

# THE MEMOREX PRESS

A newspaper for Memorex employees

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## Overnight Mail Costs Trimmed

In a move to save up to \$97,000 a year, Memorex is no longer sending overnight shipments unless they absolutely, positively must be delivered the next day.

Corporate Physical Distribution estimates that prior to the new measures, implemented in mid-April, 50 to 70 packages were mailed out of Memorex each day. In one week, nearly 300 overnight mailing service invoices were processed.

In 1985, Airborne costs alone totalled more than \$300,000.

Sweeping, cost-saving measures implemented in mid-April now require a manager's signature on a new "Air Express Request" form for overnight delivery of any domestic package. Otherwise, an "overnight" package is delivered on the second business day after sending.

At least 60 percent of overnight shipments can probably be made on the next business day, saving about \$66,000, according to Madeline McMenamin, inbound traffic manager. She adds that the cost of each parcel drops by about 36 percent if it's delivered on the second day.

"We've found that 80 percent of second day deliveries are actually delivered overnight anyway," says McMenamin. "You're more or less paying more to guarantee that the package makes it overnight."

Other measures to cut these expenses include earlier overnight mailing cutoffs, pickups by a Memorex truck, batch mailing

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**25 Years  
Of Ingenuity**

**See Page 3**



Clean Room Assembler **Helen Dawano** holds a 14-inch disk about to become part of the head-disk assembly (HDA) of a 3680 disk drive. HDA's are assembled in a clean room that allows no more than 100 microscopic particles (3 microns in size) per cubic foot. A typical hospital operating room contains from 10,000 to 100,000 particles per square foot.

## Memorex Fills Another Niche: Meet The 6000 Series Family

Memorex has introduced the 6000 Series, currently a family of three high-performance storage products that offer special benefits to large systems users.

As part of the 6000 Series marketing program, the names of two Memorex products—the 3680 High Density Package (HDP) and the 3520 Tape Cache Processor—have been changed to the Memorex 6240 HDP and the Memorex 6520, respectively. Joining the 6240 HDP and 6520 in the 6000 Series family is the Memorex 6880 Solid State Storage Subsystem.

Like the Memorex Galaxy family of products for IBM 4300 computer users, the 6000 Series gives Memorex a niche market. Each 6000 Series product fills a unique need for IBM large mainframe computer users and is not offered by IBM.

This family of three products is expected to grow as future high-performance niche products are introduced. The 6000 Series will be promoted in Memorex advertising and to field prospects and customers throughout the rest of 1986.

The 6240 HDP, which stores 10 gigabytes

of data, is similar to a string of IBM 3380 class single density thin-film technology devices, yet takes up 42 percent less floor space. Recent reliability results show that the 6240 HDP is equal to or better than similar products now available from IBM, Storage Technology, Control Data Corp., and Amdahl.

The 6520 Table Cache Processor gives users a low-cost alternative to the IBM 3480 cartridge tape subsystem.

The 6520 features data compaction. As an example, 50 percent compaction means that a user can store nearly twice as much data on a standard 10½-inch reel of computer tape.

Without access time delays, the 6880 Solid State Disk Storage Subsystem gives users a 0.3 millisecond average access time. The 6880 holds a range of 32 megabytes to 128 megabytes of data and features a built-in Winchester disk and an uninterrupted power supply.

The 6240 HDP and 6520 were first introduced in April 1985. The 6880 was first introduced in October 1985.



## IN THE NEWS

### CORPORATE

- Ten energetic Memorex employees worked up more than a sweat at the American Heart Association's "Dance for Heart" fundraiser, March 15, at the San Jose Civic Center. Aerobics instructor and Administrative Secretary **Robi Foote** and her students raised \$2,000 for completing 3 hours of aerobic exercises. Other indefatigable employees representing Memorex at the event included: **Clara Henderson**, assistant lead administrator; **Mitzi Korb**, associate accountant; **Becky Strohmayer**, administrative clerk; **Linda March**, executive secretary; **Romie Carrasco**, secretary; **Susan Caldwell**, corporate real estate administrator; **Kit Little**, senior secretary; and **Justunn Askews**, lead computer operator.
- The Memorex Community Relations Department is seeking volunteers willing to help build a community donation funded playground for 245 pre-school children at the Parkway Child Development Center in San Jose. The Memorex Community Relations Council has volunteered to be the "prime contractor" on the playground project. Contact **Don Quignon**, staff technical writer, at 7-0587, **Sandy Steward**, Human Resources representative, at 7-0920, or **Ernie Tydell**, manager of Community Relations, at 7-2894 for more information.
- Memorex is looking for Silicon Valley employees interested in getting involved with the Agnews Community Faire, a major fundraising event scheduled for May 18. **Betty Thomas**, of Customer Engineering, says organizers need employees who want to sell their own crafts or volunteer to escort Agnews residents to booths, the Faire's annual parade, antique car show, and other events.

### PRODUCT OPERATIONS GROUP

- **Leonard C. Murphy** was appointed director of finance, Product Operations Group, earlier this year reporting directly to Bill Morgan, senior vice president of Product Operations Group. Murphy replaces Jay Swent, who was appointed director of finance and administration, International Operations Group. Murphy came to Memorex from Sensory Inc. where he was vice president, finance and administration.
- **Joel H. Levine** was appointed vice president, storage systems planning and program management in March. Levine came to Memorex from Ampex Corporation where he was general manager. He has 27 years of management, marketing, and engineering experience.

### US OPERATIONS GROUP

- **Bob Bodnar** was appointed director, storage product marketing in February. Bodnar has 12 years of experience in the computer industry and had been a Memorex employee eight years ago. He returns to Memorex from Validec Inc., where he was a vice president of sales. His last position at Memorex was as 3650 product manager.

### LARGE DISK DRIVE DIVISION

- **Cindy Hackett**, an assembler in LDDD, earned an Employee Suggestion Program (ESP) award of \$759.40 last month for a money-saving idea that saved about \$3,800 on the manufacturing cost of disk storage equipment. Hackett, who attaches sub-assemblies and cables to product frames, proposed that these parts be secured with screws and washers instead of self-adhesive clamps.
- **Bruce Campbell** was appointed operations manager for new products at LDDD earlier this year. Campbell is responsible for coordinating new product introductions and developing the LDDD's manufacturing production plan. He reports directly to Paul Sheffield, LDDD operations manager. Prior to the appointment, Campbell was manager of precision machining operations.

### COMMUNICATIONS GROUP

- **Cher E. Wolfe** was promoted in January to director of planning and program management at the Communications Division. she reports directly to John Douglas, vice president and general manager of the Communications Division. Wolfe had previously been a manager of program management in Communications.



**Chuck Wedge**, director of manufacturing at the Communications Group, snips the ribbon at opening ceremonies for the Group's new cafeteria. The grand opening of the cafeteria, located at Memorex's Milpitas, Calif. facilities, was held in early March.

## 3680 Ideas Result In Savings

Material costs for the 3680 (excluding head/disk assemblies) have been reduced by 12 percent in the first two months of 1986, according to the Large Disk Drive Division (LDDD) Cost Reduction Department.

The Cost Reduction Department also reported that costs for head/disk assemblies decreased by 5 percent in the same two-month period. Material costs for the 6240 High Density Package (formerly the 3680 HDP) dropped 17 percent.

"That's an incredible savings for a two-month period," said Ed Vincent, manager of LDDD's Cost Reduction Department. "This kind of savings is largely due to money-saving suggestions and recommendations."

Vincent said the cost reduction resulted largely from suggestions and recommendations for smarter purchasing, yield improvements, and a product component design changes.

One recommendation, made by the Cost Reduction Department, has been to reuse protective plastic part covers during 3680 and 6240 HDP manufacturing. This recommendation could save LDDD about \$99,000 each year. The plastic covers, used to protect parts from debris and falling tools, previously were part of the product shipped to a customer.

## 125 Patents In 25 Years

# Memorex Inventions Through History

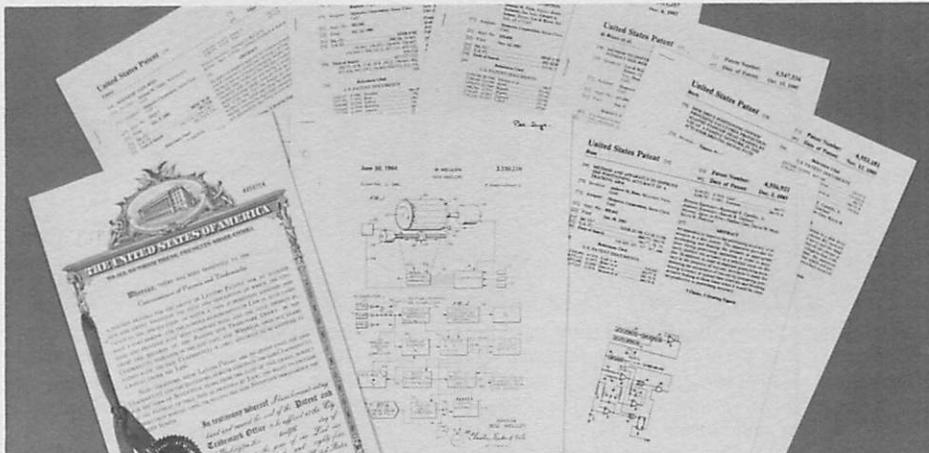
From early data displays to high-density advanced disk servos, more than 125 patents have been granted in the U.S. alone for Memorex inventions during the company's rich 25-year history.

Some of these inventions, like the formulas for computer tape coatings, were milestones in Memorex's growth. Other patents cover inventions that were only passing developments in the history of the data storage industry.

Only a few days before Memorex was incorporated in 1961, an application for an invention by Bob Mellon was filed and resulted in the company's first patent. Mellon's invention was a data handling device that displayed constantly changing computer data on a photosensitive drum... an early computer monitor.

The data display and recording apparatus of Memorex's first patent allowed technicians to better monitor complicated processes in the fields of space technology, medicine, business, finance, government planning, and even traffic control.

After Memorex began to develop high-quality computer, audio, and video tape in the early sixties, company patents understandably focused on magnetic tape coating formulas and plastic reel designs. But along the way, devices for cleaning and testing rigid disks were developed. During the early 70's, Memorex patents included a computer display device that used fiber optics, a microfilm printer, and a method for



copying computer tape data onto another tape simply by contact.

Throughout the 70's, the number of data storage-related inventions and patents rose. One of the more notable patents, issued in 1978, covered a "crash stop" device. This device prevents a disk drive head from coming too close to the disk surface.

Memorex played its part in the pioneering of flex disk drive manufacturing, too. U.S. Patent #4,179,718 covers a Memorex invention that prevents an end-user from smashing a partially inserted flex disk when closing the disk drive door.

Many of Memorex's recent patent filings relate to the magnetic media and equipment of the 3680 thin film storage subsystem. Memorex's thin film head developments have resulted in patents; the first for a method of manufacturing thin film heads and slider components which was patented in 1982. Other thin film patents have been

issued in each year since.

One of the most recent Memorex patents was issued in March and protects a Memorex-developed technique relating to disk servos in advanced high-density data recording.

More than a dozen 3680-related inventions are in the patent application stage, according to Patent Counsel David Heid. These Memorex inventions range from servo mechanisms to complicated voice coil magnet assemblies.

Several patent applications for one of the biggest milestones for Memorex 3680 development—the inventions of an advanced lubricant—was filed in Fall of 1985. These applications, for the inventions of Senior Staff Chemist Duncan Frew and Senior Chemist Bob Shadwick, protect the crucial solution to the industry-wide problem of disk lubricant loss.

## Burroughs Declares Dividend

Marking 91 years of uninterrupted quarterly cash dividends, Burroughs announced in March that it will pay a dividend of 65 cents a share on May 7 to shareholders of record on April 7.

The Burroughs Board of Directors, in announcing the dividend, also declared a shareholders rights plan that could protect shareholders from an unfriendly takeover.

In the event of "abusive tactics" by an acquiring company, Burroughs shareholders could purchase shares of that company's common stock at half the current market value.

## Employee Ideas Saved \$1.5 Million In 1985

Ingenuous suggestions from employees around the world improved Memorex's bottom line by nearly \$1.5 million in 1985, according to an Employee Suggestion Program (ESP) report.

The ESP 1985 report showed a \$450,000 increase in savings from employee ideas, when compared to 1984 ESP results. Awards paid to employees increased to \$277,000 in 1985 from \$131,000 in 1984.

"Memorex represented only 7.6 percent of the Burroughs population in 1985," said Leight Mateas, manager of ESP. "Yet we accounted for 41 percent of the dollars saved by implemented suggestions."

Mateas also reported that the Memorex Winnipeg facility had an average of 1.3 suggestions per eligible employee—the most suggestions per employee of any Memorex facility.

Average savings per eligible employee in 1985, a Burroughs yardstick for ESP effectiveness, showed Memorex at about \$800, far beyond the Burroughs target of \$173 per employee and any other Burroughs group.

ESP statistics for January and February show that Memorex employees made more than 152 suggestions. Savings resulting from these ideas totaled approximately \$38,000.



Members of the Memorex Ski Team were ecstatic last month about beating the IBM ski team in the 1986 Porsche Corporate Ski Challenge held at Squaw Valley, Calif. In singles competition, **John Winkleman**, a Burroughs sales account manager, finished first out of 1,000 participants in the Men's Alpine Slalom. From left to right (back row) Analytical Chemist Technician **Carmen Ochoa**, Design Engineer **Jeff Unruh**, John Winkleman, Technical Analyst **Brad Roberts**, (front row) Senior Technical Illustrator **Sue Lambie**, Business Systems Analyst **Evelyn Smith**, Financial Analyst **Inez Torres**, and Senior Staff Engineer **Nick Dixon**.

## ANNIVERSARIES

### February and March 1986

#### Twenty Years—U.S.:

Masako Day  
Cecilia Parker

Beatrice Burgos

#### Fifteen Years—U.S.:

James Holody	Robert Cant	Joseph Holan
Stephen Mckenzie	Elbert Chukes Jr.	Thomas Speir
Robert DeVincenzi	Francesco Gennari	Susan Jones
John Sedgwick Jr.	Frank Holzerlandt	William Stark
Thomas Maloney	James Turkowski	John Moffatt

#### Fifteen Years—Germany:

Uwe Mayer

#### Fifteen Years—U.S.:

Robert Burden	Ronald Davis	Karen Martinez
Dan Burman	Evelyn Gardner	Hazel Benn
Mark Burton	Edna Burroughs	Vicki Amaviska
Christine Cellini	Jessie Harrison	Carri Gallagher
Wilfredo Del Rosario	Dennis Duby	Larry Bauer
Paul Fink	Quy Nguyen	Linda Skipper
Ronald Indiveri	Philip Stein	Robert Gettman
Michael Johnson	Michael Klinger	Faaea Gaoupu
Diane Higgins	Wayne Munson	Alberta Wergin
Ron Davis	Laverne Price	Jamie Tibbs
Teresa Finnegan	Thomas Roberts	Richard Greer
David La Gue	Rolando Salazar	Timothy Jacobsen
David Larson	Robert Shaughnessy	David Hilst
Roghie Mirzabozorg	Daniel Tortorelli	Carol Konczal
Yuk Yang	Steve Van De Pitte	

#### Ten Years—Germany:

Roland Baumhannel	Horst Flueth
Hans-Juergen Miethe	Heinz Seifert

## Overnight Mail Cost Cuts Made

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and consolidation accounts for payments by each entity.

Previously, many overnight packages had been sent from Memorex headquarters and charged as separate packages despite having the same destination—Burroughs headquarters in Detroit, for example. With twenty packages mailed to the same destination, each would be charged individually, while if all twenty were mailed as one package only one fee would be incurred.

McMenamin estimates that savings from batching overnight packages being sent to the same location could amount to \$31,000 a year. To do it, Memorex trucks will pick up mailings earlier each day—at some buildings up to two hours earlier—and deliver them to Building 23 for batching.

Schedules for daily Memorex pick-ups are available by calling Lea Refregier at X-2217.

In addition to the cost savings, centralizing the whole overnight mailing process will make it easier for employees to track down lost packages, says McMenamin. Lost packages can be traced by simply calling one extension, X-2217. Previously, each mailer had to track down his or her own package.

## Press Box

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**Memorex**

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