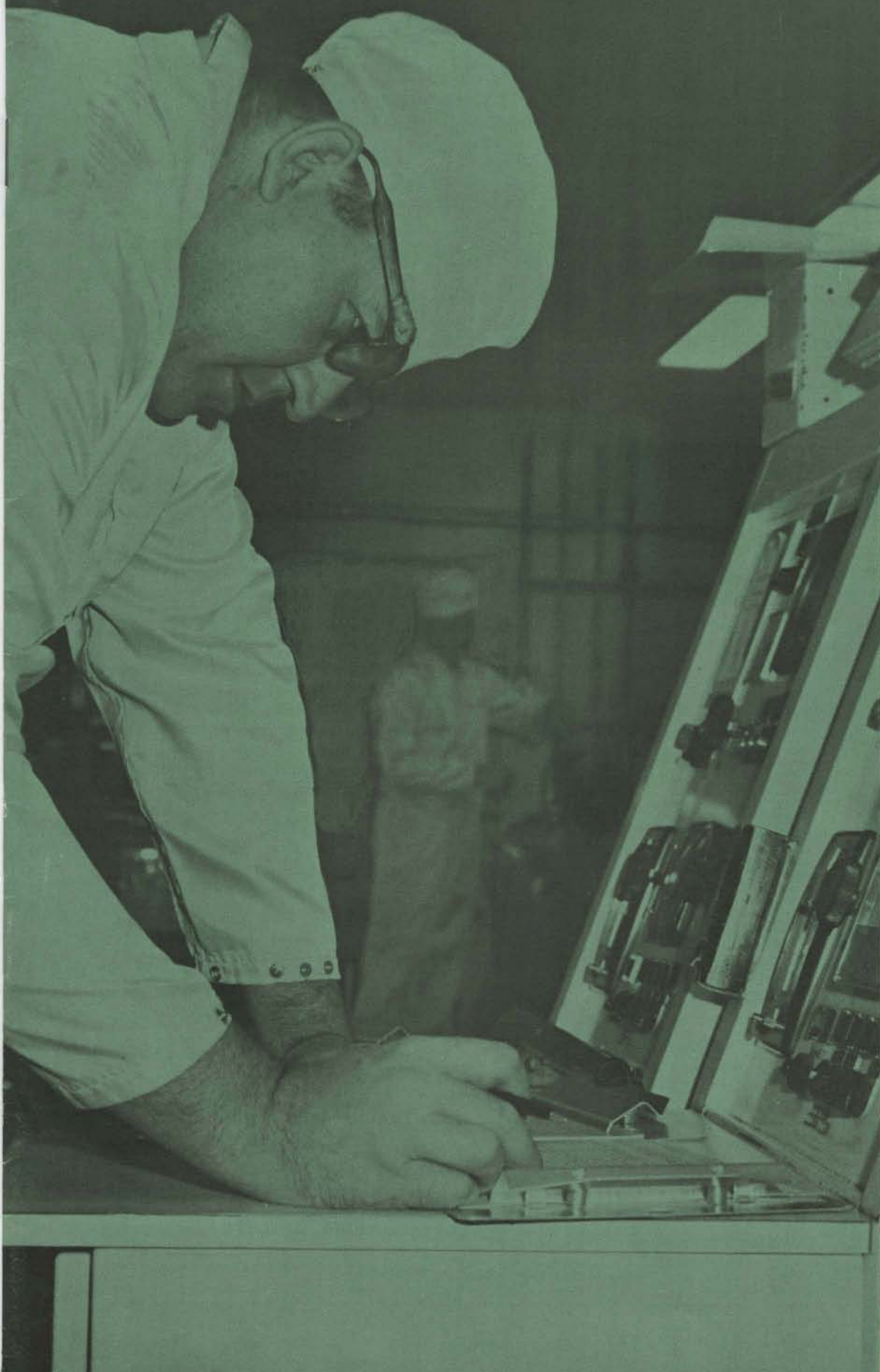


Newsmagazine for Memorex Employees
Volume 7, No. 2/February, 1970
U.S. Edition



INTERCOM

1969 PROFIT SHARING POINT VALUE CONTEST

(Official Entry Blank)

I estimate that the value of each Profit Sharing point for 1969 is:

\$. , to the nearest hundredth of a cent.

NAME _____

ADDRESS _____

MEMOREX DIVISION _____

Deadline—March 13, 5:00 P.M. Entries must be delivered to the Profit Sharing Office at Shulman Avenue by that time.

Only one entry per employee.

MEMOREX EMPLOYEES' PROFIT SHARING PLAN 1969 POINT VALUE CONTEST

Newest Vice President Started as Manager Just Six Years Ago

"I've always been impressed with the caliber and character of the people at Memorex," states Hig Tavrow, the Company's newest vice president.

Both Hig and his wife, Joyce, were born and raised in upper New York State. After receiving a mechanical engineering degree from Rensselaer Polytechnic Institute, Hig worked for almost five years with Eastman Kodak Company. He then went to work for a polyethylene extrusion company, and four years later he was sent to their branch plant in California.

The Tavrows couldn't see the logic of trading California's sun for the snow and cold of the East, and after working for two additional companies, Hig joined Memorex in February, 1964.

As part of his career Hig has been chief industrial engineer, production and inventory control manager, plant superintendent and manufacturing manager. He joined the company as finishing manager, and after three and one-half years was promoted to manufacturing manager. Six months later Hig was made tape plant manager, a position he held for two years until his recent promotion to vice president of Manufacturing in the Precision Magnetic Products Division.

In his spare time, Hig enjoys playing tennis. "California weather is made for tennis," Hig feels, and he hopes that his four children, who range from five to 12 years of age, become tennis players.

'69 Sales Top \$77 Million

Memorex Corporation established record sales and earnings for the year ended December 31, 1969, announces President Larry Spitters. Sales rose to \$77,692,000, 33% more than 1968's \$58,295,000.

Net income for 1969 totaled \$6,902,000, or \$1.87 per common share, compared to \$4,939,000 or \$1.35 in the previous year.

Comparative Statements of Income for the years ended December 31, 1969 and 1968 follow:

CONSOLIDATED STATEMENT OF INCOME

| | Year Ended December 31 | |
|--|------------------------|--------------|
| | 1969 | 1968 |
| Net Sales | \$77,692,000 | \$58,295,000 |
| Income before Federal and Foreign Income Taxes | \$13,604,000 | \$10,084,000 |
| Federal and Foreign Income Taxes | \$ 6,702,000 | \$ 5,145,000 |
| Net Income | \$ 6,902,000 | \$ 4,939,000 |
| Per Share of Common Stock | \$1.87 | \$1.35 |
| Average Number of Shares Outstanding | 3,693,307 | 3,663,010 |

Annual Reports will be in the mail to all employees as soon as possible, probably in early March.

Hig Tavrow starts off a typically busy day by giving dictation to his secretary, Carol Hancock.



INTERCOM

An official publication for employees of Memorex Corporation, 1180 Shulman Ave., Santa Clara, Calif. 95050

Editor: Gary Williams

ABOUT THE COVER:

George Roberts keeps track of the tape he's running through his surface treating machine in the tape plant. The story, on pages 10 and 11, tells why surface treating is such an important part of the tape production process.

Fun Filled Weekend Offered As First Prize in Annual P.S. Point Value Contest

It's that time again when you and many other Memorex employees are focusing your attention on the 1969 Contribution to Profit Sharing—and equally important, the value of a Profit Sharing Point for the year.

In another section of this magazine, you read that Memorex set record high levels of sales and earnings for 1969. It was also a year when the Profit Sharing Contribution exceeded that for any previous year. The Contribution amounted to \$1,383,000 and represents an increase of approximately 49 percent to the asset value of the Profit Sharing Trust. When the funds are transferred to the Trustee, they will be invested in various securities for the accounts of those eligible to participate in 1969's results.

Unlike other years, the 1969 Profit Sharing Contribution is not 10 percent of the Company's consolidated pre-tax profits. Because during the year certain subsidiaries operating outside of the United States ceased participation in the Plan, the method of calculating the Contribution was changed to reflect, on a pro-rata basis, those earnings allocable to Memorex operations remaining in Profit Sharing. Accordingly the Plan now provides that this amount will be 10 percent of pre-tax profit less an adjustment for non-participating Memorex employees. This change will not produce any material difference in the amount of Profit Sharing credited to your account.

1969 POINT VALUE CONTEST

Having reviewed Memorex's operating results for 1969, each of us finds it particularly easy to understand the financial importance of Profit Sharing. We do this by evaluating our participation in terms of compensation for the year and the length of service at Memorex. Each factor rates a certain number of points, and each point can be translated into your proportional interest in the Profit Sharing Contribution.

Because there is always wide speculation on what the point value will be, guessing that figure makes a good subject for calling everyone's attention to Profit Sharing.

And so, we announce the 1969 Point Value Contest! The Contest is open to all employees of Memorex Companies participating in the Profit Sharing Plan. The objective: guess the value of a point to the nearest one-hundredth of a cent by completing the contest entry form inserted in this magazine. The results will be announced in April.

The Prizes

The contestant making the closest estimate of the 1969 point value will receive:

First Prize

An exciting, pleasure-filled weekend for two in San Francisco. With emphasis on what's happening and how to enjoy it! This first-class fun-trip will give you:

—Two days and two nights' accommodations at the luxurious Fairmont Hotel atop Nob Hill.

—Dinner two nights at your choice of some of San Francisco's most noteworthy restaurants.

—Tickets for your choice of an evening's entertainment. Enjoy events like a hit stage play from New York, the world-famous San Francisco Symphony, or an exciting nightclub revue.

—A \$25 gift certificate to any one of San Francisco's many fine specialty shops or department stores.

—\$50 in cash to cover your miscellaneous expenses, and

—Special chauffeur-driven limosine service from your home to San Francisco and return when your weekend is over.

If you come in with the second best estimate for the Profit Sharing Point Value, you will receive:

Second Prize

\$50 in cash.

The contestant with the next best guess receives:

Third Prize

\$25 in cash.

Alternate prizes will be available to the First Prize Winner if he is unable to accept the weekend vacation in San Francisco.

Some Hints to Help You

So that you understand how the Point Value is derived, it is recommended that you refer to the section in the Profit Sharing booklet which explains the process. Then, as an illustration of how it works, apply the principles to your own situation.

—For every \$100 in compensation you received while participating in Profit Sharing during 1969, you are credited with one (1) point. (Salary in excess of \$16,800 does not count.)

—For every full calendar year of participation, you get two (2) points of credit.

Your points are combined with those of all other participants in Profit Sharing for 1969 to provide the grand total of compensation and service points for the year. The sum is then divided into the Company's contribution to arrive at the average Point Value in dollars and cents.

In 1968 the average Point Value worked out to be:

$$\frac{\text{Contribution} = \$1,120,427}{\text{Total Points} = 116,354} = \$9.6295$$

Remember that the number of Memorex employees participating in the Plan affects the Point Value as do the individual levels of compensation and the time of service.

The following data will assist you in estimating the 1969 Point Value:

| | Profit Sharing Contribution | Total Points | Point Value |
|------|--------------------------------|-----------------|----------------|
| 1965 | \$ 280,182 | 16,237 | 10.6789 |
| 1966 | 575,479 | 42,796 | 13.4470 |
| 1967 | 751,717 | 74,174 | 10.1345 |
| 1968 | 1,120,427 | 116,306 | 9.6295 |
| 1969 | 1,383,000 | ? | ? |

CONTEST RULES

1. All employees of Memorex Corporation participating in the Profit Sharing Plan are eligible, regardless of individual membership in the Plan. (Personnel associated with the preparation of information related to the Point Value calculation are excluded from entry.)
2. Only ONE ENTRY PER PERSON. More than one entry will disqualify a contestant.
3. Entries must be on the contest application attached to this magazine.
4. Entries must be received in the Profit Sharing Office at Shulman Avenue by 5:00 P.M., Friday, March 13, 1970.
5. In case of ties, the entries received earliest will be given preference.
6. The Profit Sharing Executive Committee members will be judges of the contest, and their decisions will be final.

Micrographics Division Ready to Support Microfilm Printer System

The Micrographics Division, officially named just last month, is readying its first products for market in early 1970. These products will be the media and supplies for the Equipment Group's 1600 series Microfilm Printer system.

The new division has grown out of a research effort which began in early 1969 to determine if a workable microfilm formulation could be developed.

The first formulations, although showing promise, were very difficult to work with. In fact, vapors given off during the coating process were so toxic that gas masks had to be worn by those running the experimental coating line. Jack Hounslow, the division's general manager, said that one of the main decisions to continue with the microfilm project hinged on whether or not the toxic coating fumes could be eliminated

from the process. They were eliminated with more advanced formulations, and now the division expects to begin sales in April.

Jack was named to head the microfilm project in August, 1969, and since that time it has grown from a launch group into a division. There are already about 16 people in the division, plus another 10 who are working full time for Micrographics, but are actually part of the Information Media Group Technical Staff. One of those from the Technical Staff is Dr. Orville McCurdy, who is team leader of the microfilm formulation project. Others working with him on this development project include Gary Bunas, Ross Clark, Bob Murashige, and Elizabeth Herzfeld.

Jack sees two major objectives for the division. The first is to provide a complete line of supplies for the 1603 Microfilm Printer. This includes three different types

of microfilm, processing chemicals, paper and toner, forms-flash slides, film cores, reels, and cassettes. The second objective is to enlarge the division's development and manufacturing capabilities so that it can expand into the general microfilm market with superior products.

The 1603 was announced to the public last October, and its reception in the marketplace has been excellent. The 1603 is designed to replace, or in some cases supplement, paper printout machines. It is 10 times faster than paper line printers; it is quieter and takes less space than line printers; and one 1,000 foot reel of microfilm holds as much information as 24,000 sheets of paper. In addition, a computer operator can make as many copies as he needs from a master reel of microfilm, while line printers can make a maximum of about six copies per printer.



Micrographics is moving into a leased building on De La Cruz and Reed St. Putting the finishing touches on the office layout are Ron Gross (left) and Phil Gahr.

John Ethier, recently promoted to mechanical engineering manager in Micrographics, talks with Joe Pentala (left) and Ron Arima (right).

Sales of the new microfilm products will be handled by a special Micrographics sales force within the Information Media Marketing Division. The market Micrographics will enter in April is known in the industry as COM (computer output microfilm). When the division moves to accomplish its second objective, it will be entering the general microfilm market, or DOM (a Memorex abbreviation meaning "document on to microfilm").

In order to reach these objectives, Jack has organized the division into six departments. Howard Earhart has been named manager of Product Development; Product Engineering is headed by Bob Erdman; Phil Gahr is responsible for all engineering activities; and Phil Phythian is manager of Finance and Administration. For the present, Jack is acting manager of the Manufacturing Department, and Bill Hiegel is acting manager of Material.

We've already mentioned that the division will market three types of microfilm. One is COM-S Master Print Film. This is a silver film which is used in the 1603 to make the master copy of information printed out by the computer. COM-S comes in light-sealed molded plastic cartridges which contain 500 feet of 16mm film. Comdata will make the cartridges for this film at its new plant in Orange County.

The second microfilm product is COM-T, a thermally developed duplicate film that will be used on the Memorex 1620 Duplicator. The Duplicator is part of the 1600 series system that produces multiple copies of the original silver film. COM-T will be used to make positive microfilm copies from negative ones, or negative copies from positives.

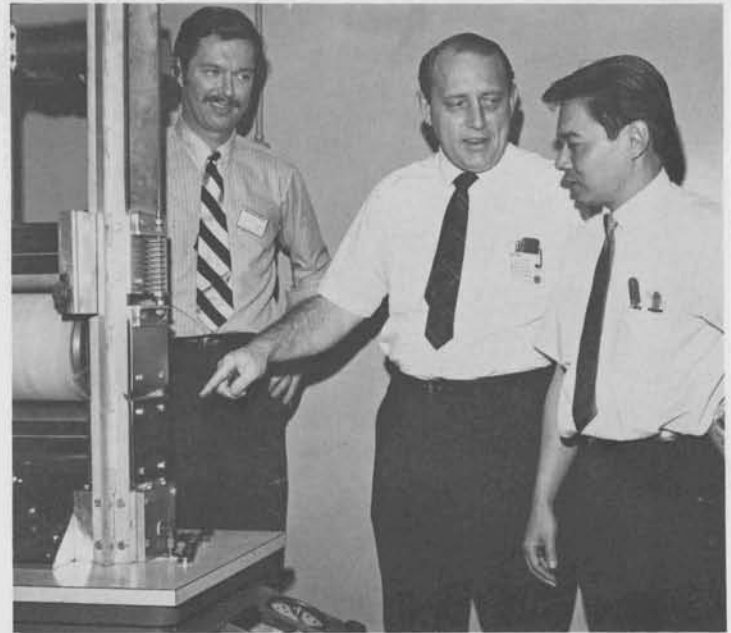
The third type of microfilm is COM-D, which is also used to make duplicate copies of the master film. COM-D will be

sold in 1,000 foot rolls for making diazo type copies on the 1620 Duplicator. COM-D is different from COM-T in that it is used to make positives from positives and negatives from negatives.

The Micrographics Division was first located in building K, the former Purchasing area on Shulman Ave., just west of the research labs and offices. The production development people are still there, but the rest of the operation is moving into a newly leased facility on De La Cruz Blvd. and Reed St., in Santa Clara.

Present plans call for Micrographics to move into a permanent home by early 1971. The permanent facility will be designed exclusively for the manufacture and technical development of microfilm products.

Until that plant is built, microfilm will be coated in the Shulman Ave. tape plant. Slitting, rewinding and packaging will be done in the De La Cruz building. Warehousing and distribution will also be done from the De La Cruz site.



The New Year Offers Equipment Group Marketing Many Exciting Challenges

J. Garrett Fitzgibbons (standing) conducts a marketing strategy session with three of his four directors. Seated are, from left, Bill Emmons, Ed Faber and Bill Collins. Jack Kelly was unavailable for the picture.

Sales training classes are usually held in Building 2 on San Ysidro St. This one, taught by Howard Rathbun, was in session near the end of last year. Similar classes are conducted for salesmen on a regular basis.



Equipment Group Marketing is facing a tough challenge—that of building a first rate computer sales and service organization which will reach through the United States. The division was established slightly more than six months ago, and already there are Equipment Group sales offices in 14 major cities. The goal is to have the Equipment Group's sales network set up by the end of 1970.

This and other equally tough challenges are the reasons why Memorex has been hiring top talent from the computer industry; people like Marketing Vice President J. Garrett Fitzgibbons, and his four marketing directors. Together these five men have more than 50 years of experience in an industry that's only about 20 years old.

Garrett came to Memorex in June of last year after 14 years with IBM. Working with him in the Marketing organization are Field Sales Director Bill Emmons, OEM Sales Director Bill Collins, Field Support Director Jack Kelly, and Marketing Services Director Ed Faber. In turn, these four men have been hiring talented and experienced people to work in their areas. Since August, Equipment Group Marketing has grown from a handful of people to more than a hundred. The last count was 106, but there'll be more by the time this story reaches you.



The customer engineers—men who install and maintain our equipment after it has been sold or leased—are in the Field Support Department. "One way we hope to make their jobs easier is by concentrating our sales effort in major geographical areas," states Garrett. "This reduces the amount of territory each engineer must cover, allowing them to be most responsive to customer service requirements."

The OEM Sales Department's responsibility is self-explanatory. Bill Collins and his sales force sell our equipment to Original Equipment Manufacturers, companies which will lease or resell our equipment to other companies. The Field Sales Force is the one which goes directly to end-users—the people who actually operate computer centers.

Chris Soter, advertising/promotion manager for the Equipment Group, and his assistant, Jerry Palladino, discuss a proposed advertisement for Memorex disc files. Advertisements are placed in magazines like *Datamation* and *Business Automation*, which reach specialized audiences.

Marketing Services has three areas of responsibility: An Administration Department audits and controls all equipment orders which come into Santa Clara from the field; An Education Department for training the field sales force and our customers; and Advertising/Promotion which does product advertising for the Equipment Group.

The final Marketing Department is Planning. Garrett is presently acting director of Planning and the four product managers report to him.

The Marketing vice president explains that Memorex has stepped into the computer equipment business when it's just starting to open up, and the market's ripe for the type of products Memorex has developed. "The computer peripheral equipment market is expanding faster than the computer market. This means computer users will be paying a higher percentage of their dollars for peripheral products." As important to Memorex, however, is the knowledge that computer users who were once prone to buy all of their equipment from the computer manufacturers are no longer hesitant to equip their centers with devices made by independent suppliers. Evidence of this trend can be seen by the recent emergence of many new computer equipment companies.

However, Memorex has advantages which these and other new companies don't have. For one, we have a strong technical base in organizations like Image Products, Storage Products and Information Printing Systems. We are an established name in the computer supply business, and our tape products are known for their high quality. Garrett says this reputation for quality furnishes Equipment Marketing with a key objective for 1970—to bring an awareness to equipment customers and potential customers that Memorex equipment products, like our tapes and disc packs, are made to meet or exceed the highest industry standards.

It's the job of our product development and manufacturing organizations to build quality products, but it's Marketing's job to lease or sell them. This brings up another of the division's 1970 objectives.

In 1969 all Equipment Group business was to OEM's like Management Assistance, Inc. (MAI), our first major customer for disc drives back in 1968. "We will continue to sell to OEM's," says Garrett, "but by the end of 1970 we want people to recognize that we're in the end-user equipment business."

Ed Faber, director of Marketing Services, is enthusiastic about the Equipment Group's future and that of Memorex as a whole.

He says, "We hope to double the number of sales offices by the end of 1970, and greatly increase the number of salesmen working out of those offices."

"Our immediate goal is to grow to the point where Memorex is compared with such large companies as Control Data Corporation, Xerox Data Systems, and others in that league. Within five or ten years I believe we can and will be the other recognized superior computer systems company in the industry."



Memorex People on the Move

Reorganization of the Supplies Division into the Information Media Group has brought about a number of promotions. Last month we announced that **Dick Boucher** has been promoted to vice president and general manager of the Precision Magnetics Products Division (basically the old Supplies Division); **Hig Tavrow** to vice president of Manufacturing, reporting to Dick Boucher; **Roland Jang** to general manager of Consumer Products; and **Jack Hounslow** to general manager of Micrographics.

Shortly after the above changes and promotions were made, Dick Boucher announced the organization of his new division. Reporting to him will be Manufacturing, headed by Hig; Research and Development, headed by **Stan Meyer**, vice president of Research and Development;

Comdata, headed by **Ed Conti**, Los Angeles area manager; Planning, headed by **Tully Bryant**, director of Planning and Engineering and Quality Assurance, headed by **Bob Bertrand**, director of Engineering and Quality Assurance.

In Tape Manufacturing, which is responsible for computer, video and special products tape production, **Dusty Rhodes** has moved up from manufacturing manager to plant manager of the tape plant. Dusty, who reports to Hig, came to the company four years ago as a senior mechanical engineer, and has been manufacturing manager since mid-1969.

Also reporting to Hig will be **Keith Gerry**, who was promoted to the newly created position of manufacturing technical director. Keith is in his seventh year with

Memorex. In his new job he will be responsible for Manufacturing Engineering, Central Electronic and Mechanical/-Electrical Services, and Plant Services.

In Tully Bryant's Planning Department, **Dick Loomis** has been promoted from production control supervisor to production planning manager. Dick will be responsible for all production control, inventory control, and order processing and planning in the Plant Department.

Roy Jones, former warehouse supervisor, has moved up to production control manager in the tape plant. Roy came to Memorex in 1966 from Fairchild Hiller Corporation, where he was scheduling supervisor. Roy will report to Dusty Rhodes.

Key Management Slots Filled

Hobart was formerly with Gra-Tec, Inc., in Campbell, as financial vice president. He has also served for four years as managing director of Gisholt Machine Co., Ltd., in Great Britain.

Another new director is **William Backer**, who joined the Technical Staff in January as director of Media Research and Development. Bill will be reporting to **Dr. Gordon MacBeth**, vice president and senior scientist. For the past four years, Bill has been director of Fibers R & D for the Dow Badische Co. in Williamsburg, Virginia. He has a Bachelor's degree in chemistry from Fresno State, and a Master's degree in chemical engineering from the University of California, Berkeley.

Company President **Larry Spitters** announces the hiring of **Robert Jaunich**, who joins Memorex as marketing manager for Consumer Products. Bob will report to

Mr. Spitters, and will be responsible for all aspects of marketing the products which are under development by the Consumer Products Division of the Information Media Group.

Mr. Spitters says, "I have given Bob the job of building a consumer marketing organization which will be responsible for all product planning, selling promotion, and industrial design of the cassette product line and the reel-to-reel products for the consumer market."

Bob was formerly with Procter & Gamble, where one of his most recent responsibilities was to create and direct the marketing effort for Gain Detergent, one of the two largest detergent products sold in the United States.

Two new directors have joined the International Group, according to **John Kramer**, vice president, International. The two are **William Randolph**, director of Marketing, and **Hobart Johnson**, director of Finance. Both will be located in Santa Clara.

Bill comes to Memorex after 12 years with IBM, where he most recently served as western regional manager, Systems and Operations-Information Marketing.

Backer



Gerry



Johnson



Jones



Loomis



Randolph



Recent Legislation Changes Tax Features Of Employee Benefit Plans

The recently legislated Tax Reform Act has far-reaching impact on many parts of our nation's economy and also on our own personal finances. Although we, as individuals, are provided meaningful relief in certain areas, the new law substantially alters tax treatment of distributions from benefit programs like our Profit Sharing and Savings and Investment Plans when the distributions result from termination of employment.

When you review how the Tax Reform Act affects you with regard to these Plans, there are four important items to consider:

1. The source of the funds you receive in distribution(s).
2. When contributions to the Plan were made.
3. The appreciation on the original contributions to the Plan.
4. When you received the distribution(s).

In the Profit Sharing Plan there is one source of the funds which are contributed to the Plan Trust—Memorex's annual contribution from profits. Because employees do not contribute to this Plan, it is called non-contributory. For such Plans, the new law states that taxes on all the amounts credited to an individual's account are deferrable until you receive the funds.

The Savings and Investment Plan, however, is a contributory Plan, which means that we employees as well as Memorex make contributions to the Plan Trust. When funds are distributed from such a Plan Trust, it is necessary to designate their source. In the case where a distribution consists of both your and the Company's contributions, only that portion accounted for by the Company is taxable. There are no additional taxes on the funds you contribute.

Timing is also important with regard to the Company's contributions. The Tax Reform Act differentiates between contributions made by Memorex prior to January 1, 1970 and those made later. Simply, the law now states that distribution of those funds representing Company contributions alone (no appreciation) made after December 31, 1969 will be taxed at ordinary income rates. However, the Act also allows you to average out the income over a seven year period. This will ease your tax burden for the taxable year in which the distribution was made.

The new law does not affect distributions of amounts representing Company contributions which were made prior to January 1, 1970. Those amounts will generally continue to be taxed at the favorable capital gains rate.

The third factor to consider is the appreciation on the contributions which were invested for your account. Regardless who contributed the funds, you always have tax liability on the capital appreciation of the investments. Remember, you pay taxes on appreciation after the securities are sold.

Finally, the tax law provides that if the account distribution is not made completely within one of your taxable years, you must pay tax at ordinary income rates on the portion of Company contributions received after the year when the first distribution was made.

Although the Tax Reform Act does complicate accounting for each of the items discussed above, a statement indicating the source of the funds, the amounts of Company contributions made prior to January 1, 1970 and those made on or after that date, and the appreciation will be provided when your account is distributed to you. This will be all the information you need to complete your tax return.

While the Tax Reform Act has brought about many important changes, it is quite possible that more changes pertaining to our Plans will be forthcoming. When that occurs, they will be covered in this magazine.

The following examples illustrate how the new law works:

PROFIT SHARING

On September 1, 1978 Mr. T. terminated employment after fifteen years with Memorex and received in that year a lump-sum cash distribution of the funds in his account (he is 100% vested). The

Company contribution for his employment in 1978 will not be made until the following year and will be distributed to him at that time.

Mr. T's account would reflect:

| COMPANY CONTRIBUTIONS | | | APPRECIATION | |
|------------------------------------|---------|---|--------------------------------|---------------|
| Period | Amount | Taxable as | Amount as of Distribution Date | Taxable as |
| 1964-1969 | \$4,500 | Capital Gains | \$ 7,500 | Capital Gains |
| 1970-1977 | \$8,000 | Ordinary Income* | \$10,000 | Capital Gains |
| Jan. 1-Sept. 1, '78 | \$ 900 | Ordinary Income* | — | — |
| Total Distributed | | \$30,900 | | |
| Total Subject to Capital-Gains Tax | | \$22,000 (Taxable in the year received) | | |
| Total subject to Ordinary Income | | \$ 8,900 (Taxable in the year received) | | |

*Special seven-year averaging provision applies.

SAVINGS AND INVESTMENT PLAN

On October 15, 1979 Mrs. W. discontinues working. At Memorex she had contributed to the Plan regularly since January, 1970. In 1979 she receives a lump-sum distribu-

tion of all the funds credited to her account. (In accordance with Plan provision she is not vested in Memorex contributions for 1977, '78 and '79.) Mrs. W's account:

| MRS. W'S DEPOSITS | | | MEMOREX'S CONTRIBUTION | | APPRECIATION | |
|------------------------------------|---------|---|------------------------|-----------------|--------------|----------------|
| Period | Amount | Taxable as | Amount | Taxable as | Amount | Taxable as |
| 1970-1976 | \$3,500 | no tax | \$1,750 | ordinary income | \$5,000 | Capital Gains |
| 1977-1979 | \$1,400 | no tax | not vested | | \$ 800 | Capital Gains* |
| Total Distributed | | \$12,450 | | | | |
| Total Subject to Capital-Gains Tax | | \$ 5,800 (Taxable in the year received) | | | | |
| Total Subject to Ordinary Income | | \$ 1,750** (Taxable in the year received) | | | | |

*On Mrs. W's contribution only.

**Special seven-year averaging provision applies.

Microscopic Peaks and Valleys Removed from Tape Surfaces By Confidential Process

Top—Tortie Nute, Frank Holden and Harry Lombardo look over a web of tape that has just come through a surface treater.

Lower Left—Monitoring the machines is an important part of each surface treater's job. Shown here is Stan Marshall.

Lower Right—Ross Cruz is taping down the end of this jumbo which has just run through his machine.



The condition of a tape's recording surface is one of the most important factors in determining its overall recording performance. That's why Precision Magnetic Products has an entire department devoted to surface treating the thousands of miles of tape we produce each year.

The department supervisor, Bill Laughlin, says that surface treating at Memorex is a continuous operation, shutting down only for major holidays and sometimes not even then. The men work on the same schedule as the Mix and Coating Departments. They're on a four week cycle that gives the men a four day weekend each four weeks, seven straight days of work in each cycle, and two 12-hour shifts each four weeks.

The goals of surface treating are to improve the recording performance of the tape by allowing more intimate contact between the head and the tape surface, as well as reduce head wear on the recorder. Any microscopic air gap between a recording head and the tape will cause a loss of signal (or dropout). Surface treating is especially important for video tapes because better head-to-tape contact means a sharper picture. A major dropout on a computer tape will cause an error in the information the computer is handling, although this problem is partly minimized by error correction circuitry which is built into computers.



Lower Left—Larry Walker concentrates on some of the paperwork that goes along with his job as a surface treater operator. He's sitting at the console which controls his machine.

Lower Right—Don Serratore readies his machine to run another jumbo. The view is through the top part of his surface treater.

Right—Al McDowell has completed his work shift and David Williams (right) will take the next shift on the same machine. Here Al is telling Dave about the type of tape that's being run on the machine.

The actual surface treating method used by the department is confidential; however, the basic goal of any method is to either remove some of the microscopic peaks and ridges found on newly coated tapes, or flatten the entire surface level.

Precision equipment applies pressure and heat to iron the entire surface of the tape, and proprietary processes are used to burnish (or polish) the surface.

Memorex's method of surface treatment has been undergoing constant refinement since our first surface treaters were built years ago. But the machines still require operators to make the many precise adjustments required for different types of tapes. The operators also closely monitor the tape as it passes through their machines, to be sure it is running smoothly. A few seconds of inattention on the operator's part could mean the loss of an entire web (or jumbo) of tape.

Even subtle changes in the condition of their equipment while it is running can have a dramatic effect on the outcome of the tape. For example, in a recent test an eyelash was placed on a roller in a surface treating machine. After the test one observer commented, "When the tape came through that machine it looked like it had been tooled by a leather maker."

That's why surface treater operators are such an important part of the team which produces our tape products. All the way from the tape's beginning in the Mix Department until it reaches final packaging, production is a team effort. And at each step along the way, the departments are charged with the responsibility to uphold the company's high quality standards.



**Memorex
Intercom**

Memorex Corporation
Santa Clara, Calif. 95050
Return requested

**First Class
Mail**

J. R. Porter



Can someone be assigned to clean up the cafeterias when we work on Saturdays?

We have scheduled a lunchroom attendant to work Saturdays and Sundays, from 10 a.m. to 3 p.m. This attendant will rotate between the three Information Media Group lunchrooms. The lunchrooms should now be much cleaner on the weekends.

Can Equipment Group coffee breaks be extended to make up for the time we lose due to the crowded lunchrooms?

We can't extend the breaks, but we are investigating the possibility of adding to the number of vending machines available, and rescheduling coffee breaks. This will provide easier access to the machines and more seats in the lunchroom by spreading out the number of people there at any one time.

We are also happy to tell you that the new building on San Tomas will have much nicer facilities for eating, including vending machines in the manufacturing area and a cafeteria with full service eating facilities.

When will something be done about the power line pole in the middle of Shulman Ave.?

Removal of the power poles on Shulman Ave. has been delayed until new underground electrical tie-ins have been provided to all the businesses on Shulman Ave. We have been advised that this work will be completed by the end of March, 1970, and then the power poles will be removed.

What is the possibility of having a chest X-ray van stop at Memorex every six months?

The Tuberculosis Association has informed us that at the present time there is no mobile X-ray unit available in Santa Clara County. However, free chest screening X-rays are available through the Santa Clara County Health Center at several locations in the county. For the convenience of our employees, we have posted a schedule on the bulletin board in the Medical Department. If you wish further information about this service, our Medical Department on Shulman Ave. will be happy to advise you.

Why isn't the American flag that is flown by the company on Shulman Ave. kept clean?

The present flag is relatively new, but it has been cleaned after receiving your recommendation. Frequent checks on the flag will be made so it will be kept clean.

What plans does the company have for hot foods other than those dispensed by vending machines?

We are studying the feasibility of increasing the scope of our food service at Shulman Ave., and we are planning to install full service eating facilities at the San Tomas location.