

FROM THE EDITOR

ave Packard was one of the nicest billionaires I ever met (the other being Bill Hewlett).

I had seen Dave on a handful of occasions in the last eight years—annual shareholders meetings, retiree parties, various times when he visited the Corporate Offices—but I didn't have a chance to talk with him one-on-one until he retired in 1993.

Dave wanted to pass on some final thoughts to HP employees before retiring as chairman of the board. He decided that *MEASURE*—the magazine he helped start 30 years earlier—was the best way to reach employees.

I prepared a list of questions, put on my best suit and went to Dave's 1950s-era office in Building 3.

Dave, wearing a plaid flannel shirt and bolo tie, was sitting at a table, fiddling with the pencil-like microphone that fed his hearing aids.

He welcomed me warmly, asked me to sit down and continued adjusting the microphone. Actually, Dave's method of adjusting the microphone was literally to pound it on the table several times.

Suddenly, the irony of the situation hit me. One of the richest men in America was dressed like a ranch hand. This one-time bruising college football player was now a frail giant. And his adjustment of the delicate microphone was brutal.

What was supposed to be a onehour interview turned into 80 of the most delightful minutes of my life. Dave talked at length about some of his favorite topics: the values of the company; the HP Way; making a contribution in whatever technologies HP pursued or communities the company entered; and how all employees are important—not just engineers. He didn't say anything magical or earth-shaking, but he was a man of uncommon common sense.

In my six years working at HP, I had always referred to him as Dave. Yet, once I was face-to-face with him, I could only call him *Mr*. Packard.

As the scheduled 60 minutes grew to 80, it was clear that Mr. Packard was getting tired.

Sensing that the interview would end soon, I asked a few final questions about how he planned to spend his retirement. Mr. Packard seemed to gain strength as he talked about his important work with the David and Lucile Packard Foundation. He talked about the Monterey Bay Aquarium, the Monterey Bay Aquarium Research Institute, population control and his increasing interest in bioscience.

Was there anything he hadn't accomplished that he had hoped to?

"As you get older," he said, "your ability doesn't always keep up with your ambition. But I've been very fortunate in my life's work."

Did he have any regrets?

"Well, sure, there are always lots of things that you could have done better," Mr. Packard said. "I'm not going to waste any time on that."

-Jay Coleman



On the cover: He was a rancher—and so much more. In a special 16-page insert MEASURE highlights the life of the late HP co-founder Dave Packard through the anecdotes and emotions of current and past employees.

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MEASURE is published in mid-January, March, May, July, September and November for employees and associates of Hewlett-Packard Company. It is produced by Corporate Communications, Employee Communications section, Mary Anne Easley, manager. Address correspondence to MEASURE, Hewlett-Packard Company, 3000 Hanover Street. 20BR, Palo Alto, California 94304-1185, U.S.A. The telephone number is (415) 857-4144; the fax number is (415) 857-7299; and the Internet address is jcoleman@corp.hp.com.

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MEASURE magazine is printed on recycled paper with vegetable-based ink.

^{*}Accredited Business Communicator by the International Association of Business Communicators (IABC).

It's more than a slogan

DESPERATELY SEEKING

Ret
str

SATISF ACTION:

By Jean Burke Hoppe

What could HP possibly learn from an entertainment giant like Disney? Retail leaders like Wal-Mart and Nordstrom? Hotels like the Ritz-Carlton?

Companies like these have a secret weapon the computer industry seems to be having a difficult time learning—a passion for customers and a deep understanding of what they want and need to feel satisfied.

These world-class companies know how to take customers beyond loyalty and

The term "customer-centered" has been floating around HP for years, but an evolving group in HP Quality is interested in making it more than a slogan.

into commitment-the customer-for-

life realm.

"Our goal is to have a common set of practices within each business that will win HP customer loyalty and commitment," says Bob Horenstein, manager of customer-centered quality. "Learning from the best through benchmarking is one way we'll get there."

Clearly, HP is doing something right already. It has been ranked No. 1 in the computer industry for product support and service quality by *Fortune* magazine for the past eight years. It has garnered the top spot for customer support in DataPro's survey of users of UNIX® system computers for the past 10 years. *Fortune* ranked HP No. 9 on this year's list of most-admired companies. *Forbes* magazine made HP its 1995 performer of the year.

Other companies should be benchmarking HP, right? Well they do, of course. But HP's leadership scores in customer satisfaction make HP only "the best of a bad lot," says CEO Lew Platt.

An industry survey of support satisfaction commissioned by HP's Worldwide Customer Support Operations last year gave the computer industry an average score of 7.6 out of 10 for support satisfaction. HP's score was 7.9, a leadership score but still the equivalent of a C+—not exactly where HP wants to be.

A special area of concern is surviving in mass markets served by the retail channel where there is little or no control over what happens, and it's difficult to track who your customers really are. This is a new territory and a whole new set of customers for HP, Bob says.

"There are so many choices out there. Our customers today want case-of-use and ease-of-installation that we are not providing. They want to buy a computer product, plug it in and use it, just as they do their G.E. refrigerator or Sony television.

"Our customers' expectations continue to rise," Bob says. "Like it or not, we're not being compared to IBM or Compaq so much as to companies outside our industry, such as Ritz-Carlton, Federal Express, First Direct (U.K.) and USAA.

"Customers don't want to hear about how complex this business is, our configuration problems or short product cycles. They want satisfaction and they wield enormous power."

HP learns something useful from every company it talks to, Bob says. "A lot of things don't translate well into the HP culture, but many ideas



center stocked with HP products could look like. Donna Black (right) shows the center to employees Larry Treuarthen and Lori Lorenz.

can and have been adapted and used by HP."

How do some of the best treat their customers? Consider these smooth marketing moves:

- · How could you possibly dislike an automaker who sends your car a birthday card? Saturn attracts hyper-devoted customers (despite 14 product recalls) by such personal attention. When customers call for roadside assistance, the first question they're asked is, "Are you in a safe neighborhood?" The company greets customers returning for recall repairs with a banner reading, "Welcome home, Saturn owners!"
- The General Electric Answer Center in Louisville, Kentucky, is considered the United States' premier call center. Why? The people answering the phones are highly trained and

have everything they need at their fingertips. They can address equipment failures or schedule service calls. Employees who answer these phones are given enormous freedom to be themselves. They'll do any necessary legwork to get an answer for a customer without passing the caller off to someone else.

- In Intuit's Follow Me Home program, customers who purchase Quicken financial software in the San Francisco Bay Area are asked if they'd be willing to let an Intuit engineer witness the initial use of the softwarefrom opening the package and loading the software to setting up accounts and filling in the data. They want to see how "average folks" deal with the product and directions.
- Nike maintains a squad of mobile vans called "Ekins" (Nike spelled

backward), whose primary mission is to restock and repack retailers' Nike shoe boxes to make sure they look great inside and out. Nike wants the entire customer experience to convey a sense of uncompromising quality. Nike builds good relations with the retailers this way.

One problem HP must address, Bob says, is how complex the company can seem to its customers. "Our organizational structure should be invisible," he says.

HP sometimes employs mystery shoppers-HP employees posing as shoppers buying HP products and experiencing the ordering, installation, learning and using processes. A mystery shopper once encountered, within one box, a number of cards and product manuals that referred the

More than a slogan

customer to seven different phone numbers to call for help. These customers are navigating HP on their own until they reach the right person.

John Toppel, worldwide support manager for printers and PCs, says he hates surveys that show HP on top in customer satisfaction. "There's a risk of being complacent, and that's not good. We set very high standards for ourselves and continually push against them. Our Customer Support Centers get 6 million calls a year in the United States alone, and the volume is continually increasing.

"Our philosophy is, "The best service call is no service call,' and we provide feedback on the calls continually to the divisions. We're working on giving the divisions a weekly Top 10 List of the most common customer complaints or troubles so they can take action."

The Boise, Idaho, and Loveland, Colorado, Customer Support Centers have set up what they call "living rooms," featuring nearly every type of PC and much of the software that customers might be using with their HP products. "Our people can sit down and actually walk through the process while the customer is on the phone," John says. "They're using the same products, looking at the same screens."

John says his goal is to empower the people who answer the phones in the support centers so that they can resolve issues immediately and so that problems don't escalate.

"Our people have an enormous amount of leeway to make things right with an unhappy customer. People like Luther Jones, our escalation manager at Boise, know you can create a committed customer if you do right

by them when they're dissatisfied. You can create loyalty out of lessthan-ideal circumstances."

A lot of it comes down to the "ART" of answering the phone, says Alan Blackwood, process manager for the Americas Call Management Program. ART, an acronym coined by Bell Canada, stands for accessibility, responsiveness and timeliness. "All the benchmarking studies and research show that these three things matter most to customers calling with questions or complaints," Alan says.

"Callers want it to be easy to access the information they need, and they like to talk with real people. They want a response from the first or second person they talk to. Depending on the complexity of their need, people are tolerant of waiting, but there's a definite limit."

There's been a massive training effort the past three years for the 4,000 employees who work with customers on the phones at HP's U.S. sales offices, call centers and processing centers, Alan says.

Many HP entities are embarking on programs that will give them an in-depth knowledge of their customers, says Jeff Jaques, manager of customer knowledge in HP Quality. "Understanding customers' needs and how they perceive working with HP has a direct impact on profits," Jeff says.

The Test and Measurement Organization has started some very strong initiatives that will result in each of its organizations using a common approach to measuring customer satisfaction, TMO Canada, the LaserJet Solutions Group, the Spokane (Washington) Division and the Medical Products Group are among the HP entities that recently embarked on

Numbers to keep you awake nights

Here are a few random statistics about customer satisfaction issues for MEASURE's more linear readers:

- · As many as 40 percent of customers who say they're satisfied still will never buy from you again.
- It costs from two to 25 times as much to get a new customer as it does to keep a current customer.
- People tell only four or five friends about a truly satisfying experience. From 16 to 18 will hear about a bad one.
- The former Computer Products Organization receives 6 million calls per year at its Customer Support Centers.
- The average time customers spend on the phone seeking help is eight minutes.

- The calls cost from 6 to 8 cents per revenue dollar.
- · If a caller is transferred four times, customer satisfaction can decline by as much as 80 percent.
- · Satisfaction also declines while customers are on holdby 15 percent after one minute; another 5 percent after two minutes; and another 20 percent after three to five minutes.
- HP has more than 600 800numbers in the United States alone.
- Seventeen percent of the 3.6 million calls the General Electric Answer Center in Louisville, Kentucky, receives each year turn into sales for GE.

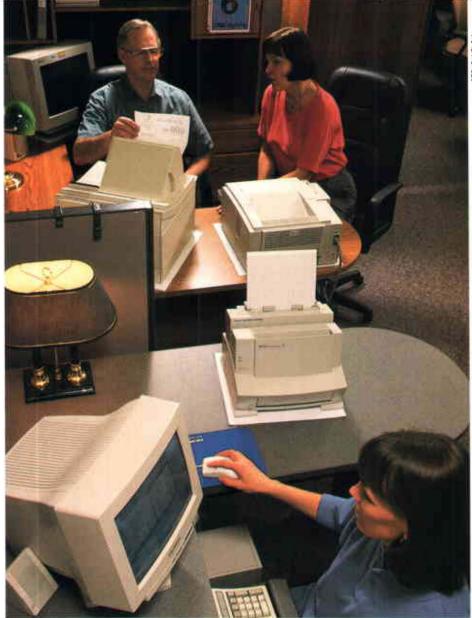
processes that will help them better manage and use customer feedback.

The Computer Systems Organization just finished a pilot with US West (famous itself for market research and strategic decision-making) of a relationship-testing process for HP's largest accounts. HP teams will interview 30 to 50 people within customers' organizations-everyone from decision-makers to those who have negative feelings toward HP or its products.

US West's response to the process was extremely favorable. One executive vice president said it showed that HP really cared about them as customers. "You're really on the right track with this," she said, noting that another major supplier to US West last year sent her a nine-question survey and misspelled her name. Similar tests are under way with GTE and Procter & Gamble.

A recent internal and external benchmarking effort showed the factor most often executed poorly was right at the beginning of the sales process—understanding user needs.

"We discovered you can't understand customer needs in a conference room," Lew Platt told Design Super-Con last year. "You really have to spend



In the "living room" at the Customer Support Center in Boise, Idaho, customer support technicians (from left) Pat Wees, Jan Ahlin and Ann Dallas provide technical assistance to users of HP LaserJet printers by replicating the problem on various brands of equipment.

some time in the customers' environment, watching what they do...almost like cultural anthropology." M

(Jean Burke Hoppe is a Lincoln, Nebraska-based free-lance writer. -Editor)

Handling complaints with class

Following are the key characteristics of an effective customer-complaint system, adapted from Customer Satisfaction Measurement and Management by Earl Naumann and Kathleen Giel-and some examples of companies that do a great job at each.

Easy access

British Airways, Marriott, Sheraton, Pizza Hut

Fast response

Diamond Shamrock, Solectron

No hassles

Wal-Mart, Quill Corp., Land's End

Empowered employees

Ritz-Carlton, Lexus, Nordstrom

Employee training

Federal Express, General Motors, Solectron, Monsanto

Customer database

Diamond Shamrock, USAA, Cellular One

Organization commitment

Xerox, L.L. Bean

By Jay Coleman

A band of loyal HP retirees springs into action to handle some 750 customer complaints a month to HP CEO Lew Platt.

Jan Black leans forward in his chair and recalls his favorite customersatisfaction story.

It was 4:30 on a Wednesday afternoon in December 1995, when a frantic U.S. Army officer from Fort Polk, Louisiana, called HP for help. His Army unit was scheduled to leave on maneuvers the next day, and the HP fax machine he had ordered hadn't arrived.

Jan immediately started placing phone calls and found an HP dealer in Shreveport-200 miles from Fort Polk. He convinced the dealer to stay open late, then called the Army officer back and said, "There's a fax machine waiting for you in Shreveport. The dealer will stay open until you get there."

"A couple of days later, I read that those guys were on maneuvers in Kuwait," Jan says.

This success story is one in a growing list recorded by HP's Executive Customer Support Group, a team of 20 retired and part-time HP employees who respond to the hundreds of customers who call or write to HP CEO Lew Platt.

The Lew Line, as the group is known, began in July 1994 as a way to centralize complaints that come to Lew's office. It also is an opportunity to resolve these complaints quickly by a staff of knowledgeable and highly motivated people.

"All of the people who work here are retirees who know the HP culture and know how to get things done," says Fran Rudé, who manages the group. "The customers who call or write to Lew are understandably frustrated or angry, and the retirees are



HP Korea G.M. Doug Halbert spent a day at the Executive Customer Support Group to learn firsthand what irate customers say.

fully empowered to solve the problem the best way they know how."

Usually that means logging in the complaint, referring it to the appropriate HP division and following up to make sure the problem is corrected. Sometimes it means handling the conflict personally, as Jan Black did in December.

"I still own HP stock, and I'm interested in what's going on in the company," says Jan, a former worldwide distribution manager for HP's Cemponents Group and a 21-year employee before retiring in 1990. "This job keeps you mentally alert. Every situation is different."

Bill Martin, a computer programmer in the Corporate Tax and Distribution department before retiring from HP in 1990, likes the challenge of trying to make an unhappy customer happy again.

"One woman called before Christmas because she had a leaky printer cartridge," Bill says. "She said, 'If a company as good as HP is doing this, there's no hope for American industry.' I apologized for the problem and sent her some replacement cartridges. She ended up sending me a Christmas card and a note, saving that I had restored her faith in Hewlett-Packard."

Retaining customers is key, says Jeff Utigard, who assists Fran.

"The customers we're in touch with are on their way out the door." he adds. "We have the opportunity to win them back. Otherwise, they may just leave, and you may never know it."

Fran meets with Lew several times a year to report on the volume of calls and letters, and to identify trends and problem areas.

"Most of the calls and letters that Lew receives involve problems that should've been handled at a lower level, but the HP people who first talked with the customer were too busy to handle the complaint or didn't think it was their job," Fran says. "Often, we can influence process changes with internal customers that, we hope, will prevent the problem from reaching Lew again.

"For example, one person called in because she received three defective HP printers. Many HP customers are incredibly loyal, but even I wouldn't put up with three defective printers!"

A consumer-oriented, \$32 billion company that ships millions of products a month is bound to have some problems, says Fran, who has seen the volume of calls and letters increase from about 100 in July 1994 to more than 750 in January 1996. Her function may be the last chance to convert a dissatisfied customer into a loyal one.

"The key is to let them know that you're here to help," says Ed Kanazawa, who retired in 1991 from the Components Group. "I let them know I'm on their side!" M



Dealing with sometimes angry callers to CEO Lew Platt's office for eight hours every day keeps (from left) Fran Rudé, retiree Joe Spinozzi and Jeff Utigard on their toes.

What can / do?

Customer satisfaction is part of every HP employee's job, says CEO Lew Platt. To encourage that, Lew instituted the CEO Customer Satisfaction Award in August 1995.

Functional and general managers can nominate individuals or employee teams for the engravedcrystal award.

In the first year, more than 300 awards were presented.

Employees receive the award for extraordinary acts of heroism, innovative or creative solutions, quick turnaround efforts or sustained excellent service.

Here are two examples:

· In December, a customer in the lobby of the Colorado Memory Systems Division in Loveland, Colorado, complained about his faulty HP tape drive, Sam Shertzer, a production engineering assistant who was updating a product display case in the lobby, overheard the conversation. He took the tape drive to the production department, had it repaired and returned the working product to the startled, but now happy, customer.

· During an unexpected power shutdown at HP's Grenoble, France, site, a team of test engineers took the refrigerator-sized equipment to an employee's nearby home, finished the testing and delivered the hardware to the customer on time.



By Mary Anne Easley

The laboratory of the future is wherever it's needed—in a manufacturing plant, on a boat, in a pasture—even in your home.

"Smaller...faster...cheaper...and smarter."

Sound familiar? It should to anyone in the electronics industry. But in this case, it's advice chemist Dr. Ursula Spichiger-Keller gave the management team of HP's Chemical Analysis Group (CAG).

Dr. Spichiger-Keller was one of a six-member "thought-leader" panel assembled last August in Monterey, California, by Ideascope Associates to help CAG plan its future. She is an associate professor at the Center for Chemical Sensors/Biosensors and BioAnalytical Chemistry at the Swiss Federal Institute of Technology.

Ideascope is a consulting firm that assists companies in breaking down boundaries to identify tomorrow's opportunities. CAG is just one of 30 HP entities who've worked with Ideascope on strategic initiatives.

Other "thought leaders" on the CAG panel were from the food, pharmaceutical, environmental monitoring, bioscience and indoor environmental engineering industries. Some of these are traditional markets for HP, while others are unexplored.

The panel was one part of CAG's "Tsunami" project led by group G.M. Rick Kniss, who took the helm in May 1995 when the business was called the Analytical Products Group. "Tsunami" is an apt title for the big wave bringing sweeping change and a new sense of urgency to the group.

Although HP today is a leader in the field of chemical analysis, changes in the marketplace and raised revenue and profit expectations within HP have prompted CAG to look for new opportunities to extend its current businesses.

"Tsunami" is an effort to:

- grow the traditional laboratory ousiness;
- meet customers' emerging needs for distributed measurement—going outside the lab with smaller, portable instruments and sensors that are reliable and easy to use; and
- link the lab and its extensions with integrated information management that's an HP advantage.

With a significant percentage of the market in gas chromatography, HP clearly is the market leader. In liquid

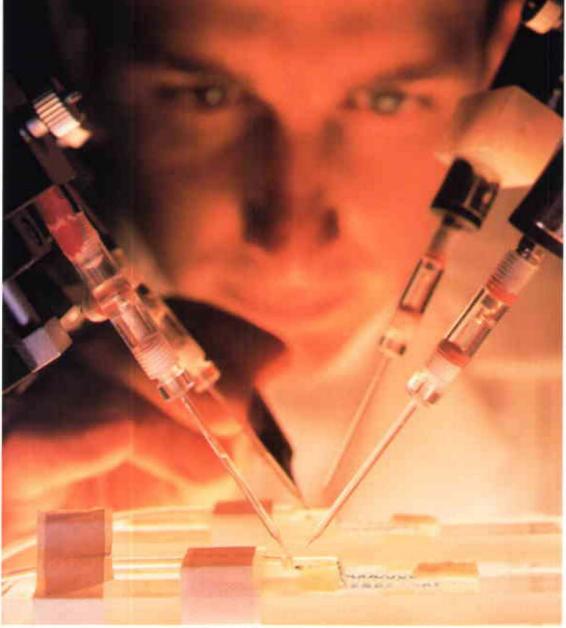
chromatography, HP holds the No. 2 position, and in mass spectrometry HP leads the benchtop market. "We would be nuts if we were to walk away from this business," says Rick, explaining how important it is to defend HP's current business. With its HP 1100

liquid chromatography system introduced last year, the Waldbronn (Germany) Division hopes to become the market leader. "The system costs less to purchase and to operate than other models," says Marketing Manager Lynn Jarke. It's also targeted to pharmaceutical customers. "Theirs is a heavily regulated industry,"

Lynn says, "and it's designed to help them more easily comply with government specifications."

The California Analytical Division (CAG) is responsible for mass spectrometry. In recent years, the division added software and instruments for bioscience (the combination of pharmaceutical and health care), which were once scattered in various parts of HP.

Customers for mass spectrometers are wide ranging and need to measure everything from hydrogen, the smallest molecule, to DNA, one of the most complex. They include companies in the food and beverage, pharmaccuti-



Bioscience companies are some of the Chemical Analysis Group's newest customers.

cal, chemical and petrochemical industries, university labs and environmental agencies-and now bioscience companies.

Entering the field of bioscience is changing CAG's culture to one that's more entrepreneurial. "Our traditional business has been around for 35 years, but bioscience is all about the 21st century," says division G.M. Dick Begley. "We have classic old technology plus very hot new technology."

Everyone in the division completed a culture inventory survey, describing the culture as it is now and the culture they want. "Changing the culture is important-getting everyone to behave like an employee/owner,"

Dick says. He expects it will take 18 to 24 months to accomplish a divisionwide behavioral change.

"Bioscience is at once esoteric and a competitive new frontier," Dick says, and he seems to have the right combination of credentials: Dick grew up in New York's South Bronx and later earned a Ph.D. in applied physics at Stanford University.

Major shifts in current customer industries are causing CAG to pursue its second "Tsunami" objective-to explore new opportunities. Big pharmaceutical companies have been devouring smaller ones, environmental test labs are consolidating, and

Tsunami

there's been little or no new investment worldwide in the chemical and petrochemical industries. All of this translates to slower growth.

Beyond the lab

Customers want to analyze substances anywhere and any time, whether preparing a field for planting, cleaning up a chemical spill, monitoring the water supply or ensuring air quality indoors or outdoors.

Early efforts to develop smaller instruments and sensors are being undertaken by the Little Falls Analytical Division (LFAD), which also is responsible for gas chromatography and the columns and supplies business. G.M. Nancy Kerins, who came to CAG in November 1995 after 17 vears in the Medical Products Group, says. "Our customers tell us again and again they'd like to bring the measurement to the sample. They're tired of bringing the sample to the lab."

Brian Holden, a marketing program manager in LFAD, is part of a team investigating sensor-based systems as a business. He says, "There's a lot of oppor-

tunity in these systems. We just have to determine what HP can contribute in this business that nobody else can." He adds that HP's MC² capabilities give the company many advantages over competitors.

Such devices will not only be smaller, but simpler and less expensive, and they'll perform multiple functions.

Rick Kniss imagines that such a small, portable instrument could one day be used to monitor the air quality in an office building or the quality of tap water at home.

A multitude of other new markets awaits-chemical, power, transportation, the home and personal care,

information environment. They don't want to do it themselves. The goal is a lab in which all the equipment is networked-inside the lab and with key external entities anywhere in the world—and where there is one simple user interface so that people can easily access information and no longer need to continually re-enter data.

It's here that MC²—HP's unique capabilities in measurement, comput-

> ing and communicationsis a real advantage. HP is one of only a few companies with chemical-analysis expertise and systemsintegration expertise to bring an efficient information environment to the lab.

CAG at a glance

- Year started: 1965 with acquisition of F&M Scientific Corporation, Avondale, Pennsylvania
- · Major current products: gas and liquid chromatographs, mass spectrometers, columns and supplies
- 1995 revenue: \$806 million
- · Locations: Palo Alto, California (mass spectrometry, bioscience products); Waldbronn, Germany (liquid chromatographs); Wilmington (Little Falls), Delaware (gas chromatrography, sample preparation, columns and supplies and distributed measurement); Yokogawa Analytical Systems, Inc., Tokyo, Japan (inductively coupled plasma mass spectrometry elemental analysis); HP Shanghai Analytical Products Co., Shanghai, China (gas chromatographs and spectrophotometers)
- · Group G.M.: Rick Kniss
- · Major markets: pharmaceutical, biopharmaceutical, chemical/petrochemical, environmental
- Major competitors: Perkin-Elmer, Thermo, Waters

even the semiconductor industry, which needs to measure smaller and smaller contaminants.

Information that can be shared

Customers tell HP they want their vendors to supply all the necessary computer links, both hardware and software, to ensure an integrated

Partnerships

Alliances are key to CAG's plan for success. "We'll have to rely on alliancesinside and outside HP-to grow the business. This also is a culture change," Rick says. CAG may be a leader in MC² efforts in HP, partnering already with the Test and Measurement and the Computer Systems organizations, as well as with the Medical Products Group.

CAG has taken Dr. Spichiger-Keller's advice seriously as the group

explores smaller, faster, cheaper and smarter instruments. "We have an opportunity to be a real business partner with our customers," G.M. Nancy Kerins says. "This means good business potential, but it also has potential for satisfaction for every employee." M

PEOPLE 3 2

For three HP families, it's goodbye for now to compact cars, two-bedroom houses, traveling light, quiet evenings and orderly lives.



A bundle of babies

By Jean Burke Hoppe

"Leave your name and number and we'll try to get back to you before the kids go to college," says the cheerful voice-mail message at Patty and Scot Shier's home in Westchester, California.

Patty, software support engineer in Americas Customer Support in the Los Angeles, California, sales office, made history January 23, 1996, by giving birth to the healthiest set of quintuplets ever born in the United States. Of the fewer than 40 U.S. quint births on record, Patty's 33 weeks was the longest gestation period. Her babies' birth weights were the highest: from 3 pounds, 5 1/2 ounces to 4 pounds, 5 ounces. All five babies were able to breathe on their own from the start.

Patty is not the first HP employee to receive this complicated blessing. In fact, she's the third:

 On January 27, 1993, Sara Rothmuller, now an R&D manager at HP's Lightwave Operation in Santa Rosa, California, and her husband, Ken, became the first HP family to have quintuplets.

The July 1993 HP VideoMagazine featured the tiny Rothmuller quintuplets, including a video clip with all five babies in Sara's lap. Today, such a "lap shot" would be difficult because these healthy children wear size 6 clothes and total more than 200 pounds.

As their pediatrician recently said while attempting to plot height and weights on the growth chart, "They're all chart busters."

· And on March 9, 1995, Martin Ryberg, Professional Services Organization consultant at HP Argentina

Bundle of babies

headquarters in Buenos Aires, and his wife, Victoria, also became the proud parents of perfectly healthy quintuplets—the third set to be born in Argentina.

When Patty and Martin discuss the miniature tornadoes that have blown

through their lives, rearranging absolutely everything, you know that these 10 babies are in good hands. Both sets of parents are filled with

"I thought to myself, 'This is not happening,' " Martin says.
" 'This is a dream.' "

awe and joy at what has been given to them; both are unflappable and trust that all will be well. Both have an abundance of humor and humility about the responsibilities of parenting enough children to fill a small daycare center.

Martin was working in Mexico City when he and Victoria sought fertility treatments to start a family. Their first son, Matias, was born April 13, 1992. When the Rybergs returned to Argentina in early 1994, they decided Matias needed a sibling.

Victoria took the same drug at the same dose that she took when Matias was conceived. Within two months she was pregnant. Martin was on a business trip to Washington, D.C., when Victoria called to tell him the overwhelming news.

"I thought to myself, 'This is not happening,' "Martin says. "'This is a dream. I will wake up and everything will be fine. Surely the difference in altitude between Mexico City and Buenos Aires couldn't result in this!'"

But within 10 minutes, he says, "I decided the only important thing

was that the babies be born without problems."

Victoria spent the rest of her pregnancy in bed, dealing with a very jealous 2-year-old. "He didn't understand why his mother could not get

> up and play, but he figured out very quickly that he could do anything he wanted, and she couldn't do too much about it," Martin says.

"I supported 40 customers

in my job so I'm used to

managing many things

at once."

The babies—one boy, Santiago, and four girls, Malena, Pilar, Florencia and Cecilia—were born at 32 weeks gestation. They had no immediate problems, although two of them later had surgery to repair a stomach valve. They stayed at the hospital for two months to gain weight, giving Victoria and Matias a good time to reconnect and prepare.

"He had his mother back, and the babies were bearable since they weren't home yet," Martin says. "When he saw them, he would kiss them

—or try to strangle them. It still isn't easy for him."

It's one of the many changes the Rybergs have gone through in the past year. The family has moved to a larger house. And they've received help from Argentinean companies, which provided diapers, formula and nursing care for a year.

"There were always at least two babies awake during the night," Martin says. "Having help meant we could kind of sleep. Even today, there's always somebody waiting for something."

When people comment on the noise level at their home, especially now that the children are at full toddler speed—cruising, bruising and exploring—Martin laughs. "The environment is like people who live near an airport with jets going by all day. You can get used to anything. I say, 'Noise? What noise?' "

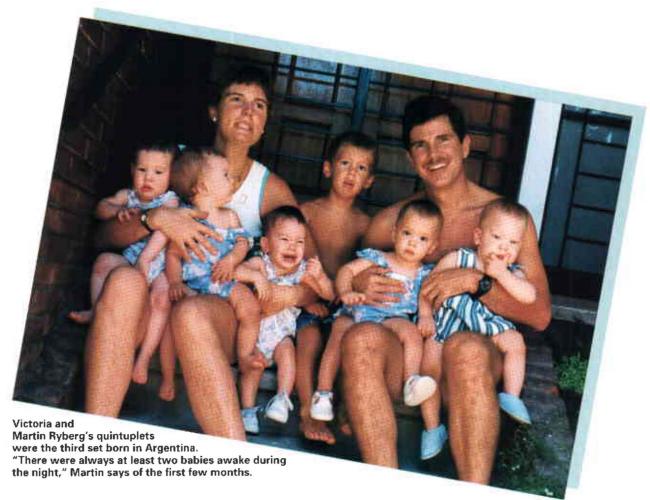
It's a tremendous amount of work and worry, and Martin and Victoria wouldn't trade it for anything. "We both love kids and wanted a big family. Now we've got it."

Patty Shier's five newborns—Sarah, Hannah, Rachel, Joshua and Jonathan—had all been home from the hospital for two weeks when *MEASURE* caught up with the new mother. By then, she was used to

interviews. As the Rybergs had learned before them, healthy quintuplets are big news. One of the shows that interviewed the Shiers was kind enough to tabu-

late their future college bill: approximately \$1 million.

Patty is coping, thanks to the help of volunteers from their church, HP and the community. Thirty scheduled volunteers come to the Shier's home to help feed, diaper and cuddle the babies, and they have hired a woman to help overnight.



This is a brave new frontier for Patty and Scot. Both grew up as only children; neither had ever diapered a baby before. "We took parenting classes and read a lot of books," Patty says. "That was our preparation."

"People think we must be overwhelmed, but this is all we know. We had no expectations. The days are long and challenging, but manageable. I believe God doesn't give you more than you can handle. We've received a tremendous amount of support and prayers, even gifts and money, from people we don't even know. The outreach to us, here in this big city, in tough Los Angeles, restores your faith in people."

Patty and Scot tried to conceive for five-and-one-half years. Patty took a medical leave from HP in July 1995 to devote all her energy to their last attempt at in-vitro fertilization. She learned six weeks later that she was carrying quints and was advised to abort two or three of them.

"We had already decided to keep all the babies if the process resulted in multiple births," Patty says. "We trusted that God would take care of us and them."

She kept that faith even as she watched her 115-pound frame pack on 75 pounds through the 33-week pregnancy. The babies weighed a total of 18 pounds, 7 ounces at birth.

Patty attributes her successful pregnancy in part to HP's support in letting her take medical leave. She felt the company's presence at the hospi-

"They used HP equipment to monitor my contractions before the birth, and my blood pressure and vital signs during recovery. They measured the children's heart rates with HP equipment. It made me feel secure."

At two months of age, the infants started to interact with each other and to coo, smile and make their personalities known. Sarah, the first-born, barely makes a peep. The first-born boy, Joshua, is decidedly strongwilled. Rachel, the smallest, is quiet and serious. Hannah giggles and smiles. The last-born, Jonathan, is good-natured, but has a voice of his own.

Patty says she's using many of the skills she honed at work to organize the care of her children.

"I supported 40 customers in my job so I'm used to managing many things at once. I make lists, plan my time and set priorities.

"Still, the experience of having quints is a lot like riding a roller coaster. You take the ups and downs as they come, and you never know what's around the next corner. It's a ride that we thoroughly enjoy!" M

(Jean Burke Hoppe is a Lincoln, Nebraska-based free-lance writer, a former MEASURE editor and a frequent contributor.—Editor)

A salute to Barney

As a former HP employee with 20 years at the company, I read with sadness the note on the death of Barney Oliver (January-February).

As an engineer and manager at HP during the 1970s and '80s, I had exposure to Barney at division reviews and technical project reviews. Making demonstrations and presentations to top corporate managers made one nervous enough. But my peers and I cringed at the thought of preparing for Barney.

He was a legend of high standards and an intellect that was nonpareil. His insistence on the proper use of the English language was just the tip of the iceberg. You quickly learned that there was a depth of knowledge and understanding that was proper for any project. And woe be to you if you were not up to this task.

You never interacted with Barney without learning a lot, not only in your area of expertise, but in any of his myriad areas of interest.

He will be missed, but always remembered by many of us.

TOM HASWELL Corvallis, Oregon

Getting a grasp

I wanted to tell you how much I enjoy your From the Editor column in *MEASURE*. I like the personal tone you put into it and the discussion about the writing process.

As a part of HP's recent acquisition of Convex Computer, *MEASURE* has helped me get a grasp on what HP is. Keep up the good work.

DANNY FAUGHT Richardson, Texas

Thanks, Danny, and welcome to HP.—Editor

MEASURE is a treasure

The person (January-February) who said that *MEASURE* is a piece of fluff certainly takes too much for granted and does not seem to have enough appreciation for this great magazine that surely draws readers to the one HP.

I recently transferred from Hewlett-Packard Japan to Yokogawa Analytical Systems, and one of the first things I did was to make sure we got onto the distribution list for this terrific magazine. The reason is that we Japanese tend to be pretty good at reading and writing English, but very bad at speaking and listening. In this sense, *MEASURE* was a great way for us to study English and, at the same time, get to know about HP.

For me, *MEASURE* sure is a treasure!

AKIKO OGURA Tokyo, Japan

Arrigato, Akiko. I'm speechless.— Editor

Stop me before I manage again!

Congratulations on producing an issue (March-April 1996) that I was compelled to read cover to cover for the first time ever.

I do have a comment about the article titled "What I learned as a manager" by Duane Gray. Having worked with a handful of new managers at the Vancouver site, Duane's insight into the world of management would be perfect for a new-manager training class. It is too bad, however, that there is no training that prepares a prospective manager.

My observations are that most new managers learn through their own mistakes—sometimes at a cost to their direct reports, as well as to themselves in damaged relationships. I think the tuition is too high.

HP would benefit if all aspiring managers knew what they were getting into and were able to get the mentorship and training prior to attaining management positions. A formal training program for prospective managers would be a wonderful start.

Keep up the great work, and I will continue reading the whole issue.

SAM KIM Vancouver, Washington

More on the Company Store

A colon was mistakenly left out of the Internet address for the HP Company Store in the March-April MEASURE. The correct address is http://www.hp.com/go/hpstore.

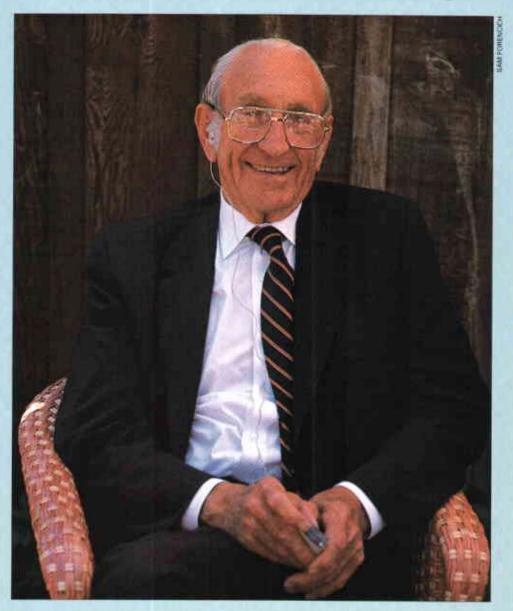
Employees who prefer to receive a printed copy of the HP Company Store catalog can call (415) 335-4715, extension 334, or send a fax to (415) 335-4720.

Please send mail

Do you have comments about something you've read in MEASURE? Send us your thoughts. If we publish your letter, you'll receive a free MEASURE T-shirt (one size fits most).

Send your comments to
Editor Jay Coleman (the fax
number and address are on page
3). Please limit your letter to
about 150 words, sign your name
and give your location. We
reserve the right to edit letters.

The Packard touch



To those of us who knew him, he will always be "Dave."
—BILL HEWLETT

THE PACKARD TOUCH

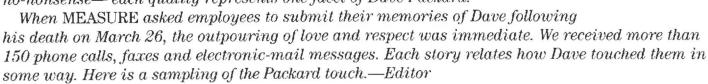
ave Packard's influence on the electronics industry, management and philanthropy was nothing short of extraordinary. It took a six-page press release and an eight-page special section of the San Jose Mercury News newspaper—distributed to HP employees in April —to begin to capture the life of this rare man.

While the tributes and remembrances of Dave have been extensive and universally positive, they

don't tell the profound effect that he

had on HP people. Warm, generous, humorous,

no-nonsense— each quality represents one facet of Dave Packard.





Dave was my technician

During the mid-1950s, Dave wanted to show our productcalled the 803/417 RF & UHF bridge—at a conference at the U.S. Naval Sound Lab. We had two months to do about four months of work.

One evening, I was taking data to confirm the accuracy of the bridge. At about 6:30 p.m., Dave returned from a meeting. He watched and turned a few knobs for the test, then asked if I had eaten dinner. I said, "No," and he told me to go home to eat.

I returned a half hour later, and he was still taking data. I said, "Dave, you go for your dinner and I will finish up." He said he wasn't hungry. We worked together until past midnight. Dave and I carried the bridge to the show on schedule. We sold many of them.

The moral of the story is that Dave or Bill never would ask a worker to do a task that he wouldn't do himselfeven to the point of working as my technician.

> ART FONG Palo Alto, California



Bill and Dave shared 50-plus years of laughter and memories in 1993 at a press conference when Dave announced his retirement.

"I was mad as hell at Packard"

In 1989, during HP's 50th anniversary, Bill and Dave attended a press conference at the annual HP Communicators Workshop, which brought together editors and communications people from around the globe. Among the first questions to the co-founders was "Have you ever had serious disagreements?"

Dave responded, "You want to start, Bill?" Bill replied, "Go ahead. You start."

Dave answered, "You see, that's the way it worked. Well, ever since we met in 1930, I don't think we've ever had any major disagreements."

Bill noted, "I can only remember one, and I was mad as hell at Packard. And then I discovered that we were saying exactly the same thing. We had just misunderstood each other."

> GORDON BROWN Los Altos, California

He saw all of us the same

In 1993, I met Dave at HP Labs Diversity Day. He stopped by our Disability Awareness booth and complimented our display, including materials covering a wide range of people with disabilities.

He saw that there were materials dealing with deafness. He picked up a brochure and told me that he—like me wears a hearing aid. This gave me the opportunity to tell him about the Deaf/Hard of Hearing Employee Network and what we have been doing. He said he was happy to learn about us working as a group to eliminate barriers and encouraged us to continue to do so.

After meeting him, I remember thinking here is a person that sees all of us as if we are the same. No one is above or beneath one another.

> PATTY O' SULLIVAN Palo Alto, California

Breakfast with the President

Because of my job in security. I had the privilege of driving Mr. Packard many times to and from the San Francisco airport, as well as visiting him at his home. I learned a great deal from him about HP and his life.

On one ride from the airport, he told me about his recent trip to Washington, D.C. It was quite late in the evening and he asked me what time I went to work that day. I told him it was about 7 a.m. He replied that he had been up since about 6:30 a.m. east coast time because he had to meet the President for breakfast.

He apologized for coming in so late and making my day long. I thought to myself, "Here is someone who had breakfast with the President of the United States this morning. He's riding in my car and he's worried about my long day!"

I don't think that I will ever forget that conversation or Mr. Packard's consideration for as long as I live.

> STEVE WILSON Palo Alto, California

MBWA at the demonstration

The most influential memory of Dave Packard for me took place in the late 1960s or early '70s. There was significant unrest and chaos throughout our world. There was a great deal of anger directed toward almost anyone characterized as part of the "establishment."

The media were filled with pictures of disruption, protests and violence. One night in the Palo Alto Times-Tribune newspaper there was a picture of another demonstration. But this one was different. In the middle of the picture was Dave, sitting on the steps of one of Stanford University's buildings, surrounded by the demonstrators.

The caption and story related why he was there: He wanted to learn the demonstrators' dissatisfaction firsthand. He put himself at personal risk in an effort to understand better. He applied the now-famous "management by wandering around" to his personal life. He lived what he preached—he "walked his talk."

> **BILL TAYLOR** Palo Alto, California

Too busy to talk to Dave

In the early 1970s, shortly after his return from Washington, D.C., Dave and Bill, with all the corporate officers, attended one of the annual reviews for the Loveland

(Colorado) Division. The reviews primarily concentrated on new-product introductions and engineering programs.

It was the custom to take a mid-afternoon break, which gave us the opportunity to practice management by walking around and meet the Loveland people.

We went in pairs to the various departments, and I went with Dave to the production area. We were walking down one of the new production lines when Dave stopped in front of one of the stations where a lady was busily inserting components into printed-circuit boards.

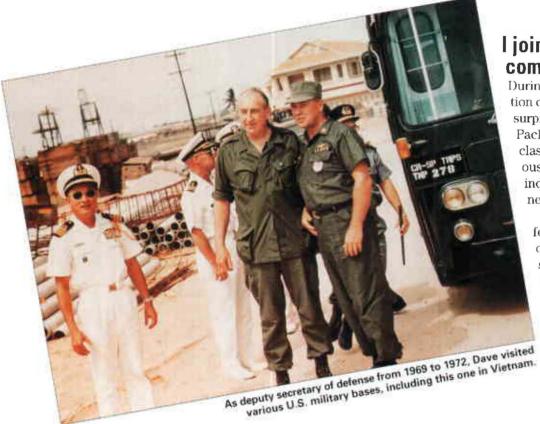
He said, "Hello, I'm David Packard and I wonder if you would explain your process." Without looking up, she replied, "I'm too busy to talk now. I have to get these boards done." Dave just laughed and said, "That's all right, young lady; you just keep doing what you're doing."

She probably still holds the record as the only person in HP who was too busy to talk to David Packard.

> BOB BONIFACE Palo Alto, California



Dave and President Richard Nixon took the podium in 1960 during a dinner in San Francisco for the combined Harvard and Stanford University schools of business.



I joined the right company

During my new-employee orientation class in 1975, I was pleasantly surprised to learn that Dave Packard would address the class one afternoon. I was curious to know what this lion of industry would have to say to neophyte engineers.

After a welcome, Dave focused on the importance of maintaining the highest standards of business conduct in all areas of work. At that point, I knew I had joined the right company.

RICK PALM Palo Alto, California

No one has to knock

I joined HP in 1959 and had only worked for the company for six hours when I met Dave, who was visiting our assembly line.

He was wearing a white shirt with the sleeves rolled up, black tie, black pants and about a size 16 shoe.

When I told him it was my first day, he said, "Congratulations," and we talked for a while.

Before he moved on to the next person, Dave said, "My office is over there in Building 8. Any time you have a question or something on your mind, just walk right in. There's no door: I had maintenance take it off so no one has to knock."

That was my first imprint of Hewlett-Packard and the HP Way-right from the top.

> JIM COLE Sunnyvale, California

Congratulations—and a check from Dave

I will always cherish the memory of receiving my profitsharing checks from Dave. If any co-workers were away from their desks, it seemed as though Dave would hang around for them to return. He wanted the opportunity to congratulate them in person. He was so sweet and sincere in his gesture. Those were great times.

> BEV KNOBEL Santa Rosa, California

I never met him, yet...

He was the founder of the company in which I work, and I miss him like a friend. I never met Dave, yet I feel as though I know him. I guess that's what makes HP special. TROND HAUGEN Oslo, Norway



Dave and electronics technician Ben Merfalen celebrate HP's 10,000th cathode-ray-tube terminal in 1977 at the Data Terminals Division.

Like shaking a catcher's mitt

I remember around 1968, when I was an apprentice in the HP Labs model shop, how Bill and Dave would come through yearly to hand out profit-sharing checks. The checks were always followed by a sincere "Thanks for a great job" and a raft of questions by "Pappy" about what we were working on at that time and how things were going.

Dave's handshake seemed like shaking hands with a catcher's mitt. This always impressed me and really made a person seem like an important part of the HP team. Those impressions and feelings have lasted throughout a 30-plus-year career.

BILL DIXON McMinnville, Oregon

I was doing my job for Pappy

When "Pappy" walked into a room, he usually was the biggest one there, and when he spoke, there was no

doubt. Dave had a way of making you feel like he personally appreciated what you did on the job. All my years, I performed my jobs as though I were doing them for him.

That was one of the unique characteristics of this great leader. He taught and set an example of the importance of values such as integrity, honesty, sincerity, honor and fair play.

MILO PITCHER Fort Collins, Colorado

"The worst cup of coffee I ever had"

In 1964, I was working in a small satellite building in Waltham, Massachusetts. There were only about 20 employees there, so it was doubtful that Dave would visit after his tour of the main facility.

However, Dave arrived during our break time and sat down with us. He asked where he could get a cup of coffee. In those days, coffee was from a vending machine for a nickel a cup. Like a lot of vending-machine coffee, you were never sure what you'd get.

The expression on Dave's face made it clear that it was pretty bad coffee. He didn't say anything about it, but urged us to continue our conversation. I was talking about my car's broken water pump.

To our delight, a new coffee machine was delivered within the week. And even though the coffee wasn't much better, it was the thought that counted.

Several years later, I met Dave again and thanked him for the coffee machine. He not only remembered the incident, he said, "That was the worst cup I have ever had." To my surprise he also remembered and asked about my water pump.

Perhaps that's what makes some men greater than others: He really cared about the little things. And, I guess, that is what the HP Way is all about.

> DICK BEAL Andover, Massachusetts

The day Barney Oliver slapped Dave

Upon joining HP in 1967, I was assigned to the former Avondale (Pennsylvania) Division. We lived for nine years in nearby Wilmington, Delaware, and I became well acquainted with many executives from the neighboring world headquarters of three major chemical companies.

Admirable as these fine people were, I couldn't help but observe that we in HP worked in an entirely different atmosphere than they.

One hot summer day in the mid-1970s, I went up to HP's New Jersey Division to attend its annual review. The new building was not quite completed, the air conditioning was not yet fully operational, the outside doors were wide open, and the flies were buzzing around us quite fiercely.

I was seated next to Barney Oliver in one row, while

immediately in front of us sat Dave Packard. Barney, bless him, was armed with a fly swatter. When one of the little winged miscreants made the fatal mistake of settling momentarily on the back of Dave's head, Barney couldn't resist flattening the intruder with one well-aimed blow.

Understandably startled, Dave rose up, whipped his head around, saw it was Barney and immediately burst into laughter while the two of them exchanged thumbs-up success signals!

Can you imagine how-and even whether—this revealing little scene would have played out elsewhere in the hallowed halls of most of corporate America?

EMERY ROGERS Palo Alto, California

"This is manifestly absurd"

For all his warmth and kindness, Dave Packard could be harshly critical of careless thinking and faulty judgment. A journalist once described him, quite accurately, as a man who "did not suffer fools gladly." A now-retired HP accounting manager has a personal memento of the Packard pique.

In the late 1960s, the manager had some ideas about revising HP's internal accounting system. He put these ideas into the form of a lengthy memo to Dave. The next day came the memo—with a handwritten note:

"This is manifestly absurd and evidence of total stupidity." The manager has happily saved the note and counts it among his most prized possessions.

> DAVE KIRBY Palo Alto, California



A most precious encounter

David Packard, you were truly a great man in every way a man of broad and deep perceptions, penetrating insight and decisive judgment, with the generosity and warmth to accept people. Attracted by your personality, I felt close to you and, to the same extent, admired and respected your character.

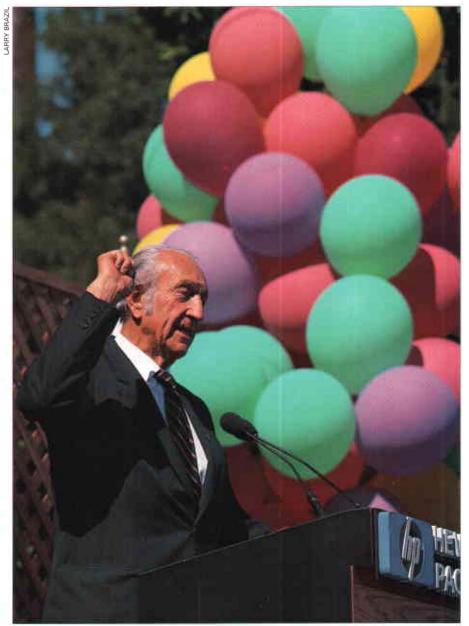
In each human life, there are encounters that are irreplaceable—that one is truly glad to have had. David Packard, meeting you was, indeed, a most precious encounter in my life. I keenly mourn your death. Memories of you always will be fresh and alive in my heart and in my mind's eye. Those memories will, I believe, sustain us in the future.

> SHOZO YOKOGAWA Chairman emeritus Yokogawa Electric Corporation Tokyo, Japan

Meeting Dave during HP's 50th anniversary celebration week in 1989 was the highlight for Phyllis Jones, an employee "ambassador,

gangar for Payms Jones, an employee ampassador, who represented the Glen Allen, Virginia, sales office.





During HP's 50th anniversary celebration in 1989, Dave and Bill returned to 367 Addison Avenue in Palo Alto, the site of the famous garage where the company began.

"Dave Packard — no title"

Twenty years ago in Cupertino, California, Dave Packard attended a reception for newly minted computer sales reps. One rep, whose name I have long since forgotten, wanted to meet Dave. He was from an HP office near Philadelphia called King of Prussia.

Screwing up his nerve, the sales rep marched up to Dave, stuck out his hand and said, "Joe Jones, King of Prussia."

Dave replied, with a twinkle in his eye, "Dave Packard-no title."

Needless to say, Dave held many titles, all richly deserved, but he acted daily as he suggested: Dave Packard-no title.

> SAM BOOT Vancouver, Washington

An unforgettable flight

It was a late, hot afternoon during the summer of 1979 when I was rushing through Los Angeles International Airport to catch a flight back to the Bay Area. I had just spent a long, tiring day in "neophyte" training as part of my newemployee orientation. I left the HP office in such a hurry that I still had my HP name badge on.

I was the last one to get on the plane before take-off. There was only one open seat left, way in the back of the plane next to an elderly gentleman.

I started to push my carry-on luggage under the seat in front of me. Seeing that I was exhausted, the gentleman reached down to help. I looked up to thank him—and it was Dave Packard. Even as a new employee, I had seen enough photos to know who it was.

All I could think to say was, "Hey, aren't you Dave Packard? Your name is on my badge, too." He smiled, and the most incredible hour of my HP career began.

I asked him as many questions as I thought I could, including the earliest days of the company, and he shared some wonderful insights.

Near the end of the flight, Dave reflected, "My goodness, that was such a long time ago. I'll be turning 70 soon —70 years old." He smiled and said, "Greg, make every year of your career count; it goes by so fast."

GREG MIHRAN Cupertino, California

Just for the newlyweds

In 1969, when Mr. Packard was assistant secretary of defense, I married a co-worker, Vern Haines. Vern and I were on the San Felipe Ranch picnic committee.

The tradition was for committee members to go to the ranch the day before the picnic, help the ranch hands prepare for the event and sleep over at the ranch that night. We all brought sleeping bags and slept, on a first-come, first-served basis, in any bed or floor that was available in the ranch house or on the ground by the pool.

Just about sundown, the foreman told us that he had word from Washington, D.C., that the newlyweds were to sleep in Mr. Packard's room. I don't know how Mr. Packard knew that I was a newlywed—I suspect that my buddy, Margaret Paull, had a hand in that-but his kindness made the 1969 San Felipe Ranch picnic real special for me.

> BETTY HAINES Palo Alto, California

He didn't smile the whole meeting

Early in 1972, just after Dave resigned his assignment at the Pentagon, we received the exciting news that he would attend our management meeting in Megeve, near Geneva. Rumors circulated that Dave was in a very bad mood and ready to "put some things in order at HP."

Dave and Lucile arrived in very light summer clothes, ignoring that the meeting was in the mountains. Driving to Megeve, the car got stuck in a snow storm. The driver, looking for chains, slammed the trunk, locking his coat, Dave and Lucile's coats and hats, and the car key in the trunk.

At the hotel, we were worried when the Packards didn't arrive for the opening cocktail period. Then, a couple of hours later, we saw a huge figure walking through the door, dripping water from the packed snow on his shoulders. Dave had walked a mile in the blizzard, picked a taxi to rescue Lucile and made it to the hotel without their luggage.

There were neither smiles nor funny comments by anyone. At the meeting an hour later, Dave said, "We should never have any debt...We could generate much more money if you would keep your ___ damn inventories under control and if you would reduce your lousy receivables." I do not recall having seen much of a smile on Dave's face during the whole meeting.

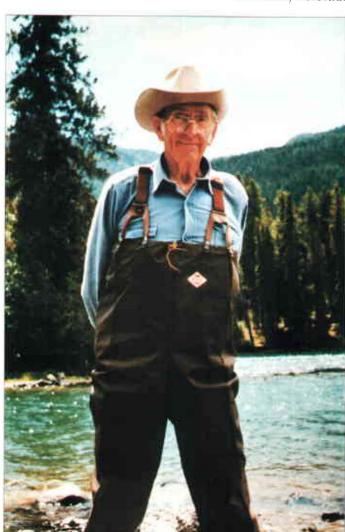
> FRANCO MARIOTTI Geneva, Switzerland

"My name is Dave"

In 1976, a small group of us were waiting for our new-hire orientation session on the HP Way to begin. A very recognizable gentleman approached us and one of the new hires said, "Hello, Mr. Packard. I'm pleased to meet you."

An immediate response followed: "Mr. Packard is my father. My name is Dave."

> **GARY TRUJILLO** Loveland, Colorado



Dave, pictured at his fishing lodge in Canada in the early 1990s, once told CEO Lew Platt, "When you're put here on Earth, you only have so many days, and the good thing about a day spent fishing is that it doesn't count.



Dave and Lucile-the "first lady" of Hewlett-Packard-pose in their home in 1986, a year before Lucile's death.

In memory of Lu

I joined HP early in 1987. That spring, Stanford was raising money to build a new children's hospital to be named in memory of Lucile Packard, Dave's wife.

I had heard about this very special woman who cared so much about the health and welfare of children. I sent a check for \$25 to the hospital building fund with a brief note expressing my admiration for Lucile Packard.

In July, I received a short note from Dave Packard thanking me for the contribution in Lu's memory. He signed the letter himself.

I could scarcely believe that this man-so wealthy and so powerful-went out of his way to thank me for a modest contribution in honor of his beloved wife.

Ever since, I've kept that letter in my briefcase—a constant reminder of what a great man I work for.

> LYNNE BALDWIN Santa Clara, California

I feel I have known him well

When I was hired by HP Canada, I thought I would be working at a large computer company. Instead, I discovered that I had really joined a family that ran a business founded on the principles of the HP Way.

I never had the pleasure of meeting David Packard; however, I feel I have known him well, thanks to his vision and ideals, which are so prevalent throughout HP worldwide.

If I had met Dave in person, I probably would have just said, "Thank you."

> RICHARD PINOS Ottawa, Ontario Canada

A shared disability

In 1992, Dave was invited to dinner in Monterey, California, by worldwide HP information technology managers, who were having a conference. The dinner was held in front of the magnificently beautiful kelp-forest tank at the Monterey Bay Aquarium. Dave was scheduled to talk briefly before dinner. I was covering the event for the Information Systems News newsletter.

I met with the aquarium events coordinator and Dave to select a spot for his talk. When we finished, Dave and I talked for about 10 minutes. We had in common the same disability—hearing impairment—so, among other topics, we discussed hearing aids.

He enthusiastically showed me his hearing aids, which were remotely controlled by a device about the size and shape of a ballpoint pen.

That was my most cherished—and final—contact with Dave.

> MEL KELM Palo Alto, California

Not a bit of wasted space

In 1979, I worked for, among others, Chining Liu, who had just been named general manager of HP's representative office, soon to open in China. Chining and Dave Packard were getting ready for a trip to Beijing in which they would meet with government leaders.

One morning, I arrived at work and found a tall, older gentleman down on his hands and knees on the floor in front of my desk. He was surrounded by calculator boxes. Although I had never seen either of HP's founders in person, I knew immediately that it was Dave.

A supply of HP's latest handheld calculators had been shipped from Corvallis to be given as gifts to the Chinese hosts. Dave was removing each from its box and repacking it to save space and weight.

Of course, I offered to do it for him, but he simply replied that he was doing fine himself and was almost finished. Since I couldn't just watch him work, I stepped away. When I returned, the mountain of boxes had been cleaned up and the calculators that arrived in three large cartons now occupied only one.

> BARBARA BEEBE Palo Alto, California



No one was more proud than Dave of the Monterey Bay Aquarium and his daughter, Julie, when the aquarium opened in 1984.

The costliest cost over-run

The day before the Monterey Bay Aquarium opened in 1984, Dave told reporters: "I presided over many cost overruns as deputy secretary of defense, but none to match this one."

> THOMAS ULRICH Sunnyvale, California

Needless to say, we made the sale

Our sales team was hosting a customer at the Loveland, Colorado, facility. We were in a conference room discussing our products when, all of a sudden, the door opened. In walked Dave Packard. By coincidence, he was visiting the plant that day.

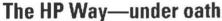
He shook hands with us and spent a few minutes talking with the customer about his application. After Dave left, the customer turned to me with an incredulous look on his face.

"Was that really who I think it was?" the customer asked, I'm not sure who was more surprised and impressed

-the customer or our sales team!

Needless to say, we made the sale.

MARK BURAK Fort Collins, Colorado



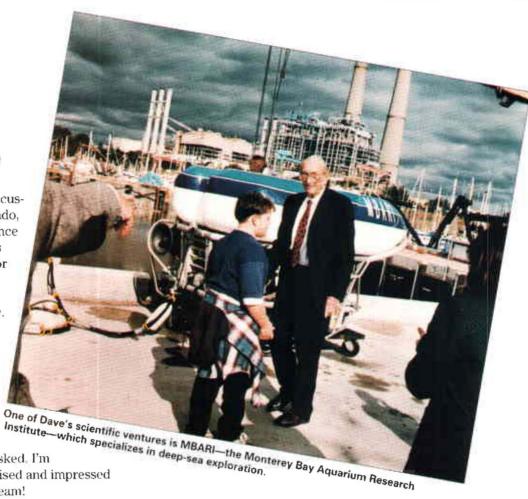
In June 1993, I was HP's attorney during a deposition. The attorney for a former employee had been given permission by the court to ask Mr. Packard a limited number of questions focused specifically on the HP Way.

When asked the direct question, "What is the HP Way?", Mr. Packard gave an historical answer, describing how it had evolved from the earliest days of the company. The opposing lawyer seemed satisfied with that answer and was about to move to another issue when Mr. Packard volunteered the following:

"I have one more comment... In simple terms, the HP Way is simply that we expect everybody in our company to follow the Golden Rule, to treat other people the way they think they should be treated themselves."

That spontaneous comment crystallized for me why Mr. Packard stands head and shoulders above so many and why IIP is what it is today.

> CRAIG PACE Palo Alto, California



A man and a plan

In 1966, when HP Labs was close to developing a new technology and wanted to find a "home" for it at one of the divisions, the call went out for "a man and a plan." A division G.M. would select an individual to develop a plan and interview with none other than David Packard.

Not only was Dave Packard's reputation formidable, but his size and stature were big. As I entered his office, I recall the size of his massive desk. When he stood up behind it. I froze.

He walked out from behind his desk, shook my hand warmly, led me to an old leather couch across the room and sat down beside me. He asked me about my family, talked to me about my aspirations and, in gentle order, asked about my style and my plan.

After an hour or so, I left his office and realized that this man knew me about as well as anyone with whom I had ever had a business relationship. Had he sat behind his desk, he would have only heard words from a young man and he would have had to guess how I might perform the very important task he had in mind. Instead, he found out.

After that experience, I never sat behind my desk when interviewing a candidate.

> GERRY PIGHINI Los Altos, California

THE PACKARD TOUCH

I was ticked off...

Ed Hilton had just about finished developing a printer that eventually turned out to be a real money-maker for HP. Near the end of the project, we were running comparative life tests on two units of slightly different design and had about one more week to go.

Packard was in a hurry for new products, however, and left word that we had another day—not another week—to finish. I was ticked off, and the next morning I went to his office to tell him so. He saw me at the door and waved me in to sit down while he finished a telephone conversation.

While he continued talking, I sat there thinking of how to word the sad story I was going to give him. "It's not much fun working around here anymore"—things like that. Slowly, though, I got the gist of his telephone conversation. He was arguing fervently with a fellow Palo Alto school board member and saying things like, "But we've got to. Otherwise, it's not fair to the kids."

It was a long conversation and the topic obviously meant a lot to Dave. I just kept sinking lower in my chair. When he hung up, I said we had hoped for another week of tests, but it wouldn't be any problem to finish up that afternoon. He said, "OK," and I left.

AL BAGLEY Los Altos Hills, California



I have been with HP for almost 38 years and I have always remembered my first encounter with Dave in 1958. HP had had a very good month, so there was a Friday "beer bust."

I was chatting with Dave when a young woman from production came over and asked, "Mr. Packard, will we ever have unions at HP?" Without blinking an eye, Dave said, "If we can't do as good a job as the unions, then, yes, we probably should have unions."

It was the perfect answer because it put the employee first. It was an answer I never expected and never have forgotten.

GEORGE STANLEY Santa Clara, California



You will always live in us

You are like a giant redwood tree hit by a storm, by lightning, suddenly.

As Pablo Neruda would say, "You undermine the horizon with your absence. Eternally in flight like the wave.

I have said that you sang in the wind like the pines and like the masts.

Like them, you are tall and taciturn.

And like we, are sad, all at once, like a voyage."

The lady from the shadows, the unknown, fell in love with you and took you where you belong, the stars.

We are very sad because we miss you immensely. But how else can it be? We all love you sincerely.

You will always live in us, your offspring, your kin, the forest that today is HP.

> PANO SANTOS Palo Alto, California

The man behind the book

I received my copy of The HP Way and, after reading it, sent it to my daughter in New York. I could understand her interest in the book because she worked for HP for five years before moving away when she was married.

A few months later, I asked for my copy back, My daughter told me that her father-in-law had borrowed it. Now my son-in-law is reading it, and his uncle is waiting his turn.

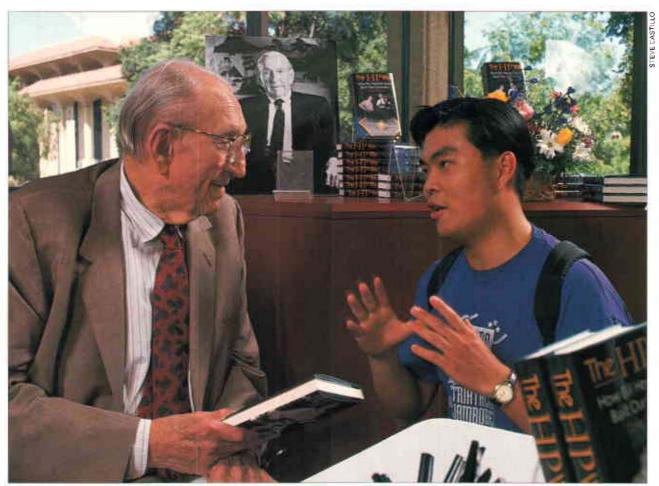
All of these people have no relation to Mr. Packard or HP, but they feel strongly about the man behind the book. PHYLLIS BOURNE Palo Alto, California

His last words of wisdom

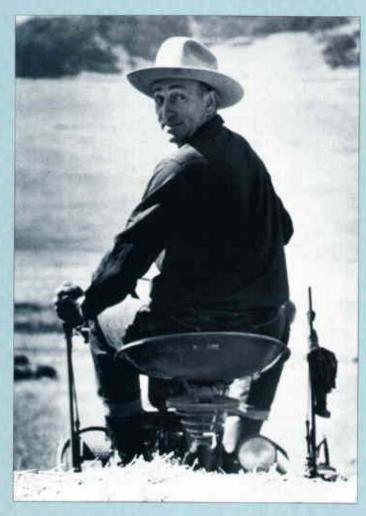
In October 1995, one of my proudest moments came during the HP Labs Celebration of Creativity day. We watched in astonishment as a frail Dave proudly walked up the ramp to the podium to deliver what were to be, for many of us, his last words of wisdom.

I intend to honor Dave by taking part of the company philosophy into my life. I never will close the door on anyone until at least they have been heard. I know Dave would like that.

> JOAN GALLICANO Palo Alto, California



Dave chats with Stanford University student Ern Loh at the university bookstore where Dave autographed The HP Way.



He was our mentor, our inspiration and, for most of us, our closest personal experience with greatness.

—LEW PLATT Chairman, President & CEO Hewlett-Packard Company

Aiming for the Olympics

By Thomas Ulrich

COLORADO SPRINGS, Colorado-Tammie Forster, three-time World Cup and Pan American Games rifle champion, spent much of 1995 wondering why she couldn't shoot straight.

Tim Conrad, design engineer and assistant to the shooting coach, explains, "Tammie was holding her aim well within the bull's-eye. She sensed some movement of the barrel, but didn't realize that it was insignificant."

Using a "force platform" and a video camera, Tim persuaded Tammie that she could hold an infrared laser sight on the bull's-eve for 6 seconds. The force platform senses how much Tammie swayed once she took position. The camera recorded how far her aim strayed from the bull's-eye.

"The force platform and video display gave me the confidence that my hold was good," Tammie says. "Knowing that allowed me to focus on trigger control."

To improve her control, Tim created an electronic sensor that slips over the trigger and is wired to a computer. When Tammie pulled the trigger, the sensor transmitted a signal that the computer reported as applied force over time. Reading a chart that appeared beneath a video transmission of Tammie firing the rifle, coaches determined how gently she pulled the trigger.

"Using the video overlay/triggerpressure system convinced Tammie that while her hold was solid, she was not pulling the trigger smoothly," Tim





top

Tammie Forster aims her .22caliber rifle during a practice session at the U.S. Olympic Committee (USOC) firing range in Colorado Springs, Colorado.

above

Butch Johnson, a member of the 1992 and 1996 U.S. Olympic archery teams, draws his bow at the ARCO Olympic Training Center archery range in Chula Vista, California. An archer goes through seven distinct motions before shooting each arrow.

Olympics

says. "If you don't pull the trigger smoothly, you can disturb the aim of the gun.

"We gave her something specific to work on."

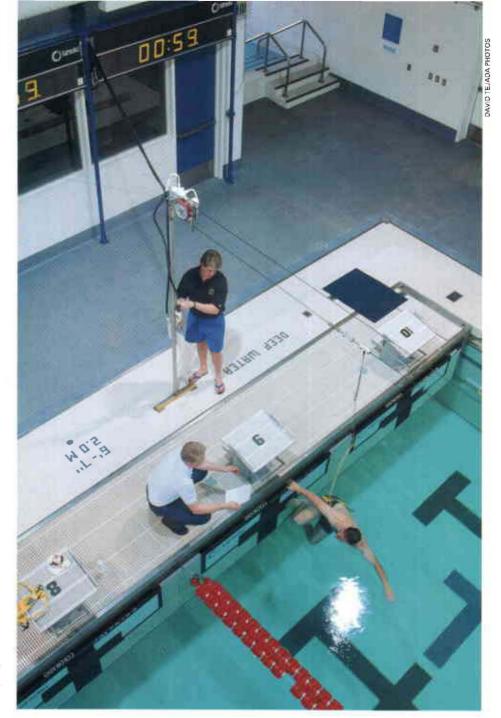
Tammie's performance has improved ever since. For the air rifle event, she fires a pellet from 10 meters and pierces a half-millimeter bull's-eye 35 out of 40 times. "I was shooting 392 out of 400," she says. "Now, I'm shooting a 395 (one point short of the Olympic record)."

Three points may seem like an insignificant difference, but those minor improvements—a millimeter here and a hundredth of a second there—can decide who walks away from the 1996 Olympic Games with medals or regrets.

For decades, East German scientists refined the performance of Olympic athletes through a strict application of medical science and technology. The outstanding performance of East German athletes in the 1972 and 1976 Olympic Games prompted the United States Olympic Committee to build a training center in Colorado Springs, Colorado, to help athletes prepare for the next Olympiad.

By 1983, scientists and engineers in Colorado Springs developed comprehensive programs for sports science, technology and sports medicine that have since raised the bar for Olympic athletes.

Engineers at the Sport Science Technology Lab in Colorado Springs use test and measurement gear, including some from HP, to design and build a range of electronic sensors that coaches and athletes use to streamline training and improve performance.



The sensors, which track the athlete in the water or out on the firing line, help coaches evaluate the form and strength of archers, cyclists, oarsmen, sharpshooters and swimmers.

"These tools," says Jay Kearney, physiologist for the U.S. Olympic Committee, "give us a sophisticated way of assessing where coaches and athletes should focus their training to improve performance."

Tom Westenburg, design engineer at the Sport Science Technology Lab, and Marty Hull, an inventor from Palo above

A swimmer and his coaches prepare to use a tow system at the pool in Colorado Springs. Five members of the U.S. Olympic Training Center swim team who trained with the tow system qualified for the 1996 Olympic Games.

Alto, California, built a tow system to measure water resistance as a swimmer glides or strokes the length of the training center pool. The tow system has a harness that pulls swimmers through the water and an underwater camera that tracks their motion as they speed up and down the pool.

"As a swimmer is towed," Tom explains, "athletes can rotate their arms and legs faster than usual. Sometimes when a swimmer strokes faster than normal, the synchronization between upper and lower body falls apart. The harness can teach athletes to swim faster before they are able to."

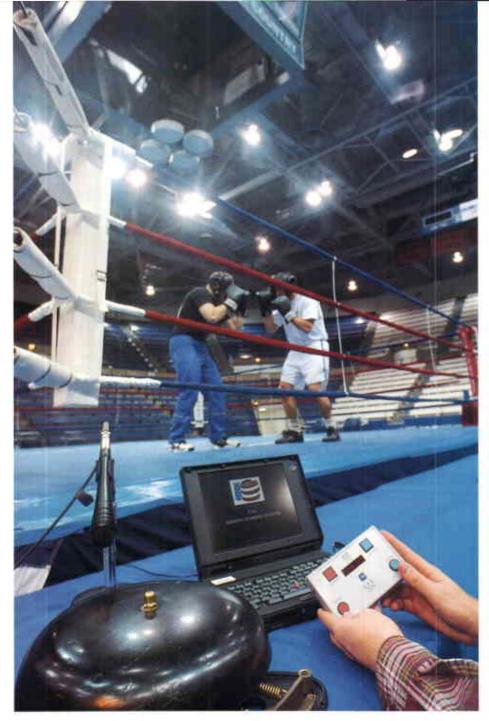
Tom and Marty's design and one swimmer's hard work have yielded striking results.

Amy Van Dyken trained using the tow system for six weeks. Last summer at the Pan Pacific Games, she set the U.S. women's record in the 50-meter freestyle event. This spring in Indianapolis, Indiana, she qualified to swim five events at the Olympic Games.

"Amy used the harness to streamline her stroke," Tom Westenburg adds. "She would place her head or arch her back to determine what position created the least amount of drag. Sometimes water started flying and she'd veer all over the lane. Other times, the waves died down and she moved through the water like a torpedo."

By reviewing the videotape and sensing resistance for each set, Amy and her coach decided which position propelled her through the water most efficiently.

Michael Porterfield, an oarsman for the U.S. men's rowing team this year, recalls the day his eight-man scull lost



a bronze medal at the 1989 World Championships by four-hundredths of a second. "Technology could have made the difference," he says.

The 62-foot scull glides over the water at 5 meters per second or 11 miles per hour. Like a V8 engine that fires all cylinders at once, the crew applies power in spurts.

To understand how each oarsman cradles the water, Tom Westenburg placed sensors on some oars, which

above

Olympic boxing judges will use an electronic score card containing an HP ultra-bright display for the first time in Atlanta during the 1996 Olympic Games. The USOC developed it to ensure that the outcome of a bout is fair.

Olympics

are wired to a computer on the back of the scull. The sensors gather data that describe oar force, oar angle or degrees of sweep, boat speed and acceleration.

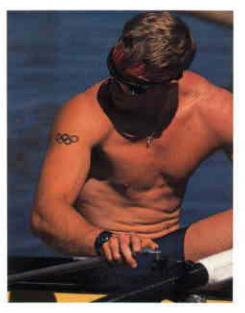
The sensors transmit data to the computer, which relays it to a laptop computer next to the coach, who rides in a "pursuit" boat. The coach can view a power curve (force versus angle) for each oarsman and suggest changes to technique during the workout.

"Even if you watch a videotape of the workout," says crew member Chris Swan, "it is difficult to know how you are applying force to the oar."

Coach Michael Sprackin uses the information from the computer to refine the technique of individual oarsmen, balance the power for each position within the boat and test new equipment.

"I can remember seeing an East German boat rigged up with similar technology in 1990," oarsman Michael Porterfield says. "Technology is an important ingredient. We've caught up with the best in the world." M

(Thomas Ulrich writes for HP's Integrated Systems Division in Sunnyvale, California.—Editor)



left

A member of the U.S. men's eight listens to instructions from crew team coach Michael Sprackin.





top right

Tom Westenburg (left), USOC design engineer, and Mark Kloverstrom, HP field engineer, examine training data after an HP power supply and pulse generator verify performance from a data-acquisition system. above and right

Members of the U.S. men's eight slide across Otai Reservoir at the Chula Visa, California, USOC training facility as a data-acquisition system gathers conformation on a morning workout. The data-acquisition box rests on the back of the scull.



Where does HP stand now?

By Betty Gerard

Two years ago, MEASURE asked where manufacturing is headed at HP. Today a new companywide manufacturing strategy provides direction.

CEO Lew Platt asked the big question when he talked with top manufacturing managers last October: "Is manufacturing a core competency for Hewlett-Packard?"

His own answer: "Manufacturing is as important as it ever has been to our company—it is a core competency for us-but it is changing." HP has moved from doing metal fab to complex inkjet technology, for instance. There is a continuing evaluation of which processes and technology should remain in-house.

Platt has empathy for the production side of the company. He joined HP in manufacturing and spent most of his career in that function.

He has also seen the fierce battleground on which HP contends today

"Manufacturing is as

is changing."

important as it ever has been

to our company—it is a core

competency for us-but it

and recognizes the urgency to focus people and resources on those areas that give HP a sustained competitive advantage.

The Manufacturing Council, made up of some

two dozen group and division manufacturing managers, was charged by Platt and the Management Council's Operations Committee in 1994 with crafting a manufacturing strategy that would establish where the various businesses could make their own decisions-and where they must yield to acting as one company. One rule:

Their independent decisions must not hurt another HP business.

Manufacturing is operating under some special pressures. In the outside world, increased global competition requires shorter time to market, improved availability and a lean cost structure.

Within the company, HP has placed new emphasis on asset management to balance its measures of financial performance. The consideration of Return on Assets (ROA) means that heavy capital investment in sites and machinery can become a hard-todigest liability on the books.

Gone are the days when manufacturing existed in relative isolation as one of a division's "big three" functions, along with marketing and

> R&D. Today, manufacturing managers must understand the entire "value chain" in their business, a chain that stretches from order generation to order fulfillment. There

are other hard-charging businesses within HP to consider, and more strategic partners and contract manufacturers to deal with on the outside.

To sort out the realities of manufacturing's role at HP today, the Manufacturing Council, headed by Don Curtis, set up five task forces to look

at possible areas of cross-business leverage: procurement, under Chuck Walter; contract manufacturing, under Dan Bechtel; logistics, under John Kenny; manufacturing processes and technology, under Tom Viola, and information systems, under Doug Scribner. While not all task forces have completed their work, two principles are guiding their work:

- · Businesses will own and fund their own strategies and strategic relationships (see the box on page 24).
- · In a very few areas, HP will act as a single company, with a "short list" of mandatory items for cooperation. Some, such as memory chips and plastic resin, are in the procurement area; others involve leveraging HP's buying power for transportation and establishing common terms and conditions for contract manufacturing to give the company an advantage.

Doug Carnahan, who chairs the Operations Committee, is another former manufacturing manager. He's already seen a lot of solid cooperation in the Manufacturing Council.

"No function at HP works together better than manufacturing," Doug says. "Council members have found ways to set aside their individual needs to get an excellent balance of what's good for our many businesses and what's good for HP."

To underscore the need to give the businesses their freedom for strategy, Doug points out some of their contrasting approaches. "Some are highly centralized as to fixed assets and expertise, while others have divisions with distributed manufacturing that's strung around the world."

One brisk discussion today involves "commercializing" technologymaking HP-developed technology



Order Fulfillment Manager Rhonda Hocker and G.M. Tom Viola stop by a Computer Interconnect Operation surface-mount production line in Fort Collins, Colorado.

available to selected contract manufacturing partners or widely available in the industry. Attitudes differ among the businesses, although there's growing agreement that a "technology board of directors" should be established to work with the businesses

and central support functions on procedures for what and when to share, as well as to evolve emerging technologies.

HP has some 50 manufacturing sites, with about half in the United

Manufacturing

States. The number of regular U.S. employees in traditional manufacturing jobs has remained relatively flat during the last three years—despite some product-line sell-offs, shop closures and transfers of production overseas. Orders for products have soared, and many temporary workers have come in to provide needed flexibility on the line.

The Test and Measurement Organization has several examples of gracefully transitioning a manufacturing process to an outside source.

In Sonoma County, the through-hole printed-circuit process of the Microwave Instruments Division is being outsourced to LeeMAH in the Bay Area, and all of the shop's 250 employees are in the process of being placed without difficulty in local HP jobs.

"Two years ago it became clear that this process was no longer a competitive advantage for us," says Ian Ross, manufacturing manager.

Outside sources could offer the same quality and value, and reduce

Nine areas of guiding principles for manufacturing

Here is the bedrock on which HP's businesses will make their manufacturing decisions:

- · Customer satisfaction
- · Financial performance
- Value chain—should maximize customer satisfaction, reduce cycle time, minimize costs and optimize returns for the entire business, not just the manufacturing function.
- Human resources—employment decisions are strategic investments; anticipate changing business conditions.
- Core competencies—to be maintained or developed for competitive advantage.
- Strategic alliances—in areas where HP has chosen not to develop internally.
- · Environmental management
- Metrics—need to ensure that key manufacturing processes will be appropriately measured using external and customer-focused metrics.
- Cross-business impact of strategies—ensuring that one business doesn't adversely affect another business.

the cost of ownership. TMO, like many of HP's businesses, evaluates which processes it should own for a sustainable competitive advantage.

"We're not getting out of manufacturing," Ian says. "We need to be more judicious in how we utilize HP's people and assets."

Two years of careful assessment of whether to maintain a printed circuit board (PCB) shop at the Loveland, Colorado, site led to divestiture. HP sought bids from seven potential buyers, and TMO selected Merix to take over the activity. A compatible corporate culture was one of the requirements. Merix agreed to offer jobs to all 300 employees in the shop -85 percent of whom accepted. Highly skilled, they can look forward to a future with Merix, which specializes in PCB.

Temporarily housed on HP's Loveland site, Merix has agreed to stay in Northern Colorado when it relocates to its own location. The operation has already achieved record productivity, yields, production output and financial profitability. The manager of the organization is Mark

Hynes, who was with HP for 12 years in the PC board business and helped arrange for the divestiture.

Manufacturing at HP is changing —but it is firmly in control of its own destiny. M



help you make sense of the gazillions (a technical term) of pages of information on the Web.

One of the best web crawlers lives inside the HP firewall, visiting the more than 500 home pages and 90 individual home pages that make up HP's Intranet, Fort Collins' Dave Jobusch told me about one crawler that was written by co-worker Jack Applin.

Jack's HP Web Walker is a set of electronic tools that creeps quietly all over the HP internal web of computers. While it's out there crawling, this

web walker memorizes all the new URLs it can find—along with key information from those files-and brings all that stuff back and spins it into a searchable database. This great research tool is at http://searcher. fc.hp.com/arachnophilia.

Even cooler is the club Jack started with HP people around the globe. The club's purpose: to help him feed his growing spider collection. You can sign up to become a "Junior Web Walker" at http://searcher. fc.hp.com/web-walkers.html. Arachnophobics need not apply.

Ready to expand your Web search beyond the HP firewall? There are some powerful search engines out there that can cut your hunting time considerably.

A great place to test a large number of them is at a new site called SEARCH.COM. Not too surprisingly, its URL is http://www.search.com. Duh! It leads you to well-known search sites like Yahoo, Excite, Info-

seek and Alta Vista (one of the doctor's favorites, even though it's run by an HP competitor). SEARCH.COM is probably the best way to tap into the power of more than 250 search engines on the Net.

That's important as the Internet grows like a weed. In my January-February MEASURE column, I said "there are tens of thousands of computers" on the Net. I heard straightaway from cricket@hp.com, the founder and chief architect of HP's Americas Internet Consulting section of the Professional Services Organiza-

tion. The cricket told me I'm way off. "That number is woefully low," cricket wrote. "MIDS, a

well-respected Internet consulting firm, estimates the number of hosts on the Internet at over 5 million, growing at a rapid clip.

"I'm pleased to see your column. HP would benefit enormously from having employees make better use of the HP Intranet and the Internet at large."

Cricket's thoughts are echoed by Corvallis' Susan Baker, who agreed that it's OK to surf seemingly nonbusiness-related sites on the Web.

"Just as people browse casually through information sources such as dictionaries, encyclopedias or new books in a traditional library, so do people browse the Web. This can be a source of serendipitous association or flashes of creativity.

"There are many very valuable sources of information in the new networked environment that are difficult to find anywhere else. To place blanket restrictions on Internet usage would, therefore, needlessly handicap the people who will create HP's future products."

I'm glad to hear that some of the doctor's bio medicine helped Michael Sykes from Böblingen, Germany's, financial operations.

"After years of having worked with computers," Michael says, "I'm somewhat ashamed to say I had never surfed the Net.

"The guidance and instructions you provided were clear, easy to follow and made my first attempt at 'surfing' fun. I am amazed at the amount of information that is available out there and the ease with which it can be accessed."





Michael, I'm always amazed at the amount of information out there that's truly helpful. I hope you've found the on-line version of Financial Notes, edited by Chris Frey in Fort Collins. It's at http://panwebl.corp.hp.com/ finnotes/default.htm. I particularly enjoyed Beth Swenson's article about working from home using ISDN lines. Financial Notes joins the growing number of HP internal publications moving to the Web.

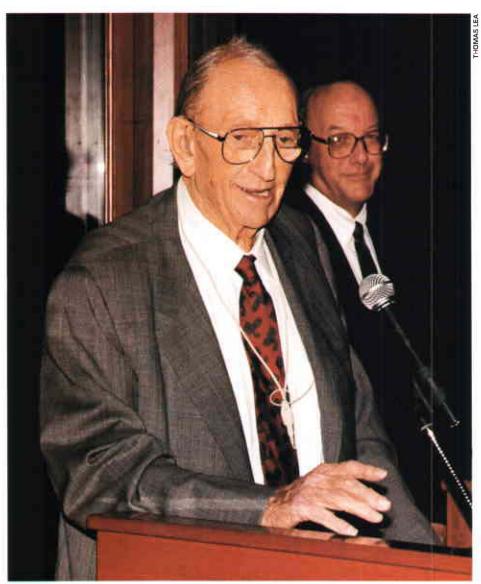
While English may be the de facto standard for Web communication, you can find material in other languages. Böblingen Instrument Division's Manfred Illenseer suggests there may be a number of HP employees around the globe who are interested in exercising their German and keeping up with what's going on in his HP plant community. The Internet newspaper for Böblingen is at http://www.

germany-live.de.

That's all for this issue. Keep up the surfing (in German or English or Japanese or Russian), and send your Web favorites to Dr. Cyberspace at doctorc@corp.hp.com.

LETTER FROM LEW PLATT

HP's chairman, president and CEO shares some personal remembrances of HP co-founder Dave Packard.



An admiring Lew Platt watches as co-founder Dave Packard addresses HP's board of directors during the January 1996 board dinner in Los Altos, California.

y now, you've heard and read the volumes of welldeserved tributes to Dave Packard since his death on March 26. More of the stories are included in the special insert in this edition of MEASURE.

Dave-never one to dwell on the past—undoubtedly would urge us today to focus on the future.

However, as a final tribute, I'd like to share a few personal insights about Dave—his unparalleled generosity,

the enormous respect he generated and his intense interest in HP's values.

About 10 years ago, I was involved in a campaign to raise \$2.5 million to build a new YMCA facility in Mountain View, California. I didn't know Dave well at the time, so Jack Brigham, HP's chief legal counsel, went with me to see Dave.

I explained the project and showed Dave the full set of plans we had developed. Dave was excited by the

idea and reminisced about learning to swim at the YMCA in his hometown of Pueblo, Colorado.

"Have you talked with Bill (Hewlett) yet?" Dave asked. I said that I hadn't. Bill happened to be in his office adjacent to Dave's, and Dave pulled his long-time partner into the room.

"Bill," Dave said, "I want you to see this project. I'm pretty intrigued by it, and I've decided to give them \$500,000. Why don't you do the

same, and we'll get this thing started right?"

In 30 minutes, we had a \$1 million gift-40 percent of our target-and our campaign was off and running. Without that gift, the YMCA might not have been built.

aspire to.

Many people are aware of Dave's commitment to projects such as the Lucile Salter Packard Children's Hospital at Stanford, the Monterey Bay Aguarium and the Tech Museum of Innovation in San Jose, California. But how many people know about the thousands of others like the Mountain View YMCA?

Rightly, Dave became a symbol for the highest values we can aspire to. Two recent examples illustrate this point.

In September 1995, the HP board of directors attended the opening of HP's Atlanta (Georgia) Business Center. Dave enthusiastically agreed to attend an all-hands meeting at the site cafeteria during the visit.

Employees were cheering and reaching out to touch him as Dave slowly, painfully walked down the long hallway. His speech lasted only

> two minutes, but there wasn't a dry eve in the place. It was incredibly emotional to see the admiration that people had for him. You just

Three years ago, I made a

pact—that as long as I am

commitment to Dave—a

CEO. I will believe in and

practice those values...

don't see that today, especially in companies our size.

The other story concerns our annual General Managers meeting in San Diego in January. Near the end of the meeting, Dave stood to address the

group. He decided to read one of his favorite poems, The Deacon's Masterpiece or The Wonderful One-Hoss Shay, by Oliver Wendell Holmes.

Rightly, Dave became a symbol

for the highest values we can

Dave loved this poem and wanted to pass

on its message about quality and longevity. Unfortunately, the paper Dave held covered the microphone, and virtually no one in the room could hear his words. The tension in the

room was thick. Had anyone else been speaking, you might have seen smirking or heard muffled laughter. Instead, after a couple of minutes, the tension eased and everyone focused on Dave, the man. The standing ovation he received after the reading lasted several minutes. It wasn't admiration for a great speech; it was enormous respect for a great man.

I'll never forget that moment. When I think of Dave, I remember his insistence that HP values endure long after he and Bill are gone.

I have spent a great deal of time talking with Dave and Bill since I became HP's CEO three years ago, and every time, they wanted to talk about our values. We may have started our conversation on another topic, but they always brought up the values. Most of all, they wanted to know, "How are our people doing?"

> Three years ago, I made a commitment to Dave—a pact that as long as I am CEO, I will believe in and practice those values as passionately as he did.

I can't think of anything that I-

that we-can do to better honor Dave Packard.



Extra*MEASURE*

News from around the HP world

by Tena Lessor

Skydiving OmniBooks

Look up in the sky. It's a bird. It's a plane. No, wait... it's an OmniBook?

That's right. New Year's Day 1996, you could have seen HP OmniBook computers soaring through the sky above Lodi, California.

Why?

Tony Sorce, a technician in HP's Optical Communication Division, explains: "One day over lunch I was talking to one of the marketing guys about various applications for infrared components. We joked about the idea of transferring data any time, any place," Tony says.

And with that thought, Tony and a friend took to the skies. From 12,000 feet up, they jumped from an airplane and fell at 120 miles per hour, each with



Who says you can't mix work and play? HP's Tony Sorce and friend Brian Fairhurst explore wireless data transmission applications while skydiving on New Year's Day.

an HP OmniBook computer strapped to his arm.

For the past two years, Tony and his colleagues have researched ways to create new applications for

wireless components. His New Year's Day adventure added a little play to work, although no data was transferred between the skydivers.

"Skydiving with the OmniBook was much more a novelty than a practical application," he says. "But free fall is an application where you would never want to use a cable."



HP makes the grades on *Fortune's* report card

It's report card time and Hewlett-Packard received good grades in two Fortune magazine surveys.

Up two places from last year, HP ranks No. 20 in the overall category in the Fortune 500 ranking of the largest U.S. corporations.

In individual categories, HP's rankings include No. 2 in "Computers, Office Equipment," No. 12 in market value, No. 16 in profits and No. 22 in stockholders' equity.

The good grades don't stop there. HP ranks No. 9 overall in Fortune's 14th annual Corporate Reputation survey-one spot better than last year's position.

For the fifth straight year, HP's reputation is tops in the industry category of "Computers, Office Equipment."

Fortune's Corporate Reputation survey rankings are based on interviews with more than 11,000 executives. outside directors and financial analysts. Including HP, 417 corporations were surveyed.



With help from HP, the Team Rahal Indycar racing team is shifting into high gear for the 1996 PPG Indycar World Series.

HP puts the pedal to the metal

Rev your engine and buckle your seatbelt as HP speeds into the world of car racing.

For the 1996 PPG Indy-Car World Series, HP's Worldwide Customer Support Operations is an associate sponsor and technical partner for the Team Rahal IndyCar racing team.

HP's role is to analyze and report race data faster. HP customized a mobile communications network and improved business operations for the team. HP also will provide ongoing technical support during the 16-race season.

The HP logo whizzes by at 200 miles per hour on Team Rahal's Mercedes-Benz Reynard Indycars. The HP logo appears on driver and team uniforms, and HP receives other promotional services as well.

"The more we come to depend on technology to make our race cars faster, safer and more efficient, the more we depend on the expertise of partners like HP to help us harness and maximize that technology," says Bobby Rahal, threetime IndyCar champion.

Quoteworthy

I believe that people always do better work when they have a little fun doing it. They ought to look forward to going to work every morning. The extent to which you can generate that spirit contributes to what we call the HP Way.

Dave Packard

DAVID PACKARD

David Packard. co-founder and chairman emeritus of Hewlett-Packard, died March 26. 1996, from pneumonia and complications. (See special insert in this issue in his memory.)

BOTTOM LINE

Hewlett-Packard reported a 31 percent increase in net earnings, a 29 percent rise in orders and an increase of 27 percent in net revenue for the first quarter of its 1996 fiscal years ended January 31.

Here is a comparison of the 1996 first quarter with the year-ago quarter, with FY95 numbers shown in parentheses:

Net earnings were \$790 million or \$1.50 per share on some 526 million shares of common stock and common-stock equivalents (\$602 million or \$1.15 per share on some 524 million shares); orders were \$10.1 billion (\$7.8 billion); and net revenue was \$9.3 billion (\$7.3 billion).

CEO Lew Platt termed the company's firstquarter results "a terrific start to the year.

"HP's people once again did an outstanding job in a highly competitive environment," he said.

BOARD CHANGES

Leaving the board of directors in February were Harold J. Havnes. retired CEO of Chevron and board member since 1981, and Shirley Hufstedler, Los Angeles lawyer, former federal judge and the first Secretary of Education in the Carter Administration, who joined the board in 1982.

Elected to the board: Sam Ginn, chairman and CEO of AirTouch Communications.

WORTH NOTING

Winners of the third annual President's Quality Awards, which recognize a successful balance of customer satisfaction, employee satisfaction and sustained business results:

HP Austria Sales. Network and System Management Division, Imaging Systems Division. Hachioji Semiconductor Test Division and Optoelectronics Division.



Girl Scouts of Santa Clara County pick up their cookies at HP's Cupertino, California, site, which served as a temporary cookie refuge.

Giving a helping hand

One of the Girl Scout creeds is to give help when needed. In February 1996, the Girl Scouts of Santa Clara County, California, needed a little help and Hewlett-Packard lent a hand.

HP's Cupertino site provided emergency lodging and a pick-up point for 5,000 cases of Girl Scout cookies after the local troops' usual facility was no longer available.

Brown and green uniforms came and went from the Cupertino site, as young girls picked up their cookie boxes, stacked in columns 9 feet high.

HP was the only local company willing to provide a facility, says Connie Wilson, Girl Scout volunteer service unit manager. "HP couldn't have been more pleasant and efficient," she says. "This was a wonderful experience; HP is a fabulous company."

Mike Mylar, the Cupertino site safety program specialist, says handling 5,000 cases of cookies was quite a challenge. And despite the sore muscles the next day, Mike says, "We were glad to give the Girl Scouts a helping hand."

ASIA PACIFIC

HP opened its first subsidiary in Vietnam in March under Bob Hughes as G.M. HP Vietnam is located in Ho Chi Minh City.

The first HP personal computers to be manufactured in China for sale in the local market will be made in Shanghai by a new China PC Manufacturing Operation under Colin Ang as operations manager...A new marketing and R&D center in Beijing will focus on the VXI instrument business in China.

In Australia, a new building for the Australian Telecom Operation has been officially opened in East Burwood, Victoria.

GETTING TOGETHER

The Open Systems Software Division has opened a new lab in Florham Park, New Jersey, staffed by 150 former Novell employees, to lead initial development of nextgeneration UNIX products. Operations manager is Don McGovern.

HP and SecureWare have signed an agreement for HP to acquire the latter's Internet security technology...HP has made an equity investment in Business@Web, and the two companies

will do joint marketing and Internet consulting.

I NEW HATS

In the Medical Products Group, Steve Rusckowski to G.M.. Healthcare Information Management Division.

Al Moye to Director of University Affairs.

Micheline Bouchard to G.M. of Quebec Operations for HP Canada.

Lane Nonnenberg to worldwide sales and marketing manager for Worldwide Customer Support Operations... Doug Chapin to G.M. of its Operations Services Division.

Cathy Lyons to G.M. of the Bergamo (Italy) Hardcopy Operation, replacing Gil Merme who returns to the United States as G.M. of the Greeley (Colorado) Storage Division.

CHART I CHANGE

Two operations in the Telecommunication Systems Business Unit have been elevated to division status. They become the Telecom Network Division under G.M. Virgil Marton and the Telecom Platform Division under G.M. Gail Hamilton.

PARTING SHOT

Violet in bloom

BUDGE BUDGE, India— On a late September morning in Budge Budge, a small industrial suburb on the Ganges River just outside of Calcutta, the sun lit up the petals of a Butterfly Pea flower. The flower caught the eye of Shikharesh Das, business manager in the Medical Products Group of HP India.

Although the garden had many flowers, among them roses and marigolds, Shikharesh says, "This particular flower stood out immediately."

The Butterfly Pea is a seasonal plant, its bloom spanning a period from August to February.

"The Butterfly Pea is quite a popular plant among gardeners in this part of the country," Shikharesh says.



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