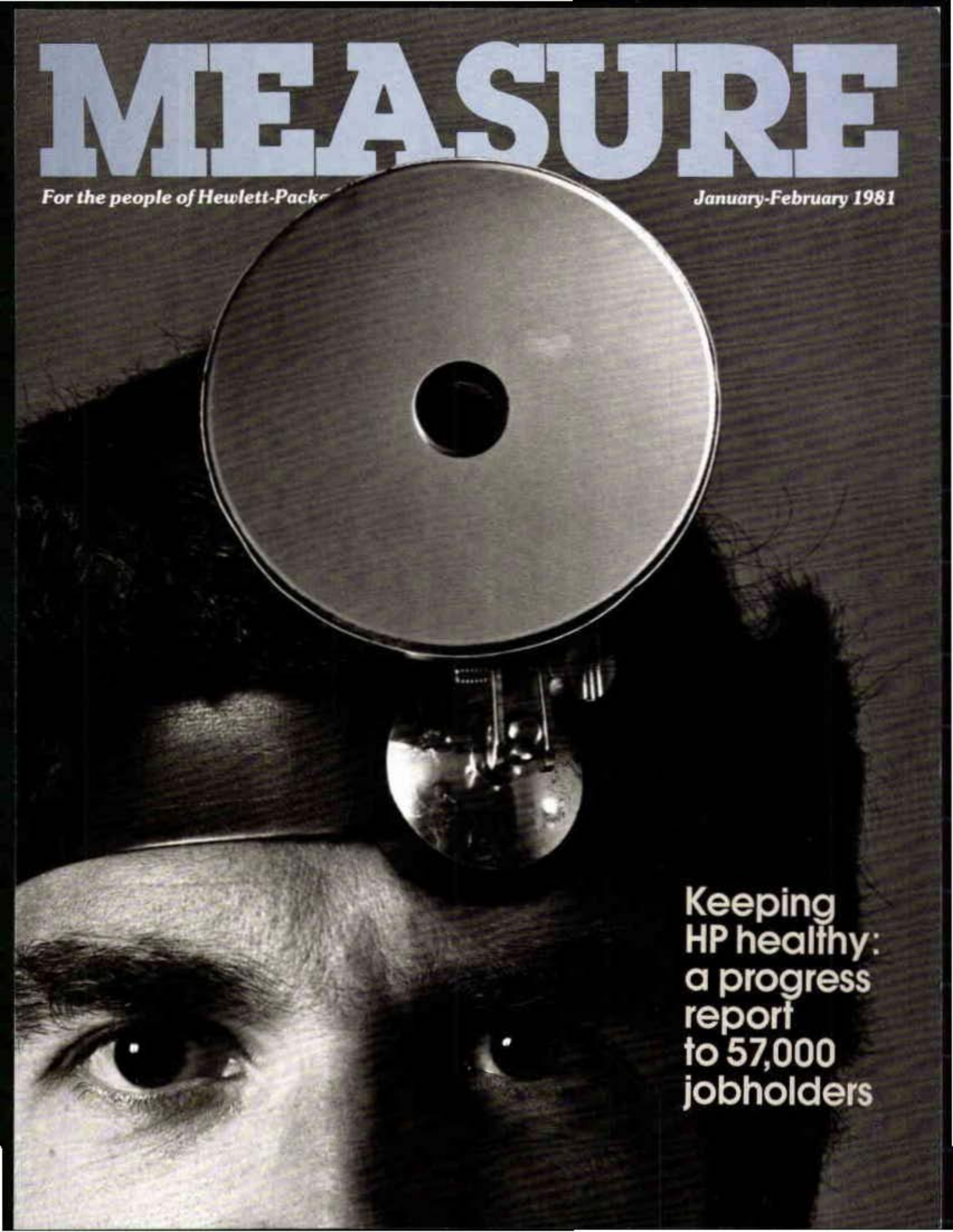
MEASURE

For the people of Hewlett-Packa

January-February 1981



Keeping HP healthy: a progress report to 57,000 jobholders

UP FRONT

Comments on the changing HP scene— and the people behind it.

Our aim for this issue has been to examine different aspects of the company's health, with emphasis on its physical—rather than fiscal—fitness as a new year gets underway. To start our checkup we asked a scattering of employees why they think the company has been so successful (as it clearly was in 1980 despite tightening economic conditions), and what we must do to help keep it that way. Important personnel aspects of employment are reviewed. The company's building program is surveyed and facilities mapped. Finally, we present a theme that emerged from some of the viewpoints expressed in the HP general managers' conference on January 15–16 at Pebble Beach, California—the growing interdependence among HP organizations. Since all these topics together do not constitute what accountants call an annual report, we decided to borrow a new phrase by describing our project as a "jobholders' report." Whatever it is, we hope it brings some new perspectives to the job you and 57,000 other jobholders are doing.

In his profit-sharing announcement last November, John Young noted "the excellent cooperation received thus far" in reducing controllable expenses in a period of economic uncertainty. **Measure** asked its correspondents to uncover examples of interesting and creative responses to this belt-tightening, particularly those that fulfilled the policy while still achieving original work goals.

First we learned about a telephone conference between corporate and five divisions in which a dozen or so engineers worked out some strategies for semiconductor quality. The phone conference replaced a meeting which would have involved a number of flights and much more time. Ken Kormanak, materials manager for HP Computers, said it did the job this time—though he doesn't see it as an answer to all inter-organizational meetings.

Then we heard how Data Systems Division had developed an audio-tape cassette presentation in place of personal tours of worldwide sales organizations to introduce its new computer-on-a-board. Accompanied by a not-too-serious picture of Joe Schoendorf, the division's sales development manager, the tapes were a big hit in the field and saved a bunch of travel bucks.

With important personnel materials to distribute, San Diego Division chose to hand them out to people rather than put them in the mail as usual. Savings: $1,518.

A number of organizations, including Colorado Springs, Loveland and Mountain View divisions, switched to on-your-own lunches during training programs or long staff meetings. One workshop class took the occasion to treat their supervisors to lunch, in appreciation for their support. One division switched to root beer in place of beer busts. The returns on this tradeoff are not yet in.

Roseville put part of its transfer from Cupertino on hold, setting up a "Roseville West" for seven people. With transfers currently costing around $20,000 each, that deferred a goodly sum.

Obviously, there were and are many other instances of overhead savings, large and small, employed throughout the company. (The almost-silent travel desks attest to that.) Dean Morton, executive vice president, noted this in a recent report: "When the message became clear, everyone pitched in. Employment actually decreased during the fourth quarter of 1980, and —in contrast to other years—spending was in step with orders. As a result we had a stronger fourth quarter, and positioned ourselves well for 1981." **M**

Telephone network conference arranged by Ken Kormanak, left, saved much travel time and expense.

Every business segment of HP saw sales and earnings growth in 1980, despite recessionary trends in the U.S. and abroad.

Why has HP been so healthy, and what can be done to keep it that way?

Measure asks a cross section of employees to reveal their thoughts about HP success.

You can add 1980 to the long list of successful years that Hewlett-Packard has enjoyed since the company was started in 1939. Record sales of $3.1 billion, up 31 percent from the previous year, left many employees thankful that they were part of a company that did so well despite sagging economic conditions around the world.

"I feel very fortunate today that I chose HP when I was re-entering the job market," says Waltham Division production supervisor Eileen Loring. "I'm glad to be in an environment where growth and development are encouraged and supported."

Growth and development are key ingredients at both the corporate and the individual level. Employees feel the financial and philosophical commitments to HP people and to research and development are crucial.

"An important reason for our success has to be the attitude of the people working for HP, and the company's attitude toward its people," says Arne Bergh, a 25-year HP veteran who works at Computer Systems Division as a staff engineer. "Hewlett's and Packard's own approach has always been, the individual is important. And if you feel important, you work better."

Vinny Schiavi, cost account supervisor at Avondale Division, thinks HP's continuing investment in R&D (about 10 percent of every sales dollar) has been an important part of the company's formula for success. "Our commitment to a healthy level of R&D expenditures, in spite of outside pressure to decrease expenses, continues to benefit HP. We are the beneficiaries of R&D expenditures of past years and future employees will be beneficiaries of current expenditures."

Another long-standing HP practice of financing its own growth was listed by many employees as a big help in 1980. "HP's policy of conservative growth by internal financing has helped accomplish financially what some corporations could only pray for in these

"About six months after I joined HP in production I got my courage together and went to my manager and said, 'I don't want to be in assembly work all my life.' The company was very supportive and I was given a lot more technical training. The company has also helped with my education. I'm just finishing up my degree at San Jose State University. The only thing that can hold me back now is myself. I know the company won't. HP seems to be as much into my growth as I am."

Lisa Darragh
quality assurance inspector II
Microwave Semiconductor Division

Why has HP been so healthy, and what can be done to keep it that way?

troubled times," says Sukhindarpal Singh, graveyard shift supervisor at HP Malaysia. "No external borrowing means that soaring interest rates do not adversely affect our bread basket."

Another factor that helped HP through an otherwise difficult year was a control on hiring that slowed growth in the fourth quarter of the fiscal year. At the Cupertino Integrated Circuit Operation "more overtime was scheduled instead of hiring new people. Each operator was given an opportunity to cross-train at each individual station," explains Kathleen Nussbaumer, a production operator. "When there was an absentee, there was always an operator able to fill in the line, when and where they were needed."

"I see two key factors that have helped HP: early recognition of the situation and rapid adjustment," says Gail Hamilton, project manager in the Colorado Springs Logic Systems R&D lab. "Management is aware of important economic indicators such as orders, sales, expenses, etc., and is willing to make quick adjustments when things begin to look bad.

"Along with that is the HP philosophy of teamwork. Employees are willing to sacrifice for the good of the entire company, and people are willing to make do with less so everyone is assured of a stable job.

"The reason we can react very quickly to changing times is the prevailing spirit of cooperation and teamwork. Most of us have learned to be very flexible just because of the nature of our business. This is another reason we can quickly make adjustments to keep a tight rein on the operation," says Gail.

The aspect of teamwork and pride is also evident to Ken Birdsong, instrument sales manager in the Southern Sales Region. "Throughout the company, people take pride in their work and are made to feel the significance of their contribution to the success of HP. This results in a strong sense of security and a high degree of enthusiasm among employees. If anything, I am even more impressed with HP today than I was 10 years ago. I am continually amazed at our leadership role in such a wide variety of technical innovations. We continue to emphasize the people aspect, even with our rapid growth, and the opportunity for personal growth expands with the growth of the company."

When Muriel Leite joined the company in 1976, she was amazed at how different a U.S. based company is from a French one. "I was happily surprised by the family spirit here. No social barriers. People could talk to each other without having the boss on their backs," says the computer systems operator. "With our fast growth, we are somewhat losing that family spirit, and we cannot know as many people as we used to. But we still can talk and I hope we always will."

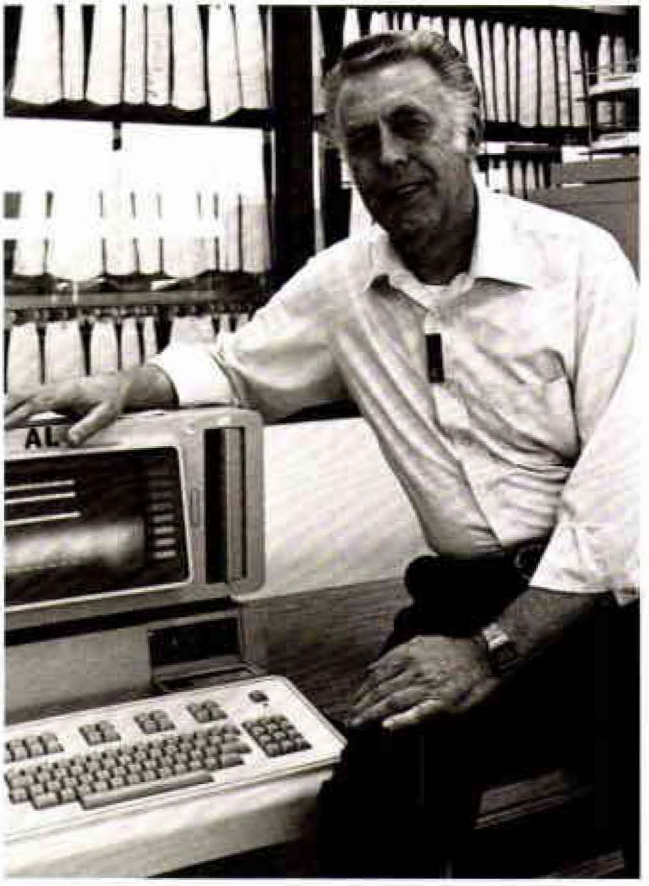
The company's track record of successful years makes HP an attractive company for potential employees, according to Antonio Ramirez, a 10-year HP veteran and field manager of instrument sales for HP

"Despite the current recession, Hewlett-Packard will know a bright future again. We already had a recession four years ago and came out of it even stronger. We did it once, and we can do it again if everybody puts their mind to it. People must keep feeling responsible, then they do a better job."

Muriel Leite
computer systems operator
HP Grenoble

"If there is any one thing we can all do to help avoid the symptoms of bigness, it's to make our products and our corporate support of the customer the best that is possible. In the late '50s, before I joined the company, I had a job helping a graduate student analyze the effects of grounding structures on antenna patterns. Two weeks before his thesis was due, the HP SWR meter we were using suffered a switch failure. The graduate student's professor speculated repairs would take a month. This meant the student would have to stay in school another term—something he couldn't afford to do. He called the local field office and the field engineer delivered the part in one day. Needless to say, that graduate student now buys HP equipment, as does the rest of that lab."

Dick Moore
general manager
Corvallis Division



"We have always been a strong technology company—good people who make products the market has valued. When we started in the computer field we were fortunate to have HP's extensive field organization to build upon. The computer industry is still in its early stages. There is a huge mass market that hasn't been touched yet. The important thing for our division and the Business Computer Group is how well we manage our product strategy. Done right, we should continue to grow and be strong."

Arne Bergh
staff engineer
Computer Systems Division

"I believe the future of the electronics industry and of HP is very bright, from an Australian point of view. This is a young country with abundant resources, technology growing at a tremendous pace and energy-related projects now taking off. As HP continues to put great emphasis on research and development, we will be able to keep up with or be ahead of the competition."

Sheila Lowe
secretary
HP Melbourne

Why has HP been so healthy, and what can be done to keep it that way?

Argentina. "The advantage to working at HP is that we are in a company with guaranteed growth."

That optimistic outlook is based on a healthy track record. "The electronics industry has had phenomenal growth in the past decades and does not yet seem to have run out of steam," explains Dick Moore, general manager for Corvallis Division. "The fact that electronics seems to enhance almost any product the individual comes in contact with is a major reason for that, especially because the costs of that enhancement continue to decline. HP is very well situated to share in that growth because we have the capability for both analysis in our measurement activities as well as computation and control. In this way HP is almost uniquely able to exploit any opportunities which arise."

The company's future growth depends upon a number of outside influences, and Sukhindarpal Singh doesn't see the rate of growth continuing. "I'm pessimistic about the future of the industry, but its dynamism, unlike others, will carry it through. The growth will not be as dramatic as has been seen in the last decade. With some belt-tightening, the company should do fine, although my career may not grow as rapidly as it would have during boom time."

Ambrose Phaahla, customer engineer for HP South Africa, sees a brighter future. "Because HP plays a significant role in the electronics industry, the company's future looks bright, and the same applies to my corner of the HP world."

Bill Ferguson, a test engineer II at the South Queensferry Division sees an uncertain future. "Although it looks good at the moment, the future of the industry is a bit unpredictable because of such factors as government policies and the economic recession. I also see the nature of jobs within the industry as a whole changing with the increasing importance of the microchip, making many jobs and machines obsolete."

Vinny Schiavi feels HP's future success will "hinge on an increasing ability to provide advanced electronic measurement and related products to our current customer base. While we should make every effort to expand our customer base, the key will be to search out areas of future electronic applications that our customers couldn't imagine doing without 30 years from now."

Maintaining HP's technical, financial and personnel momentum in the future is HP's biggest challenge, according to Gail Hamilton. "So far we have managed to preserve the 'HP culture' that I feel is so important: the respect, support and freedom we give to individuals and the emphasis we place on innovation. It is absolutely imperative that we not only continue to adapt to changing social and economic environments, but that we also do not lose our innovative attitudes. We cannot afford to stagnate." M

HP: IT'S A PEOPLE BUSINESS

With HP so dependent on people, it's small wonder that HP pays so much attention to them...

As a response to concerns expressed in Open Line, the company began to take a fresh look at its overall compensation program in 1980. A number of specific changes were made in U.S. programs. These included improvements in the life insurance, medical insurance, dependent dental coverage and hospital guarantee programs. Engineering pay curves were carefully reviewed and their philosophy stated more explicitly.

Planning of benefits was put on a new long-range basis, and active studies were underway on proposals that could affect time off, sick leave, and flexible work hours. In addition, one task force urged new approaches to the communication of personnel programs. As a result, a new position of personnel communications manager was created and staffed to help make information more available and understandable, particularly in the area of pay and benefits. Another task force developed a statement which consolidates and clarifies the various elements of HP's basic policy on compensation (similar statement on benefits policy is being developed).

The text of the compensation statement, which was adopted by the Executive Committee in December, is reviewed in John Young's message on page 23. In brief, it says that HP has been and will continue to be among the leaders in compensation as established by independent surveys of major companies. It also describes the "merit" system that HP employs in determining salary levels, and outlines other aspects of the company's compensation philosophy.

Commenting on the policy statement, Personnel VP John Doyle says, "The important thing about pay at HP is that it should be fair with respect to competition outside the company and fairly administered within the company according to sustained contribution.

"Since we all tend to have a high opinion of ourselves, this will not necessarily result in our feeling that we are properly paid with respect to our peers; and no system of pay has yet been devised that has more than about half of the people in any group feeling really happy about their pay.

"We will always strive to be above the 50 percent mark."

P.S. 54 percent of those surveyed by Open Line said they were "satisfied" with their pay.

During 1980 Hewlett-Packard employees participated in the company's stock-purchase plans in record numbers. At the end of the third quarter there were 22,454 HP people who received stock certificates under the regular plan, while another 3,221 people participated under the special plan that's needed to meet the requirements of certain countries. Allowing for first-year employees or others not yet eligible and for people in countries that prohibit or penalize investments in foreign stocks, participation of eligible employees reached 70 percent. Among individual organizations, HP Labs was tops with 89.3 percent of its eligible population enrolled in the plan.

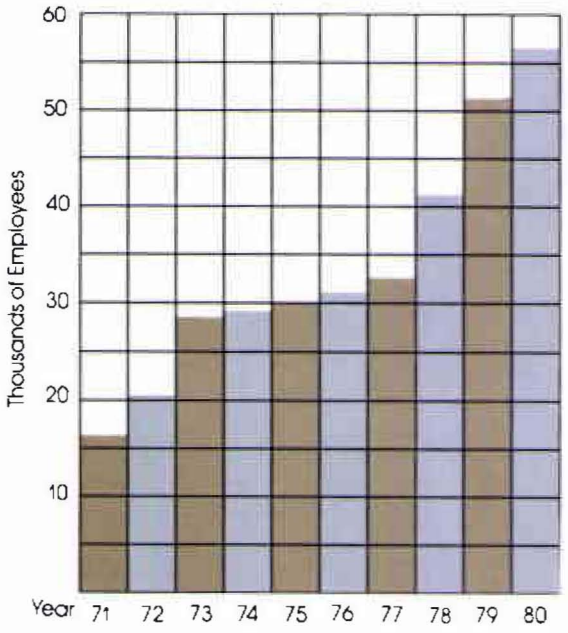
The regular plan is available not only to U.S. employees but also to those in Australia, Austria, Belgium, Canada, Denmark, England/Scotland, France, Germany, Greece, Hong Kong, Italy, Mexico, Malaysia, The Netherlands, Norway, Singapore, Switzerland and Venezuela. Participants in most of these countries receive their certificates directly; in Austria, France and Italy the law requires that certificates be deposited in a national bank.

More restrictive requirements in several other countries resulted in the development of HP's "foreign" stock plan in 1970. Today, in such countries as Finland and Sweden, the quarterly contributions of participants are accumulated and held for

two years each. At the end of each quarter stock is allocated, but the employee has to wait for two years to receive any benefit. The waiting period was established in order to keep open the possibility that the local laws might be changed to permit direct purchase. As it is, participants usually find it necessary to take a cash equivalent, withdrawing their payroll contribution plus accumulated interest plus the company's 25 percent contribution. It's a way of extending a benefit for purposes of fairness to employees who otherwise may never become shareholders.

For HP, the employee stock-purchase plan is an important part of its capital financing program. In 1979 the plan provided some $34 million which, in combination with funds raised by stock options and the profits realized through sales, generated the cash needed to finance recent and current growth of the company.

In turn, this "pay-as-you-go" approach to growth tends to look good to Wall Street analysts whose ratings strongly influence the value placed on our shares by the many thousands of buyers both inside and outside the company.

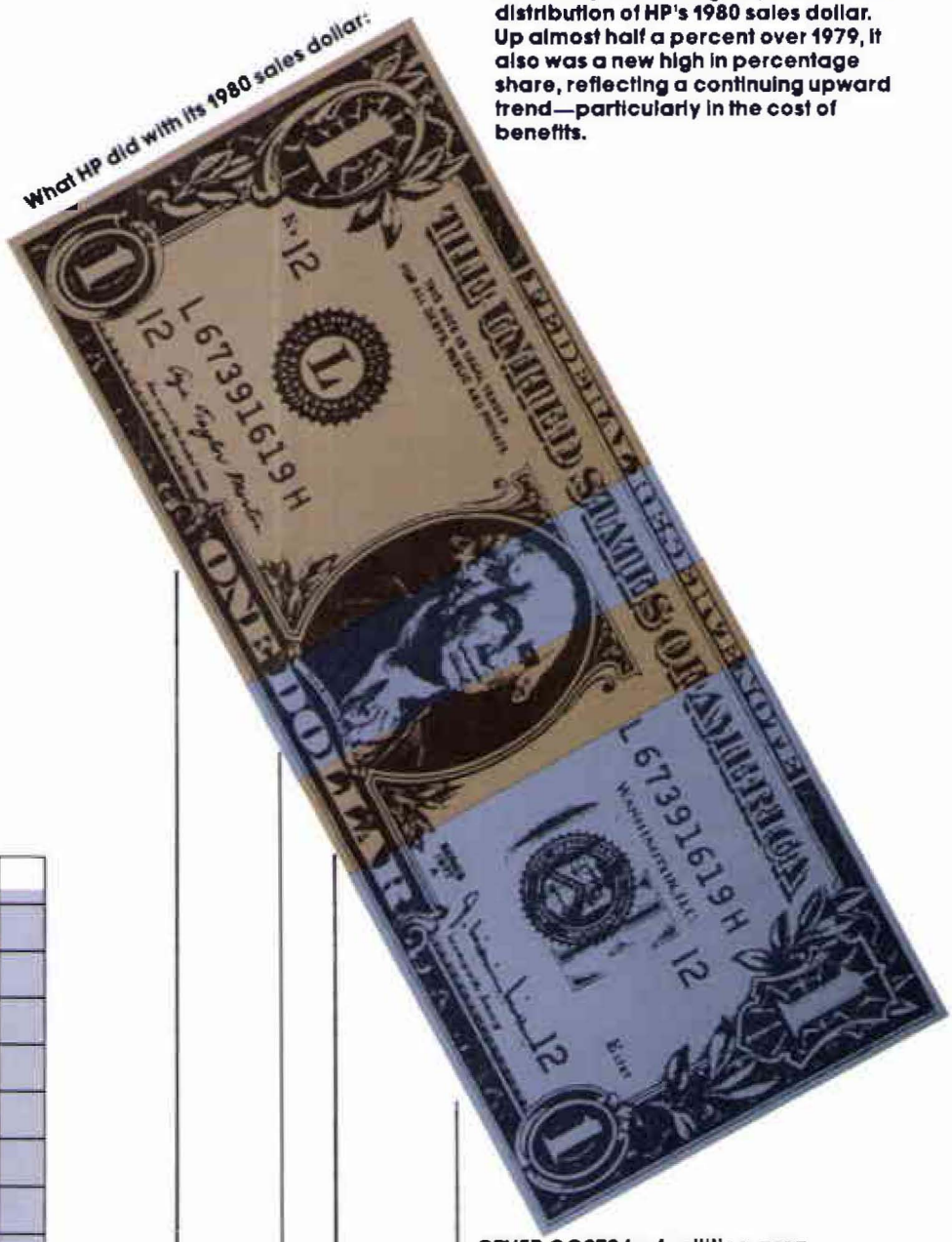


EMPLOYMENT FOLLOWS SALES' CLIMB

In the last 10 years, Hewlett-Packard has added more than 40,000 new employees to payroll. While employment tripled, sales increased nearly 10-fold in the same period. If the company continues its established pattern of growth, there could be as many as 100,000 employees by 1985.

People costs, at 44.4 percent, represented by far the largest portion in the distribution of HP's 1980 sales dollar. Up almost half a percent over 1979, it also was a new high in percentage share, reflecting a continuing upward trend—particularly in the cost of benefits.

What HP did with its 1980 sales dollar:



OTHER COSTS for facilities, property, equipment, materials, supplies and services, dividends to shareholders (1¢) 38.6¢

INCOME TAXES paid worldwide 8.0¢

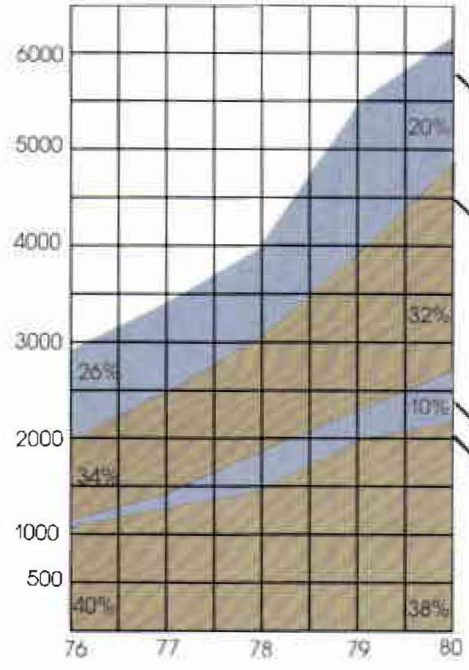
NET PROFIT to help finance future needs 9.0¢

PAY AND BENEFITS to employees 44.4¢

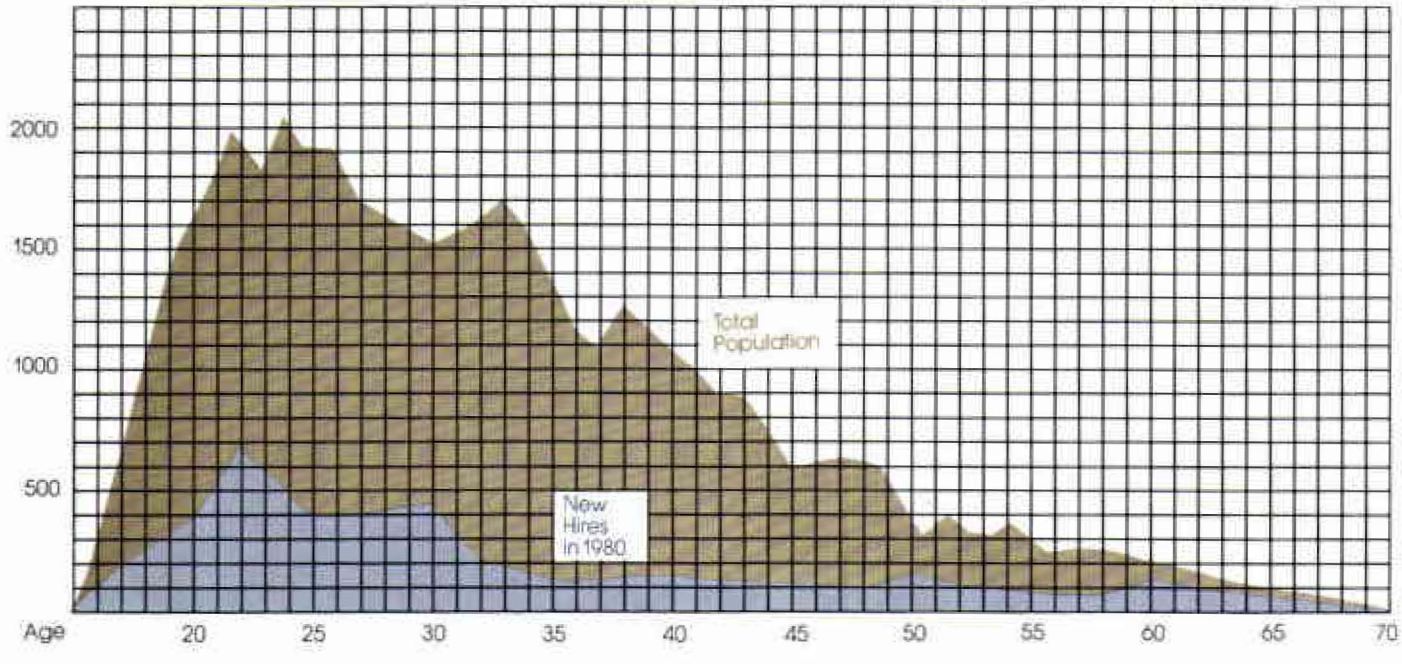
Some notable strides were taken during 1980 to insure that HP people receive the training necessary for more effective performance and development on the job. Corporate Training and Management Development, which develops and monitors most of the programs and materials for this worldwide personnel activity, reports the following:

- Employees participated in more than 50,000 training experiences during the year, an average of close to one for everyone on the payroll.
- "Working at HP," the company's new basic training program in corporate philosophy and practices, drew 7,477 participants, most of them relatively new employees.
- In response to Open Line suggestions, a new job-instruction method was made available for people wanting to pass along work skills quickly and efficiently.
- A new computer-simulation program was introduced to help coach division management teams wanting to improve decision-making skills.

WHAT'S GROWING IN THE FIELD?

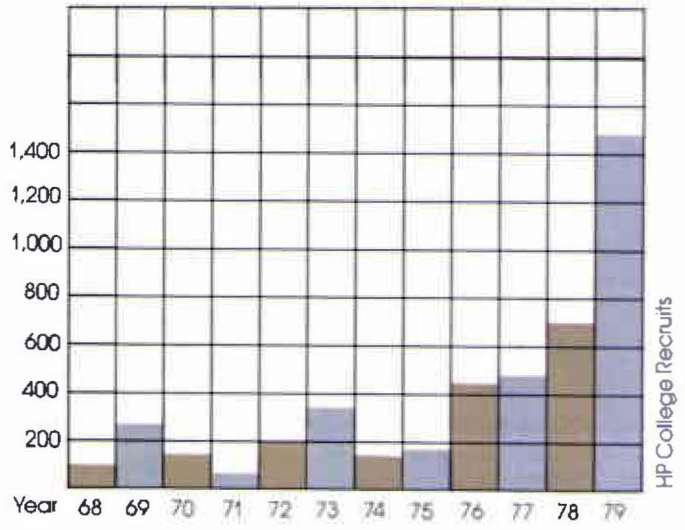


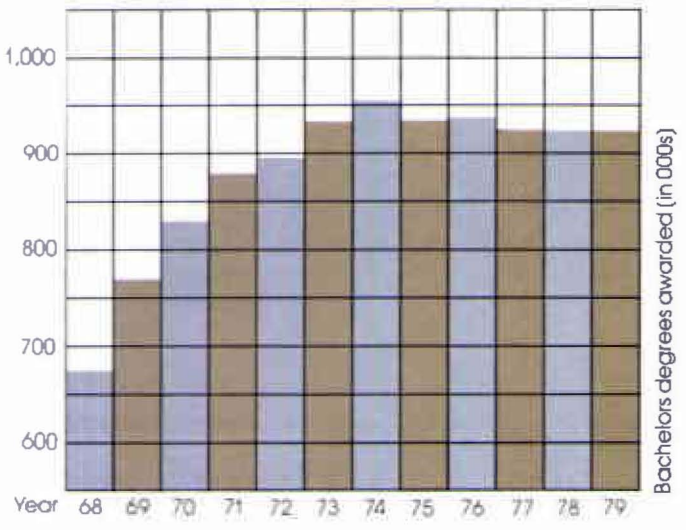
The last five years has seen a dramatic increase in the ranks of HP's sales and service activities, including the start-up of the systems engineering organization in 1977. The percentage of field staff (admin.) needed to support the sales and service activity has dropped from 26 to 20 percent.



GROWING UP WITHOUT GROWING OLDER

The average age of HP employees is 35, but the average age of 1980's new hires is 28. During periods of rapid growth, the average age of employees creeps down, while periods of hiring controls push the age up. But not everyone who joins the company is average-aged. HP added 45 sexagenarians (over 60) to the workforce during the past year.

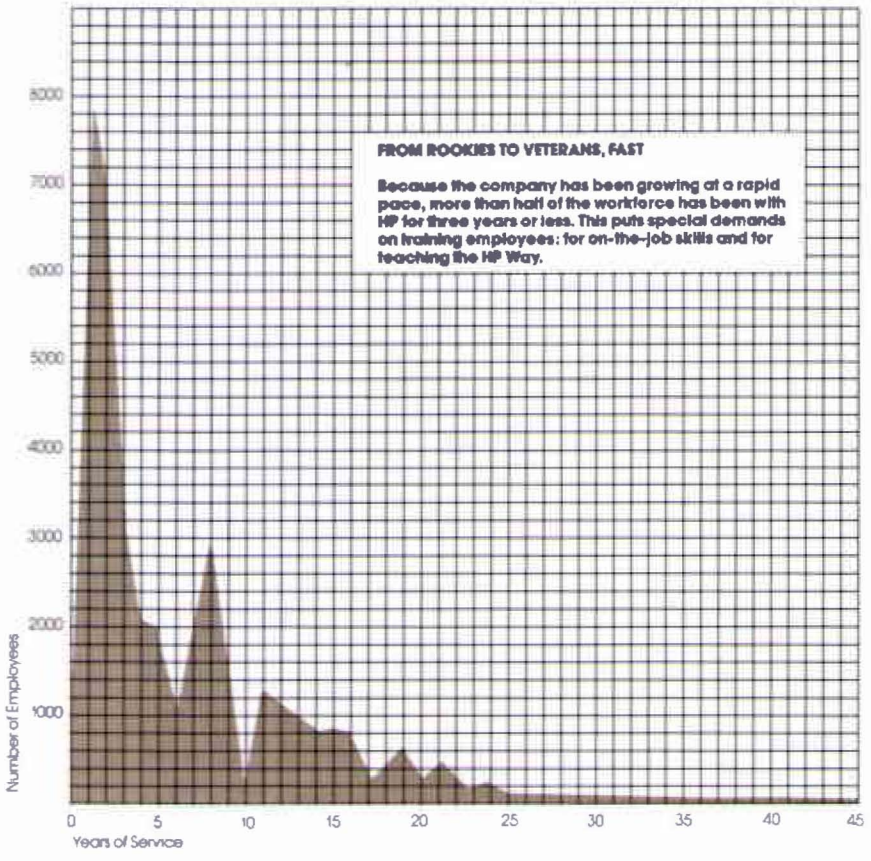




GOOD PEOPLE ARE GETTING HARDER TO FIND

People born between the mid-'40s and 1960 come from the "baby boom" era—those years when there was a significant increase in the birthrate. Most of those people are now a part of the workforce, and a smaller, post-boom population is now finishing school and entering the workforce. As a result, U.S. colleges and universities are handing out fewer bachelors degrees today than they were in 1974. Of the 921,000 presented in 1979, only 6 percent were in engineering and related fields. In the years ahead, competition for those scarce graduates will become more intense as companies, like HP, look for scientists and engineers to add to their growing ranks.

- A number of new programs on behalf of field sales, service and support were implemented, reflecting the fast growth and changing needs of these functions.
- Two five-day programs in corporate management and strategy were held for senior managers.
- A new course for R&D project management was designed for introduction in 1981. It incorporates the wisdom of some two-dozen R&D managers. A similar approach will be used for a manufacturing management course being developed this year.
- More than 10,500 videotapes were distributed to HP organizations and customers. Included were many of the 70 new programs completed by HP-TV in 1980 for product introductions, technical instruction and training programs.
- The concept of "quality teams" received a big boost. By year's end in the U.S., HP had trained 300 new leaders and facilitators, while the number of teams currently operating exceeded 200; worldwide it was over 300. M



ROOM TO GROW

When your payroll grows by many thousands of people each year—10,000 in 1979 and 5,000 in 1980—you had better have a long-range construction program working non-stop around the world.

During fiscal year 1980, Hewlett-Packard added more than 1.8 million square feet of office, production and sales space. Those new facilities, from Penang, Malaysia, to Houston, Texas, are evidence of the company's continuing growth. For the fiscal year, HP spent $279 million for new property, plants and equipment.

It can require several years for a new HP manufacturing facility to take shape. Many months may be needed to find, evaluate and purchase the property. Next come zoning permits and local government building approvals. About two more years of design and construction can pass before a new building opens its doors to employees for the first time. Property purchased this year will probably not house an HP division until sometime in 1983.

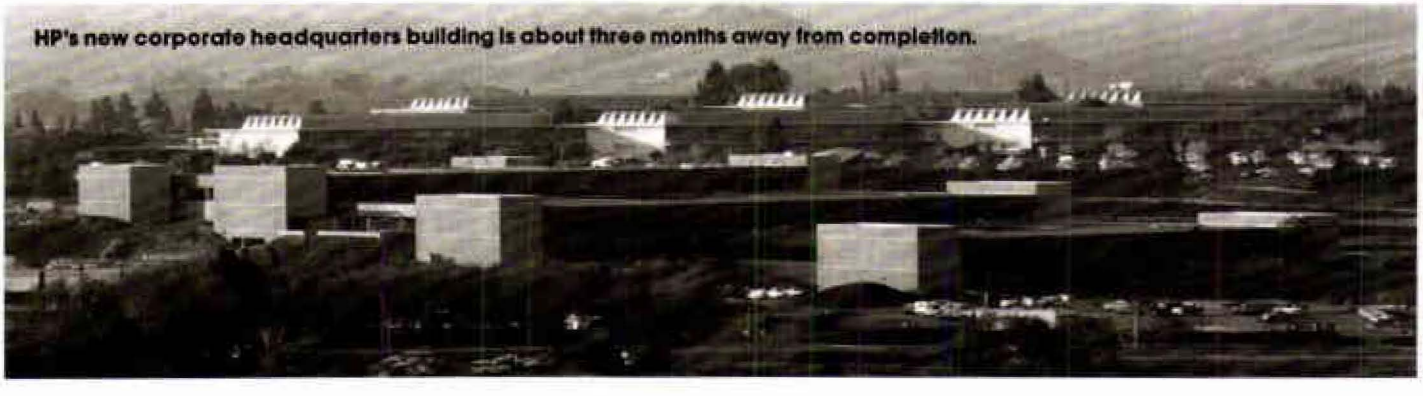
During the past year the company purchased three large new parcels of property: 240 acres in Wake Forest, North Carolina, which will be used for production of gas chromatograph products; 570 acres in Greeley, Colorado; and 500 acres north of Roseville, California.

The company also signed options to purchase 315 acres in Longmont, Colorado; 206 acres north of Colorado Springs; and 263 acres in Rohnert Park, California. The company still has options on a 60-acre site in Puerto Rico and 125 acres in Lake Stevens, Washington.

Some of the projects planned, under construction or completed during 1980 include:

PROJECTS COMPLETED

	MFG	MKTG	SQ FT
Boise, Idaho	X		216,000
Fort Collins, Colo.	X		183,000
Sunnyvale, Calif.	X		254,000
Penang, Malaysia	X		60,000
Houston, Tex.		X	27,000
Dallas, Tex.		X	72,000
Denver, Colo.		X	43,000
Portland, Ore.		X	24,000
Bellevue, Wash.		X	51,000
St. Paul, Minn.		X	43,000
Sydney, Australia		X	44,000
Montreal, Canada		X	48,000
Brussels, Belgium		X	70,000
UNDER CONSTRUCTION AND PLANNED			
Boise, Idaho	X		96,000
Loveland, Colo.	X		260,000
Roseville, Calif.	X		193,000
Santa Rosa, Calif.	X		192,000
Palo Alto, Calif.	CORP HQ		478,000
Rockaway, N.J.	X		163,000
Vancouver, Wash.	X		194,000
San Diego, Calif.	X		141,000
Corvallis, Oregon	X		208,000
Boeblingen, Germany	X		223,000
Rockville, Maryland		X	70,000
Atlanta, Georgia		X	100,000
Orlando, Florida		X	21,000
San Diego, Calif.		X	26,000
Brisbane, Calif.		X	32,000
Pinewood, England		X	100,000
Vienna, Austria		X	65,000
Zurich, Switzerland		X	56,000
Colorado Springs, Colo.	X		230,000
San Jose, Calif.	X		240,000
South Queensferry, Scotland	X		105,000
Madrid, Spain		X	80,000
Geneva, Switzerland	EURO HQ		97,000



HP's new corporate headquarters building is about three months away from completion.

INTERNATIONAL SALES AND SERVICE OFFICES

ARGENTINA
Buenos Aires

AUSTRALIA
Blackburn, Victoria
Fyshwick, Australia Capital Territory
Nedlands, West Australia
North Ryde, New South Wales
Parkside, South Australia
Spring Hill, Queensland

AUSTRIA
Graz
Vienna

BELGIUM
Brussels

BRAZIL
Alphaville
Porto Alegre
Rio De Janiero

DENMARK
Birkerod
Silkeborg

FINLAND
Espoo

FRANCE
Aix-en-Provence
Besancon
Ecully
Evry
Eybens
Le Blanc Mesnil
Merignac
Metz
Orsay
Paris
Rennes
Strasbourg
Toulouse
Villeneuve D'Asca

GERMAN FEDERAL REPUBLIC
Berlin
Boblingen
Dusseldorf
Frankfurt
Hamburg
Hannover
Mannheim
Neu Ulm
Nurnberg
Taufkirchen

HONG KONG
Hong Kong Island

IRAQ
Baghdad

IRELAND
Dublin

ITALY
Bari
Bologna
Catania
Cernusco Sul Navliglio
Genova Pegli
Milano
Napoli
Padova
Roma
Torino

JAPAN
Atsugi
Kobe City
Kumagaya
Mito
Nagoya
Osaka
Tokyo
Yokohama-Kanagawa

MALAYSIA
Kuala Lumpur

MEXICO
Mexico City
Monterrey

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Barcelona
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Basle
Bern
Geneva
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Widen
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Altrincham/
Manchester,
England

Belfast, Northern
Ireland
Brechin, Scotland
Bristol, England
Castleford, England
Central London,
England
Birmingham, England
London Colney,
England
Maidenhead,
England
Reading, England

South Queensferry,
Scotland
Redhill, England
Winnersh, England
VENEZUELA
Caracas

INTERNATIONAL
MANUFACTURING

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Campinas
FRANCE
Grenoble

GERMAN FEDERAL
REPUBLIC
Böblingen
Waldbronn
JAPAN
Hachioji
MALAYSIA
Penang
PUERTO RICO
Aguadilla
UNITED KINGDOM
South Queensferry
SINGAPORE

MANUFACTURING IN NORTH AMERICA

CALIFORNIA
Cupertino
Mountain View
Palo Alto
Roseville
San Diego
San Jose
Santa Clara
Santa Rosa
Sunnyvale
COLORADO
Colorado Springs
Fort Collins
Loveland
IDAHO
Boise
MASSACHUSETTS
Andover
Waltham
NEW JERSEY
Rockaway
OREGON
Corvallis
McMinnville
PENNSYLVANIA
Avondale
WASHINGTON
Spokane
Vancouver

REGIONAL SALES HEADQUARTERS

CALIFORNIA
North Hollywood
GEORGIA
Atlanta
ILLINOIS
Rolling Meadows
MARYLAND
Rockville

SALES AND SERVICE OFFICES IN NORTH AMERICA

ALABAMA
Birmingham
Huntsville
ALASKA
Anchorage
ALBERTA
Calgary
Edmonton
ARIZONA
Tucson
ARKANSAS
Little Rock
BRITISH COLUMBIA
Richmond
CALIFORNIA
Canoga Park
Fresno
Fullerton
Los Angeles
North Hollywood
Palo Alto
Sacramento
San Diego
Santa Ana
Santa Clara
South San Francisco
COLORADO
Englewood
CONNECTICUT
Wallingford
FLORIDA
Fort Lauderdale
Jacksonville
Orlando
Pensacola
Tampa
GEORGIA
Atlanta
Augusta
Warner Robins
HAWAII
Honolulu
IDAHO
Boise
ILLINOIS
Bloomington
Downers Grove
Rolling Meadows
INDIANA
Indianapolis
IOWA
Des Moines
Iowa City
KANSAS
Derby
KENTUCKY
Louisville
LOUISIANA
Kenner
MANITOBA
Winnipeg
MARYLAND
Hanover
Rockville
MASSACHUSETTS
Lexington
MICHIGAN
Farmington Hills
Grand Rapids
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Las Cruces
NEW YORK
Albany
Fairport
New York
Syracuse
Woodbury
NORTH CAROLINA
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OHIO
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Cleveland
Columbus
Dayton
OKLAHOMA
Oklahoma City
Tulsa
ONTARIO
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QUEBEC
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SOUTH CAROLINA
Columbia
TENNESSEE
Knoxville
Memphis
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Austin
El Paso
Fort Worth
Houston
Richardson
San Antonio
UTAH
Salt Lake City
VIRGINIA
Richmond
Roanoke
Virginia Beach
WASHINGTON
Bellevue
Spokane
WEST VIRGINIA
Charleston
WISCONSIN
Brookfield

A Declaration of Interdependence, Teamwork And Cooperation

The individual manufacturing division, in concert with the sales region, has long been the base of HP innovation and enterprise. But more and more, that division is finding it necessary and advantageous to team up with other divisions, groups and corporate organizations to achieve its goals. This trend to increasing interdependence was evident throughout the 1981 HP general managers' conference at Pebble Beach, California on January 15–16. A summary follows:

Three European managers review possible effects of economic outlook. From left: Franz Nawratil (South/Eastern Europe), Heiner Blaesser (Computer Marketing), and Klaus-Dieter Laidig (Boeblingen General Systems Division).

Bob Watson, general manager-Terminals (left), and Paul Ely, executive vice president-Computers, use coffee break to discuss business.

The theme of interdependence was touched on very early by President John Young in the course of outlining the purposes of the conference. One of the company's biggest challenges, he said, will be that of managing technological change. This calls for interest and commitment not only from corporate and group managements but from every organization represented at the meeting. Specific approaches to managing key aspects of technological change were discussed in a series of reports chiefly from representatives of special task forces. Each of the approaches clearly indicated the need for a high degree of interaction and agreement among growing numbers of people and organizations.

ENGINEERING PRODUCTIVITY...

Engineering productivity was one such topic, with speakers reporting on their task-force findings in the following areas:

- Defining a present and long-term strategy for printed-circuit production. PC is still the main electronics packaging technology, said Clyde Coombs, administrative manager of HP Labs. In the face of ever-increasing density and complexity of boards, ways need to be found to speed up layout and fabrication. As it is, HP is well along in some developments, especially digitizing layouts, which can cut design time in half.

- A similar "nuts-and-bolts" subject dealt with new tools and techniques for integrated-circuit design. The goal, said John Strathman, microcircuits engineering manager at Colorado Springs, is to go from functional design to finished design and documentation in minimum time. The payoff will be large when such promising tools as interactive graphic stations are fully proven and implemented.

- Not just a "factor," motivation is a multiplier in engineering productivity, said Bob Frankenberg, hardware engineering manager at General Systems. Planners at corporate, group and local levels can foster creativity by developing stable strategies, by encouraging continuity in projects, and by appropriate recognition of outstanding personal contributions, and developing appropriate methods of reward.

Al Oliverio, vice president-Marketing (left), and Bob Puette, general manager of Computer Support Division, discuss Bob's presentation to the meeting on the rising role of service and support functions.

Alan Bickell, managing director-Intercontinental, reports on the strong showing of many of Intercon's markets around the world.

STRATEGIES FOR PCs, ICs ...

Recommendations of a 1980 task force on integrated-circuit strategy call for increasing consolidations of some IC manufacturing centers, greater use of engineering design tools, more standardized "workhorse" processes and multi-division sharing of facilities. The goal according to Bob Grimm, director of the Technology Research Center of HP Labs, is to provide the divisions with novel ICs that can enhance their opportunities to achieve end-product contributions.

Access to IC centers would be based on technical considerations rather than geographic or organizational ties, said Marco Negrete, R&D manager of the Technical Computer Group. When in full operation the centers would share time and space between the local and non-local organizations. Costs would also be shared. A combined strategy would be used to develop IC design tools and production processes.

IC technology will continue to be one of the fundamentals of HP's business for at least the next 10 to 15 years and needs strong support and close attention from management, added Doug Chance, Technical Computer Group general manager.

COMPANYWIDE CAMPAIGN ...

A major program of productivity improvement is underway throughout the company, offering numerous opportunities for cooperative action and sharing of ideas. And these improvements are by no means confined to assembly operations, on the contrary, programs to improve productivity are active in a variety of functional areas including field sales and service. In some cases it's a matter of organizing "quality teams" which now number in excess of 300 around the company. In others, informal "partnerships" have been formed with suppliers to improve product quality and delivery schedules, customer service and support have been defined as products and organized accordingly, inventories have been reduced by "linearizing" shipments (spreading shipments evenly throughout a month); dramatic turnarounds in product quality have been achieved by new testing methods and approaches.

That's the gist of reports by seven speakers led by Ray Demere, vice

MEETING AT PEBBLE BEACH

Dave Packard, Bill Hewlett and Bob Boniface enjoy a coffee break with guest speaker Ezra Solomon (right), world-renowned economist and faculty member of the Stanford Graduate School of Business. Professor Solomon discussed the economic prospects for the '80s. Inflation has made forecasting more and more difficult for economists, he said. Nevertheless, he believes that those who view the '80s as a likely replay of the '70s on a grander scale are pessimistic. Inflation, Solomon pointed out, is a man-made thing—as is money itself—and the means exist to bring it back into control. The next four years will be critical if we are to disinflate in an orderly way. The probability of doing that is good.

president-Corporate Manufacturing Services. Titled "Quality/Productivity Improvements A Year Later," their presentation reflected the important shift in action and attitudes that occurred around the company by the end of 1980 as a result of a call for action at the management meeting one year earlier and at a manufacturing managers' meeting in mid-1979. This time, in addition to urging still higher expectations for HP quality and productivity programs, Demere said we should make quality a corporate objective.

RECRUITING CHALLENGE . . .

John Young expressed enthusiasm for the programs that had been outlined for quality and productivity improvements. He mentioned that he had attended two quality-team sessions in order to "catch their chemistry." We need a coordinated effort throughout the company to give them more visibility and support, he said.

Cooperative interaction was certainly the note sounded by John Doyle, vice president-Personnel, in—among other things—outlining the challenges facing our recruiting programs. The division teams assigned to campus recruiting visits must view their primary role as representing HP, rather than their own local interests.

In 1981, he noted, HP recruiters will visit 174 campuses in the U.S. compared with 72 in 1975. They will be talking with some 5,000 graduating students in the hope of attracting 1,250 to employment. An increasing share of these—up to 25 percent—will be for field sales and service positions.

"We are looking at a significant proportion of the available pool of graduating students," Doyle pointed out, "and our job is going to get more and more difficult. Bringing new people into the Bay Area organizations is particularly tough due to the tight housing situation."

Near the conclusion of the meeting, Board Chairman Dave Packard observed that the basic divisional structure of the company appears to be working very well. Nevertheless, cooperative activities will be very helpful in finding new ways of working together, and sharing facilities and resources.

In review, John Young said the meeting had been helpful in defining some of the newer areas of interdependence and to suggest some ways to improve our management structure to enhance cooperation. The vitality of HP total effort lies in teamwork and taking advantage of the many strengths we have as a company. **M**

YOUR TURN

Invites you to question or comment on matters of importance to the readers of Measure.

TAKING CARE OF THE KIDS

I think it would be so neat to have a company day-care center for children of HP parents. We would know that if HP sponsored it, it would be a good place for kids.

I know I speak for a lot of single parents and others who would be grateful to HP for making life a lot easier for us. Has the company ever considered the possibility of offering day care? Is that in the future as far as benefits are concerned?

DEBBIE CLARK
Data Terminals Division

Hewlett-Packard is very aware of the child-care problems facing many young parents working at its facilities. A number of Open Line analysis groups independently suggested the company consider child care as a benefit.

The company's basic approach has always been to encourage private or community efforts to solve child-care problems. HP isn't in the child-care business. The company actively supports local efforts by volunteering employees' time to serve on local committees and boards. The company occasionally makes cash contributions to day-care programs which are well run and benefit a sizable number of employees. Personnel departments at HP provide information about local child-care centers to employees. And the company is keeping abreast of legislative moves that affect child care (in Colorado, for example, there is a proposal to enact a child-care tax credit which would allow a deduction on the state tax form).

For about a year, Microwave Semiconductor Division has been involved with several other companies checking into the formation of an independent child-care center. A task force, composed of two employees from each company, observed that the child-care problem affects more than any one company, and that a regional or community solution should be sought. The task force also concluded that control of the center should be a committee job, and not left to any one company.

The task force has gone on to incorporate and obtain tax-exempt status, and is now looking for a suitable building.

THOM EDMONDS
Personnel manager
Microwave Semiconductor Division

GETTING THE LEAD OUT

I was taught that HP does not have "production leads" because we have "skill specialists" instead. Why (in your September-October article on Southeast Asia) is it different in HP Singapore?

MIRIAM CESPEDES
Manufacturing Division

In 1978 a task force representing all product groups recommended a revision to HP's manufacturing organization, intended to cover all of HP, not just the U.S. The task force addressed such basic questions as the number of people reporting to a supervisor, what the supervisory functions are and the confusion resulting from the use of the position of lead.

In HP Singapore, as in the U.S., the recommendations of the task force were accepted and implemented. In fact, as the job of lead in Singapore was changed, more than 20 leads were promoted to supervisor and most of the others moved into clerical support jobs.

The article erroneously mentioned lead, an understandable error due to the long-time use of the term. Today there are no leads in HP Singapore, just as there are none in the U.S.

FRANK WILLIAMS
Group personnel manager
International

Address letters via company mail to Editor, **Measure**, Public Relations Department, Building 28A, Palo Alto. Via regular postal service, the address is Editor, **Measure**, Hewlett-Packard Company, 1501 Page Mill Road, Palo Alto, CA 94304. Try to keep your letter under 200 words. Please sign your letter and give your location. Names will be withheld on request. Where a response is indicated, the best available company source will be sought.

CLOSE UP

Zooms in on the ever-changing world of HP people, products and places.

PAGING DR. HEWLETT PACKARD

The intercom at Montana Deaconess Medical Center in Great Falls, Montana, politely asks for Dr. Hewlett Packard. A quick bustle of activity follows. A life is saved.

Dr. Hewlett Packard is the nickname of the hospital's defibrillation equipment, made by Hewlett-Packard, of course. Whenever there's a cardiac arrest, the staff pages the good doctor. "That's the fastest way to get 'him' to an emergency," explains one of the hospital's nurses. At last report, Dr. Hewlett Packard is still alive and well and working around-the-clock on the hospital staff.

Waltham Division's Joe Cerniglia decided "quality" was just the right word to emphasize Waltham's successful quality improvement program. Designed by Waltham graphic artist Karen Lehman, the prismatic posters now spruce up walls all over the Massachusetts medical manufacturing facility. Joe, plant engineering manager, promises this is only the first of a series of posters that will help remind employees of the importance of—you guessed it—quality.

The eyes of all Lesotho (a tiny African country) may soon be on HP's Michael Lekoetje. He plans to become the country's only optician after he completes his studies at Portland Community College in June.

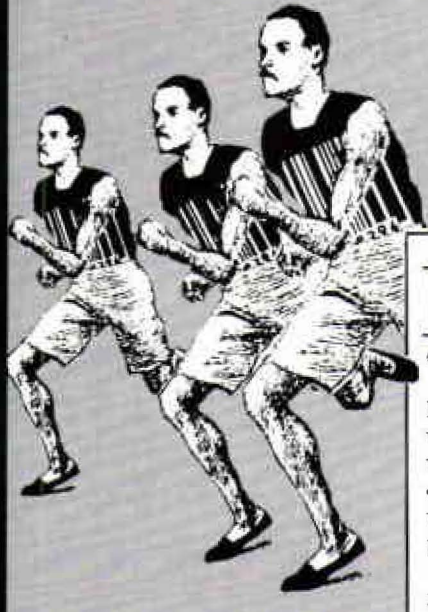
Last summer Michael had run out of funds, couldn't find a job and considered returning to Lesotho. But local newspapers ran stories about his plight, and HP offered him a part-time job at the Vancouver Division that lets him attend optician classes in the morning and work in the afternoon. "The job HP gave me when I needed it most makes my future look bright," says Michael.

Whether you're selling catering, freight-forwarding or a computer system, certain basic rules of human motivation and sales techniques apply. That's why Neely Santa Clara's Bob Payne (above, second from left) volunteered to teach a 10-week course of evening sales seminars to Bert Glass, Mae Rogers, Leo Loh and 11 other owners or partners in Bay Area minority-owned businesses. Bob, who is now district sales manager for computers, has been with HP for 11 years in sales and sales-related activities including developing two sales courses for Corporate Training. Sponsor for the series was Corporate Materials Management, which assists minority-owned businesses to become HP vendors.

The HP-41C's ten musical tones are enabling blind students like Peggy Butler to complete math and statistics courses, thanks to Dr. Mervin Newton at Thiel College.

Newton, an associate professor of mathematics at the western Pennsylvania liberal arts college, spent more than 300 volunteer hours last year programming the 41C to beep its answers aloud for the senior sociology major. His next project: developing a talking calculator program for students interested in banking and finance.

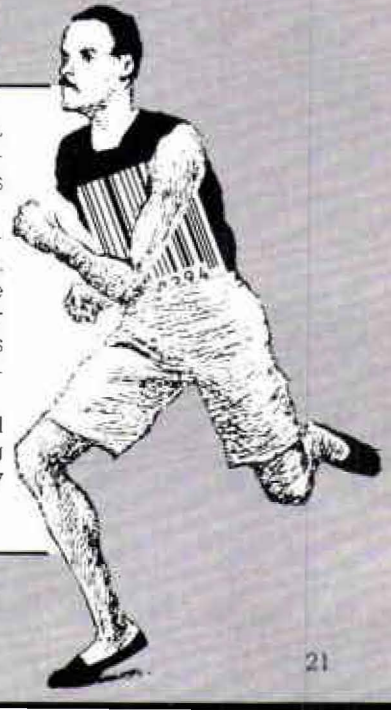
"Because of the costs, blind students face critical problems securing sophisticated equipment which would help them," explains Newton. "It's my job to help people learn, and when they need extra help because of handicaps, I'm willing to assist them."



Finishers in the October Marine Corps Marathon in Washington, D.C. were read like boxes of breakfast cereal, sending race results into an HP 1000 computer system and out to the press quickly.

The 10,000 runners, wearing their names and numbers on sticky-backed bar codes much like the labels on groceries and soft drinks, were herded into chutes in finishing order. At the end of each chute was a computer terminal with a bar code wand reader. As the bar codes were scanned by race officials, runners' names and numbers were matched with their finishing times and entered into the computer. The official results were posted almost immediately.

"In the past, runners have had to wait several days for official results," said Major R.M. Rudolph, the Marine Corps data processing coordinator for the race. "Our reporting speed is unmatched by any top marathon."



NEWS CLIPS

Recaps the newsworthy events, changes and achievements within HP.

Atlanta, Georgia, now has HP's largest single sales and service facility in the world to be built as one project. Sharing the new 111,000-square-foot facility on a wooded 10.6 acre site are the Southern Sales Region headquarters and the Atlanta District office. (Larger still is a Paramus, N.J., facility with 115,000 square feet—but it was built in several phases.) Nearly 300 HP people made the move in late December.

R&D, PERSONNEL

Bernard Oliver will retire as VP—R&D on May 27, his 65th birthday, it has been announced. He will also retire from HP's board of directors but will continue his association with the company in a consulting capacity as technical advisor to the president. Succeeding Oliver as VP-R&D will be John Doyle, VP - Personnel since 1976 and former director of corporate development. A native of Devon, England, Doyle joined HP in 1957 and served on the original team that founded Hewlett-Packard Ltd., HP's British subsidiary. He has served as general manager of two different California divisions.

Named director of Personnel, succeeding Doyle, is Bill Craven, general manager of the McMinnville Division since 1976.

In the Technology Research Center of HP Labs John Moll has been named senior scientist in charge of IC Structures Research and Fred Schwettmann is now director of an expanded Integrated Circuits Laboratory which comprises all aspects of IC process research and development.

INTERNATIONAL SALES

In the German Sales Region, Wolfgang Rucker has become general manager as Karl Doering moves to the new position of manager, government and customer relations. Growth of HP sales activities in the People's Republic of China has resulted in Intercontinental's recognition of that country as a management entity within its sales organization. Chi-ning Liu becomes country general manager, based at Intercon headquarters in Palo Alto, California. Relocating to South East Asia as general manager for HP Singapore (sales) is Tony Johnson, formerly HP Canada's regional sales manager for Instrument/Components and Western zone manager. HP Canada's Montreal office has moved into a new $3 million, 53,000-square-foot facility located in Kirkland, Quebec.

IEEE HONOR

Steve Adam of the Microwave Semiconductor Division has been elected a Fellow of the Institute of Electrical and Electronics Engineers in recognition of his "contributions to and technical leadership in the theory and application of automatic network analyzers." Since joining HP in 1957 he has primarily been associated with the development of commercial microwave test equipment at the Stanford Park Division and the former Microwave Division.

"PageWriter" electrocardiograph

AMONG NEW PRODUCTS

The HP 4700 "PageWriter" electrocardiograph from the Andover Division replaces the traditional strip chart with a standard single-page format that makes an ECG record easy to read and store. The San Diego Division has entered the large-format plotter market with the HP 7580A plotter, half the cost and size of competing high-performance plotters. It is based on an innovative, low-inertia design that moves the sheet in one direction while the pen carriage moves perpendicular to it. Eight pens are automatically stored and capped in a rotating carousel. Eight pens are also featured in six new flat-bed plotters (HP 9872 C/T, HP 7220 C/T, HP 7221 C/T) introduced by the division in February. Corvallis Division's successful HP-85 has parented a Series 80 family of personal computers. The new HP-83 (at $2,250 U.S.) costs $1,000 less than the HP-85 and has all the same features except for the integrated thermal printer and tape cartridge drive.

Large-format plotter

A MESSAGE FROM JOHN YOUNG

HP President John Young (left) and North Carolina Governor James B. Hunt Jr. discuss the state's economic development program during the governor's recent trip to Palo Alto. HP has purchased a 240-acre site in Wake Forest, N.C. Plans call for HP to build a plant to manufacture gas chromatograph products there.

A special insert in the upcoming March-April issue of **Measure** will provide all U.S. employees with a final summary of the actions taken and the decisions made by the company in response to the U.S.-based Open Line program*. In the final distillation of issues by the analysis groups, predictably the two with the greatest interest and questions about policy were pay and benefits. In the next **Measure**, as a wind-up on Open Line, I'll comment on benefits. In this issue I would like to give you a report on HP pay practices. Both subjects involve principles that have worldwide application.

In the Open Line survey itself, two out of three U.S. employees who had the opportunity to express their views gave the company's program of pay and benefits a favorable rating. That rating stood significantly above a national "norm" of some 200 other companies we have been using for comparison purposes. Nevertheless, the analysis sessions that followed the survey raised a number of specific concerns about our pay policies and practices. Many of those concerns were local and have been resolved by those organizations.

In reviewing the others, there clearly remains a lack of understanding of our pay policies and practices despite the initiation of many courses such as the "Salary Administration Workshop" for supervisors, and the salary portion of "Working at HP" to be given to every employee. A continuation and reenforcement of these efforts is indicated and supervisors should use regular performance reviews to assure that any questions are resolved.

Some of the misunderstandings, we realized, arose because in a few cases policies lacked clarity or definition. We asked a top group of HP managers to review and redraft a statement of compensation policy. This has just been approved in its final form and will be distributed in the near future.

I'd like to comment on three of the points from this policy statement. The first has to do with our *competitive position*. The statement begins by saying "At Hewlett-Packard, we believe in paying our people at competitive rates that place us among the leading companies in the country or region from which we attract people." In another section we define what HP means by "among the leaders." Briefly stated, compared to the few truly leading companies HP will be about equal to their midpoint or average. We will be well above the average of other well-known companies when we use a broad competitive survey.

In setting salary ranges and curves for the coming year, HP uses this competitive data as a base. First, we set our own midpoint to reflect the desired position as judged from the competitive survey data. Then we further project this midpoint one year ahead to anticipate increases in the competitive salary market. This assures that HP employees are unlikely ever to be behind the market.

The subject of *relative contribution* is another basic philosophy reflected in the policy statement. Individual performance relative to the performance of other people doing the same or similar jobs is the key measure. Relative contribution also recognizes that there is value in experience and in sustained performance on the job. This provides the basis for a true merit system in that varying levels of performance over a period of time will be reflected in varying levels of pay within a given salary range or curve. You can see the great importance of performance evaluations in this system to give everyone feedback and direction and to let them know where they stand.

A third point of philosophy describes the *openness of the system*. Individuals are encouraged to understand the process and to review their pay curves. Salaries are administered by the direct supervisor, but the "open door" applies to pay questions just as for other issues.

Together, these elements of our pay philosophy assure HP people that they are paid favorably with respect to the salary market and fairly with respect to their peers on the job. Of course, competitive compensation is only one element in rewarding people for their contributions to an organization. HP's philosophies of management, profit sharing, growth opportunities and employment security are widely regarded as models of HP leadership as well. Open Line has provided an opportunity to examine, improve and communicate all of these important practices that make up the HP way.

*Locations outside the U.S. will receive copies of the report for review by interested employees.

John

MEASURE

"Man is the measure of all things."
-Protagoras (circa 481-411 B.C.)

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The theme of cooperation echoed through the halls of the Pebble Beach Lodge as HP's general managers discussed new ways to bring divisions, groups and outside suppliers closer together.

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