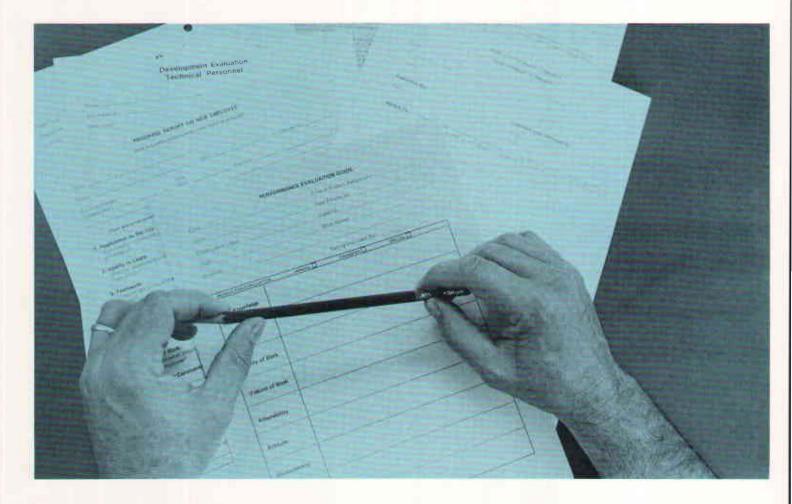


NEW CORPORATE STRUCTURE



Your annual evaluation:

It's more than a report card!

□ "An evaluation is a special time when the supervisor must sit down individually with each person in his unit and talk about how he feels the individual is doing, what he considers his or her strong points to be, and in what areas he or she needs to improve. Each discussion needs to be documented and placed in the employee's file." -Bill Hewlett, MEASURE, April 1972

You're called in to talk to your supervisor, and for a fleeting moment you wonder, "What have I done now?" But your supervisor puts you at ease, you relax into a chair, and very shortly it becomes clear that this is to be your annual evaluation. Does your heart begin to pound at the thought of a dreaded yearly ordeal? Or do you welcome the chance to talk about your performance on the job, and perhaps find out what aspects of your work need improvement?

You're a manager with a busy travel schedule. Your secretary informs you that one of your best engineers is overdue for an evaluation. The printed form is on your desk, along with piles of other paperwork you've got to catch up on. Do you scrawl some one-word appraisals in the appropriate blanks and call the employee in for sixty seconds worth of congratulations on what a good job he's doing? Or do you take the time, in spite of your busy schedule, to put some thought into it, write a complete and honest evaluation, and make an appointment with the employee for a thorough discussion of his strengths, weaknesses and career objectives?

It's not difficult to see which course of action is the "HP way." The personal growth of each employee and the recognition of his or her achievements on the job are an unequivocal part of the corporate objectives.

Perhaps you've had an evaluation approximating the extreme example given above-some one-word descriptions of the quality of your work along with a few words of praise. If so, your supervisor hasn't helped your career as you may think, and he hasn't done you any favors by overlooking the areas where you need development. Nobody's perfect.

Whether it's called a "progress report," a "personal evaluation," "performance evaluation," or, as in some divisions, a "development evaluation," the process of rating your performance on the job is an important part of your supervisor's responsibility. And if it works according to the HP guidelines, you can expect it to be a helpful, constructive session. You should view it as an opportunity that you're entitled to at least once a year.

Jack Grout, personnel manager at Santa Rosa Division, prefers the term "development evaluation" because he considers it a form of career counseling. When he and a task group of other managers in the former Microwave Division sat down and revised their evaluation system a few years ago, there had been instances of employees being terminated when no record of poor performance appeared in their personnel files. Some were receiving spotty or irregular appraisals. And it was felt that employees needed more guidance in pursuing a career path within the company. What training, what experience does he or she need in order to advance? These questions were considered as important as current job performance. Out of that task force came some new ideas, new forms and new determination to make the system work.

"The forms themselves are merely for the sake of consistency—to use as a checklist and a record of the discussion," Grout explains. "The important part of the evaluation is the discussion itself." He emphasizes the need to be frank and honest, so the person's potential can be developed, but to be tactful as well. "We should motivate people to improve—not discourage them."

Take the actual case of an employee we'll call Mary. Four years ago, as part of the clerical staff in a production control group, Mary was doing an excellent job. Her two-page written evaluation gave due credit for her strong points ("She is meticulous and accurate, and can always be trusted to meet any objective, carry out any assignment or suggestion without any followup required.") and pointed out some weaknesses ("Her knowledge of the products in the division and the processes used to make them is limited, and if improved, would increase her effectiveness . . ."). Her boss even suggested some specific steps she might take to develop her abilities: "A better understanding of the limitations and opportunities for EDP applications in her group might be of some use. Perhaps a course in basic EDP and then Mark IV might give the background required."

In the evaluation session, Mary and her supervisor talked about these points at length. She signed the form indicating that she had read and discussed the evaluation. She worked hard at improving in the ways suggested, and the following year her evaluation reflected the improvement. In the meantime, she had been promoted!

Today, after several such honest, wellthought-out evaluations of Mary's performance, plus some additional training as well as several promotions—Mary is a manager with a great deal of responsibility and almost double the salary she was earning four years ago.

That's the HP manner of "home-growing" talent, and the personal evaluation is a key part of it. If Mary's weaknesses had been glossed over in her evaluations, as so often happens, the results could have been missed opportunity and stagnation in her HP career.

Personnel people agree that an employee's first few evaluations are the most important. For non-exempt employees these normally are made within three months of hiring, and again at about nine months. For an exempt employee an evaluation is written within the first six months, and another around six months later. (Everyone with over a year of service is to be evaluated annually). A supervisor is responsible for assisting an employee in overcoming any difficulties during this early "trial period," and problem areas should be carefully documented. With proper supervision, of course, such constructive criticism should come as no surprise at evaluation time-it should have been brought out in previous discussions.

After those initial appraisals, a supervisor or manager may tend to devote less and less time to evaluating that employee, which is unfortunate. There are some evaluations in the files that simply read: "Old-timer, no change!" But an "old-timer" --still expected to meet HP standards of performance-also has the same right as a new employee to be evaluated fairly and completely at least once a year.

As important as the written evaluation and personal counseling, Grout feels, is the followup--the informal day-to-day help and encouragement that the supervisor should give to help the employee improve. "The supervisor can even give the employee a copy of the evaluation to refer to if it'll help him work on improving his performance."

The evaluation program is just one important tool in the development of HP personnel. And, as in anything that deals with human factors, it's only as effective as the people involved. Its success depends on having top-quality leadership and capable employees who want to do a better job. That's why it works.

Held over by popular demand

All time HD hit!

cast of thousands!

	Positive Effects	No Effects	Negative Effects
Productivity	60%	37%	3%
Efficiency	57%	35%	8%
Tardiness	81%	15%	4%
Absenteeism	51%	49%	
Sick Leave	36%	64%	
Customer Communications	25%	55%	20%
Safety	28%	66%	6%
Morale	96%	4%	
Scheduling Hours	67%	23%	10%
Traffic Conditions	93%	6%	1%
Socializing with Others	38%	52%	10%

□ It probably will cause you no surprise to learn that—some 18 months after its introduction to the company at large—the flexible worktime program is endorsed by an overwhelming majority of your fellow employees.

To be specific, a questionnaire sent to a cross-section of HP people in mid-1974 found 95 percent of them rating the program as a success, 3 percent as "somewhat" successful, and the remaining 2 percent disagreeing.

The survey, conducted by EPG's Polly Johnson, was aimed chiefly at people in the manufacturing divisions where flex time—which allows employees wide freedom in determining the "when" of their workday—has its main impact.

4

The table at left presents a summary of responses from all persons surveyed to a series of questions concerning the effects of flexible time. Supervisors among the respondents were asked several extra questions. In general, their answers indicated that flex time created no problems in controlling lunch breaks, scheduling overtime, and meeting goals and objectives. In two areas-monitoring the program and interfacing with other departments-some of the supervisors described problem situations though few saw these as representing real difficulties.

Individually, there were some rather interesting and revealing comments: For example, one person answered the tardiness question with another question: "Is there such a thing any more?"-suggesting that the two-hour "window" allowed by flex time has just about eliminated lateness, or at least any excuse for same. In addition to the largest positive response, the "morale" question elicited such comments as: "There is an implied trust which increases the individual's sense of worth," and "It's one more step we've taken to allow people to be themselves." Regarding productivity and efficiency, one supervisor noted that "leaving responsibility with the individual tends to sustain high levels of both?"

The words of a secretary-typist summarized the feelings if not the exact experience of quite a few people surveyed when she said: "In my case, with two preschool children and a husband in school, flexible hours have made the difference as to whether I work or not and also how well I work. I guess the best comment for the program's success is that I look forward to coming to work and enjoy it when I get here." The survey revealed—or, rather confirmed—some expected data concerning patterns of flex time usage.

Every R&D reply, for example, noted that lab people have long employed their own versions of flex time. Said one group leader: "It merely reinforces the way we have been operating all along."

A finance manager put it a little differently, saying in effect that the workload dictated the degree of flexibility in his department.

An information systems manager noted that flex time has made little difference with professional people "since they have to work odd hours and take compensatory time off." He added that computer operations people, in general, have not been able to take advantage of the program "since we must schedule the computer."

Very clearly, the production lines are where most of the flex time action occurs. A production manager wrote: "In practice-most hourly people come in at 6:30 to 6:45 A.M., while production engineers and the like arrive an hour later. The only thing I would recommend are even earlier starting times."

Some of the negative reactions showed up in the following: "While traffic conditions are much better (coming and going to work) car pools are harder to get up. The variance in hours sometimes delays getting needed information."

"After-hours socializing is more difficult now."

The survey is not the only notice that has been taken of the flex time program since Bill Hewlett announced its companywide adoption in March, 1973. That announcement plus some explanatory news releases resulted in what is undoubtedly the greatest volume of publicity ever generated by any HP action. John Kane, press relations supervisor in Corporate Public Relations, said "Our press clippings on flex time would fill volumes. The 'ink' we got on this would float a battleship."

That's part of the payoff for pioneering. Actually, the real pioneering was done in Germany during the labor-short days of the 1960s. Developed by a female management consultant, the objective for the first flex time program there was to encourage women with families to return to the work force on a part-time basis.

At this point, most HP sources will tell you that HP's first flex time experiment took place at the Boeblingen plant in 1967. But Karl Doering, country manager at the Frankfurt sales headquarters for Germany, says his sales organization was the first—by about six months: "We piloted it for them."

Be that as it may, how about that two percent of surveyed people who turned thumbs down on the program? What have they got against it?

A couple of respondents, including one computer operator, complained that they were not permitted to take advantage of flexible hours, apparently due to the inflexible nature of the work. The others mainly felt that flex hours gave some people too much opportunity to slack on the job, particularly during those hours when they are unsupervised.

No doubt such things happen. But if the majority are to be believed—and a 95 percent affirmative vote must surely represent an avalanche of believability—flex time now is a very successful and accepted part of the workday at HP.



A very 'cohesive' team

To get a picture of what it takes to do business in a "multi-multi" environment—multi-lingual, multi-national, multi-discipline—look around the European calculator factory-marketing department headquartered in the GmbH plant at Boeblingen.

As the European representative for the Loveland calculator line, the department provides a variety of services. Among them is market development, tailoring calculator applications to particular industries, and adapting certain U.S. applications to European requirements. Another is sales support to the calculator salesmen in the field. In addition, the team supports new-product introductions and trade-show activity.

Of the 16 people in the group, four are French, four German, two U.S., two Dutch, two British, one Austrian and one East Indian. Between them they can converse fluently to customers in French, German, Dutch, Spanish, Italian, Indian and English, and even get by in several other languages. All of them, in fact, speak English which has become their everyday business language. The photo shows a cross section of nationalities: Austrian Manfred Sailer, American Bonnie Dykes, Englishman Geoff Kirk, and Frenchman Guy Cohen.

And how do the people in this mini-United Nations get along? "Splendidly," says Srini Nageshwar, the Indian-born manager of the GmbH calculator activity. "Over the last two years it has become a very strong and cohesive team, and a very friendly place to work."

the New orate Management

☐ Meeting at the Loveland Division, Colorado, on September 20, the HP board of directors reviewed and approved a plan that creates significant changes in the management structure of the company. The changes involve both a restructuring of the organization and a series of new assignments for a number of people.

In describing the organizational changes, Bill Hewlett said, "they represent an evolutionary step in HP's continuing growth and diversification." He noted that six years ago the company had adopted a group structure, one that served HP well. "However," he said, "it has become increasingly apparent that the rapid expansion of the company, both in size and complexity, has made it necessary to provide for more effective management of our day-to-day operations."

Details of the structural changes are presented in the chart and text on pages 8–9. President Bill Hewlett outlines the rationale for the restructuring in his letter on page 15. Brief biographies of the key people involved appear on page 10.

It should be noted that the chart reflects only the corporate management structure, and is not intended as a description of the whole corporate organization. Nor does the chart necessarily reflect the many informal and functional lines of communication and the cooperative working relationships that exist among the various levels of management.

HEWLETT-PACKARD: The NEW CORPORATE MANAGEMENT STRUCTURE September, 1974

The most important change occurs with the addition of a new level of management responsibility. The new level is made up of three positions that jointly have charge of all day-to-day operational activities of the company:

• Executive vice president Ralph Lee takes on the responsibility for three product groups consisting of the Medical, Calculator, and Analytical groups.

• John Young, formerly vice president and general manager of Electronic Products Group, is executive vice president responsible for the Instruments, Computer Systems, and Components product groups.

• Bob Boniface, formerly vice president-Marketing, now is vice president in charge of Corporate Administration with responsibility for all Corporate staff functions excepting Corporate Development and HP Labs.

In addition to providing for more concentrated attention to day-to-day operations, the restructuring will also permit greater emphasis on long-range planning:

• Dave Packard and Bill Hewlett will devote a good part of their time to policy matters and charting the future course of the company.

• To assist in this planning, John Doyle as head of Corporate Development, and Barney Oliver as head of HP Labs, will report directly to Bill Hewlett and Dave Packard.

• Ed Porter will similarly assist Bill and Dave in meeting HP's obligations in the increasingly complex area of corporate community activities. He will, also, continue to follow the Medical and Analytical organizations on an informal basis.

• An Executive Committee, consisting of Hewlett, Packard, Lee, Young and Boniface, will provide coordination of all phases of the company's operations.

The restructuring reinforces the product group structure, resulting in a total of six groups:

• The Instruments Group, headed by vice president Bill Terry assisted by vice president Ray Deméré, consists chiefly of

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JOHN YOUNG ecutive Vice Presid	ent	Exe	RALP cutive V
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	COMPUTER SYSTEMS: PAUL ELY	JOHN YOUNG ecutive Vice President PRODUCT COMPUTER SYSTEMS: PAUL ELY COMPONENTS: DAVE WEINDORF General Manager	Bil OPERATIONS JOHN YOUNG ecutive Vice President Exer PRODUCT GROUPS COMPUTER SYSTEMS: PAUL ELY COMPONENTS: DAVE WEINDORF General Manager DEAL: DEAN MORTON Vice President and

the "traditional" HP divisions. Included are: San Diego, Stanford Park, Manufacturing, Santa Rosa, Santa Clara, Colorado Springs, Loveland Instruments, and New Jersey divisions. Delcon Division, whose products are basically standard HP instruments, also is included.

• The new Computer Systems Group, headed by Paul Ely, is made up of Data Systems, AMD, and Boise divisions.

• Dave Weindorf, as HPA division manager, heads the new Components Group.

• A new Calculator Group consisting of Loveland Calculators and Advanced Products divisions will be headed by George Newman.

• The Medical Group, headed by vice president Dean Morton, includes the divi-

sions at Waltham and Andover in Massachusetts, and McMinnville, Oregon.

BOARD OF

Dave Packa

• The Analytical Products Group, headed by Emery Rogers, comprises the Avondale Division in Pennsylvania, and Scientific Instruments Division in Palo Alto.

• Loveland's Civil Engineering Division will report directly to Ralph Lee for the time being.

• In addition to the manufacturing locations noted, each group is directly responsible for the field sales activity on a worldwide basis. This function is closely coordinated with the sales region structure both in the U.S. and internationally. Thus the groups have the complete responsibility for the key functions relating to their products.

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	MARKET	ING	AL OLIVERIO Vice President			
	INTERNA	TIONAL	BILL DOOLITTLE Vice President			
	PERSON	NEL	RAY WILBUR Vice President			
		LEGAL		JEAN CHOGNARD General Counsel		
			JACK BRI General A			
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Corporate Marketing has a new head:

• Al Oliverio was elected vice president-Marketing, succeeding Bob Boniface, Al previously was domestic marketing manager for the Electronic Products Group,

• Supervisory responsibilities of the vice president-Marketing include the sales regions in the U.S. and Canada as well as Parts and Customer Service, Customer Engineering, Marketing Services, Corporate Marketing Communications, and Corporate Training. Additionally, corporate-wide marketing and sales policies are coordinated by this office,

While not indicated elsewhere on these pages, the relationship of International Operations to the rest of the organization is growing not only in size and importance but also in mutuality and cooperation:

• Bill Doolittle, vice president and director of International, operates through two principal organizations, namely European Operations (HPSA) and Intercontinental Operations.

• HPSA, headquartered in Geneva, is responsible for all country and regional sales and service organizations in Europe, the mid-East and Eastern Europe, as well as the factory organizations in Germany (HP GmbH), Great Britain (HP Ltd.), and Grenoble, France.

• Intercon, headquartered in Palo Alto, embraces sales and service organizations located in Africa, Asia, Australasia, Central and South America, and Japan, together with the factory divisions in Japan (YHP), Singapore and Malaysia.

• Strong product ties are maintained between the international manufacturing organizations and the U.S.-based group management. This insures that the company has a coordinated and cooperative effort to serve our customers by drawing on our multi-national resources. Here's some brief biographical background on the eight people who received key new assignments as a result of the corporate restructuring announced on September 20:



Ralph Lee has been an HP manager for almost 30 years. His first job for HP was as head of manufacturing engineering. He became a vice president in 1960 and

an executive vice president (and director) in 1969. Ralph graduated in 1941 as a mechanical engineer from the University of Washington.



John Young, newly appointed as an executive vice president and elected to the board of directors, joined HP in 1958 as a marketing planner. Subsequently John

held positions in sales, finance and marketing prior to taking on general managership of the former Microwave Division in 1963. In 1968 he became vice president and group manager of Electronic Products. Further back, John was a 1953 EE graduate from Oregon State, served two years in Air Force research and development, and received an MBA from Stanford in 1958.



Bob Boniface, appointed to the newly created position of vice president in charge of Corporate Administration, and elected a director, has been associated with

HP since 1942. That was the year he joined Neely Enterprises (a sales representative firm that became the Neely Sales Region after its acquisition by HP in 1962). In the course of his Neely career, Bob served as an officer in the U.S. Army during World War II and the Korean War, took his Bus Ad degree from Los Angeles City College, and became vice president and general manager in 1952. He shifted from North Hollywood to Palo Alto in 1970 as vice president, Marketing, for HP. A A

Al Oliverio, the new vice president of Marketing, has more than 20 years of sales and marketing experience. Al joined HP via Neely Enterprises where he became

sales manager in 1963. He came to Palo Alto five years ago as marketing manager for the Electronic Products Group. Al received both EE and Bus Ad degrees from the University of California at Berkeley.



Bill Terry, vice president and head of the new Instruments Group, came to HP as a sales engineer in 1957. He then took on such diverse assignments as training sales manager and

supervisor, regional sales manager and corporate marketing staff member before going to Colorado Springs Division where he served as marketing manager and division manager. Bill is a 1955 EE graduate from the University of Santa Clara, and served in the U.S. Army as electronics instructor and laboratory supervisor.



Paul Ely, head of the new Computer Systems Group, joined HP in an R&D capacity in 1962. He was graduated from Lehigh University with a degree in engineer-

ing physics and continued his studies at Stanford, earning an MS in electrical engineering in 1965. He also participated in the Stanford Business School's 1969 Executive Program. In the meantime, Paul served as Microwave Division R&D manager, Microwave Division general manager, and as general manager of Data Systems. He also has authored numerous technical papers on high frequency instrumentation.

George Newman heads the new Calculator Group after having served as calculator products manager for the former Data Products Group since 1973. George

joined HP in 1957 following graduation from Menlo College School of Business Administration. Subsequently he held accounting and administrative positions in Palo Alto, with HP Ltd. in England, HPSA in Geneva, and YHP in Tokyo. He became director of Intercontinental Operations in 1969, and general manager of Data Systems Division in 1971.



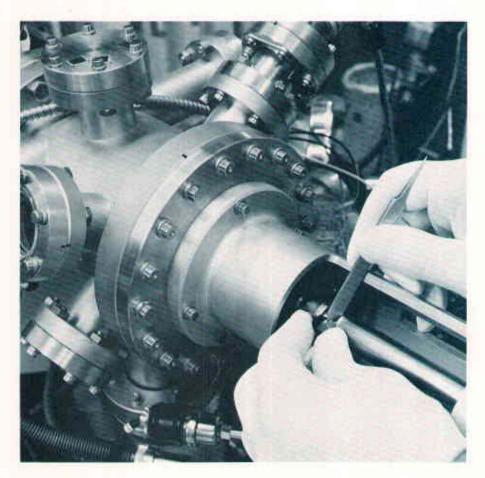
Dave Weindorf heads the newly formed Components Group. He joined the company in 1963, serving as chief engineer, manufacturing manager and semicon-

ductor manager for HPA Division prior to being named division manager in 1969. Dave is a 1950 graduate from Penn State, and worked as an engineer for three major firms prior to employment at HP.

esca:

Only scratching the surface

□ ESCA—not a very catchy acronym perhaps, but pronounce it "ESS-kuh" and you have the name of an exciting new scientific technique for surface analysis—one that has promise of far-reaching technological importance. The letters stand for Electron Spectroscopy for Chemical Analysis, and its potential applications are in nearly every field of chemical science and engineering.



A test sample, prepared in the applications lab under "clean" conditions, is placed in the vacuum chamber of the ESCA spectrometer.

(continued)

esca

A clinical instrument under development at HP recently failed its pilot-run test for an unusual reason. A residue film appeared on a vital component after the instrument was subjected to a warm, humid environment-causing it to give inaccurate readings. Measurements were taken with infrared, ultraviolet and mass spectrometers, but the nature of the contaminant remained a mystery.

Enter ESCA. The unique ability of the HP 5950A ESCA spectrometer to study surface phenomena was applied to the problem. The contaminant was identified as a compound of zinc and silicon, which narrowed its possible sources to a material in the component itself. Based on that knowledge, steps were taken to eliminate the contamination and put the development project back on schedule. And that's only one of a number of problems ESCA has solved within the company. With our broad range of technologies, HP has turned out to be its own best proving ground for ESCA.

Chemical characterization of surfaces is vital to the semiconductor industry. Oxidation, contamination and other surface characteristics can be pinpointed by ESCA studies and related to the methods of fabrication in a way never before possible. In other industries—the manufacturing of chemicals and petroleum products, for instance—ESCA has proven extremely useful in studying the surface properties of catalysts and the effects of lubricants. Knowing the behavior of a material at the surface is important in countless different production processes.

Scientists have known for years that all atoms are bound together by electrons. It was almost 75 years ago that Albert Einstein theorized the photo-electric effect, ESCA's underlying principle: that electrons can be knocked out of a solid by bombarding it with electromagnetic



radiation, and a simple relationship exists between the radiated energy required and the electron's "binding energy." Now, three-quarters of a century later, we have the necessary technology for isolating and directly measuring the various levels of binding energy in surface atoms.

In 1964, Dr. Kai Siegbahn at the University of Uppsala in Sweden demonstrated the usefulness of the photo-electric effect using x-ray photons. Later he served as a consultant in the development of HP's first ESCA spectrometer—a major R&D effort by HP Labs starting in the midsixties.

Each chemical element has a unique set of binding properties. By knowing its "spectrum signature" (like having a set of fingerprints), a scientist with an ESCA spectrometer can identify almost any atom present in a sample and the nature of the bond between atoms—in other words, what compounds they form on the surface, and in what quantities.

Because it is basically another measuring technique—a highly sophisticated one, to be sure—our special abilities in the field of measurement have placed HP right in the forefront of ESCA development. The company's unique contributions to the technology are incorporated in the 5950A, including improvements in sensitivity and resolution resulting from several ingenious design innovations.

Harry Weaver (foreground) and Stan Williams, an HP summer employee and Berkeley graduate student, test a sample in the ESCA applications lab. To more accurately describe how it works, another term applied to ESCA (though ESCA is the accepted one) is X-ray Photoelectron Spectroscopy, or XPS. X-rays impinge upon the surface of a solid sample in a high vacuum and eject electrons (down to a depth of 10 to 20 angstroms, or 1 or 2 millionths of a millimeter). The binding energy of the expelled electrons is determined by measuring the difference between the x-radiation and the kinetic energy of those electrons, as Einstein had theorized.

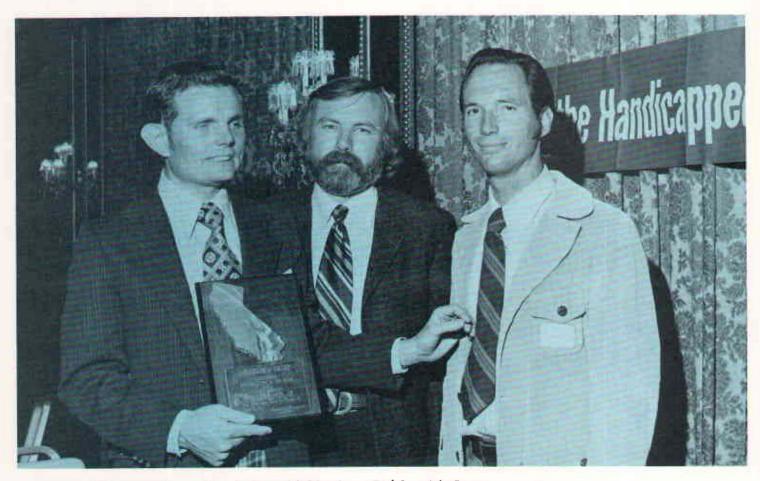
But the x-rays themselves can mask some of the attainable information about the sample. So HP designed a "monochromatized" x-ray source that filters and focuses the radiation, increasing resolution and improving the test results. Resolution and sensitivity were further enhanced by HP's lens design and other refinements.

Still another innovation solved a nagging problem called "charging effect," a phenomenon that occurs when an insulator becomes positively charged by the removal of electrons, or negative charges. HP designed a neutralizing electron "floodgun" that can be switched on or off at will. Measurements can be taken with or without the charging effect, yielding information about surface conductivity.

At Scientific Instruments Division in Palo Alto, an ESCA spectrometer in the applications lab now operates at an average of 14 hours a day studying various types of surface problems-not only for HP, but for potential customers. It is not a service lab, but a marketing tool used for demonstrating the ESCA spectrometer's capabilities, experimenting with different testing methods and verifying the accessory products.

In the applications lab, research engineers work closely with HP's own R&D people and those of many other companies and institutions. At a cost of over \$100,-000, after all, the 5950A ESCA spectrometer represents a sizable investment. Potential buyers must be convinced that it will help solve their problems. Because analysis details are kept strictly confidential, many new applications cannot be publicized, but ESCA has proven useful in an overwhelming majority of cases.

SID's marketing personnel feel that we've only "scratched the surface" in finding applications for the ESCA spectrometer. The clamor of interest in the new technique throughout industry seems to bear this out—and when and if ESCA becomes a major research tool, HP will be ready with the hardware and the technical know-how.



Named as "Rehabilitant of the Year" for the State of California was Rick Joy of the Santa Rosa Division. The award noted that Rick "through sheer determination, has overcome monumental handicaps to succeed in becoming self-sufficient and to enjoy hobbies and leisure pursuits not normally related to one both blind and deaf." At his HP assembly bench he uses a special soldering iron and reads by touch with an electronic Optacon. Off the job he has achieved Eagle Scout ranking, enjoys ham radio by use of Morse code, and "listens" to music by sensing the vibrations through his hands and feet. Rick is shown at left in the photo with two people who have shared in his success: Ed Hoefer (center), a counselor for the California Department of Rehabilitation in Santa Rosa, and Rich Bauhaus, Rick's supervisor at the plant.

News in Brief

Palo Alto – As one outgrowth of the organizational restructuring described elsewhere in this issue, HP has more clearly identified itself as one of the leaders in the minicomputer manufacturing industry.

The new rating results from the formation of the new Computer Systems Group, including as it does Data Systems and AMD divisions, the two HP organizations most concerned with minicomputers.

John Young, executive vice president, noted that the new corporate structure "makes visible for the first time the full extent of HP's participation in the computer industry." The new group represents approximately \$170 million in annual sales, with employment of more than 4,500 people worldwide. Only Digital Equipment Corporation among minicomputer makers has higher annual sales.

Group manager Paul Ely described the consolidation as "logical, and reflects the fact that computers and their use in systems are virtually inseparable. It greatly strengthens our research and products service organizations, as well as reinforcing HP's position as the industry leader in the end-user market."



From the president's desk

It was in the Fall of 1968 (incidentally, before Dave knew that he would be drafted for a job in the Department of Defense) that we instituted a revised management structure. Basically, this structure involved grouping all the data products related divisions into one group headed by Carl Cottrell (now Deputy Director of International Operations); the Medical and Analytical divisions, as well as Delcon, into one group headed by Ed Porter; and the remainder of the divisions consisting of the instruments divisions, AMD, and HPA under John Young. The purpose of this change was to reduce the number of operating units reporting to the head office—that is, to spread the management load. The role of the divisions was not changed. They remained the key operating units of the company.

This reorganization proved most fortunate, for when Dave was called to Washington I inherited a structure already in place that had greatly reduced the day-to-day load on the chief executive office. At about this same time, Ralph Lee and Noel Eldred were named executive vice presidents; Ralph to have responsibility for monitoring the inside operations of the company, and Noel the responsibility for marketing and outside relations of the company. Thus, until Noel's death in late 1970, the company was run by a threeman group-Ralph, Noel, and myself as chief executive officer.

At the end of 1968 we had about \$275 million in sales, and employed about 13,500 people. By the end of this year, we will be doing almost three times that amount of business and will employ about 29,000 people. Within this eightyear period, medical electronics and analytical became fullfledged groups, and we added a number of new operating units including Advanced Products Division, Boise, Scientific Instruments Division, Civil Engineering Division, Mc-Minnville Division, Andover (to handle a portion of the Waltham medical line), Grenoble, Singapore, Malaysia, and Hupe & Busch in Germany. In addition, we are now strongly entrenched in the components market and are well established in the consumer market with our line of pocket calculators.

Thus, the divisional groupings that were logical eight years ago no longer seemed quite so logical, and Dave and I were becoming concerned about the unbalance that was developing in the existing group structure. After a great deal of thought and discussion we recommended a basic restructuring of the company's upper management to the HP board of directors at their meeting in Loveland last month. Two basic steps were proposed and approved. The first step was the reassignment of divisions into six groups.

The Instruments Group will be comprised of those divisions responsible for our more conventional product lines, and will be managed by Bill Terry. Because this group is so important and so complex, Ray Deméré will be helping Bill in his role as group manager.

Components are now important enough and have a sufficient differential market to be separated out as a group, and Dave Weindorf will serve as group manager.

Dean Morton will continue to manager the Medical Electronics Group, as will Emery Rogers the Analytical Instruments Group.

George Newman will be responsible for the Calculator Group which will include the Loveland Calculator Division and Advanced Products Division.

Finally, there will be a new group consisting of Automatic Measurement Division and Data Systems to be known as Computer Systems Group, managed by Paul Ely.

The second basic change was to establish a new management tier consisting of Ralph Lee and John Young. John has been appointed an executive vice president and he, along with Ralph, will be responsible for the day-to-day operations of the company. Assisting them will be Bob Boniface who is assuming the position of vice president for administration. Reporting to Bob will be all the corporate staff functions with the exceptions of R&D, headed by Vice President Barney Oliver, and corporate development, headed by Director John Doyle, both of which will be reporting directly to me. Replacing Bob Boniface as head of corporate marketing is Al Oliverio who has been elected a vice president.

Under this new arrangement Dave and I will have more time to concern ourselves with the long-range directions of the company (hence the decision to have two key elements of long-range strategy—the Lab and corporate development—report directly to the president). Ed Porter will continue as a vice president and will serve as a special assistant to Dave and me.

The new structure, therefore, clearly delineates the day-to-day operations to Ralph Lee, John Young, and Bob Boniface, thus assuring that situations requiring top management decision will receive prompt attention and action.

This new top management structure will be tied together by means of an Executive Committee that will meet regularly on a weekly basis. The Committee will consist of Dave and myself, with Ralph, John, and Bob.

I can assure you that these changes are in no way a prelude to a lessening interest in the company by Dave and myself. Rather, this reorganization should be viewed as an opportunity to permit new people to be brought into the top management structure, to provide Dave and me more time to plan for the company's future, and to allow maximum use of both Dave's and my many outside contacts that can be so important as the company continues to grow.

Bill Hewlood



Plus or minus?

One of the more lively subjects of debate heard in the classroom this season of the year 1974 concerns pocket calculators. Far from being academic, the discussion comes down to the question of whether these handy devices advance the cause of learnin' or whether they are, in fact, a crutch that creates lazy students unable to handle simple problems without a machine in hand. Besides, say the critics, they are unfair to the have-nots.

An answer which surely must be regarded as highly favorable to Hewlett-Packard's products and point of view comes from Menlo College on the San Francisco Peninsula. One entire classroom used by six professors teaching math, science and business classes has been equipped with 20 HP-45 scientific calculators, one to each student.

Said the chairman of the math department, "We're finding that through daily classroom use of the HP-45's, many students, especially the weaker ones, acquire a significantly faster and firmer grasp of what math is all about." He added that more complex problems can be tackled and many more problems can be completed per hour. Q.E.D.

Measure

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