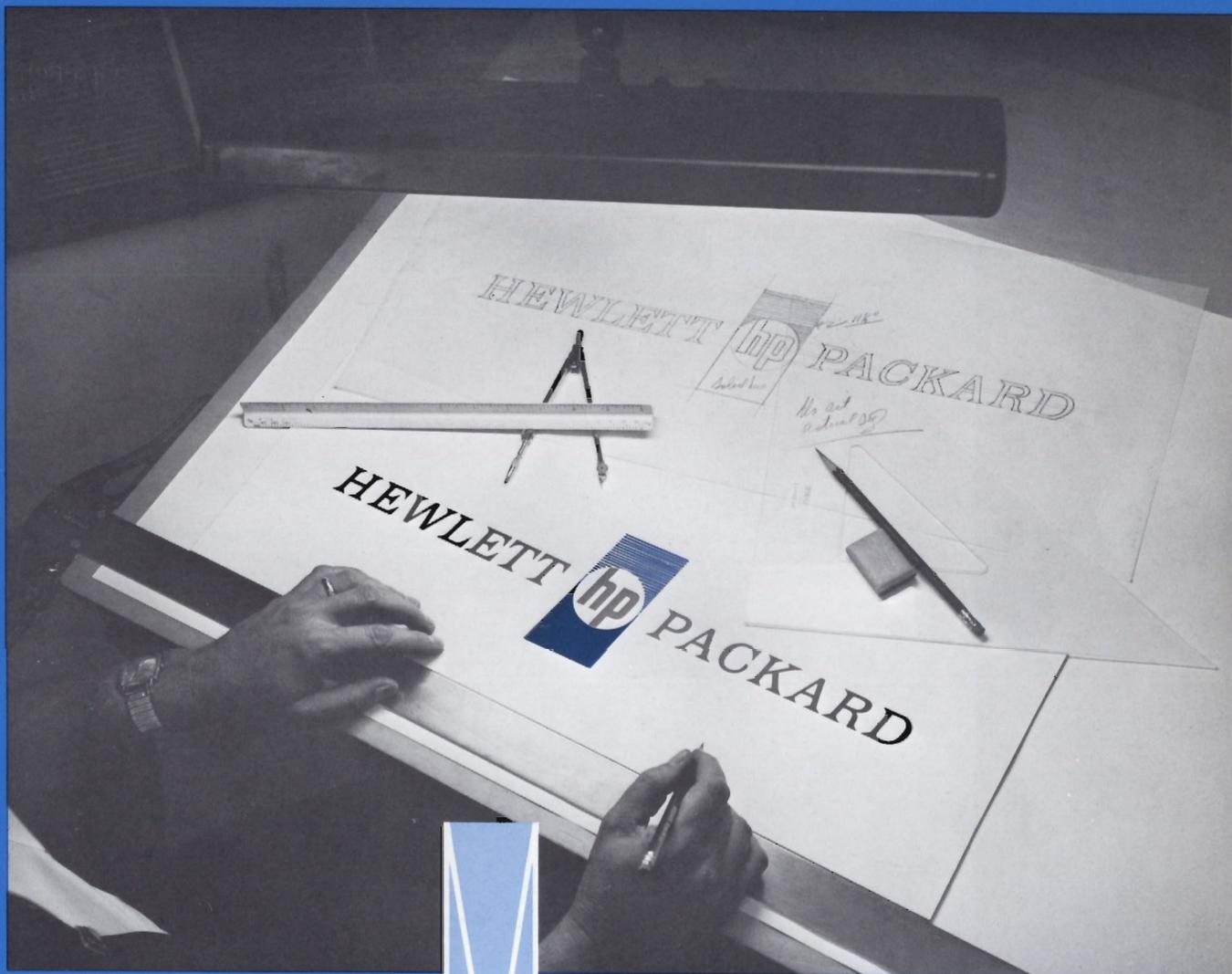


MR JOHN WARMINGTON
SAMPLE ELECTRONICS -VIC- PTY. LTD.
9-11 CREMORNE STREET
RICHMOND E. 1
VICTORIA, AUSTRALIA

November 1964

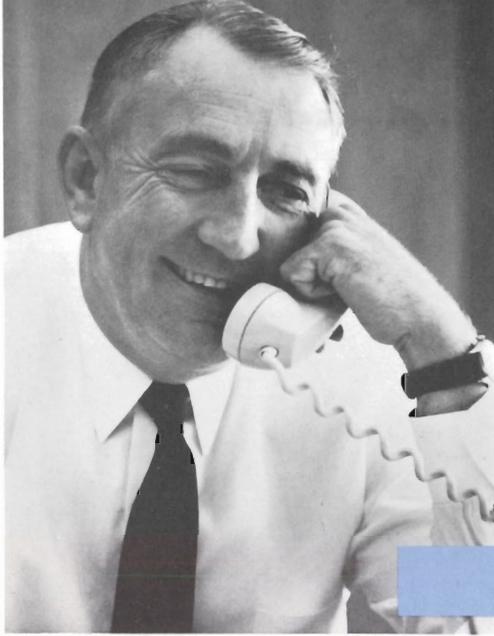


M e a s u r e

In this issue

Our Valuable Identity

HP's New Microwave Spectrometer



from the chairman's desk

LAST MONTH I had the opportunity to visit some of our facilities in Europe, and was very pleased to see the progress which has been made there during the past two years.

My first stop was at Bedford, where the rapid growth of both our manufacturing and marketing operations has made it necessary to expand our plant. In England, however, the government takes a very strong hand in all business affairs, and because of various regulations we are prevented from doing any appreciable building in Bedford. We have, therefore, been looking for a new location in Britain where we will be able to expand sufficiently to meet the growing demand for our equipment there.

After considerable study, we have decided to move our manufacturing operations to Edinburgh in Scotland. Edinburgh is a very attractive city on the east coast of Scotland. It is the country's capital, and has a long and distinguished background of culture and education. We will, we believe, be able to establish a close association with the University there which should be of great benefit to our technical people.

The final site has not been selected, but we have several good choices. You will be interested to know that the government, as a means of attracting industry to the area, will build 50 apartments for our people who will move from Bedford, will pay their moving expenses, and pay for a trip back home during their first year away.

In West Germany, the next country I visited, our manufacturing subsidiary has just completed a major addition to its plant in Böblingen and the people were moving while I was there. The plant is very attractive and everyone seemed enthusiastic about the way things are going and the outlook for the future.

In Switzerland, our HPSA marketing group has an office located on the top floor of a new building just a short

distance from the center of Geneva. I was very favorably impressed with the program there. HPSA has an excellent staff and they are doing an outstanding job in managing our European marketing activities.

We have a brand-new sales office in Paris and my visit coincided with the first Open House. We have many good customers in France and I had the opportunity to meet and chat with some of them. It was encouraging to find that they have a high regard for our products and there is every indication that we will be able to do even better in France in the coming months and years.

There was a good deal of discussion while I was there as to why we do not manufacture some of our products in France. It is very possible we may find it desirable to do this, especially if De Gaulle should take France out of the Common Market.

Europe is clearly a very important market for us. This year, for example, we will sell considerably more equipment in Europe alone than we sold in the United States ten years ago. The European market is growing nearly twice as fast for us as is our market in the United States, and although the growth rate may slow down during the next few years, it will continue to provide us with a large portion of our total business.

It will certainly be necessary for us to manufacture more products in Europe as we go along, but we can hardly hope to satisfy the European demand for our products solely through our manufacturing operations there, at least in the foreseeable future. Europe, then, will help to maintain the production volume at all our plants in the United States. This market adds a substantial measure to the opportunity for our company, and therefore to the opportunity for everyone associated with our organization.

David Packard

A new system, a new field of interest

HEWLETT-PACKARD'S Microwave Division has just introduced a big, beautiful package of answers to some of chemistry's most bothersome problems. The new Model 8400A microwave spectrometer is a tool to help penetrate the mysteries of molecular structure, speeding the work of scientists dealing with new drugs, better fuels, and stronger materials, to name only a few.

Using microwaves to produce a "fingerprint" of an unknown substance is one of several advanced techniques available to materials researchers today. For some classes of material, it is the best analytical method. For many others, it is a valuable adjunct. The trouble has been that the instruments had to be assembled by the scientists themselves. These "do-it-yourself" projects consumed much of their valuable time, and yielded equipment which often left much to be desired in performance and reliability.

Model 8400A is a completely engineered system that's a bargain at about \$45,000 (depending on options). Bringing HP's years of microwave experience to bear on the design, it achieves a new high in ability to separate, measure, and exactly identify the substance and structure of minute samples of unknown materials. The answers appear on records and in visual presentations which are immediately understandable. Best of all, the high-performance system is delivered complete, ready to work.



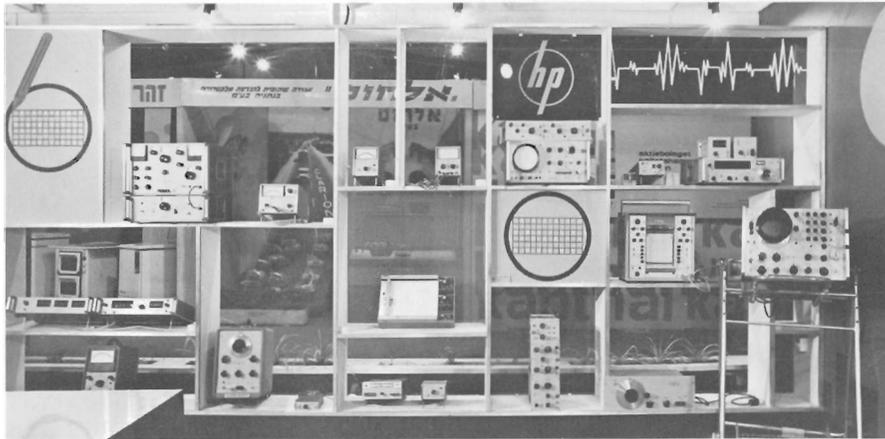
The microwave spectrometer works by exposing the unknown sample, introduced as a gas into an evacuated chamber, to a carefully measured spectrum of microwave energy. Small variations appear in the absorption of the energy as the molecules are selectively tumbled by the energy. These variations in many cases uniquely identify structural differences, substances present, and their relative quantity.

In the photo here, the vacuum equipment which exhausts the sample chamber is on the right. The chamber is in the middle console, while the readout and recording equipment is on the left.

Products seen by thousands at trade shows

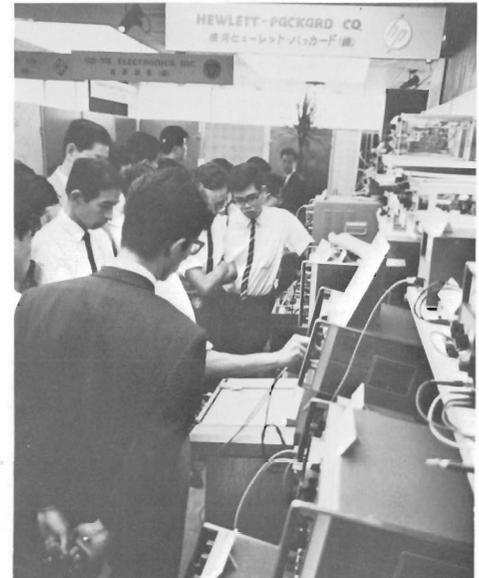


Heartbeat of a chick embryo was successfully displayed on a Sanborn Viso-Scope by Ames Research Center.



Booth at Tel Aviv Fair generated many sales inquiries from Israeli government and industry representatives.

Yokogawa-Hewlett-Packard's first U.S. Trade Center exhibit in Tokyo drew big crowds.



THE PRODUCT EXHIBIT is of major importance to HP's marketing effort. In the past four months, at least a dozen trade shows have provided the company with opportunities to display instruments to thousands of present and potential customers throughout the world.

Yokogawa-Hewlett-Packard has had great success at two recent shows and will enter a third with a major exhibit in November. The Process Control and Recording Instruments Show, held in July at the U.S. Trade Center in Tokyo, attracted 6,000 people. The Japan Electronics Show in September, which was attended by some 30,000 people, was the largest such event Y-HP has participated in to date. The November show, called JEMIMA, will be held in Osaka.

Electronics & Engineering Ltd., HP's representative in Israel, manned an attractive booth at the recent Tel Aviv Trade Fair. Engineers from HPSA in Geneva helped with lectures.

HP Instrument AB, the company's Swedish affiliate, sponsored a display at the Stockholm Technical Fair in October. Forty-three other U.S. firms were represented there.

Since WESCON in August, HP products have been on exhibit almost continuously in the United States. A Sanborn Viso-Scope, used to display a tape recording of a chick embryo heartbeat, was featured at the Fourth National Conference on the Peaceful Uses of Space in Boston. The exhibit

dramatized an experiment by Ames Research Center.

San Francisco's World Trade Fair in September attracted over a quarter million people. The electrocardiograph and scopes operating at the HP booth drew considerable interest. In Chicago, the company unveiled its new microwave spectrometer at the National Chemical Exposition (see page 3).

October was the busiest show business month. At the Instrument Society of America convention in New York City, all manufacturing divisions and affiliates were represented, for the first time, in the same booth.

A few days later, the divisions again joined together in a large two-sectioned exhibit at the annual National Electronics Conference in Chicago. Later, at the Conference on Spectroscopy Instrumentation and Chemistry in San Francisco, HP again showed its new microwave spectrometer and Mechrolab, Inc., displayed two osmometers and a photometer. As the month came to an end, the Frequency and Time, Dymec, and Oscilloscope divisions participated in the Fall Joint Computer Conference in San Francisco.

November started off with the Northeastern Electronics Research and Engineering Meeting in Boston and HP instruments were much in evidence. During the remainder of the month, "show biz" activities will slow down until the Atom Fair opening December 1 in San Francisco for a three-day run.

Shozo Yokogawa stood vigil over Olympic flame.

Keeper of the flame



IT WAS NEARING DUSK in Tokyo on October 8 as the runner, holding the Olympic torch high, completed the final lap of the great journey from Greece to the Musashino City Hall. There to greet him was a group of dignitaries, among them Shozo Yokogawa.

The light from the torch was transferred to a safety lamp where it would burn through the night. Shozo, who is president of Yokogawa-Hewlett-Packard and head of the Musashino Traffic Safety Society, was honored as one of the city officials entrusted with the flame.

After their all-night vigil, the torch was started again and carried by a runner to the Imperial Palace Plaza, where it was stationed in a cauldron along with three other torches. There the flames burned through the night to the dawn of the first Olympic day.

The Olympic flame, lighted in Olympia, Greece, on August 21, reached Japan on September 9. It was divided into four torches carried by runners through the prefectures of Japan on their way to Tokyo, where they served impressively to open the most successful Olympic games in history.



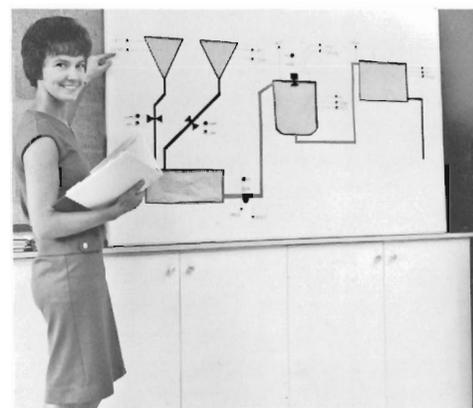
Runners carry torches through streets of Tokyo in traditional ceremony preceding start of Olympic games.

Call it Philips' Screwdriver

EARNIE PHILIPS remembered his days in the Army when an instructor wasn't an instructor without visual aids.

So, to explain the Dymec 2010 data acquisition system to people in the chemical industry, why not devise a demonstration board which would do the job effectively, and maybe get a few laughs along the way? Philips, a field engineer for Robinson Sales Division, went to work at home and soon came up with a demonstrator showing a hypothetical chemical processing system tied to a Dymec system. It works. Colored lights (snatched from his Christmas decorations) flash on as the processing operation is activated, indicating the points at which the 2010 takes information.

While Earnie wasn't looking, someone labeled two funnels "Vodka" and "Orange Juice" in the processing diagram. Now the whole ingenious contraption is known as "Philips' Screwdriver." But don't knock it. His chemical customers are paying attention.



Philips' display demonstrates Dymec system, while Jackie Phipps decorates photo.



HEWLETT  PACKARD

Corporate identity program creates . . .

A new look for a proud name

YOU WON'T FIND it listed in the balance sheet of the annual report . . . and yet it is at least as valuable as the land and buildings we own, the equipment and tools we work with.

This precious asset is, of course, our corporate name, "Hewlett-Packard." Over the past quarter century, this name has become identified with certain things. Quality. Reliability. Service. Research and engineering achievement. We know this is true because customers tell us so by their continued and increasing purchases—and they are the final judges.

The way we sign this name, and the valuable names of our various divisions and subsidiaries, is of such vital importance that it has been for many months the subject of intensive investigation. The study, called the Corporate Identity Program, has resulted in a new design for the company's signature as it appears in advertising, in all literature, on letterheads, forms, cartons, and vehicles.

The design is not a radical departure from the company's former signature, or "logotype" as it is technically called (see old and new "logos" above). A complete change was unnecessary and would not be consistent with the purposes behind the Corporate Identity Program.

What are these purposes? Why and how did the program get started? What are the results to date? The answers to such questions have been and are the special concern of Marketing Vice President Noel Eldred, who assumed top responsibility for the program over a year ago. As Eldred points out, HP's tremendous growth since the mid-fifties is the number one reason the subject of corporate identity had to be brought up in the first place. The Sanborns, Moseleys, Neelys, Crossleys, and a dozen or more other firms acquired along the way all have excellent reputations of their own. Their individual names represent substantial investments and command respect in the markets they serve.



Many versions of logotype were submitted. Here Don Short presents idea to (l to r) Noel Eldred, Al Inhelder, industrial design chief, and Harry Lewenstein, advertising and sales promotion manager who coordinated program.



"We recognized these things," says Eldred, "and we felt that the time had come when all corporate components had to be welded together under one banner which would preserve the value of the various divisional names while taking maximum advantage of the goodwill Hewlett-Packard's name has earned.

"The ideal thing," Eldred continues, "would be to develop a logotype which could be used by all divisions in a uniform way and would also lend itself to adaptation by companies which might be acquired in the future. In other words, it had to be a flexible design . . . an easy design to use in a lot of different ways . . . a design which would give all divisions the benefit of identification with the parent corporation while retaining their own identity."

The task of creating a new corporate logotype and the variations for use by divisions, subsidiaries, and affiliates was assigned to Walter Landor and Associates, a nationally prominent, San Francisco-based industrial design firm.

The Landor group working on the HP project, headed by Don Short and Ron Rampley, proceeded to single out all the firm names which would have to be included with the parent corporation name. They also studied the old HP trademark because it would be important to retain a feeling of identity with that familiar symbol. And many hours were spent poring over HP printed materials to gain an understanding of Hewlett-Packard and to find all ways the signature would be applied.

"Every corporation has a personality," says Short, "and the logotype should be designed to reflect it. We sized up Hewlett-Packard as a progressive organization, fast growing, often fast moving, but rather conservative and unflamboyant in advertising and communications with the marketplace."

Many designs were submitted by the Landor group between February and May of this year. The final selection, made by Eldred's corporate identity program committee and eventually passed on by the corporation's executive committee, has been described as a clean, simple design which indicates a company moving forward. The HP initials made familiar by the old trademark are retained, but they are framed in a new graphic element called a rhomboid. Some variations in the use of this trademark appear on this page.

As Eldred puts it, "the uniform application of our new logo will provide a visual umbrella for the entire organization, signifying unity and common purpose."



around



the circuit

BY NOEL E. PORTER, *Vice President, Operations*

WHILE THE FINAL figures are not in as of this writing, it's quite evident from preliminary estimates that we wound up the fiscal year on October 31 with another record performance. Shipments for the year totaled about \$125 million and orders were about \$130 million. Both these figures represent an increase of approximately 8 percent over 1963. Furthermore, our total profits will show an even greater increase over the previous year.

This was a tough competitive year, with many companies in our field suffering declines in sales and profits. In view of this, we can be quite proud of our performance. Orders in general were up all across the board, with International, Harrison, and the F&T Division showing the greatest increases over 1963. We were the successful bidder on a number of large contracts, particularly in scopes, counters, signal generators, and data amplifiers at Sanborn.

On the marketing end of things, we made some important strides in the gradual integration of the medical sales groups into our regular marketing structure. Moreover, we made some good progress in expanding our marketing capability into new fields of application for our products.

Our new product programs picked up speed, with a number of new devices contributing substantially to our total volume and performance. In the manufacturing area, we've continued to improve efficiency by developing better methods and processes. We've made a considerable investment in new equipment, including several numerical control type of machines. Through a coordinated corporate purchasing effort, we've been able to effect an annual savings of over \$1 million. We've tightened up our quality control procedures to meet the most rigid government requirements. We've built a num-

ber of new plants both in the U.S. and overseas, and will soon start construction of a large addition to our Palo Alto-Stanford complex.

In the general administrative functions, we've also made considerable progress. The new field order processing system has been extended to all our domestic sales groups, and we've started down a similar track in Europe. We're making greater and more effective use of electronic data processing techniques among our various manufacturing divisions and field sales offices.

At corporate headquarters we've streamlined our staff, while at the same time strengthened areas where corporate effort is appropriate and important. As part of a plan to make our product development program more effective, we've established the offices of corporate engineering manager and advanced technical planning manager. This will enable us to do a better job of monitoring and coordinating all our new product programs and seeking out new and broader applications for our products and capability.

The acquisition during 1964 of Mechrolab and International Control Machines, plus the impending acquisition of Delcon, will broaden the company's base and lead us into important new fields of instrumentation. Other acquisitions are under consideration, all designed to expand our technology and keep HP a world leader in electronic test and measuring equipment.

So we've covered a lot of ground during the past year and have done well. The big job now is to move ahead in 1965 with an even better performance in orders, shipments, and profits. There are plenty of opportunities awaiting us, but we'll have to move as fast as we can to take advantage of them.

HP winding up negotiations to acquire Delcon

HEWLETT-PACKARD is completing negotiations with the Delcon Corporation of Palo Alto, whereby Delcon will become a division of HP through an exchange of stock.

Delcon manufactures ultrasonic detection and test devices, widely used in industrial maintenance and production. It also produces a variety of communications equipment, including voice scramblers for telephone and radio circuits.

The Delcon Corporation was founded in 1960, has 35 employees, and in 1963 had sales of approximately \$750,000. Alan B. Simpkins is the corporation's president.

David Packard, HP board chairman, said the acquisition

would be a "significant step in HP's expansion into new fields of instrumentation."

"Although Delcon has been in business only four years," he said, "it has developed a versatile line of well-designed successful products. These devices will enable us to broaden and diversify the HP product line and strengthen our position in both industrial and scientific markets."

The western regional, award-winning television program, "Science In Action," is featuring Delcon on its show during the week of November 8. The program is carried by many stations in the western U.S.



TALK ABOUT being buried in work! Don Barkley, skipper of HP's Eastern Travelab, found himself hub-cap-deep in problems recently at the Garrett Corporation in Toronto, Canada, when he was directed to park in the company's newly paved parking lot. The big bus

promptly broke through the pavement and sank to its axles. While two tow trucks strained for four hours to free the Travelab, Barkley and salesman Ted Grunau turned defeat to victory by talking to every engineer at Garrett.

Ceremonies, tours mark four new plant openings

THE FALL OF 1964 is shaping up as the season of plant dedications for Hewlett-Packard.

The big new oscilloscope plant at Colorado Springs was impressively christened Saturday morning, October 24, by Colorado Governor John A. Love, local mayor Harry W. Hoth, and a number of HP executives. In the afternoon, tours through the beautiful 137,000-square-foot structure were conducted for the public. The plant, one of the largest industrial facilities in the state, is located on Garden of the Gods Road in Pikes Peak Industrial Park. It is expected that employment there will reach 450 by the end of this year.

Also on October 24, Harrison Laboratories' new plant at Berkeley Heights, N.J., was the scene of an open house for employees' families and local residents. The 45,000-square-foot building is located on a nine-acre site at 100 Locust Avenue. Air conditioned throughout, the plant employs 135 people. Harrison's transformer department will continue to be housed in the division's previous plant on Industrial Road.

One week later and half a world away from New Jersey, open house took place at Hachioji, Japan, to show local citizens and dignitaries the just-completed Yokogawa-Hewlett-Packard plant. Shozo Yokogawa, president of the Y-HP joint venture, was host for the day, assisted by Bill Doolittle, Palo Alto vice president of international operations. The new Y-HP facility, located 30 miles west of downtown Tokyo, employs 250 and has about 63,000 square feet of floor area.

On the day following the open house, all employees and their families gathered there for a social get-together.

Later this month, to top off HP's season of dedications, the new addition to the Böblingen, Germany, plant will be celebrated with formal opening ceremonies. The two-story structure more than doubles the plant's size, bringing it to a total of 81,000 square feet.

A pictorial review of the October dedicatory ceremonies will be presented in the December issue of MEASURE.

Geneva conference

EXTENDED USE of data processing equipment was the subject of a conference in Geneva September 17-18, attended by the general managers and chief accountants of all European operations. Paul Warnock, financial manager for HPSA in Geneva, conducted the meeting with assistance from IBM staff specialists and Bud Eldon, Palo Alto manager of corporate systems and operations analysis.

A plan was drawn up for installing new tabulating equipment at HP factories in the United Kingdom and West Germany. These installations will be compatible with existing equipment in Geneva and the U.S. The equipment, among other things, will provide a high degree of speed and efficiency to HP's new order processing system whereby the European sales offices place orders directly on the two factories there instead of through the Geneva office.

NEWS IN FOCUS



"Better than new" is their motto . . . and they live up to it. Rube Leamons (left) and Renze van der Meulen of the Stanford plant building 1L tool shop are responsible for bringing new life to old equipment used in the various Palo Alto operations. The lathes, milling machines, grinders, etc., they rebuild meet specifications often surpassing the equipment when it was first purchased. Here they are seen checking out an overhauled seven-year-old milling machine modified to meet a specific requirement.



Miss Teenage San Francisco for 1964 is lovely Linda Licciardi, who was selected over 20 Bay Area finalists on October 20. Next stop for Linda will be Dallas, Texas, where, on November 14, Miss Teenage America will be crowned. A senior at San Lorenzo High School, she is the step-daughter of Stanford Plant Cafeteria Manager Hal Wiehe. Photo courtesy of KEWB



Remember the vibrating car scenes in old Laurel and Hardy movies? One by one the headlights dropped off, the fenders, the doors—until the whole thing was a pile of junk. Don't laugh, it could happen to you if automotive engineers hadn't long ago recognized vibration as a major cause of car wear. Testing for vibration has become an elaborate and sophisticated procedure for auto manufacturers. Here, General Motors runs a series of dynamometer tests on a Buick using an imposing array of HP equipment—an electronic tachometer, voltmeter, audio oscillator, counter, and X-Y recorder.



people on the move

HP PALO ALTO

Al Augustine, quality assurance, Oscilloscope Division—to divisional quality analysis, F&T Division.

Bill Benham, Microwave lab—to Microwave production.

John Doyle, production department manager—to manufacturing manager, Microwave Division.

Walt Neumeyer, Oscilloscope CRT lab—to Advanced R&D, Physics.

Walt Noble, Oscilloscope in-plant engineering—to Customer Service engineering.

Bob Oswald, Marketing illustration group—to manufacturing specifications group, F&T Division.

George Robles, Lear Siegler, Inc., Los Angeles—to logistic data manager, Contract Sales.

Harmon Traver, manufacturing manager, Microwave Division—to corporate Manufacturing Engineering.

From Oscilloscope engineering to Advanced R&D, pulse generator group:

Fred Basham, *Johan Blokker*, *Mike Cunningham*, *Joe Dykhuizen*, *Phil Foster*, *Jim Green*, *Dick Monnier*, and *Bob Schweizer*.

RMC SALES DIVISION

Howard Greenwald, field engineer, New York office—to field engineer, Englewood office.

Mel Young, staff engineer—to field engineer, New York City office.

COLORADO SPRINGS

From Oscilloscope Division, Palo Alto, to Colorado Springs:

Marshall Ball, purchasing and inventory control; *Ross Beckett*, CRT lab; *David Chaffee*, CRT design engineering; *Dick Clark*, sampling Oscilloscope engineering; *John Crowninshield*, CRT design engineering; *Blair Harrison*, pulse generator engineering; *Jerry Hedquist*, component evaluation; *Chuck House*, Oscilloscope engineering; *Dave Kent*, process engineering; *Wally Klingman*, manufacturing engineering manager; *Bob Kolar*, product management group; *Bob McClelland*, CRT production; *Norm O'Neal*, sampling scope engineering; *Jim Pettit*, advanced development group; *Fred Sayre*, production control; *Norm Schrock*, manager, advanced development; *Jerry Spero*, publications group; *John Strathman*, advanced projects; and *Jim Umphrey*, sampling Oscilloscopes group.

INTERNATIONAL

Carl Cottrell, managing director, HPSA—to international marketing manager, International Operations.

Ken Tingley, product promotion, marketing department, F&T Division—to product research, International Operations.

DYMEC

Ed Albert, publications department, Oscilloscope Division—to publications department, Dymec Division.

NEELY SALES DIVISION

Chuck Bradley, parts department, Neely, North Hollywood—to Sanborn medical sales representative, San Diego.

Holly Cole, R&D instrumentation engineer, Atomics International Division of North American Aviation—to staff engineer, North Hollywood office.

Duane Dobratz, staff engineer, San Carlos—to field engineer, Sacramento office.

Bob Hall, Sanborn medical sales, Glendale—to field engineer, North Hollywood office.

Ken Kleidon, field engineer, North Hollywood—to Neely medical sales manager, Glendale.

Chuck LaPorte, field engineer, Sacramento—to field engineer, North Hollywood office.

YEWELL SALES DIVISION

Bill Fitzgerald, senior technician—to assistant service manager, Burlington office.

SANBORN

Eleanor Bagley, supervisor, credit and collection department—to credit manager.

HP INTER-AMERICAS

Tony Malo, overseas sales, International Operations—to technical support engineer, HP Inter-Americas.

HPSA

Dick Reynolds, marketing manager—to managing director, HPSA.

Measure

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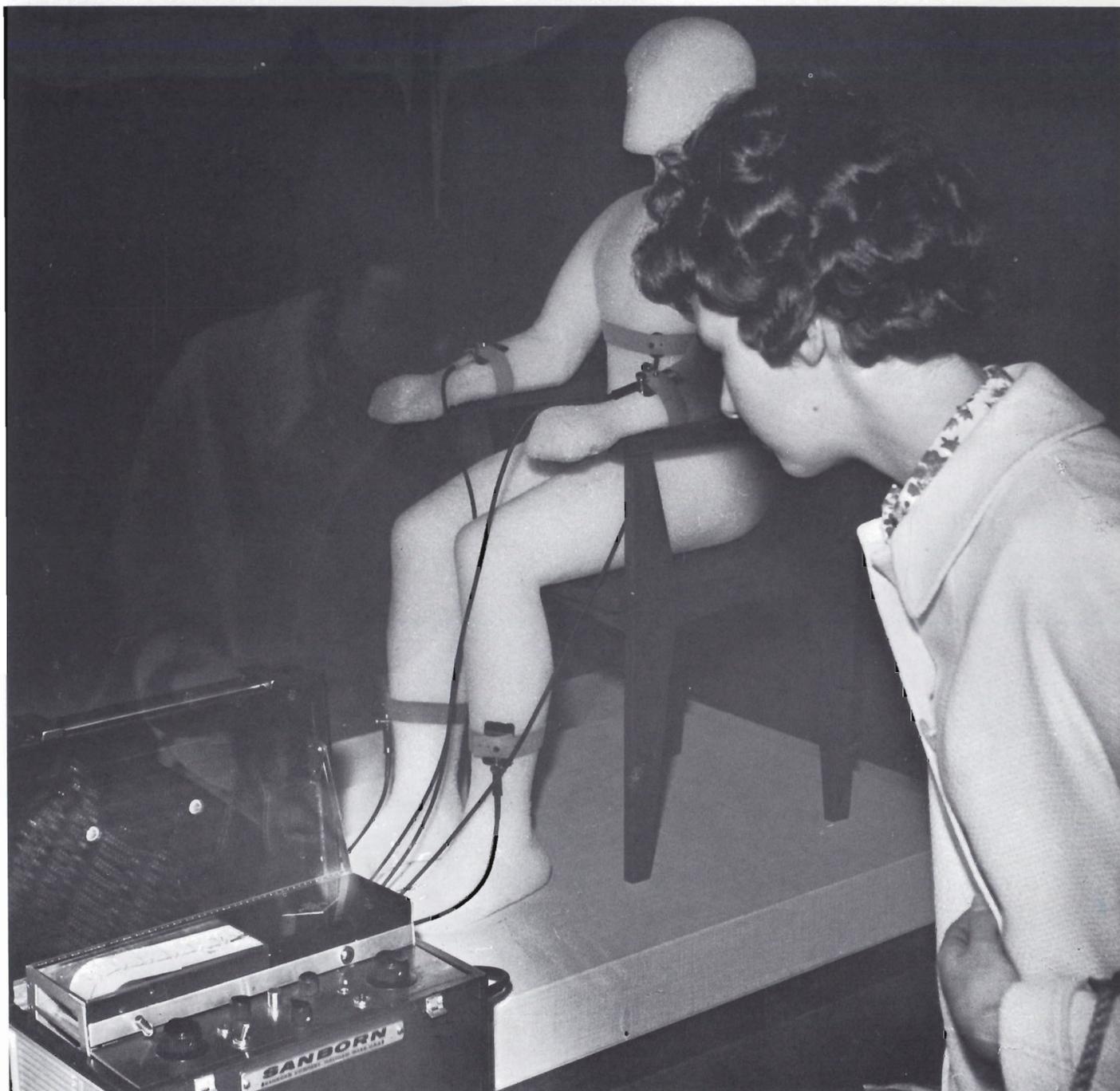
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"I often say that when you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind . . ." LORD KELVIN (1824-1907)

Your heart, and how it works



THE STORY OF YOUR HEART unfolds daily before hundreds of spellbound visitors to Boston's Museum of Science—and Sanborn equipment is used to dramatically dispel the mysteries surrounding that vital, hard-working organ of the human body. In a most unusual and fascinating medical exhibit, a Sanborn amplifying stethoscope enables you to hear your own heartbeat

through a loudspeaker. Another portion of the exhibit, shown above, explains the importance to physicians of the electrocardiogram. A Sanborn electrocardiograph and oscilloscope are used in the demonstration. Since its beginning two years ago, over 700,000 people have visited the exhibition.

Photo courtesy of Boston Museum of Science