

# INTERCOM

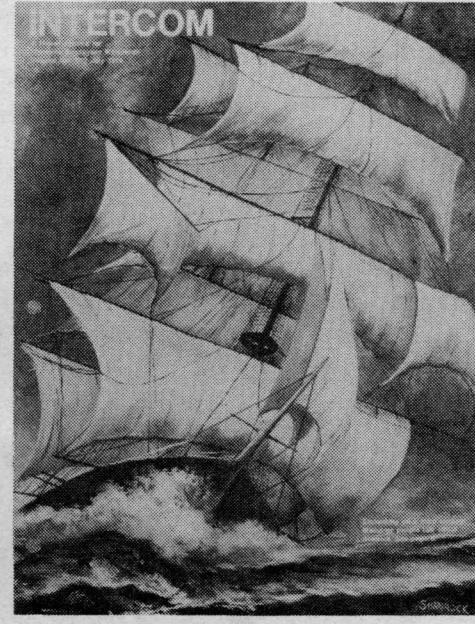
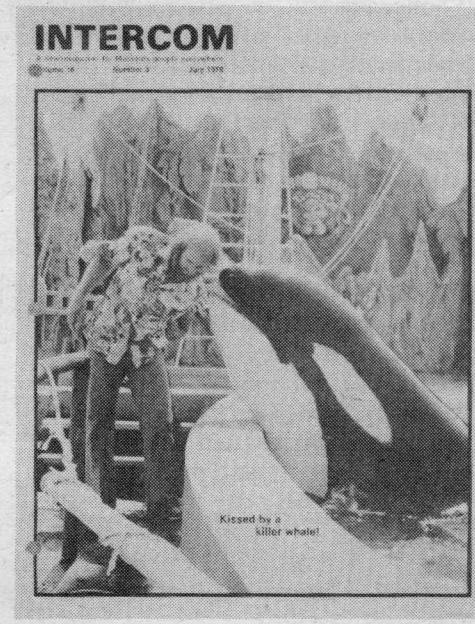
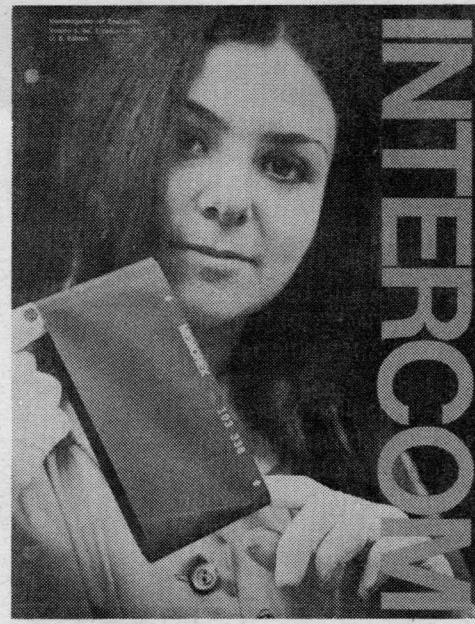
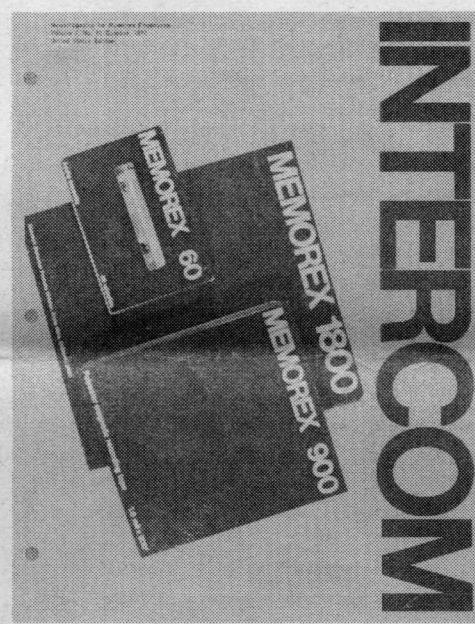
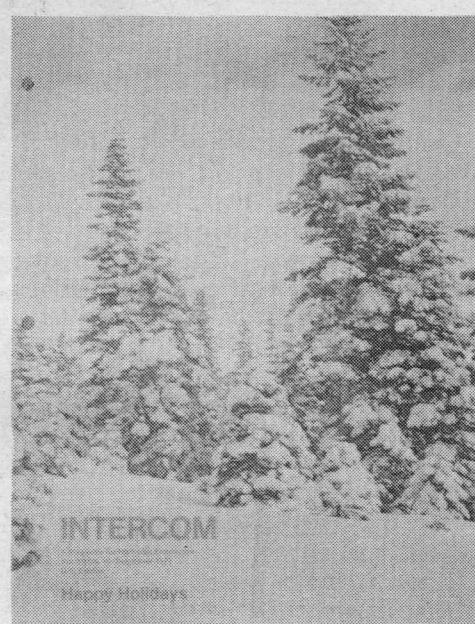
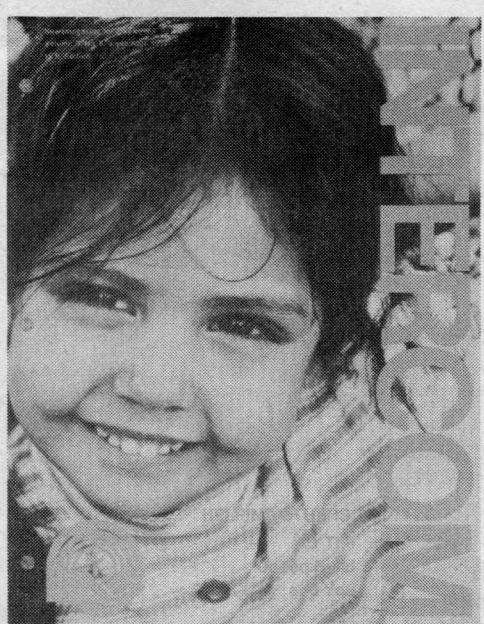
FINAL EDITION

Volume 21 Number 5 September 1983

THE COMPUTER HISTORY MUSEUM  
1 027 4535 7

ADIOS...GOODBYE...AUF WIEDERSEHEN...SAYONARA...CIAO...AU REVOIR...HEJ DA! TO INTERCOM

You are holding the final issue of Memorex's INTERCOM. See editorial on page 2.

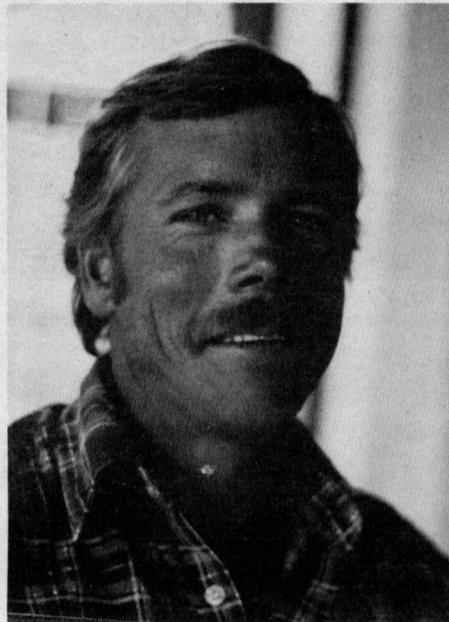


## Memorex customer engineer finds Sharks, Sea Bass, and treasures

Where does an 800-pound Sea Bass swim? "Anywhere he wants to," says Mike Guerin, who encountered one of the giant fish during a scuba diving expedition off the coast of Santa Barbara, CA, while looking for Sea Urchins.

"I looked up and there was this wall right in front of me," he said. "It hung around the area for three days, just checking out the divers. It came within three feet of us."

Previously a commercial scuba diver, Guerin is now a Memorex customer engineer working on our communications products, such as terminals, controllers, and printers. He has also recently completed new-hire disc training on 367X products.



Mike Guerin

Guerin started scuba diving in 1970, just after he returned from Vietnam and finished his service with the U.S. Army. Immediately, he says, he got "hooked." About six months later, he discovered he could make money as a diver and found underwater maintenance work at Lake Tahoe, CA, which he continued for three years.

Following that, he took a hiatus from commercial diving to be the foreman on a 200-acre ranch in Southern California, and an employee at Sequoia National Park. In 1975, he graduated from a commercial diving school in Seattle, Washington, then took off to work in the North Sea doing oil field diving for a firm called Oceaneering.

The North Sea (near Scotland, Norway, and The Netherlands) is considered to be the most unpredictable sea in the world for its combination of huge waves (swells reach 80 to 100 feet in a storm) and extremely cold water, the temperature

of which is affected by melt-off from the Polar Ice Cap.

Following his assignment with Oceaneering, Guerin returned to the States to teach sport diving in Newport Beach, CA, for high school students and private classes.

During his career as a commercial diver, he participated in three major underwater expeditions, including a hitch as a crew member for Jacques Cousteau.

Another project took place in the waters off the Bahamas, where he encountered Bull Sharks and Tiger Sharks, both dangerous species. During those dives, sharks swam right up to the divers to investigate. Guerin describes the shark/human encounter as one of "mutual curiosity," and claims he felt in no danger.

On another expedition, however, he did get stung by a Sculpin, a dangerous member of the Stone Fish family with a dorsal spine resembling a row of syringes, from which the fish injects a potentially-deadly poison into its victim. He was also bit by a Moray Eel while groping around the eel's home (between two rocks) looking for abalone.

"It was my own fault," he said. "I know of no marine life that's aggressive without provocation."

In the Dominican Republic, Mike joined a group of fortune hunters to look for silver and other relics from a sunken Spanish ship over 300 years old. Unfortunately, Mike left the expedition (due to a conflict of interest with the government of the Dominican Republic) before any booty was recovered. The final tally came to over \$7 million in silver.

He has logged over 2000 hours underwater as a commercial and sport diver, and has taught sport diving to many people, certifying over 1500 for the sport.

There are tremendous differences between sport diving and commercial diving, he says. Sport diving is normally done in calm waters for the beautiful underwater scenery, the exercise, or the gathering of seafood, and is relatively safe with proper training and certification.

However, sport diving can be potentially hazardous and, says Guerin, "I don't recommend that anyone go diving without sport diving certification."

Commercial diving, on the other hand, is pure, dangerous, hard work in conditions that can include very rough seas, murky waters, great depths, and very cold water temperatures.

His teaching experience ranges over a six-year period and includes



Cannons recovered from a 300-year-old sunken British ship are some of the treasures Guerin helped to uncover on various diving expeditions.

## INTERCOM laid to rest; Memorex introduces new publications

### EDITORIAL

INTERCOM was introduced to Memorex employees in 1962. The Company was barely a year old but growing to the point that "word-of-mouth" was no longer an effective means of communicating information to employees. What people needed was their own newsletter to keep them informed about the business, employee activities, high technology, and all the other news and information they wanted and needed.

INTERCOM has served as the main employee publication for over 20 years and has served its purpose well. Old INTERCOM's may, in fact, be one of the best historical record of Memorex and, in some respects, chronicles much of the development and growth of "Silicon Valley." It is now being laid to rest, to be replaced by other publications.

Based on an INTERCOM readership survey early this year and the employee opinion survey in the second quarter, we discovered that Memorex employees would like *more* communication. You asked for more product application articles (just how are Memorex products used in the real world?), more information about benefits, more interviews with and/or profiles of Memorex executives, and so on.

Therefore, we are introducing, among others, a brand new publication called MEMOREX WORLD. Scheduled to come out in the fourth quarter, MEMOREX WORLD is a quarterly magazine featuring the kinds of articles you asked for. We hope you'll be better informed, educated, entertained, and amazed with each issue.

Another new publication, MEMOREXPRESS, will hit the stands soon. Designed to serve the information needs of Memorex employees in the Santa Clara Valley (which group represents nearly half the Company) MEMOREXPRESS will contain mostly news of local interest, such as: local MAG news, training and educational opportunities, award winners, promotions, a large and (we hope) very effective WANTADS section, information about community cultural activities (what's playing at the Center for the Performing Arts, for example), and all the local news you wanted in INTERCOM and never got.

On an "as-needed" basis, we will be publishing MEMOREX WORLD PRESS, a newsletter designed to bring all Memorex employees the news and information of international significance that cannot be held for a quarterly MEMOREX WORLD.

Our intention is that these three publications replace INTERCOM to provide timely news and feature and issue-oriented material. As has always been the case with INTERCOM, we rely on your calls and letters to keep us informed on what's happening in the world of Memorex. You are invited to submit articles, photographs, and ideas any time, all the time. Subject to editorial approval, your submission will be published and you'll get the credit you deserve.

If we all take the responsibility of "feeding the system" (i.e., keeping us informed), communication throughout the Company will improve. We appreciate all comments — positive and negative — on how you think we're doing. Please let us know if we aren't providing the amount and type of information you'd like, then help us do it better by letting us know what's happening out there.

To INTERCOM — goodbye.



Diane Grazj

Editor, Employee Publications

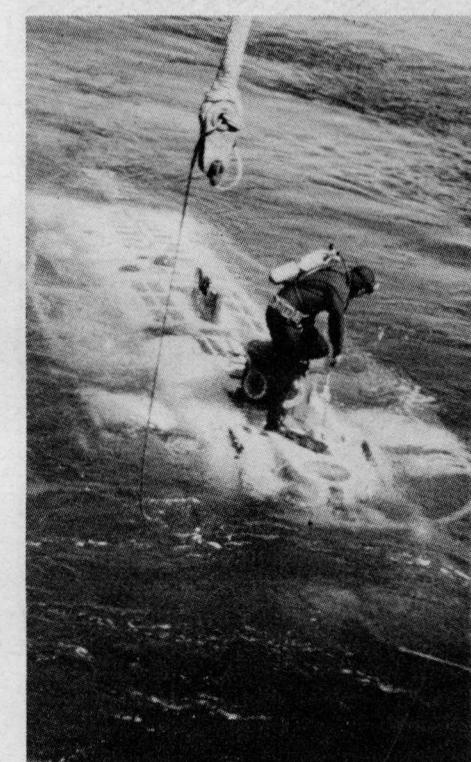
students, both male and female, between the ages of 7 and 70. When asked if there were any notable differences between the sexes in scuba diving, Guerin noted, "Women are as capable as men in diving. In many cases, women are better divers; maybe because they tend to be more cautious."

He was once interviewed by a reporter from a women's magazine and was featured in a television special on scuba diving in which he taught the woman interviewer the basics of diving during the course of the show.

He supports and encourages women to take up the sport. As a matter of fact, he met his wife Sally in a class he was teaching and plans to teach his one-year old daughter Molly to dive when she's old enough.

"The most beautiful place I ever dove was in the South China Sea," says Guerin. "The visibility was so good and there was an abundance of marine life. The species were the largest I've ever seen."

Except for the 800-pound Sea Bass, we assume.



Guerin was inside this small submarine which dives to a maximum depth of 600 feet.

# USES&S reorganized to maximize quality of sales and service

by Karen Lippe

Bob Berry and Sam Spadafora have been appointed vice presidents of the newly-formed U.S. Equipment Sales and Service Group. The announcement, by Dr. James Castle, executive vice president, defined the two organizations as Customer Operations and Sales Operations. Both organizations will report to Castle.

Berry will be responsible for Customer Operations which includes Customer Engineering Field and Headquarter Operations, Customer Service, Finance, Guest Relations, and Sales and Service Education and Training.

Sales Operations will be directed by Spadafora who will be responsible for all end-user equipment sales activity in the United States.

The objective of the new organizations is to maximize Memorex quality



BOB BERRY



SAM SPADAFORA

## Employee benefits package revised

"It is a fact that during the last six years, the cost of health care for every man, woman, and child in the U.S. has nearly doubled — from \$750 to \$1,400. And Burroughs' costs have more than doubled. The reasons for these sharply escalating costs are complicated, but the fact remains that the customer — each one of us — ends up paying the bill."

So stated W. Michael Blumenthal, chairman and CEO of Burroughs Corporation in a recent memo to all Burroughs employees who now receive benefits, including the Memorex population.

The purpose of the memo was to introduce a new Corporate-wide benefit program covering medical, dental, disability, and survivor benefits.

This program is designed to meet three major objectives:

1. To provide employees with protection that is of high quality and is competitive with plans offered by major employers in our industry.
2. To offer options that will meet the needs of employees in a variety of situations.
3. To establish a system that is effective at controlling costs — employees' and Burroughs'.

Blumenthal continues, "Burroughs' new benefit system helps to slow down this rate of increase (in costs) because it encourages us to save money by making more efficient use of our medical benefits."

During the timeframe of September 6 — 23, all Memorex domestic employees who now receive benefits will attend meetings in which they will receive a full explanation of all the new benefits and will be asked to make their choices of benefits' packages.

## Johnson appointed to Burroughs Tech Committee

Don Johnson has been appointed to the Burroughs Technical Committee to evaluate internal and external technical developments affecting the company.

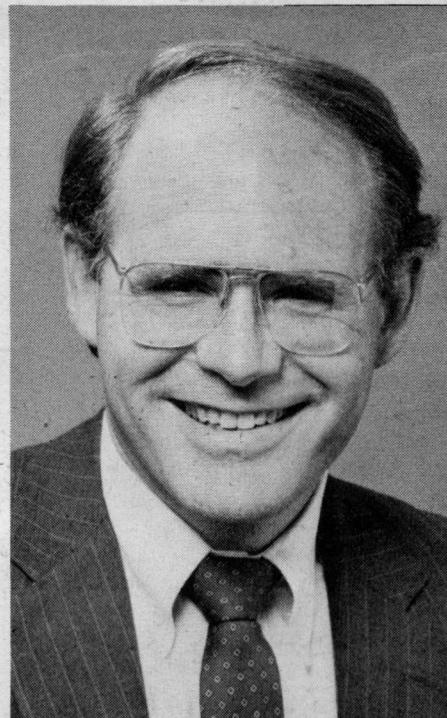
The Committee, which was established in 1982, plans to explore Burroughs' competitive postures in key technological areas. The group will also evaluate the company's technical development and make recommendations for future company goals, approaches, strategies and priorities.

Johnson, a Memorex staff technologist, will be a Committee member for two years.

in the marketplace by providing a cohesive customer-oriented leadership, except direct sales, into one organization, according to Castle.

Each organization has also announced their new divisions. Reporting to Berry will be: Hank Baylor, director of Customer Engineering Headquarters Operations; Harold Stanley, manager of Guest Relations; and Tom O'Keefe, manager of Customer Service. The remaining positions, manager of Education and Training and manager of Finance, have not been filled.

Reporting to Spadafora will be: Larry Miller, manager of Systems Engineering; Woody Hancock, Sales Support; and the five area vice presidents of sales end-user products — Greg Grodhaus, Southwest; Al Kennedy, East; Bill Roch, West; Bill Wiley, South; and Ron Zanzarella, Central.



## Mahland joins MFC as vp, controller

Peter Mahland has been appointed vice president, controller of Memorex Finance (MFC), reporting to Clyde Johnston, president of MFC. Mahland joins Memorex from City Investing Company where he was Western Regional Financial officer. Mahland received his BA in Economics and MBA in Finance from Long Island University.

## Education benefits increased to \$2500

by Diane Rubino

Memorex's Educational Assistance Program maximum annual reimbursement has recently been increased to \$2500. This increased benefit is part of an ongoing program to provide opportunities for Memorex employees to develop skills to improve their current job effectiveness and prepare for potential advancement in their career fields at Memorex.

Regular fulltime U.S. employees are eligible to participate in the program which reimburses for registration, tuition, lab fees, and required books, upon completion of coursework with a grade of "C" or better. Coursework must be taken from an accredited institution, approved by Memorex, and must relate to the employee's current position or prepare the employee for future career goals at Memorex.

Applications for Tuition Assistance are available from your Human Resources representative. The application must be received by Human Resources Development (HRD) prior to registration. Approved applications are kept on file. Grades and receipts must be received by HRD within 90 days of course completion. For more information, call your Human Resources representative or HRD at (408) 987-3700.

## Kenney named general manager of SDD (Small Disc Drive)

Jack Kenney has been named general manager of Small Disc Operations, reporting to Wade Meyercord, president of Storage Equipment Manufacturing and Development (SEM & D).

According to Meyercord, "This organizational change is being implemented in order to bring focus to the small disc drive business and to better integrate the engineering and

manufacturing operations."

In the new position, Kenney will have responsibility for engineering, manufacturing, and Quail program management for small disc products.

Reporting to Kenney are: Ron Lesti, director of Small Disc Drive Engineering; Ed Trost, plant general manager of the Winnipeg facility; and an open position of Quail program manager.



Colleen Murphy is presented with the Burroughs Exemplary Award by Bill Brown, right, vice president of Development Engineering SEM & D, while Joel Filios, manager of PCB Design and Drafting for LDDD, observes.

## Murphy earns Exemplary Action Award for Quality Circle work

Colleen Murphy, a senior designer in the Large Disc Drive Division, is the first Memorex employee to have earned a Burroughs Exemplary Action Award in the recently announced program.

Murphy was cited for her work in developing and implementing a quality circle in LDDD consisting of representatives from several organizations in that division. As chairperson of the quality circle, Murphy led the group to several major accomplish-

ments related to printed circuit board design.

When asked what she felt was the most significant effect of the group on its members, Murphy said, "Opening up communications with each other."

Murphy, who has been with Memorex since February 1982, was presented the Exemplary Action Award by Bill Brown, vice president of Development Engineering for Storage Equipment Manufacturing and Development (SEM & D).

# The successful person — what it takes and how to make it happen

We are all born with approximately 100,000 working hours and that's it. Why then are some people fantastic successes, others normal or average, and yet others dismal failures? Being a "genius" is not the answer, as there are a higher number of failures among people with high IQs than among people who fall into the norm. If your "yardstick to success" is money, education is not the answer. In the U.S. today there are more millionaires with a high school education or less than there are millionaires with a Ph.D.

The key difference between being average or outstanding is so simple, it is often overlooked. **There are only two things that any human being has going for him: His time and his attitude.** Many experts agree that a person's life is determined by his mental attitude.

## GOAL SETTING

Most people spend more time each year planning their vacations than their lives. When was the last time you sat down and said (and wrote it out) here are my goals for the next year, two years, five years, etc. Having once defined and aggressively pursued a set of goals almost guarantees they will be obtained. How they are obtained is more difficult than the execution of the plan itself.

There are two books that provide a detailed understanding of goal-setting techniques which I fully recommend: **Think and Grow Rich**, Napoleon Hill and **Success Thru a Positive Mental Attitude**, Clement Stone/Napoleon Hill.

## PERSONAL TIME MANAGEMENT

Personal time management is another important element to success. It is imperative your time is spent doing what you do best. To illustrate this point, I would like to cite the following example: In a small town a lawyer bills his time at.....\$75/hour. He also envisions himself as the best legal secretary in the town and does his own secretarial work. The second best legal secretary in the town sells time at.....\$15/hour. She also feels she is the best seamstress in town and makes all her own clothes. The second best seamstress in the town charges.....\$5/hour. She also feels she is the best cleaning woman in town and cleans her own store. The best cleaning woman in town charges .....\$1.65/hour. What does it cost the lawyer to do his own secretarial work?

\$75/hour! If he were working, that's what his income would be. The same applies to the legal secretary. Her clothes cost her three times as much as they should.

This concept of spending your time in doing that which you do best is called marginal utility. As we established, the lawyer's highest marginal utility is legal work. His second highest marginal utility is **marketing**, not legal secretary work! The lawyer markets future hours at \$75/hour. This maximization of our future time is of extreme importance. We must all ask ourselves, "Am I using my greatest marginal utility?"

## GETTING ALONG WITH OTHERS

The one common denominator to all success is other people. Scientific studies have proved that by learning how to deal with people, you will obtain about 85 percent success in any business, occupation, personal endeavor or profession. We must learn the art of human relations in a way that our egos and the egos of others remain intact.

### Three Studies Reveal The Importance Of Getting Along With Others

The Carnegie Institute of Technology analyzed the records of 10,000 people and concluded that 15 percent of individual success is due to technical training, knowledge, and skill on the job; 85 percent is due to personality factors such as the ability to deal successfully with people.

Harvard made a study of thousands of men and women who had been fired. They found that for every person who lost his job for failure to do the work, two persons lost their jobs for failure to deal successfully with people.

Dr. Albert Wiggin in his famous syndicated column **Let's Explore Your Mind**, says that out of 4,000 persons studied who lost their jobs, 400 (10 percent) failed because they could not do the work, and 90 percent failed

because they had not developed the personality for successfully dealing with other people.

### Remember these five key points:

Establish some meaningful personal and business goals.

Effectively use your time in doing that in which you are best.

Develop the ability to deal with people.

Learn the meaning of teamwork. Be a team players. Help the other guy score.

Lastly, be creative and use your imagination. Don't settle for "We don't do it that way here."

In conclusion, **success is a comparison of where you are compared to your own potential!** It is not a destination; it is a constant journey. As an individual you constantly grow to be the person you want to be. Success is yours for the asking, all it requires is a commitment from you to yourself.

Reprinted from August 1973 INTERCOM.

# Merit Scholarship program offered to employees' children

High school graduates of the class of 1985 are now eligible to enter the Merit Scholarship program sponsored by Burroughs.

The scholarship competition, administered by National Merit Scholarship Corporation (NMSC), is designed to honor exceptionally talented high school students who plan to attend college in 1985. Scholarships can range from \$500 to a maximum of \$2,000 per year of college study.

Eligibility requirements include United States citizenship, completion of secondary education, and entering college in 1985, and being a son or daughter of a regular full-time employee within a Burroughs operation entity.

For details, contact your Human Resource representative.

# Would you hire yourself?

But if you're not, you'll still do all right in you can answer "yes" to these few questions.

And should you have any of these high gifts, they will shine through with all the greater brilliance if you've given positive replies in this basic little test.

Reprinted from February 1966 INTERCOM.

Show me a person who doesn't make mistakes, and I'll show you a person who doesn't do anything.

# Memorex operators — linguists, counselors, and product whizzes

by Karen Lippe

By most company standards, a telephone operator must be courteous and patient. However, the Memorex operators move well beyond that, evolving into product and company

information specialists, counselors, and linguists.

Since the operators are the first official contact with non-employees, they must be well versed on Company-related subjects. They must know what types of products certain divisions

manufacture. They must also establish a satisfying relationship with the caller, projecting a good image of the Company.

A problem the operators encounter is the lack of information a caller has when trying to contact an employee.

"Some people ask for Sue at Memorex. Do you know how many Sues are at Memorex?" asked Carolyn Harr, a four-year switchboard veteran.

Children often call requesting to speak with their parents; at times, however, the parent's location is not known and in one incident, the child didn't know the mother's new last name.

"When people don't let their family know where they are," said Venus Wright, an operator for 1½ years, "and when there's an emergency, it can be difficult to locate the employee."

In these situations, the operator must calm the distressed caller and try to help them as much as possible.

In the Silicon Valley, the diversity of ethnic backgrounds has created a name pronunciation challenge. This unique situation has instilled self-taught linguistic abilities in the operators. They tackle names that "look like someone took the alphabet, threw it in the air and made a name out of the way it landed," said Wright.

This month, the installation of on-line computer terminals will turn the operators' paper telephone listings into switchboard history, decreasing their search time, but not the time they spend helping callers.

# Jr. Achievement sponsor search

Junior Achievement is the nation's oldest youth economic education program. Over 200,000 high school students learn the principles of the American free enterprise system each year by running their own small businesses.

Junior Achievement companies, consisting of about 20 students each, function as a small business under the guidance of adult volunteers called advisors. They meet one night a week for two and a half hours to conduct the business of the company.

Memorex Corporation sponsored a Junior Achievement company during the 1982-83 school year and is looking for volunteers who would be willing to work with the students in forming and running a Junior Achievement company during the 1983-84 school year. The training for advisors begins in August.

If you would like to involve yourself in this worthwhile program or want more information about it, contact Ernie Tydell at (408) 987-2894.



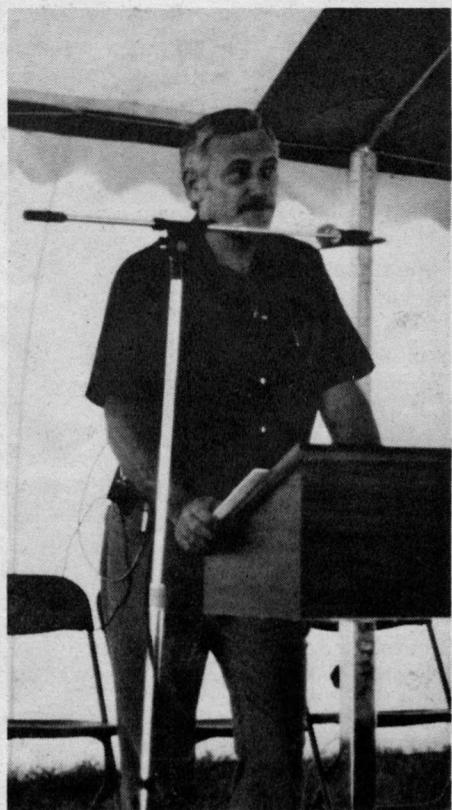
The Santa Clara switchboard operators handle phone inquiries from 7:30 a.m. to 5:30 p.m., Monday through Friday. The operators, left to right are: Venus Wright, Carolyn Harr, Deborah Courtney and Cathy Zlomke.

# A STROLL DOWN MEMOREX LANE

Throughout the years, when it happened at Memorex, INTERCOM was there, announcing major milestones, among them:

1961	Research and development operations began in a rented facility in Mountain View, CA; initial efforts centered on magnetic recording media; introduction of first product—computer tape.	1978	Recording Technology Center and Magnetic and Chemical Technology Center were established to pursue key technologies. Memorex formed Mini Disc Drive Corporation to develop 8-inch rigid disc drive products. Introduction of: 1371/1372 Terminal Controllers; 2089 Line Printer; Intelligent Dual Interface for 3670/3650 products; Super 3 Software for IBM System/3 users; Cubic HD Computer Tape; MRX audio tape line of cassettes, 8-track, and reel-to-reel; and MRX-716 professional video tape.
1962	Memorex established corporate headquarters, research and development laboratories, and principal manufacturing facilities in Santa Clara, CA.	1979	Memorex Finance Company was established to provide package leasing of computer and communications equipment to Memorex customers. Establishment of a plant in Ireland for production of audio tape products. Introduction of: the double-density Model 3652 Disc Storage Subsystem offering 635 megabytes of storage capacity per spindle; Model 101, the first of a planned series of 8-inch rigid disc products offering 11.7-megabyte capacity; GEO-XL computer tape for recording of geoseismic data in oil exploration; HIGH BIAS cassette audio tape for consumer markets; and half-inch VHS home video tape.
1963	Introduction of video tape for closed-circuit television.		
1964	Memorex established its first overseas sales office in Maidenhead, England.		
1965	Sales reached \$13 million; employment reached 442; international marketing operations expanded with direct sales offices in Great Britain, France and Germany; local representatives in Canada, Latin America, Japan, and Australia.	1980	C.W. Spangle was elected president and chief executive officer of Memorex; subsequently, chairman and CEO. Memorex announced formation of Memorex International, combining Europe/Middle East/Africa Group and the Americas and Asia Group, for sales and service outside the U.S. Introduction of: 2076 Remote Cluster Controller and 2078 Display Station by the Communications Group; disc cartridges with exclusive Shockwatch impact-detector feature; 659 OEM Disc Drive offering 677 megabytes of data storage capacity; 612 OEM Disc Drive; 677-30 Disc Drive and 1300 Matrix Screen Printer.
1966	Introduction of MRX III computer tape line and improved broadcast video tape for commercial television market.		
1967	Memorex enters the peripheral equipment business with introduction of the 630 Series Disc Drive. With introduction of Mark I line of disc packs, Memorex became the first independent manufacturer to develop and market IBM-compatible disc packs.	1981	Memorex was acquired by Burroughs Corporation. The Company divested itself of the Business Systems Division and commenced discussions leading to the sale of its Consumer audio and video tape operations to the Tandy Corporation. Memorex announced a series of products to allow the 1270 Terminal Controller Unit to interface with X.25 public or private packet data networks. The Company invested \$40 million in research and development and celebrated its 20-year anniversary, as did four of its original employees: Elizabeth Herzfeld, Albert Delman, Roland Gallegos, and Wayne Elder. The Media Products Group was formed by combining the Computer Media Group with the Consumer Products Group. Memorex received the U.S. Presidential "E" Star Award "in recognition of outstanding contributions to the increase of U.S. trade abroad."
1968	Sales offices opened in Canada; marketing subsidiaries were established in Mexico, Denmark, and Finland. A joint venture was established with the Japanese Trading Company to market Memorex products in Japan. Sales increased to more than \$58 million, a 70% rise over the prior year. Employment increased to 1,916.	1982	The Corporate Quality Council was formed to promote greater quality awareness throughout the Corporation. Twenty-year anniversaries with the Company were celebrated by: Ethel Anderson, Clarence Hamm, Gloria Martinez, and Dennis Burgstrom. Dr. James Castle joined Memorex as executive vice president. The Westlake Village, CA, and Winnipeg, Canada, divisions of Burroughs officially joined the Memorex family as part of our Storage Equipment Off-Site operations. Memorex introduced the 3680 single-spindle thin-film-head disc drive, representing the highest technology product in the industry. The 3260 Series magnetic tape subsystem was introduced. Despite the lagging economy, Memorex employees throughout the country contributed to the most successful United Way campaign in Memorex history, breaking all previous records for giving.
1969	Memorex began to build direct sales and service organizations to market its equipment to end-users; Consumer Products Division was established to develop magnetic recording media for in-home recording market; introduction of 1603 Computer-Output-Microfilm (COM) Printer utilizing patented fiber optics technology.		
1970	Memorex established the Equipment Group to encompass its storage products, COM printer, and communications equipment; introduction of audio cassette and open-reel tape for consumer markets. The Company adopted "shattering glass" trademark in its consumer advertising campaign; revenues reached \$78.9 million; employment reached 6,101. Introduction of Memorex's first communications products; 1200 Communications Systems included the 1270 Terminal Control Unit and the 1240 Communications Terminal.	1983	(First half) Harold Morgan and Arthur Burt celebrated 20 years with Memorex. Memorex signed an agreement with DMA Systems Corporation for joint sponsorship of a family of 5-1/4" disc products for the OEM market and Burroughs. Memorex and Burroughs announced the first Memorex products compatible with Burroughs equipment — the B677 and B659 disc products. The first two products in the 400 Series of compact 5-1/4" fixed/removable Winchester disc drives were introduced. The Communications Group introduced the 2074, a large remote cluster controller. Memorex introduced a new on-line semiconductor storage device for storage subsystems, the Memorex 3864. Flex Disc Marketing introduced a program to retail Memorex flexible discs to personal and small business computer users. RMCD unveiled an automated line to process 5-1/4" rigid discs from initial disc cleaning to certifying — the first operational automated line in the rigid disc industry. Memorex equipment was used extensively in the movie hit WAR GAMES. Our 2078 Display Station was used in the movie to "save the world" from thermonuclear war.
1971	Revenues topped \$100 million; introduction of 3670 disc storage subsystem; Model 3670 disc drive offered 100-megabyte storage capacity.		
1972	Revenues reached \$145 million; over 40 percent of revenues derived from International operations. Introduction of 1240 Multipoint Communications Terminal and the 1270 Terminal Control Unit which continues to perform as one of the most reliable and efficient communications controllers available in the marketplace today.		
1973	Introduction of: Model 3673 Disc Controller; 653 Flexible Disc Drive (IBM-compatible); double density Model 3675 Disc Drive; and new disc cartridges compatible with IBM System/3 computers.		
1974	Memorex re-organized the Company into five operating groups: Equipment Products; Computer Media; Consumer and Business Media; Europe, Middle East, and Africa; Americas and Asia.		
1975	Memorex earned record \$18 million on revenues of \$263.9 million; introduction of Markette Flexible Discs and the programmable 1380 Communications Controller.		
1976	Memorex earned \$40 million on revenues of \$344.6 million; Introduction of Model 1377 Video Display Station, Model 3650 Disc STorage Substation, and 3650 Disc Drive offered 317.5-megabyte storage capacity.		
1977	Memorex acquired: Business Systems Technology of Santa Ana, CA; and CFI Memories, a computer media manufacturer located in Anaheim, CA. Memorex broke ground for a new printed circuit board manufacturing plant in Eau Claire, WI, to double the size of the existing facility. Earnings reached \$56 million on revenues of \$450 million. Employment reached 8,823. Introduction of: 601 OEM Rigid Disc Drive; SuperReel Tape Reel; Model 3220 Magnetic Tape Subsystem; and double-density flexible discs.		

# Winnipeg holds all-employee outdoor communication meeting



Ed Trost, Winnipeg plant general manager, addresses employees at their outdoor meeting.

It was a hot summer day in Winnipeg on July 15th, 1983, with the temperature rising to 35 degrees celsius (95°F). But it was a perfect day to mark the start of the Winnipeg Plant's annual vacation shutdown, and an ideal day for an outdoor communications meeting and barbecue.

This was the fourth in a series of all-employee communications meetings which were introduced to provide employees with improved feedback on performance (including progress toward meeting quality objectives) and other developments in the Company. As with the first of these meetings last summer, a large "carnival-type" tent was erected on plant property in case of inclement weather, since there was no location within the plant which could accommodate all 470 employees.

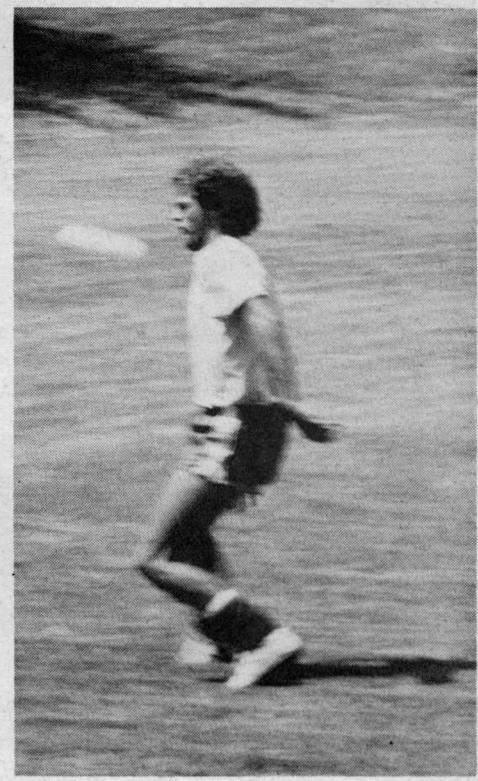
To thank employees for meeting ambitious quality and production goals in the second quarter, the senior managers served a barbecue lunch after the meeting. The hot weather, the excellent lunch and casual atmosphere, made the afternoon an enjoyable event which will be remembered by all.



Winnipeg employees were treated to a barbecue lunch prepared and served by the management team at their all-employee communication meeting.



The Winnipeg meeting was held in a huge tent set up on plant grounds to alleviate the effects of the stifling heat.



Two world-class frisbee throwers recently demonstrated their talents on the Memorex headquarter grounds in Santa Clara. The two champions will take part in the International Frisbee Disc Association Competition established in 1957.

## SQC provides the means to "Do it right the first time"

Traditional quality control methods have provided American industry with a way of finding bad products after they're built; an important process, but not the key to producing higher quality. All by itself, throwing out the bad products does not enhance the quality of what's left. However, increasing quality *must* be accomplished in order for American industry to successfully compete in the international marketplace with high quality products, whatever they may be.

To achieve that, a method called Statistical Quality Control (SQC) concentrates on *creating* highest quality products by monitoring all the processes involved in manufacturing them.

It involves a statistical monitoring system performed by operators at their work stations, the results of which are fed back up through the organization. Maintenance technicians and engineers are then tasked with resolving the problem; i.e., fixing the process.

With this method, highest quality can be achieved without sacrificing cost, volume production levels, or product consistency. As a matter of fact, volumes and consistency go up using the SQC method, and costs are reduced.

A popular misconception about SQC is the belief that it applies only in a manufacturing environment. However, it can also be used to improve the quality of any process, including those involved in service, staff and administrative functions.

Memorex's Rigid Media and Components Division (RMCD) has been

applying the principles of SQC for a year with some remarkable results. Now, SQC is being introduced to employees in manufacturing and other areas throughout the Company. This program represents one more major step in Memorex's ongoing Quality Program.

## Ever wonder what makes a company?

What is a company? Ever think much of that? Chances are you haven't, but don't worry about it. Most people don't. It's not the type of question one normally juggles around in his cranium. But then, it could be an important question, especially if you work for one.

A company is many things — buildings, departments, desks, typewriters, matchbooks with logos, plate glass windows, catchy advertising memos, bulletin boards, and "no smoking" signs. These are important things and few companies would be without them. Yet these things in themselves, and all the others that go with them, do not make a company.

What really makes a company what it is are people — all kinds of people from every possible combination of background and interest. Companies can do without the matchbooks, the bulletin boards, even the memos. But no company can afford to be without people.

Companies are formed by people, employ people, and serve people. They provide it with a philosophy, an attitude, and with goals and achievements. They provide it with status, appearance, social standing, and reputation. They also instill it with pride, courage, honor. This is the power of people.

In short, people give a company life. They breathe the very essence of life into its form by what they are and what they believe. Companies are big, small, independent, tough, useful, competitive, successful or important because of the people that perpetuate them.

Take away the people, and only a thing remains, an empty shell on a windless beach. Companies are people. Why is the definition of a company important? Because a company is YOU.

By Roger Wilson Cook

Reprinted from May 1967 INTERCOM.

## British worker installs safety award — ouch!

"The London Sun" recently reported on the ending of a remarkable safety record chalked up by a British factory.

After a long spell of accident-free performance, the factory won a plaque which was presented in an impressive ceremony. A foreman proceeded to mount the plaque on the wall before a great gathering of employees and guests. With dramatic flair he seized a hammer, swung . . . and squashed his thumb.

Reprinted from November 1966 INTERCOM.

# Major account reps and branch managers meet in Santa Clara

Major Account representatives and Branch managers from across the country held their annual meeting in Santa Clara on July 27-29. Their cohesive purpose was to review the accomplishments of each group, the current programs they are involved in and the introduction of new sales concepts. Featured in the top picture are the Major Accounts representatives. The lower photo includes area vice presidents, regional managers and branch managers.

Top: Frank Ames, Dick Belschner, Adrian Bos, Doug Brigance, John Colfer, Jim Connor, Jude Cordeiro, Tom Corder, Marty Crimmins, Jerry Cronin, Ed Dolan, Karl Doskicil, Earl Fowler, Ron Gelaude, Ed Halligan, John Hamilton, Dan Hellreigal, Kurt Johnson, Thatcher Jones, Hank Loher, Dave Mare, Jim Mastro, Rick May, Jim McCormack, John McMahon, Dave Palmer, Larry Parker, Randall Phillips, Tom Pozniak, Gene Roman, Bill Trimble, Mike Vena and Jim Wieghorst.

Bottom: Tom Aaron, Lou Adimare, Al Baumgart, Jay Benedict, Dave Borgeson, Ron Bulin, Gary Brock, Ralph Casale, Randy Demont, Vic Gamaly, Greg Grodhaus, Ed Haligan, Jack Helman, Robert Jones, Frank Kearney, Kim Kelly, Al Kennedy, John Kennedy, Ron King, Bill Koenig, Bill Lambert, Stan Luby, Dave Mare, Jerry McSpadden, Dave Miles, Todd Morrison, Jim Peck, Bill Roch, Mike Taniellian, Bruce Thomas, Steve Toukovich, Bill Wiley, Doug Wright, Dennis Zanone, and Ron Zanzarella.



## Energy conservation program saves Company over \$400,000

by Otto Kralicek

Results of the Corporate-wide Energy Conservation Program have been tabulated for the first half of 1983 and the figures show that Memorex employees have used an average of 8.3% less energy this year as compared with the same time period last year. This reduction, when stated in dollars, represents savings amounting to \$449,000, 89% of the program goal for the six-month period.

Top energy saving divisions have been:

Physical Distribution	26.0%
Corporate Facilities	17.5%
Communications Group	16.0%
Precision Plastics Division	15.9%
Westlake Village	13.4%
Memorex DIC	12.8%
Computer Tape Division	10.0%

We would like to encourage all divisions to continue their energy-saving projects so we can achieve our year-end goal of saving \$1 million.

## Quiz — How's your ACRONYMABILITY?

Do you know what these common Memorex acronyms stand for? Take the quiz below, then turn to page 12 for the answers.

CTD	RMCD	PPD	SE
USESS	FDMD	LDDD	DE
MTEO	SDDE	MFC	MJL
PPE	PPM	MPG	CE
SDC	DIC	OEM	CPF
HDA	RTC	CAD	CU
DDP	OE	QA	MIS
EMI	FATS	SEM&D	
MRO	WP		

## Memorex sales rep chairs AAU USA men's basketball tournament

The top men's high school basketball players in the country recently competed in the National AAU/USA Junior Men's Basketball Tournament in Jacksonville, Florida.

Chairing this enormously important event in amateur basketball was a Memorex employee, Harrison Harrison, a senior sales representative

in the Tampa, Florida office.

Teams comprise the "cream of the crop" in junior men's basketball players from throughout the country, representing regions rather than high schools. One of the unique aspects to the organization of teams is a winning team's privilege of selecting one player from the losing team to join the winning team in further playoff games. The final teams sent from each region, then, include the very best basketball players from that area.

This year's competition included teams from: Florida, Tennessee, Washington, Oklahoma, Maryland, Louisiana, Georgia, Massachusetts, New York, Michigan, and California. "Team Florida" from Jacksonville took the championship this year and has been sent to Russia to play the best Russian junior men's team.

Many of the talented participants are expected to qualify for the United States Olympic Basketball Team in 1984. Historically, over 60% of the young men participating in this tournament end up at the Olympics, according to Harrison.

### Turn off the stove and drive 55 mph to save on energy bill

#### What we can do to conserve energy at home

Everyone can help in the conservation of energy by simply eliminating wasteful habits, some of which are listed below. The most important thing is to look at every device that produces heat or cold as an energy pig.

#### In the electric kitchen:

1. Do not put frozen food in a pre-heated oven (unless specifically directed by a packager). This wastes tremendous amounts of electricity. Always thaw the food first at room temperature.
2. Try to turn off stove burners before the food is completely cooked — there will be enough residual heat to finish the job.
3. Never put hot foods in the refrigerator.
4. Don't open the refrigerator door just for a shopping tour. Decide what you want and then immediately close the door.

#### Throughout the rest of your home:

1. Turn your thermostat down to approximately 68 degrees. If you feel cool, wear a sweater or long sleeve shirt.
2. Close all curtains to prevent heat loss through the windows in the winter and heat penetration in the summer.
3. Keep vents (fireplaces, kitchen hoods, etc.) closed when not in use.
4. Insulate long-run heating ducts and hot water pipes. When possible, insulate your house and weatherstrip the doors.

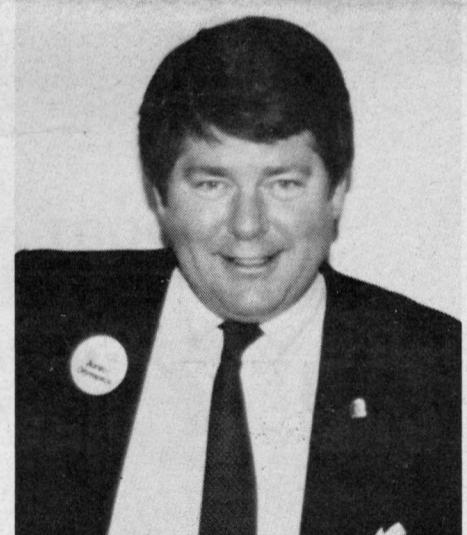
It also takes a lot of energy to pump water into your home and heat it, so:

5. Don't spend any more time than necessary in the shower.
6. Don't waste water brushing your teeth. (A running tap will waste at least a gallon or more).
7. Don't use the washer and dryer (clothes and dishes) unless you have a full load. It takes as much energy to wash one item as it does to do a full load.

#### Your car:

1. Reduce your driving speed to a maximum of 55 miles per hour.
2. Always keep your engine properly tuned.
3. Keep your tires properly inflated.
4. Turn off your air conditioning and other add-ons that consume engine horsepower.

Reprinted from December 1973  
INTERCOM.



One of Harrison's principal activities for Memorex is to assist customers in extending the performance and cost-effectiveness of their data processing systems through the optimum selection and application of Memorex equipment and software. He has received numerous awards for excellence in salesmanship and business management and has been widely recognized for his leadership and participation in community affairs. His enthusiasm for the sport of basketball and the cause of promoting America's young athletes is contagious.

## Tucson facilities moved to new site

The Support Facility at the Tucson/Mexico Operation sites have been relocated as of July 25. The new address is: MEMOREX CORPORATION, Tucson/Mexico Operations, 6701 South Midvale Road, Tucson, Arizona, 85706. Their present telephone number will remain the same.

# EMERGENCIES: DO YOU KNOW WHAT TO DO?

The Communications Group in Cupertino, CA, recently staged a mock gas leak and explosion emergency drill complete with smoke bomb and victims.

The drill was arranged by Memorex Security, Safety and Health Services as part of an ongoing crusade toward an employee emergency awareness

program. The drill's purpose was to observe the strengths and weaknesses of the emergency response team (ERT) and how employees react to life-threatening situations.

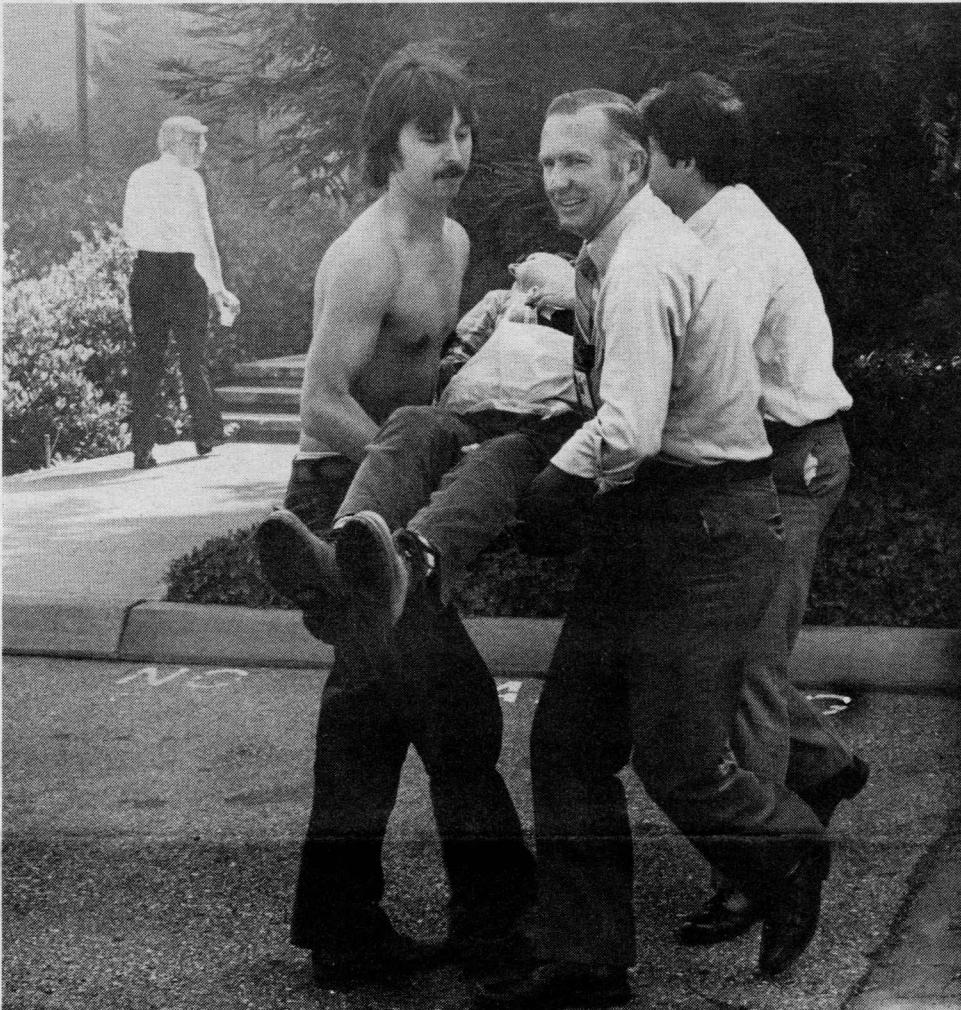
Each of the following photos portrays a different type of emergency and how Memorex employees handled the situation.



Two employees become victims of a hypothetical gas leak and explosion.



The plant is alerted and employees evacuate the facility.



Members of the ERT (Emergency Response Team) move the victims to a safer location.

## EMERGENCY PROCEDURE

An Emergency Communications Network is in operation to handle various types of emergencies from industrial injuries to fires, bomb threats and explosions.

**TO REPORT AN EMERGENCY**  
DIAL  
**7-3333**

- Identify yourself by name, extension, and building location
- Relate all known facts

### DO NOT TERMINATE CALL

Until you are told to, so that ALL information pertinent to the situation can be obtained.

The individuals monitoring the emergency telephone lines are fully trained to obtain the necessary assistance depending on the nature of the emergency.





Victims receive first aid from ERT members.



ERT members practice their ERT training.



The emergency is maintained and controlled.

## A safety quiz on personal injury

1. How quickly can a person bleed to death if a large blood vessel is cut?
  - a. in 4 to 6 minutes
  - b. in one minute or less
  - c. in 10 to 12 minutes
2. Shock occurs in any badly injured person and is serious enough to cause death, even though the injury itself would not be fatal.  
The important symptoms of shock are:
  - a. pale, cool, clammy skin
  - b. weak and rapid pulse
  - c. general body weakness
3. Artificial respiration should be given to a person who has stopped breathing because of electric shock. To give artificial respiration you should:
  - a. tilt the victim's head and clear his airway of foreign matter
  - b. jut the jaw forward to keep the airway open
  - c. breathe into his mouth once every 5 seconds
4. The objectives in first aid care for burns are:
  - a. to relieve pain
  - b. to prevent contamination of the injury
  - c. to give care for shock
5. Burns are classified according to degree of skin damage: first degree — the skin is reddened; second degree — blisters develop; third degree — deep tissue damage occurs. Shock is a major hazard in burn injuries when:
  - a. burns cover more than 10 percent of the body
  - b. the person has a sunburn
  - c. the victim has a small but very serious burn
6. The first step in treating a chemical burn of the skin is:
  - a. call for medical help
  - b. wash away the chemical completely with water
  - c. apply the suggested treatment
7. An acid burn of the eye should be treated in three steps. List the order of procedure:
  - a. call for medical help
  - b. have victim close the eye, place an eye pad over the lid, and bandage
  - c. wash the eye thoroughly with water or a solution of baking soda and water for 10 to 15 minutes
8. Any wound that involves a break in the skin can become infected. Signs of infection are: wound area is red, tender, warm and swollen; pus may appear; fever and headache may develop. These signs appear:
  - a. two hours after injury
  - b. two to seven days after injury
  - c. twenty-four hours after injury
9. Loose foreign objects in the eye usually lodge on the inner surface of the upper lid. To remove the object you should:
  - a. have the victim look down as you turn the eyelid outward
  - b. remove the object with the corner of a clean hankerchief
  - c. rub or touch the eye to remove the object
10. You are alone with a person who has been under medical care for a heart condition. The person has a heart attack, but is breathing adequately. What should you do in order of importance?
  - a. give the victim the prescribed medicine
  - b. keep victim lying down
  - c. get medical help

ANSWERS:  
9—a,b; 10—b,a,c.  
5—a,c; 6—b; 7—c,b,a; 8—b.  
1—b; 2—a,b,c; 3—a,b,c; 4—a,b,c.

Reprinted from August 1975  
INTERCOM.

## Turn "near accidents" around for future prevention and safety

You probably remember, with painful realism, the last accident that clobbered you. But what about the last close or not-so-close call? Maybe you remember, maybe not.

That's the trouble with the "no-injury accident;" too often it is ignored or soon forgotten about. We call them "near-accidents," but actually an accident is an accident, whether someone gets hurt, or something gets damaged, or no harm's done. An unexpected happening, like a 104° temperature, is a red-hot symptom that something is wrong; that there is a dangerous infection in the system, the practice, or the environment.

The difference between a direct hit and a near miss may be no more than the fraction of an inch or the fraction of a second. That's why you should work up a lather over every close shave. Don't call yourself lucky and then forget it; maybe it is luck that determines whether you suffer fright or fracture, but it's analysis and action that will prevent future hits and near-misses and far-misses. The object in accident control is to toss Lady Luck out on her fickle ear, and make everything as luck-proof and fool-proof as possible.

Whenever a stack of material sags or collapses, or something thuds to the floor nearby, or a ladder slips, or a tool snaps, or anything out of the ordinary happens, report it to your supervisor no matter whether you suffer a bruised digit or merely a bruised dignity. There's at least one good lesson — maybe two or three —

in everything that goes wrong. Rig yourself mentally so that whenever a close call breezes by you, the breeze will automatically flip on a red light in your mind which signals: "SOMETHING WRONG... FIND OUT...MAKE IT RIGHT!"

By Employers Mutual of Wausau

Reprinted from May 1967 INTERCOM.

## Safety glasses can prevent blindness and eye injuries

The possibility of being blinded for life stared a Memorex maintenance technician in the face recently when he was accidentally sprayed with a strong chemical cleaning agent. Luckily for him, his safety glasses prevented a tragedy.

"The employee was not injured," said a process maintenance supervisor of the tape plant, "but the accident has made a lot of believers here at the Memorex Drive maintenance building about the importance of safety," he said. He could have been blinded for life because the chemical was strong enough to melt his goggles and frames of his prescription glasses."

Reprinted from October 1972  
INTERCOM.

## Hodgman affirms Co. commitment to high quality

Excerpted from a speech by Gary Hodgman

One year ago, we started the quality program. The principal reason for starting a quality program was, and still is, to change everyone's attitude to higher work standards, keeping our commitments, and doing it right the first time.

We chose Philip Crosby's 14-step program because we found it to be an exciting program. The initial step in the program is management commitment, and I could do nothing unless my bosses were committed. All the way up through Memorex and Burroughs, there is a real commitment to quality. That's the only way we can really do the things we've been doing, because without our bosses behind us, some of the commitments we've made, we just couldn't have kept.

How have we done? We've got a ways to go, but we've done quite well. This is not just a program that's going to come through one day and go out the next day. It is indeed a program to make Westlake successful and is, in fact, basic to our survival.

I want to say that we have a lot to celebrate about. We've done a lot of good things and we've got a ways to go. One of the most significant things that has happened to us is that we are now a Memorex plant. I'm really proud to say that and you should be also. Memorex Corporation makes some of the best disc drives in the world.

We have shipped the 677 and it is fantastically reliable. The 659 has proven the same. These products are based on Memorex designs. Memorex makes good products. They're a quality company and we're a quality plant.

What we're asking you today is to look at the effort that we've put into this quality program and search your own mind to see if you're willing to make the commitment to do your best wherever you're at. All 800 of us count. Everyone is extremely important.

## Westlake employees celebrate "Zero Defects Day" in style

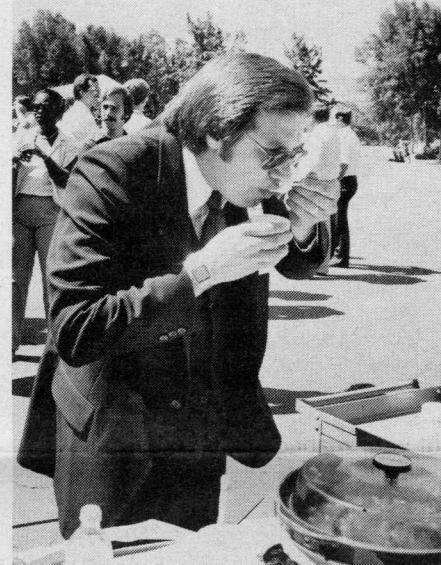
by Karen Lippe

Westlake's Zero Defects Day had all the fellowship of a social gathering and the seriousness of a Congressional hearing, but the well-balanced celebration demonstrated the plant's eagerness to commit to excellence.

The structured non-workday began at 7 a.m. Upon arrival to the outdoor festivities, each employee received the day's agenda and was invited to indulge in a complimentary continental breakfast before the morning's events began.

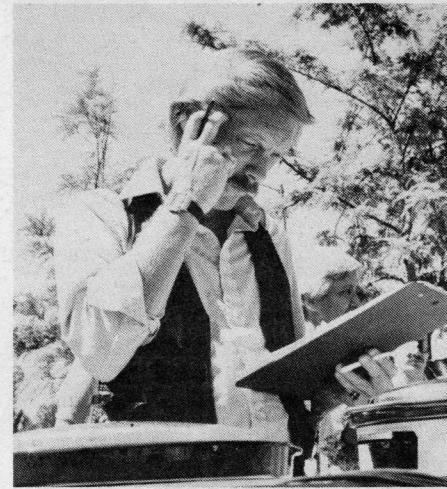
The opening speech was given by Gary Hodgman, Westlake's general manager, who introduced Bill Krehbiel, vice president of Off-Site Operations for Storage Equipment Manufacturing and Development (SEM & D), and Philip Crosby, author of *Quality is Free*. Each speech reiterated the idea of commitment to quality as a team effort. Excerpts from their speeches are reprinted on this page.

The day's ceremonial events included the destruction of a scrapped 206 disc drive to signify the now rebuked "use-as-is" policies. A raffle-chosen employee, Ophelia Garcia, won the honors of demolishing the unit.



Gary Hodgman, Westlake general manager, samples one of the 40 chili entries during the Zero Defects Day cookoff.

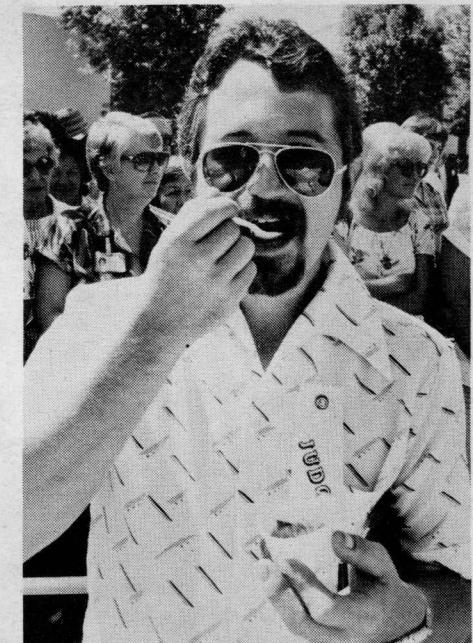
During the past year, task groups were organized as part of the "Quality is Free" program. At the recognition awards program, 66 employees were presented with plaques, certificates and pens for their outstanding achievements in the program thus far. The achievement awards were earned by groups who surpassed the 70 percent improvement mark. Some groups attained 80 and 90 percent improvement ratio for their initially-established goals.



Judging chili can be difficult as Rob Bowman, manager of Technical Purchases, discovered.

As the day progressed, a 40-entrant chili cookoff drew the attention of employees while a panel of 15 discriminating judges evaluated the different recipes. Thelma Rankin was judged as cooking the best chili in Westlake.

Hot dogs, hamburgers, salad and sundaes were served to employees while a contemporary band filled the air with music.



George Fletcher, maintenance supervisor, tantalizes his taste buds during the chili cookoff.

The afternoon schedule included a slide show which depicted Westlake's progress since the program began. Department and crew meetings were also held to discuss the meaning and future of the quality program.

The day wound down to the last scheduled event, the volunteer pledge signing. Each employee was asked to commit themselves to the program by signing their name to a pledge of quality excellence. Upon signing the agreement, each employee received a name plate signifying their commitment to zero defects.

Westlake's commitment is 100 percent. Their eagerness to "do it right the first time" is shared by all. One Westlake employee, Leona Vaughn, a 19½ year veteran, sums it up like this.

"It's great. It's a real caring attitude that's lasting. It doesn't go away overnight. Management is listening to us and things are changing for the better."



Members of the chili cookoff sub-committee prepare for the taste test event. Carmen Pena, left, coordinated the cookoff.

## What does "Do it right the first time" really mean?

by Karen Lippe

"Do it right the first time" is a simple idea, but to implement and support that concept has taken Westlake over a year to achieve. A 14-step program called "zero defects," based on the concepts presented in the book *Quality is Free* by Philip Crosby requires a commitment to excellence. Westlake is striving diligently to accomplish that goal.

The program, which began at Westlake about a year ago, aims toward consistent, top quality products without defects. The 14 steps are broken up into sections.

The first six steps are aimed toward management and service-oriented personnel and are designed to assist individuals in becoming sensitive to their surroundings and discovering areas that need corrective action. Part of this program is achieved through participation in task groups. Westlake has about 40 task groups in operation which consist of five to 30 individuals who meet regularly to cite problems and to suggest ideas to resolve them. Each group also establishes group goals to achieve by Zero Defects Day. These goals are tabulated in percentile figures and an 80 percent average must be reached by all task groups in order for Zero Defects Day to occur. These steps normally require about a year to

complete. Westlake achieved their 80 percent average on July 19, 1983.

The next two steps involve the assistance of production personnel. This includes preventive defect auditing and quality improvement training for supervisors. By now, employees will also notice the plant undergoing physical and mental face-lifts. Westlake's interior was reorganized and remodeled. New equipment, such as comfortable chairs and better lighting, has been installed for added employee comfort.

Step 10 is Zero Defects Day, a celebration where all employees are invited to join the commitment to excellence philosophy. On a volunteer basis, each employee signs a quality agreement which states, "we pledge ourselves to make a constant, conscious effort to do our job right the first time, recognizing that each individual contribution is a vital part of the overall effort."

The last steps include the establishment of personal improvement goals, effective communication channels to management, a recognition awards program, and on-going quality circles for continued plant improvement.

The commitment of management and the pledge of their staffs will ensure a continuingly successful quality program.

## Westlake honors 66 employees

At the recent "Zero Defects Day" celebration, Westlake management took the opportunity to present awards to 66 deserving employees for their contributions to the plant's quality program in the last 12 months. The winners are:

Terri Agulia	Pat Haran	Tom Smyly
James Baker	Gary Hodgman	Naida Stackhouse
Ursula Baker	Emmett Hood	Bob Steiger
Kathy Berry	Gerry Howard	Dick Summer
Vivian Berry	Linda Hughes	Neville Thompson
Bonnie Bohachef	Frank Keehl	Wendell Thompson
John Brunasso	Phyllis Kreutz	Rick Travnick
Noel Burguin	Fernando Lacbain	Bob Trejos
Louise Coleston	Janet Long	Leona Vaughn
Dave Corey	Dan Mahaffie	Bette Vertis
Shirley Cornelison	Bernard Masson	Ron Vicinsky
Agnes Dougherty	Nellie Moreno	Robert Weikal
Dick Drinkward	Sam Myers	Jim Welsh
Joe Dudkowski	Liz Parino	Jerry Wilder
Bill Fields	Rosemary Paykel	Jill Williams
Vera Franco	Raj Rajendran	Jeff White
Daren Francom	Thelma Rankin	Verna Whitehead
Mike Garrett	Arnold Reuter	Bob Wright
Benita Gonzales	Sam Sampson	Cathy Wright
Dale Grose	Bridgette Schalke	Edna Wright
Gloria Guillen	Carmen Schiermeyer	Paul Wright

# Author of "Quality is Free" is featured at Zero Defects Day

Philip B. Crosby is the author of *The Art of Getting Your Own Sweet Way*, and *Quality is Free*, a book expounding his concepts on how American industry can increase the quality of its products to compete in the international marketplace. Crosby's philosophy is the basis for Westlake Village's Quality Program, the success of which was the impetus for Westlake's recent "Zero Defects Day." Crosby was one of the guest speakers at that event. Excerpts from that speech follow.

**\*McGraw-Hill Book Company.**

Is anybody here against quality? Can I see a show of hands? I've been asking that question now for 30 years and nobody has ever raised a hand. So nobody is against quality, which means that we must be up to here with quality. We must have it all over the place. Obviously, we don't. Because you can see that the problem of our nation, the problem of industries, the problem in the automobile industry, the problem in the electronics industry, has been the inability to give the people what it was we said we were going to give them.

Just wanting to do things right is a good start, but there's more to it than that. You have to really understand why we do things wrong. Every bad thing that happens to us, we cause somehow or other, and we have to *learn* how to do that.

What is quality? We all talk about quality. What does it really mean? What kind of system do you need to get quality? What do you have to do to make it happen — to cause it? What sort of performance standard do you need and why do you need a performance standard at all? How do you measure quality so that everybody can understand it? We say quality means not goodness, not

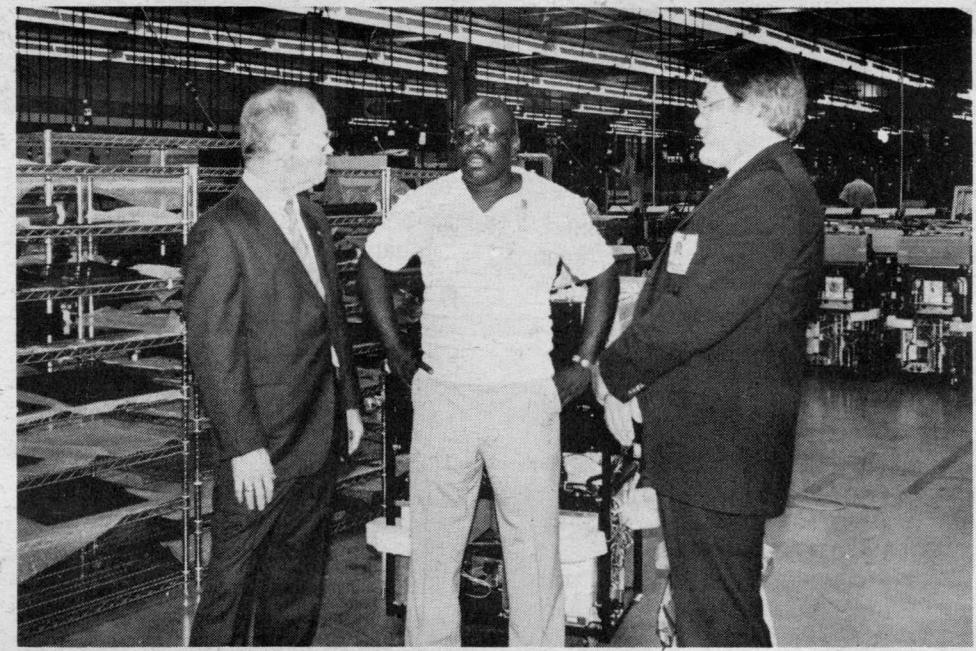
how hard you clean up the room, there's always something that you missed. So, after a while, people quit cleaning their rooms. If you're going to get heck for it anyway, why waste the effort? However, if you can reach an agreement with your mother on what a clean room looks like, then you know when you're done.

It's the same thing with work. We need to know what the requirements are. When we conform to the requirements, we have quality. So, a Honda that meets all its requirements is a quality car. A Chevette that meets all its requirements is a quality car. A Rolls Royce that meets all its requirements is a quality car. Not because it costs more, but because it conforms to the requirements.

What kind of a system do you need? You need a prevention system. Don't make mistakes in the first place. It's very hard to fix something when it's all done. Some people say that the people that cause the problems in automobiles are assembly workers. That's not true. It's the design. Assembly makes their own problems, but they're just putting things together. So, it's the designs they get; it's the components they get; it's the whole system. Paperwork causes more problems than mechanical work anytime. If you look at the causes of problems that people have and companies have, most of them come from paperwork and administrative systems; not just putting things together.

Appraisal works fine, but that's just inspection — sorting the wheat from the chaff. To do a better job of inspection, a better job of testing, is like rearranging the deck chairs on the Titanic. You have to use inspection and test *only* to see how the process is going, then go way back with corrective action and fix it to prevent the problem.

They said we couldn't make software right the first time. But we found out



Westlake manufacturing supervisor, Paul Wright, center, talks with Philip Crosby, left, and Bill Krebholz, right, on a plant tour during Zero Defects Day.

So, if each of us is 99% reliable, nothing is ever going to work. We have to be 100% reliable and do whatever it was we said we were going to do right the first time.

I'm on the board of a hospital back in Florida and every time I go to a board meeting, I go past the maternity ward because I really like to see all the little babies with their blue and pink blankets and they're all lying around looking happy and contented. I always visualize a chart up on the wall, like the ones you see in production areas, that says: "Defect Rate: nurses dropping babies — our target is three babies this month." To drop no more than three babies this month? You wouldn't put up with that.

The performance standard you set for your own personal work and your own personal life is the same one you need to set in professional life because the quality level of this company is your personal responsibility. Now, management can hurt that by not supporting you and not being active, but your management is not that way. I see a lot of management all over and your management is really dedicated to this business and to the radical idea of making the product like we told the customer it would be. Wouldn't it be nice just to get something that really was what it was supposed to be?

Now, how do you measure quality? You measure by money. You count the cost of nonconformance. What does it cost you to do things wrong? In most companies, it's about 25% of sales. Instead of wasting it, you can use it to grow with. Instead of having scrap and rework and warranty and service after service and all that kind of stuff, you can use it to develop new products and build new plants and new lines and new factories and new ways of doing things.

How does all this fit together? Let me give you a personal example here. Sometimes these industrial things are a little complex, but only because we make them that way. About 10 or 11 years ago, I had a heart attack. They took me to the hospital and put me into one of those intensive care cribs; you know, with all the tubes and wires sticking out of me and oscilloscopes and all that stuff. And they got me back to operating again. The next day, my family doctor came to see me.

After inquiring about my health, he said, "Every year you come to me and you get a physical. And every year, I tell you to quit smoking and lose 20 pounds. And every year, you tell me how you're going to do that, but you don't. The next year, you come back and look just like you did before, except maybe a little sloppier and tackier. Now, what I'm going to tell you is, if you don't quit smoking and lose 20 pounds, you're going to die."

I said, "Ohhhhhh, now I understand."

Now, companies are coming to the realization that if they don't get their quality act together, they're going to die.

So, I had this sense of dedication and I really worked hard at it. Twenty years of smoking went right out of my head, because nobody ever explained it to me that clearly before. So, I got out of the hospital and went out and bought a diet book that had to do with eating hard boiled eggs and spinach for a few weeks. In about three weeks, I'd lost 20 pounds. So, I went out and had all my size 43 suits cut down to size 41 suits. In about six months, I put the 20 pounds back on again, so now I had all these little suits on.

I realized that what I'd done was take a shortcut on the program. You see, quality is not a program. It's a process. A program is like eating an ice cream cone. You buy the ice cream cone, you eat the ice cream cone, you wipe off your mouth, and it's all over with. A process is like raising children. When they're 65, you'll still be raising your children. They may not like it, but you'll still be raising your children.

So, I said to myself, "What I need to do is to look at myself as a product. I need a 175-pound Phil Crosby as a product, and I need to develop a management culture of eating that produces that product." I had to accept the fact that the reason I was heavy was because I ate too much. It was not someone coming in the middle of the night pouring it in my ear, it was not my mother, it was not my boss, it was not the government, it was not the union, it was not the company. It was me. I was doing it to myself.

So I did an analysis and I made a list of all the things I ate for two weeks. Now, if you think you don't eat too much, write down everything you eat for two weeks and, I guarantee you, it'll fill up a pickup truck. What I do now is eat three meals a day. You see, it's not so much *what* you eat. It's *how much* you eat. It's volume. So I learned that what you have to do is get smaller plates, put it all on one plate, then eat it. That's it. No snacking in between.

Because someone told me years ago about all the starving children in China, that I should eat the whole thing, I eat the whole thing. But since I can't do that when I'm eating out, what I do is carry this plastic bag with me addressed to the People's Republic of China. I put the leftovers in it and drop it into a mailbox so I don't have that guilty feeling.

So, changing the system that way, I got down from 195 to about 188 and then it started to level out. Then I cut out desserts and that got me down to about 182. The only thing left was alcohol. I didn't drink beer or whiskey, but I drank a lot of wine, traveling around like that. Wine isn't like beer or booze. I mean, you don't say, "Give me a shot of wine." The wine guy comes out with a tuxedo and a silver chain and a leather book with all those fancy names. You know, Napa Valley, Sonoma, Beaujolais, and Bordeaux, and it isn't like it's bad for you or anything. But it's all sugar,

*continued on page 12*

MAKE EVERYDAY

ZERO DEFECTS DAY



MAKE TIME TO

MAKE IT RIGHT

Tom Smylys' poster received first place honors at the Zero Defects Day festivities.

beauty, truth, wisdom, and all that sort of stuff. What quality is is conformance to the requirements.

Now, when management says to you, "do it right the first time," you have a right to ask, "What is it that you want me to do right the first time?" Management's job is to explain it to you. That's the requirements. "What time do you want me to come to work? (7:30) Where do you want me to sit? (Right there.) Who gives me my work? (They do.) What do I do to do it? (Here's the procedure.) How do I learn to do that? (We're going to send you to training school.)" And so forth.

Once we all understand the requirements, then we know how to do it. So, if you don't understand the requirements, you get into a position like the one you're in where it is never possible to get your room clean enough for your mother. No matter

if we spend our time making the specifications right and understanding what we really want, software is a piece of cake. It's when you make an unclear specification, then you make a program, that you spend months debugging it. We've shown that you can run it through the computer once — right the first time — with no defects.

What kind of performance standard do you need? Well, the performance standard we've used in industry for years and years is acceptable quality levels. Now we're saying that's not good enough. You can't say something's "close enough." If you take, for instance, one percent acceptable quality level in something with 100 components in the system and each part is 99% reliable, what is the probability that that system is *not* going to work? I'll spare you the mathematics. It's about 36%.

# LDDD employees honored by Red Cross for record-breaking donations

by Jeff Wagner

"Blood is made up of several elements," according to a pamphlet from the American Red Cross, "each of which performs a special function in your body and in the body of a person who receives the blood you share."

Employees from Memorex's Large Disc Drive Division (LDDD) recently shared much of their blood by achieving a donation record of 187 pints during their June blood drive. This total surpasses their previous record of 63 pints donated in one drive and a yearly donation total of 140 pints.

What's the reason for the dramatic leap of donors?

"Supervisor involvement," said Ernie Tydell, Community Relations manager for Memorex. "Seventy supervisors attended a meeting prior to the drive in hopes of getting their support, which would be passed on to their employees."

For their achievement, LDDD employees were presented with a plaque on August 24 by the Red Cross.

But what happens to your blood after it's donated?

The components of one pint of blood may help restore several different patients to health. Three major elements, red blood cells, plasma, and platelets, are extracted from each unit and are used for different purposes.

Red blood cells are used to replace blood in accident victims, surgery patients, or kidney disease patients. Plasma, the liquid part of the blood, is used for treatment of shock or clotting defects such as hemophilia or severe liver disease. Platelets, which are produced by bone marrow, are used by leukemia patients or those undergoing chemotherapy whose platelet supply is depleted.

The Red Cross Blood Program, which was established in 1947,

receives about five million pints of blood each year and every pint counts. It only takes six to ten minutes to donate a pint of blood and one pint can save many lives.

## Is it live? Or...

*Is it Ella...or is it Memorex?*

*That's the question posed to Nelson Riddle in a new Memorex audio tape commercial being released this month on national television.*

*In the 30-second film, Riddle is seated in the audience of an auditorium with his back turned to singer Ella Fitzgerald. The announcer asks the well-known composer and arranger if he can tell if Ella is singing live, or on Memorex tape with MRX Oxide.*

*Riddle, who has arranged Ella's jazz sound for years, listens, hesitates, then admits he can't tell. When shown that he is listening to a recording of Ella, Riddle remarks, "That sounds live to me."*

*It is the third national television campaign using Ella Fitzgerald to be created for Memorex by Leo Burnett Company, Chicago. The first, introduced in 1972, showed Ella Fitzgerald shattering a glass both with her live voice, and with her voice as recorded on a Memorex cassette. The second, shown on network TV during the past year, posed the "Live or Memorex" question to Ella's longtime friend, Count Basie, with similar results.*

*The commercial is now being aired on network television in selected spot markets.*

*Memorex is now a leading supplier of consumer audio tape products. The MRX iron oxide formula is found only in Memorex cassettes, and it offers performance quality unsurpassed by any other ferric cassette.*

**Reprinted from October 1974  
INTERCOM.**

## Phil Crosby speaks at Westlake

continued from page 11

and sugar makes fat. So, I decided what I'd do is just have two glasses of wine every night for dinner and that would take care of it. Well, the only problem with that is, about halfway through the second glass, a little relay shorts out and you forget why having only two glasses was such a sensational idea. So I finally wound up with no wine and I went right down to 175.

Now, as long as I have that pattern of eating, I stay there. I don't have to diet, because I've changed the culture. I've changed my management culture. Accept it. Do it. And that's the end of it. You don't have to worry about it. Once you make a commitment, you have to stick to it.

So, quality is conformance to requirements. Requirements: one helping, three meals a day, no snacks, eat half when you go out, two desserts a month, no booze. Zero deviation from requirements makes life nice and simple. Makes it clear so you can understand what's going on.

When I say quality is free, I mean if you're doing what you said you were going to do, it doesn't cost any more. It costs just what you built into the budget. If you have to do something over again, you pay more money.

We found there's a profile of companies that always have problems with quality. There's five things they all do. First, they typically deliver nonconforming products and services. They get it all documented. They get the waivers, the deviations, the off-specs, the "use as ises." It's all nice and clear and everybody's covered, but the product never looks like the advertisement. It's never like they said it would be. There have been a billion automobiles made in the United

States, and I guarantee there's never been one made exactly like all the drawings. There's always some little deviation.

What it's all about is that you should get what you order. If you send away to Lane Bryant for a size 14 dress in blue, you ought to get back a size 14 dress in blue, not a size 12 dress in yellow with a note. If you give people what they order, you'll have more business than you know what to do with. These companies that deliver nonconforming material routinely have all kinds of elaborate systems to justify it. Because of that, they wind up with field service or dealer organizations that just spend their time fixing things. That's the second characteristic of these companies. They're not servicing and maintaining, they're fixing, and they get very good at that. There's always the case of the customer engineer who swam the Mississippi River with two printed circuit boards in his teeth to keep some supermarket chain going. And that's fine except that they have to do that because, back at the plant, they're making junk.

The third thing at these companies is that there's no performance standard. People say, "That's good enough, use as is, acceptable quality level, deviation," etc. They've learned that if you miss the schedule, you get killed. If you miss the cost, you get brackets around your numbers and they call you nasty names and they don't invite you to the picnic. If the quality's bad, the quality manager catches hell. You don't have to be too swift to figure that out. At these companies, quality is a negotiable.

On the other hand, a program of Zero Defects is very specific. It means *do it right the first time*. That's all

## Answers to the ACRONYMABILITY quiz

from page 7

CTD	Computer Tape Division
USESS	U.S. Equipment Sales and Service
MTEO	Magnetic Test Equipment Operations
PPE	Performance Planning and Evaluation
SDC	Systems Development Corporation
HDA	head/disc assembly
DDP	distributed data processing
EMI	electro-mechanical interface
MRO	Materials Recovery Operations
RMCD	Rigid Media and Components Division
FDMD	Flexible Disc Media Division
SDDE	Small Disc Drive Engineering
PPM	Planning and Program Management
DIC	Dainippon Ink and Chemicals
RTC	Recording Technology Center
OE	Order Entry
FATS	Field Asset Tracking System
WP	Word Processing
PPD	Precision Plastics Division
LDDD	Large Disc Drive Division
MFC	Memorex Finance Company
OEM	Original Equipment Manufacturer
CAD	Computer-Aided Design
QA	Quality Assurance
SEM&D	Storage Equipment Manufacturing and Development
SE	Storage Equipment
DE	Development Engineering
MJL	Memorex Japan Limited
CE	Customer Engineering
CPF	Central Parts Facility
CU	Credit Union
MIS	Management Information Systems
MPG	Media Products Group

Number Correct	Translation
33	Wow! You've really been paying attention or else you cheated and looked at the answers. If the former, congratulations.
32-28	Outstanding. Take two giant steps.
27-20	Not bad at all. Bordering on excellence.
19-15	Improvement indicated, but keep up the good work.
14-8	Obviously you're a brand new employee. Don't worry; you'll catch on.
7-0	Maybe you've heard of Memorex?

## Krehbiel sums up commitment to highest quality

Excerpted from a speech  
by Bill Krehbiel

I would like to share with you why Memorex management is committed and why Burroughs management is committed to quality. It is certainly affected by the fact that we would like the computer and electronics workers of America to *not* be in the same shape as the auto workers and the steel workers are today.

But it is also true that we have a battleground in the customer marketplace and the things that win the battles are quality and reliability.

It was about two years ago that the board of directors of Memorex and Burroughs announced that we would merge the two companies. At the time of that announcement, we were already in a transition, both in Memorex and in Burroughs, toward an organization that believed in and was committed to the concept that quality is not only free, it is an absolute necessity to compete in our marketplace.

Management commitment is only the first step and, as Philip Crosby will tell you, the more we stand up here and commit ourselves, the more we hope you will commit yourselves to that goal.

By the way, you can't fool any of the people any of the time. If your management stands up here and says great words then ignores them, we'll be out of existence. So what we demand from this plant and from all the plants of Memorex and Burroughs is, first, true management commitment.

## Women in sales: a look at the record

In a speech at the Computer Media sales conference in San Diego in May 1977 a Memorex National Sales Manager had a few observations about the women on the Memorex team:

"Create is an active verb, and activity begins with organization — with people. And while create is an active verb, creator is not a masculine noun. We now have 15 females in our sales organization, the leader in this respect, not only in our company, but in the Computer Media industry."

"Lest you think this stems from altruism, or a desire to employ females for the sake of minority employment, let me review some cold, hard facts with you:

- Our top salesperson in both 1975 and 1976 was a woman.
- Half of our top ten performers in 1976 were female.

- And 10 of the 11 women on quota for the full year 1976 achieved their objective."

Hiring women, he said, is "surely not altruistic nor a desire for minority quotas, but a proven, effective investment in sales productivity. In the sincerest form of flattery, our competitors have seen this success and are gradually adding females to their selling organizations.

"In order to capitalize not on novelty, but a novel opportunity, we must not only extend this program, but focus in 1977 on career path opportunities for women in line and staff management, thus keeping Memorex the leader as the most attractive alternative for career-minded women."

Reprinted from June 1977 INTERCOM.

## Memorex products used by NASA, IRS, Disneyland, and hospitals

A lunar capsule lands on the moon's surface and transmits thousands of close-up pictures across nearly 239,000 miles of space.

The pictures, recorded back on earth with Memorex video tape, are hailed by scientists as the best yet. The high quality of the pictures will make it easier to determine which sites are best for a manned landing on the moon.

Tape produced in Santa Clara and purchased by the National Aeronautics and Space Administration (NASA) has given a boost to the United States in our race to reach the moon.

NASA is just one of many well known Memorex customers who, along with the relatively unknown ones, rely on us to produce magnetic tapes of the highest possible quality.

We've all heard of the Central Intelligence Agency, Bureau of Customs, United States Atomic Energy Commission, and the U.S. Information Agency. But how many know that all of these groups buy Memorex tapes.

Maybe the tape you helped make a few weeks ago is in a computer in Washington, D.C. Then again, that tape may be in use at the Manned Spacecraft Center in Texas; the U.S. Post Office; storing data for the Coast and Geodetic Survey; at Ames Research, Moffett Field; or even helping the Internal Revenue Service catch the mistakes on your 1967 tax form.

The U.S. government buys a lot of Memorex tape and we could write for quite a while mentioning the names of such customers as the Department of Commerce, Department of Agriculture, the Army, Navy, Air Force, and Armed Forces Radio and TV Services.

The majority of these and all our other customers buy computer tapes. That PG&E bill you just got may have been computed on tape you helped make. But don't feel bad, the tape may also have gone to one of our many school district customers; to be used by researchers at the Stanford Linear Acceleration; one of the Kaiser Foundation Hospitals; Warner Bros.; or even to Walt Disney Productions.

Jefferson School District in Santa Clara uses our computer tape. It helps them keep track of some of our employees' children.

A number of colleges and universities are also customers; such schools as John Hopkins University, Southern Methodist, Yale, Rutgers State University, University of Alaska, the University of California, and Temple University, where comedian Bill Cosby played football.

Tapes also go to large insurance companies, banks, chain stores, airlines, railroads, large corporations, TV stations and television networks.

## Administrative Council formed to educate, inform, and acknowledge administrative support personnel

A new Administrative Council, developed and run by secretaries and other administrative support personnel, has been established at Memorex.

Diana Ryan and Jill Fugate were instrumental in researching the effect of similar councils in other companies and preparing the charter for Memorex's Council. The charter for the Council, as approved, is to develop, coordinate, and improve communications and professionalism of the secretarial and administrative support services. It will provide a focal point for the input of information and suggestions to management as well as facilitate an information flow to the secretarial and administrative functions to enhance understanding, consistency, and professionalism.

The Council will consist of secretaries and administrative support personnel and will report to Larry Chamberlin, vice president of Human Resources.

The key objectives of the Council are to provide information to fellow secretaries via a newsletter, offer training courses, publish an

administrative procedures manual and focus attention on new and temporary secretaries with the creation of "Buddy Packets."

There are many multi-talented secretaries and administrative support personnel here at Memorex and the functions of the Council will allow them to display some of these talents by: creating and maintaining a newsletter for better communication; making suggestions for changes and updates to the administrative manual; and teaching or coordinating training classes.

Administrative support personnel is one of the most widely distributed job families in the Corporation. By getting information into the hands of secretaries, the Council hopes to enhance the distribution of information to support personnel, provide an opportunity for recognition for their significant contributions, and enhance the awareness of the important role they have in Memorex's present and future success.

For further information, contact Diana Ryan at (408) 987-2701.

Memorex Corporation Presents

## THE NEW MEMINET\*



### What the viewers are saying:

"I thought I was watching the six o'clock news."

"The on location shots gave the program an international flavor."

"I loved it. Does it have a sequel?"

**STARRING**  
**Memorex employees everywhere**  
**Now playing near you.**

**Contact your Human Resource representative for showtimes.**

\*Memorex Information Network

## UCLA cuts costs with Memorex storage equipment

A medical computer service, functioning with the Department of Biomathematics at UCLA, has improved its throughput efficiency by 44 percent and slashed its data storage costs by 15 percent with the use of Memorex 3660 and 3670 Disc Drives and 3671 Controller.

Health Science Computing Facility, located in Westwood, California has a medical research disc data base consisting of more than 1.5 billion bytes of information. The facility utilizes more than 30 Memorex Disc Drives.

The medical research center has two basic objectives: serving research project investigations for more than 700 users and developing computerized techniques which enhance the nation's medical capabilities.

One of the facility's practical and ongoing contributions to medical health is its organ transplant and blood transfusion activity performed in conjunction with the laboratories of Professor Terasaki at the UCLA Medical Center's Department of Surgery.

Blood samples from potential organ donors and recipients are received world-wide from over 120 transplant and transfusion centers.

Once analyzed and typed at the laboratory, resulting data is key-punched, read into a terminal and transmitted over voice grade phone lines several blocks away to HSCF. There test data is disc-filed for computer compatibility matching of individual donor and recipient blood characteristics to obtain the best prognosis of success.

Two remote users, the Bethesda Cancer Institute in Maryland and the Veterans Hospital in Nashville, Tennessee, utilize online bi-directional transmission of test data due to the critical time value combined with their volume of compatibility requests.

Reprinted from May/June 1974 INTERCOM.

## 1974 – Memorex ships modules

Memorex became the industry's first and only independent disc drive manufacturer to deliver plug- and media-compatible double density disc storage modules, with the installation of two Model 3675 drives.

The new 3675 double density drives were installed last month under a contract from Omnis Corporation, the data processing subsidiary of Sammons Enterprises and Reserve Life Insurance Company of Dallas, Texas.

## Burroughs earnings increase – up 5.5% for second quarter

Burroughs Corporation has reported that its second-quarter profits rose 5.5 percent from a year earlier. Earnings reached \$42 million or \$1 per share.

"We remain confident that the second half will show continuing improvements and that this will result in a satisfactory operating earnings improvement for the full year over 1982," said Burroughs chairman and chief executive officer, W. Michael Blumenthal. He added, "We will continue to invest in our people to equip them to better serve our customers."

## Ban the screeches, squeals and jerks

Our four-wheeled life is punctuated by "squeeeel" and "skreee" and "shriiil" — tire-torturing sounds of cars being started, stopped and cornered with amateur clumsiness.

Any tire — whether premium or third-line — wails a high-pitched death-song when it is being murdered in its prime. There are sounds of "squealing out," or of "laying a patch." There are the sounds of the mind-wandering motorist in a desperate stop. There are the sounds of the stare-down-danger that he should have been seconds sooner, and avoided by non-frantic, non-tire-screeching action. All of these are sounds of stupidity.

If a driver has proper air pressure in his tires and proper brain pressure in his mental combustion system, he will probably never have cause to generate the tread-obliterating shriek. A real pro will claim that if your behind-the-wheel performance has invoked just one full-volume tire-scream in the last five years, you are an inexpert driver! Defensive, smooth, silent-tired driving is what separates the good drivers from the bad.

The sounds of stupidity mean that countless dollars and countless miles of travel are dissolving away into rubbery scorches on the concrete. They mean that many clumsy motorists are blundering through our daily traffic. They mean that

many immature and imperceptive drivers should be unharnessed from their horsepower.

Let's spread an attitude around! Let's come to hear the tire-squeal as the verbal drooling of the moronic motorist; as the squeaks and squalls of driver-in-diapers performance; as the soprano scream of the deficient and the maladjusted.

Let's come to see the tire-burn on the pavement as the scuff-mark of the stumble-bum driver; as the black minus sign that signifies the vacant mind; as the pathetically unimaginative attempt by the juvenile to make some kind of mark in the world.

Let's equate the rubber-shedding screech with the crudest of social errors: with the burp that explodes the silence just when the bride is expected to say, "I do;" with the upward-spiraling snore that trespasses upon the sermon's climactic pause.

Let's look upon the tires-in-agony yelp as the most amateurish of bloopers: like the dropping of the perfect pass in the end zone...the bobbed infield popup...the flubbed four-inch putt...the sprawling belly-flop...the gutter-ball...the muffed setup shot...the double-fault at match point.

Let's detect the other sounds that are mingled with the tread-destroying quaver: the clatter of the scatter-brain...the guffaw of the rude-and-crude...the shrilling of the undisciplined and the irresponsible...the stumbling shuffle of the eternal bench-warmer...the siren's warning that a non-thinking, non-skilled driver is within striking distance.

If we succeed in getting "squeeeel" and "skreee" and "shriiil" universally interpreted as symbols of four-thumbed, fourth-class, fourth-witted performance behind the wheel, it will help add quietude to our world, professionalism to our driving, abundant mileage to our tire life...and to human life!

Reprinted from August 1973 INTERCOM.

## Flexible discs for the Japanese market

Memorex Corporation and Memorex Japan, Limited have joined the Japanese firm Teijin Limited in forming Teijin Memorex Company Limited, which will manufacture high-quality flexible disc products in Japan.

The new, jointly-owned company was formed to meet the growing Japanese demand for such products. The firm will combine the technical, manufacturing and marketing expertise of the parent companies to provide Japanese customers with superior products.

Teijin, a diversified high-technology company with a 1978 fiscal year revenue of \$1.4 billion, has its headquarters in Osaka. It will supply employees and facilities for the new firm.

Reprinted from February 1979 INTERCOM.

## 1969 – new Memorex headquarters built

Construction will begin early this summer on about 200,000 square feet of new offices and manufacturing facilities, at our recently purchased 54-acre site near the Santa Clara tape plant.

The property, which more than doubles Memorex's total land holdings, is bounded by the Central Expressway on the north, San Tomas Expressway on the west, Walsh on the south, and Scott on the east.

Initially, two buildings will be constructed at the new site and both are scheduled for completion in about a year. One will house corporate and other offices. The second will be the permanent office, engineering and manufacturing facilities for Peripheral Systems, Image Products, and Information Printing Systems Corporation, all Memorex subsidiaries.

Included in the project will be a 10,000 square foot cafeteria and employee center.

Peripheral Systems is presently leasing buildings near Lawrence Expressway in Sunnyvale. Image Products is now engaged in research and development activities in a leased building in Santa Clara.

The new property is located in the San Tomas Industrial Park, which is an Aetna Life Insurance Company Project.

Reprinted from May 1969 INTERCOM.

## MEMOREX IN 1968

Egad, where're we gonna put' em all! Memorex and our subsidiaries now employ more than 1460 employees. More than half of that number have been hired in the last year and a half. Where we're "gonna put' em all" will be answered in the next few months, as plans for additional facilities are approved and announced.

Reprinted from February 1968 INTERCOM.

## Memorex wins award for MT/ST cartons

Memorex and Container Corporation of America have won a Merit Award for our MT/ST cartridge carton at the 27th Folding Carton Competition, sponsored by the Paperboard Packaging Council.

According to the Council, there are 18 categories and each entry is judged on how well the package accommodates the product from the production line, through the channels of distribution and into the hands of the ultimate customer.

Specific areas taken into account during the judging include packaging innovation, consumer convenience, communication excellence, market excellence, distribution excellence and production excellence.

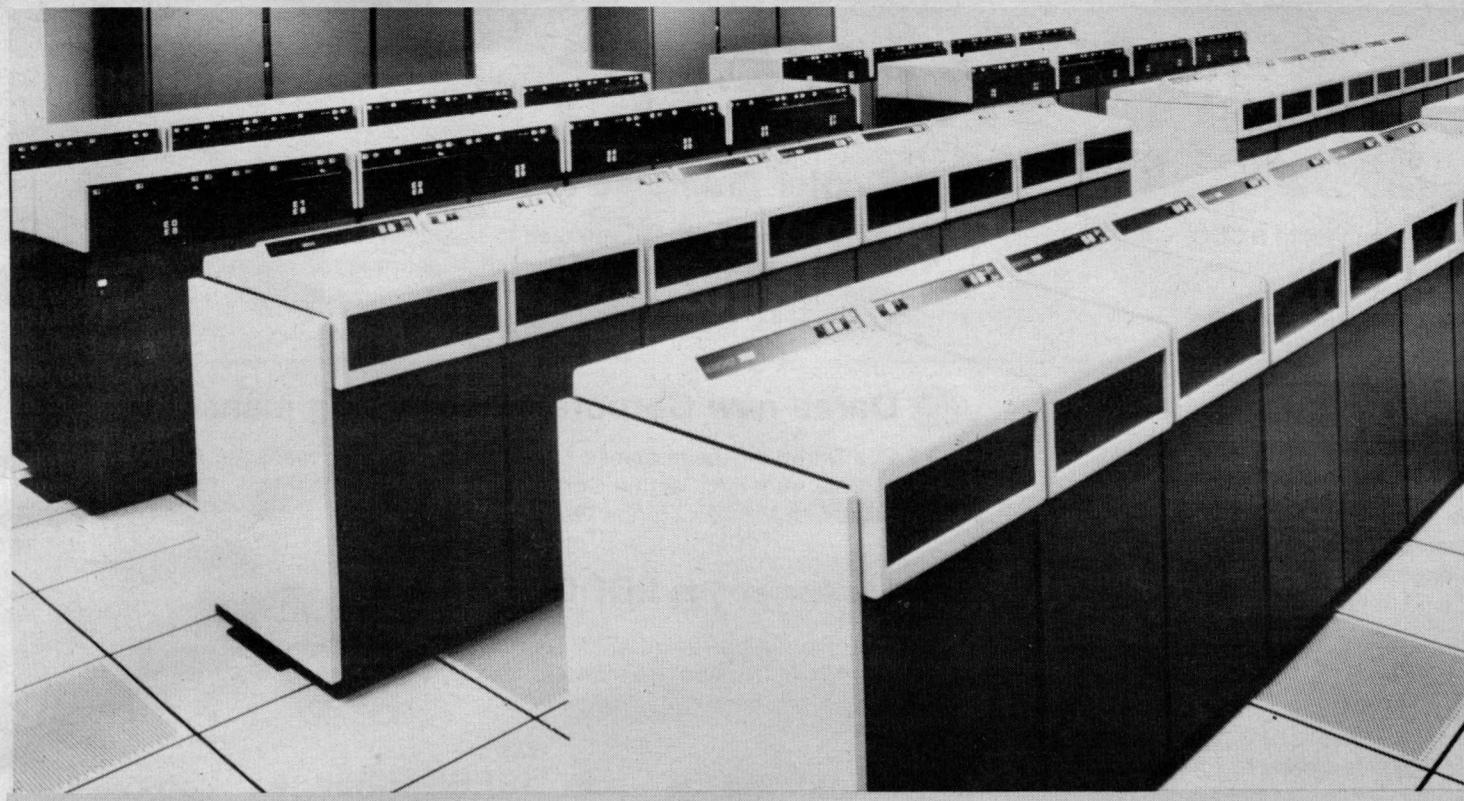
Reprinted from June 1970 INTERCOM.

## INTERCOM

**EDITOR, Diane Brazil**  
**GRAPHIC DESIGNER, April Bishop**  
**ASSOCIATE EDITOR, Karen Lippe**  
**INTERCOM is published by the Corporate Design Center 2800 Bowers Avenue Santa Clara, California 95051 Mail Stop 06-03, Telephone (408) 987-0376 Telex: 334-492**  
**Memorex Corporation is a freestanding subsidiary of Burroughs Corporation.**



W. Michael Blumenthal, president of Burroughs Corporation, recently visited the Memorex and Burroughs facilities in Milan, Italy. Blumenthal gave numerous interviews to the European press on the status of Burroughs and Memorex "state-of-the-art" products.



These random-access Memorex disc drive systems enable lawyers, executives and journalists to obtain information on any subject they choose without leaving their offices. Searching for specific words or phrases, the magnetic heads quickly locate material for display and printout on custom-designed timesharing terminals.

## Memorex disc drives prove reliable, cost-effective and fast in NEXIS and LEXIS high-speed libraries

Electronic research services are bringing vast libraries to the desktop. One of the key components in any such system is a fast, reliable, memory system — disc drives that store vast amounts of data and scan it for topics in fractions of a second.

Envision, for example a desktop computer terminal that can bring you the *Encyclopedia Britannica*, *The Washington Post*, major magazines, wire service stories, newsletters, the *Federal Register*, Supreme Court decisions, the *Internal Revenue Code*, case laws from all 50 states, corporate annual reports, *Securities and Exchange Commission* reports, and various other information, and all within minutes or even seconds.

Consider the efficiency of a system that can search these materials for you and select sections or display the full document on virtually any subject you're looking for. A sizable resource of this type, assisted by a computer-controlled array of disc drives, can eliminate indexes, abstracts and time-consuming trips to the library.

Known as NEXIS, for news and financial information, and LEXIS, for legal data retrieval, extensive electronic libraries already exist via customized timesharing terminals connected to a computer facility at Mead Data Control.

The company has assembled massive on-line data bases of complete texts stored primarily on Memorex disc drive systems and equivalent to about 200 years of reading — more than 32 billion characters of data.

The "brains" of this service are in Mead Data Computer Center just outside of Dayton, Ohio, where two large-scale Amdahl computers are connected to an extensive array of state-of-the-art random access disc memory systems. Most of the disc equipment consists of Memorex 3652s, 3655s, and 3656s.

LEXIS and NEXIS can be compared to libraries with high-speed research personnel.

Rather than pore through the book stacks yourself, you direct the disc drive magnetic heads to locate relevant data at speeds measured in millions of a second. No need to check out and return the materials — push PRINT and gather up a hard copy of the materials displayed on the CRT screen.

"Every decision to turn on the system is equivalent to a decision to buy time on our service, so our key concerns in setting up our system have been reliability, prompt response and cost-effective delivery," notes Bruce Rhoades, Mead's vice president of Operations. It took years to perfect the software; now the burden of

consistent performance is on the hardware. According to Rhoades, Mead has been using Memorex equipment for years, based on its reliability, service support, and cost.

Moreover, all of Mead's Memorex disc drive systems incorporate a unique option called Intelligent Dual Interface (IDI). With the built-in redundancy of IDI, each spindle in the disc drive has two independent access paths for optimal throughput. It also means the equipment can be serviced without shutdown — each spindle can be diagnosed and repaired, while all of the others continue to operate.

The discs are dual-density to maximize the amount of information that can be stored. The more densely packed the data, the less time required to scan and identify relevant texts. Average seek time on the Memorex systems is only 18 thousandths of a second.

One example can illustrate how the system works. Last year, when the Pope was shot in Italy, the name of the

attacker was announced, but little was known about him. A reporter in San Francisco entered the alleged assassin's name into the NEXIS terminal, and within minutes, retrieved six background news articles that had mentioned his name. The terminal first gave the journalist a list of publications and stories that were requested. Then, it provided excerpts referring to the assassin; and finally, the reporter asked for printouts of the articles in full. That night, an in-depth report on the attacker appeared on the news.

By taking the tedium out of information-gathering, Mead Data Central's computer system is giving its users more time to do what computers still can't do — think.

Excerpt from a Memorex publication, June 1983 *Bottomline*. For full transcript contact: California Mailing Services, 2247 Ringwood Drive, San Jose, CA 95131, Attention: Carol Cramer, Request: Memorex PUB-005.

## Read it and smile: how the office has changed

Does the 8 to 5 routine get to you, sometimes? Ever long for the good old days? Read these rules for office workers in 1842:

- Godliness, cleanliness, and punctuality are the necessities of a good business.
- Working hours have been reduced. The clerical staff will now only have to be present between the hours of 7 a.m. and 6 p.m. on weekdays.
- Daily prayers will be held each morning in the main office. The clerical staff will be present.
- Clothing. The clerical staff will not disport themselves in raiments of bright colours. Hose must be in good repair.
- Overshoes and top-coats may not be worn in the office, but neck scarves and headgear may be worn in inclement weather.
- A stove is provided for warmth. Coal and wood must be kept in the locker. It is recommended that each employee bring four pounds of coal each day during the cold weather.
- No member of the clerical staff may leave the room without permission from Mr. Rogers. The calls of nature are permitted and clerical staff may use the garden below the second gate.
- The area must be kept in good order.
- No talking allowed during business hours.
- The craving of tobacco, wines or spirits is a human weakness and, as such, is forbidden to all members of the clerical staff.
- Now that the hours of business have been drastically reduced, the partaking of food is allowed between 11:30 a.m. and noon, but work will not, under any circumstances, cease.
- Members of the clerical staff will provide their own pens.
- Mr. Rogers will nominate a senior clerk to be responsible for the cleanliness of the main office and the private office, and all boys and juniors will report to him 40 minutes before prayers, and will remain after closing hours for similar work. Brushes, brooms, and soap are provided by the owners.
- The owners recognize the generosity of the new Labour Laws, but will expect a great rise in output of work to compensate for these near Utopian conditions.

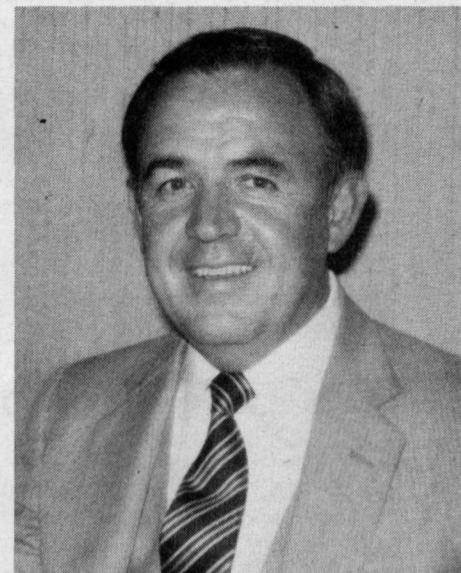
Reprinted from Farmer's Almanac in May 1981 INTERCOM.

## Comiso leads Media Marketing and Sales

Charles "Chuck" Comiso has joined Memorex in the position of vice president of Marketing for the Media Products Group, reporting to Tom Stevens, president of MPG.

Comiso will have full functional accountability for all Media Products marketing and sales. Initially reporting to him will be: Mark Klein, vice president of MPG Sales; David King, Flexible Disc Marketing manager; and Sharon Geraci, (acting) manager for MPG Marketing and Sales Promotion. Reporting to him on a functional basis will be: Jay Greenberg, Computer Tape Marketing manager; and Tony Tarvin, Precision Plastics Marketing manager.

Comiso joins Memorex from Hewlett-Packard, where he spent the last 13 years in a variety of sales and marketing management positions. He holds a bachelor of science degree in electrical engineering from Newark College of Engineering in New Jersey.



## Technology Tours designed to display Memorex technology

by Jeff Wagner

Teamwork is a needed element when it comes to making a business successful. No company or team can operate successfully without the equal contributions of its members.

This is especially true for Memorex personnel, both Santa Clara and field-based, who are involved in coordinating Technology Tours.

Tech Tours, currently in their second year of operation, are nurtured by Corporate and field staffs which create a slide program designed for the customer and presented at locations around the United States.

Five employees are sent from Santa Clara to assist the field employees by providing a visual program to inform established and potential customers about Memorex. Together, the Tech Tour team reaffirms Memorex's position in the high technology field and clarifies its future direction in communication and storage equipment products.

The traveling Santa Clarans include a Memorex executive, a representative from both Communications and Storage Equipment, an audio-visual specialist, and Jerry Sheridan, Memorex's National Account Support manager. These individuals travel from city to city visiting customers who are unable to travel to Corporate headquarters.

A three-hour presentation features slide shows on communication and storage equipment products, Memorex Corporation and the full range of Memorex products in the marketplace today. An exhibit of thin-film and media technology is also a feature of the Memorex presentation package.

Since March, Tech Tours have traveled to 10 cities across the United States and will visit a total of 18 by this November.

# NEWSMAKERS

## Watkins promoted to manager

Greg Watkins has been promoted to product manager of RMCD, reporting to John Higgins, manager of Marketing and Business Development. Watkins has been with Memorex since February. He received his bachelor's degree in Business Administration from the University of Northern Colorado.

## Groesbeck joins CTD Marketing

Rick Groesbeck has joined the Computer Tape Division's Marketing department as Field Engineering manager, reporting to Jay Greenberg, CTD's Marketing manager. Groesbeck comes to Memorex from Amdahl, where he held first and second-line field engineering management positions. Prior to that, he was with ITEL and Telex as a technical support field engineer and manager.

## Martin manages 3680 marketing

Steve Martin has been named manager of 3680 Marketing Programs, reporting to Geoff Seabrook, manager of Storage Equipment Marketing. Prior to his new position, Martin was manager of Business Planning responsible for the interfacing of Memorex Storage Equipment Products into Burroughs' systems. Before joining Memorex, Martin had spent 10 years with Burroughs. Martin received his bachelor's and MA in Business Administration from the University of Wisconsin at Madison.

## Bush promoted in Tucson

Lois Bush has been promoted to senior Human Resource specialist for the Tucson/Mexico operations, reporting to Gene Robles, Off-Site Human Resource manager. Bush received her BA in Liberal Arts from the University of Wisconsin and MA in French from the University of Michigan.

## Matej named RMCD Operations manager

AI Matej has been promoted to the position of Operations manager in the Rigid Media and Components Division with responsibility for both the Manufacturing and Development Engineering organizations. Matej, who has been with Memorex for seven years, is reporting to the open position of vice president and general manager, which position he is filling in an acting capacity.

## Thompson promoted in USESS Finance

Vicki Thompson has been appointed manager of Budgets and Measurements, reporting to Eric Croson, director of Finance, U.S. Equipment Sales and Service. Thompson has been with Memorex since 1978. She received her bachelor's degree in Business Administration and MBA in Finance, both from San Jose State University.

## Braggiato joins Computer Tape Division

Claudio Braggiato has been appointed manager of Cartridge Tape Program, reporting to Joseph Nussbaum, Development Engineering manager, Computer Tape Division. Braggiato joins Memorex from Atari's Consumer Electronics Division. He has bachelor degrees in Engineering, Finance and Management from the University of Portland.

## Sander promoted to manager

Dan Sander has been named manager of Financial Accounting, reporting to Eric Croson, director of Finance, U.S. Equipment Sales and Service. Sander has been with Memorex since 1978. He received his bachelor's degree in Accounting from the University of Oregon.

## Plowright elected assistant controller

Thomas Plowright has been elected assistant controller and treasurer of Memorex, reporting to Wayne Bridges, controller. Plowright has been with Memorex since 1979. He received his bachelor's degree from San Jose State University and is a Certified Public Accountant.

## McMahon takes double post

Mike McMahon has been named manager of Corporate Application Systems Development, reporting to David Berg, director of Corporate Information Systems. McMahon has also been named Service manager for the Large Disc Drive Division Data Collection. McMahon joins Memorex after 18 years with IBM, where he held a variety of technical and managerial positions. He received his bachelor of science degree in Industrial Engineering from the University of Florida.

## Tarvin joins Precision Plastics

Anthony Tarvin has joined Precision Plastics Division as manager of Sales and Marketing, reporting to Wayne Cunningham, general manager. Prior to joining Memorex, Tarvin was with Saga Engineering Corporation where he was director of marketing. Tarvin received his bachelor's in Business Administration from Colorado State University and an MBA in Marketing from the University of Denver.

## Onufer promoted to new post

Glen Onufer has been promoted to the newly-created position of manager of Communication Planning, reporting to Tom Porter, Corporate Telecommunications manager. Onufer has been with Memorex for two years.

## Darab new Corporate Purchasing manager

Bea Darab has been named Corporate Purchasing manager, reporting to Dale Anderson, acting Corporate Procurement manager. Darab has been with Memorex since 1981.

## Larson leads LDDD Purchasing

Vern Larson has been appointed Purchasing manager for the Large Disc Drive Division, reporting to Carl Lyle, manager of Material, LDDD. Larson has been with Memorex since 1982.

## Emick moves up in USESS Finance

Gary Emick has been appointed Finance manager of Storage Equipment Planning, reporting to Eric Croson, director of Finance, U.S. Equipment Sales and Service. A four year Memorex veteran, Emick received his BA in Accounting from San Jose State University.

## Don't overdo...

*Politeness, for instance. You know how it is around too courteous people. Pretty soon you're tempted to bellow some extremely discourteous things at such folk, and kick them squarely in the seat of their overpoliteness.*

*Praise is another example. Up to a point it's stimulating stuff; but beyond that it gets embarrassing, and your toes start curling up inside your shoes.*

*Then there's neatness. Usually there's not enough of it around, and as a result, production and safety records take on a dismal look. But a strong desire for neatness, rare as it might be, can occasionally become unreasonable and downright dangerous.*

*Take Ned's case. He was one of the neatest employees in the plant. He was noted for both his neat appearance and his neat performance. There was good, clean quality to his work. He had but one fault; he was — would you believe it — too neat.*

*There came a moment in Ned's life when his passion for neatness coaxed him over the border into dangerous territory. A piece of scrap caught in his machine. All of Ned's instincts for one-hundred-percent shipshape-ness rebelled. "That cursed, unsightly scrap!"*

*With the machine running, he deftly plucked the offending scrap away. Mistake number one...and he got away with it. "But wait — there it was, an unsightly wax buildup on those two rotating shafts. If I take this scrap and drag the edge over those two shafts, it'll clean away that messy old wax and leave the shafts nice and shiny. Easy does it. Just like th..."*

*Ned is back on the job again — finally. His hand is healing quite nicely. He was very pleased with the job the doctor did in sewing it back together. It will be — perhaps — almost as useful a hand as it was before.*

*Oh yes, and Ned said — with an ever-so-slight wince — that the stitches were very, very neat."*

*Adapted by Employers Insurance of Wausau from Hoerner Waldorf's WALSAFE, Bob Fritsch, Chicago, with permission*

*Reprinted from February 1967 INTERCOM.*

## WANTADS

**FOR SALE:** Philco washer and Kenmore electric dryer. Good condition. \$75. Call Brian at (408) 377-3574.

**FOR SALE:** '81 Capri hatchback. Sunroof, A/C, PS, PB, AM/FM stereo, 5-speed and other extras. Four cylinder, 19-28 MPG. \$6,000. Call Brian at (408) 377-3574.

**FOR SALE:** collector's car, '63 Super Lark. Four speed, POSI, owned since '68. Many features and extras, includes many spare parts. Must see and drive to appreciate. \$4,200. Call Brian at (408) 377-3574.

## AUGUST ANNIVERSARIES

### 15 YEARS

**Lettie Harris, Large Disc Drive Division**  
**Louis Pelkey, Rigid Media and Components Division**  
**Carolyn Taylor, Magnetic Test Equipment Operations**  
**Liz Kwantes, England**

### 10 YEARS

**M. Jose Grace, Memorex Finance Company**  
**Obaid Khan, Development Engineering**  
**Rosa Yablosowski, Brazil**  
**Irena Chajewski, Belgium**  
**Joseph Homen, Rigid Media and Components Division**  
**C. Grotjohann, Holland**  
**Darrell Guidry, Computer Tape Division**  
**Diane Davis, U.S. Equipment Sales and Service**  
**Betty Rawlings, U.S. Equipment Sales and Service**