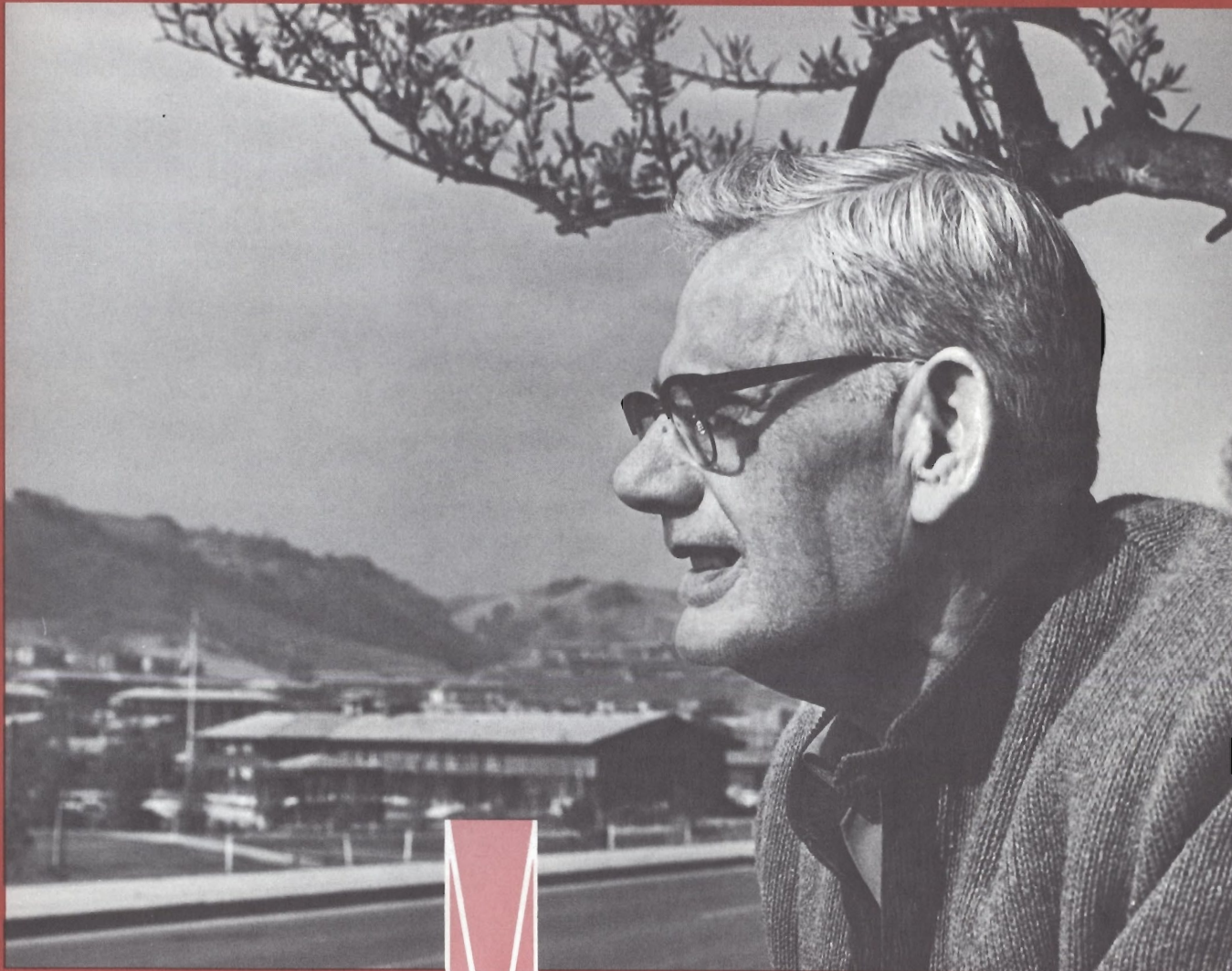


MR JOHN WARMINGTON
SAMPLE ELECTRONICS -VIC- PTY. LTD.
9-11 CREMORNE STREET
RICHMOND E. 1
VICTORIA, AUSTRALIA

February 1966



M e a s u r e

In this issue

Formula for retirement

Those important R&D dollars

SUDDENLY YOU'RE 65! . . . And your friends kid you gently about the joys of retirement. You've had some discussions with the personnel people about termination dates and benefits. There's hint of a farewell get-together for you. And your supervisor says to take things easier—let your replacement take the load until that official last day. You begin to wonder . . .

□ It's doubtful that the average American has given serious thought to retirement. *Serious*, that is. "I'll face it when it happens," sums up a common reaction.

□ But retirement planning should be of concern to all employed people. If you retired today, you'd be one of 15 million Americans in the over-65 range. By 1975 the figure will rise to 22 million, and to over 30 million at the turn of the century.

□ Statistically speaking, you are going to live quite a bit longer than your parents, largely because of medical progress. Also, you're going to have a vastly greater choice in how you retire, thanks to corporate retirement programs, Social Security benefits, and a growing variety of private and public projects devoted to the retired community.

Retired HP employees agree with sociologists who insist, however, that the quality of a person's retirement is a highly personal thing. In other words, you get out of it what you put into it.

□ Ed Heidler, tool and die maker who retired from HP's Stanford Industrial Park plant in 1963, exemplifies those individuals who seek to extract the maximum pleasure out of retirement by actively planning and preparing well in advance.

Ed (portrayed on the cover) frankly set out to live "like a millionaire" in retirement. So years ago, he and his wife developed property in the Los Altos Hills area as a source of extra income. Now they're selling off these properties as well as their former home in Palo Alto, and have moved into the world-famed Rossmoor Leisure World retirement community in Walnut Creek, California.

formula for retirement . . .

Personal preparedness plus a company assist

Besides the financial preparations, the Heidlers represent the active approach to retirement. They plan on plenty of horse riding, bowling, time to spend completing their Sierra cabin, and meeting lots of new friends. Psychologists stress the benefits of such mental and physical stimulation—best achieved, they suggest, by developing strong interests over the years.

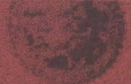
Industry is increasingly aware of the needs of its retiring personnel, and of the opportunities to help them make a comfortable transition. Among HP divisions, for example, Sanborn offers a voluntary advance group planning program. Over a number of weekly sessions, counsel is given on health and medical benefits, financial planning, legal protections, estate planning and living arrangements, and other important aspects of retirement. Programs similar to Sanborn's will be offered at other HP locations as greater numbers of employees approach the retirement mark. (Palo Alto has recorded only 28 retirements due to age since 1957.)

□ The HP Profit Sharing Retirement Plan now covers employees with three or more years service in all participating domestic divisions and affiliates. In simple terms, the plan is based entirely on company contributions from profits. These annual contributions are placed in a trust, and are invested in real estate loans and corporate bonds for income, and in selected common stocks for growth and profit.

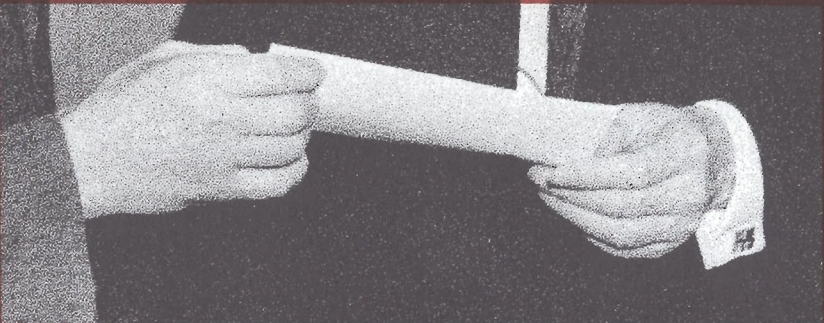
For Ed Heidler, the HP Plan was "just great," particularly since he joined the company at 51 and couldn't take good advantage of private insurance at that age. On the first anniversary of his retirement he had the option of drawing his share in a lump sum, taking it out in installments, or using it to purchase an annuity contract from a life insurance company. It became an important element in his planning.

Other HP retirees attest to the benefits of advance planning. At the same time, it's obvious that there are many roads to retirement, several of which are indicated in the following interviews with a selection of recent HP retirees.

Nearly \$3,000,000 from company profits in 1965 have raised the HP Employee Profit Sharing Retirement Fund to a total market value of just under \$19,000,000. The check for the 1965 contribution is handed to representatives of Cracker-Citizens National Bank (trustee of the Fund) by HP's Assistant Treasurer Fred Anderson (left). The HP Retirement Fund now covers 4,400 employees in 19 divisions and subsidiaries.



CALIFORNIA



(continued on page 4)

Personal preparedness plus a company assist



EM JONES began financially preparing for the future back in 1930 when he purchased his first piece of income property. Subsequently, he bought two more properties. And now, since his retirement in 1964 from the Palo Alto plant maintenance force, he gets a lot of pleasure in being a fulltime landlord. It helps keep him busy, keeps him in contact with many people (in the photograph he calls on a tenant, Mrs. Harold Harriman), and of course the property produces income and security. Em and his wife also manage a 15-unit apartment building in Palo Alto. Last year they set out to visit some of the scenes of Em's youth. They traveled to Minnesota where his father had raised and trained horses, and then to the Kentucky Derby where some of his friends still gather. This year it will be Canada. The objective: always keep a plan going for the future. Keep busy, and active—yet learn to accept the status of retirement, and enjoy it.

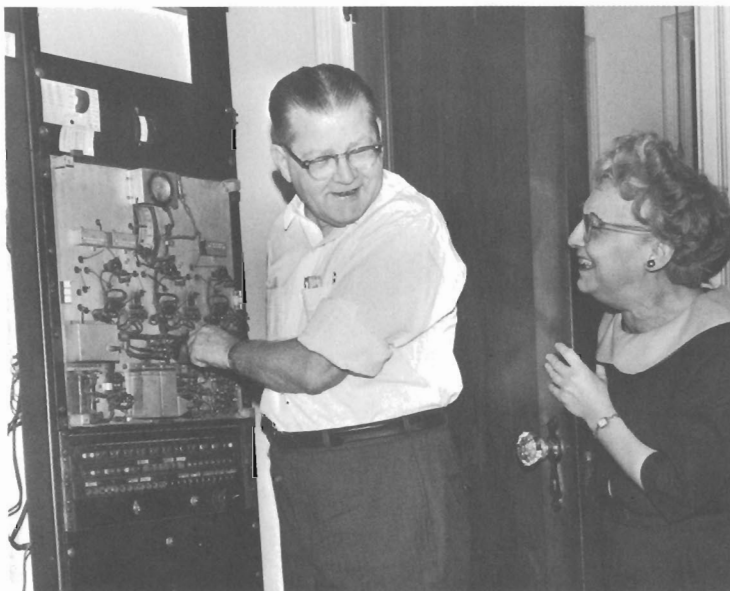
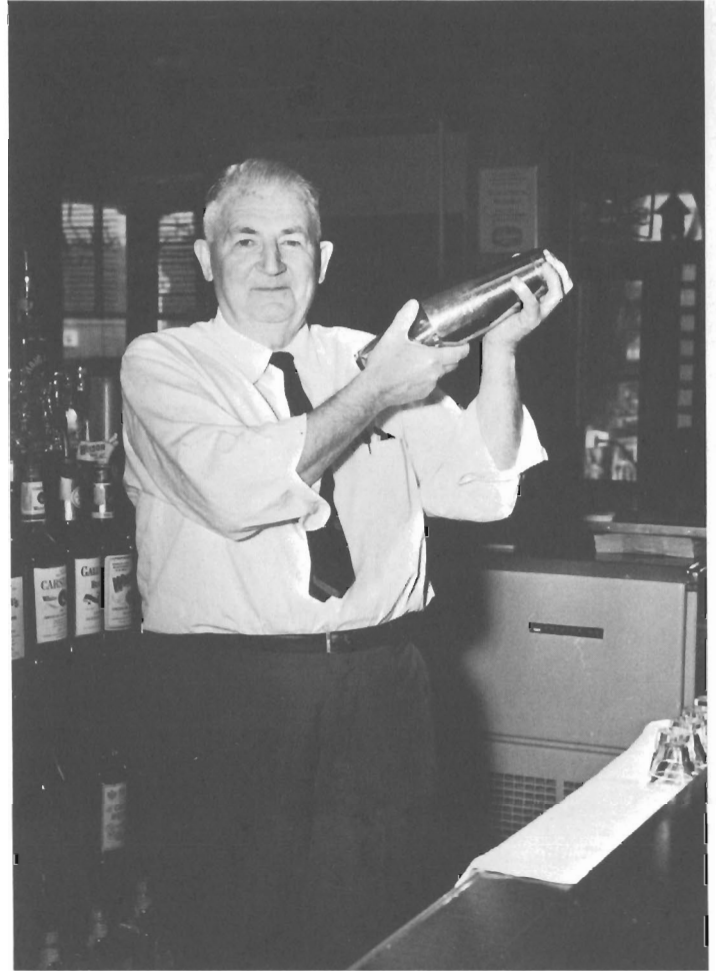
ESTHER MURRAY hopes to invest her retirement years in helping young people—adolescents who need lots of understanding. She would like to work as a volunteer, perhaps in some phase of the Poverty Program such as Head Start schooling for youngsters needing extra help. In this way her early training and experience as a teacher in Philadelphia will be put to use. And Mrs. Murray, who retired last year as a Palo Alto line fabrication group leader, definitely plans to be useful in the Palo Alto community. Living alone for the past 12 years, she keeps active and interested through her many friendships, and particularly enjoys symphonies and the theater. She's kept up a strong interest in the stock market too, and has done well in her personal investment program.

CLARENCE ENSMINGER (or George as he is more commonly known at the Moseley Division) has combined post-retirement employment with the relaxed "gone fishing" approach. Retired as a Moseley custodian in 1964, George keeps busy with part-time work which he enjoys because it keeps him active and alert, as well as being a help financially. But fishing and camping are part of his retirement prescription, too. Following retirement last year, he and Mrs. Ensminger made a journey of more than 6,000 miles in their camper to visit family and friends in Detroit and in Canada. Most of their recent trips have been a little closer to their home in Pasadena, but nevertheless highly successful and satisfying days spent fishing the mountain lakes of Southern California.





TOM O'GRADY likes people, and his retirement formula includes lots of personal contact. The former Rockaway Division shipping and receiving group leader enjoys his one-day-a-week bartending job because of its sociability. Then there are his duties as secretary of the House Committee of the local Elks Club, as well as secretary of a volunteer fire company in Boonton—the Mansfield Hose & Engine Co. Not least is his family. Tom believes in helping them in various ways—including that important grandparental role of baby sitter. Golf is another outlet, and he plays in two leagues during the season. Tom, who retired last year after 18 years with BRC and HP, is up every morning at six, fixes breakfast, then drives his wife, Nona, to her work at the Rockaway Division. All of these activities give him purpose and peace of mind, the two elements he emphasizes for a happy retirement.



ALBERT TOTH, who retired in 1964 from the RMC sales division, staunchly advocates that people of retirement age should retire gracefully—and leave the way open for younger people. Al and his wife, Hazel (a Bell Labs retiree), are completely adjusted to retirement. No more long subway rides for Al between Manhattan and their Long Island home. They find their life relaxed and tension free, but they do keep busy. Al's time is divided between the search for old or unusual coins for his collection, modernizing his music system, keeping an eye on his stock market investments, and fixing things around the apartment. Al is something more than a hobbyist when it comes to electronics. He maintains a small downtown office where he can experiment on some equipment ideas he has. His advice to young people is to make good financial investments early in life, because "living costs always go up—never down." He says the aim should be for a retirement income at least fifty percent that of peak salary.

Research and Development: What do the do

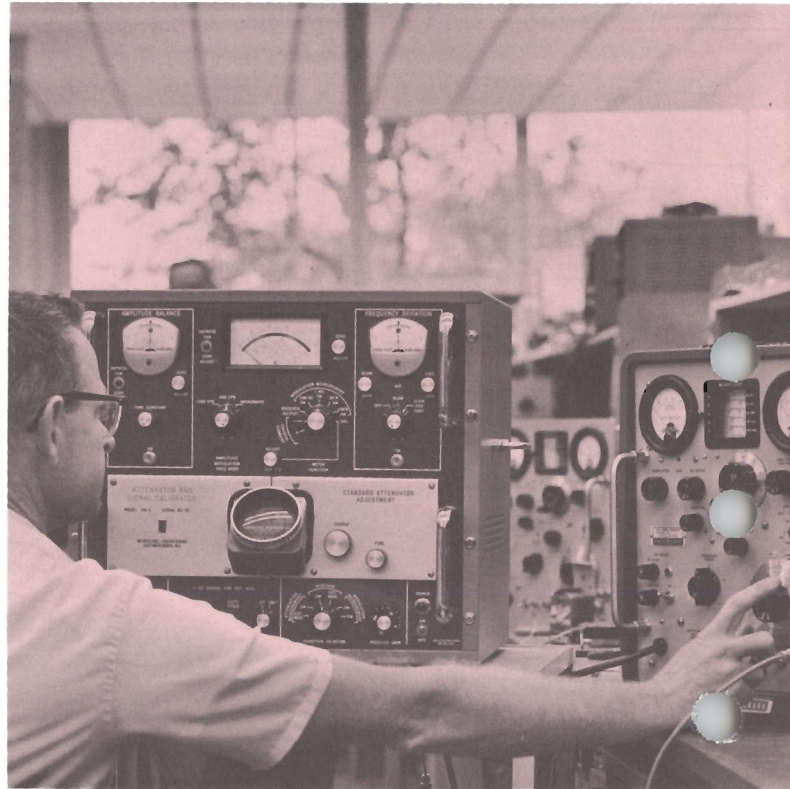
WITH A RECORD BUDGET of nearly \$19 million for HP research and product development this year, some interesting and important questions arise. Why that much? Why not cut it in half and keep the difference? Or couldn't it be doubled to return twice as much in new product sales?

Sometimes companies arbitrarily cut R&D spending in an attempt to smooth out the ups and downs in their businesses. But Hewlett-Packard is not that kind of company in that kind of industry. HP is so much in the forefront of industry's accelerating technological revolution that continuing investment in new products is essential for leadership and growth.

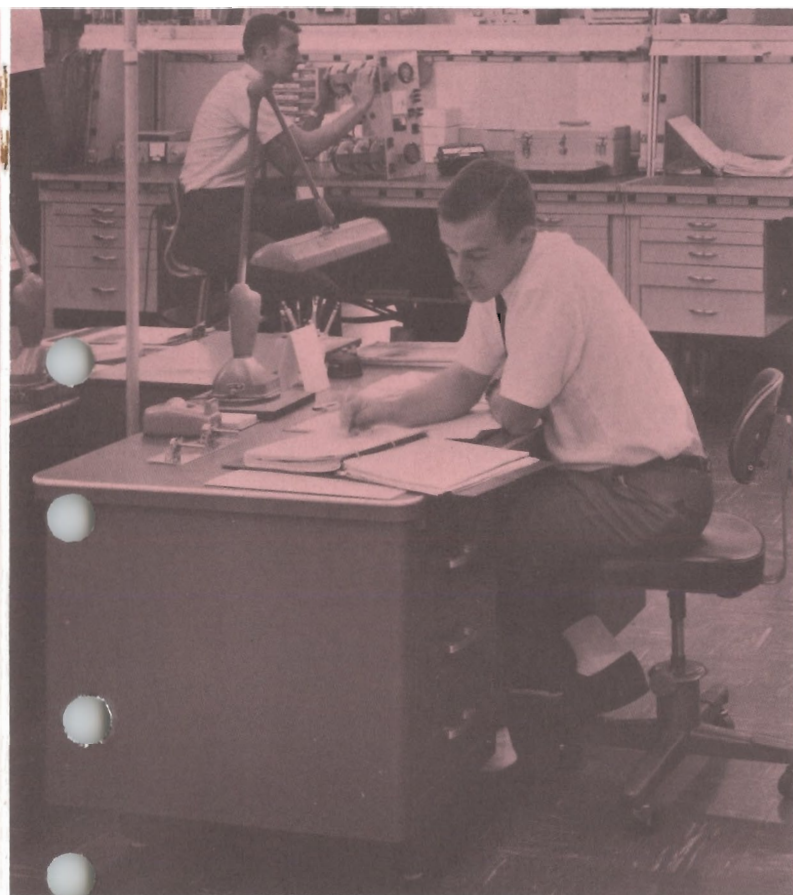
□ But why \$19 million specifically? Was the figure pulled out of a hat? The answer is no. There is a reason for every dollar allotted in the budget . . . and years of experience, careful planning, and the application of sound business formulas went into the determination of the final amount.

For instance, HP has found that an average annual R&D investment rate of 9 to 10 per cent of sales is an excellent guideline for producing an optimum balance between growth and profit. The company puts this formula to work in a way that is simple and effective: Every manufacturing division is expected to generate a minimum of two dollars in new annual sales for every dollar they commit to research and product development. This means that by investing 10 per cent of its revenues in R&D, the company as a whole can hope for a 20 per cent growth in sales. HP anticipates sales of approximately \$190,000,000 in fiscal 1966, thus R&D's 10 per cent is \$19,000,000.

□ With such rules-of-thumb as guides, the division managers naturally take a very penetrating look when ideas for new or improved products are presented for development by their R&D groups. They become interested not only in the specifications and technical feasibility, but also the marketing prospects. What will be the target price for the new product? What will be its projected volume of sales? How much profit will it make? And how soon? They also hold all proposals up to the light of HP's original two criteria: Will it be a true technical contribution filling a definite need? And will it represent quality at reasonable cost?



llars do?



One thing is evident to all HP personnel concerned with product research and development—the pace is picking up. There are compelling economic reasons for such speed. The sooner a new product can be brought to market, the better the chance of capturing and holding a commanding position. Profitability is extended over a longer period. In addition, money invested in its development can be recovered sooner and put to use again as quickly as possible.

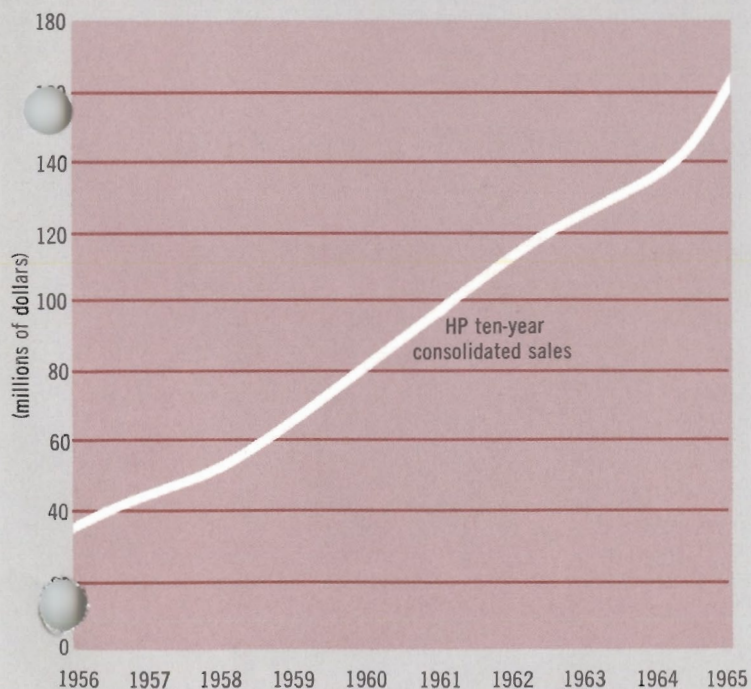
□ For its product development plans, HP generally plots out a five-year program. Costs, revenues, and profits are projected year by year. It's worth noting, however, that all current costs are charged against current income. In this way, the company achieves true pay-as-you-go product development.

One vital area of company research effort is centered in the newly formed HP Laboratories in Palo Alto. Representing a regrouping of corporate advanced research activities, HPL has several objectives. These include developing materials, processes, devices, and techniques useful in current and future activity, keeping abreast of new developments elsewhere, building internal capabilities in areas of research and technology of greatest potential interest to HP, developing products in new areas, and providing a reservoir of knowledge and techniques available to the divisions.

HPL's portion of the 1966 R&D budget will be approximately \$2.5 million, allocated between the four major sections: solid state physics, physical electronics, electronics research, and medical and chemical electronic instruments research.

□ Proof of the soundness of the company's product research and development policies is evident in its history. R&D investment and company growth have followed a parallel upward path over the 27-year length of Hewlett-Packard's history. The company's R&D efforts have created scores of new products whose success has led to HP leadership in a variety of important markets. Over the years, an increasing number of these developments have represented outstanding technical contributions—milestones in the progress of electronic instrumentation.

The money HP invests this year in product research and development is the seed for future growth and progress, and has been carefully sown to fulfill this mission. ◀



“Continuing investment in new products is essential for leadership and growth.”

OUR ANNUAL MANAGEMENT MEETING, held in January, once again reaffirmed the HP belief that growth and profits are dependent on people. We now have nearly 9,200 people in all of our operations. If we are to double our business over the next five years, and this seems highly possible, we will need an additional five to eight thousand people to help us get the job done.

As you are well aware from newspaper reports, and from your own observations, the economy is so strong that the supply of technical and professional personnel is rapidly being exhausted. This means we are going to have to work harder to meet the need for qualified people in each of our divisions.

□ Currently in Palo Alto, for example, we are short about 100 people for our manufacturing activities. And, for our total U.S. operations we hope to add nearly 300 professional people in 1966.

Early in our history in Palo Alto it was easy for us to get the quantity and quality of skilled and semi-skilled people we needed. However, as the area has grown and some of the large defense suppliers have established local plants, it has been more and more difficult to get the kinds of people we need. This has also been the case at many of our other plant locations.

We can forecast accurately what the labor market will produce in the future—by age groups—and it shows that we will be more dependent on the younger and older people. There will be a shortage of those in the 25 to 44 category. Of course, many of the younger people are not available to us because they are pursuing their education or meeting military requirements. In addition, many are entering government service and the educational field.

□ We are going to have to make more of an effort to encourage our younger people to pursue those skilled and professional careers so desperately needed by business and industry.

Although we will constantly improve our manufacturing and engineering methods and encourage automation, these steps alone are not enough to ease the problem. We must also increase our apprentice programs and on-the-job training programs. We must spend more money on advertising to make our needs known throughout the country. We also plan to achieve closer relationships with high schools, vocational schools, and colleges and universities to assist them in supplying people for the future. And even these steps may not be enough.



Ray Wilbur, Vice President, Personnel

AROUND THE CIRCUIT . . .

Some steps to meet the expanding need for people

□ All of this adds up to the fact that your individual help will be needed. In the months ahead, if you have friends or acquaintances who might be candidates for employment with HP in the skilled and professional classifications, please pass this information along to your personnel office. We in turn will do our best to bring them into HP if they meet the qualifications.

As you well know, we are proud of our HP people and the fact that they meet the necessarily high standards of our precision instrument operations.

It is important to all of us that we continue attracting these kinds of people. Your interest and activity in helping us meet this need will surely be appreciated. ◀

Outside vendors get the big pitch on HP



Microwave's Bill Parsons guides vendor group during plant tour.

Just about everyone in the throng of 260 vendors agreed that the big get-together at the Stanford plant January 27 was a little out of the ordinary. "This is a real switch," said one of them. "The life of a salesman can mean long hours in customers' waiting rooms and then a lot of effort to get them to buy our products. But here we are being sold to by a customer."

What he meant was that Hewlett-Packard, for the second time in two years, had invited vendors to spend an evening at the plant in order to create a better understanding of the company and to do a little selling of its own on the fact that HP is going places at a fast clip. "We need the goodwill and cooperation of materials suppliers as never before," says Hank Taylor, corporate purchasing. "This is a sellers' mar-

ket. Many essential materials are in short supply because of Vietnam and the booming economy. As a result, delivery times have been greatly extended in some cases, which in turn handicaps our own operations."

The vendors were greeted in the plant lobby by corporate and divisional people, and then, in groups of 8 to 12, were conducted on tours through plant and warehouse facilities. The new buildings 5, 6A, and Paeco in the Stanford complex stood as solid evidence of the company's growth.

After a social hour and dinner, talks were given by Taylor and Ed Porter, vice president of operations. Taylor frankly stated that HP needed the support of all the vendors in order to function efficiently as a company. He stressed that although some materials shortages are particularly critical at the moment, Hewlett-Packard's greatest concern is in shaping a customer-vendor relationship that will have a favorable long-range effect.

Porter reviewed HP's first quarter century of growth and then discussed plans which will enable the company to double in size in the next five years.

Just days after Vendors' Night was held, letters started pouring in from attendees praising the effort. Taylor believes a similar approach to improving relations with suppliers could be carried out by HP divisions in other parts of the country, and points out that the two Colorado divisions are already planning a similar event.

Many of the vendors who attended the affair in Palo Alto serve more than one manufacturer. As a result, nearly 400 major suppliers were represented.

New monitor meter for KZSU

"A major contribution by industry to educational radio" is the way Ralph Peer and Penny Niland expressed their thanks when Dymec General Manager Bob Grimm (right) presented a \$1500 frequency monitor meter. The HP-donated instrument will help Stanford University radio station KZSU keep to its assigned FM frequency of 90.1 megacycles. Miss Niland is station manager and Peer is manager of station relations.





Latin American distributors meet

HP distributors from a dozen Latin American countries gathered in Palo Alto January 17 for a weeklong seminar on medical instrumentation, sales techniques, and general business discussions. Here Andy Pete, Sanborn product training manager, gives enthusiastic explanation of the division's multi-channel recording systems used for monitoring physical phenomena in medical research and diagnosis. Talks in English were translated U.N. style into Spanish and simultaneously transmitted to the 22 distributors who were provided with cordless headphones.

PEOPLE ON THE MOVE

HP PALO ALTO

Russell Berg, asst. advertising manager, *Scientific American* magazine—to corporate advertising and sales promotion manager, HP Palo Alto.

DYMEC

Jerome Keever, Mechrolab staff—to design services, Dymec Division.

Walt Noble, R&D staff, Microwave Division—to technical support, Dymec Division.

Don Ried, *HP Journal* staff—to technical writer, Dymec Division.

EASTERN SALES REGION

Lyle Jevons, product manager, Microwave Division—to Eastern Region Microwave Engineer.

FLORIDA SALES DIVISION

Ed Wood, field engineer, St. Petersburg office—to same position, Orlando office.

FREQUENCY & TIME

Tom Shine, Mechrolab staff—to Frequency & Time lab.

HP ASSOCIATES

Bill Nelson, Microwave Division lab—to R&D lab, HP Associates.

Jim O'Briant, Mechrolab staff—to test supervisor, HP Associates.

MOSELEY

Ken Capen, Esso Standard (Libya)—to personnel manager, Moseley Division.

PAECO

From printed circuit manufacturing, Frequency & Time Division, to Paeco: **Don Higgins**, manager; **Tom Miller**, **Dick Rumminger**, and **Mario Sarti**.

SANBORN

Stan McCarthy, Advanced R&D staff—to engineering staff, Sanborn Division.

Arthur MacNeill, cost accountant—to supervisor, cost.



from the chairman's desk

LAST MONTH WE HELD our annual management meeting in Monterey. We reviewed our 1965 performance, and discussed our goals for 1966 and our long range objectives, as well.

There was considerable enthusiasm about the opportunities we see ahead. The greatest opportunity for the next few years will continue to be in our traditional areas of electronic instrumentation.

□ Our largest divisions—F&T, Microwave, Loveland, and Colorado Springs—will continue their emphasis in their present fields. Rockaway, Harrison, Delcon, and Moseley will also continue in their present areas, and if I interpret what I heard at Monterey right, they will give the larger divisions a run for their money both in growth and profitability. HPA and Paeco will have some products of their own which look exciting, and will continue to provide support for our other divisions, as well.

Sanborn will put increasing emphasis on the medical market and F&M will concentrate on chemical instrumentation. We expect both of these areas to increase the diversification of our products and our markets.

We have some newer areas which will provide further diversification in the future. Datamec and ICM are making peripheral equipment for computers, and we have some developments in the HP Laboratories which will provide products in computer-related markets. We do not expect these markets to expand rapidly for us in 1966 but they will receive more attention in 1967, and in the years ahead.

Dymec will keep its emphasis on systems and will continue to develop them using instruments from other divisions as well as their own. They will also have some involvement in the chemical market with their quartz thermometer in 1966, and expand into other markets in the future.

□ We all agreed in Monterey that the international market will continue to offer a great opportunity for us to sell the full line of products we are making in the United States divisions. We will continue to manufacture more instruments overseas as well, and in 1966 we will be selling some of these products in the U.S.

All of these plans clearly outline a fine future for our company. But if we are to achieve the goals we have established, many things must be done. One of the most important is to put renewed emphasis on the needs of our customers, for if we satisfy their needs well we will continue to progress, and if we do not, we will fail. We must develop the products they need. We must produce them with the highest standard of quality. We must keep our costs in line so that our prices can be competitive and reasonable.

□ To do these things will require capable people in every job throughout the company. It will require the highest level of performance from each of us. And, as we grow we must attract many more of the kinds of enthusiastic and capable people we now have.

Because customers and employees seem to be the most important factors which will determine our success in the future, I have added two new statements—one having to do with customers, the other with organization—to our list of corporate objectives. I am sending a copy of these revised objectives to each of you with the hope it will help you understand better what we must do to meet the challenging opportunities which lie ahead. Over the next few months I hope to tell you more specifically about the things we must do to achieve the goals we set for our company at the Monterey conference. ◀

David Packard

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Published monthly for the employees of Hewlett-Packard and its affiliated companies

Measure

Vol. 4 February 1966 No. 2

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"I often say that when you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind . . ."

— LORD KELVIN (1824-1907)



Care and feeding of data

DATAMEC DIVISION MAGNETIC TAPE UNIT (in background) is used to feed computer-generated information into one of Stromberg-Carlson's new high speed computer recorders. The recorder displays the data on the face of a cathode ray tube and simultaneously photographs the image with a microfilm camera. The film can then be stored for almost instantaneous retrieval. Six Datamec tape transport systems have been purchased by Stromberg-Carlson's data products division in San Diego for use in product development and for final checkout of S-C systems as seen here. The Datamec systems (Model D-3029) are interchangeable with IBM units and are enjoying a fast-growing market.