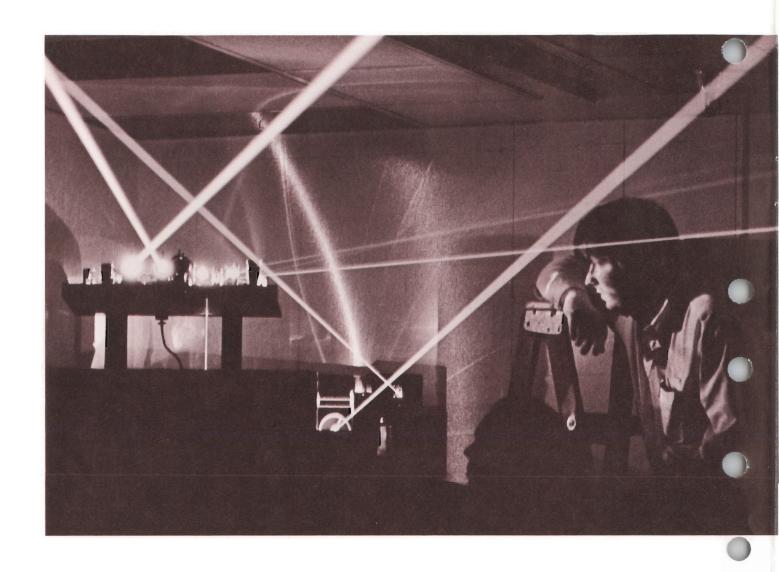
## Measure For the men and women of Hewlett-Packard/FEBRUARY 1970

MANUEL HEADCHIVE COM



## Art-with a touch of technology

Creative collaboration between HP and a talented young sculptor has produced a unique work of environmental art that soon will be seen by millions of people from around the world.

A inst a backdrop of flashing laser beams, clicking shutters and smoke needed to it sify the light beams, HP's Dan Lansdon (on lower ladder) and Larry Hubby check the operation of the Krebs apparatus just hours before its shipment to Osaka's Expo 70. Cover illustration is derived from photographs taken at trial run. First full-scale test will be made in Japan, but artist Krebs and HP collaborators were convinced of its operation and effectiveness.

One of the 20 mirror brackets to be used in the U.S.

Expo 70 pavilion show by Rockne Krebs is checked by Fred Rios and Bill Dixon of HP Labs R&D Model Shop. The mirrors will be used to reflect the highly collimated laser beams from wall to wall, projecting a colorful complex of shifting lines that create an ethereal form of sculpture.



In Osaka, Japan next month, an American artist named Rockne Krebs will unveil a unique work of environmental sculpture for viewing by Expo 70 visitors from around the world. In a large darkened room they will see red, green and blue shafts of light bounce from wall to wall, weaving a shifting fantasy of geometric forms. It will be done with the age-old artifacts of the magic show—lights, prisms, mirrors and smoke—but with a sophistication that owes a great deal to HP technical help.

For HP, the project got started about two years ago when the Los Angeles County Museum of Art asked the company to participate in a program called Art & Technology. Leading artists were to collaborate with leading technological companies to see if the twain could somehow meet on some synergistic field located somewhere between art-for-art's sake and standard corporate objectives of profitability and usefulness. So well did this program succeed that it recently won nomination as the official U.S. exhibition at the Japan World Exposition opening this March 15.

The Krebs/HP laser project will be one of 9 highly diverse works selected from 20 Art & Technology creations for presentation at Osaka. Included are works involving light modulation, airframe construction techniques applied to sculpture, a giant icebag that heaves and sighs, cinematography, advanced materials technology applied to sculp-

ture, holography, optics, computerized poetry, and an environmental work employing various gases, lighting effects and electricity.

Krebs came to Palo Alto from his Washington, D.C. home last July. Guided by Dan Lansdon, HP Labs administrative manager, he came in contact with many of the company's technical projects and people. Gradually, with the help of physicist Larry Hubby of the physical electronics lab, optical engineer Bruce Ruff of Santa Clara Division, circuit designer John Lazier and mechanical engineer Charlie Mitchell of HP Labs, Bill Nicewonger, Fred Rios and the R&D machinists in the HP Labs Model Shop, the laser project took shape. While no technical breakthroughs came out of it, the project did require a considerable amount of engineering creativity and superior workmanship.

Krebs himself experienced a certain uneasiness at not being able to shape his own concepts with his own hands. But the collaboration and the final work were both very much to his liking. The HP people also became personally committed as well as professionally involved. In the end, artist and engineers proved they could collaborate to produce a new dimension through which to view the world and some of the many wonders therein. That has to be worth something.

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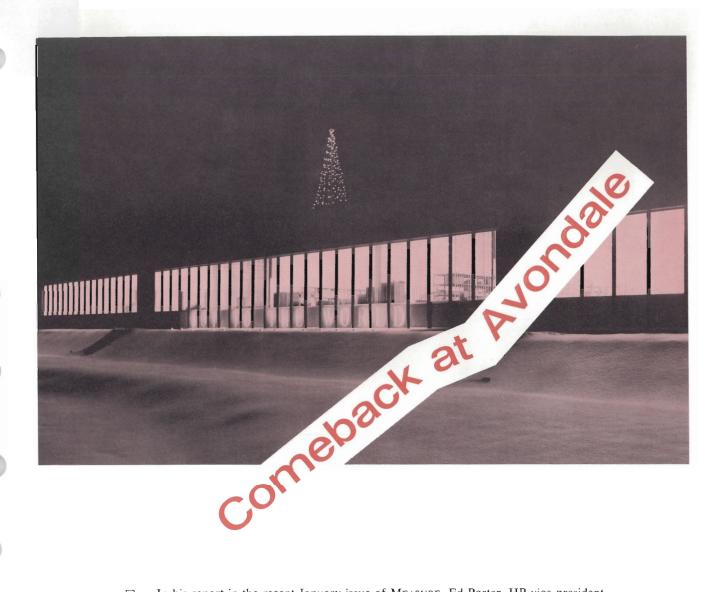


## art and technology



Tweaking the various prisms and beam-switching devices that control the Krebs/HP laser apparatus are, from left, optical engineer Bruce Ruff of Santa Clara Division, artist Rockne Krebs, and physicist Larry Hubby of HP Labs. HP furnished equipment, consultation, design and fabrication of the precision apparatus. In addition, some very special and hurried packaging efforts had to be made by Corporate Packaging Engineering people to make a tight delivery deadline.

Electronically timed shutter system for the Krebs laser apparatus was designed by John Lazier (standing), while Charlie Michell provided mechanical design help. It was an interesting change of pace for the HP Labs people. Krebs, who attired himself in the informal style conventional to artists, impressed the HP staffers as serious, talented and pleasant to work with.



In his report in the recent January issue of MEASURE, Ed Porter, HP vice president and general manager of the Operations Group, noted the particular significance of the medical and analytical divisions "turning around so nicely in profitability" in 1969. "As divisions become larger," he said, "it is more and more necessary for them to carry their share of profitability."

For that reason alone it is certainly worth looking at the way the improvements were brought about. But there are other reasons for examination: How did a turnaround become necessary in the first place? And how did people respond to the various steps that were taken to bring it about?

To find out, Measure selected the division that seemed originally to have the widest range of problems and, therefore, the biggest comeback to make—Avondale. At the time of the visit the people of the analytical products division were looking forward to their third "victory" party of the year for having again surpassed their targeted monthly operating profit in Fiscal 1969. According to preliminary estimates, the improved trend apparently is maintaining its pace into the new year. Both Porter and division manager Emery Rogers are quite hopeful that the new pace will hold solidly through the uncertainties of 1970 at the very least—and grow from there. The following views of a cross section of Avondale plant people suggest that these hopes are well founded:

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### Avondale comeback



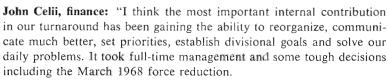
Jim Peters, R&D project leader: "It became apparent to me at the merger stage in 1965 that we would be involved in considerable change. One product—the atomic absorption unit—had to be recalled because of unsolved design problems after twelve pilots had been made. That cost over two years of R&D money. It was quite a shock and it took some management guts to withdraw it because there was quite a bit of disappointment, particularly among people directly involved.

"To me, this indicated a more basic problem we had, which was that philosophy differences existed between R&D people and management.

"Even so, I'm not sure people here realized how serious the total situation was—until expected markets failed to materialize in 1967–1968, and we had to cut back rather severely. Only then, I think, did people become aware of how much money had been going down the drain and that Hewlett-Packard was determined to halt the losses and begin rebuilding."

Jim Baldwin, final inspection: "One of the problems we have had to face is the month-end push. Now the emphasis on smoothing out production over the whole month has made a lot of difference in our situation. Final inspection under the former conditions used to take about 18 people. Now it's at 7.

"There's more thought given to quality now. Quite a few design changes have resulted in better performance of products and fewer warranty problems."



"Now the working environment is much different. You can sense the feeling that people here have that they are making a contribution. We even like to think that we can become the number one operating profit percentage division in HP."

Mrs. Jessie Wilcox, thermistor probe production: "Two years ago I was really depressed. As a self-supporting person I worried about the future here. I noticed this in others, too. I know it affected productivity. There was no backlog to challenge us.

"But attitudes began to change not too long after Emery arrived. Then orders began to come in. Pay and benefits went up. Now most people are aware that we have to give a day's work for a day's pay. Now you hear remarks that 'that's good—or not good—for profit sharing':"

Al Del Pizzo, paint shop supervisor: "Emery Rogers came into a tough situation. We had too many people, too few sales and a declining chemical market. Emery discussed this with everybody. We hadn't really known how bad things were.

"At the monthly meetings he started, we saw the performance charts that showed we were losing hundreds of thousands of dollars a month. But at the same time HP made everybody believe that they were concerned and interested in helping the individual.

"I think the key to the whole turnaround has been taking on a new attitude that any problem can be solved. Now everybody is talking about 'shipments' and 'targets' and 'operating profit'. People can relate to them—they give us goals to work to.









"We're really busy in the paint shop. We have a new wet process area-one of the top facilities around. We've got our return on it already in terms of reduced rejects and improved morale."

Bob Bump, R&D engineer: "I came here from Loveland about thirty months ago because I was attracted by the technical problem they had here. This came to a question of designing for production versus designing a laboratory curiosity. There was concern then whether an approach was HP or F&M. Now the subject hardly comes up.

"Another big contrast was the level of enthusiasm for a project. At Loveland if they liked an idea they'd practically grab you by the lapels and tell you it was the greatest. It was much more casual here. But now there's enthusiasm here, too. We've gotten some good new people in, and everyone seems to understand now that what they are working on has a good chance for success, therefore they're excited.

"Previously there was an 'arms length' situation between the various disciplines here. Now the 'critical mass' interaction seems to have taken place?'

Ron Shoop, order processing: "I always used to have the feeling that our forecasting was not realistic-over-optimistic. Now we are getting better information. I'm sure this is helping us reflect a much better image in the field. They need contact with people who are confident and realistic. They're getting it now.

"There's an improved feeling at profit-sharing time now that we are contributing."

Joe Campbell, production manager: "I think Ed Porter's bringing in Emery Rogers as full time general manager was the turning point. He was able to work on arranging the transfer of the quartz thermometer from Palo Alto Division and the integrator designed in Loveland. Both were worth several millions of dollars yearly in increased shipments. At the same time we tightened our belt through attrition. There were no production layoffs. Yet with about 25 percent fewer people, we were able to match shipments of the previous year. I think some of the 'can do' winners philosophy that I saw on a visit to Microwave Division has caught hold here now."

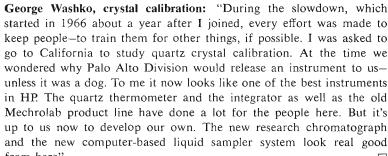
Joe Torello, machine shop apprentice: "I was raised in Avondale, so after the service I wanted to join the company. It seemed to be growing. But the slump left a lot of people insecure. Even Dave and Bill came out and asked people to have faith. It took a while before getting on the upswing, but things are really going good now.

"One real sign I've noticed. Emery comes out into the yard at noon on Wednesdays when he's in town. He sits with us on the picnic bench and we talk over problems. I told him about a couple of major problems-group type problems-and now they've been solved."

started in 1966 about a year after I joined, every effort was made to keep people-to train them for other things, if possible. I was asked to go to California to study quartz crystal calibration. At the time we wondered why Palo Alto Division would release an instrument to usunless it was a dog. To me it now looks like one of the best instruments in HP. The quartz thermometer and the integrator as well as the old Mechrolab product line have done a lot for the people here. But it's up to us now to develop our own. The new research chromatograph and the new computer-based liquid sampler system look real good from here?" 









What is this thing called "segmen



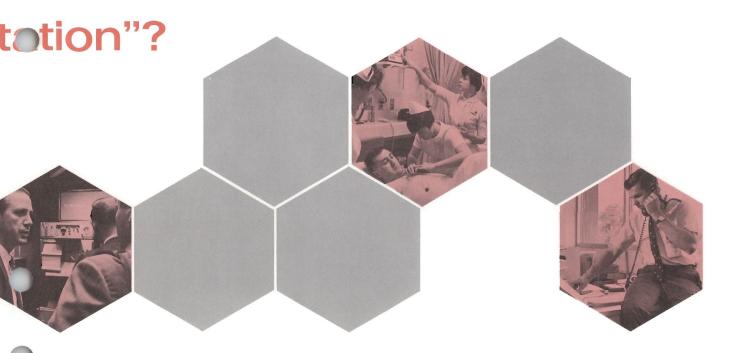
Noel Eldred, Executive Vice President

Unless you were looking and listening very closely last year, you might have missed the big company-wide change to "segmentation." Most of the divisions and all of the sales regions-and hundreds of specific jobs thereinwere affected by the change. Yet it came without a lot of fanfare-a trial run here, an appointment there, some assignments, some new titles, and some new faces. But now that segmentation is more or less in full effect, what does that rather ponderous word mean. WEBSTER'S likens it to the formation of many cells from a single cell. For HP, it has meant splitting the marketing organizations—both d sional and field sales teams—into a series of separate team, each directing its attention primarily to a particular market. Such segments presently include analytical products, calculators, data products, "A"-bag and "B"-bag electronic products, and medical products. That obviously present major change from just a few years ago when an HP 1 engineer knew and sold the whole product line. But-was it really necessary to subdivide the golden egg that had brought growth and prosperity for 29 of the company's first 30 years? Measure put that question to Noel Eldred, executive vice president and the company's top marketing executive:

#### How did segmentation come about?

"It is only within the last year or so that we have been able to realize that HP was evolving into several major businesses. Until then, all of our organization, growth and thinking had revolved around the belief that we were in a single business—the electronic test instrumentation business.

"When we first began to change to a segmented organization just over a year ago, our basic intent was to split it up into more manageable pieces. But what we were redoing—although this was not completely understood at time—was to prepare the company for the day when it was



still larger and in which new businesses could be handled in some logical way. Today, it's much clearer that we are indeed in several different businesses and that the number of businesses is going to increase rather rapidly. At the same time as we go into these new businesses we are going to ve to retain the basic organization that was responsible for our success in traditional product areas. Segmentation gives us the method to do this as well as to take on the new things.

w is it organized?

"Segmentation is most apparent in the field sales organizations. Here we have appointed discipline sales managers in each region for each major business we are in, and divided the field force between the various disciplines. In effect, these product teams relate very directly to the marthey cover and to the HP divisions that serve these markets.

"Divisions, too, have had to adapt to the needs of these new businesses. While some of our divisions operate with only one product line, others have several lines and these have found that they really need internal marketing organizations for each line as it relates to the field organization. Loveland, for example, is in both traditional products and calculators. To be efficient, they've found they need separate marketing/engineering organizations, each with full responsibility in its area. The same is true, as a further example, at New Jersey Division where interest has been very high in the new TV display products. But they know they can't afford to neglect power supplies, so they've created separate teams whose Brownie points depend solely on their own efforts.

t has been the effect on HP people?

"The result of these changes in the field and factory

organizations has been that many of our people have had to adjust to things they are not used to. The lines of authority have become more complex, and the field man in particular finds himself more or less looking in two directions for authority and approval. He reports to the office where he works. He observes the local work hours, and he uses the office to keep his demonstration units. At the same time, he will have a very strong orientation to the 'bag' or divisions he represents.

"So now we have to contend with a kind of duality in the organization. Our present job is to get people to understand that this is going to be a way of life for HP.

"As I mentioned, some people have found this change difficult to accept—not many, but enough that I want to make one or two points very clear. First, there really was no choice; we had to change in one form or other to stay in these new businesses.

"But the real question is how our own people should view the change. Basically, it will create extra opportunity for everyone. In 1970, for example, we expect to add a sales volume equal to a very substantial business. This is going to add many more opportunities of all kinds for HP people. In addition, for the field engineer segmentation means that there is more than one path of progress for his career. He can aim at a sales supervisory role in the field organization, or he can look to opportunities in marketing that arise from the new field-factory relationship. The same sort of choice, or course, would be available for the factory engineer.

"In summary, I think that segmentation reflects the very essence of what's going on in the company today—its growth into new businesses, and the need to gear for greater growth. But I still wish someone could think of a better name for it."

South of Baghdad-by-the-Bay...

on the road to san Jose



## Where we live

Of the 16,000-plus people now in the company, more than a third of them work on the Peninsula south of San Francisco. It's an area that over the years has been transformed from rolling hills, redwood forests and apricot orchards into a hustle-and-bustle world of business, industry and people. HP obviously has had something to do with that change.

Between Palo Alto and San Jose-tucked in the foothills between the southern portion of San Francisco Bay and the Pacific Ocean-are HP's corporate headquarters, international operations, eight of the company's manufacturing divisions and service center, as well as a Neely area sales office.

Though many "natives" have remained, the majority of Bay Area residents-and HP people-have come from other states. In fact, they're still coming in record numbers ... despite some well-publicized environmental problems such as smog, freeway congestion, and an occasional earth tremor. Why do they come . . . and stay? Let's ask some of them:

#### Ski lifts and cable cars



Hi Fujii, contract administrator, Santa Clara Division: "My brother and I head for the mountains whenever we can. It's great, winter or summer-skiing, camping, water skiing and boating. One of these days I'm going to sit down and plan a 5-6 day pack trip into the Sierra be-

tween Tahoe and the Yosemite areas. The trouble is, my vacation time is usually gone before the summer arrives.

"The night life around here appeals to me. The City is just a 45-minute drive-and I'm a bachelor-so I usually make it up there once a week. My favorite routine begins with dinner at a restaurant right on the cable car line. After dinner, it's just a short trip to Broadway, Fisherman's Wharf, or any of the other swinging spots. San Francisco is a rock music center, too. There are lots of small theatre groups performing. Occasionally, it's great to go cycling through Golden Gate Park. Don't pick a foggy day though! It gets cold!

"I'd love to live in San Francisco. A lot of my friends are there. Also, it's central to the whole Bay Area. But the daily commute doesn't appeal to me.

#### Once upon a time...

Brunton Bauer, senior staff engineer, HP Labs: "All the Peninsula towns used to be little more than crossroads when I moved here in 1938 . . . Menlo Park, Belmont, San Carlos. Even Palo Alto wasn't much more than a typical, quite college town. Between the towns were 2-3 miles of truck farms and orchards.



"When I came to HP in 1941, there were only two other electronics companies in the area. At that time, there

were only 12 of us in the company. We were in an old fix-it shop-just two old buildings, one used for manufacturing, the other for research. After the war started, we began to grow . . . to about a couple hundred people. Then

it was 10 hours a day, six days a week.

"People used to fly kites and model airplanes where this Stanford Industrial Park is located. We used to think of the area I now live in as wilderness. There was nothing but one terrible road, so you couldn't really get back into the valley. There was one small farm, but the rest was wild. Now there are homes and buildings all over. Fortunately, there are a lot of people fighting to keep some open (continued)

## Baghdad-by-the-bay

spaces—trails, parks, places to hike. I hope they succeed, but it's not easy to stop the building with so many people wanting to come in."

#### Midwinter golf? You betcha!



Ed Hunter, systems engineering supervisor, Cupertino Division: "The people here are always moving. It's an active society — forward-looking, open-minded. Back where I come from, people are more set in their ways; they like the quite life.

"I'm kind of a golf nut; it's a year-round activity here. In fact, HP just had a big tournament in January, and there's another scheduled this month. I play on about eight different courses in the immediate area. My wife? She gardens a lot when I'm out on the course. That's another thing that's great about this area—gardening. We've got lemons on our tree that are 17 inches around. And our rose bushes are still in bloom!

"San Francisco is such a clean city. We love it. We enjoy visiting the missions, too, and looking for antiques and rummaging through junk shops for things that can be fixed up.

"But the area is getting too full of people and buildings for my liking—especially apartment buildings. Still, to me, this is where it's at. I'd like to stay here."

#### A growing pride in our area



Clarence Parker, stores clerk, Palo Alto Division: "Kids have a ball here—and a lot of opportunities. I went to school in the south and wish I'd come out here when I was young . . . especially for the education.

"As president of a parent's organization—at Ravens-

wood Child Care Center-I get the chance to work and play with a lot of kids. I always tell them they have to work for it, but that the opportunity is right here.

"There's a growing pride in our area, especially in the Child Care Center. The school is for children whose parents are on welfare... they need to have some place for the kids to stay while they get out and work. We have about 136 kids now. The people are showing more interest now, more organization. There's a real community awareness of the problems of poverty and of racial equality in the Bay Area... by both individuals and business and industry. HP has a great deal of influence in East Palo Alto. I know that.

"There are lots of job opportunities here that just aren't available in other states I've been in. Recreation facilities are good and getting better, too. Fishing and hunting are fine. And there are all kinds of recreation leagues for basketball and softball. The kids have no trouble fine a place to play. It's pretty good that way, but it could always be improved, too."

#### Schools with new, creative programs



Henry Sanchez, field service representative, Customer Service: "The Bay Area is ideal for a person with a variety of interests—close to the ocean, lakes, the snow country and to San Francisco for night life and entertainment. Many state parks are within range for weekend camping, too.

"I'd say our school system is one of the real att tions, with a lot of new, creative programs. Probably one of the biggest developments in the schools has been because of the electronics industry. The schools now have access to a lot of technology as it's being developed. The kids see it and can study it in the classroom. And a education has been really helped by the junior college tem. I earned both my AA and management certificate at junior colleges.

"When you look back, you realize how fantastic the growth of this area has been. I've lived on the Peninsula all my life and can remember when Palo Alto High was the only one around here. When we used to read our for a schedule, we knew every high school and what city it was in. Now every city seems to have its own league!

"More people around here seem interested in real estate as an investment, too. Even I've bought a lot; it's up in the redwood country. All I hear from the kids these is 'When are you gonna build a cabin, dad?'

#### A lot like Boston



Rick Kniss, product marketing engineer, HP Associa "Community services in Paro Alto are so easy to get to—the library, school swimming pools open during the summer, parks and all the other facilities. The whole area—the climate and the people—appeals to me.

"I've done my share of time in the snow. After Massachusetts I worked three years in Wisconsin. Those Wisconsin winters really made a believer out of me!

"The people are a real cross-section here. They make it a young, dynamic area. The Boston area is similar—three or four universities and a centralized area of electronics companies. There's a lot of movement between the two areas.

"California seems to have done an excellent jo planning ahead, especially in the areas of highways, parks and recreation. Because it's a pretty desirable place, people converge to move in. I'm afraid this means more congestion. I know in my earlier days at Stanford, Lick Observatory up there on Mt. Hamilton was visible almost every day; now it's easier to count the days when you can see it rather than those when you can't."

#### Not like Alf/Mosel



Marlene Feiden, parts coordinator, International Operations: "Though I've only been here a short time, I've certainly noticed quite a few differences from my home in Germany—the climate, especially. Even though some of the people around here are complaining about the rain,

it would be considered a real dry spell back home! Some other differences? Well, the cost of living is a lot higher. My apartment is costing about three times as much as it void in Germany.

"People work harder here, too. They seem to be busy all the time. It really surprised me to find wives and mothers working to earn more money. They almost never do this back in Germany. And the stores are open on weekends! People back home always relax on weekends...they do "garden and wash cars all day long."

"After we arrived in New York, we drove across the country to California. Ohio was most like the traditional America I saw in pictures... white houses, little picket fences. California is more modern. It's very similar to Germany, which was almost completely rebuilt after the The homes are different though; they're built for except for the Spanish influence. I miss the layout of a traditional small German town with its fountain and mar-

### A and of gold rush

ket place in the middle?'

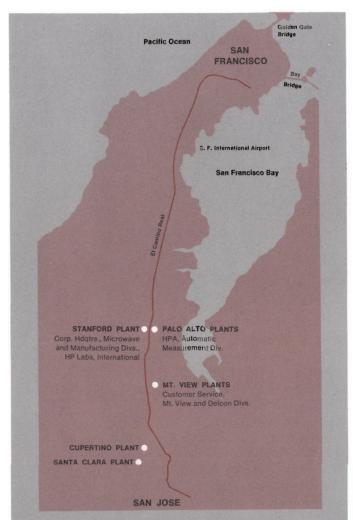


Claire Ross, production control, Manufacturing Division: "Where have all the natives gone? Seems like everyone around these days is from another state.

"The attraction must be the weather—or something. It's ideal for us sports fans who follow the Giants or the

49ers. For golf, too—I'm flattered whenever the machine shop guys ask me to go out and play golf with them. My golf game just isn't that good!

"California's also had kind of a gold rush going in estate values. They've gone up amazingly over the y. My neighbor just sold his house for three times the original price."



Since HP was born in the typically quiet college community of Palo Alto, the town has grown in those 30 years from 16,000 persons to almost 60,000. The nearby cities of Santa Clara (6,600 to 90,000) and San Jose (68,000 to 435,000) have had even steeper growing curves. In 1955, Cupertino's population was 1,700; now it's 17,000.

Santa Clara County population has more than quintripled since 1940 to more than a million persons. And San Mateo County, situated between San Francisco and Santa Clara Counties, has done the same from its 1940 figure of 110,000.

Most HP people live in this Santa Clara Valley, but many use the freeways as a daily route from 50 miles away and more... from San Francisco, the East Bay, or north from Santa Cruz. But even with the eight-lane freeways, El Camino Real—the king's highway—reminds localites of California's Spanish heritage and of the crude roads that once carried adventurers and missionaries up the coast from Mexico. There's still evidence of Gold Rush days in Northern California, too...a time when thousands of persons came west to seek fame and fortune. Today, not much gold is being mined...but the rush, it seems, has never ended.

## News in brief

Palo Alto-A new division named the Automatic Measurement Division has been formed by combining the former Systems Division and Palo Alto Division. The new organization will be part of the Electronic Products Group, and will be headed by John Dovle who recently moved to Systems Division as general manager from the same position in Manufacturing Division. Gene Mleczko, R&D manager of Palo Alto Division, will become product manager of the data acquisition area of the new division. Bob Grimm, marketing manager of Systems Division, will be product manager of the automatic test area. Jerry Carlson, former Palo Alto Division manager, will move to the Corporate Finance staff to help implement the company's new accounting system. In announcing the change, John Young, vice president and EP Group general manager, said it permits the company to serve its customers more effectively and to employ corporate resources more efficiently.

Palo Alto—Construction has begun on a sixth building at the HP headquarters area in the Stanford Industrial Park. The 93,000 square-foot building will be used by the Electronic Products Group to provide additional space for the Microwave and Manufacturing divisions. The general construction contract is for \$1.75 million, providing a twostory structure of steel and concrete with the north and south sides enclosed by glass. It will be completely air conditioned and contain special equipment for treatment of exhaust gases. The sixth building will increase total floor space at the headquarters plant to almost 700,000 square feet.

Palo Alto—Distribution of the 1970 general product catalog to field offices is now under way. The catalog covers electronic products for measurement, analysis and computation. Separate catalogs or brochures are also due to be issued during the year for medical, analytical, solid state, and power supply product lines.

## People on the move

Corporate – Andi Aré, to industrial design, from industrial design, Colorado Springs; Dick Arms, to manufacturing supervisor, electro sensitive paper, Technical Services, from member technical staff, Mountain View; Jon Cretarolo, to Finance, from Finance, Mountain View; Jim Hodel, to repair manager, from staff member, Customer Service Center; Bob Perry, to accountant, Management Services, from Finance, Microwave; Dick Wilson, to accountant, HP Labs, from same position, corporate Finance.

Data Products Group

Cupertino — George Bender, to maintenance manager, from maintenance supervisor; Ben Helmso, to manufacturing engineering manager, manufacturing services, from member technical staff, Microwave R&D; Bill Williams, to systems programmer. R&D. from same position. Microwave R&D Systems,

Mountain View – Charles Ulfers, to Finance, from same position, corporate Finance; Chuck Walker, to Finance, from Finance, Customer Service Center.

Electronic Products Group

HP Associates—Ron Regehr, to chemist, R&D, from thin film R&D engineer, Microwave.

Manufacturing — Henry Mangan, to production control expediter/scheduler, material control, from same position, Microwave; Vic Munoz, to manufacturing supervisor, fabrication, from journeyman machinist; Clint Simon, to manufacturing supervisor 4, fabrication, from manufacturing supervisor 3; Charles Walter, to production control

master scheduler and planner, from production control expediter.

Microwave - Grady Caldwell, to line manager, production manufacturing, from line leader, production; Parkie Low, to line manager, production manufacturing, from production technician; Bob Pace, to SPRINT manager, engineering services, from material engineering manager, Manufacturing materials engineering; Ron Trelle, to production engineer, R&D from production engineering, Mountain View; Gordon Wheaton, to printed circuit manager, production, from manufacturing supervisor; Dave Widman, to marketing staff, instrument sales, from service engineer, systems marketing.

Santa Clara — Art Bloedorn, to member technical staff, R&D, from same position. Microwave R&D; Tom Murphy, to Manufacturing Systems, from Microwave SPRINT; Harry Vossen, to member technical staff, integrated circuit production, from same position, Solid State Labs, HP Labs.

Systems — Max Clark, to production manager, fabrication repair, from service engineer supervisor, Palo Alto Division field services; Norm Galassi, to engineering member technical staff, from same position, Manufacturing reliability and preferred parts program.

International — Joe Barr, to International Operations, from corporate accounting management staff, corporate Finance; Karl Doring, to European central area manager, from company manager VGmbH; Dominique Dupard, to business manager, HP France, from indoctrination program, International

Operations; Jim Peterson, to regional sales medical engineer, HPSA Geneva, from marketing, Waltham Division; Tony Seidel, to advertising and sales promotion manager, Intercontinental Sales Region, from corporate advertising and sales promotion; John Walling, to customer service manager, Intercontinental Sales Region, from repair manager, Customer Service Center; Ed White, to marketing services manager, Intercontinental Sales Region, from calculator marketing, Loveland Division.

HP VGmbH - Martin Befeld, to field engineer, Berlin, from service group leader, Berlin; Fritz Dieckmann, to company manager VGmbH, from sales manager; Robert Eckhardt, to sales manager, from branch office manager, Frankfurt; Wilhelm Graffmann, to branch office manager, Frankfurt, from field engineer specialist military; Hilmar Krinke, to service product specialist, digital tapes, from service group leader, Frankfurt; Dieter Lindenau, to product sales manager analytic, Frankfurt, from field engineer analytic, Hamburg; Franz Nawratil, to marketing services manager from sales promotion manager; Achim Pilz, to service group leader, Dusseldorf, from service engineer analytic, Dusseldorf; Helmut Reinhardt, to service product specialist, digital systems, Frankfurt, from service group leader, Dusseldorf; Michael Rodens, to field engineer. Munich, from field engineer. Dusseldorf; Thilo von Zehmen, to product sales manager, medical, from field engineer, medical.

Southern Sales - John Salyer, to district manager, from field manager, Atlanta.

## From the president's desk

This is the time of the year when we do a great deal of nail biting on the subject of how well we are progressing into our new fiscal year.

The planning cycle for fiscal 1970 started last fall with division and group managers—as well as field marketing people—reviewing past performance, evaluating the expected contribution of new products, and assessing the expected economic climate. Using this information, along with other factors, our managers made their forecasts. These figures were then collected, reviewed, modified as necessary, and finally accepted as a guide for operation.

This guide, or plan, provides direction for making a variety of decisions such as our level of professional hiring, the order volume for long lead-time components and equipment, the approval or delay of construction projects, and commitments to the field sales force, just to name a few.

Many of these decisions and commitments must be made during the first two months of our fiscal year. Unfortunately, these months traditionally are inconclusive indicators of the outlook for the rest of the year. November tends to be an atypical month simply because it is the first month of the fiscal year. During October, people are concentrating on finishing up the old year and planning a fresh start for the new one. This seems to result in a letdown in November that can't help but have a reaction on corporate performance.

During December, many of our people are either on vacation or holiday and, of course, our customers have a similar situation in their plants and offices.

January, therefore, is a critical month. It completes the first quarter of the fiscal year, and is usually the first real indicator of what the new HP year will be

The difficulty in decision making is compounded this year by the general economic climate in the U.S. The President wisely is encouraging a monetary program designed to place some dampening on the inflationary trend. This effort is clearly reflected in the tight money market and in the programs to reduce government spending. In the long run HP, as well as the nation, will certainly benefit and be more healthy from these efforts. However, on a short-term basis these policies can affect the ability of many of our customers to purchase much needed equipment from us.

Congress, on the other hand, does not appear to share the administration's concern with inflation. With an election year in the offing, it has passed tax legislation that in no sense of the word is anti-inflationary, and has increased government spending in several areas including substantial boosts in social security benefits.

Thus, the net effect of the two conflicting policies make it unclear as to the immediate short-term outlook for the economy generally and HP sales in particular.

What this means is that we must move cautiously. If the policy of monetary austerity prevails we must be prepared to avoid over-committing ourselves and hold down spending and new hiring. If, on the other hand, the more liberal policies of Congress prevail, or if the President concludes that his policies can be loosened due to effective dampening of the inflationary trend or that negative side effects exceed the positive values of his program, then we must be prepared to move forward rapidly.

Bill Hewlest

The next three or four months should tell.





# A choice and a charter

For 28 years of the company's 30-year history, Norm Schrock has been an important contributor—as development engineer, lab division manager, R&D manager of the former Oscilloscope Division, and now as quality assurance manager at Colorado Springs. In those roles he has chosen to remain as close as possible to the technical side of the business, preferring this to the various management avenues that unquestionably were open to him. Last month, Norm became the fourth HP person ever to be recognized for this kind of contribution; the Board of Directors passed a special resolution designating him as Senior Staff Engineer. According to the resolution which Bill Hewlett is shown presenting here: "Norm Schrock has consistently made many contributions to the company's objectives of advancements on the electronics art, particularly in the fields of microwave and waveguide equipment, distributed amplifiers, and oscilloscopes, and in the quality assurance area . . . he has continued to keep current in the rapid technological changes in his field . . . this position carries with it not only recognition . . . but also a charter that will, we hope, permit even greater contributions."

## Measure

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