For the men and women of Hewlett-Packard/JANUARY 1970

1960-69: Fourfold growth

1960

The corporate headquarters/manufacturing facility in Palo Alto's Stanford Industrial Park was completed and occupied, and entertained two important visitors—then French President Charles De Gaulle, and Prime Minister Rahman of the Federation of Malaya.

In view of the increasing number of products and its expanding markets, the parent company's first distinct manufacturing division—Microwave—was formed.

Shareowners, following the recommendation of the board of directors, authorized a 3 for 1 stock split, thereby increasing the number of authorized shares from 5 to 15 million.

1961

Internationally, plans were announced for an engineer manufacturing facility for HP GmbH in West Gern., leasing a similar facility in England for HP Ltd., and for establishing marketing offices in the Benelux countries and in Canada.

The Oscilloscope and Frequency & Time Divisions were formed, HP Associates established, and negotiations in pleted for the acquisition of two highly respected from Sanborn (medical products) in Waltham, Mass., and Harrison Laboratories (power supplies) in Berkeley Heights, N.J.

Hewlett-Packard stock was traded for the first time or the floor of the New York Stock Exchange, with a listin fe nearly ten million shares outstanding.

HP's Colorado activities were highlighted by the announcement of a new engineering/manufacturing facility in Loveland, and the plans to move scope production to a leased building in Colorado Springs.

1962

Seven independent sales companies (Neely, Crossley, Horman, Lahana, Yewell, Stiles, and Bivins & Caldwell) joined the company as affiliates.

HP moved into FORTUNE magazine's "500" largest companies listing for the first time as a result of 1961 sales of over \$85 million.

1963

An agreement was negotiated with Yokogawa Electric Works



of Japan to establish a joint venture to be known as Yoko-gawa-Hewlett-Packard.

Plans for an engineering/manufacturing plant in Colorado Springs were announced.

The frequency synthesizer, one of the most complex instruments developed by the company to date, was introduced, and another highly sophisticated instrument, the spectrum analyzer, reached the final stages of development.

1964

pansion continued as negotiations were completed for disition of Mechrolab, Mountain View, Calif., and Delcon, Palo Alto; and new buildings completed and occupied at Yokogawa-Hewlett-Packard, Colorado Springs, and Berkeley Heights.

company unveiled a new look for its trademark and signature—the first major change since the company's founding.

Among the outstanding instruments and systems introduced were Waltham's portable electrocardiograph, Loveland's directly voltmeter, and the microwave spectrometer.

1965

Two HP cesium beam clocks, during a 35-day period, traveled 35,000 miles comparing time-of-day standards at world time-keeping centers.

At mid-year, negotiations were completed for the company to acquire the Datamec company in Mountain View, California, and F & M Scientific, now the analytical products sion at Avondale, Pa.

A program to restructure the entire marketing organization was put into effect with establishment of the Neely (Western) and the Midwest regions, and finalized plans for the Eastern and Southern regions.

1966

HP's advanced research and development activities were officially consolidated under the name HP Laboratories.

Datamec and Delcon moved into new, twin buildings in Mountain View, and HP Ltd. people moved from Bedford, England, into their new building in South Queensferry, Scotland.

Carrying the travelab concept an additional step, the company outfitted staterooms on the S. S. Leonor to display HP products during port calls at 11 Latin American cities.

The first HP computer—forerunner of today's Data Products line—was introduced late in the year.

1967

Marketing subsidiary companies were established in Denmark, Finland, Norway, Argentina, Brazil, Venezuela, and Australia.

Building construction got under way for HPSA in Geneva, HP France near Paris, and Eastern Sales Region head-quarters in Paramus, N.J.

The company distributed its first annual, hard-cover catalog, that included for the first time the company's entire product line.

1968

Indicating continuing growth and expansion, the company announced a building program for a site in Santa Clara, Calif., purchase of a building site north of San Diego, and purchase of a building in Cupertino, Calif.

The major new product introduction of the year was the highly sophisticated desk-top calculator.

Plans were announced to restructure the corporate organization by combining operating divisions into groups, each responsible for related products and activities.

Chairman Dave Packard accepted the post of Deputy Secretary of Defense.

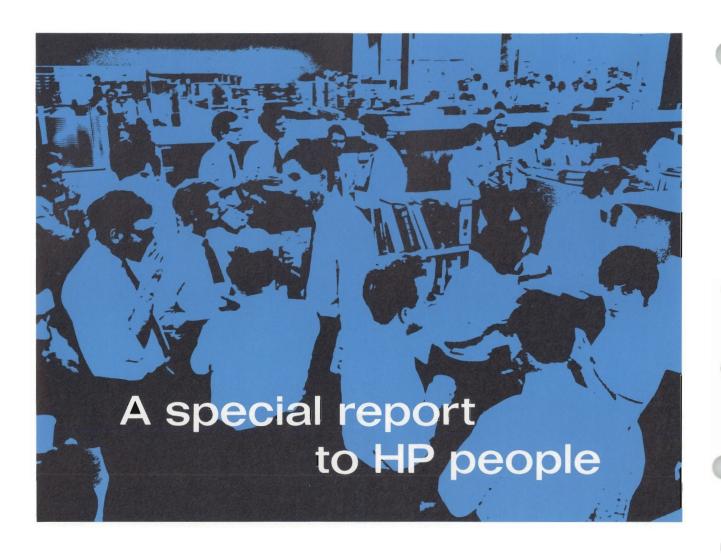
1969

The board of directors proposed a 2 for 1 stock split (subject to shareholder approval) which would increase the number of authorized shares from 15,000,000 to 30,000,000.

HP Ltd. was awarded the highly coveted Queen's Award for its development of a microwave link analyzer.

An HP product display took to the air for the first time when a specially designed aircraft flew instruments and systems almost to the doorsteps of potential customers in a 46-city, 12-country, 110-day trip.

Orders for the year passed one-third billion dollar mark.



For Hewlett-Packard—and Hewlett-Packard people—the sixties were years of rapid growth and change. Starting the decade as a relatively simple, monolithic organization, HP emerged as a genuinely large company with a multiplex structure designed to serve multiple markets on a worldwide basis. Many of those changes came into strong focus in 1969, a remarkable year in an extraordinary decade. In a series of reports by the heads of the major operating groups, this special "annual report" issue of Measure reviews the important events and trends of the past year and notes their significance for the future.

1969-19??









Building New Businesses

Carr Cottrell, general manager, **Data Products Group**

"1969 helped Hewlett-Packard focus on the fact that it is involved in a new business-the data products business. This is a new endeavor for the company and one quite unlike the other businesses it is in.

"Our group underwent great changes in 1969. After starting from zero three years ago, last year was the year in which we became profitable. This was a welcome change because even with the demands of our rapid growth, we wanted to contribute a fair share of corporate earnings and we are proud of ability to do so.

During the year we were able to

come up with selection and definition of the new markets we are entering. Obviously, we just can't say that we are in the computer business, per se. We can say that we are in time-sharing, the education field, scientific computation and we are in the business of selling systems and stand-alone products to manufacturers, particularly manufacturers of electrones products.

"These are important definitions, because in the marketplace each requires new skills and a new investment. You see, it is not enough to have the right products. Customer support in many of these markets can be very demanding -much greater than anything the company has required in its traditional instrumentation markets. The marketing investment, in fact, can far outweigh the engineering investment and that is why we have to be very selective. We have to be sure that we are ready to make the necessary commitment to enter a market, and 1969 saw us commit ourselves to a major effort in the areas mentioned.

"We also have been learning how to live with an accelerated growth pattern in 1969. Our group is moving at a very fast rate and this tends to accentuate certain problems in personnel, in hiring and space to work in. Recognizing this, our people worked that much harder to get the job done. The result was a tremendous team effort among our

three Peninsula-area divisions and this spirit is going to carry us up and over many of the problems of the future.

"A very important plan was started last year to develop a strong Data Products marketing capability in Europe. In addition to starting calculator and computer manufacturing in Europe, we are actively establishing Data Centers, Systems Integration Centers and increasing the size of the field sales force. We picked some of our best people in Europe to run the show and they are already at work on this task. Without question, international sales will add a tremendous increment of business to our group and we are pleased to see the enthusiasm for our products develop at such a rapid rate.

"Concurrent with our own rapid growth as a group, it became clear that the computer, as used by other HP divisions, particularly in instrumentation systems, is having a profound effect on the product character of the company. At last count there were some 50 'dedicated' instrument systems either in or nearing the marketing stage throughout the company, with just about every division represented. One finds that the divisions have added a new increment of sales and new elements of manpower, space, engineering and manufacturing that did not exist before. Thus, while instruments continue to be our largest and strongest (continued)

corporate business, the computer has brought a very healthy diversification that is going to give the company lots of extra leverage in the marketplace.

"In the year ahead, we expect to plan a new addition at the Cupertino site, accelerate our international activities, complete the addition of new Data Centers in the sales regions and vigorously pursue our new product program. I am quite confident that the investments we made in 1969 will help make 1970 a successful and exciting year."



New Men, New Relationships

John Young, vice president, general manager of Electronic Products Group

"In our first full year as a group organization, several accomplishments of general interest took place. All of our group staff activities have been staffed, and there's been a lot of learning taking place—defining these new functions and getting them going.

"In the field marketing area, the appointment of regional discipline sales managers-corresponding to the electronics product group-by the domestic and international sales regions has been a major step forward. Already these men have provided a strong new interface between field and factory. Their inputs from the field have been really important and useful. This has helped our divisions in setting up our own marketing strategy. And their gaining a longer view of where we are headed by participating in our long-range product planning has made an important difference in how they are able to respond. I would say we have gained very significantly in our ability to communicate with the field engineer both on technical and sales topics-much stronger than anything we've had for years.

"How did our operating divisions fare in 1969?

"The big event for F&T was the opening of the new Santa Clara plant and name change to Santa Clara Division. The facility is a very handsome one. The people are very happy with their new quarters, and enthusiasm for the future is high. Bringing out the 5360A computing counter was another

important landmark for this division. The 5360A is outstanding in a poer of ways, most notably because it is the pacesetter in combining computer technology with an electronic instrument, From a personnel viewpoint, it was a year of building new strength. With Dick Anderson as engineering manager, and Al Steiner as the new head of marketing, Santa Clara has a strong, balanced team. Results of these efforts will begin to show in about a year. Some very fine projects are under development.

"Microwave had a fine sales year and a strong profit performance. Organizationally, it was a year of rebuilding. Most of the former management drafted into other assignments, so raul Ely has had the task of pulling a new management team together. They have achieved this goal, but it has not been easy. Microwave is our largest diving it is also quite complex because or the diverse character of its products. It's a collection of activities, and this represents a special challenge to its management.

"During the year, the microcircuit program (Measure, June 1969) ed from R&D into a manufacturing phase. This is a significant activity within the Microwave Division and will have a major impact both financially and in its technical influence on our free products.









"The Manufacturing Division, of was created as a separate division last year. Being basically a cost center as opposed to a profit center, it required considerable time and thought to define the criteria of its performance and set up the operating organization. An important change is in the way the Manufacturing Division relates to new product activity of our other divisions. Manufacturing engineers are assigned to become physically part of these development teams in the lab. Now the association between product tool design and the process shops is much better.

"Growth and change were very signt for HP Associates during the year-one of the top performances in the company. They gained a new general manager, Dave Weindorf, and regained marketing manager Milt aber. They also gained a much strugthened relationship and identity with the rest of the corporation. Components have clearly been identified as a strong potential growth area for HP. During the past year, HPA has done some strong product planning in new ma product categories having excellent potential-solid-state displays and opto-electronics.

"The Systems Division has been part of Electronic Products Group only a months. John Doyle has had only a nort time aboard as general manager. This division has a large backlog of work in a new business area for HP Our first jobs are to achieve an appropriate division profit as quickly as we can, and to get a longer range product strategy worked out. I'm impressed with the enthusiasm of the Systems people—their obvious excitement with what they are doing. They have worked extremely hard in getting things going. That should make for success in any future activities.

"For the coming year, the general order situation is somewhat softer than mid-1969, but we are ahead of year-ago levels. I think we will be concentrating

on more short-term projects—getting new projects out of the labs and into production as quickly as we can in order to beef up sales programs.

"One trend became very obvious during 1969, and that was the across-the-board impact of systems on our business. Actually, we caused it to happen ourselves. At the management conference about five years ago we noted the potential of the computer and what it could do with instruments and alone. This got a lot of our people thinking—and now it has happened. It is a dominant trend in the way measurements will be made in the future?"



Around the World with One Image

Bill Doolittle, vice president, International Group

"Last year was a landmark year in a number of ways for the International Group. We passed the \$100 million mark for the first time, with orders reaching \$105 million, a 44 percent increase over our previous fiscal year. We restructured our basic organization. We celebrated our 10th anniversary of direct overseas operations by the company. The engineering laboratories of our overseas manufacturing divisions produced outstanding results in creating new products. We completed a new headquarters building in Palo Alto and our European operations people in









(continued)







Geneva moved into new quarters, both with space to grow. We ended the year strongly—just about exactly on target—and early results indicate that we are starting 1970 at the same pace.

"These facts support the conclusion that HP has now become a true international organization, with worldwide responsibilities and opportunities.

"To meet HP's growing international challenges, our organization has been restructured to encourage the company's product groups to assume worldwide product strategy and profit responsibility. With some of our product disciplines approaching 50 percent of their business in international markets, a common worldwide strategy is essential.

"An important step in this direction has been the restructuring of the European and Intercontinental Sales Regions along similar organizational lines as our four U.S. Sales Regions, with product disciplne sales managers.

"In recognition of the importance of the Data Products Group to HP's future worldwide growth, we have taken a basic new organizational approach in the appointment of Fred Schroeder—our senior European manager—as European General Manager of the Data Products Group. In this assignment he will have responsibility for developing the Group's European strategy—manufacturing, marketing and engineering, as well as profitability. Although re-

porting directly to the Data Products group general manager, he will work closely with International's European Operations Office, utilizing all corporate assets—personnel, facilities and capital—to achieve his Group's objectives. We envision this type of organization will eventually be extended to other product groups, not only in Europe, but also in other areas of the world.

"During the past year we also began to restructure our basic international organization into geographic areas of responsibility. In Geneva, the new European Operations office, directed by Dick Alberding, has responsibility for all HP manufacturing and marketing activities in Europe. In Palo Alto, the Intercontinental Operations office, directed by George Newman, has responsibility for all international manufacturing and marketing outside of Europe. In essence, these Operations offices serve as housekeepers of the corporate assets-personnel, facilities and capital-and are responsible for assisting the product groups in implementing their manufacturing and marketing strategies.

"All of these changes are designed to give us flexibility to meet the complex business environments that we find in the world markets.

"The multiple role of our three overseas manufacturing divisions was very clear in 1969. Together, the plants in

Germany, Scotland and Japan ployed more than 1,300 people ducing over 350 products. Many of these products were designed originally by the U.S. divisions, then transferred to the overseas divisions in order to provide greater penetration in the local markets. Because of the eliminati customs tariffs, these products bw compete successfully with competitive, locally-produced counterparts. Without local manufacture, much of this business would be lost to the company. But an increasing share-25 percent of duction this last year-originated in the HP laboratories in Europe and Japan, and were marketed throughout the world. At the same time, these divisions continued to incorporate into finished products-both U.S. designed and locally designed-many components and fabricated parts supplied by the U.S. divisions, thus adding considerably to our U.S. employment level.

"At this point in our development, it's interesting to look back a bit. In 1959, for example, our overseas business represented a little over 11 percent of total corporate orders. Last year, on a greatly increased volume, international business reached more than 30 percent of the total, representing more than one and a half times our total corporate business level in 1959. We think this rapid growth trend will continue for the foreseeable future cating how very important it is to. all

(continued on page 9)

The Model 1970 Corporate Organization

In spite of the fact that the Hewlett-Packard organization can be drawn up in chart form (see centerspread), with lines indicating the formal relationships between areas of responsibility, in real life it's much more flexible and complex.

Many people are well aware of that flexibility. The company has always taken great care to encourage ease of communications between people and departments. Nevertheless, as a result of the company's growth, some new relationships have evolved that are not fully explained either by experience or the chart:

- The Chief Executive Office was broadened early last year. Bill Hewlett, as chief executive officer, now has Executive Vice Presidents Noel Eldred and Ralph Lee as members of his office, creating new depth and flexibility.
- The corporate staff offices actually function in two ways. First, each acts
 on policy matters on behalf of the Chief Executive Office and serves as
 the company's observer in its area of specialization. Their other role is to
 provide centralized service to the operating groups and the departments.
- It is the nature of the Hewlett-Packard organization—of its flexibility—
 that one person may hold both a staff post and an operations position at
 the same time. A number of instances of this may be noted on the
 organizational chart.
- At the operating level, the emergence of group management is a development of great significance. Not shown on the chart is the way in which the groups work together in focusing on common operating problems. This is done through the Operations Council, made up of the two executive vice presidents and the four group managers.
- Another important new relationship is indicated by the dotted line between Data Products-Europe and European Operations. In effect, Fred Schroeder will provide the Data Products Group with a more active and direct role in planning and coordinating its sales and manufacturing programs in the European markets. As such, his new role is a prototype of how the other product groups may eventually participate in Europe and elsewhere in international markets.
- A special pictorial report of the HP Board of Directors is presented on pages 12-14. The key role of the board in managing the company's business is discussed by President Bill Hewlett in his letter on page 15.



Corporate Organization, January 1970

Operations

Staff

EXECUTIVE COUNCIL

Bill Hewlett, Chairman

Frank Cavier

Barney Oliver

John Chognard Carl Cottrell

■Ed Porter Ed van Bronkhorst

■Bill Doolittle

Cort Van Rensselaer

■Noel Eldred

Bruce Wholey Ray Wilbur

■Ralph Lee

■John Young

OPERATIONS COUNCIL

Operating

HP LABORATORIES Barney Oliver, Vice President

ADMINISTRATION Dan Lansdon

LABORATORIES

Electronics Research Paul Stoft Physical Electronics Don Hammond

Physical Research Len Cutler

Solid State Paul Greene

ELECTRONIC PRODUCTS GROUP

John Young, Vice President

GROUP STAFF

Accounting Bill Johnston Manufacturing John Doyle Marketing Al Oliverio Personnel Jim Phelps

MANUFACTURING DIVISIONS

HP Associates Dave Weindorf Manufacturing Jim Ferrell Microwave Paul Ely Santa Clara Al Bagley Systems John Doyle

OPERATIONS GROUP

Ed Porter, Vice President

GROUP STAFF

Marketing Bob Brunner Special Affairs Stan Selby

MANUFACTURING DIVISIONS

Avondale **Emery Rogers** Colorado Springs Bill Terry Delcon Brian Moore Loveland Ray Deméré New Jersey

Don Tighe San Diego John Brown Medical Electronics Dean Morton

DATA PRODUC Carl Cottrell, Gen

BOARD OF D

CHIEF EXECUT

President and Chief

Noel Eldred

Executive

Vice President

Bill Hev

GROUP STA Engineeri Marco Marketing Bill Day

sonnel Jan Mi Service Ernie N Software Roy Cla

DATA PROD EUROPE Fred Schröd

MANUFACTI DIVISIONS

Cupertino Tom Pe Mt. View Gordon Palo Alto Jerry Ca

PROD inufactu Other D

IRECTORS

IVE OFFICE

lett Executive Officer

Ralph Lee Executive Vice President

CORPORATE STAFF

FINANCE
Ed van Bronkhorst
Vice President
& Treasurer
GENERAL COUNSEL
John Chognard
MANAGEMENT SERVICES
Cort Van Rensselaer
MARKETING
Noel Eldred
Vice President
PERSONNEL
Ray Wilbur
Vice President

PLANNING
& DEVELOPMENT
Austin Marx

PUBLIC RELATIONS
Dave Kirby

RESEARCH
& DEVELOPMENT
Barney Oliver
Vice President

SECRETARY
Frank Cavier
Vice President
& Secretary

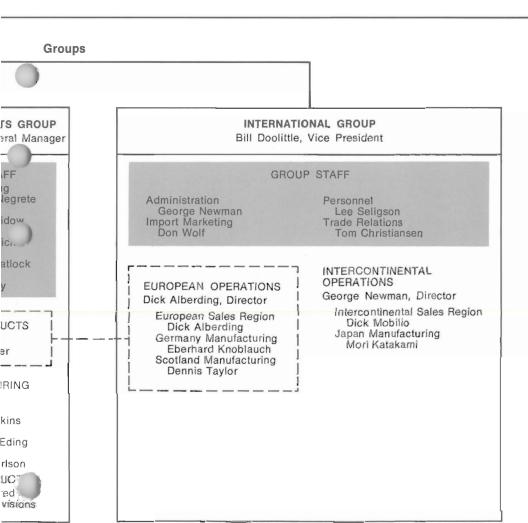
TECHNICAL SERVICES
Bruce Wholey

CHANNELS OF CONTACT

The chart provides a picture of the general lines of responsibility, authority and accountability. Flow of information is expected to be upward as well as downward.

Contacts, and flow of information, between personnel within a group or between groups are to be carried out in the simplest, most obvious and direct way practicable. Of course, in making such contacts it is the responsibility of each person to keep his manager informed promptly regarding such matters as: (a. Those for which his manager may be held properly accountable by others; (b. Those in which there are or could likely be cause for disagreement or controversy, especially between dif-ferent groups within HP; (c. Those in which the advice of his manager or coordination by his manager is required with other HP groups; (d. Those in which recommendations are involved for change, or in variance from established policies; and (e. Those for which his good sense tells him his manager should know in order to be more effective in his day-to-day actions as well as his planning for his group.

Each manager, as he believes there is a need, is expected to guide his staff as to matters that fall in the above category.



MARKETING

Noel Eldred, Vice President

CORPORATE STAFF

Customer Service
Chuck Ernst
Fleet
Stu Kingman
Government Relations
Jack Beckett
Marketing Communications
Russ Berg
Marketing Services
Bill Johnson
Training
Carl Mahurin
Sales
Jack Petrak

U.S. FIELD SALES REGIONS

Eastern
Bob MacVeety
Midwest
Frank Waterfall
Southern
John Bivins
Western (Neely)
Bob Boniface

looking ahead...

At the 1960 HP management meeting in Sonoma, California, Dave Packard asked those present to guess what the company's shipments (sales) would be for Fiscal Year 1969—ten years away. Guesses ranged from \$176.7 million to \$415 million. The average of all guesses was \$267.9 million. The actual result, as we now know, was \$324 million.

What does this suggest? If you compare sales in 1960 of \$80 million with last year's total, you have very close to a four-fold growth rate for the decade. At this rate, 1979 sales would be nearly \$1.3 billion. If you use the unadjusted (for acquisitions) sales figure for 1960 of \$60 million, you come up with a 5.4 rate which would give you sales of \$1.75 billion in 1979.

By coincidence, the company's accumulated sales for the past decade also comes to \$1.75 billion. There are some other significant accumulations—a total R&D investment of \$173 million (just a shade under 10 per cent of sales), total federal and foreign taxes of \$126 million, and total compensation including wages and benefits of almost \$700 million.

Profits, the base from which growth flows, also kept pace during the sixties. Pre-tax profits grew at about a 5 times rate, while net profit grew at 4.5 times.

At the recent management meeting in Palo Alto, President Bill Hewlett said that the company had indeed built a very strong financial base. At the same time, there is a need to improve profitability so that HP can continue to finance its own future as it has done so successfully in the past. In the early years of the seventies, the company will invest heavily in fast-growing new markets. Eventually, of course, these new ventures will have to stand on their own and contribute to still other enterprises that should make the seventies at least as stimulating and filled with opportunities as the past ten years.









of s to continue to 'think internatic y', and to present one HP image around the world."



Timely Turnarounds

Ed Porter, vice president, general manager of Operations Group

"1969 was an excellent year for the Operations Group of divisions—one of our best, particularly with the medical and analytical divisions turning around so nicely in profitability. Colorado Springs Division also made very significant improvement. With its model 183 scope it has really come up with a winner tailored to the needs of the market. These improvements are all important because, as these divisions because of them to carry their share

of profitability.

"Loveland has a large new building under construction due for completion later this year. This will effectively double their floor space. Loveland is in two major product areas or markets... the traditional electronic instrument market with their voltmeters, oscillators, etc., and the data products market with their line of calculator products. In the future we will move to separate the management of these two areas, particularly in the engineering/marketing functions, so that Loveland may in many ways look like two divisions.

"This is in line with our overall approach of more clearly defining the roles of our various divisions so that they can concentrate on doing their basic jobs. This was done last year by the Medical Electronics Division which transferred responsibility for marketing its commercial recorder products to the San Diego Division.

"By the same token, our traditional product divisions will concentrate more on those products, and not worry so much about getting into new businesses. These traditional product lines provide the biggest share of our business and the base from which the rest have grown. But in some areas of this business, growth has not been as strong as we could wish. So we want to keep heads up in our traditional lines—maintain our lead and our prime position.

"The new regional discipline sales teams that were set up last year for medical and analytical as well as electronic products, are going to improve our ability to get closer to our customers. This setup is already beginning to show good results.

"People in our group are actually quite optimistic about 1970. The scope people have a good backlog of orders. Computer manufacturers particularly are choosing the 183 scope for their computer test programs. Medical products look very good, especially in certain areas such as the Eastern States and international markets. Avondale expects another good year in analytical products and will concentrate on bringing out some promising new products. Loveland, San Diego and New Jersey all have good, strong programs going and will be stronger than ever in 1970. Loveland, for example, feels that, with the "B"-version calculator and with extended memory for the "A" machine, they will increase their penetration in the calculator markets. There are also new voltmeters and other promising products coming out.

"But with uncertain economic conditions, we are going to have to watch it—stay loose so that we can move one way or the other. We are going to have to keep our capital budgets trim and tight. It is not going to be an easy year. But it could be a good year, and a healthy one."

(continued)

Segmentation with Representation

U. S. Sales Regions: a composite report

"In our experience, the changeover to a market-segmented sales force has been a success. Our men are pleased, and so are their customers. For one thing, the men in the two electronic products segments-so-called 'A-baggers' and 'B-baggers'-still call on many of the same customers, and this requires a great degree of cooperation. The teams meet every week to coordinate their schedules and discuss their various approaches and problems. So it really reflects a benefit to the customer who now has two men calling on him. It's not duplication, because each has had different emphasis in his product training. But each is also quite able to talk the other's product language up a certain point, so the customer is getting better coverage?"

• "A very important step forward—maybe even the biggest for us during the year—was the appointment of the discipline sales managers. This has produced many benefits in our communications with the manufacturing organizations. Not that we weren't trying before, but the new system enables our regional product men to concentrate on a smaller number of plants. They have been able to do a much

better job of planning?'

- "In spite of market segmentation and specialization in the field, as far as our customers are concerned we are still all working 'under one roof'. A customer may deal with only one part of our organization, but he sees the combined strengths of the whole team and this is impressive and reassuring."
- "The new Data Centers, which all regions have been in the process of setting up, are going to be increasingly important. For the first time, the data products customer can get HP training in the field rather than the factory. In the future, the same approach might well be appropriate to our traditional instrument lines involving systems. The systems customer needs the same kind of product demonstration and training service as the data products customer."
- "1969 was a year of rapid growth in people and physical facilities. We added a substantial number of people particularly in data products and calculator sales which became recognized as a separate sales task."
- •"In the area of instrument service, it is a fact that more and more of our business is in field service rather than in-house. This is particularly true in the new products—data products, medical, analytical, calculators and systems. We are now probably approaching a 50-50

split between field and shop service. It presents operational problems in oviding round-the-clock seven-day-a-week availability. But that's what we have to do now."

• "Our outlook reflects the unsettled outlook of our customers. There is great interdependence in our industry and economy; the more so for us now that we are a multi-market company. The total expectations in our markets haven't really changed, but it looks as if they will be stretched out."



More People, More Responsibilities

"As Measure noted in the November













issue, the company added 2,300 new jol est year, raising worldwide HP employment to nearly 16,000 people. It was a very big year from that point of view.

"During the year there were also extensive reorganizations by the product groups. A number of these included the personnel function—adding direct personnel staff support to several of the divisions and groups. At the same time we were able to augment the corporate staff by concentrating several people in the areas of compensation and benefits. One result is the recently announced modifications to the benefits package which provide improved coverage for I eople and their families.

It was quite evident in 1969 that our growth and size have brought into focus some real problems of security, both internally and externally. Unforely, we now find some people in the organization who do not always respect our informality and openness. and take advantage of these practices for their own personal gain. From outside the company, we tend to have more people interested in what we are do in technical areas and at times we have made it too easy for them to learn about our plans. Also, we are the object of interest of some people who classify us members of the 'militamindustrial establishment' which the oppose. So it is up to each of us

to participate in tightening our control in these matters, to protect HP people, HP ideas and HP facilities.

"We also have noted a rise in accident rates, particularly of the more serious kind. Safety continues to be a responsibility of each one of us that requires constant attention.

"Our professional recruiting in 1969 was very successful. The percentage of qualified people accepting jobs with HP went up; and by year's end we had added nearly 750 professional people throughout the company.

"An area of increasing importance to us is management planning and development. Late last year Bill Hewlett organized a task force to focus on this area so we are better prepared to meet our management needs in the 70's. This means more emphasis on the selection, identification, evaluation and development of managers. In fact, we need to give constant attention to insure that all people in the company have every opportunity to grow in their jobs. We may become discouraged at times with individuals who don't live up to our expectation. But, in stressing their strengths and by making every effort to help the individual, we can better assure they will make a contribution to HP and thus to society.

"In meeting our social responsibilities, we continued to give considerable emphasis to programs concerned with minority and disadvantaged people. It's my belief that management and supervisors now have a much stronger understanding of these programs.

"In good part, I think it has been the response of the minority people themselves—the way they have been able to stay with us and advance in their jobs—that has made the greatest difference. Our rate of retention of those people who came to us through the Consortium is the highest in the area and among the highest in the country. Actually, the rate is about the same as that for all our people.

"In addition to the hiring programs that required special training efforts, we were also able to add quite a few qualified minority people through normal hiring practices. However, we need to see more professional people and management people from the minorities. This is not only the right thing to do, but selfishly we will need all kinds of good people, both men and women, if we are to grow and manage our business successfully in the 70's.

"The company and many HP people individually continued to be very active in minority programs other than just the area of employment. In addition to a number of specific projects supported by the company, we found more and more interest by our people in becoming personally involved in various local social and economic programs."







Gathered at Cupertino plant conference room for November meeting, HP board of directors included in clockwise order from left:
Ed van Bronkhorst, HP vice president and treasurer; Francis Moseley, Servo Products; Thomas Pike, Fluor Corporation; George Bennett, State Street Investment Corp.; HP President Bill Hewlett; Noel Eldred, HP executive vice president; Edmund Littlefield, Utah Construction & Mining; Robert Minge Brown of McCutchen, Doyle, Brown & Enersen; (from top of photo at right) Ralph Lee, HP executive vice president; John Fulenwinder, Hercules, Inc., (retired); Harold Buttner, ITT Co., (retired); Russel Lee, Palo Alto Medical Research Foundation; Luis Alvarez, University of California; Frederick Terman, Stanford University vice president (retired); Frank Cavier, HP vice president and secretary. The 16th member of the board, Ernest Arbuckle of Wells Fargo Bank, arrived after this picture was taken.



HP's working board

Technically, you could make a case supporting the idea that a company's stockholders and the public—as represented by certain regulatory government agencies—are the ultimate "bosses." In practice, though, it's clear that for most modern corporations the Board of Directors is the very apex of the management structure. In his letter on page 15, Bill Hewlett discusses the role of the HP board.

The photographs presented here show the board in the course of a day at the new Cupertino Division plant. Here, last November, they received a briefing on HP computers, looked closely at the manufacturing process, tested their hand at a demonstration time-sharing terminal, and then held their regular business meeting. More of the same kind of intensive exposure to the company's operations was scheduled for the next meeting, to be held at the new Santa Clara Division.

In the past, the board had also looked over the Colo-

rado divisions, met in the East, and toured European headquarters and the manufacturing facilities in Germany and Scotland—as well as the various Palo Alto operations. In exercising the mandate given them by the shareowners, the board finds such exposures to be of great practical importance.

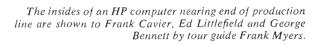
For its board membership, a company hopes to attract men from the outside who will add creativity and sound judgment, and bring a fresh outlook based on a diversity of experience. In meeting these criteria, the HP board has as non-company members the chairman of a major bank, a Nobel Prize winner in physics, former high executives in the chemicals and communications industries, the president of a worldwide construction firm, the founder of a major medical clinic, a world-renowned electrical engineering professor, an economist and special consultant to the President, a founder of several successful electrical engineering professor, an economist and special consultant to the President, a founder of several successful electrical engineering professor, an economist and special consultant to the President, a founder of several successful electrical engineering professor, an economist and special consultant to the President, a founder of several successful electrical engineering professor, an economist and special consultant to the President, a founder of several successful electrical engineering professor, an economist and special consultant to the President partner, and an investment firm president professor partner professor partner professor partner professor professor partner professor pr



Fundamentals of computer software are reviewed for HP directors and various Data Products Group hosts by John Pavone of Data Center at Cupertino plant.

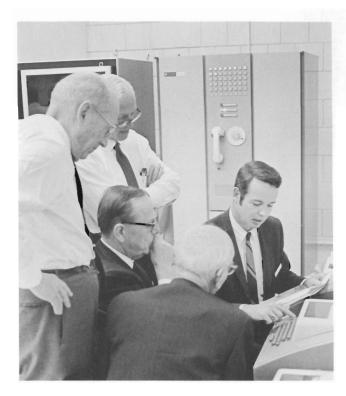


Taking a look at final testing of a 2114A computer by Skip Norman are Tom Pike and Bill Hewlett. At rear is host division manager Tom Perkins.





(continued)



Time sharing, one of the company's important new markets, is demonstrated in Time Sharing Lab at the Cupertino Data Center. Here directors John Fulenwider, Bob Brown, Francis Moseley, and Harold Buttner are briefed by Dick Peake.



A quorum of executive vice presidents, Ralph Lee and Noel Eldred, focus on samples of microscopic computer memory units.

working board

A break in the morning briefing brings together Dr. Russel Lee (left), founder of the Palo Alto Medical Clinic, and Ernie Arbuckle, Wells Fargo Bank chairman and former dean of Stanford University Graduate School of Business.





From the president's desk

To most employees, the function of a board of directors is, I imagine, somewhat of a mystery. The board is probably often thought of as an exalted body of distinguished, influential individuals who periodically congregate in a board room, sagely review the performance of a company, and then return to their principal occupations. Of course, it is not as simple as that. I thought you might be interested in my views of the role of the directors, what is expected of them, and what factors enter into their selection.

First, there is the legal position of the directors. They are elected by the shareowners as their representatives to issure that the company is run in a manner that is in the best interest of the shareowners. The board cannot actually operate the company, so it appoints a management team—in practice just the president—to carry out the planning and the day-to-day operation of the company. However, the directors are not without potential liability for the company's actions, and can be held personally liable if shareowners suffer through improper or irresponsible action on their part.

Turning to the HP board, we have 16 directors, five of whom are employed by the company and therefore are "inside directors." These people, Noel Eldred, Ralph Lee, Ed van Bronkhorst, Frank Cavier, and myself, bring detailed knowledge about the company to the board.

The other 11 are outside directors, and I'd like to tell you something about their roles on the board, how they are selected, and their areas of contribution.

One of their responsibilities is to be well acquainted with the policies and practices of the company, and to be familiar with key management people other than those serving on the board. For this reason, over the years we have arranged for presentations to the board by many of the organizational units within HP. This has a dual benefit in that it provides the directors with an opportunity to meet and evaluate key individuals, and at the same time helps expand their knowledge about company activities. As a result, they acquire an understanding that sharpens their ability to resolve the policy decisions with which they are faced.

Two recent examples of policy matters before the oard were whether the stock should be split, and whether the dividends should be increased and if so, by how much.

As with all matters reaching the board, these questions were carefully thought out by management beforehand, but the final decision to confirm, modify, or reject rests with the directors.

The questions mentioned above are strongly financial in nature, and here directors with strong business and financial backgrounds such as Ernie Arbuckte, Tom Pike, Ed Littlefield, and George Bennett can offer significant points of view. Other policy questions may be of a more technical character or relate closely to the electronics industry. In those cases, directors like Luis Alvarez, Fred Terman, Francis Moseley, Harold Buttner, or John Fulenwider will have particularly important input. Dr. Russel Lee can provide pertinent consultation on medical matters, as can Bob Brown on legal situations. The advice and counsel of the directors is not limited to board meetings. I often have occasion to call one or more of them on the phone to ask for their thoughts on a particular question that is facing management at the moment.

As far as director selection is concerned, we currently have a case in point. Dr. Lee and Harold Buttner will be retiring from the board this year under a mandatory policy on age that was adopted by the directors several years ago. Both of these men have made very significant contributions to the company and will be hard to replace. However, we are fortunate in having two very able individuals to recommend as new directors to shareowners at the annual meeting in February.

One of these is an almost ideal replacement for Dr. Lee. It is his son, Dr. Philip Lee, Phil is 45 years old, and is presently chancellor of the University of California's Medical School in San Francisco. Just prior to this appointment, he served as assistant secretary of health, education and welfare under John Gardner. It is rare indeed that the possibility arises of replacing a distinguished father with an equally distinguished son.

The other new board candidate is William Eberle, currently the president of American Standard. Bill, who is 46, has shown remarkable success in transforming his company from one rather narrowly confined to the plumbing supply business into a dynamic operation with a diversified product line and sharply increased earnings. Prior to election to his present position, he was a vice president of Boise-Cascade. He holds a law degree, and served in the Idaho legislature from 1953 to 1963. Bill will thus bring to the board proven experience in efficient and aggressive management and an imaginative view on growth.

Let me sum up by saying that a board of directors can and should be a vital force in the progress of a company. Ours is one that offers a good balance of ages and backgrounds. It is also a working, participative board in the truest sense. Above all, it is comprised of men who fully understand and support the HP philosophy and the HP spirit that underlie the successes the company has achieved over the years.

Bill Hewlest

A special report to HP people

Measure

EDITOR Gordon Brown

ART DIRECTOR Tom Martin



CONTRIBUTING EDITORS — AVONDALE,
Matl Whittier • CUPERTINO, Jack Loustanou
+ HP ASSOCIATES, Jean Ewings • HP BENELUX, Amsterdam, Hans Vinkenoog Brussels,
Yvette Andre • HP ILONANDAI, Ian Jackson •
HP GmbH, Klaus-Dieter Laidig • HP FRANCE,
Jacques Brusere • HP LTD, South GueensHerry, Hene Clark • Slough, Maureen Philipolit
Herry, Hene Clark • Slough, Maureen Philipolit
Herry, Hene Clark • Slough, Maureen Philipolit
Horry, Hene Clark • Slough, Maureen Philipolit
Horry, Hene Clark • Slough, Maureen Philipolit
Nawatil • LOVELAND, Nancy Sorenson •
Nawatil • LOVELAND, Nancy Sorenson •
NANUFACTURING, Frank Welliams • MIDWEST
SALES, Helen-Marie Boesch • MOUNTAIN
VIEW, Doug Hanson • NEELY SALES, Bob
Reade • NEW JERSEY, John Ricci, Dorothy
McMahon • PALO ALTO, Sallie Welle • SAN
CIEGO, Getty Royce • SANTA CLARA, Karby
Johnson • SOUTHERN SALES, RegionalAllanta ærea, Mettle Ferguson • Fibrida ærea,
Helen Hobson •
WALTHAM, Janet Dale • YHP, Youke Ishikæva

1501 Page Mill Road, Palo Alto, California 94304