

August 1965



Measure

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Somebody has to

UNLIKE THE HOUSEWIFE, none of the professional purchasing people who buy for HP is likely to spend much time at a January White Sale or Thursday Supermarket Bargain Day. Nor will you find them prowling used car lots or auction barns.

But the woman working on a strict budget, the man who plans to build a new home for his family, and HP purchasing people all have one common goal—buying maximum value.

□ As any homemaker knows, this is not an easy thing to do. Value is a tough word to define. Does it mean cheap? Not always. Does it mean durable? Often, but sometimes durability is of little significance. Does it mean beauty of design, color? Does it mean dependability, serviceability? Yes, it *can* mean all these things and more. But these attributes mean nothing unless they relate directly to the needs and purposes of the person who is spending the cash.

Homemakers have a given amount of income and resources with which to maintain the standard of living they judge to be their due. If they are smart they will not exceed these resources, and this means that they must study the things they buy and stretch their dollars as far as possible.

□ HP's purchasing objectives are not unlike this. The main difference lies in the great complexity and volume of purchases the company makes each year—somewhere between \$50 to \$60 million dollars' worth, not counting land and buildings.

To point up the magnitude and tremendous responsibility of the company's buying activities, Hank Taylor, who heads corporate purchasing activities, uses the Stanford plant as an example. In a year, over 12,000 different categories of parts and components are bought for direct use in instruments being manufactured. These add up to tens of millions of individual items ranging from nuts and bolts at a tenth of a cent to highly specialized tubes at \$2,000 to \$3,000 apiece.

□ Add to this the purchases of parts being made in all domestic divisions, and the task of buying wisely takes on great economic importance for everyone in the company.

Although there are about 30 HP people in the U.S. who are employed as professional buyers, hundreds of other employees become involved in making purchases. These purchases can be grouped into classes. Capital expenditures, for example, would include land, buildings and capital equipment exceeding \$150 in cost. Practically everyone in the company is responsible for using some kind of capital equipment because this category includes everything from electric typewriters

THE COVER Don Wood, HP buyer at Palo Alto headquarters, checks Kardex file for information to help him make a purchasing decision.

bought something

and desks to delicate laboratory devices and \$300,000 milling machines.

Raw materials would include a great variety of things to be used in the manufacture of products—transistors, sheet metal, tubes, plastic compounds, and shipping materials.

Then there are expenditures for plant maintenance and tooling. Things like sweeping compounds, light bulbs, solutions for cleaning metal, and die casting molds. Other classes of expenditures include office supplies (rubber bands and paper clips), services (advertising and electricity), and sub-contracting (having certain parts made in outside shops).

□ In order to do the best possible job of buying so many different things at so many different places from so many different vendors, the company's purchasing people must utilize all the know-how, techniques, and tools of their profession. For this, computers have proved a great boon, relieving the individual buyer of tedious hand calculations while providing decision-making information rapidly. Among other things, the computer can accurately help forecast parts requirements so that the buyer can make purchases when prices are most favorable. Computers also are invaluable in the growing companywide program to determine divisional requirements and to buy collectively, thus taking advantage of quantity discounts. Taylor estimates that such group buying has saved nearly \$3 million in the past two years.

□ Another "tool" being used is a system developed by Taylor's group in Palo Alto and featured recently in *PURCHASING*, one of the profession's leading trade journals. As *PURCHASING* said: "Price-break guesswork has been practically eliminated at Hewlett-Packard, thanks to a new nomograph calculating system that saved the firm \$170,000 last year. The nomograph tells buyers—within one minute—whether it's better to load up on incremental inventory and 'bargain' prices . . . or to clamp down on cash outflow by paring stocks to a minimum."

Another money saving technique at HP is to buy raw materials and *build* rather than *buy* some products, such as castings, machined parts, certain types of solid state devices, and transformers. This gives the company more control over both price and quality. It's not unlike the handyman husband who buys parts to build his own hi-fi set.

There may be a vast difference in budgets, scientific purchasing tools, and techniques between the HP professionals and their talented, non-professional counterparts at home, but there is little doubt that both are out to get the most for their dollar. ◀



Two firms join HP family

Datamec's handsome 15,000-square-foot plant makes pleasant night scene.



Model D 3030 magnetic tape units were designed by Datamec for medium speed computer market.

HEWLETT-PACKARD'S MARCH toward increasing diversification continued this summer as two manufacturers in widely varying fields of instrumentation became HP divisions.

On July 1, Datamec Corporation of Mountain View, Calif., officially became a member of the HP family, and the F&M Scientific Corporation of Avondale, Pa., came into the company on August 9.

□ Datamec manufactures digital magnetic tape units and other electro-mechanical equipment for data acquisition and processing. The firm's products are sold throughout the United States and in several foreign countries. Founded in 1961, Datamec has 60 employees and last year had sales of approximately \$1.3 million. James D. Bowles, who has served as president, will continue to head the new division.

F&M Scientific Corporation is one of the world's largest manufacturers of gas chromatographs. In just eight years since its founding, the company has built an annual sales volume exceeding \$7 million and has more than 400 employees.

In addition to the plant and headquarters building at Avondale, 40 miles southwest of Philadelphia, F&M operates a manufacturing subsidiary in Amsterdam, Holland, which serves the European market.

□ F&M was founded in 1957 as a part-time occupation by Frank W. Martinez, Jr. who continues as division manager. His first production facility was in the basement of his home . . . but not for long. In less than a year the business had grown so much that he was devoting full time to it and had to find larger quarters. By 1960, over 50 people were employed, and the company had its own sales force and an expanding research and development staff. From then on the firm grew steadily each year until now it is one of three world leaders in gas chromatographic equipment.

The instruments produced by F&M are used throughout the chemical and related industries for the scientific analysis of various compounds. A relatively new analytical technique, gas chromatography is rapidly growing in its scientific and industrial applications.

An F&M chromatograph is operated by Applications Chemist Roger Leibrand.



F&M's manufacturing facilities are located in this modern, low profile building.

ALTHOUGH EXACT FIGURES AREN'T AVAILABLE at the time of this writing, our third quarter (ended July 31) continued the trend toward higher orders, shipments and earnings. June, traditionally a good month for orders, was exceptionally good this year. While July was down somewhat from June, we still have plenty of momentum and by all standards are running well ahead of 1964. Contributing to this record-breaking performance is a steady flow of new products, many of which will be on display at WESCON.

□ As reported elsewhere in this issue, Datamec Corporation and F&M Scientific Corporation are now full-fledged members of the HP family and we're happy to welcome them aboard.

Datamec, which manufactures digital magnetic tape units, is growing rapidly and adds considerable strength to our capabilities in the data acquisition and processing area.

F&M, a leading producer of gas chromatographs, provides us a platform from which to expand our efforts in the chemical instrumentation field. Plans call for the products and services of our Mechrolab Division, also directed toward the chemical industry, to be integrated into the F&M operation to provide a cohesive, chemically-oriented unit headquartered at Avondale, Pa.

□ Looking elsewhere around the circuit, our Moseley Division in Pasadena is hustling right along and has some exciting new product innovations in the mill. The Colorado Springs and Loveland Divisions are also stepping up their new product programs, and effectively sharing facilities and know-how. Loveland, operating at full capacity, is looking forward to the completion of its 116,000-square-foot plant addition, scheduled for next summer.

Sanborn's operations continue to move along at a good pace. The division recently embarked on a reorganization of its marketing activities and is strengthening other functions as well. Sanborn's new intensive care equipment, a major addition to its product line, was enthusiastically received at a recent medical meeting in Boston.

□ Our operations in New Jersey, including Boonton, Harrison and the Eastern Service Center, are making good progress and, as in the case of our Colorado divisions, working closely together for maximum efficiency. We'll soon have another facility in New Jersey when our new Eastern Regional Sales Office opens its doors. This office will coordinate sales activities in the New York metropolitan area, New Jersey, Washington, D.C. and most of Pennsylvania.



Noel E. Porter, Vice President, Operations

AROUND THE CIRCUIT . . .

Innovations in products, markets, planning

Our international operations continue to show impressive growth. Through the first nine months of the fiscal year, international orders appear to be up some 33% over 1964.

Here in Palo Alto construction crews are busy with the major addition to our headquarters plant, scheduled for completion about January 1, and with the new building for Paeco. As mentioned earlier, Datamec is growing rapidly and will soon need a new plant.

□ On the R&D side of the picture, we're planning to consolidate our advanced R&D activities, including the advanced R&D work being done at HP Associates, and eventually will have these under one roof. HPA, meanwhile, will continue to produce solid state devices for our own divisions and for outside customers.

All this growth places increasing emphasis on our long-range planning function. We're now staffed up to do a good job in this area, and it's receiving the full support and attention of top management. Planning is vitally important to our operations, particularly as we move ahead into new markets and new technology. ◀



YOHKO ISHIZAKA A warm welcome for visitors to Yokogawa-Hewlett-Packard in Japan.

FOR THOUSANDS OF PEOPLE who visit Hewlett-Packard locations throughout the world, the first person they meet is an attractive, intelligent, friendly, and thoroughly helpful receptionist. Not a bad beginning for the visitor . . . and not a bad way for the company to practice good public relations.

□ Greeting visitors, naturally, is the prime responsibility of the HP receptionist. But it's not uncommon for her to double in brass. One moment she may be a stenographer, a book-keeper, or a telephone operator. Then in her spare time on the job she has been known to organize service award lunches, chase out stray dogs, and sew buttons on visitors' coats.

MEASURE queried a number of HP's receptionists recently and found that their days are filled with many interesting moments.

Carolyn O'Loughlin, at Loveland, Colo., defined her receptionist duties about as well as anyone: "This job is as varied as the people who come through our front door." Carolyn is also in charge of the lost and found department, arranges plant tours, and even sees that new babies of HP employees receive their gifts.

□ Margaret Schulz at GmbH in Boeblingen, Germany, isn't a trained nurse, but she's had to double in that role during her 3½ years on the job. "I once gave first aid to a visitor who walked through a plate glass door," says Margaret.

Liking people is a necessity for all HP receptionists, and this comes easily for Ann Gill of New Jersey's Boonton Di-

vision. "Since I enjoy talking so much, I can pursue my hobby and get paid for it at the same time," Ann laughingly points out.

Although HP's receptionists like their jobs 99% of the time, they do have pet peeves. Alice Dysart of the Robinson Sales Division at West Conshohocken, Pa., doesn't particularly care for the salesman who can't take "no" for an answer. "My favorite visitors are HP customers with money to spend," counters Alice. (She's an enthusiastic stockholder.)

Theresia Frey, of HPSA in Geneva, finds speaking English, German, and Italian helpful. "We have visitors from many countries," she adds. Marianne Blomskog, of Crossley's Sales Division, Skokie, Ill., likes her job because "there are never two days the same."

□ Judy Brecher, of the RMC Sales Division, New York City, plays her own private game from her receptionist's desk. "I have a mental picture of everyone phoning in," says Judy, "but I'm usually way off when I finally see them."

Julie Dibenedetto of Pasadena's Moseley Division, who helped plan the plant's inter-com system, enjoys meeting foreign visitors more than anything else.

Irene Ferguson of the Horman Sales Division, Baltimore, Md., likes calls from customers best. "It may be just a question, or it may be a million dollar order," says Irene.

Whether they're administering first aid, searching for a lost coat, or greeting a visitor, HP's charming corps of receptionists represent their company ably, and with a smile. ◀

JEAN BINDING
Yewell Sales Division
Burlington, Mass.

Every day is a new adventure . . . and I must admit that my four years' experience with an answering service helps me in dealing with people and all kinds of situations.



JEANNE ELLIS
Colorado Springs Div.

Outside of greeting visitors, I have this busy, busy switch-board to operate. And for several hours daily I handle the inter-plant page system. Oh, yes, each week I write the names and numbers of all employees on the time cards. Guess that's about all.

The company's smiling face



DOREEN MERULLO
Sanborn Division
Waltham, Mass.

The most difficult thing is dealing with visitors who become impatient when they are kept waiting when someone else had a prior appointment. With a lobby full of people you soon learn that you can only solve one problem at a time.

PAT LADOUCEUR
Corporate headquarters,
Palo Alto

Every once in a while someone or something can sort of ruin your day. But, being cheerful becomes a habit—and when you stop and think about it, that's one of the most satisfying things about the front desk.



LANI PERSKE (left)
CATHY DILLARD
DORI McGUINNESS
(not shown)
Neely Sales Division
North Hollywood

Once in a while a group of cowboys will come in dressed in their Western costumes, complete with six-guns, wanting to know if this is the Revue Studios employment office. We send them across the street.



Crossley moves north to Skokie

The Crossley Sales Division, headquartered on Peterson Avenue in Chicago for several years, moved north to newer and larger facilities in Skokie, Ill. early this month.

One of HP's largest sales and service divisions, Crossley's new address is 5500 Howard Street. The building was purchased from the Chrysler Corporation, and with the larger facility (54,000 square feet of space) Crossley is looking for-

ward to expansion of customer services.

The new headquarter office overlooks Edens Expressway in Skokie, and is within a 15 to 20 minute drive from O'Hare airport.

The Crossley division serves HP customers in 11 Midwestern states and maintains branch offices in Cleveland, Dayton, Detroit, Indianapolis, St. Paul and Monroeville, Pa.

PEOPLE ON THE MOVE

HP PALO ALTO

James Vargiu, engineering staff, Microwave Division—to Advanced R&D.

Adolf Koning, electronic model shop—to materials engineering.

Ron Norman, contract sales staff—to corporate Marketing order processing.

George Stutler, F&T Division quartz crystal production—to Advanced R&D (Physics).

Art Walton, accounting staff, F&T Division—to supervisor, billing department, HP Palo Alto accounting.

BOONTON DIVISION

Jim Prestridge, branch manager, Syracuse Sales Division, Rochester office—to marketing manager, Boonton Division.

DYMEC DIVISION

Arndt Bergh, Advanced R&D, HP Palo Alto—to development engineer, Dymec.

Ed Holland, Advanced R&D, HP Palo Alto—to development engineer, Dymec.

Kay Magleby, Advanced R&D, HP Palo Alto—to manager, development engineering group, Dymec.

Stephen Shank, Advanced R&D, HP Palo Alto—to development engineer, Dymec.

EASTERN SERVICE CENTER

Jerry Bender, supervisor, repair order processing—to supervisor, visual-medical repair group, Eastern Service Center.

Cy Currier, supervisor, materials management—to supervisor, repair order processing, Eastern Service Center.

Don Hicks, test engineer II—to service supervisor, Eastern Service Center repair department.

Dick Oschmann, senior test engineer—to service supervisor, Eastern Service Center repair department.

Sel Thierfelder, stockroom group leader—to supervisor, materials management, Eastern Service Center.

F&M SCIENTIFIC DIVISION

Dick Arms, manufacturing engineering—to fabrication manager, F&M Scientific.

Bill Ludwick, material management, Moseley Division—to materials manager, F&M Scientific.

Ed Truitt, process engineering—to manufacturing manager, F&M Scientific.

FREQUENCY & TIME DIVISION

Rolly Hassun, Advanced R&D—to engineering staff, F&T Division.

HARRISON DIVISION

Johan Blokker, Advanced R&D—to chief engineer, Harrison Division.

SANBORN DIVISION

Doug Ritchie, industrial design, Microwave Division—to industrial design, Sanborn.

CROSSLEY SALES DIVISION

Ed Winn, contract sales staff, HP Palo Alto—to staff engineer, Crossley Sales Division, Chicago office.

MOSELEY DIVISION

John Brown, manager, Arizona and New Mexico area, Neely Sales Division—to marketing manager, Moseley Division.

Tom Coyne, repair and maintenance of Moseley instruments, Eastern Service Center—to customer service manager, Moseley Division.

Ken Dixon, project engineer, United Technology center—to project engineer, Moseley Division.

Leslie Fodor, camera product designer, Hycon Mfg. Co.—to motor design engineer, Moseley Division.

Dick Pennycook, chief engineer, American-Wiancko Instrumentation—to engineering-production liaison, Moseley Division.

Charlie Smith, production planner—to material manager, Moseley Division.



Glenn Herreman makes a thin film measurement with ingenious system developed by gage lab using a Moseley strip chart recorder.

Overall view shows Hal Andrews in outer room calibrating a precision gage. Ralph Richberger, visiting from another department, dons white smock in air lock before entering "clean room" where precision calibration is done by Glenn Herreman and Irene Ardoin.



They measure the measurers

MAN FIRST BEGAN MEASURING things about the time he climbed out of the trees . . . and logically enough he first used arms and hands to gage distance. For instance, the oldest standard of physical measurement, the *cubit*, was roughly the distance from a man's elbow to the end of his middle finger. A horse was so many *hands* tall and a *yard* was the distance from the tip of the nose to the end of the thumb. Not very precise, you say? Well no, but such measurements were plenty accurate for their time. □ Today, this business of making mechanical measurements—and that's what we're talking about—has become incredibly involved and sophisticated. You'd have to look far and wide to find this point more dramatically illustrated than in HP's own gage laboratory at the Stanford plant.

Here in a clinical, dust-free atmosphere, an engineer and three technicians are engrossed in a rather strange occupation. They measure measuring devices—as many as 900 in a month. The devices they measure are high precision gages used by most HP divisions in research, product development, and manufacturing. Plug gages and micrometers are examples, and so are vernier calipers and precision squares. When these mechanical measuring gages are first purchased by the company, they are sent to the gage lab to be calibrated for accuracy. Later, after usage, at predetermined intervals or if engineers, scientists, or production people suspect that a gage does not meet its original tolerance of say 40 millionths of an inch, then back to the gage lab for recalibration and rebuilding or replacing if necessary.

□ Speaking of millionths of an inch (and gage lab people almost never speak about anything bigger) the accurate measuring of such unimaginable distances combines for the layman a lot of science, some art, and a little black magic. As

laboratory Supervisor Glenn Herreman says, "We calibrate gages which have to be ten times more accurate than the precision parts and materials which they in turn have to measure. Therefore, it stands to reason that our calibrating methods should be at least ten times more accurate than these gages."

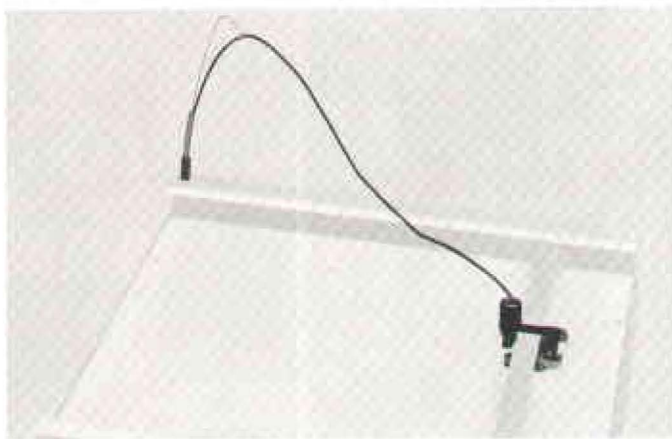
To perform these feats, Herreman and his technicians, Wilfred Kincaid, Hal Andrews, and Irene Ardoin, utilize some of the finest electronic and optical measuring instruments available. Things like a large \$6000 Pratt & Whitney standard measuring machine which can measure (to 10 millionths of an inch) the go-no-go plug gages used in HP machining and production operations. And then there is the versatile tool makers' microscope which can magnify a part 150 times with 20 millionths-inch readout. Or the electronic comparator which measures ring gages with a stingy 2 millionths accuracy.

But Herreman and company take greatest and most justified pride in two instrument systems which the staff developed itself for checking "squareness" and for measuring the profile of everything from precision parts to thin film on a glass slide. There was a need for such measurements and no commercial products met the accuracy requirements. So they built their own.

Although the lab's fine array of instruments was originally intended for calibrating precision gages, more and more time is being devoted to providing other precision measuring services for HP scientists and engineers. "We're on the lookout for further ways we can apply our know-how and facilities to other company operations," says Herreman, an already-busy man who nevertheless is always willing to take on another assignment. <



Dymec's front access "card cage" (above) and Moseley's ribbonless character printer (below) are among 17 "survivors" from 152 entries in WESCON Industrial Design exhibit. Final awards will be given August 24.



Two HP products honored by WESCON

Two Hewlett-Packard entries, along with 15 other instruments from across the nation, have been selected for the 1965 WESCON Industrial Design Awards exhibit.

The 17 survivors from among 152 entries will be judged for final awards in excellence of product design just prior to the opening of this year's Western Electronic Show and Convention.

HP's newest prize-contending products are the Dymec Division's 2539A front access "card cage," and Moseley's 17009A ribbonless character printer for X-Y recorders.

Gerry Priestley designed the Dymec entry, and product engineers were Bob Pierce, Arlan Saunders, and Ted Pollard. Richard Kemplin and Tom Minor were designer and product engineer, respectively, for the Moseley character printer.

Judging of the 152 entries was based on visual clarity of function, manufacture, and material through creative design engineering; possible improvement in lowered manufacturing cost; and such design areas as maintainability and human factors, which improve the competitive marketing position of the product.

WESCON-1965 will be held during the days of August 24-27. The HP theme for the show will be "Measurement Problems Solved," and the booth will feature some 50 instruments and systems from various divisions. WESCON will mark the first Western showing of many HP products, and the first national showing of several brand new HP instruments.

Bank honors Packard

David Packard, HP board chairman, was one of 19 business leaders named recently to Chase Manhattan Bank's International Advisory Committee.

The committee, composed of leading executives from the United States and 9 other countries, will counsel the bank on its international activities and economic and political trends around the globe, according to Chase Chairman George Champion and President David Rockefeller.

Two-day meetings will be held twice a year in New York, with the possibility of another meeting abroad once every two years. Chairman of the committee is Jonkheer John H. Loudon of the Netherlands, chairman of the board of the Royal Dutch Petroleum Company.

In addition to Packard, other U.S. members of the committee are William A. Hewitt, chairman, Deere & Co.; William Blackie, president, Caterpillar Tractor Company; George H. Love, chairman, Chrysler Corp.; William B. Murphy, president, Campbell Soup Co.; Eugene R. Black, director, Chase Manhattan Bank; Donald C. Burnham, president, Westinghouse Electric Corporation; Austin Cushman, chairman, Sears, Roebuck and Co.; and Robert Hal Dean, president, Ralston Purina Co.

Poll proves HP leadership

While Hewlett-Packard has long been recognized as a pioneer in electronic instrumentation, a product preference poll completed last month by McGraw-Hill's *Electronics* magazine indicated that the HP name may have even greater drawing power among customers than expected.

The publication listed 212 types of instruments, components and materials, and HP was named in 69 categories by those asked which manufacturer they preferred.

Hewlett-Packard led its competitors by wide margins in at least a dozen different categories. Statistics attesting to HP's leadership in several important fields listed below are impressive.

Microwave test equipment - 77.6% prefer HP; digital voltmeters - 45.6% prefer HP; oscillators - 81% prefer HP; signal generators - 73.9% prefer HP; electronic voltmeters - 62% prefer HP; pulse generators - 53.8% prefer HP; spectrum analyzers - 34.7% prefer HP; frequency synthesizers - 63.3% prefer HP; frequency meters - 63% prefer HP; sweepers - 32.1% prefer HP; R.F. voltmeters - 49.7% prefer HP.

Additionally, Moseley and Sanborn were named specifically and ranked high in six categories, Harrison in two, and Delcon in one.



from the chairman's desk

THIS MONTH THE ANNUAL WESCON Show takes place in San Francisco. Next to the IEEE Show in New York, this is the most important single event in the electronics industry, attracting thousands of visitors from all parts of the country.

As in past years, many of our people are spending a great deal of time and effort in putting together the Hewlett-Packard exhibit and in readying the several new products we intend to display at the show. This is a big job, and I am especially impressed with the planning and preparation that have gone into this year's exhibit.

□ In addition, I was pleased to learn that a number of HP people are serving on various WESCON committees. These committees, composed of volunteers from several companies within the industry, do a tremendous amount of work in planning and organizing WESCON activities. Although their efforts receive little publicity, committee members devote many long hours outside of their regular jobs to see that the show runs smoothly and is a success in every way.

This year there are a dozen HP people serving on WESCON committees. By contributing their time, their talent and experience to this important event, they are continuing a long-standing company tradition and one that is tied directly to our corporate objectives.

□ We have always felt that one of our primary responsibilities as a company is to help our industry grow and prosper. One of the ways we do this, of course, is to lend financial support to various industry groups and associations. But it is far more effective if we, as individuals, take an active role in industry affairs and contribute our individual knowledge and experience to organizations such as WESCON.

□ The same is true of our relationship with professional societies. Many of our professional people—engineers, physicists, industrial designers, accountants and so on—belong to various national and regional societies. But membership in these societies is not worthwhile unless it is accompanied by a real desire to devote some time and effort to furthering the objectives of the society.

From a personal standpoint, there are very important advantages to be gained from taking an active role in professional groups. It broadens our horizons, gives us greater insight into what our colleagues in other companies are thinking and doing, sharpens our judgment and helps us do an all-around better job.

As time goes on, we hope we will have more and more people in our company who will serve, in a very active and positive way, their profession and their industry. By so doing, they will add a dimension to their knowledge and experience which is bound to benefit their careers and their company. ◁

David Packard

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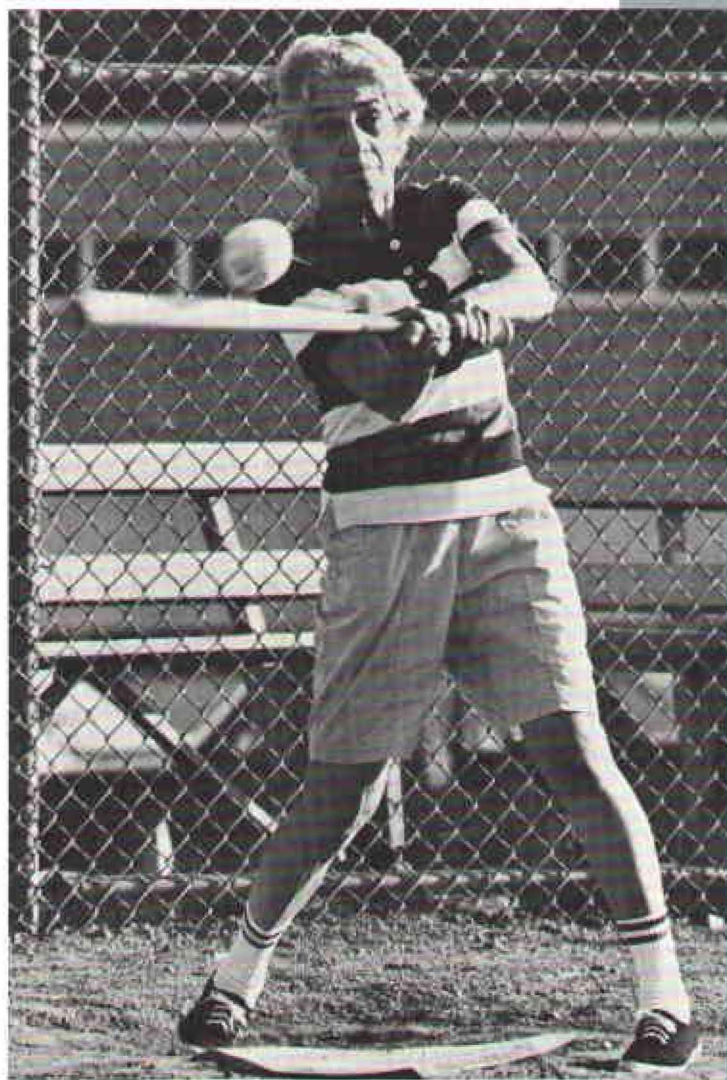
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"I often say that when you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind . . ."

LORD KELVIN (1824-1907)



The Boonton bomber

MRS. Frances (Cap) Caplinger, shown here blasting another basehit for the Boonton Division women's softball team, apparently has discovered the fountain of youth.

How else do you account for a 54-year-old grandmother of four hitting over .400 against girls half her age and playing the hazardous position of catcher as well?

An HP/Boonton employee for 23 years and now a group leader in pre-fab at Boonton, Fran has had an interest in baseball as long as she can remember. She was even a substitute outfielder on the boys' high school team in Smoot, W. Va.

Fran's baseball activity has been limited to spectator-ing in recent years, but formation of a Boonton team this season to play in a Morristown, N.J., industrial league changed that.

But why the tough position of catcher? "Because that's where the action is," says Boonton's busy, baseball-playing grandmother.