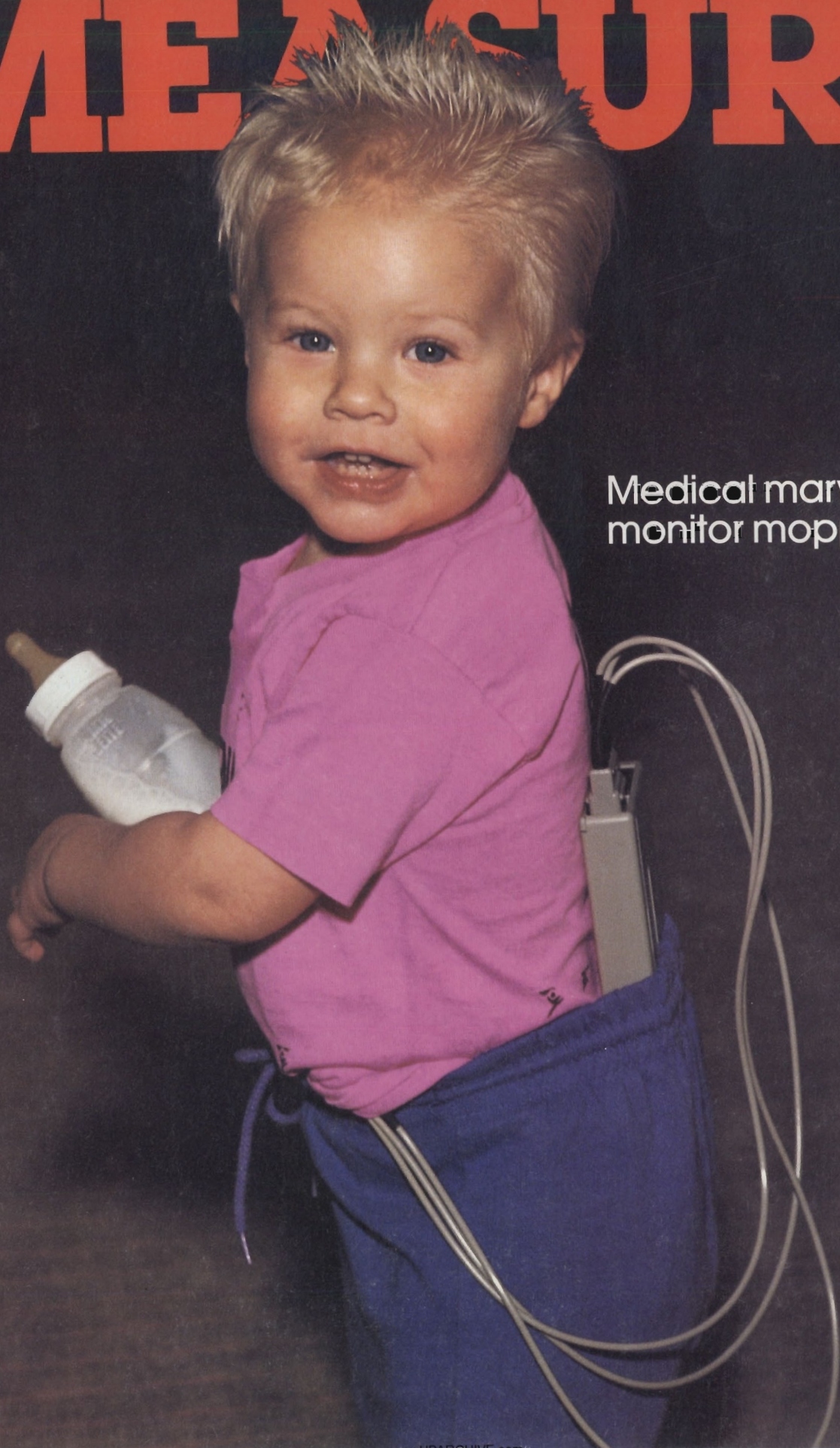


For the people of Hewlett-Packard

September-October 1991

MEASURE



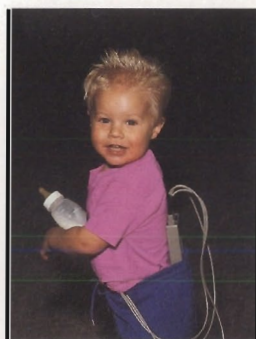
Medical marvels
monitor moppets



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On the cover: An HP telemetry transmitter gives 2-year-old pediatric patient Chad Hillstrom greater freedom to explore the halls at Lucile Salter Packard Children's Hospital at Stanford. Photo by Douglas Peck.

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 Against considerable odds, HP introduced its first computer in 1966. Today, computer products are two-thirds of HP revenue.

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MEASURE

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Hewlett-Packard Company is an international manufacturer of measurement and computation products and systems recognized for excellence in quality and support. The company's products and services are used in industry, business, engineering, science, medicine and education in approximately 100 countries. HP employs more than 91,300 people worldwide and had revenue of \$13.2 billion in its 1990 fiscal year.

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HP's biggest little gamble

By Gordon Brown

A card player would blink hard—and fold quickly—if dealt a poker hand with those unlikely numbers. Yet, 25 years ago HP dealt itself just such a hand, the 2116A, its first computer. Against considerable odds, the company held, then raised and raised again...

The game, of course, still goes on. But back then, any thoughts that HP computer technology would become a major force both within the organization and the marketplace would have been fantasy.

What happened, of course, is that during the past quarter of a century computers and their attendant systems became essential basic tools of business, industry, research, education and government. The game got bigger and bigger. Both the ante



and the take soared. And although HP was not one of the early players, it did participate with increasing skill and success in those big rounds of recent years.

As a result, computer products now account for approximately two-thirds of HP revenues. In fact, HP's identity in the business world is now predominantly that of a computer company, albeit one with very important and closely related instrument activities.

That makes it sound almost too easy. In fact, both the birth of the 2116A and the subsequent growth of the company's commitment to computers were the products of some very tough decisions—of “interesting times.”

Early on, the big questions were not “if” or “why” but rather “what” and “how?” By the early '60s, for example, there was fairly widespread conviction that the company needed computer technology for the control of increas-

Why get “Big Blue” mad so early in the game?

ingly complex instrument systems. In HP Labs under Paul Stoft, Kay Magleby's team had been designing a small computer oriented toward controlling and getting data from instruments.

Then in 1965 HP purchased Data Systems, Inc., a small division of Union Carbide. Among its assets were four engineers experienced in designing computers, plus a prototype design.

These engineers—from Data Systems, HP Labs and some from the



HP entered the computer market in 1966 with the introduction of the HP 2116A—basically a controller for instruments.

Dymec Division—comprised HP's first computer team, headed by Kay Magleby. They set up shop in part of Dymec's building at 395 Page Mill Road in Palo Alto, California. Later, a portable building was placed nearby to house the new software group headed by Roy Clay.

By that time it had been determined that existing computers on the market were awkward to interface with instruments. They required significant additional hardware and software.

The goal, then, was to design a real-time machine that was broadly compatible with instruments, and in a price range that the many users of instruments could afford. Almost unspoken at the time was the possibility that HP might some day become a player in the open field of computer manufacturing. Early descriptions, in fact, referred to HP's design as an “instrumentation computer” or “controller.” Why get



“This invisible thing called software was hard to grasp,” says Bob Grimm, HP retiree and former Dymec Division G.M.

“Big Blue” mad so early in the game?

Bob Grimm, Dymec's general manager at that time, recalls several of the things that made life somewhat more than just plain interesting: “Almost all of HP's engineers and managers were hardware people and used to looking inside an instrument and being able to see all the parts. But these computers had things like operating systems and compilers and assemblers that you couldn't see or touch.

“This invisible thing called software was hard to grasp. The software people didn't make things any easier because—as Barney Oliver once said—‘All those software people talk in code!’”

Yet, the project moved with remarkable speed—just 15 months from bread-



The HP 2116A computer (left foreground) proved to be seaworthy and just what Woods Hole Oceanographic Institution needed.

board to pilot production. Long days and weekend hours were the norm. The goal was to introduce the 2116A at the Fall Joint Computer Conference in November 1966.

In Roy Clay's case, the workload doubled when a programmer, Bob Stuckey, died in an airplane crash. With no time to find a replacement, Roy found himself working as a manager during the day and as programmer at night.

The end product was a rugged 230-pound machine standing almost 7 feet

HP's first computer customer

Woods Hole Oceanographic Institution was in a bit of a bind when it became HP's first computer customer in 1966. Today, senior scientist Carl Bowin recalls that funds were declining. Meanwhile, data-processing costs were mounting, mainly because it took eight days of shore-side processing on leased systems for every day of data logging at sea.

HP's 2116A proved to be the answer: With it, the staff on the research vessel "Chain" could process data as it was received—because the HP machine was seaworthy. Savings in time and money were significant. That first machine served 10 years recording oceanographic data under harsh conditions.



tall. Like HP's instruments, it was environmentally tough. Unlike other computers of that era, the 2116A could work in harsh environments, such as factories, extreme temperatures and high humidity. Other system elements included a paper-tape reader for inputting programs and a teletype to communicate with the computer's 4K core memory and to print output results. This minimum set of equipment sold for \$26,100.

As the November conference came and went, it became clear that early sales results for the product were falling below expectations—single digits per month instead of double. That drew a lot of attention.

At a meeting that included top management and the four specialists

A telephone strike put all time-sharing systems out of action—except Hewlett-Packard's.

from the regional sales organizations, it was agreed that:

- More applications programs were needed.
- More peripherals and other items should be developed.
- Documentation and sales literature were skimpy.
- Most HP sales people were instrument oriented, and—in spite of training efforts—were quite uncomfortable in



Customers Gary Border (center) of Digital Automation and Bob Combs (right) of Combs International share stories about the HP 2116B computer with HP's David Fastenau at a recent Interex conference in San Diego, California.

presenting the 2116A. Instead of the end users they usually called on, they now confronted EDP people who had concerns far beyond technical matters.

But there were good grounds for hope. For example, the Eastern Sales Region specialist with prior experience in minicomputer sales sold five HP machines and told the meeting: "If I didn't have to spend so much time trying to teach other salesmen what a computer is all about, I could have sold a hundred!"

As an outgrowth of that meeting, a number of decisions were made to redirect marketing efforts and to initiate or accelerate various programs, including a new kind of time-sharing. Let it be noted that at the Spring Joint Computer Con-

ference of 1968, a telephone strike put all time-sharing systems out of action—except Hewlett-Packard's. Orders poured in.

And above the booth was this huge sign that said: "H-P COMPUTERS" ... ■

(HP retiree Gordon Brown was Measure editor from 1968–82. He wrote on HP Labs' 25th anniversary in the January–February 1991 issue.—Editor)

Strange bedfellows

By Robert Bouzon

Politics, it's said, makes strange bedfellows—and that may be especially true in the computer industry.

For the past two years, the chief executives from 11 of the industry's fiercest U.S. competitors have gathered periodically in Washington, D.C., to discuss selected public-policy issues of industrywide concern.

Dubbed the Computer Systems Policy Project (CSPP), the CEO-level group focused its initial efforts on one international trade issue—the U.S.-Japan Semiconductor Agreement—and one domestic policy issue, government research emphasis on key technologies.

HP was instrumental in the CSPP's formation. It all started with discussions among John Young, John Akers of IBM and James Treybig, CEO of Tandem Computers. The three invited other companies to join CSPP.

When the group first got together in the fall of 1989, it was the first time

“CSPP is a very unusual advocacy group...”

some of these powerful computer executives actually had met one another face-to-face.

John Young chaired the group for its first two years, with Rod Canion of Compaq and John Akers of IBM as vice-chairs for trade and technology, respectively. The new chair since August 1991 is John Sculley of Apple, with Kenneth Olsen of Digital and Akers as technology and trade vice-chairs, respectively.

“CSPP is a very unusual advocacy group in that it is based on direct CEO involvement,” says Eben Tisdale, man-

CSPP member companies and CEOs

Apple—John Sculley
Compaq—Rod Canion
Control Data—Lawrence Perlman
Cray Research—John Rollwagen
DEC—Kenneth Olsen
HP—John Young
IBM—John Akers
NCR—Charles Exley, Jr.
Sun Microsystems—Scott McNealy
Tandem—James Treybig
Unisys—James Unruh

ager of HP's Washington, D.C., government-affairs office.

“The group has had a very focused agenda,” Eben says, “and it has accomplished major public-policy changes in a short amount of time.”

On the international trade front, a small CSPP working group, including HP, started in the spring of 1990 to meet with representatives of the Semiconductor Industry Association (SIA) to forge a unified view on the renewal of the U.S.-Japan Semiconductor Agreement.

Signed in 1986 and set to expire in July 1991, the pact helped open the Japanese market to non-Japanese chips, but also caused disruption in U.S. chip markets, creating friction between chip makers and chip users.

CSPP worked with SIA to create a unified front, and together they helped shape the U.S. government position in talks with Japan. The result was a new semiconductor trade agreement to continue opening the Japanese market, but without causing adverse effects in U.S. chip markets.

The net result for HP and other CSPP companies? Millions of dollars in sav-

ings on chip purchases. And what is the benefit for the global economy? More access to an important foreign market and a freer market in the U.S.

On the domestic policy front, CSPP initiated groundbreaking work to answer the following questions: What technologies are critical to the success of the U.S. computer-systems industry? And how well is the U.S. developing them?

Another first occurred when chief scientists from the 11 CSPP companies gathered to come up with the answers. Led by HP Labs director Frank Carrubba, they identified 16 key technologies and assessed the U.S. as leading the world in half of them, weak in the others and likely to decline in all in the future without positive action.

The CSPP report, released in July 1990, identified the success factors

“The group has had a very focused agenda...”

needed to regain or maintain U.S. technological predominance. It received widespread attention, and has led to similar assessments by other groups and by the government.

Next steps for the CSPP include seeking an increased focus of government-sponsored research on technologies that are critical in a generic way to commercial product development.

And as the U.S. Congress debates the merits of creating a national high-performance computer network, a CSPP working group co-chaired by John Young and John Rollwagen of Cray Research will formulate the computer-systems-industry input and promote its viewpoint. ■

(Robert Bouzon is HP's East Coast Public Affairs manager.—Editor)

In the last three years, HP has opened the doors of a number of new organizations... through acquisition, joint venture or traditional growth. Among them are:

- Idacom Telecom Division
- Hewlett-Packard & Controll Kft.
- AOT Operation
- Edisa Informatica SA
- HP Thailand Ltd.
- HP Ceskoslovensko spol. s.r.o.
- Golden Technology Company Ltd.
- HP Portugal S.A.
- Haupu Information Technology
- HCL Hewlett-Packard Ltd.
- Hewlett-Packard Polska
- Intelligent Network Operation
- Apollo Systems Division
- Bergamo Hardcopy Operation
- Quingdao Zhonghui Medical Products Ltd.
- India Manufacturing Operation
- Hewlett-Packard Bilgisayar Ve Olcum Sistemleri AS

NEW
KIDS
ON THE
BLOCK

By Brad Whitworth

Growth. HP has faced tough times for the past four years—times marked by a hiring freeze, redeployment, voluntary severance, enhanced early retirement and other austerity measures. During such times it's unusual to think about growth. But while the company has been pruning its total work force and some of its top-heavy organizations, it's also been sprouting new sales and manufacturing operations all over the world. There has been a never-ending stream of acquisitions, joint ventures and equity investments in other firms.

On the next three pages, you'll hear from employees at six of those newest HP entities. You'll learn why they're excited—and scared—to be part of a new part of HP. And you'll hear about their hopes for the future. Two people work for manufacturers that HP acquired. Two work for sales organizations in countries where HP had used third-party sales reps. And

two work at new manufacturing sites that grew from existing HP operations.

Meet your new neighbors, the people who work for the manufacturing and sales organizations that are HP's "new kids on the block." ■

(Brad Whitworth became Public Affairs manager for HP's Intercontinental Operations in April 1991. But for 10 years before that he was a Measure staffer and served as the magazine's editor from 1982 to 1986.—Editor)

India Manufacturing Operation Bangalore, India



Nandini S (left) confers with stores assistant Rajesh N.

Nandini S's new HP family extends to places she's never seen: Scotland and California. "I'm proud to belong to a company that has roots in so many countries. The chance to interact with people from different cultures is definitely a rich experience."

As imports assistant in the materials group at HP's new India Manufacturing Operation (IMO) in Bangalore, she coordinates shipments and consignments from other HP divisions. IMO assembles and tests a number of products designed by other entities. "IMO is still a small family when compared to other HP operations. I eagerly look forward to coming to work every day, something I didn't feel in my previous job."

Nandini S joined HP last December, two months after IMO got its start. She had worked for Premier Polytronics, a manufacturer of electronic textile-control instruments, so she already knew about HP. "I'd even handled the HP digital scope a few times," she says. "But in India, until recently, HP was almost unknown outside the industry."

While she appreciates the small-family feeling that IMO offers, "I hope we're able to maintain the same healthy atmosphere as we grow in size. One thing that I think needs to change at HP is the religious adherence to policies and principles, no matter what the situation may be. I think we need to be a bit flexible in applying them."

One HP tradition that still surprises her is the HP beer bust. "In Indian society, the consumption of alcohol is not encouraged, so I'm not used to the idea that people take beer, especially during working hours."

But her overall impression of the company is positive. "We have been having lots of visitors, and when they share their high views of HP, we all are very thrilled over it."

IMO: In October 1990, HP started manufacturing a limited number of instruments at the new India Manufacturing Operation. The operation got under way with just a handful of people and now has a roster of more than 50 at the factory in Bangalore. IMO plans to move to a bigger facility soon.

Bergamo Hardcopy Operation Bergamo, Italy

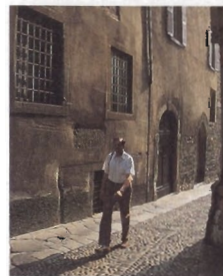


Roberto Mottola, production manager

Roberto Mottola is a man with a mission. For the past year he's been assembling a production team for HP's newest European manufacturing operation.

He's proud of the start-up crew in his native Italy. "I was one of the first Italians hired for the project one year ago. We'll end this year with about 70 local employees, six foreign service employees and a dozen people on extended business trips."

But being part of a small start-up makes Roberto aware of the shortcomings of a large multinational. "If I had a magic wand and could change one thing about HP, it would be to simplify the organization. I remember with horror listening to a lab manager who told me she needs to pull 15 entities together to make a decision. I'd love to see us reverse the trend where more people have the authority to say 'no,' while fewer people have the authority to say 'yes.'"



BHC: When HP's former Peripherals Group looked at its European presence in 1989, it decided to launch a new manufacturing operation. The idea was to build printed-circuit boards for HP LaserJet printers in Italy to thwart possible trade barriers against products not made in EEC countries. BHC opened its doors in a temporary location in Brembate in April 1991, started prototype runs in June and full-scale manufacturing in August.

HP Thailand Bangkok, Thailand



Nusura Komolpetch, marcom secretary

After graduation from Silpakorn University, Nusura Komolpetch went to work at the Royal Orchid Sheraton Hotel in Bangkok. Two years later she sent a letter to HP, applying for a job as receptionist. "At that time, I didn't know what kind of business HP was because it is not as well known in Thailand as its competitors. I decided to join HP mainly because I wanted to change my career and get out of the hotel business."

Today Nusura knows a lot about HP products and services. Part of her job is as marcom secretary where she helps handle press releases, works with a public-relations firm to coordinate press conferences and answers inquiries from the press. She also supports the Analytical sales force, coordinating the schedules of field engineers and providing product information directly to customers.

"Because I'd worked in hotels before, it was hard shifting gears. I had some problems adapting. But HP and the people made me feel confident. They trusted me to do my jobs by myself."

One of the biggest differences Nusura sees at HP is how willing people are to help one another. "Even though we are in different positions, departments or countries, everyone works together well," she says. She feels HP is in a great position to share its expertise with Thai customers and to benefit from the country's economic boom. "HPTL would like to be one of Thailand's top three computer companies.

"And I am one of those who intends to turn this objective into reality."



HPTL: HP opened its own sales subsidiary in Bangkok, Thailand, in November 1989. The organization grew out of a small distributorship and today employs 50 people. All but two are Thai nationals.

AOT Operation Milpitas, California



Ellen Crawford, software design engineer

Ellen Crawford hopes history doesn't repeat itself. Eight years ago she was working for a small Silicon Valley start-up that was acquired by a large company. Red tape and bureaucracy crept into her job, her management team was replaced and the new management team canceled her project. That's when she signed on with another start-up, Applied Optoelectronic Technology (AOT).

So far, at least, HP's acquisition of AOT hasn't been an instant replay of her past experience. "It still hasn't really hit me. I still sit at the same desk, I still do the same work. My paycheck does look different, but in total, the impact of the acquisition hasn't sunk in."

The software design engineer admits that the atmosphere has changed since the day she joined AOT in 1985. At that time, the company had just 20 employees. "There isn't the same sense of excitement. Back then, you helped push machines back to the loading dock and ship them out. You had a feeling you and the company could go anywhere.

"We traded that excitement for some sense of security. The last couple of years at AOT had been pretty lean, we'd skipped a couple of pay reviews, I saw some people let go. So the timing was just about right for HP to buy us.

"I'm amazed at how many resources there are in a company like HP," she says. "For example, until they started promoting the picnic, I didn't even know that HP owned its own picnic and camping grounds (Little Basin) in the Santa Cruz Mountains. I just wonder how many other resources there are out there that I don't know about yet."

AOT: HP acquired the Applied Optoelectronic Technology Corp. in January 1991. The organization, now HP's AOT Operation, designs and manufactures automatic test equipment for semiconductor manufacturers.

HP Portugal Lisbon, Portugal



JOSEPH BRIGNOLO

Cristina Almeida, order-processing administrator

Before joining the start-up group for HP Portugal, Cristina Almeida knew a lot about Hewlett-Packard because she worked for the competition—Digital—for almost five years. “We were curious to see what was going to happen with the opening of a new HP operation in Portugal.” Now she’s part of the team that’s making it happen.

“Two months before the official opening, I started working with HP in Madrid to learn our order-processing system. I learned the theory, but most of the time I was doing real work alongside the Spanish employees. This was the best way to learn, despite the fact that business in Spain and Portugal is very different.”

Cristina processes orders from HP’s Sales Force 12, the group that sells to dealers and resellers. She had worked in a similar job at DEC, “but it was really a challenge to start with a company, using the professional experience I already had in this area.”

“The biggest issue I find in a big multinational that is new to a country is how quickly it can adapt to a new reality, a new way of doing business. People think differently from country to country and companies need to balance the need for consistent policies and procedures with the need for flexibility in dealing with employees and customers.”



HP PORTUGAL: HP announced in May 1990 its intention of opening a Portuguese sales subsidiary six months later. Many of today’s 55 employees came from CPC, the third-party distributor of HP products from 1985 to 1990.

Idacom Division Edmonton, Alberta, Canada



BOYCE & ASSOCIATES

Ian Moss, mechanical development engineer

“I had a fear we would be blown away by a competitor with a better product. After all, we were just a small company with one product,” says Idacom’s Ian Moss. “When HP acquired us, the chances of being blown away evaporated.”

“There are other advantages to being acquired. The HP name behind us adds momentum to our effort. We have more resilience. We have a broader ability to sell our product. And much better purchasing power for parts and materials.”

Ian joined Idacom 10 years ago when there were just 30 people working in one bay of an Edmonton warehouse. Since HP’s acquisition of Idacom, there’ve been some changes. “A small company can make decisions much more quickly,” says Ian. “But I’m surprised about the degree to which HP has given us freedom to call our own shots. There really aren’t a lot of fingers in the pie.”

It’s been 14 months since the acquisition was completed. “I used to be able to brag about HP being a big competitor, but that’s gone. Now that I know more about the company, I can’t think of anybody I’d rather have been bought by.”

IDACOM: In the summer of 1990, HP purchased Idacom Electronics in Edmonton, Alberta, Canada. The company became HP’s second manufacturing site in Canada, producing high-performance computer-based protocol testers for the communications industry.



It's not the same old story

The painful privilege of watching your parents age can bring stress and feelings of hopeless inadequacy. HP's new elder-care benefit might help you shoulder the burden.

By Jean Burke Hoppe

Joan Hezeltine, an administrative assistant in the components-engineering group at Boise (Idaho) Site Operations, is watching her father, a retired school-teacher, "die piece by piece" as he succumbs to Alzheimer's disease.

She has watched Bill, 76, forget how to write his name, count, tell time and call his children and grandchildren by name. She remembers the last time he drove—when he ran a red light, totaled the car and couldn't tell the police where he lived. She's cringed listening to her brilliant, reserved father let loose with uncharacteristic profanities produced by the disease. She swallowed tears when he told her, "I have 'Almer's' disease. I'm so stupid. You're gonna get to the point where you just hate me."

Joan's mother, Mary, troubled by phlebitis and arthritis at age 75, is Bill's

full-time caregiver and vigilant guardian. Joan has listened to her mother's anxious stories about Bill's nighttime wandering and her fears about the future.

Since Bill's diagnosis, she's learned to drive, and to maneuver the complex worlds of insurance, personal finance and law that Bill always managed for the family. "She's angry," Joan says. "She's angry that this happened. They worked so hard to pay for their home, to set aside money to travel, to enjoy my father's retirement.

"We'd like to get respite care so that she could get out of the house, maybe take a swimming class for her arthritis, but she won't do it. She doesn't want to leave him for a single minute. She'll have been married to him for 56 years this November and her feeling is, 'As long as I can take care of him, I'm going to do it.'"

Joan was one of the first employees to use the company's new Elder Care Consultation and Referral Service in the

United States. HP has retained Work/Family Directions, Inc. (the consulting firm that also provides HP's Child Care Resource and Referral Service) to counsel and help employees locate quality care for their elderly relatives.

Through the Work/Family representative in Boise, Joan and her family (including three siblings and Joan's husband, Wade, who is an engineering specialist in the Boise Printer Division) have found respite care that will be ready when Joan's mother is. The family has hooked up with a valuable Alzheimer's support group that both Joan and her mother attend. And the family has decided where Bill will live if his deteriorating health outstrips the ability of Joan's mother to care for him.

Despite widespread myths to the contrary, experts say that 80 percent of care for the elderly in the U.S. is provided by family members. The caregiving responsibilities often fall on women, 51 percent of whom now work outside the home. Those who are also parents may have

Elder care might just turn out to be the employee benefit of the '90s...

barely worked out the logistics of backup day care or using flex-time for well-baby visits when a parent suddenly falls ill and there's a whole new set of decisions to make.

Situations like these take their emotional toll and the effects can be felt in the workplace. Men and women caring for elderly relatives take time off, miss work, sometimes feel distracted and depressed. Applying for Medicare or checking out nursing homes has to be squeezed in between work deadlines, staff meetings, business travel, folding



MARY CLINE

He's dying "piece by piece" Joan Hezeline says of her father, Bill, an Alzheimer's victim.

laundry and swim-team car pools. Some employees switch to part-time work or quit their jobs.

Elder care might just turn out to be the employee benefit of the '90s, for Joan's sad rite of passage is far from unique. The median age of HP employees is 38, a time when elder-care issues frequently arise.

Today one in eight Americans is over age 65. By the turn of the century, only a few years away, the number of Americans age 65 and over will grow by 11 percent, and the number age 85 and older by 42 percent. By the year 2030, when the last of the "baby boomers" reach their prime, more than one in five Americans will be over 65, according to the American Association of Retired Persons.

Nearly 60 percent of those who are 65 and over who are not in institutions are functionally limited in some way, according to U.S. Census Bureau statistics. Many of them need assistance with meal preparation, housekeeping, transportation or managing money.

Alan LaRue, West Coast director of Work/Family Directions until July, when he transferred to the company's headquarters in Boston, says advance planning for the needs of elderly relatives is an important component of Work/Family's service. "People often wait

until a health crisis strikes to explore options, but our counselors are available to help people learn ahead of time about aging issues such as housing, medical insurance or living wills."

In retrospect, Toni Atkinson, software-development engineer at the Colorado Networks Division in Fort Collins, understands how that kind of preliminary research could help.

"Probably the most valuable thing I learned from the Work/Family counselor was the language I needed to carry on the investigation for my father-in-law, Harry. They taught me the vocabulary, the definitions of the levels of care, like 'assisted-living residence' and 'skilled nursing facility' and 'home care.' I think most people would tend to hold off calling until they could be more articulate



TONI ATKINSON

Rick Atkinson helps his father, Harry, box up household goods for an auction after Harry moved into a nursing home.

about the situation, but there's no need."

Toni's husband, Rick, a graduate student, was on holiday break in January and planned a visit to Harry in Belleville, Kansas. Rick called him the night before he left and was concerned about how disoriented his father sounded. When he got there the next day, his father was in the hospital, the victim of a slight stroke and heart attack that had left him off balance and confused. He had tried to

“old” story

drive his car out of the garage without opening the door. In his delusion, he was planning to drive to Minnesota. Neighbors found him and got him to the hospital.

Harry's future held nothing but question marks for Rick and Toni, and the pressure was on. Rick had only two weeks before school started again back in Fort Collins. Toni was in the middle of a huge project at work. And there was no way to tell at that point what kind of care Harry would need. It was clear only that he could not go home alone for the time being.

Work/Family helped them investigate care options in Belleville, Fort Collins

HP's elder-care benefit will streamline difficult decision-making for many.

and Lincoln, Nebraska, the biggest city near Belleville. They decided to place Harry in one of Belleville's two nursing homes to receive the care he needed and stay in familiar surroundings. Toni says they worry about a sudden change for the worse, and are prepared to move him to Fort Collins if that happens. The groundwork is all done.

Kay Coen, whose husband, Charles, works at the SID Operation in Palo Alto, California, also called Work/Family for help with a long-distance crisis involving her mother, Sydelle Leavitt, 82, of Tucson, Arizona. Kay works full time at Syntex, and she and Charles have two children, ages 1 and 5.

Sydelle had a bad spell recently when she became disoriented and fell. She crawled to the phone and called for an ambulance to take her to the hospital.



Kay Coen's daughter, Megan, didn't know her grandfather, but feels close to him when she wears his wedding-day top hat.

She instructed them not to turn on the siren for fear of disturbing the neighbors, and she crawled to unlock the front door so the paramedics wouldn't have to break in.

Fortunately, Sydelle now is stable and still able to live on her own. Despite the long distance between them, Kay, through her Work/Family counselor in Tucson, has been able to arrange a transportation service to get her mother to appointments and to the store. They're looking for a college student to live with

Sydelle rent-free in exchange for help around the house. Sydelle was scheduled for a complete geriatric consultation in July.

"I'm glad she's getting that," says Kay, "because I know a stranger will get more truth out of her about what she needs and how she feels than my brother or I can. She's so independent and she doesn't want to 'bother' us with her problems, she says."

But Kay will worry anyway because that is the nature of this problem.

HP's elder-care benefit provides information, choices and ongoing support to employees and their families. It

By the year 2030, more than one in five Americans will be over 65.

streamlines difficult decision-making for many. It does not, however, take away the heartache the people who shared their stories here—and many others—feel.

But there aren't many complaints about that. As Joan Hezeltine says, "I am so grateful for the support I've gotten from my boss throughout this, and from our elder-care counselor. It makes it easier.

"When I can step back from the day-to-day problems and look at the whole picture, I guess I feel pretty lucky. We had good parents who loved us. We've all been able to stick together. It's our turn now to take care of them.

"That's what it's all about." ■

(Former Measure editor Jean Burke Hoppe is a San Francisco, California-based free-lance writer. Her last Measure article, "Hope behind Romania's doors," appeared in the May-June 1991 issue.—Editor)

Elder care is a global issue

While Work/Family Directions, which HP has retained to administer its elder-care benefit, operates only in the U.S., employees worldwide are struggling with these same issues.

To provide a global perspective on elder-care conditions, *Measure* polled personnel representatives from countries in which HP operates. Most of the responses described a situation nearly parallel to what is happening in the United States. The nature of the family has changed dramatically the past 10 years all over the world, said respondents from Japan, Canada, Germany, the United Kingdom, Austria and Belgium. More women, the traditional caregivers, are joining the work force. Grown children and their families live apart from older relatives, often a great distance away and often in small apartments or flats that won't accommodate more people.

With life expectancy increasing in many countries, there is an urgent need to provide alternatives for housing and services for the growing population age 65 and over, for which families traditionally have cared.

A few of the responses clearly stood out by indicating a tradition of family support for elders, or strong government programs.

The replies from Mexico were short and to the point. Said Arturo Islas, "Mexican families really care for their old parents, grandparents, or any other older relative. The last alternative we usually think of is to send old relatives to any institution."



The Chinese government provides elderly citizens with recreational activities as well as the Five Guarantees of food, clothing, housing, heating and a funeral.

Elder care in Mexico is clearly a family affair.

So, too, in Brazil where Alberto Golbert says, "Brazil is a Catholic country, and it is the norm for children to open their homes to their parents. In families with three or more children, the parents might rotate, spending a month or two with each child. When there are only one or two children, parents who are ill might be taken to an institution if the children work."

Jianhua Qi says it is common in China for two or three generations to live under one roof. Children are required by law to support their parents. "Since older people are more likely to have secured government housing, and younger people are not eligible for that until their mid-30s, they all live together. Grandparents often care for their grandchildren while the parents work."

The Chinese government provides the elderly what it calls the "Five Guarantees," says Jianhua: food, clothing, housing, heating and a funeral. It also provides recreational activities, social events, travel discounts and health care.

The Belgian Law (Code Napoleon) also obliges children to care for their parents when they need help, says Jacques Bruylant. "Many children open their homes to their parents," he said, "while other older people go to 'old-age hotels—pension houses,' where they rent a flat and receive medical care, food and entertainment."

One of the more positive reports came from Norway, where Ann Tremblay Voelstad reports "fairly good public facilities for the elderly. We have a Social Security-type pension covering everyone at a subsistence level, and most people have other work-related pensions. Health care is free." People who can no longer live at home stay in subsidized housing or in hospitals.

"Although some people have elderly parents or in-laws living with them, this is not the custom," says Ann. "Most of our employees are part of two-income families, leaving no one at home to take care of these domestic matters."

Medical marvels

PALO ALTO, California—One of the thoughtful details included in Lucile Salter Packard Children's Hospital at Stanford is a cushioned bench in each room that allows an anxious parent to spend the night alongside a sick child.

For the parents of Blake Vanderhoof, 4½, it meant staying comfortably close to their son when he had heart surgery in June and again when an infection occurred and he was readmitted.

An HP cardiac respiratory monitor near Blake's bed also helped nurses keep a close watch on him after his operation. Three electrodes attached to Blake's chest sensed his heartbeat and breathing patterns.

The new 143-bed hospital, opened in June, is part of the Stanford University Medical Center. It is named for the late Lucile Packard, wife of HP co-founder David Packard.

Concerned about health services for children, Lucile was a longtime volunteer at Children's Hospital at Stanford. When the need became apparent to combine its services with those of the pediatric department of the separate Stanford University Hospital, she led planning for a new hospital—and joined with her husband in giving \$40 million as the centerpiece for its funding.

Touring Packard Children's Hospital, you see patios bright with flowers, wide windows to admit cheerful light, family lounges with kitchen and laundry facilities on each unit, a recreation therapy room that looks like any busy nursery school, and classrooms, among many carefully detailed features.

HP medical equipment is part of the health-care team. All of the hospital's third floor and half of the second floor are wired for telemetry—a life line

of communication that permits Chad Hillstrom, 2, (shown on the cover) to enjoy supervised freedom instead of being confined to a crib.

There are dozens of HP's component monitoring systems, equipped with modules that can be plugged in to provide constant information on those measurements needed for an individual patient. The monitors, which have a different color trace for each vital sign, are everywhere: in the various intensive-care units that serve newborns, pediatric patients like Chad or older children; in the anesthesia and post-operative unit; and in acute-care rooms where a specially designed air-flow system reduces the risk of infection.

The old hospital used HP medical equipment for many years, and Hewlett-Packard made a grant of \$1.78 million in modern medical gear for Lucile Packard Children's Hospital.

For several months before the day of the actual transfer of patients, Jeff Charzuk and others from HP's Foster City, California, office installed HP equipment and trained the medical staff on its use. "We were all over the place on move-in day," says Jeff. As for the hospital itself, "This is it—all the things people have been talking about." HP will continue to provide the support that can be life-critical in medical applications.

On the following pages you'll glimpse the special atmosphere in which these HP medical products are on the job, protecting young patients. ■

—Betty Gerard



above

Blake Vanderhoof, 4½, likes having his mother, Janet, read to him while he is hospitalized. The HP cardiac respiratory monitor at his bedside tracked his heartbeat and breathing after recent heart surgery.



PHOTOS BY DOUGLAS PECK



above

In the pediatric intensive-care unit, nurse Rose Alonzo examines a baby whose family has tucked a welcoming photo into the small bassinet. At the right rear is an HP component monitor.

left

This baby, in a bed with heat lamps for radiant warmth, has a Nellcor sensor on one toe which is measuring the amount of oxygen in the blood. Non-invasive, the sensor eliminates the need to take a blood sample for this purpose. The readout is seen on the HP component monitor overhead.

Medical marvels



above

One personalized touch is a crayoned drawing at the door to each room. Alyssa was only 1 month old when she required surgery, so her daddy drew her nameplate. Spencer, 3 months, was also in the hospital for an operation.



above, right

Critical-care nurse Bente Lindblom learns details of the HP component monitoring system from Terri LoCurto, HP clinical-application specialist who is a former nurse herself. Over a five-month period, Terri trained the hospital's 200 nurses and many physicians on the new HP medical equipment.

right

When a mobile patient like young Chad Hillsfrom (cover) wears a telemetry transmitter, it sends a signal to a monitor at a central nursing station, such as this one in the infant/toddler intensive-care unit. One and one-half floors of the hospital are wired for HP telemetry.





left

Each of the 31 newborns in the neonatal intensive-care unit is connected to an individual HP component-monitoring system to alert the staff to any dangerous changes in condition. Nurse Carol Hutchison (front) examines the small occupant of one isolette, while down the row a visiting mother cradles her baby.



HP PHOTO

above

Color imaging is now a feature of HP ultrasound imaging—one of the company's major medical product lines. The adjacent Stanford University Hospital has five HP ultrasound imaging systems.



left

School-age patients like these girls continue their studies in the hospital, which serves children from newborns through adolescents. The local school system provides teachers and study materials, using three telemetry-equipped classrooms in the building.

HP earns a Ph.D.

By Michael Scofield

Becoming a university instructor is a lifelong dream for some people. For Al Gasiewski (pronounced gah SHEV skee), it was an accident.

"Even as a kid I admired the teaching profession, but I was in graduate school before I realized that I could explain things decently myself... that I could help people better understand nature."

Al Gasiewski and Shira Broschat (pronounced BRO shot) are two of 30 HP-sponsored professors teaching in 24 private and public universities around the United States.

HP gave them half of their tuition—and loaned them the other half—and living expenses during the four or five years it took to earn a doctorate in engineering or computer science. If the instructors teach for at least three years afterward, HP forgives the loan portion of their fellowships.

In addition to their doctoral educations, Shira and Al each received \$50,000 worth of HP equipment for the schools where they teach—Shira for the School of Electrical Engineering

"...teaching exercises the heart, and research exercises the mind."

and Computer Science at Washington State University, and Al for the School of Electrical Engineering at the Georgia Institute of Technology—Georgia Tech for short.

"The idea," explains HP contributions manager Nancy Thomas, "is to keep more good people in academia after earning their Ph.D.s, rather than letting



"Serving as a role model may be the biggest reason of all for me to stay (in academia)," says Shira Broschat, Washington State University professor who earned her Ph.D. with help from HP.

them be lured away by the higher salaries of industry.

"We'd like to hire these young people ourselves! But the more people we can persuade to stay on as inspirational teachers, the more students we'll see earning advanced degrees in the engineering and computer sciences down the line."

"Why am I staying in academia?" asks Shira. "Because teaching exercises the heart, and research exercises the mind. Teaching makes me feel good; research is exciting."

Al adds this plus: "The academic environment offers intellectual freedom."

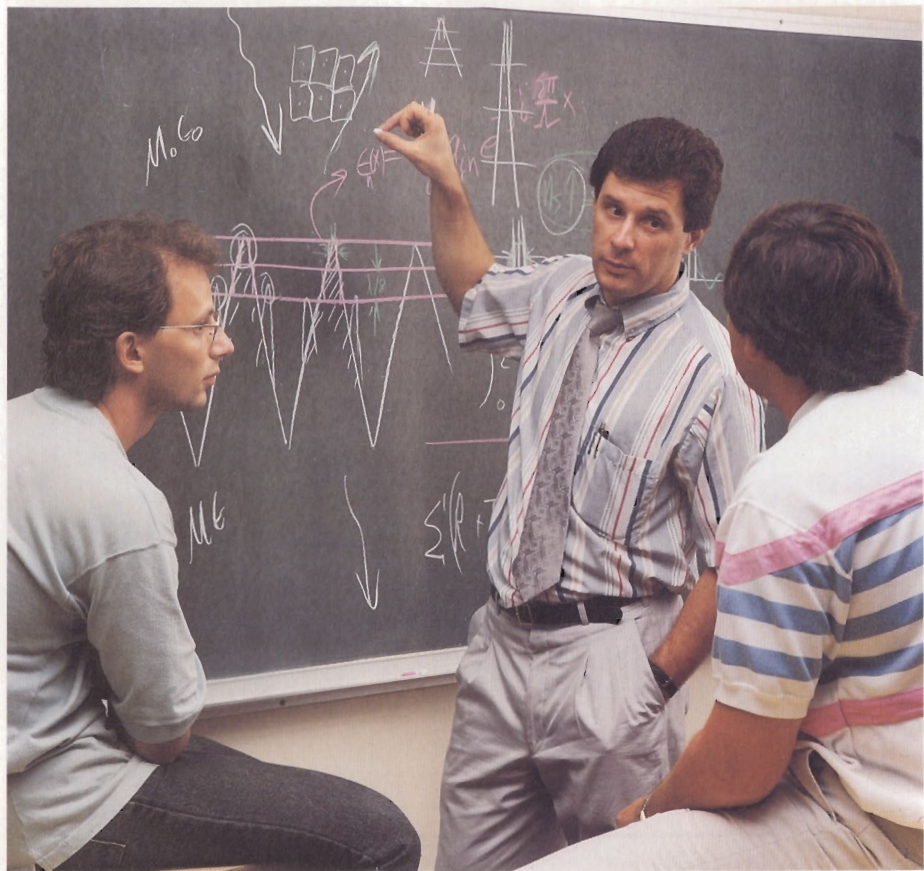
Shira and Al love teaching. But of the 61 students HP has sponsored since the program began (10 with their doctorates still ahead of them), 20 have dropped out of the program. Why? Nancy Thomas says, "Most realized early on, even with the fellowship money, that they simply weren't motivated to teach. It's a five-year grind after earning that undergraduate degree just to get a Ph.D.

The program's not for everyone."

Does HP consider the program a success? "Yes, indeed," Nancy says. "The graduates who continue with it are making tremendous contributions to their schools."

The enthusiasm professors Shira Broschat and Al Gasiewski show for their teaching and research is catching. Last year students at Washington State chose Shira as Teacher of the Year in electrical engineering. One woman said Shira shored her determination to succeed "in a career area still dominated by men," noting that Shira even called her at home to find out why she had been missing classes.

This fall Shira will teach a course she designed during the summer called Numerical Solutions to Electromagnetic Problems. Her husband, professor John Schneider, teaches down the hall. The two color workstations HP donated as part of Shira's fellowship are additions to a roomful of HP workstations nearby. Laughs Shira, "The new equipment



Al Gasiewski is “a heck of an engineer,” as the Georgia Tech school song suggests. “I talk to my students about opportunities in both industry and academia,” he says.

decidedly earned me brownie points with my department head.”

Washington State University gives Shira the half-and-half mix of teaching and research that she sought. “Most of my research involves ‘modeling,’” she says. “I simplify equations that describe the laws of nature. The trick in modeling is to simplify the equations in such a way that they still give correct theoretical predictions.” Shira’s research is used in applications, such as predicting the height of ocean waves.

Three thousand miles away, receiving microwaves from satellites forms the heart of Al Gasiewski’s research and teaching at Georgia Tech University. He uses an HP-donated spectrum analyzer and other HP microwave equipment to improve satellite sensors that measure properties of the earth and its atmosphere. This allows meteorologists to better forecast the weather and monitor global warming.

States Al, “Without the HP equipment, we would have a tough time starting the Laboratory for Electromagnetic Remote Sensing here.”

Al is especially proud of his teaching, for which he won an award while earning a Ph.D. at the Massachusetts Institute of Technology. At Georgia Tech

getting them superior lab equipment and helping them obtain scholarships.”

Neither Al nor Shira wants to leave teaching. But industry continues to sing a siren song about higher salaries. How do professors like these resist temptation? And what do they tell their students about such a decision?

“Scientists are basically human,” laughs Al. “We have the same temptations as any consuming citizen. But for me, watching a student finally understand a concept and make intellectual progress outweighs any negatives.

“When discussing careers, I talk to my students about opportunities in both industry and academia. Some, like me, have natures that will thrive better in academia. I ask them this: ‘What do you most want to do—what sounds to you more like a hobby than a job?’ If I can find that out, I’m batting a thousand.”

Al is a bachelor. Shira and husband, John, have a 4-month-old daughter, Miya (the name means ‘beautiful’ in Japanese). How does Shira deal with the lure

of earning more money in industry?

“I plan to win the lottery and stay in teaching,” she quips, adding “the problem for me is more one of time. I take my responsibilities seriously—between research and teaching and advising, I’d gotten used to working 70 to 90 hours a week.

“Now I have Miya, my biggest responsibility. The question is how to cut back to 40 or 50 hours a week and still get everything done. John and I are trying to work it out; we both love what we’re doing.

“But there are so few women in academia. Students need role models. Serving as a role model may be the biggest reason of all for me to stay.” ■

(Michael Scofield is a free-lance writer based in Palo Alto, California, who specializes in the human side of high technology.—Editor)

“...watching a student finally understand a concept...outweighs any negatives.”

he teaches undergraduate courses in electromagnetic theory and graduate courses in electromagnetic remote sensing. “Training a future generation of engineers is strong motivation,” he says. “You not only want to support them intellectually, but also financially, by



ANNETTE WACOVITZ

Relatively speaking

Just what the heck is relative ranking and why does HP use this performance-management tool?

It's an age-old question: What's the best way to judge and reward employee performance?

Some companies use the seniority system. Others create a pool of money for "merit" increases.

At HP, it's all relative—that is, the company uses "relative ranking" where managers assess and compare differences in performance among employees doing similar work.

Why does HP management think that relative ranking works best for the company? Because it directly ties in with three key HP priorities: pay employees for their performance; link performance

to business objectives; and encourage continuously rising levels of employee performance to help HP remain competitive.

The rationale is simple: the marketplace changes continually and HP's performance—in other words, *all* employees' performance—has to continue to improve to keep pace.

"Employees are evaluated against a moving target," explains Ben Holmes, vice president and general manager of the Medical Products Group.

Adds Dick Anderson, vice president and general manager of the Microwave and Communications Group, "Com-

parative ranking best advances the concerns of both the employees and the stockholders.

"Its aim," Dick says, "is to assure that those making the most contribution get paid the most; those making the least contribution get paid less, with the rest reasonably spread."

Two years ago, a task force of HP managers began meeting to suggest ways to improve the process. The group's recommendations—approved by the personnel committee of HP's

Bonza, information-technology manager at the Avondale (Pennsylvania) Division and a task-force member.

"Whichever we use," Chuck says, "the importance of the whole process is for the manager and the employee to have a more beneficial relationship. Performance evaluations should help employees improve and managers become better managers."

■ Instead of ranking an employee "acceptable," managers now must classify employees in the "performance rank 1" or "action needed" category.

"Every employee survey I've seen in the last two years says that HP isn't aggressive enough in dealing with poor performers," says Bob Mead, an R&D manager with the Commercial Systems Division and a task-force member. "The 'action needed' rank helps address that problem."

"Action needed" means that the employee isn't meeting management expectations for the job. Continued

"Employees are evaluated against a moving target."

Management Council in 1990—will be implemented in full force during ranking sessions in November. That's when managers will explain the changes to their employees. Among the changes:

■ Terms—such as "exceptional," "excellent," "very good" and "good"—have been replaced with numbers—namely "performance rank 4," "performance rank 3," "performance rank 2" and "performance rank 1."

"Many employees would fixate on the meaning of a word, rather than the overall evaluation," says Doug Moore, an area business manager in the St. Paul, Minnesota, sales office. "One employee told me he had never been 'just very good' at anything in his life."

It would be a mistake to focus too heavily on the switch from ranking terms to numeric ranks, says Chuck

"One employee told me he had never been 'just very good'...in his life."

performance at this level would lead to an unacceptable situation. Managers have to describe specifically what needs to improve and how it must be demonstrated.

Ian Ross, manufacturing manager at the printed-circuit assembly center in Rohnert Park, California, notes that the "action needed" change means that managers "have to play the full management role."

"HP has been described as being 'terminally nice' to its employees," Ian says.

"Now managers will have to deal with tough evaluation situations head-on, but that's part of our responsibility as managers."

"Our recommendations didn't solve every problem," Bob Mead says, "but they're definitely an improvement to the present program."

The Eastern Sales Region was among the first HP organizations to implement the new ranking system, and employee

"HP has been described as being 'terminally nice' to its employees."

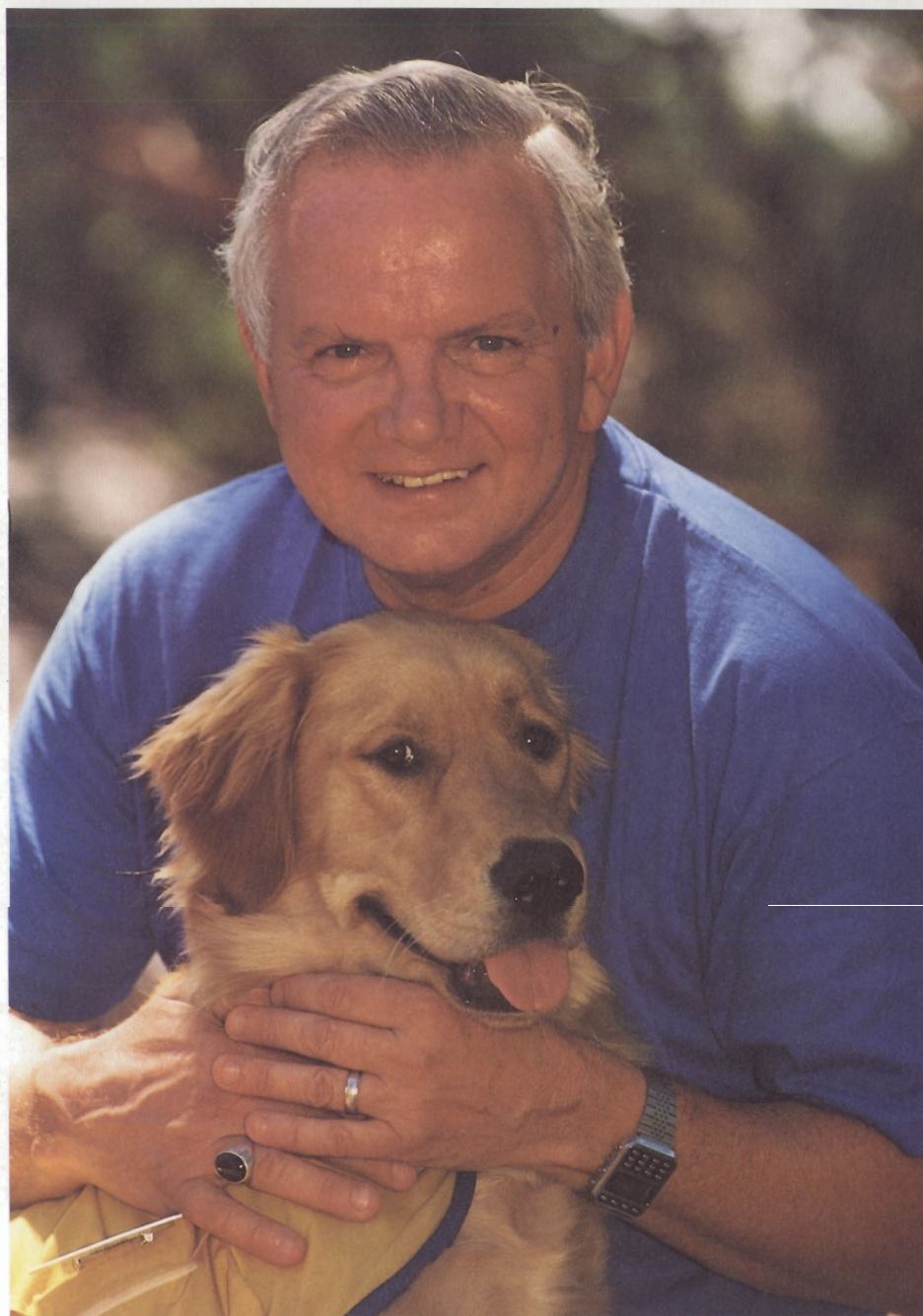
reactions to the changes in the ranking system have been relatively positive, says Moe Cote, test and measurement AEO manager in the Rockville, Maryland, headquarters.

"People now have an intellectual understanding of what ranking is all about," Moe says. "At the emotional level, how you feel about relative ranking usually depends on where you're ranked."

Relative ranking should provide the information to help employees improve their performance and contribute more effectively to team excellence, Doug Moore adds.

"HP employees are competitive and want to do a better job," Doug says. "But we're all here to beat the competition, not ourselves. The real competition is from IBM, DEC (Digital Equipment Corporation) and other companies that constantly are improving their performance, too, and raising the standards we have to beat." ■

When Dean Kelly's golden retriever grows up, he won't be just another family dog; he'll be someone's ticket to independence.



PHOTOS BY RENEE WYN

As a puppy raiser for the Canine Companions for Independence, Dean Kelly will train golden retriever, Kaufman, for 18 months before the dog goes to live with a person with disabilities.

Puppy love

By Melinda Sacks

ROSEVILLE, California—The green flag is up over Dean Kelly's workstation at HP in Roseville, California—the sign that Dean's golden retriever, Kaufman, has come to the office today.

Dressed in his handsome yellow cape, the 70-pound canine is likely to be sleeping quietly at his master's feet. But the picture may be deceiving. Kaufman is not here to play. He too, has come to work.

As puppy raisers for the Canine Companions for Independence program (CCI), Dean and his wife, Jean, have committed to keeping their dog with one of them at all times, whether that means an outing to Nordstrom department store or an eight-hour shift under the desk, with occasional trips to the cafeteria.

At the end of 18 months of intensive training, socialization and a good dose of tender, loving care, Kaufman will be ready to return to CCI for six months of advanced training. From there, he will graduate to full service.

For the Kellys, that will mean giving up their much-loved dog to a new owner.



Dean's Roseville co-worker Cynthia Knoop brings her CCI dog, Marilyn, for an office visit. Whether in the office or cafeteria, Dean's puppy, Kaufman, maintains his composure.

For the lucky recipient, Kaufman will provide the bridge to independence.

For the lucky recipient, Kaufman will provide the bridge to independence.

Similar to the better-known Guide Dogs for the Blind, CCI provides highly trained dogs to pre-qualified recipients who are disabled in a variety of ways other than blindness. The CCI dog can turn light switches on and off, pull his owner in a wheelchair, take a library book out of a bag and return it to the counter, and even pass money to a cashier or pick up a dropped handkerchief.

"When Kaufman is ready to graduate, the sadness of our parting will be countered by the happiness of the recipient," says Dean, who adds that he thinks Kaufman is so calm and gentle that he would be perfect for a child.

To raise a CCI puppy requires commitment and time, says Dean, an on-line support engineer for the Performance Technology Center. Wife Jean spends two hours every day working with Kaufman, and Dean takes him to the office about two times a week. At home, Kaufman interacts with the family's two cats and pet dachshund, an important part of his socialization. Coming to the office is good practice for the 24-hour-a-day companionship Kaufman will one day provide to a disabled person.

Dean's co-workers, Jim and Cynthia Knoop, were so inspired by Kaufman that they are now raising CCI puppy, Marilyn. In any given workday, you might find both Marilyn and Kaufman hard at work at HP.

Kaufman also inspired Dean's co-worker Dave Gershon to offer his own dog for CCI's breeding program. "I just thought Kaufman was such a great dog and his disposition was so incredible," Dave says. "His appearance at work inspired us to get involved."

HP has been so extraordinarily supportive of our program," says Katherine Davis, director of the Northwest Regional Training Center for CCI in Santa Rosa. "The company's policy allows contributions in all kinds of ways. By letting the dogs come to work they can really spend a 24-hour day in training. That means a higher success rate in the end."

Not all CCI puppies make it through graduation, though. About 60 percent pass the rigorous training program. Some are disqualified due to health problems, others because of temperament problems, such as shyness in public. While more than 700 dogs already have been trained and placed, the wait-

Puppy

ing list of hopeful recipients “just keeps growing and growing,” Dean says.

In the United States a staggering 49 million people are potentially eligible for CCI dogs, he adds. For disabled people who sign up now, the wait for a dog is about three years.

Canine Companions for Independence was formed in 1975 by a woman who saw burros being used to help disabled people in Asia. Bonita Bergin returned to the United States and set about proving that dogs could be taught to be the arms and legs for people with disabilities. She established CCI in Santa Rosa and placed her first trained canine companion, called a “service” dog, in 1976.

Now, 15 years later, CCI has opened programs in Ohio, New York, Florida and Southern California. CCI even has an affiliate program in France and is working on programs in Canada. The dogs are provided free to the recipients even though it costs more than \$10,000 to graduate a team (the dog and recipient). The nonprofit agency raises funds from foundations, individuals and social service clubs, such as the Lions.

CCI breeds its own dogs so that every puppy comes from known stock. Golden retrievers and Labrador retrievers are the most commonly used service dogs, but border collies and even

“These people have a heart of gold and an incredible ability to think about others.”

smaller dogs like Welsh corgis are used as signal dogs for hearing-impaired recipients who do not require the strength of a large animal.



“We love (Canine Companions for Independence) so much we’ve started spending all of our free time with CCI,” say Dean and Jean Kelly, here exercising Kaufman.

Puppies are placed with host families for the first 18 months of life. They come with a 73-page booklet of instructions and are expected to learn about 48 commands before being turned in for advanced training. By the time the dogs are matched with their recipients, they have mastered more than 60 commands that can be used in countless combinations to perform basic tasks.

Who can become a puppy raiser? “These people have a heart of gold and an incredible ability to think about others,” says CCI director Katherine Davis. “Actually it’s everyone. It is the one time in anyone’s life when they can really know they have done something

for somebody else. The people who do it are truly special.”

To hear Dean and Jean Kelly’s story, though, it is easy to see that they have gained as much from their CCI dog as they have given. The Kelly family scrapbook is filled with photographs of Kaufman—in his blue HP baseball cap—sleeping under Dean’s desk at work and romping with the family pets.

Not only has he provided fun, but some valuable lessons, Dean says.

“While my wife has experience working directly with disabled people, I have always felt uncomfortable about this,” Dean explains. “I would have walked across the street to avoid an encounter

because I couldn't deal with it. Kaufman has taught me to be comfortable with it."

Dean carries a doggy diaper bag with him at all times, he says. In it are the requisite dog bones, toys, an extra leash, a Zip-lock bag of food and a tennis ball. Kaufman has even visited the crystal department of Macy's where he amazed the other shoppers by lying quietly on the floor while Jean bought a gift.

"We love it so much we've started spending all our free time with CCI,"

"We'll talk about his work to anybody who will listen. You can't shut me up."

Dean enthuses. "We'll talk about his work to anybody who will listen. You can't shut me up."

Although Dean admits it will be very hard to part with Kaufman, who has slept in the couple's bedroom every night since they got him, the Kellys plan to get another dog and do it all again as soon as they place Kaufman.

"It's giving the gift of independence," explains CCI's Katherine Davis. Travis Stout, a 10-year-old recipient whose CCI dog is named Kosmic, says, "He makes me feel independent. That's what I want most of all." ■

(Melinda Sacks is a Palo Alto, California-based free-lance writer. Her last Measure story featured Patty O'Sullivan and Donna Yeager in the March-April 1991 issue.—Editor)



KIRSTEN MANSON

A small-world story came to light when Michael Breaux learned that his dog, Dean, was trained by fellow HP employee Jennie Manson.

A shaggy-dog story

Michael Breaux, 36, a network escalation engineer in the San Diego (California) Color-Imaging Division, had been waiting to receive a CCI dog for more than seven years.

His wish came true in July when Michael, who suffers from upper-motor neuron disease and is confined to a wheelchair, was matched with a beautiful golden retriever at a strenuous two-week CCI "boot camp."

During the first several days of his boot camp, Michael says, a large selection of CCI dogs was rotated among the seven recipients. Instructors watched the interactions care-

fully to make a good personality match. By the end of the third day, Michael had chosen the dog he wanted, and the instructors agreed with his choice.

That's when an incredible coincidence unfolded. Michael's dog, Dean, had been raised by HP R&D engineer Jennie Manson of the Colorado Springs (Colorado) Division.

Since meeting each other at boot camp and Dean's graduation, Michael and Jennie have become regular correspondents, dissecting Dean's idiosyncracies and behavior like the parents of a newborn.

Dean is adjusting well to his new life in Southern California and proudly wears his own HP employee identification badge (complete with photo). Michael says Dean's favorite pastimes are sleeping, socializing and eating.

Jennie, who raised Dean from the time he was 4 months old, says, "I kept waiting for it to hurt after Dean left. It never did. I'm so proud of him for being smart enough to graduate from CCI and be matched with Michael.

"Michael is so considerate of Dean's health and needs. And Michael's life will be enhanced by having Dean. It's a win-win situation."

East Coast excellence

Your article on Jeanne Wiseman, recipient of the Distinguished Achievement Award at the HP Technical Women's Conference, was enjoyable. HP sites here in New England also sponsor events that highlight the achievements of technical women.

The HP Chelmsford and Exeter Technical Women's Committee has sponsored coffee talks, monthly brown-bag lunches and panel discussions to provide a forum to promote the contributions of technical women. Our first New England-wide event in June, "Networking—Broadening Your HP Horizons," drew more than 100 participants.

Dean Morton will deliver the opening remarks at a one-day mini-conference ("Succeeding in the '90s—Women and Men Working Together") in September.

We have an excellent team of people organizing these events and a large pool of local talent to draw from for speakers.

BARBRA GLASER
Chelmsford, Massachusetts

Contagious concern

As the chairperson of the steering committee for the Bay Area Black Managers Forum, I felt a great sense of pride and appreciation that Dick Alberding chose to mention the Forum ("Planting the HP flag," July-August 1991 *Measure*) as one of his areas of interest.

The members of the Forum have recognized his energy and support by designating him as the first recipient of the Forum's Award of Excellence. The award reads, "Dick Alberding—for leadership in improving HP's workforce diversity, May 1991." We were inspired by Dick's personal involvement and

commitment to bringing about awareness and change in his organization(s).

We hope this level of concern and energy will be contagious among managers at all levels as HP struggles with the issues of diversity in the '90s.

CARL BANKS
Sunnyvale, California

Oops. Cat-astrophe

On the back page of the July-August 1991 *Measure* we learn that Abby the cat has a new respect for the HP LaserJet IIP printer. In the picture, Abby doesn't seem to be afraid of the LaserJet at all... maybe because the printer in the picture is not a IIP.

Oops, sorry. I guess I let the cat out of the bag (or printer).

MIKE FOX
Atlanta, Georgia

Yes, the article and photo caption should have said HP LaserJet II instead of IIP. We deserve a few catcalls for that error, and hope that Measure readers forgive our catastrophic mistake. Maybe that error—although not cataclysmic—will be the catalyst for better proofreading.—Editor

Flowery praise

My husband just showed me the July-August 1991 *Measure*, specifically the article about Mr. Hewlett's wildflower photography hobby.

I have long been an admirer of Mr. Hewlett, and I just had to thank you for sharing yet another gentle facet of this man. The photos you displayed were beautiful. If anyone ever decides to put together a book, I do hope that our name is added to the list of interested people.

LINDA STEDMAN
Boise, Idaho

A quality error

Just a comment on the illustration which accompanied Dean Morton's letter about QMS on page 28 of the May-June issue.

While it is true that the QMS team reviews and scores the quality-department's contribution, this is not one of the five areas which goes into the entity score, as implied by the illustration.

The illustration tends to perpetuate the idea that the quality department "does" quality, which is the opposite of the message QMS is intended to deliver, that is, Quality (with a big Q) is part of everybody's job. In fact, I think it is probably precisely the reason that the quality-department score is not counted.

TOM HORTH
Andover, Maryland

Good catch, Tom. The "quality department" category was included in the illustration by mistake. We always like to leave room for some continuous quality improvement.—Editor

Please send mail

Do you have comments about something you've read in *Measure*? Send us your thoughts. If your letter is published, you'll receive a free *Measure* T-shirt (one size fits all).

Address HP Desk letters to Jay Coleman; by company mail to Jay Coleman, Building 20/BR, Palo Alto. Via regular postal service the address is *Measure*, P.O. Box 10301, Palo Alto, CA 94304-1181 USA. Try to limit your letter to 150 words. Please sign your name and give your location. We reserve the right to edit letters.

HP's president and CEO highlights HP Mexico's 25-year success story.

I've just returned from a visit to our operations in Mexico, and I'd like to describe the trip's highlights. I do so because this isn't a message just about Mexico; it's about HP around the world. I believe the moral of the story will become clear as you read on.

I went to Mexico to help celebrate HP's 25th anniversary there. And what a celebration! We certainly had a full two-day agenda. We broke ground for a new building in Mexico City. We had 150 customers for lunch and 70 VABs (value-added businesses) at an afternoon session. There was a gala celebration for HP employees, plus some roundtable discussions with smaller groups. I had several one-on-one visits with customers and was honored by being granted a private meeting with Mexico's President Carlos Salinas de Gortari.

Besides marking a milestone, we have plenty of other reasons to celebrate in Mexico. HP's sales there have grown more than 30 percent annually since 1980. We're the No. 2 computer vendor with 17 percent of the market, and we're on everybody's "short" list when they consider a purchase. A recent customer event drew about 5,000 people—really the "who's who" of the Mexican business community.

What's behind HP's success in Mexico? Well, I think there are three reasons we've done so well.

■ First, we have a terrific sales team in Mexico. They like to win—they *expect* to win—and a lot of credit goes to people like Rafael Piccolo and Manuel Diaz—the current and former



HP President & CEO John Young (right) discusses the successes of Mexico and HP's operations there during a private meeting with Mexico's President Carlos Salinas de Gortari.

general managers for HP Mexico—for inspiring such results.

■ Second, we provide the kinds of products and services that Mexican firms need. They are very focused on improving their ability to compete, as Mexico dismantles the protective barriers that have proved counter-productive to economic progress. HP helps Mexican firms improve their ability to compete—whether that means reduced costs, improved quality, shorter cycle times, or increased responsiveness to customers.

In short, HP makes a difference, and that's cause for pride.

■ The third reason we've been so successful in Mexico is this: We established ourselves early in the country's economic development, making the necessary investments and developing a strong local management team to build the program.

Our success has been strongly influenced by our value-added within Mexico. Our growth accelerated in the early 1980s when we established our manufacturing activities for computers and PCs in Guadalajara. It was a risk at that time, but the investment enabled us to take full advantage of the computer market's opening in Mexico during the 1980s. We were poised to capitalize on the developments that followed.

Getting in position early—that's the moral of Mexico's story.

The story is far from over; the Free Trade Agreement with the U.S. offers a very bright future and a significant impact on HP's business.

While our experience in Mexico is unique and each country has its own special characteristics, the story I've just told is being replayed in many places around the world. The "New kids on the block" story that begins on page 8 in this issue of *Measure* summarizes some of these new ventures.

Today we are planting the seeds for tomorrow's success. I am hopeful for the harvest.

John

RUIAL PEREZ CUEVAS

News from around the HP world



What's a 100-mile cattle drive look like? Bonnie Bunting's photo captures her lasting impression of the ordeal.

HP's own 'City Slicker'

Bonnie Bunting, federal support services manager for USFO in Cupertino, California, and a part-time buckaroo, headed to the hills of Northern California in May for a week-long cattle drive.

"I'm always looking for a different kind of vacation," she says.

Bonnie, who says she was a novice horsewoman before she left for the Spanish Springs Ranch, got more than she bargained for.

"There were 21 of us there to move 400 head of cattle about 100 miles, and only one trail boss—a Jack Palance-type who even rolled his own cigarettes. It was a lot more work than we had been led to believe it would be. We put in 12½-hour days in the saddle in grueling weather that went from bad to worse."

At one point she maneuvered 30 cattle by herself

through fiercely cold weather, torrential rains, a classic desert dust storm and a blizzard. The group slept under the stars every night and took their meals around a campfire.

Bonnie's moo-ving experience, which she is calling her "15 minutes of fame," was chronicled in *The New York Times*.

The group of would-be cowpokes grew close through adversity, Bonnie says. "We're even talking about doing another cattle drive as a group somewhere. The weather would have to be better."

ПАКТ В СССР

Pact in the USSR

HP signed an agreement in July with the Almaz Scientific Industrial Corporation in Moscow to create and invest in Almed, a joint venture that will manufacture medical products in the Soviet Union.

The new company, Almed, will manufacture and market the HP SONOS 100, a cardiac ultrasound system used to evaluate non-invasively the condition of a patient's heart. The joint venture, based in Moscow,

started operations this summer and employs local residents.

HP opened its sales office in Moscow in 1973 and has been selling medical equipment in the Soviet Union through that office since 1975. The company now has a network of dealers and has doubled the size of its Moscow sales office to 32 employees.



BEKEN OF COWES (UK)

Representatives from seven computing and communications companies, including HP, are learning cooperation on the high seas.

Smooth sailing

Thriving in the information-technology industry today means that competitors find themselves "in the same boat," and often become collaborators.

Seven communications and computing companies in the United Kingdom, including HP, literally have been shipmates during the past several months in a series of four yacht races.

Experienced sailors representing British Telecom (BT), Bull, Computer Consolidated Incorporated, Digital Equipment Corporation, Ericsson, HP and Pyramid

Technology are crewing the 51-foot yacht Teamwork 91.

Alan Furniss, who heads HP's Computer Products Organization sales and marketing in the U.K., mans the yacht's main sheet (sail).

British Telecom is one of HP's major customers in the U.K. HP recently completed a deal to supply an office-automation system for 30,000 BT users.

CANADA TO NAFO

A new North American Field Operations (NAFO) combining the four U.S. sales regions and the Canadian sales region becomes official on November 1, with a new reporting structure already in place. General manager of NAFO will be **George Glenday**, currently G.M. of U.S. Field Operations.

Canada has been part of Intercontinental Operations. In preparation for NAFO, **George Cobbe**, G.M. of the Canada Region, began reporting to Glenday August 1.

NEW DIRECTOR

Thomas E. Everhart, president of the California Institute of Technology, was elected to the Hewlett-Packard board of directors on July 18.

CUSTOMER SUPPORT

Worldwide Customer Support Operations has reconfigured its former Product Support and Application Support divisions into three new divisions:

The Professional Services Division under G.M. **Chu Chang** provides consulting and other services. Hardware and software maintenance are combined in the System Support

Division, **Roger Costa**, G.M. The Software Technology Division under G.M. **Marc Hoff** maintains the mature software products of the Computer Systems Organization (CSO).

GETTING TOGETHER

HP and Avantek, Inc., a maker of electronic components in Santa Clara, California, announced August 7 that they've signed an agreement for HP to acquire Avantek for about \$82.8 million.

If the proposed merger is approved by Avantek shareholders and U.S. anti-trust authorities, Avantek would be part of the Components Group.

OTHER CHANGES

Duane Zitzner to G.M., California PC Division... **Tom Steipp** to operations manager of newly formed Federal Computer Operation within CSO... **Franz Lorber** to G.M., HP Czechoslovakia.

The Disk Storage Systems Division has transferred from the Mass Storage Group to the Personal Systems Group... In the Networked Systems Group, the former Data Systems Division has been folded into the Measurement and Control Systems Division.

High-tech harmony

Rains had just moved through San Jose, California, when Joe Anthony grabbed his camera and jumped into action.

"I had been waiting several weeks for just the right combination of sun, clouds, the brilliance of the flowers and the juxtaposition of a modern, high-tech building and what Silicon Valley looked like 20 years ago," says Joe, a quality engineer at HP's Optoelectronics Division.

The photo is one of 13 images Joe included in *Silicon Valley Scenes*, a 1991 calendar he produced, with design help from his wife, Joannie, who works at HP's U.S. Test & Measurement Marketing Center.

"Some people think of the negative aspects of Silicon Valley, such as the smog and traffic," Joe says. "I wanted to get away from the high-tech image and show it as a nice place to live."



Mustard grass, Guadalupe and First streets, San Jose, California

Give us your best shot

Do you have a favorite photo you've taken? Beginning with this issue, *Measure* will feature an employee-photographed image on the magazine back cover.

We prefer color slides or prints, but will consider outstanding black-and-

white images, too. The images can be dramatic, artistic, scenic or just plain funny.

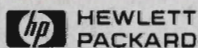
Include your name, job title, entity name and information about the photo, including the names of people pictured.

Photos will be returned

to employees.

Remember, there are only six issues of *Measure* each year, so give us your best shot. Send the photo to Jay Coleman, *Measure* editor by internal (mail-stop 20 BR, Palo Alto, California) or external (see address below) mail.

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