in providing public service to the community.
As part of our salute recognizing their achievements, we present their stories on the following pages with the hope that other executives will beencouraged to follow their lead.

Our congratulations to each of them.


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## J.PETER GRACE

Chairman \& Chief Executive Officer. W.R. Grace \& Co.

J.Peter Grace, chairman and CEO of W. R. Grace \& Co., was lunching in his Manhattan office on Feb. 16, 1982, with publisher Rupert Murdoch when his secretary burst excitedly into the room. President Reagan, she interrupted, wanted to speak with him on the telephone.
"Come on, Cynthia, we are busy," he said, assuming she was putting on an act for Mr. Murdoch. But as he heard the President's soft, unmistakable voice on the receiver, Mr. Grace, who had never met Mr. Reagan, quickly realized the call was legitimate.

He was even more quick to say "yes" to the President's request: that he head a commission of business executives to recommend ways the federal government can save money.

For 71 -year-old Peter Grace, the longest-reigning ( 39 years) CEO of a major U . S. industrial corporation, the unhesitating reply was characteristic. "Every citizen, whether he runs a company or whatever, if he has something to contribute to government, should do so," he declares. "Democracy is fragile. The more capable people have an obligation to exercise leadership.

That sentiment might well have been voiced by his grandfather, William Russell Grace, an Irish immigrant who became a successful busijessman in New York, founding W. R. Grace t Co. among his other interests. Althcugh fully occupied with his companies, the elder $\mathrm{Mr}_{\mathrm{r}}$ Grace agreed - upon being persuaded by New York Democratic party leaders seeking a candidate not identified with Tammany Hall-to run for mayor in 1880. He won, served two terms, and then returned to his businesses.

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## NVOLVEMENT

Unlike his illustrious ancestor, who'd had no previous background in government. Peter Grace has been active in public affairs throighout most of his business career.

In the 1950s he served five years as an adviser to the Eisenhower Administration on Latin America. (His expertise came from his company's then-massive interests in the region, including ownership of the Grace Line fleet that hauled cargo and passengers between North and South America.)
In the 1960s he served President Kennedy as chairman of a Commerce Dept. committee promoting U. S. private investment in Latin America under Kennedy's Alliance for Progress

In the 1970s he spearheaded a campaign that helped enact the landmark 1978 law reducing the capital gains tax. W. R. Grace \& Co 's monumental study, the Disincentivization of America, and its costly series of ads in leading newspapers are credited with triggering a grass-roots letterwriting movement that put the legislation over the top.
And, early in the Reagan Administration, he ran a full-page ad in the Washington post is fending the President's 1981 tax cuts. This action caught the attention of the White House, no doubt paving the way for his selection as head of the commission, officially called the President's Private Sector Survey on Cost Control (PPSS).
BUSINESS COMES FOURTH. Although few CEOs have been as active in public affairs as he, Mr . Grace is heartened by the business community's growing involvement with government since 1945, the year he became W. R. Grace \& Co.'s CEO following the incapacitation of his father.
"Businessmen I met as a young man were satisfied to be businessmen and nothing else, " he recalls. They didn't have to worry about the government, and they didn't hold much respect for government people. But now. government is so powerful that businessmen are betwixt and between whether they want to run Merrill Lynch or be Secretary of the Treasury. They're more open-minded about government."

Still, he frowns, "too many business people today are afraid to put themselves or their companies on the line-even on issues in which they believe strongly.*

Mr . Grace doesn't hide his anger over refusals by several prominent CEOs to join his successful campaign to lower the capital gains tax. Even though they agreed that the cut would have
enormous beneficial effects on capital formation, he says, they begged off for fear that President Carter "would get mad at them" and remove income tax credits for taxes their companies paid overseas.

To me, that is not the proper attitude," he says. "First, you owe your allegiance to God, then to your family, and your country. Your business should come fourth."

Nevertheless, Mr. Grace praises business for its support of PPSS. To carry out the ambitious project, he organized 36 task forces, each assigned to probe a federal agency or function The task forces were chaired by 161 top corporate executives who, in turn, loaned 2,000 of their managers to provide staff assistance. The panel came up with 2,478 specific recommendations of ways to cut waste and inefficiency. If implemented, PPSS calculated, the proposals would save the federal government $\$ 424$ billion in three years and $\$ 1.9$ trillion per year by the year 2000

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## OOIING TO JANUARY

In contrast with most commission reports that are soon forgotten after they're issued, PPSS's recommendations actually seem to be gathering momentum. By mid-July, the Administration reports, some 680 of the proposals either had been implemented or were in the process of becoming so. They add up to a three-year saving of $\$ 103.5$ billion.

To be sure, the commission has not escaped controversy-or criticism. Both the Congressional Budget Office and the General Accounting Office have quarreled with the panel's costsaving claims, providing ammunition for sharp attacks at PPSS from election-conscious congressmen. Even the White House's Office of Management \& Budget has joined the sniping.

Yet, Mr. Grace is optimistic that, come January, the new Congress will take action on many of the proposals that were considered too politically sensitive to be adopted in 1984's electionyear atmosphere. To help bring this about, Mr. Grace has authored a 195 -page book, Burning Money: The Waste of Your Tax Dollars (Macmillan Publishing Co.), which was released Oct. 4.
Moreover, Mr. Grace is counting on an unlikely alliance with muckraking columnist Jack Anderson-a frequent industry critic-to put grass-roots pressure on Congress. The two men have formed a nonprofit organization, Citizens Against Waste, and hope through Mr. Anderson's column to amass millions of signatures on a petition opposing federal misspending. The petition will be presented to the newly elected President and Congressional leaders in January.

FOLK HERO. Certainly most of the credit for the acceptance so far of PPSS' report is due to Mr . Grace himself. Even though the commission completed its 18 -month task last January, he has continued to spend an average of 30 hours a week promoting the recommendations. He is making more than 100 speeches on behalf of the project during 1984, besides an array of television and radio appearances, press interviews,
and Congressional committee appearances.
All of this, along with rising public concern about the federal deficit, has made him something of a cost-cutting folk hero. His colorful personality helps. A one-time playboy (he reluctantly gave up a life of polo, sailing, fast cars, and girlfriends when he was thrust into the job of heading the family company), Mr . Grace is an individualistic blend of charm, crustiness, grace, pugnacity, wit, and ebullience. He even carries a gun, fearing terrorists who still link his company with South America.
So personal a stamp has Peter Grace put upon the war against government waste that the panel he headed has come to be popularly known as "simply "the Grace Commission."

Of all his government-relations activities, the commission has been "the most all-embracing project," he comments. And he doesn't deny that it has rekindled his interest in govern-ment-an interest he admits had waned since the idealistic days of his youth.
"Frankly," he says, speaking primarily of Congress, "there was a higher caliber of people in government 30 or 40 years ago than now. Today the morality level is lower. Everyone focuses on winning at all costs; the end justifies the means."

A CABINET POST? A lifelong Democrat, Mr. Grace admits that he doesn't "know what the hell 1 am now" when asked his party affiliation. But he says he'll vote for Mr. Reagan next month. Not only does he believe the President would be more likely to push adoption of the PPSS recommendations than would Mr. Mondale, but he agrees strongly with the Administration's defense buildup.

Lifted into the limelight by his Grace Commission leadership, Mr. Grace has been mentioned as a potential cabinet officer in a second Reagan Administration. Would he serve if asked? "It would be a close call," he answers. "I like what I'm doing now."
Indeed, the W. R. Grace \& Co. CEO seems to thrive on 18 -hour workdays. His heavy, extracurricular PPSS workload often forces him to run his company through post-midnight telephone calls to the firm's executives-and he doesn't minda bit. He pooh-poohs talk of retirement:
"If I thought I were holding back. I'd get out," he says. But most of the people in the company are telling me, 'Hey, take the pressure off.' They don't think I'm slowing up.
Furthermore, his single greatest satisfaction has been work-related. That, he says, was restructuring W. R. Grace \& Co. from a company almost totally dependent on uricertain, unstable Latin America to a viable, diversified, multinational conglomerate. So complete has been the metamorphosis that none of Grace's businesses in 1945, when he took over, is part of the company today, "Yet," he adds, showing his compassionate side, "we've been able to take care of the loyal employees we had working for us in Latin America.

For him, no accomplishment could surpass that-even if the government were to adopt all 2,478 of his Grace Commission recommendations.

"Too many business people today ore atraid to put themselves or their comparies on the lneevenonissuesin which they belleve strongly."


## JUNE M. COLLIER

President \& Chief Executive Officer, National Industries inc.

Hers is the quintessential American success story. It is one, she would argue, that confirms the opportunity a person has to achieve great things under the U. S. private enterprise system.

Born to extremely modest means-she describes her childhood home in East Prairie, Mo., as "four rooms and a path"-and without a string of earned degrees after her name (she was graduated from high school at 16), June M. Collier is now president and CEO of National Industries Inc., a $\$ 100$ million diversified manufacturer based in Montgomery, Ala. A one-time office manager for an electrical fabricating firm, Mrs. Collier also is a general partner of Pyramid Oil Co. in Montgomery and has business interests in broadcasting and commercial real estate.

She serves on the U.S. Commerce Dept.'s prestigious Industrial Policy Advisory Committee. She is the only person from Alabama on the Committee of 200 , a select group of women business leaders. Mrs. Collier's radio and television show credits include the "Larry King Show" and Cable News Network's "Crossfire." She's addressed both houses of the Alabama legislature, testified before the U. S. Congress, and dined at the White House.
By almost any measure, June Collier has made
it. She is firmly establighed as a leader in U.S. business. She commands respect from colleagues and competitors alike. She is a force to be reckoned with.
Because she knows full well the promise that private enterprise fulfills, she has been a tireless advocate of the system. She averages eight to ten speaking appearances a month; and whether she is talking to the media, politicians, a school group, a service club, employees, a trade association, or other business executives, chances are that June Collier will be extolling the virtues of private enterprise or raising warnings against forces which, she fears, weaken its foundations.
Tree enterprise is a lot simpler than the economists and the professors would have you believe," she tells a group of students. "Free enterprise is the right we all have to perceive a need in the marketplace and then figure out a way to fill that need. Free enterprise includes the right to make money and the right to go broke. It's what allowed us to take National Industries and make it into the largest private employer in central Atabama. I's the same thing that let us move from a colony in the early 1700 s to the greatest power in the world in less than 200 years."

TRADE 'TIGRESS.' June Collier speaks her mind-deliberately and effectively. Paul M. Weyrich, a politically conservative columnist and director of the Committee for the Survival of a Free Congress, Washington, approvingly terms Mrs. Collier The Tigress of Trade* for her controversial call for a $20 \%$ tariff on all imported manufactured goods. That levy would, she asserts, preserve American jobs and businesses by offsetting the comparatively cheap cost of labor overseas. She is convinced that "free trade"-including the free-trade policies espoused by the Reagan Administration-is steadily eroding America's industrial base.

June Collier fully appreciates that proposing a tariff brands her advocate of protectionism-a philosophy contrary to the traditional definition of a "free enterpriser." She contends, however, that the two issues must be separated. Free trade is not free enterprise, she insists. They are not even kissin' cousins," she adds in a light southern drawl.
She does not favor quotas which, in fact, would keep foreign goods out and constitute "protectionism" as she defines the term. Tariffs, she points out, allow goods to come in but equalize the labor-cost advantage that foreign producers now enjoy.
Free trade, she emphasizes, must be recognized as one of the misguided notions that are undoing the U. S. private enterprise system.
The U.S. government, following the freetrade drummer, "is trying to give the world the benefits of the free enterprise system without any of the responsibilities that goalong with it," she asserts.
American companies, operating under the disciplines of our system, have to play by the same basic set of rules, she observes. Not so for foreign firms, she says; they dont't have to conform to our rules and regulations. And "even the

## PRIVATE ENIERPRISE

best-run American companies cannot compete against companies that do not have the same restrictions as ours do," she states. "When we give foreign competitors the right to play by their rules in our marketplace, we have set up our economy for failure.
"We are trying to raise up the lesser-developed countries, but we are only lowering ourselves," she asserts. "We are paying the price for our generosity in higher taxes and unemployed people-and we are losing our industrial base in the process," she insists. "If we are weak, with no industrial base, what are we going to do?" she inquires. "Who is going to be the hope of freedom in this world?

MINIMUM GOVERNMENT ROLE
It would be easy to dub June Collier a latter-day "America Firster," an isolationist. And it would be incorrect.

Though she might not fully appreciate the compliment-for she claims to prize things sim-ple-Mrs. Collier is far too complex and sophisticated a person to be adequately-or accu-rately-characterized by such expressions.

For instance, her ringing defenses of the American private enterprise system-and they have been legion over the last several yearscontain an unexpected twist. June Collier admits that government has a role to play in regulating business.
"Free enterprise presumes that the government has no place in the private marketplace, except as a sort of referee to make sure everybody plays by the same rules," she says. "[But] when government exercises even a valid function in the private marketplace, that means the system is no longer completely free. There is no such thing as a 'pure' marketplace or 'total' freedom
nor would any of us really want it. What we must strive for is a minimumgovernment role in the free enterprise system."

As an example of a "valid" government function, she cites the antitrust laws. "At one time we were a little guy," she notes, an allusion to the fact that 21 years ago National Industries had seven employees and about $\$ 250,000$ in sales. Were it not for antitrust laws when we started rattling people's chains, National Industries would not be in business [today]," she states. "And when you even relax the antitrust laws at all, you are going to knock out small businesswhich is absolutely the cornerstone and strength of this nation. Small business keeps the Fortune 500 honest"

Neither does Mrs. Collier have a problem with government intruding into the marketplace to protect people from inpure food and drugs. 'In a purely free market the maker of a dangerous drug would eventually go out of busi-ness-but maybe hundreds or thousands of people would die before everybody got the message that, perhaps, that drug was not the best remedy on the market," she says. Government intervention in such a circumstance is reasonable and responsible-though it makes the system less free, she believes.

However, June Collier is critical of what she
views as unreasomable government intrusions into the private sector.

Unreasonable wage rules really irk her. When government weighs in and states that all workers are worth the same amount of money regardless of the quality of work they produce, both the business owner and the worker suffer, she argues. Whether the "owner" is one person or a million stockholders, the freedom to run the enterprise is eroded when government steps in, she says. And unreasonable wage rules tell the worker that "there is no longer a premium on quality", she claims. "It takes him out of the profit loop-at least in the short run. He doesn't work as hard, because it doesn't matter to his paycheck how hard he works," Mrs. Collier says.
"As a result, productivity goes down, profit goes down, prices to the consumer go up, not as many people as before can afford to buy the product, fewer products are sold, the companies that used to make the products close plants, the employees who used to be in those plants are out of work, [and] government has to tax more heavily the people who still have jobs," she reasons.
'NO STAKE.' It is important to remember who the rulemakers are, June Collier emphasizes. They're mainly people without a direct stake in the smooth functioning of the private enterprise system-people who think they have no stake in profits and losses," she says. These are people "who are concerned with the smooth operation of government, not industry."

It would not be overstating her position to say that Mrs. Collier sees misguided trade policies and unreasonable regulations as posing a "clear and present danger to the American private enterprise system
"We used to feel that government's role was to support our economic system, to be a referee," she says. "Government was supposed to do those things that would allow things to flow smoothly."

In contrast, now ... we seem to feel that government is the reason that the system exists, and that the system's function is to make government's job easier," she states. "instead of government supporting free enterprise, it's now free enterprise that supports government."

Too often, the people who make the rules and write the regulations in government forget that private enterprise is a concept that goes beyond a single company or an individual industry, she states. "It's the underpinning of our whole social system:

And so, "whether you go into manufacturing, or farming, or mining, or a service industry, or government, you have a responsibility to the system of economics that has made this nation what it is," she says. "If we all understand that, we can start identifying some of the dangers to that system, and we can work to eliminate them ${ }^{\text {2 }}$
Whether or not you agree with June Collier's conception of the U.S. private enterprise sys-tem-its promises and problems- there's no denying that she makes you think. And that may be the best kind of promotion the system can have.

"We used to feel that government's role was to support oureconomicsystem ta beareferee . Now we seem to feel that government is thereason that the systemexists Instead of government supporting free enterprise, it's now free enterprise that supports government.2


## JAMES G. TREYBIG

President \& Chief Executive Officer. Tandem Computers inc.

In recognition of your outstanding efforts in implementing and maintairing sound employee relations.

SIticon Valley is a 30 -mile strip about an hour's drive south of San Francisco. More important, it's also of course where much of the country's leading-edge computer technology, the work of ingenious and furiousiy industrious entrepreneurs, originates. In the popular imagination, Silicon Valley now represents no less than the American Dream in action, replete with the usual Horatio Alger cast of big-ger-than-life characters.

One of the most inspiring Silicon Valleyites is a 44 -year-old engineer with a gift for seeing the open window in already crowded markets. The window that James G. Treybig, now president and CEO of Tandem Computers Inc., Cupertino, Calif., perceived some ten years ago was the on-line transaction-processing market.

Back then, Mr. Treybig served as marketing manager of Hewlett-Packard Co.'s computer division. The window began to open during his work on a project for Holiday Inns Inc. The company wanted a computer that would run big hotel sites," reflects Mr. Treybig, explaining that
the hotel chain sought to replace a cumbersome arrangement of standard minicomputers linked together.

The future Tandem chief sensed that other companies had asimilar need. He tinkered with the numbers a bit and tallied up a market worth potentially $\$ 350$ million. "And it was a 'sell market-not a 'rental' market. It looked as though you could grow a big company real fast," recalls Mr. Treybig.
His instincts told him that banking, manufacturing, and communications operations also were about to enter a period in which they would need to automatically capture, update, process, and deliver voluminous amounts of information.
Mr. Treybig left Hewlett-Packard and took a job at Kleiner \& Perkins, a San Francisco-based venture-capital firm. (The Kleiner of Kleiner \& Perkins, incidentally, was a former HewlettPackard general manager who invited Mr . Treybig aboard specifically to provide him with the time and resources he needed to prepare his business plan.) As a part-time venture capitalist, Mr . Treybig, who is a Stanford M.B.A. graduate, was impressed early on by a harsh lesson in the creation of new businesses. He saw "start-ups flourish and then suddenly flounder when key people left because they weren't treated right. *
Mr. Treybig-most people call him Jim-realized that making his idea go and grow required good people. He became determined to give Tandem "a people philosophy" that would make it a great place in which to work.

Tandem began in 1974 with four employees sharing a tiny office. Today the company employs 5,000 people in 30 countries-with 80 locations in the U. S. alone. Last year, its revenues totaled $\$ 418$ million-enough to make Tandem the nation's 500 th-largest company.

The key to success is to involve every employee in the company, " notes Mr. Treybig, his voice sometimes dropping into the south-Texas accent of his upbringing. 'You've got to stay close to your employees and make them feel they're important-that the company cares."
OPEN DOOR. Tandem's philosophy is to keep the lines of communication open; to keep the creative juices flowing; and to foster strong professional and social bonds. Matching its words with deeds, Tandem has a tradition of sharing the wealth. Every year each employee receives stock options. In 1983, employee stock purchases contributed $\$ 25$ million to Tandem's coffers. And every four years each employee is awarded an extra six weeks of vacation in the form of a sabbatical leave.

Characteristically, Mr. Treybig is quick to point out the help he has had in creating such programs, "We are lucky to have a good board of directors who value people and think they are important. A lot of presidents might have these ideas but their boards might not support them."

Besides financial remuneration, Mr. Treybig believes in the power of communications to create the homogenous will, purpose, and direction that a company needs to sustain initiative. Basic to this belief is the approach of

## EMPLOYEERELATIONS

structured and unstructured communication, the latter spanning job functions with no impeding hierarchy. "Structure is good when you want to give direction, but it's no good for creativity," declares Mr. Treybig, explaining the limitations of organizational charts

To shake that structure, the company has initiated a number of programs. The most novel, perhaps, is its TV network. The company has placed satellite earth stations-at a cost of $\$ 6,000$ each-in most of its U. S. offices and in Canada.

Within 30 minutes, Mr. Treybig or any of his management team in Cupertino can be on the air to other Tandem sites. The cost about $\$ 400$ per hour. (It's not surprising, then, to discover that Mr. Treybig is an inveterate ham-radio operator, that is. Hisidea of getting away from it all is to lug his gear to some remote island, say, off the coast of Africa, to work the airwaves.) Every year, the day before the annual meeting. the Tandem management team broadcasts an extensive briefing to employees on what will be said during the formal meeting the next day. And throughout the year the closed-circuit network provides technical updates, news of financial performance, and other information
"We want interaction," Mr. Treybig explains. "No one has all the answers. And good exchanges can help clear the air and clarify issues.

For example, a recent program dealt with the subject of how to better control expenses. One aspect centered on getting the least expensive routing for airline fares. 'We haven't found the answer yet," admits Mr. Treybig

To encourage interaction, employees may submit their questions anonymously.

C

## REATING SOLUTIONS

Another communications avenue is the company's electronic-mail system. "Mail is an integrator of people over distance," says Mr . Treybig. Unlike many companies in which only management or a development team can use electronic mail, everyone at Tandem can send electronic messages. "A person can say "help' to 5,000 people," notes Mr. Treybig. "And, instantly, everyone knows what the problem is-and that kind of joint experience will call up a lot of possible solutions."

It can also put a crimp in a new management plan. A new vice president recently sent out a new company policy via electronic mail and, that very same day, received over 400 mes-sages-all against it. "He said he believed in our 'people philosophy," laughs Mr. Treybig. but it would take awhile to adjust to this democracy."

Another program that involves unstructured communication is TOPS-for Fandem Outstanding Performers. Throughout the year, $7 \%$ of the company's best employees gather at a resort in groups of 70 or 80 to get to know each other and to discuss problems. I''s a cross-functional meeting at which an assembler, for instance, can talk to an accountantor a sales person or any one of the company's 12 top managen who are present. Then I can hear it the way it is There's nothing standing between me and what an assembler or a clerk sees as going on," says

Mr. Treybig. That keeps me in touch."
But the most popular event is the company's weekly beer blast-or "popcorn party," as it's now sedately called. Each Friday, from 4:30 p.m. to $6: 30$ p.m., everybody at the firm's headquarters gets together socially. The beer and popcorn cost the company about 50 c per person, a bargain for the good will it brings. Many good ideas have been passed along and also, occasionally, some abuse. "One day a guy walked up to me," remembers Mr. Treybig, "and chewed me out for 30 minutes. And he was right. He was frustrated, and for a good reason." Mr. Treybig smiles in his down-to-earth manner and adds: "And I have a chance, of course, to give it back. I'm not hesitant to do that."

Each of these programs encourages the company's two fundamental goals: quality and productivity. At its Austin, Tex, plant, as at the others, these programs are combined with weekly and daily participatory-management meetings that deal with specific issues such as quality.
The Austin plant is a "paperless" factory in which all incoming materials are inventoried and tracked by computer. Each employee workstation has a computer that will give an employee feedback on just how well a part is performing at each location. "The terminal," reflects Mr. Treybig, "becomes the tool of the worker-not a tool of management to monitor the worker. I think we provide leadership in this area."

But even the most enlightened CEO must acknowledge a sad fact of business life-letting people go. The one area of the company's people philosophy in which Mr. Treybig feels there is still much work to be done is firing. In a sense, Mr . Treybig feels that Tandem is a victim of its own policies. "In general, we don't let people go," he says. "And generally, people don't want to leave because we have such good benefits." That can bea big problem for an entrepreneurial company. Says Mr. Treybig: There are people who are wasting their lives here. Either they don't have the capabilities, or they don't work hard enough. The problem is how do we help people to leave when they no longer have a career here?"
Though the company has a process for firing. and Mr. Treybig believes it protects the rights of the employees and assures all of faimess, We don't do it really well, 'he laments. It's something we are still learning. I don't ever want to like firing, ' he adds, 'But then if you don't fire, you will never be a good manager."
How does Mr. Treybig see himself? He says he thinks he is good at strategy, af seeing trends and windows; at creating enthusiasm, and "at attracting people better than myself."

In fact, Mr. Treybig believes that good hiring is a key to keeping the company healthy, and he regularly interviews two or three job candidates each week.

But what makes Jim Treybig so successful? Part of it is that he genuinely likes and cares about people. And that, in part, is what makes Tandem so successful, too.

"You've got to stay close to your employees and make themfeel they're imporiant-that the company
cares...We want Interactipn, No one has all the answers. And goodexchanges canhelp clear the air


## R.GORDON McCOVERN

President \& Chief Executive Officer, Campbell Soup Co.

## In recognition of your outstanding efforts in public ser: vice, reflecting a sense of corporate responsibility to the community.

R.Gordon McGovern strides purposefully through the corridors of LaGuardia Airport just as he might walk the halls outside his office in Camden, N. J. It's not surprising, really. The president and chief executive officer of Campbell Soup Co. spends more than one-third of his time traveling, which often makes an office out of bustling airports.

At $58, \mathrm{Mr}$. McGovern has headed the 115 -yearold food company for three years, spending a hefty portion of that time visiting tomato fields, packaging plants, regional offices, and supermarkets worldwide. He has met virtually every employee at the company's Camden plant, to say nothing of the vast sales teams and distributors he regularly sees.

With a schedule that often keeps him far from his desk, Mr. McGovern seemingly would have little time for anything not related to managing his company's 1,000 -plus products-more than 100 of which have rolled out during his short tenure. Yet somehow, the smiling, confident Mr.

McGovern keeps several burners going at the same time;andon one simmers a community-relations program that has attracted national attention.
Why spend precious time and money on projects that don'tsell food? Part of the reason is Mr . McGovern himself. He self-consciousiv concedes that the label of "maverick" - which employees and the press pin on him-is sccurate Indeed, stories about his battered Volkswagen Beetle are famous: it seems his car was so conspicuous in the executive parking lot that one day it was mysteriously given a fresh coat of paint. "The old car never looked better," he recalls.

ButMr. McGovern is quick to point out that, in his case, being a maverick is nothing more than being creative and open-minded. His marketing techniques at Pepperidge Farm Inc., a Campbell subsidiary, got him noticed-and late. pro-moted-by the board of directors. And that maverick style, based on new ideas, helped to develop a diverse, and what he calls a "responsive," community-relations program. Under Mr. McGovern's guidance, Campbell Soup has initiated a host of programs, including:

- A company-subsidized day-care center at its Camden headquarters for children of employees and other local companies.
- A health and fitness program for employees that cost Campbell Soup more than 5700,000 .0 inaugurate.
- An improved maternity-benefits package that inciudes parents who adopt children.
- A grant of $\$ 125,000$ for the Camden City Summer Program in 1983, which gave more than 5,000 community youths employment and recreation opportunities.
- Donations of more than $\$ 1$ million in food products during 1983 to food programs across the country.
But, clearly, the company's time and contributions have not blunted its bottom line. Net sales in fiscal 1984 rose $12 \%$ from fiscal 1983-from $\$ 3.3$ billion to $\$ 3.7$ billion. At the same time, net earnings jumped $16 \%$, hitting $\$ 191$ million versus the preceding year's $\$ 165$ million. Similarly, earnings per share increased from $\$ 5.12$ to $\$ 5.93$. And the active, shirts-sleeve role that Mr. McGovern has found to be successful in helping to boost sales and earnings has also found its way into the company's community programs.

CIVIC BOOSTER. Campbell Soup-and Mr. McGovern in particular-have taken an active role in working to improve the city of Camden, an economically depressed suburb of Philadelphia, Mr. McGovern, for example, is chairman of the Cooper's Ferry Development Assn., a group dedicated to upgrading land and real estate along the city's waterfront area. The $\$ 100$ miltion project is slated to develop a large office and research complex, a retail center to support the business center, and a moderate hotel facility for visitors. Campbell Soup also supports local Boy Scout camps, contributes to area educational scholarships and institutions, and, perhaps most important, maintains its headquarters in Camden at a time when many companies have
pulled out of depressed locations.
"I can't really imagine us leaving." says Mr. McGovern. There are some pretty bad areas here, but I think corporations have a responsibility to help people and the cities You can't solve a city's problems by packing up and running away.
At the same time, Mr. McGovern acknowledges that the reasons why Campbell Soup involves itself in these projects are not wholly altruistic. There is a pragmatic side to this maverick: The programs that benefit Camden also work to the benefit of Campbell Soup," he says. By developing a positive image for the company and creating pleasant working conditions, Mr McGovern hopes to keep attracting quality employees to Campbell Soup. The new community day-care center, for example, provides working mothers with a nearby place in which to safely keep their children. The company offers most employees the convenience of "flex-time," enabling mothers to visit their children on breaks. It not only helps our employees with important parts of their lives, but also improves productivity. Mothers aren't spending as much time worrying if their children are safe and happy. They can go see for themselves, "Mr. McGovern says.

Moreover, the considerable sum devoted by the company to its new physical-fitness program can also be seen as a benefit to the company; it boosts company morale and lowers med-ical-insurance costs. "It's by far our most popular program. We can't accommodate all the people who want to take part," he says, emphasizing that the saving will make up for the initial costs of the program. "We think it will come back in spades."

S

## MART BUSINESS

Perhaps some people think that the glitter of community programs dulls somewhat when they're linked so obviously to corporate well-being, but not Mr. McGovern. As he explains it, it's just a fact of business life. A company is primarily responsible to its shareholders for maintaining a strong company and stable profits; and one of the best ways to achieve that goal, he says, is to create programs for employees and the community that improve the quality of life. "It's good business," he says.

It's also smart business. It improves the corporate image-so important to a consumer-oriented company-furthers the symbiotic relationship between the community and the company, and offers opportunities to the area that it might not otherwise have, such as the day-care center. Tf all [these programs] were left to the government, I doubt if Camden would have these benefits available," Mr. McGovern says.

Yet, Campbell Soup seems to be more than a community benefactor. Its adoption program is one of the first in the country started by a company. And some of its other programs also have a broad impact. They reflect more the CEO's maverick side than his pragmatic one: it is Mr . McGovern's forward thinking that resulted in Campbell's recognition by Savvy magazine as a
company that provides excellent opportunities for women. Mr. McGovern hired the first two women vice presidents in Campbell's history and is in the process of hiring others.

The company has also embarked on a program to ease the plight of migrant workers at farms where it-and other companies-obtain produce. In Ohio, for instance, the housing requirements for migrant workers on farms with Campbell tomato contracts are more stringent than the state's own codes. A company spokesman says Campbell paid half of all the construction costs and loaned the remaining $50 \%$ to farmers at low-interest rates. Additionally, Campbell has started a pilot health-insurance program for migrant workers that will run throughout the 1984 harvest. Finally, when Campbell recently slimmed its pudgy "Campbell kids" to reflect the growing awareness of healthy diets in America, it instituted a "fitnessgram" for school-age children that encourages them to engage in a variety of exercises. The youngsters involved receive a computerized report card assessing their scores.

OPEN DOOR, OPEN MIND. While many of the details of Campbell's community-service programs are handled by Ray Page, vice president for community relations, it's clear that Mr. McGovern's philosophy and management style are the wellspring of much of the programs' energy. The extensive communication with every department at Campbell that takes up so much of Mr. McGovern's time also gives employees a chance to express their views and ideas.
"In fact," Mr. McGovern says, "it was at one of these small sessions, with about 20 people, that the idea for the day-care center first came up. One of the women suggested it and we said, Well, why not? We might as well take a look at it.' We never dreamed it would be this successful.

I think a good communications policy, a kind of open door, is essential to any company. A manager can never afford to cut himself off from the ideas of his employees. You have to be able to Iisten-and to accept new ideas if they can benefit the company and the community in some way, he says.

While Mr. McGovern concedes that Campbell Soup is not the only company that employs good communication to its advantage, some companies seem less aware of its importance. And one clue might be found in the products a company markets. -As a company that manufactures and markets food," he says, "we have to be very con-sumer-oriented. We are always out there talking with consumers, with regular people, and finding out what they like and don't like, and what their concerns are. We have to be able to respond to their needs to keep our products up with the times.

It is perhaps this same philosophy-a necessary ingredient in the company's marketing rec-ipe-that has influenced Campbell Soup's com-munity-relations program. As Mr. McGovern says: "If you go to sleep in this business, you die pretty quick. Keeping on your toes is what keeps you alive."

\#think corporations have aresponsibliity to help people and the cities. Youcan't solve a city's problems by packing up and running away . . . Youhave to be cable to lis. ten-and to accept new ideas if they can benefit the company and the community in some way."

# Tandem emulator hooks into IBM hosts 

## Terminals use 3270 emulation to run applications simultaneously on Tandem computers and IBM hosts.

When an office has several computers from different vendors, a user may use different terminals for different jobs. Such situations can create excessive hardware and officespace costs. But a new software package from Tandem Computers can help cut those expenses. The EM 3270 allows Tandem 653 X terminals to emulate IBM 3270 Information Display Systems, thus providing single-terminal, simultaneous access to applications running on Tandem and IBM systems.

During emulation, pressing a function key causes EM 3270 to read the data on a 653 X terminal screen and convert it to 3270 format for transmission to the IBM host. The host, therefore, is sending and receiving data in 3270 format, while the 653 X terminal is sending and receiving data in 653 X format.
EM 3270 accomplishes the conversion by examining each character in the datastream and locating the control sequences that require modification. The control characters are then substituted for the characters in the datastream. and the converted block of data is passed to the receiving device.

EM 3270 provides an 1BM 328 X printer-emulation feature, so that files in an IBM host system can be printed on a Tandem printer. The 328 X printers are emulated in a fashion similar to IBM-terminal emulation: The datastream is translated into a format compatible with Tandem printers.

Tandem Compulers inc
19191 Valico Pkwy Cupertino Calif 95014

Operate in block mode. Both the 3270 and 653 X terminals can operate in block mode: their screens are painted with protected and unprotected data fields. Protected fields cannot be modified by the terminal operator. The host computer sends control sequences to the terminal to define these characteristics for each area of the screen. When the terminal user enters data and strikes a function key, only the modified data fields are sent to the host. This minimizes the resources needed to communicate information between the terminal and the system. It also minimizes communication-line traffic, and the system is spared the work of refreshing the protected fields. Most block-mode terminals such as the 3270 have only one screen buffer (page) of terminal memory. But Tandem 653X terminals, which have both block-mode and conversational-mode capabilities, contain eight pages of memory. They offer higher performance in transaction processing. The buffers store the most recently used eight terminal screens of data. Switching between the various screens is done at the terminal, and does not require that the host system repaint each screen as it is needed. This facility further reduces communication-line traffic.
Block-mode terminals communicate with computer systems via sessions, temporary logical connections that define the manner in which data will be exchanged between terminal and host system. EM3270 takes advantage of the multiple-page feature of 653 X terminals to manage simultaneous sessions with Tandem and IBM systems.

Two-way or three-way. EM 3270 can provide two-way sessions (between a terminal and an IBM host) and three-way sessions (between a terminal, an IBM host, and a Tandem host). A two-way session might
be used for timesharing or program development on an IBM system (Fig. 1). In this case, EM3270 interfaces with the IBM host through a Tandem access method that provides bisynchronouscommunications access to the host.

A terminal user might also initiate a three-way session, in which communication is established with both an IBM-based application and a Tandembased application (Fig. 2). In such sessions, the IBM host application might be CICS or IMS.

Users can switch among the applications in a three-way session manually (via a function key) or programmatically (via a predetermined sequence of characters in the datastream). In the programmatic method, the IBM session yields the screen to the Tandem application (or vice versa) at times determined by a program. The terminal user might even be unaware that there are two computers in session with the terminal.

Concurrent sessions supported. EM3270 reserves one of the 653 X terminal's eight screen buffers for the IBM host session, leaving the remaining seven for the Tandem-based application. Since screens from both sessions are in the terminal memory at the same time, very rapid switching between sessions is possible. Neither application need be involved when switching between the screen that is visible on the terminal, and one that is in terminal memory.

A 653 X terminal can store data in any of its buffers at any time. For example, if screen buffer 4 is being displayed, the host can send a block of data to be stored in buffer 7. Therefore, applications from both the IBM and the Tandem systems can be active simultaneously. Moreover, a terminal user can initiate a long-running transaction on one host, and then switch to an application running on the other host.

When the transaction is completed, EM3270 will store the resulting data in the buffer reserved for that session without disturbing the other session. The terminal user can periodically switch between sessions to see if the transaction has been completed.

Provides conversion for host. EM3270 provides datastream conversion for the IBM host session. Since data in the Tandem-based application session are passed to and from the terminal without modification, the Tandem-based application does not affect the screen buffer reserved for the IBM application. The IBM application, therefore, runs as if it is communicating with a 3270 and the Tandem application runs as if it is communicating with a 653 X terminal. This way, existing applications on Tandem and IBM can both run without modification.
Writes to any Tandem-attached printer. EM3270 can read the 653 X screen and write the resulting data to any Tandem-attached printer. The user executes this screen-print function by striking a designated


1. A Tandem terminal can use the EM3270 emulation package to communicate with an IBM host in a two-way session. Such sessions are best suited for timesharing or program development on an IBM system.
function key while either the Tandem or IBM screen is displayed. This requires no participation by either the IBM or Tandem application. As an option, the screen-print output may be directed to a disk file to retain a machine-readable copy of an entire session or a specific screen.

EM3270 also provides for two-way sessions where an IBM 328 X printer datastream is converted and directed to any attached Tandem printer. Typically, the output is directed to the Tandem spooler so that printers may be shared by many applications.

With another option, the printer output may also be directed to a disk file or another process running on the Tandem system. This arrangement can facilitate movement of data from an IBM system to a Tandem system.

Database reconciled on two systems. The ability to support dual simultaneous sessions between two different computers, with instantaneous switching between sessions, lets users perform such unusual applications as the online reconciliation of complementary databases on the IBM and Tandem systems. For example, a user might have an orderentry application on a Tandem system, and a finished-goods-inventory application on an IBM system. While performing order entry on the Tandem system, the clerk could switch to the IBM session and readily check for, and reserve, the finished goods required for shipment.

Tandem's networking software, Expand, provides
2. A three-way session implemented through EM3270 lets a Tandem terminal communicate simultaneously with a Tandem system and an IBM system. Users can switch between applications or run both at once.

3. EM 3270 can be used with Tandem's networking software, Expand, to link geographically distributed Tandem and IBM systems. This arrangement can also eliminate addressing conflicts between IBM hosts, where more than one host uses the same terminal address.

additional capabilities for EM3270 applications. It allows a user to access any system in the network via the computer to which his/her terminal is attached. With Expand, IBM systems can be linked to a Tandem network to provide a 653 X terminal with access paths to multiple, geographically distributed IBM hosts (Fig. 3). A Tandem 653X terminal in Chicago can be in session with Tandem or IBM applications running in San Francisco, Dallas, or Frankfurt. In addition, terminal-addressing conflicts may be eliminated between the 1BM hosts. where more than one IBM host uses the same terminal address.

EM3270 provides other benefits as well. The single-terminal, multiple-system environment allows for a lower initial terminal investment. Users purchase fewer terminals, and from a single vendor. Long-term, such an environment is a good investment because of the lower cost for parts. replacement, maintenance, and expansion. Most importantly, a user can leverage an existing investment in computing systems, while taking advantage of new technology to meet changing needs.

## How useful?

Immediate design application

## Circle

110
111
Within the next year
Not applicable


## SWSTEMS

## Fom

## IHIL THPN

In the wake of Tandem's recently resolved problems over its financial reporting practices, sources say chairman Thomas J. Perkins has begun taking a much more active role in the day-to-day decisions at the Cupertino, Calif.-based firm. A company spokesman said the title and responsibilities of president and chief executive officer James G. Treybig haven't changed, however. The company would not comment on reports that it has discontinued work on two fault-tolerant system projects code named Rainbow and Crystal.

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## Exprixile

## Valentine doesn't need <br> any hearts and flowers

By Kathleen Burton Special to Business Monday

MENLO PARK - The man who has been called "the emperor of Silicon Valley" strides into his surlit offices at 8 a.m. on a Friday and flashes a Kennedyesque grin that crinkles his gray eyes.
Looking decidedly unregal is 47-year-old Bon Valentine, the venture capitalist extraordinaire who has funded the likes of Apple Computer Inc. and Tandem Computers Inc., both of Cupertino, and Atari Inc. of Sunnyvale. He is dressed for his regular Friday golf game in bright kelly green pants and shirt. Green, he says, is his favorite color.

Among insiders in the investment community, Valentine is


Valentine known as one of venture capital's golden boys. He has been calted one of the men Wh o started silicon Valley back when tit
was nothing but endless rows of fruit trees brushing against the California sky.
An intensely-private man who lives quietly with his wife and their youngest daughter in a location he refuses to disclose, Valentine shuns publicity. He doesn't save his own newspaper clippings, and he plays his carcds close to his vest while on the venture capital cocktail party circuit. This is a decided rarity in the venture "good-old-boy" network, where news about hot new companies travels fastest over wine.

With an eye to the valley's propitious climate for venture opportunities, Valentine started Sequoia Capital in 1973 after 12 years in sales marketing and management positions in the electronics industry, notably with Fairchlld Camera \& Instrument Corp. of Mountain Vlew and National Semiconductor Corp, of Santa Clara.
good example," Valentine says. We know that small, spinoff communications companies will be blg telephone equipment buyers in the future, and we're finaneing companies that will supply this need.
"We're also looking at financing companies that will sell to the new. smaller telephone companies and compete against (newly divested) Ma Bell."

Sequoia finances initial offerings in the $\$ 350,000$ to $\$ 1.5$ million range. Its investments have centered historically on computers, peripherals, office equipment and communications companies located on the West Coast

But now, with the field glutted with venture money looking for the very best new talent, Sequoia Capital is widening its horizons to include any fast-growth business with a product that makes it different.
"There are no rules," says Valentine, "We're looking for non-conformists, for unusual people with unusual ideas."

Competitors characterize Valentine's business style as harddriving, tough and independent.
"He's aggressive," says Peter Wolken, a partner at Associated Venture Investors in Menlo Park. Another competitor adds: "He's real tough about making people pay up. He also won't chase issues that are way over-priced. He can

## 6 There are no rules. We're looking for

 non-conformists, for unusual people with unusual ideas.- Don Valentine
afford to wait until they come down."

Between 1973 and 1983, the success formula Valentine and his partoers used shows a King Midas

Inc. of Sunnyvale. He is dressed for his regular Friday golf game in bright kelly green pants and shirt. Green, he says, is his favorite color.

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By comparison with some other venture capital firms on the West Coast, Sequoia Capital is small. San Francisco's Hambrecht \& Quist, for example, manages $\$ 450$ million in funds and invested $\$ 69$ million in 1983. Kleiner Perkins Caufield \& Byers, also of San Francisco, invested $\$ 41$ million in 43 deals for that same year.

In contrast, Sequoia Capital manages approximately $\$ 150 \mathrm{mil}$ lion and invested $\$ 15.9$ million in 22 investments during 1983. A survey in Venture magazine ranked Sequoia Capital 44 th among the top 100 venture capital firms in the country. The staff consists of five partners in Menlo Park and two in Los Angeles.
"Given our size," Valentine says, "we have to exploit time. We have to get in there before big companies get interested in the same opportunity."

His most recent fund, Sequoia Capital IV, launched in February 1984 and capitalized at $\$ 90$ million, is looking at "transitions."

The telephone company is a
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Between 1973 and 1983, the success formula Valentine and his partners used shows a King Midas touch. The company's first fund backed Atari, Tandem and Apple. The $\$ 20$ million Sequoia Capital II fund, launched in 1978, backed a wide range of high-tech flyers, inciuding Altos Computer of San Jose, LSI Logic Corp. of Milpitas (semiconductors) and Tandon Corp. of Chatsworth (hard disks).

Sequoia Capital III, launched in 1982, has backed almost 40 start-up firms, most of which have not yet gone public. They range from an artificial heart manufacturer (Novacor in Oakiand), to a semiconductor company (Cypress Semiconductor of San Jose), to a developer of artificial intelligence expert systems (Syntelligence of Menlo Park).

Valentine has had his share of winners that turned into losers, including Atari and Pizza Time Theatre, which is now operating under protection of the bankruptcy laws.

Despite a portfolio that keeps him busy, Valentine takes the time to reflect on Silicon Valley.

## Computers ystems News $10 / 15 / 84 \rho 56$

## BUSINESS \& FINANCE

## Tandem Computers Reaches Out-Of-Court Settlement With SEC

CUPERTINO, CALIF, Tandem Computers Inc. said it has reached an out-of-court settlement with the Securities and Exchange Commission on charges that it committed fraud and inflated its profits and revenue for fiscal year 1982.
Without admitting or denying the allegations, Tandem consentedto an entry of judg. ment enjoining it from violations of federal securities laws
and requiring that its outside auditor, Arthur Andersen \& Co., perform special audits of Tandem's accounting of sales for fiscal 1984, 1985 and 1986 to ensure that the company has improved its procedures.
The charges followed a twoyear non-public investigation of Tandem's accounting procedures, which the SEC began in October 1982 when it was reportedly tipped off that Tandem was not following stan-
dard accounting procedures for its orders.
That same year, Arthur Andersen and Co. reviewed Tandem's revenue recognition policies. As a result of that review. Tandem restated its fiscal 1980 earnings and sales, downgrading revenue from $\$ 335.8$ million to $\$ 312.1$ million.

Later Tandem restated its profits and sales for all four quarters of fiscal 1982.

SEC attorney Claudia Bel-
cher said, "It was a problem of recognizing revenue before it was appropriate to recognize it." Tandem was counting revenue on orders that were not final, that were contingent on financing, managerial approvals and other things, she said.

The company was charged with violating the fraud provisions of the Securities and Exchange Act. The suit also levied charges of reporting and
accounting violations against Tandem and three of its executives: James Treybig, president; Robert Marshall, chief operating officer; and Henry Morgan, former controller, secretary and treasurer, who resigned in February.
Tandem said it was consenting to the entry of judgment in order to avoid the extensive commitment of management time and financial resources that would be involved in a court action on the matter. A spokeswpman said the agreement essentially puts an end to the matter. Tandem has made changes that have improved its accounting procedures, she added.

## Design Graphics

 Acquires ArcadLOS ANGELES - Design Graphics Software Inc. last week said it has purchased year-old software marketer Arcad for an undisclosed amount of cash. Arcad will become the marketing arm of Design Graphics.

Design Graphics president and chief financial officer David G . Hamlin has been named president of Arcad, replacing Peter Martin, who assumes the titles of Design Graphics executive vice-president and Arcad vice-president and marketing director.

Privately held Design Graphics, which was formed in June as an OEM value-added reseller of computer-aided-design systems, will "restructure Arcad's marketing effort to include turnkey systems to run Arcad's AIDS (Architectural Interactive Design Sys*

## b-MAINFRAME MUNICATIONS TIONS:

1e world of large computers used to be quite a headiache But now that heir full line of proven communication products things are much easier. he VP of Finance said he wanted to tie into the mainframe down the COX" was my instant answer. We just plugged the card into his PC. o the IBM controller. No need to double up on hardware or clutter up minal
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## Tandem Set To Supply Systems To Airlines

CUPERTINO, CALIF. Tandem Computers Inc. has entered into three joint venture agreements that mark its first move toward supplying its fault-tolerant systems to the airlines industry.
Tandem signed joint venture partner agreements with two subsidiaries of the Scandinavian Airlines System Group: Linjeflyg AB, the Swedish domestic airline, and Scanator $A B$, a software marketing and management consulting firm.

The third deal is with Bedford Associates Inc., Norwalk, Conn., a software company that specializes in the transportation and financial industries.
The agreements call for the companies to jointly develop and market an airline reservations system and to market 22 existing applications software packages related to the airline industry. Linjeflyg will not market the software applications.
The packages will run on Tandem's NonStop networkoriented transaction processing family of computers.

The reservations system, to be called SPAR (for Swedish Passenger Reservation System), will include inventory control, flight availability, passenger handling, ticketing and check-in capabilities.

In addition to the reservations package, software to be offered includes traffic and operations modules, aircraft maintenance modules, administrative and management systems, tour operations systems and a software development tool, all of which are reportedly are being used within the Scandinavian Airline Systems Group.
The partners will also offer a cargo system being developed by the Scandinavian Airline Systems Group.

According to Tandem, Linjeflyg already has completed the initial design of SPAR, and the first system will be installed at Linjeflyg in December 1985. Tandem, Linjeflyg and Bedford will make that initial installation as a joint effort. Scanator will not be involved in that installtion.
Bedford will do the actual design work on a standard version of SPAR to be marketed to other air carriers.

Three weeks ago, Hambrecht \& Quist Inc. and Woodman Kirkpatrick \& Gilbreath agreed to merge. Since then the management staffs of both companies have been sorting out personnel questions. Many decisions remainespecially in the research department-but some changes are apparent. Ed Lowe, an $H \& Q$ managing director and head of institutional sales, is stepping down as deparment head and returning to his previous H\&Q sales position. Roger Killion, a top-grossing salesman Lowe had hired from Smith Barney, Harris Upham \& Co. Inc., will take his place. Tommy Chircle, H\&Q's head of over-the-counter trading, has resigned, and WK\&G's head of trading, Frank Burney, will not join H\&Q. Randall Minnniear, also hired by Lowe, will run H\&Q's entire trading operation. Minniear and Killion were named managing directors.

Although most analysts on Wall Street have been negative about Tandem Computers Inc., including Goldman, Sachs \& Co's John C. Levinson, Levinson is now somewhat more optimistic about the stock. Levinson said in a recent report, "So far this year, the stock is down 57 percent, while the average minicomputer company's stock is down about 10 percent. We know of no major firm currently recommending the shares.... Given the stock's sharp correction and some discernible changes at the company, we now believe Tandem shares have some speculative appeal at current levels." This opinion is based on four points: The worst of the transition to a more marketingoriented company is probably over; new product flow will be strong over the next two to six
months, the most important of which is low-end product expected by year-end; the first solid gain in earnings since 1981 should occur in fiscal 1985 due to the company's "strictest expense control measures ever"; and the stock is undervalued at current levels-selling at the second-lowest (to Digital Equipment Corp.) multiple of all minicomputer stocks on price-to-book value and price-to-sales bases-if the fundamentals turn as expected.

The initial-public-offering market in the third quarter of this year has picked up steam. According to Securities Data Co. Inc., New York, there were 282 IPOs completed in the first nine months of 1984 , with 102 occurring in the third quarter. looking at IPOs for the computer industry-including all companies primarily engaged in manufacturing electronic computers and peripherals equipment and/or major logical components used in electronic computer sytems, as well as those primarily engaged in developing and marketing computer software-the number of deals is also on the rise, although less dramatically. There were 42 IPOs for the computer industry in the first nine months of 1984.

Despite recent jobchanges by analysts covering the computer industry, one analyst currently looking for a new position candidly admitted it is tougher to find a new job this year than it was last year during the bullish market for technology stocks. Brokerage firms in general have cut back. "A year ago, the brokerage firms had 100 -million-share days. Today they are just breaking even with 70 -million-share
volume," he said. This has made brokerage firms "cautious about hiring people," and some have been firing. The consolidations of Shearson/American Express and Lehman Brothers Kuhn Loeb, as well as Merrill Lynch's purchase of Becker Paribas, have forced some analysts to look for new placements. The recent acquisition of Woodman, Kirkpatrick \& Gilbreath by Hambrecht \& Quist could add a few more analysts to the roster of those seeking fresh opportunities. With a "soggy equity market," the analyst said, there is also less pressure to fill vacant spots. For example, The First Boston Corp. has not filled the vacancy created by Marc Schulman's departure to Hambrecht \& Quist seven months ago. "One year ago it was a seller's market," the analyst said. "Now research directors believe it is a buyer's market."

## - - -

ON THE MOVE: Jacqueline C. Morby, a general partner at TA Associates, Boston, will be spending more time than usual on the West Coast. Her husband has accepted a job in San Francisco, and Morby, who currently spends about 20 percent of her time on the West Coast, will gradually shift that West Coast commitment to about 80 percent, a colleague said....Vincent H. Tobkin, formerly a partner with consulting firm McKinsey \& Co., has been elected a general partner of Sierra Ventures, a West Coast-based technologyoriented venture capital fund....George Kelly, former telecommunications analyst at Becker Paribas, has joined Morgan Stanley \& Co. Inc. as its telecommunications analyst. Kelly, who has 15 years of experience at AT\&T and IBM, will be involved in both research and corporate finance at Morgan Stanley.

## tebook

ents are occurring on the IBM
the formation of a top-secret force in White Piains, N.Y. Rensidering how best to link IBM's to a cohesive offering. One observpondering reigning in the Entry rtered in Boca Raton, Fla., as part division.
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an IBM manager said the firm is of gateways from SNA to the Interzation's Open Systems Interconnect ay, however, when such links would s a seven-layer architecture used by works, including Sytek Inc's LocalMs PC Network LAN.

San Jose, Calif., is expected next rsion of its Omninet local-area ipple Computer Inc. Macintosh. roduct incorporates Corvus' Omniand that it will allow more than 32 . It will not, however, be compatihookups, they added.

1. Corvus has signed an OEM agreevide a LAN to rur under MS-DOS es predicted that version 3.1 , which would be released early next month. include LAN options, is due for
ill release version 1.2 of its Visi ware operating environment on spokesman said. The Minneapolis technology in July (see ISN, Aug. Jose, Calif., micr ocomputer soft-
rp. ended industry speculation date for its long-awaited Venus puter earlier this month by telling will be introduced at the end of this
e called the VAX-11/790, will be the st supermini using emitter-coupled will have a processing speed of about und $\$ 500,000$, industry sources said roes had said the supermini would be ber or early Deceniber. Last week, will release the protuct at the end of wal meeting on No. . 1 and Comdex

## Tandem Enters PC Domain

By Clare P. Fleig

Tandem Computers Inc. unveiled a series of low-end hardware and software products today that company executives said marks Tandem's initial entry into the personal computer (PC)/workstation marketplace.

Heading the list is the new Dynamite family of workstations that both emulates Tandem 6530 terminals and operates as a PC using floppy and hard disk-based storage, Gerald Peterson, vice president of international marketing, said.
In addition, the Cupertino, Calif., firm introduced two software packages, PCFormat and Information Xchange Facility (IXF), that enable Dynamite computers to run MS-DOS-based microcomputer software packages and to transfer and convert Tandem host files for local processing, he said.

Two new dot-matrix printers that provide draft and near-letter quality documents at up to 158 characters per second (cps), complete Tandem's product offerings.

Noting its departure from its primary fault-tolerant CPU product line, Peterson noted that Tandem plans to market the workstations solely to its installed base as part of a total system solution.
"We're in the system business, not the PC business. We're not after shelf space," he said.
Outsiders viewed the move as part of the firm's overall product broadening and push into the lowend marketplace.

Based on Intel Corp.'s 8086 microprocessor, the Dynamite family currently consists of two models.
Both models contain the design features of Tandem's 6530 on-line transaction processing terminals plus PC additions including 256 K bytes of main memory expandable to 640 K bytes and Microsoft Corp.'s MS-DOS and GW-Basic PC software packages.

The model 6541, which is available now, sells for $\$ 2,995$ and features two 360 K -byte floppy disk drives. The model 6546 , selling for $\$ 3,995$ and available in December, has one floppy disk drive and a $10-$ Mbyte hard disk drive, Peterson said.

The company expects to sell 15,000 Dynamite workstations in 1985 and last week opened a new production facility in Austin, Texas, to manufacture the products.

Tandem's PCFormat software serves as a software translator that converts Tandem Encompass
data base file formats into MS-DOS-compatible formats to be used with applications such as Lotus Development Corp.'s 1-2-3, Peterson said.

IXF allows users to transfer data between host files and workstation files via commands running under MS-DOS.
Both software packages are available now. PCFormat can be licensed for $\$ 100$ per month. IXF has a one-time license fee of $\$ 295$ per workstation and a $\$ 75$ monthly charge per system.
Industry analyst Omri Serlin, president of ITOM International, Los Altos, Calif., praised the new products as "a sign that Tandem is finally waking up to what is happening in the desktop computer market."
"It looks like they are starting to take a less myopic view of the marketplace," he said.

As a marketing incentive, for each set of 100 workstations ordered customers will be given a 2 Mbyte memory board. Orders of 500 units will earn a full expansion board for the NonStop TXP, Tandem's largest fault-tolerant computer, Peterson said.
Although they acknowledge they face stiff competition from other manufacturers even in their installed base, Tandem executives said Dynamite's system-integration features will make it a viable market competitor
Moveover, the inclusion of Tandem 6530 terminal features such as 132 -column display, 16 -screen memory and 6530 -style keyboard will make Dynamite attractive to Tandem customers, said Gerald Held, director of strategic planning. The fact that the keyboard includes the full set of 6530 terminal function keys as well as IBM PC function keys makes it more natural for Tandem system users."
The addition of the workstation family coupled with recent price cuts on Tandem's Non-Stop $1+$ and NonStop Il minicomputer lines (see ISN, Aug. 20) may allow Tandem to penetrate some lower-end markets previously closed to the company, Serlin said. "Combined with its recent price cuts, the product line indicates that Tandem has become more responsive to the whole marketplace."
Supplementing Tandem's workstation package, Held said, the new dot-matrix printers, models 5540 at $\$ 595$ and 5541 for $\$ 895$, offer five printing modes and print at 80 and 132 characters per line, respectively.

## DEC Links Its Computers To Disoss

By Johanna Ambrosio
Digital Equipment Corp has announced an interface to connect its computers and IBM's Distributed Office Support System (Disoss) host-based software.
Although other office systems vendors, such as Data General Corp. and Wang Laboratories Inc., have stated their intention to provide links to IBM's Disoss environment, DEC is the first office systems vendor to offer such a product. The announcement came at last week's Intech conference held in Dallas.

At the same time, DEC also introduced software to allow IBM 3270 terminals to access
an IBM problem," said Richard A. Loveland, DEC's manager of product planning for office and information systems.

DDXF works as a service from DEC's SNA gateway, a communications device between VAX and IBM computers. With DDXF, the gateway appears to an IBM Dis-os-based mainframe as another SNA device. A VAX user then requests Disoss files from the gateway, which then passes on the request to the IBM mainframe. The files are then sent in the other direction.

Besides accessing files, VAX users can also use Disoss' library services to either store or

IBMs software that allows appli-cations-level exchange between peer-to-peer computers. DEC solved this problem by "doing an exploratory to see how LU 6.2 really looks," Loveland said. DEC then implemented this design into DDXF, he added.

Nevertheless, if IBM's published specifications of LU 6.2 differ radically from what DEC assumed they would be, DEC may have to alter DDXF somewhat to reflect IBMs actual design, observers said.
"Digital has taken an important first step," said Frank Pinto, director of marketing in Data General's Information Systems Division.

## Despite Dynamite, Tandem says it's not going personal

## By NICK ARNETT

Tandem Computers Inc. of Sunnyvale Oct. 15 will introduce a work station that can use IBM personal computer software. The work station, called Dynamite, is targeted at users of Tandem's computer systems.
"We are not going into the personal computer business," said a variety of company officials.

Analysts said the move probably will increase Tandem's revenue immediately, though not greatly, and was necessary for Tandem to remain competitive in the long term.

Tandem makes very large fault-tolerant computers for factory and office automation, stock exchange trading management, banking networks, point-of-sale, and videotex applications.
The Dynamite family of work stations offers the features of Tandem's present line of terminals, plus the computing power of an IBM personal computer at a higher speed, and they can be used as an IBM terminal to communicate with an IBM mainframe via a Tandem network, said Jerry Held, Tandem's director of new ventures.
Tandem also will introduce two dotmatrix printers with the Dynamite work stations.

Similar capability has been possible using an IBM PC with a third-party software package, but Tandem has priced the Dynamite work stations just under comparable IBM packages. The IBM computers lack certain keys that Tandem's terminals use for special functions.
The Tandem work stations are priced just less than IBM PCs, with equivalent computing power, said Tandem officials. Analyst Joseph Kapka of Bateman Eichier, Hill Richards Inc. in Santa Clara said the Dynamite "sounds like a nice little machine, but it's not going to revitalize their sales. It's not going in add etm
measures.
Analysts said the price cuts will be a death blow to many of Tandem's potential competitors. There are 10 to 15 companies, most venture capital-backed, vying for entry into the fault-tolerant market.
Further, in August Tandem instituted new restrictions on travel, hiring and wage increases. Company officials said at the time that the tightening was to combat higher expenses due to hiring more than 600 people in the first half of the year to develop new products.
Analysts said the price cuts and increased costs are expected to flatten or lower Tandem's quarterly earnings beginning with the period ending Sept. 30, the end of its fiscal year.

A company spokesman said that the quarterly and annual figures will not be released for "several weeks." Tandem's annual revenue in fiscal 1983 was $\$ 418$ million, with a net income of $\$ 30.8$ million, or 76 cents a share.

Tandem stock last week was trading in the mid-teens, after reaching a high of $\$ 40$ this calendar year and a low of \$13. Kapka said.
Sandy Gant, an analyst with InfoCorp, a Cupertino market research firm, called the work station "an important product for Tandem" because it had been losing terminal and work station sales to other vendors.
"But it's not going to set the personal computer market on its ear," she said.
For the present, Gant said, Dynamite
'will be the best product for people who are buying Tandem computers."
Gant and Kapka both said that Dynamite won't sell computers, but Tandem's installed base- 896 customers with 6,393 processors, each of which could theoretically support up to 256 peripherals such as the work station-along with future sales makes a big potential market.
Revenue from work stations could amount to half the value of a sale, said Tandem's Gerald Peterson, vice president of international marketing. He said the work stations can be sold "without a whole lot of additional sales and marketing effort."
Prices for Dynamite work stations range from $\$ 2,995$ to $\$ 3,995$.

## R\&D SPACE




LEVEL 1 - 4 OF 4 STORIES
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October 15, 1984, Monday
DISTRIBUTION: Business Editors
LENGTH: 525 words
HEADLINE: TANDEM; New workstations provide NonStop system users host data base access and local processing

DATELINE: CUPERTINO, Calif.
BODY:
Tandem Computers Inc. (OTC/TNDM) Monday introduced multifunction, personal workstations and two new software products that translate data stored on Tandem systems into formats that can be used by personal computer software packages running under the popular MS-DOS operating system. The company also introduced two dot-matrix printers for draft- or near-letter-quality documents. The new workstations, called the DYNAMITE 654 X family, provide the features of Tandem's 653 X family of on-line terminals, including IBM 3270 emulation, plus the convenience and local processing capability of a stand-alone personal computer. Like Tandem's 653X terminals and other peripheral products, DYNAMITE and the associated new products will be marketed to Tandem customers through Tandem's direct sales organization. DYNAMITE is based on the 16 -bit 8086 microprocessor. As a standalone workstation it can run most software written for the IBM PC. With Tandem's new software, PCFORMAT and Information Xchange (cq) Facility (IXF), DYNAMITE users can transfer and convert NonStop system files into formats that can be used with MS-DOS-compatible software. PCFORMAT converts Tandem data base files to formats used by such personal computer software as Lotus 1-2-3; IXF transfers data from Tandem system files to and from DYNAMITE's MS-DOS files. The DYNAMITE family consists of two models, each with a dual-mode, 12-inch green-phosphor display screen that supports both text and graphics, and either two 360-kilobyte floppy disk drives, or one floppy disk drive and one 10 -megabyte Winchester disk drive. Both include MS-DOS and GW-BASIC. Options include bit-mapped graphics and the ability to expand main memory from 256 kilobytes to 640 kilobytes. DYNAMITE's low profile keyboard provides the full set of Tandem $653 \times$ terminal function keys plus 10 keys that duplicate IBM PC function keys. Tandem's new 5540 and 5541 bidirectional, dot-matrix printers provide local printing capability for DYNAMITE users, or can operate as a shared system resources when connected directly to a NonStop system. DYNAMITE model 6541 with two floppy disk drives, MS-DOS, GW-BASIC and 256 kilobytes of RAM is available now and sells of $\$ 2995$ (U.S.). Model 6546, priced at $\$ 3995$ (U.S.) and available in December 1984, offers one floppy disk drive, a 10 -megabyte Winchester disk drive, MS-DOS, GW-BASIC and 256 Kilobytes of RAM. PCFORMAT is priced as a monthly fee of $\$ 100$ (U.S.) per system. IXF sells for a one-time license fee of $\$ 295$ (U.S.) per workstation, and a $\$ 75$ (U.S.) monthly charge per system. Both are available now. The 5540 and 5541 dot-matrix printers are available now and are priced at $\$ 595$ (U.S.) and $\$ 895$ (U.S.), respectively. Tandem, a Fortune 500 company, manufactures computer systems and networks for the on-line transaction processing marketplace. Tandem is headquartered at 19333 Vallco Parkway, Cupertino, Calif., 95014.

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Gina Burr, 408/725-7455
By Regis McKenna, Palo Alto, Calif.
Gayle Paride, 415/494-2030

## Oct 15,1984 San Yose mer/News (evening) p 34 E <br> Tandem unveils new software, workstations <br> Wall Street Journal

Tandem Computers Inc. introduced multifunction personal workstations and two new software products that translate data stored on tandem systems into formats that can be used by personal computer software packages running under the popular ms-dos operating system.
The company also introduced two dot-matrix printers for draft- or near-letter-quality documents.
The new workstations, called the Dynamite 654x family, provide the features of Tandem's 653x family of on-line terminals, including IBM 3270 emulation plus the convenience and local processing capability of a stand-alone personal computer.

Dynamite is based on the 16 -bit 8086 microproces-
sor. As a stand-alone workstation, it can run most software written for the IBM PC

With Tandem's new software, PCformat, and information exchange facility, Dynamite users can transfer and convert nonstop system files into formats that can be used with MS DOS-compatible software.

PCformat converts Tandem database files to formats used by such personal computer software as Lotus 1-2-3. IXF transfers data from tandem system files to and from Dynamite's MS-DOS files.

The Dynamite family consists of two models each with a dual-mode, 12 -inch green-phosphor display screen that supports both text and graphics and either two 360 -kilobyte floppy disk drives or one floppy disk drive and one 10 -megabyte Winchester disk drive.

Both include MS-DOS and GW-basic. Options include bit-mapped graphics and the ability to expand main memory from 256 kilobytes to 640 kilobytes.
Tandem's new 5540 and 5541 bidirectional, dot-ma trix printers provide local printing capability for Dynamite users or can operate as a shared system resources when connected directly to a nonstop system.
Dynamite model 6541 with two floppy disk drives, MS-DOS GW-basic and 256 kilobytes of RAM is available now and sells for $\$ 2,995$.

Model 6546 is priced at $\$ 3,995$ and will be available in December 1984. It will offer one floppy disk drive a 10 -megabyte Winchester disk drive, MS-DOS GWbasic and 256 kilobytes of RAM.
riward for Tandom's Treybig
E: James G. Treybig. president of Tandem Computers Inc. of Cupertino, is one of four executives named as recipients of Industry Week magazine's eighth annual excellence in management awards. Treybig was cited

- Hor his "outstanding efforts in implementing and mainzaining sound employee relations." The business mangement magazine also presented awards to J. Peter Grace, chatrman of W.R. Grace \& Co.; R. Gordon McGovern, president of Campbell Soup Co.; and June M. Collier, president of National Industries Inc.

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$$

## New Products

Tandem Computers Inc. of Gupertino introduced a workstation and software to be used along with its family of NonStop systems. It also announced two dot-matrix printers.

Tandem's new Dynamite is based on the 16 -bit 8086 microprocessor and, for local processing, runs under the MS-DOS operating system. As a stand-alone machine, it can run most software written for the IBM personal computer.

## Keyword Office Technologies

 Inc. of San Jose has introduced a disk-to-disk conversion device that lets diskettes created on one word processor be used on any other word processor or personal computer.Called the Keyword 7000, it works as a peripheral to an IBM or

IBM-compatible personal computer. It consists of a controlier board, which is inserted into an expansion slot inside the personal computer, and a disk-drive box that sits near the personal computer. Cost is $\$ 9,995$.

Operations Control Systems of Palo Alto, formerly Project Resources Inc., has introduced new security management software for the Hewlett-Packard Co. 3000 series of computers.

Vitalink Communications Corp. of Mountain View and Digital Equipment Corp. of Maynard, Mass. are jointly selling a hardware and software product called TransLAN. TransLAN transparently connects local area networks via satellites, land lines or both.


## lebook

ents are occurring on the IBM the formation of a top-secret orce in White Plains, N.Y. Residering how best to link IBM's a a cohesive offering. One observpondering reigning in the Entry tered in Boca Raton, Fla., as part tivision.
ncompass IBM's Personal Decision ter software. Released last month. art of more sophisticated integrated said IBM has established a new Office by Example whose charter is approach for its PC product line. nounce this week a replacement for ic typewriters. The unit is said to be t to a word processor than to a 1 a detachable keyboard that can be puter family,
an IBM manager said the firm is of gateways from SNA to the Interation's Open Systems Interconnect y, however, when such links would a seven-layer architecture used by *orks, including Sytek Inc's LocalMs PC Network LAN
an Jose, Calif., is expected next sion of its Omninet local-area pple Computer Inc. Macintosh. oduct incorporates Corvus' Omnind that it will allow more than 32 It will not, however, be compatiookups, they added.
Corvus has signed an OEM agreeide a LAN to run under MS-DOS - predicted that version 3.1, which vould be released early next month. include LAN options, is due for

4 release version 1.2 of its Visi are operating environment on ookesman said. The Minneapolis technology in July (see ISN. Aug. Jose, Calif., microcomputer soft-

## -p. ended industry speculation

 date for its long-awaited Venus uter earlier this month by telling ill be introduced at the end of thiscalled the VAX-11790, will be the : supermini using emitter-coupled ill have a processing speed of about and $\$ 500,000$. industry sources said ses had said the supermini would be et or early December Last week. - ill release the product at the end of

## Tandem Enters PC Domain

By Clare P. Fleig

Tandem Computers Inc. unveiled a series of low-end hardware and software products today that company executives said marks Tandem's initial entry into the personal computer (PC) workstation marketplace.
Heading the list is the new Dynamite family of workstations that both emulates Tandem 6530 terminals and operates as a PC using floppy and hard disk-based storage, Gerald Peterson, vice president of international marketing, said.
In addition, the Cupertino, Calif. firm introduced two software packages. PCFormat and Information Xchange Facility (LXF), that enable Dynamite computers to run MS-DOS-based microcomputer sofware packages and to transfer and convert Tandem host files for local processing, he said.
Two new dot-matrix printers that provide drat and near-letter quality documents at up to 158 characters per second (eps), complete Tandem's product offerings.
Noting its departure from its primary fault-tolerant CPU product line, Peterson noted that Tandem plans to market the workstations solely to its installed base as part of a total system solution.
"We're in the system business, not the PC business. We're not after shelf space," he said.
Outsiders viewed the move as part of the firm's overall product broadening and push into the lowend marketplac:
Based on Intel Corp.'s 8086 microprocessor, the Dynamite family currently consists of two models.
Both models contain the design features of Tandem's 6530 on-line transaction processing terminals plus PC additions including 256 K bytes of main memory expandable to 640 K bytes and Micruooff Corp's MS-DOS and GW-Basic PC software packages
The model 6541, which is available now, sells for $\mathbf{\$ 2 . 9 9 5}$ and features two 360 K -byte floppy disk drives. The model 6546, selling for $\$ 3,995$ and available in December. has one floppy disk drive and a 10 Mbyte hard disk drive, Peterson said
The company expects to sell 15.000 Dynamite workstations in 1985 and last week opened a new production facility in Austin. Texas, to manufacture the products.
Tandem's PCFormat software serves as a software translator that convers Tandem Encompase
data base file formats into MS-DOS-compatible formats to be used with applications such as Lotus Development Corp's 1-2-3, Peterson said.
LXF allows users to transfer data between host files and workstation files via commands running under MS-DOS.
Both software packages are available now. PCFormat can be licensed for $\$ 100$ per month IXF has a one-time license fee of $\$ 295$ per workstation and a $\$ 75$ monthly charge per system.

Industry analyst Omri Serlin, president of ITOM International, Los Altos, Calif., praised the new products as "a sign that Tandem is finally waking up to what is happening in the desktop computer market "
"It looks like they are starting to take a less myopic view of the marketplace." he said.
As a marketing incentive, for each set of 100 workstations ordered customers will be given a 2 Mbyte memory board. Orders of 500 units will eam a full expansion board for the NonStop TXP, Tandem's largest fault-tolerant computer. Peterson said.
Although they acknowledge they face stiff competition from other manufacturers even in their installed base. Tandem executives said Dynamite's system-integration features will make it a viable market competitor.
Moveover, the inclusion of Tandem 6530 terminal features such as 132 -olumn display, 16 -screen memory and 6530 -style keyboard will make Dynamite attractive to Tandem customers, said Gerald Held, direetor of strategic planning. The fact that the keyboard uncludes the full set of 6530 terminal function keys as well as IBM PC function keys makes it more natural for Tandem system users.:
The addition of the workstation family coupled with recent price cuts on Tandem's Non-Stop 1 - and NonStop II minicomputer lines see ISN; Aug. 20) may allow Tandem to penetrate some lower-end markets previousiy closed to the company, Serlin said. -Combined with its recent price cuts, the product line indicates that Tandem has become more responsive to the whole marketplace."
Supplementing Tandem's workstation package. Heid said the new dot-matrix printers, models 5540 at $\$ 595$ and 5541 for $\$ 895$, offer five printing modes and print at 80 and 132 characters per line respectively

## DEC Links Its Computers To Disoss <br> By Johanna Ambrosio <br> an IBM problem." said Richard <br> IBM s software that allows appli-

Digital Equipment Corp has announced an interface to connect its computers and IBM's Distributed Office Support System (Disoss hast-based software.
Although other office systems vendors, such as Data General Corp, and Wang Laboratories Inc., have stated their intention to provide links to IBM's Disuss environment, DEC is the first office systems vendor to offer such a product. The announcement came at last week's Intech conference held in Dallas.

At the same time. DEC also
A. Loveland, DEC's manager of product planning for office and information systems
DDXF works as a service from DEC's SNA gateway, a communications device between VAX and IBM computers With DDXF, the gateway appears to an IBM Di--oss-based mainframe as another SNA device. A VAX user then requests Disass files from the gateway, which then passes on the request to the IBM mainframe The files are then sent in the other direction
Besides accessing files. VAX
cations-level exchange between peer-to-peer computers. DEC solved this problem by "doing an exploratory to see how LU 6.2 really looks," Loveland said. DEC then implemented this design into DDXF, he added
Nevertheless. If IBM: putlished specifications of LU 6.2 differ radically from what DEC assumed they would be. DEC may have to alter DDXF somewhat to reflect IBM's actual design. observers said
-Digital has taken an important firs step." said Frank Pinto direc-

Tandem Introduces Computer Tërminal For Mainframe Line

By a 4 an StRMOT JOUR CLPERTINO, Calif. - TandemComputers Inc. introduced a terminal for its mainframe computers that also has most of the capacity of International Business Machines Corp. s EC.

Tandem sald it would market the machine, called Dynamite, to be hooked up to its line of mainframes, which are designed to run despite malfunctions. Tandem said it won't market Dynamite as a stand-alone personal computer, but will sell it to its mantrame customers

Tundeni's current 63ix the of terminals can only manipulate data from the mainTrame. A Tandem spokeswoman said the Dynamite can be used as the same terminal for Tandem mainframe data as well as for the day-to-day business that personal computers accommodate. Dynamite can run most IBM PC software, Tandem said.

The Dynamite model costs $\$ 2.99$; and comes with two floppy disk drives and 256 kilobytes. Each kilobyte equals 1,024 bytes. or stored characters. Tandem sald it would introduce a $\$ 3,995$ model in December with one fioppy disk drive and a 10 -megabyte hard disk drive. Each megabyte equals one million bytes.

Tandem also introduced two dot-matrix printers for $\$ 595$ and $\$ 895$.

## PS of Indiana

## Cleared to Borrow

Up to $\$ 320$ Million

By a Wall Street Journal Staff Reporter
PLAINFIELD. Ind.-Public Service Co. of Indiana said the state Public Service Commission agreed to let the utility borrow as much as $\$ 320$ million and, under that approval, authorized a $\$ 310$ million line of credit from 22 banks, led by Chase Manhattan Bank. New York.

The utility said the money will be used to pay $\$ 16+$ million borrowed mainly for construction purposes, including the canceled Marble Hill nuclear project, and $\$ 145$ million borrowed for nuclear fuel.

The new loans are due Oct. 31, 1985. The utility said the banks could agree to extend the deadline or renegotiate the loans. The company said the agreement includes restrictiots on its capital spending and sale of assets

As security for part of the loans. the company swa it will issue $\$ 125$ million in firstmorth ate bonds to the lenders

Several Bond Offerings Priced by Underwiters

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## ] TRANSWORLD CORPORATION

To holders of Warrants issued under a Warrant Agreement dated as of October 1, 1979 between Trans Worid Corporation and Morgan Guaranty Trust Company of New York, as Warrant Agent

Pursuant to Section 8 of the above referenced Warrant Agreement (Warrant Agreement!, the Warrants issued thereunder (Warrants) are exercisable at any time or or prior to the close of business on October 1. 1986. Transworid Corporation (Company) may, however, accelerate this expiration date if the Common Stock shall have had a closing market price of $125^{\circ}$ c of the Purchase Price. as defined for 45 consecutive trading days. As of October 4, 1984, the closing market price of the Common Stock had exceeded $\$ 27.44,125 \%$ of the current Purchase Price, for 45 consecutive trading days. The Company has chosen to accelerate the expiration of the Warrants and hereby notifies all holders that the expiratrin shall be 5:00 p.m., Eastern Standard Time on December 3. 1984.

## Instructions for Exercise of Warrants

In order to exercise the warrants a holder must do the following
1 Complete the Form of Election to Purchase on the reverse side of the Wartan Cetrificat

 the machine, but it's not going to revitalize
their sales. It's not going to add $\$ 100$ mil-
lion in revenues."
Iandem began cutting prices on its

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 pooud כस suoneis yoom urpur I ग्पL
 -induoo WgI دч1 sว8exped W8I गqeied Dynamite work stations just under comware package, but Tandem has priced the using an IBM PC with a third-party softSimilar capability has been possible matrix printers with the Dynamite work -10р ом! amponiu! II!м osp urpuri.


 e je fanduoa ןeuosiad why ue fo sanod line of terminals, plus the computing offers the features of Tandem's present


 eurome aryjo pue fionej roj sianduoa Tandem makes very large fault-tolerant Tandem to remain competitive in the long
term.
 increase Tandem's revenue immediately, Analysts said the move probably will computer business," said a variety of
company officials. peuosiod ayi oiu! gutos rou jue כM.. tems. geted at users of Tandem's computer sysaremijos rinduoa peuosiad W\&I asn ues
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## Tandem Adds One-User Station <br> CUPERTINO, Calif. - In an

attempt to protect the low-end of its customer base from incursion by the IBM PC, Tandem Computers, Inc., has added to its terminal product line a single-user Intel 8086based work-station running
the MS-DOS operating system. Tandem said it will market the stand-alone system only through its end-user sales force to its fault tolerant NonStop and TXP customer base. Dubbed the Dynamite 654 X product line, the system is available now in a basic 256 K -byte configuration listing for $\$ 2,995$. A version with a 10 megabyte Winchester disk drive at $\$ 3,995$ will be available in December, Tandem said.
Available now are a pair of software packages that allow files from Tandem's NonStop systems to be transferred to run under the MS-DOS format. Tandern said PCFormat con verts Tandem data base files to run under some popular PC programs such as Lotus $1-2-3$. It is available for a $\$ 100$ monthly fee. A second program IXF, transfers data from Tandem system files to Dynamite's files. It will list for $\$ 295$ per workstation and for $\$ 75$ per month per NonStop system.

The Tandem PC, developed and manufactured at Tandem's Austin, Tex., facility, uses the same terminal shell as Tandem's current 653 X terminal products, but includes a separate box for logic. Tandern designed the system's Bios software. Although the system runs the MS-DOS operating system, Tandem said it was designed to run most popular programs for the IBM PC unchanged.
According to Tandem international marketing vice-president Gerald $\mathbf{L}$. Peterson, Tandem entered the PC business to protect its current terminals business with its installed customer base, and to cash in on their customers' requirements for workstation products. "If we already are in there making a $\$ 2$ million systems sale, why not sell another $\$ 2$ million in terminals or workstations to the same customer?" Mr. Peterson said.
It would be a shame to watch so meone else come in and sell PCs to our customers," he added.
In addition to emulating the 653X Tandem terminal, the Dynamite products can emulate IBM 3270 terminals. Also available on the system as an option is bit-mapped graphics at \$575, which becomes available in December. Memory on the system can be increased to swin byies in 128 K byte increments a! $\$ 250$ per increment. Also available on the systems are a pair of dot-matrix printers: an 80 -character-per-line model at $\$ 595$ and a 132 -character-perine model at $\$ 995$.
Separately, Tandem said it has entered into a joint marketing agreement with Indiana Bell covering the Ameritech company's Service Order Edit and Distribution software product for Tandem's NonStop systems. The software product will be sold by Indiana Bell directly to telephone business offices which are Tandem NonStop users. Indiana Bell will service and support the product.
In another unrelated matter Tandem said it has opened a new 190,000 square-foot-facility in Austin. Tex.

Products to be developed and manufactured at the new facility which will house 202 Tandem employes, include the new Dynamite workstation, the 653X terminal line, hardware and software for voice re, cognition, word processing, bar code readers, OCR and magnetic stripe card readers.

## PERSONAL COMPUTERS

## Tandem Computers Releases Line Of Personal Workstations

CUPERTINO, CALIF. - Tandem also has added microTandem Computers Inc. has unveiled a line of personal workstations designed to complement its family of NonStop fault-tolerant transaction processing systems.
The new Dynamite 654X family of workstations includes all the features of Tancludes all the features of randus IRM 3270 terminal plus IBM 3270 terminal emu sonal computer.
-mainframe software including PCFormet which converts Tanden data base files to formats used by personal computer software such as Lotus 1-2-3. The IXF package transfers data from Tandem system files to and from Dynamite's MS DOS files.
In addition, Tandem has addIn addition, Tandem has added two Facit inc. dot-matrix Dynamite, which has been
in production for about a year requests from customers, pri marily Fortune 1000 companies, according to Jerry Peterson, international marketing vice-president.
Peterson said Tandem is not trying to get into the personal computer business but is trying meet customer demands. The workstation show up at ComputerLand Corp. stores or in network
television ads, he said. Rather, Tandem is aiming all of its advertising at its existing "blue chip customer base.
Tandem has shipped 300 demonstration units to beta sites and sales offices, according to Peterson. Sales already have been made and volume shipments are planned thi shipments are planned this quarter, said Peterson, who de clined to identify the custom ers. The workata at

Austin, Texas, plant, he added Members of Tandem's OEM software alliance program are participating in the sules drive for the new line. Bob Lakin Tandem's strategic planner noted that the new workstation and its accompanying software will sllow third-party ware will allow third-party software houses to develop applications for Tandem that "We expect new kind not write. "We expect new kinds of applications to appear as a result o this product," he said.
Jan Lewis, an analyst at InfoCorp, said she believes the in troduction of Dynamite is part of a new more aggressive posture toward new products at Tandem. The company had grown complacent with its po sition in the Fortune 1000 online transaction processing market, she said, and Tandem needed to introduce new products to keep its dominant position in that market.
The Dynamite workstation is completely modular, consisting of an electronics box, a 12-inch tiltable green-phosphor display, a keyboard and disk drives. It is compatible with all 6530 terminal applications Lakin said the new cations. Lakin suid hey the keytoard was designed so that users of either IBM or Tandem syst ons would be able to use it right away. The keyboard in cludes all of the 653 X Tandem function keys across the top, with an IBM Personal Com-put-r-style function key pad on the left-hand side.
1 limed on a 16 -bit 8086 mi croymcessor, Dynamite runs unter the MS.DOS operating systom and GW-BASIC, and pro ides 256 k bytes to 640 k bytus of main memory and either two 360 k -byte 5.25 -inch flopye disk drives or one floppy lisk drive and one 10 . Mbito 5.25 -inch Winchester disk drive. The disk drives com from several different sources, a spokeswoman said souces, a spokeswoman said
T., complement the new worlestations, Tandem is offering two bidirectional dot ma trix urinters from Focit-ma Mest 5540 and Fact: th Mosmes. Fach prov ines draft-quality ontput t 158 cps and near-letter quality documents at slowe sper ds
Ruth models come standard with eight character ents, in cluding a 96 -character ASCI set, plus several foreign lan guale fonts and elongated old and italic characters. The printers can handle fan-fuld, roll or single-sheet paper input, and they emulate BM PC printer commands.
Thie 5540, which sells for \$59t, prints a maximum of 80 char icters per line, while the 5541 , priced at $\$ 895$, prints ui to $1: 12$ characters per line. Th. Dynamite 6541, which sells for $\$ 2995$, includes two flopuv disk drives and 256 k byter of RAM The 6546, priced at \$3995, offers privy disk drive flops y disk drive, a 10-Mbyte 25fil livtes of RAM.

# LEVEL 1 - 4 OF 4 STORIES <br> Copyright 1984 Business Wire Inc.; Business Wire 

October 15, 1984, Monday
DISTRIBUTION: Business Editors
LENGTH: 525 words
HEADLINE: TANDEM; New workstations provide NonStop system users host data base access and local processing

DATELINE: CUPERTINO, Calif.
BODY:
Tandem Computers inc. (OTC/TNDM) Monday introduced multifunction, personal workstations and two new software products that translate data stored on Tandem systems into formats that can be used by personal computer software packages running under the popular MS-DOS operating system. The company also introduced two dot-matrix printers for draft- or near-letter-quality documents. The new workstations, called the DYNAMITE 654 X family, provide the features of Tandem's 653X family of on-line terminals, including IBM 3270 emulation, plus the convenience and local processing capability of a stand-alone personal computer. Like Tandem's 653 X terminals and other peripheral products, DYNAMITE and the associated new products will be marketed to Tandem customers through Tandem's direct sales organization. DYNAMITE is based on the 16 -bit 8086 microprocessor. As a standalone workstation it can run most software written for the IBM PC. With Tandem's new software, PCFORMAT and Information Xchange (cq) Facility (IXF), DYNAMITE users can transfer and convert NonStop system files into formats that can be used with MS-DOS-compatible software. PCFORMAT converts Tandem data base files to formats used by such personal computer software as Lotus 1-2-3; IXF transfers data from Tandem system files to and from DYNAMITE's MS-DOS files. The DYNAMITE family consists of two models, each with a dual-mode, 12-inch green-phosphor display screen that supports both text and graphics, and either two $360-\mathrm{kilobyte}$ floppy disk drives, or one floppy disk drive and one 10 -megabyte Winchester disk drive. Both include MS-DOS and GW-BASIC. Options include bit-mapped graphics and the ability to expand main memory from 256 kilobytes to 640 kilobytes. DYNAMITE's low profile keyboard provides the full set of Tandem 653x terminal function keys plus 10 keys that duplicate IBM PC function keys. Tandem's new 5540 and 5541 bidirectional, dot-matrix printers provide local printing capability for DYNAMITE users, or can operate as a shared system resources when connected directly to a Nonstop system. DYNAMITE model 6541 with two floppy disk drives, MS-DOS, EW-BASIC and 256 kilobytes of RAM is available now and sells of $\$ 2995$ (U.S.). Model 6546, priced at $\$ 3995$ (U.S.) and available in December 1984, offers one floppy disk drive, a 10 -megabyte Winchester disk drive, MS-DOS, GW-BASIC and 256 Kilobytes of RAM. PCFORMAT is priced as a monthly fee of $\$ 100$ (U.S.) per system. IXF sells for a one-time license fee of $\$ 295$ (U.S.) per workstation, and a $\$ 75$ (U.S.) monthly charge per system. Both are available now. The 5540 and 5541 dot-matrix printers are avallable now and are priced at $\$ 595$ (U.5.) and $\$ 895$ (U.S.), respectively. Tandem, a Fortune 500 company, manufactures computer systems and networks for the on-line transaction processing marketplace. Tandem is headquartered at 19333 Vallco Parkway, Cupertino, Calif., 95014.
§ 1984 Business Wire, October 15, 1984

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CONTACT: Tandem Computers, Cupertino
    Gina Burr, 408/725-7455
    By Regis McKenna, Palo Alto, Calif.
    Gayle Paride, 415/494-2030
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# Tandem faces another lawsuit 

## Shareholders charge falsehoods on 1982 profit figures

Times Tribune staff
A class action lawsuit has been filed against Tandem Computers Inc., charging that the Cupertino computer company artificially inflated its stock prices by misstating its 1982 sales and profit figures.
The charges in the suit, filed Oct. 23 in U.S. District Court in San Jose on behalf of a group of shareholders, are similar to those made by the Securities \& Exchange Commission last month.
On Sept. 30, the SEC charged Tandem with fraud originating from the company's inclusion in the fourth quarter of 1982 of product sales and shipments that were not completed in that quarter.

The SEC and Tandem settled the suit with the agreement that Tandem allow auditors to check its

books for three years, but neither Tandem nor current or former officials admitted wrongdoing.
When Tandem later lowered its profit and sales figures by about 20 percent, the company's stock price dropped drastically.
The suit filed last week by Pennsylvania resident Howard Wool on
behalf of stockholders who bought shares between April 28 and Dec. 8, 1982 asks for unspecified damages.

Tandem spokeswoman Pat Becker said the case has no merit and the company plans to fight it.

A judge will take a preliminary look at the suit April 15, 1985, she said.

## known rate index

Average, you're getting an average yield, not the best yield.

IF YOU'RE shopping for an MMDA, it's not a bad idea to look for banks or S\&Ls that promise to beat the average yields of money funds or other MMDAs. Continental Illinois bank, for example, is currently promising to beat the money fund average, and several other banks are promising to beat Bank Rate Monitor's national index.

If you're shopping for a variable-rate loan, you also should make sure your loan rate its tied to a nationally known index, or you could be in for a nasty surprise. Adjustable-rate mortgages, for example, are often tied to one-year T-bills, the average of Treasury securities adjusted to a constant maturity of one year, the Federal Home Loan Bank Board's cost of funds, or the national average contract rate for previously occupled loans.

While the latter index may be a mouthful, you should keep your eye open for it. According to Heady, this index is advantageous to the consumer, because it is based, in part, on artificially low introductory rates offered on many adjustable-rate mortgages.

Whatever index you like, make sure that you get a well-known and easily trackable one. A known index gives you some measure of comfort and safety, whether you're a borrower or a depositor.

Otherwise, you could find yourself at the whim of your local depository institution.

Tribune Media Services Inc.


LEVEL 1 - 6 OF 8 STORIES
Copyright 1984 Penton/IPC; Industry Week

October 29, 1984
SECTION: FEATURES; Executive on the Spot; Tandem Computers Inc.; Pg. 66
LENGTH: 341 words
HEADLINE: James Treybig is ready to have fun
BODY:
For Texas-born entrepreneur James G. Treybig, president and CEO of Tandem Computers Inc., the challenge never stops -- and he likes it that way.

Having co-founded and guided the Cupertino, Calif., company from Day one and four employees ten years ago to a worldwide, 5,000-employee organization and revenues in fiscal 1983 of $\$ 418$ million, the $44-y e a r-01 d \mathrm{Mr}$. Treybig believes that "now the real fun and challenge begin because now we have the critical mass and R\&D capabilities to exercise our creativity."

And Tandem will need to do just that. Although it pioneered the fault-tolerant central-processing-unit market for on-line processing -- whose sole raison d'etre is to keep the computer up and running no matter what -Tandem is having to battle a host of competitors.

Whereas the company's proprietary Guardian operating system and its parallel processing architecture once were the only way to go in the fault-tolerant marketplace, now companies such is Stratus Computer Corp., Natick, Mass., and Synapse Computer Corp., Milpitas, Calif., are offering rival approaches.

But even more threatening is thatit seems only a question of time until IBM Corp., Armonk, N.Y., and Digital Equipment Co., Maynard, Mass., come online with their own fault-tolerant systems. (The market has grown from $\$ 300 \mathrm{million}$ in 1981 to a projected $\$ 2.9$ billion for 1986.$)$

The market for systems that keep computers up and running is moving so fast that where once Tandem described itself in terms of mainframe technology, now Mr. Treybig says, "Mainframe is a horrible word."
"There is a market for huge systems that are dispersed and have distributed-data and form networks. And the number of millions of instructions per second in these big systems is much bigger than a mainframe. Our Non-Stop system is [actually] much more powerful than IBM's biggest mainframe. We are really replacing mainframes. We need a new name for these big systems." And new names often presage new games, just the kind of challenge -- and fun -- James Treybig likes.

GRAPHIC: Picture, no caption

## GE, U-B in LAN agreement

ANTA CLARA, CA-General Electric and Ungermannlass Inc. signed a letter of intent to form an independent int venture firm to develop, manufacture and market LAN communications systems for the industrial market.

According to U-B, the principal goal of the new firm is to become "the leading supplier of communications products hat will interconnect all industrial automation equipment, end other intelligent devices such as CAD/CAM systems in he industrial environment regardless of brand."
Ungermann-Bass will hold the majority interest in the independent corporation. GE will provide funding for the venlure while U-B will contribute technology and will be responsible for initial staffing.

## Silicon Valley Tech News Sept 17/0ct22,1984

Page 25

## Harris, Tandem get Federal Express contract

CUPERTINO, CA-Tandem Computers Inc. and Harris Corp. were chosen to build the first phase of a satellite-based data communications network for Federal Express Corp:
Federal will use the net to support its ZapMail service, a document transmission and electronic mail service. The first phase is scheduled to be operational by July 1985.
The network will comprise Harris satellite ground equipment, Tandem network interface products and Tandem NonStop TXP systems.
Harris will provide earth stations; Tandem's satellite communications interface equipment will link the earth stations and Tandem computers. Tandem will also provide a control and monitoring system for the net.

## THE BOOK is coming

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# LEVEL $1-2$ OF 2 STORIES <br> Copyright 1984 Business Wire Inc.; Business Wire 

October 29, 1984, Monday
DISTRIBUTION: Business Editors
LENGTH: 352 words
HEADLINE: TANDEM-COMPUTERS; Unveils extensions to SNA interface software

DATELINE: CUPERTINO, Calif.

## BODY:

Tandem Computers inc. (OTC:TNDM) Monday unveiled a high-level application interface for the company's Systems Network Architecture Access Method software that significantly reduces the time required for Tandem users to develop application programs in the SNA environment. Announced at the 7th Annual International Tandem Users Group meeting in Orlando, fla., SNAX high level support (SNAX/HLS) software allows application programs to be written without regard for the complexities of underlying SNA communication protocols. The new software enables programmers to concentrate on the business issues of the application without concern for the details of SNA communications. This will significantly increase programmer productivity in an SNA environment. By using simple SNAX/HLS commands (e.g., open-session, close-session, send-data, etc.), application programmers can interface to SNA devices and/or application programs running on IBM SNA hosts without being concerned with the underlying SNA communication protocols. SNAX/HLS provides a comprehensive application interface for users of Tandem's PATHWAY transaction processing software and for non-PATHWAY systems. SNAX/HLS provides the ability to communicate with a wide range of SNA intelligent controllers (such as the IBM 3600 and 4700 financial subsystems and IBM 3560 retail subsystems) and IBM CICS and IMS software products. Thus the extensions provided by SNAX/HLS are readily applicable to most Tandem and SNA environments. SNAX/HLS is available immediately for use on NonStop II and NonStop TXP systems. The monthly software usage fee is $\$ 250$ (U.S.) per processor. SNAX/HLS requires SNAX software which has a license fee of $\$ 2,750$ (U.S.) per processor. Tandem Computers Inc., a Fortune 500 company, manufactures computer systems and networks for the commercial on-line transaction processing market. The company is headquartered in Cupertino.

CONTACT: Tandem Computers Inc., Cupertino Eina Burr, 408/725-7455<br>Pat Becker, 725-6035

## VALUE-ADDED REMARKETING

## Tandem Enters Joint Marketing Accord With Indiana Bell

CUPERTINO, CALIF. Tandem Computers Inc. and Indiana Bell Telephone Co. Inc. last week signed an agreement to jointly market the telephone company's service order entry software to Bell operating companies and independent telephone companies.

Terms of the agreement call for Indiana Bell's Software Sales Group, based in Indianapolis, to market its internally developed on-line applications package, dubbed the Service Order Edit and Distribution System (SOEDS), directly to telephone company customers of Tandem's NonStop fault-tolerant computer systems.

The pact with Indiana Bell, which was signed under Tandem's ongoing Alliance Pro-
gram, will give Tandem's sales forces an edge in landing BOC customers for its computers, according to an Indiana Bell spokeswoman. Written in Tandem COBOL in the early 1980s, the telephone company's SOEDS software is supported only on Tandem's NonStop II and NonStop TXP systems.

The Tandem Alliance project was designed to encourage software houses to design applications packages for Tandem systems in factory automation, retail, and financial applications.
Indiana Bell said last week it already has agreed to sell the software to two telephone companies, one an independent and the second an unidentified sister telephone com-

## Johnson Controls Unit Named Value-Added Dealer By IBM

MILWAUKEE - Johnson Controls Inc.'s Systems and Services Division, a manufacturer of energy control systems, has been authorized as an IBM Value-Added Dealer to sell turnkey maintenance management and energy management systems based on the Personal Computer and PC XT.

The TRIM maintenance package, introduced in June, tracks and schedules maintenance
needs for institutional, commercial or industrial buildings and can be interfaced with Johnson's computer-based building automation system.
The CHAIN energy management system is designed to control heating and cooling systems for efficient use of energy.
Johnson will market its turnkey systems through its 120 branch offices.
pany within the American Information Technologies Corp. (Ameritech) regional holding company. Indiana Bell is one of five telephone company subsidiaries of Ameritech.

The Ameritech-owned telephone company also has placed a multimillion dollar order with Tandem for NonStop systems, it was noted.
SOEDS is said to format,
edit, and distribute telephone company service orders from the initial customer request to delivery of required services. According to Gary Drook, Indiana Bell's Information Systems assistant vice-president, the applications package has enabled Indiana Bell to reduce error rates on service orders by 14 percent and eliminate service request input person-
nel by as much as 27 percent since it was implemented on the company's NonStop systems in June 1982.
An enhanced version of the software, called SOEDS Plus 1, which includes automatic rate quote, automatic telephone number assignment and a street address guide, will be available early next year, according to Indiana Bell.

## Perception Targets Financial Market

CANTON, MASS. - Perception Technology Corp., a marketer of voice-processing and response systems since 1980, has launched an OEM program to address systems houses in financial and sales markets.
Joseph Scally, president of Perception Technology, said his company is offering to OEMs four models of the BT II voice processing system, available in configurations ranging from four lines to 32 lines.
In response to codes punched in by users on touch-tone telephones, the systems call up a program, relay preprogrammed information to users, and accept data entered by users.
Such devices are easily integrated into systems used for order entry, for checking on inventory, or for such tasks as checking bank balances, Scally said.

He noted that the company already has a joint marketing agreement with AT\&T Information Systems for the product. The product has been certified to work with AT\&T's System 75 and 85 PBXes and can run on the 3B Series of computers.
The system is based on a Digital Equipment Corp. 16-bit LSI processor and plugs into an

RJ-11 phone jack. Typically, it should take no more than a week for a systems house to customize applications software for a particular use and no more than an hour to install the processor at a customer site.

In addition to having nine regional sales offices, Scally noted, the company has a field service contract with DEC so that DEC will support the hardware.

The company currently has about 40 OEMs among its customer base, including IBM, Prime Computer Inc., Wang Laboratories Inc., DEC, Hewlett-Packard Co., and Burroughs resellers.
Scally said he would like to add about 100 systems houses with the new OEM program. Beginning the first quarter of 1985 , the company will offer five regional one-day technical background sessions on the product.

OEMs also will be offered discounts ranging up to 30 percent as well as participation in a cooperative advertising program. National sales force staff will receive commissions for OEM sales made in their areas, Scally said.

Perception Technology employs about 60 people and is privately held. reseller of AT\&T's 3B computers and Personal
ing turnkey systems for funeral homes and cemeteries based on Alpha Microsystems Inc. computers. Cleveland-based Superior
installing and implementing Cadam systems, he added. Bishop said he could not predict the value of the IRM said he could not predict the

## Electronic News 10/22/84 p32

## Tandem Adds One-User Station

CUPERTINO, Calif. - In an attempt to protect the low-end of its customer base from incursion by the IBM PC, Tandem Computers, Inc., has added to its terminal product line a single-user Intel 8086based work-station running
the MS-DOS operating system.
Tandem said it will market the stand-alone system only through its end-user sales force to its fault tolerant NonStop and TXP customer base. Dubbed the Dynamite 654 X product line, the system is available now in a basic 256 K -byte configuration listing for $\$ 2,995$. A version with a 10 megabyte Winchester disk drive at $\$ 3,995$ will be available in December, Tandem said.
Available now are a pair of software packages that allow files from Tandem's NonStop systems to be transferred to run under the MS-DOS format. Tandem said PCFormat converts Tandem data base files to run under some popular PC programs such as Lotus $1-23$. It is available for a $\$ 100$ monthly fee. A second program, IXF, transfers data from Tandem system files to Dynamite's files. It will list for $\$ 225$ per workstation and for $\$ 75$ per month per NonStop system.
The Tandem PC, developed and manufactured at Tandem's Austin, Tex., facility, uses the same terminal shell as Tandem's current 653 X terminal products, but includes a separate box for logic. Tandem designed the system's Bios software. Although the system runs the MS-DOS operating system, Tandem said it was designed to run most popular programs for the IBM PC unchanged.
According to Tandem international marketing vice-president Gerald $\mathrm{L}_{\mathrm{L}}$ Peterson, Tandem entered the PC business to protect its current terminals business with its installed customer base, and to cash in on their customers' requirements for workstation products, "If we already are in there making a $\$ 2$ million systems sale, why not sell another $\$ 2$ million in terminals or workstations to the same customer?" Mr. Peterson said. "It would be a shame to watch someone else come in and sell PCs to our customers," he added.
In addition to emulating the 653X Tandem terminal, the Dynamite products can emulate IBM 3270 terminals. Also available on the system as an option is bit-mapped graphics at $\$ 575$, which becomes available in December. Memory on the system can be increased to 640 K bytes in 123 K byte increments at $\$ 250$ per increment. Also avallable on the systems are a pair of dot-matrix
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\section*{EMS \& PERIPHERALS <br> <br> Tandem presents workstations <br> <br> Tandem presents workstations said to combine micro, terminal said to combine micro, terminal

\section*{By Jeffry Beeler

## By Jeffry Beeler <br> CW West Coast Bureau

CUPERTINO, Calif. - Tandem Computers, Inc. recently complemented its line of transaction-processing-oriented mainframes with its first two workstations, The two units reportedly combine an IBMcompatible microcomputer with the ability to communicate both with Tandem and IBM hosts.

Tandem's 6540 series of personal workstations comes with two communications software packages that purportedly reformat mainframe data base files into an IBM Personal Computer-useable form and allow files to be exchanged between host CPUs and micros

PC Format, the reformatting package, and Information Xchange Facility form part of the same product announcement as the two 6540 series workstations. Also included in the announcement are two 158 char./sec dot matrix printers that provide the workstations with local output and double as a shared resource for Tandem mainframes.

Although the 6540 machines differ substantially in size and performance from any Tandem processor that has preceded them, the company claims the workstations in no way mark a departure from the company's existing product and business strategy. Like the rest of the firm's offer-

See TANDEM page 88

## TANDEM trom page 81

ings, the 6540 series members will be sold to large corporations and are geared to on-line transaction processing environments, according to Jerry Peterson, Tandem's vice-president of international marketing.

Moreover, in sharp contrast to most conventional micros, the workstations were designed to be tightly integrated into larger Tandem systems and networks, Peterson said.

Both members of the 6540 family, code named Dynamite, are said to operate in three modes:

As an on-line terminal for Tandem's Nonstop I, Nonstop II and Non-stop-TXP mainframes.

- As an IBM 3270-class terminal for on-line access to large-scale IBM processors.
- As a stand-alone, IBM-compatible microcomputer capable of supporting popular application packages and processing host CPU files locally under Microsoft Corp's MS-DOS operating system.

As a terminal for Tandem mainframes, the workstations incorporate the same features - including the same function keys - as the company's existing 6530 series of on-line CRT units. But the 6540 family also boasts several enhancements not available with the older Tandem
product line, said Gerald Held, the firm's director of strategic planning.

Unlike the 6530 series terminals, which provide an 80 -col. display, the workstations support a 132 -col. output, Held said. The 6540 line also reportedly comes with a smooth-scroll capability.

As an IBM terminal, the workstations emulate a 3270 and can communicate indirectly with 3030,3080 and 4300 processors through Tandem mainframes, Held said. The $6540 \mathrm{ma}-$ chines thus duplicate an IBM communications capability that Tandem first made available to its users last February.

When operating as a stand-alone micro, the workstations reportedly offer twice the performance of the original IBM Personal Computer. Held attributed the edge in processing speed to the 6540's $8-\mathrm{MHz}$ Intel

Corp. 8086 microprocessor, which is said to outperform its 8088 counterpart in the Big Blue product.

At present, the 6540 family consists of two models - the 6541 and 6546. Both models incorporate a 12 in . monitor and accommodate 256 K to 640 K bytes of main memory. The two 6540 series members also use a fanless cooling system to minimize noise and support bit-mapped graphics with resolutions as high as 800 by 300 pixels, Held said.

The main difference between the 6541 and 6546 lies in their external storage, Held said. While the former is configured with two 360 K -byte floppy disk units, the latter comes with just one such module plus a 10 M -byte Winchester system.

To induce organizations to buy the Dynamite products in volume, Tandem is offering users financial incen-
tives in the form of free hardware, Peterson said. Users who acquire 100 or more of the workstations will receive 2 M bytes of main memory for their Tandem mainframes at no charge.

For 200 or more 6540 s, the deal sweetener increases to 4 M bytes, and companies that buy the workstations in volumes of at least 500 will be given a free 4 M -byte TXP mainframe, Peterson said.

Prices for the 6541 and 6546 start at $\$ 2,995$ and $\$ 3,995$, respectively. The Models 5540 and 5541 dot matrix printers, meanwhile, cost $\$ 595$ and $\$ 895$, respectively.

The 6541 is available now, while shipments of the 6546 begin in December.

Tandem is headquartered at 19333 Vallco Pkwy., Cupertino, Calif. 95014.

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 10/22/84
## 60

## Tandem tool

 enhancedCUPERTINO, Calif. Tandem Computers, Inc. has announced a series of enhancements to its Enable program generator, said to automatically generate programs for user interaction with a Tandem data base.
According to a spokesman, Enable users can now -generate programs that can access many different data base files simultaneously. Enablegenerated programs can also link different parts of a data base to create more sophisticated applications without user programming.
Other enhancements reportedly include improved control of the terminal screen layout in Enable applications. In addition, different fields within the screen can now be suppressed for security or to leave a clear view of data, according to the spokesman.

The enhanced version of Enable is compatible with Tandem's Nonstop II and Nonstop TXP systems and can be ordered separately or as part of Tandem's Encompass data base management system. Enable is priced at $\$ 1,500$ per processor with a $\$ 55$ basic monthly maintenance charge. Encompass, including Enable, is priced at $\$ 8,000$ per processor with a $\$ 265$ monthly maintenance charge.

Tandem is located at 19333 Vallco Pkwy., Cupertino, Calif. 95014.

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## Award for Tandem's Treybig

James G. Treybig. president of Tandem Computers Inc. of Cupertino, is one of four executives named as reciplents of Indusiry Week magazine's elghth annual excellence in management awards. Treybig was cited for his "outstanding efforts in implementing and maintaining sound employee relations." The business management magazine also presented awards to J. Peter Grace, chairman of W.R. Grace \& Co.; R. Gordon McGovern, president of Campbell Soup Co.; and June M. Collier, president of National Industries Inc.

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\text { San Francisochronicle } 10 / 16 / 84 \text { p } 28
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LEVEL 1 - 2 OF 11 STORIES
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October 16, 1984, Tuesday

## DISTRIBUTION: Business Editors

LENGTH: 249 words
HEADLINE: TANDEM-COMPUTERS; Opens new manufacturing plant in Texas
DATELINE: CUPERTINO, Calif.
BODY:
Tandem Computers Inc. (OTC: TNDM) Tuesday announced the opening of a new 190,000 square foot facility in Austin, Texas, for the manufacture and product development of its computer terminals and related products. Located at 14231 Tandem Blvd., Austin, the new building, occupying a 20 -acre site, will house the company's 202 area employees. The California-based firm has an option on an additional 64 -acre parcel adjacent to the new plant for future expansion. Tandem began operations in Texas in October 1981 in a smaller, leased facility also in north Austin. Products developed and manufactured at the new Austin facility include the firm's family of ergonomic 653 X terminals, hardware and software for voice recognition, word processing, bar code readers, OCR and magnetic stripe card readers and recently introduced DYNAMITE workstations. Architects for the project are Page, Southerland, Page of Austin. The contractor is Faulkner Construction also of Austin. The new plant is one of seven major Tandem manufacturing sites currently in operation: Cupertino, Calif.; Santa Clara, Calif.; Watsonville, Calif.; Bensenville, Ill.; Reston, Va.; and Neufahrn, Germany. Tandem manufactures computer systems and networks for the on-line transaction processing marketplace. The company is headquartered in Cupertino.

CONTACT: Tandem Computers Inc., Cupertino Pat Becker, 408/725-6035
Joyce Strand, 725-6516

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October 15, 1984
SECTION: COMPUTER INDUSTRY; Pg. 116
LENGTH: 194 words
HEADLINE: Tandem consents to SEC check
DATELINE: CUPERTINO, Calif.
BODY:
Tandem Computers, Inc. recently consented to a Securities and Exchange Commission (SEC) order requiring the company to undergo annual reviews of its internal accounting controls for a three-year period.

The judgment entered by the SEC with Tandem's consent stems from a two-year unpublicized SEC investigation into the company's December 1982 restatement of revenue and earnings. At that time, Tandem restated its fiscal year 1982 financial statement to lower revenue by $7 \%$, or $\$ 23.8 \mathrm{million}$, and lower profit by $20 \%$, or $\$ 7.4$ million.

A Tandem spokesman said the company neither admitted nor denied SEC allegations, but consented to entry of a federal court judgment in order to avoid the time and financial resources that would be required to litigate the charges.

The SEC charged that the company's initial financial statement for 1982 , issued in November of that year, knowingly overstated revenue. The SEC also charged that Tandem violated securities laws by failing to maintain an adequate system of internal accounting, as required by publicly traded firms. As part of the consent judgment, Tandem is enjoined from further violations of securities laws.

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CONTACT: Tandem Computers Inc., Cupertino Pat Becker, 408/725-6035
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