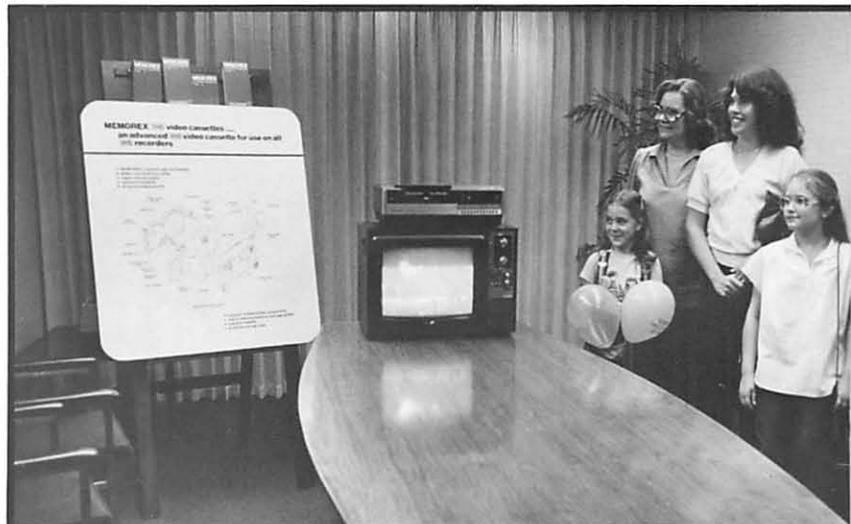


INTERCOM

A Newsmagazine for Memorex people everywhere
Volume 16 Number 4 October 1979

Santa Clara Open House: Professional Excellence on Display



Memorex-Amdahl merger talks discontinued

Memorex Chairman Robert C. Wilson and Amdahl Corporation Chairman Eugene R. White have announced that the boards of directors of the two companies have decided to discontinue merger discussions. Stating that the two boards could not agree on merger terms, the two executives said their companies would continue to cooperate with each other on specific transactions as they have in the past.

Memorex and Amdahl had announced in August that the companies were holding exploratory merger discussions. Weeks later it was announced that the Memorex

board of directors had authorized continuing merger discussions with Amdahl. The board decided, however, that the previously announced exchange rate of 1.2 shares of Amdahl common stock for each share of Memorex common stock was not acceptable.

The same announcement stated that the Memorex board of directors had rejected Storage Technology Corporation's merger offer, which had been raised from 1.6 to 1.75 shares of STC common stock for each share of Memorex common stock.

Word Processing transferred from Consumer Products to Computer Media

The company's Word Processing Division has been transferred from the Consumer Products Group (formerly called the Consumer and Business Media Group) to the Computer Media Group. The division provides office equipment supplies. James F. Ottinger, the division's general manager, will report to Jack H. King, Computer Media Group president.

"The new arrangement benefits both Memorex and its customers," says Ottinger. "Placing the division's product lines with the product lines of the Computer Media Group provides the company with a stronger marketing thrust and allows it to better serve both computer media and word processing customers."

Third quarter income, revenue reported

Memorex has reported 1979 third quarter net income of \$7.1 million, or 87 cents a share, compared with \$9.9 million, or \$1.30 a share, in third quarter 1978. This is a decrease of 28 percent in net income and 33 percent in earnings per share.

Revenue for the quarter was \$185 million, an increase of 21 percent over

revenue of \$153 million in third quarter 1978.

Income for the first nine months of 1979 was \$29.4 million, compared with 1978 income before extraordinary credit of \$29.5 million. Revenue for the first nine months of 1979 was \$544 million, or 21 percent higher than the \$450 million in the comparable 1978 period.

15 facilities participate in Open House



A traffic flow of some 6,000 visitors was reported by monitors at 15 Santa Clara area facilities participating in Memorex's Sept. 15 Open House. Above, a young visitor examines a

display at the Memorex Drive cafeteria. Also included in the program were product displays, plant tours, free balloon rides, crafts fairs, a bagpipe band, clowns and a magician.

On the cover—Open House scenes include, center and upper left then clockwise: free balloon rides at headquarters; small girl at Memorex Drive cafeteria; tour of building 14 computer lab; clowns at San Tomas cafeteria; video display at 1200 Memorex Drive; 1377 display at Cupertino facility; and highland dancers and pipe band at headquarters.

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Consumer group renamed; four vice-presidents appointed

The company's Consumer and Business Media Group has been renamed the Consumer Products Group. Also, three new vice-president posts have been established within the group, and a fourth has been established in association with Memorex's European operations.

The Consumer Products Group provides audio and video tape and accessories for consumer, professional, educational and industrial markets.

Group president Theodore J. Cutler says, "The purpose of this major change is to focus resources on the opportunities for new consumer products in the 1980s. By moving to a stronger functional organization, we will be more flexible in meeting the needs of the consumer marketplace."

The three new vice-presidents within



Berghorn



Earhart



Hensman



Humphreys

the group, all reporting to Cutler, are: Howard F. Earhart, operations; Harry G. Hensman, engineering; and John R. Humphreys, consumer sales.

In addition, Barry Berghorn has been appointed vice-president for consumer and media products. He will continue to be located in London, and he reports to Reto Braun, president of Memorex's

Europe-Middle East-Africa Group.

Others reporting to Cutler in the new organization are: Eric D. Daniel, Magnetic and Chemical Technology Center manager; Albert P. Pepper, consumer marketing manager; David P. Berry, professional audio/video marketing and sales manager; and John C. Rohrer, planning manager.

Challenge of assembling million-dollar equipment lease packages fascinates company's new MFC vice-president, Linda Vaughn

Linda Vaughn, newly appointed vice-president of brokerage services for the Memorex Finance Co., is sitting in her office in the MFC facility at 1143 Bordeaux Dr. in Sunnyvale, Calif. "Quite frankly," she confides, "I find the mechanics of marketing Memorex equipment fascinating."

MFC, a wholly-owned Memorex subsidiary, was formed in December 1978. Vaughn joined the MFC team in April as brokerage director and was promoted to vice-president in September. In the months she has been with the company, she has worked on transactions ranging in size from \$5,000 to more than a million dollars. MFC transactions primarily are single-lease finance packages which combine Memorex peripheral equipment with compatible central processing units.

"Customers are able to get a complete computer equipment package plus more flexibility in their financing," she explains. "On the other hand, we generate more business for Memorex. For example, we assembled a lease package for a division of Transamerica Corp., which involved Memorex 3650 Disc Storage Subsystems, 3653 Storage Module and Controllers and 3654 Disc Storage Module and Alternate Controllers.

"The customer had a problem. To change to Memorex equipment, an existing lease with a competitor had to be terminated. We were able to arrange for the leased equipment to be purchased by another party—thus enabling the customer to switch to Memorex equipment. The transaction probably would not have occurred without the special services provided by MFC."

A 1968 graduate of the University of Wisconsin at Madison, Vaughn began her finance career as a trust administrator with Bank of America in San Francisco. She moved to Intel Corp. in 1969, entering the equipment brokerage field five years later. At Intel, she served as vice-president of brokerage activity from 1976 to 1978.

She says there were no computer equipment brokerage courses available when she was in college. To persons interested in entering the field now, she says, "Take courses or



Vaughn stands across duck pond from MFC offices in Sunnyvale.

get some experience which makes you familiar with leasing activities and terminology. Also, get as much marketing experience as possible."

News**makers**

Peggie Henry, an inventory clerk in Lombard, Ill., is the winner of the Memorex Referral Marathon's grand prize—a trip for two to the 1980 Moscow Summer Olympics.

The winner was chosen during an Oct. 5 drawing. Participants in the second phase of the program, which ended July 31, were awarded a chance in the drawing for each referral hired. This was in addition to cash bonuses paid for each new hire resulting from an employee referral. Cash bonuses were doubled and two chances awarded for referrals for hard-to-fill jobs, called "sprint specials."

Runners-up and their prizes are: **Marilyn Jones**, secretary, Disc Drive Division, 19-inch Sony Trinitron TV set and Sony Betamax video recorder; **Ronald Gelaude**, field engineering rep., Detroit, 17-inch Sony Trinitron TV and Atari video game; **Belisario Alanis**, sr. electrical technician, LSS, 17-inch Sony Trinitron TV; **Huong Dao**, inprocess inspector C, LSS, and **Don Malone**, Corporate Design Center manager, each, weekend vacation (Winners are from Santa Clara unless otherwise indicated).

★ ★ ★



Willems, left, presents award to Boomer.

Jim Boomer, Reproduction Operations manager, is the first recipient of a special Tiger Award presented by **Johan Willems**, manager of LSS's Manufacturing Research and Manufacturing Engineering. Boomer had been working seven-day weeks shipping 3650s with IDIs (Intelligent Dual Interface features). After an evening out with his wife, he returned home on Aug. 1 to find his house burned down.

"He came in the next day in spite of his personal tragedy," says Willems.

"He said he had more boxes to ship. I've established this Tiger Award to recognize persons like Jim who are examples for everyone at Memorex of what loyalty, dedication and professionalism mean."

★ ★ ★



Shade displays award and matching pen set.

Joy Shade, order administrator for Field Operations' Western Region, has received her department's first Best in the West Award for her outstanding service to the National Aeronautics & Space Administration's Ames Research Center at Moffett Field in Mountain View.

When the agency's videotaping of Saturn information was jeopardized because of a trucking firm's delay in delivering Memorex videotape, Shade went into action. She wrote another order, walked it through channels and delivered the videotape in her car. The center was only hours away from running out of tape when she arrived.

★ ★ ★

Christmas parties

Tickets for 1979 employee Christmas dinner dances will be sold 11 a.m. to 1 p.m. Nov. 12 to Dec. 14 in the San Tomas and Memorex Drive cafeterias. Off-site and other shift workers should contact the Memorex Activities Group for tickets (7-2357).

Dates, sites, bands and recommended attire are:

- Dec. 1, Marriott's Hotel, Santa Clara, Johnny Lampson Orchestra, semi-formal.
- Dec. 8, Hyatt Regency, San Francisco, Leratones Orchestra, evening formal (tux not required).
- Dec. 15, Cabana Hyatt, Palo Alto, two rock and roll bands, Coast and Stoneground, casual.

Stephan A. Raney, 1979 Memorex Merit Scholarship award winner, will attend the University of California at Santa Barbara. His father is **Lew A. Raney**, 3652 Drive Integration manager, LSS.

James T. Gleiser, 1978 winner, is studying electrical engineering at General Motors Institute in Detroit. His father is **Marvin T. Gleiser**, Key Accounts manager, Audio Division, Detroit Zone.

The National Merit Scholarship program is conducted throughout the United States. Winners are chosen on the basis of test scores, academic record, leadership and extracurricular accomplishments. Memorex participates by sponsoring one of the scholarships. The company is not involved in the selection of winners.

Testing is being conducted this month in high schools to help determine the winner of the 1980 Memorex Merit Scholarship award. The scholarship provides up to \$2,000 a year for four years, beginning in the fall of 1981. Details are available from high school counseling offices.

★ ★ ★

Christian Corteil, a quality control technician with Memorex's Liege Division in Belgium, and his wife **Myrienne** recently paid a visit to company headquarters in Santa Clara. Corteil was the grand prize winner in a drawing held on the division's 10th birthday in March. His prize was an eight-day trip to America.



Corteil and his wife Myrienne chat outside building 10.

Eighteen veterans receive anniversary service awards



Hazel Himan—test technician, Audio Division, 15 years



Robert Jackson—chemist, Mag. & Chem. Tech. Center, 15 years



Erich Kocher—manufacturing engineer, RCD, 15 years



Stanley Marshall—production supervisor, Computer Tape, 15 years



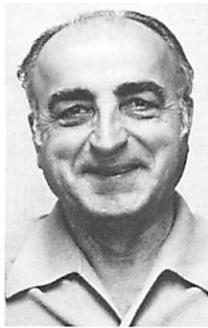
Rebecca Montez—receiving inspector, LSS, 15 years



Arturo Patlan—production control specialist, LSS, 15 years



Michael Warren—warehouse coordinator, RCD, 15 years



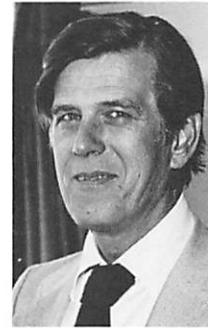
Oskar Wittmann—maintenance machinist, Flexible Disc, 15 years



Leon (Hap) Arnold—disc drive assembler, LSS, 10 years



Mel Ashdown—manager, LSS marketing for Benelux, EUMEA, 10 years



Robin Dalgliesh—manager, Mideast & Africa sales, EUMEA, 10 years



Lorna Draper—601 subassembly supervisor, GSG, 10 years



Robert Hinojo—disc drive technician, LSS, 10 years



Maud Lockwood—lead operator, 601 assembly, GSG, 10 years



Arlene Mariant—associate IR rep., Corporate Staffs, 10 years



Alejandro Martinez—disc drive machinist, LSS, 10 years



Bob McClure—sr. staff engineer, mini disc drives, GSG, 10 years



Herb Shaver—sr. test engineer, Test Engineering, LSS, 10 years



Flo LaFlamme, left, and **Irene Roberts** call up data from new system.

New Media Order Entry System improves service

A new computerized Media Order Entry (MOE) System for the Computer Media and Consumer Products groups is processing up to 4,000 orders and shipments a month.

MOE Manager Lynda Pickering says the system uses Memorex 2089 printers, 1377 display terminals and 1371 controllers. "Besides showcasing Memorex equipment, the system saves money."

The system also includes a special hotline to the Information Systems Division in Santa Clara. It is used for remote diagnosis of equipment problems. A person using the order entry system at any of the 21 entry points across the nation can call on the hotline and then have all hardware and software checked out by plugging into test equipment in building 10 in Santa Clara.

Quality Council proposes human resources program

During its first meeting on Aug. 22, the Memorex Quality Council proposed that a human resources program be established for Quality Assurance personnel.

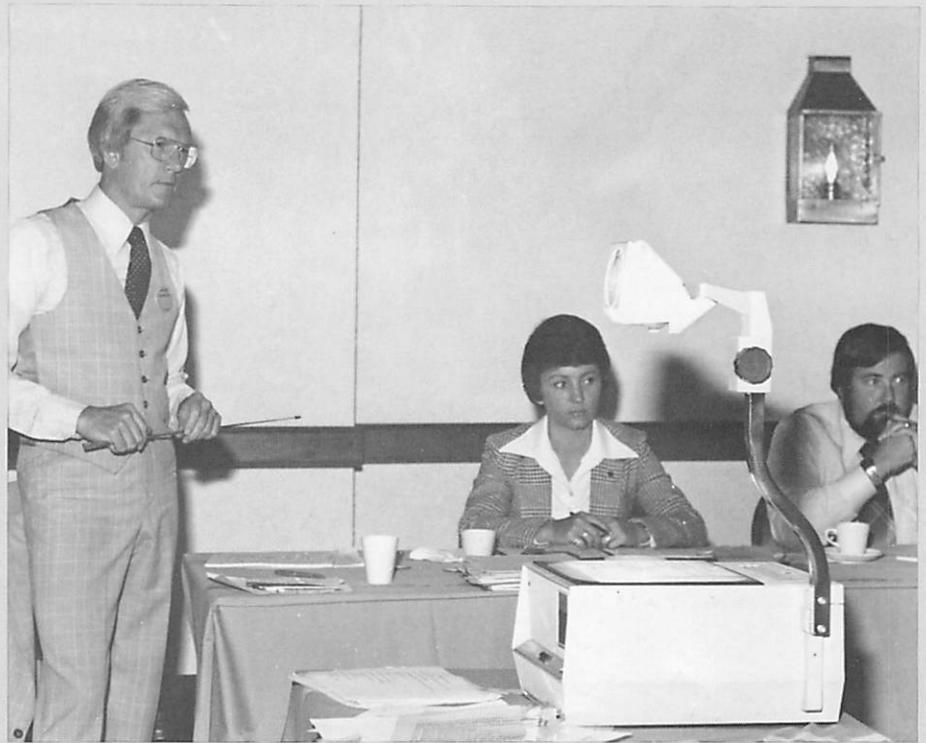
"We are eager to get more QA professionals to make greater career commitments at Memorex," said Corporate QA Manager Jack Q. Reynolds. "To do this, our managers must be sensitive to the needs of our people to grow and develop within the corporation.

"While each of the business groups or divisions may have its own development activities, this program will produce broader visibility of QA's needs and internal resources, and it should encourage maximum internal promotion and developmental job rotation."

The proposal met with unanimous support from all division QA managers present, and Reynolds said a Quality Council committee will promote communication in this vital area. He said the program should do much to maintain continuity in QA, and it should minimize turnover and the costs of training new personnel.

In other business, the council asked each business group to develop its own quality and reliability assurance system tailored to its particular products, markets and customers.

The council also laid plans for formulating broad general guidelines and minimum requirements for a good total quality system, called TQS. This is to



Reynolds, left, presides at first Quality Council meeting.

be done through a committee structure initiated by the council.

Dan Phipps, manager of process QA for Large Storage Systems (LSS), discussed the progress his group has made in implementing a TQS. The TQS procedures are to be followed by all LSS departments, not just QA, he said.

Reinforcing this point, Reynolds said, "Quality really is everyone's business. Some of the most important quality work is done by personnel in engineering, marketing and manufacturing."

Reynolds said a TQS is made up of elements of work which must be done

to assure quality. Corporate QA's job is to identify these elements and to see that the work gets done.

Examples of essential work elements are: identifying the exact requirements of potential users of new products, assuring that these requirements are implemented in the design and engineering of the product and evaluating and testing to prove the product meets the quality and reliability needs of the user.

"It isn't necessarily the job of QA personnel to do these things, but it is our job to assure that they get done," said Reynolds.

Precision Plastics praised for its cost-of-quality management

Accurate determination of the cost of quality assurance is an essential management tool, and the Precision Plastics Division has received praise for the excellent job it is doing in this area.

The recognition came from Corporate Quality Assurance Manager Jack Q. Reynolds during the August meeting of the Memorex Quality Council. Reynolds praised division QA Manager Mike Smith and the members of his staff for their outstanding performance.

Cost-of-quality analysis involves cutting a horizontal slice from corporate expenses, taking pieces from areas such as engineering, testing and field engineering. To conduct this kind of an analysis properly, said the Corporate QA

manager, it is essential that an accurate system of accounting for quality costs be established.

He stressed the need to concentrate on cost control in all areas of quality as well as concentrating on excellent product performance.

"Doing a superior quality job does not necessarily mean spending a lot more money. In fact, better quality performance usually results in less scrap material, less rework and less field repair."

Memorex has a system for tracking the total cost of quality, which is used by most Memorex businesses as another management tool to achieve good cost control. In reviewing the corporation's total cost of quality with QA

managers, Reynolds said Memorex's cost of quality as a percent of revenue is "a bit high" compared to similar companies.

"It probably means we are achieving good quality product performance with too high an expenditure. This suggests there are opportunities to reduce costs without lowering quality—or probably achieving even higher levels of quality."

Reynolds challenged each QA manager to examine his or her cost-of-quality performance, looking for opportunities to reduce them, and to exchange ideas freely with other QA managers. "Let's do what we can to have the maximum impact on our second-half cost of quality because each dollar saved is a dollar of profit."

Magazine's cover story applauds role of Memorex quality organization

Quality has been the hallmark of all Memorex products since the company's founding, and this emphasis on quality has paid off handsomely in solid revenue gains and a growing reputation for product excellence throughout the information processing industry.

Recently, this dedication to quality was the subject of an in-depth cover story in the September issue of *Quality* magazine. Written by Nat Wood, the magazine's western editor, the article is titled "Memorex—a total quality program/Meeting the goal of managing growth while excelling in quality."

In the article, Wood says, "Memorex's financial turnaround in 1975-76 parallels in many ways its successful achievement in product integrity...much of the evidence seems irrefutable. Quality control has played a definite role in the company's emergence as an increasingly important contender for a major portion of the 'computer pie.'

"The Santa Clara, Calif., company's heavy accent on high product integrity—memory excellence, as its name implies—is the result of a total effort, a positive individual/team policy embraced by every one of its 11,000-plus employees.

"Chairman Robert C. Wilson, who has figured prominently in Memorex's 'second life' and its listing among Fortune's major industrial companies, puts it this way: 'Employee attitude is surely a most important factor in our success in achieving quality performance. The people of Memorex have quality attitudes...'



LSS QA Manager Ed LaChance examines article.

"Coincidental with Memorex's growth/quality drive, the firm has moved vigorously into new product development, improvement of existing products, the search for new markets and expansion of existing markets.

"On a broader scale, it is the firm's plan to continue to allocate the resources necessary to expand its technical capabilities and leadership position in the information storage and communications industries it serves.

"Investments being made include the development of future recording technologies such as thin-film heads and media, as well as the further development of diagnostic programming and communication software.

"Says Chairman Wilson: 'Our new products are most impressive. Equally impressive are the investments being made in quality. These include manufacturing processes, quality assurance and field engineering.'

"As technical excellence continues to grow, teamwork between employee and management groups becomes increasingly important. As one executive puts it, 'Quality management can be defined in one word—communication.'"

The article includes an examination of the company's total quality program as well as a look at some quality programs at the group and division levels. The author concludes by saying that Memorex management expects company growth to continue and to be accompanied by a continuing emphasis on quality. Chairman Wilson is quoted as saying: "We intend to be a company of complete integrity—products, services and customer relationships."

Four-color glossy reprints of the magazine's cover photo and the four-page article are available at Memorex's Marketing Distribution Center in building 14 in Santa Clara, mail stop 14-11, telephone (408) 987-2345.

Better feedback enables Computer Tape to improve performance and reduce costs

The Computer Tape Division has reduced the cost of external product failures substantially so far this year under the direction of Harry Wilent, division quality Assurance manager.

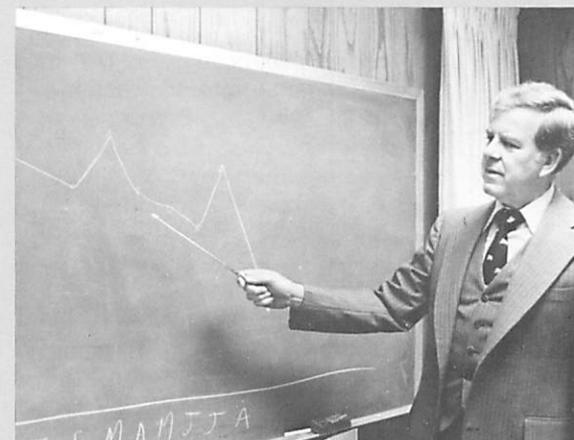
By obtaining better feedback from field engineering and users, Wilent's division has been able to keep costs of external failures well below budget. "They have done an outstanding job," says Corporate QA Manager Jack Q. Reynolds.

The cost of external failures equals

the dollars spent on a product after it is shipped, including field engineering support, the cost of returns and all expenses related to honoring warranties.

Wilent explains that the better performance feedback he has obtained has enabled him to improve performance in such areas as tape marker location and in shipping.

"As a result of these improvements, we have made a real contribution to division profit and achieved better customer satisfaction."



Wilent explains how external failure costs were reduced.

Unique IDI feature improves performance of customer's complete computer system

One of the company's latest innovative features for its 3650, 3652, 3670 and 3675 disc drive sub-systems—the Intelligent Dual Interface (IDI)—is unique in the industry. Nothing like it is made by any other company.

A factory-built-in or field-installable feature, the IDI improves performance of a user's total computer system by permitting two storage control units (SCUs) to access one string of disc drives simultaneously.

Memorex has applied for a patent on the remarkable device. In designing it, company engineers had to develop a means of keeping two string controllers operating at the same time, talking to each other—and all this in nanoseconds (millionths of a second).

In a standard installation (see illustration), each SCU can access only one spindle in a given string at a given time. The IDI allows two SCUs to access two individual spindles simultaneously. This contributes to keeping central processing units (CPUs) out of holding patterns while data is being retrieved from certain spindles, resulting in a reduction of CPU waiting time on input/output.

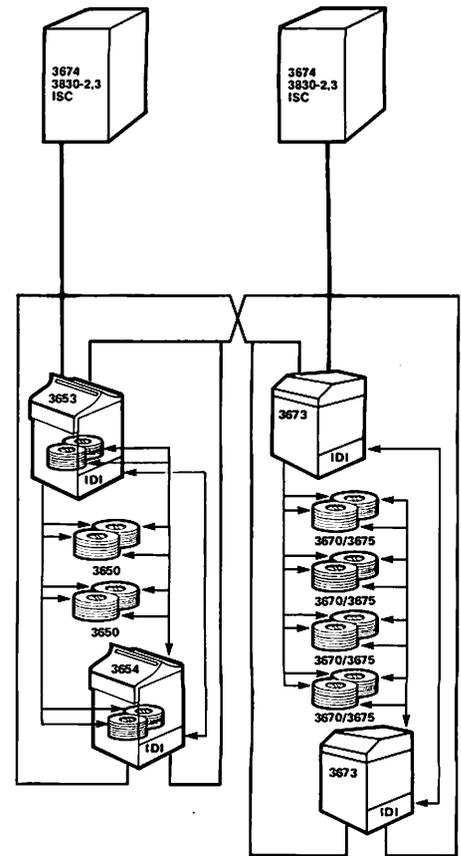
The IDI, inside the primary and secondary string controllers, allows

both controllers to be on line with a requesting SCU and assures that only one, whichever is idle, responds to a command or request for data. Hence, two SCUs are able simultaneously to access two separate spindles on a single string.

The hardware for the IDI includes specially designed printed circuit boards added to each string controller and disc module, additional data cables and some modifications to the back panels of the drives. It requires no changes whatsoever to Memorex or IBM SCUs, and it is totally transparent to the system.

In extensive testing to measure the performance of the IDI, the feature proved capable of dramatically improving job turn-around time, increasing channel utilization and improving utilization of the CPU.

The IDI provides two access paths to each string of disc modules. It resolves request contention at the head of the string rather than in the CPU, thereby reducing CPU overhead. It provides an automatic back-up with the second string controller, and, in combination with in-line Memorex microdiagnostics, the IDI allows trouble shooting and repairs to be performed on specific disc



Example shows two strings with two Integrated Storage Controllers. Up to four strings of drives (32 spindles) can be supported.

drives within a string without interrupting the operation of other spindles.

Dublin audio tape plant heads list of expansion activities for this fall

Memorex facility expansion for this fall includes the opening of a new audio tape plant in Dublin, Ireland; a move by the CFI Division in Anaheim, Calif.; a joint venture in South Carolina; the ac-

quisition of a 42-acre plant site north of Dallas, Tex.; and the establishing of an operations center in Tucson, Ariz.

This month is the target date for the opening of Memorex's new audio tape slitting and packaging facility in Dublin. The 40,000-square-foot installation, which will begin operations using tape coated in Santa Clara, will help supply the growing European audio tape market.

Ireland is providing a substantial grant for establishment of the plant, and it will contribute to the cost of training nearly 150 Irish nationals who will operate the plant.

In Anaheim, CFI will move from two leased buildings to a new 112,000-square-foot building in nearby Fullerton. A third building in Anaheim, which is owned by Memorex, will be refurbished.

CFI's John Fialco says the move will lead to improvements in efficiency, equipment utilization and productivity. The refurbishing is expected to result in improved product quality and a 30-percent increase in production

capacity. CFI manufactures disc packs and cartridges.

In South Carolina, Memorex has joined Kores Manufacturing Ltd., with headquarters in Essex, England, in forming Kormem. The new joint venture firm begins operations this fall in its Summerville location. Kormem will be the primary supplier for Memorex's line of correctable typewriter ribbons. Memorex owns 49 percent of the joint venture company.

In Texas, Memorex has purchased a 42-acre site in Plano, north of Dallas, where it plans to build a manufacturing plant. Until the plant is built, the company will lease an existing building for manufacturing purposes on property adjacent to the permanent site.

The Tucson operations center, expected to go on line this month, is located in a 12,000-square-foot leased facility at 4201 Santa Rita Ave. It will support the company's manufacturing plant in Nogales, Mexico. Robert C. Milo, Memorex operations manager, Tucson/Mexico, has been named to head the new facility.

Stanford courses available

Memorex has become a participant in the Stanford Instructional Television Network. Personnel at Memorex now can take master's level engineering and computer science courses for credit or as auditors.

"This is a major milestone in enhancing the professional development opportunities available to the engineering community at Memorex," says Engineering Vice-President Steve Puthuff.

To attain credit, participants must meet Stanford admission requirements. The company pays the costs of the program. For information, call Corporate Training: 7-3700.