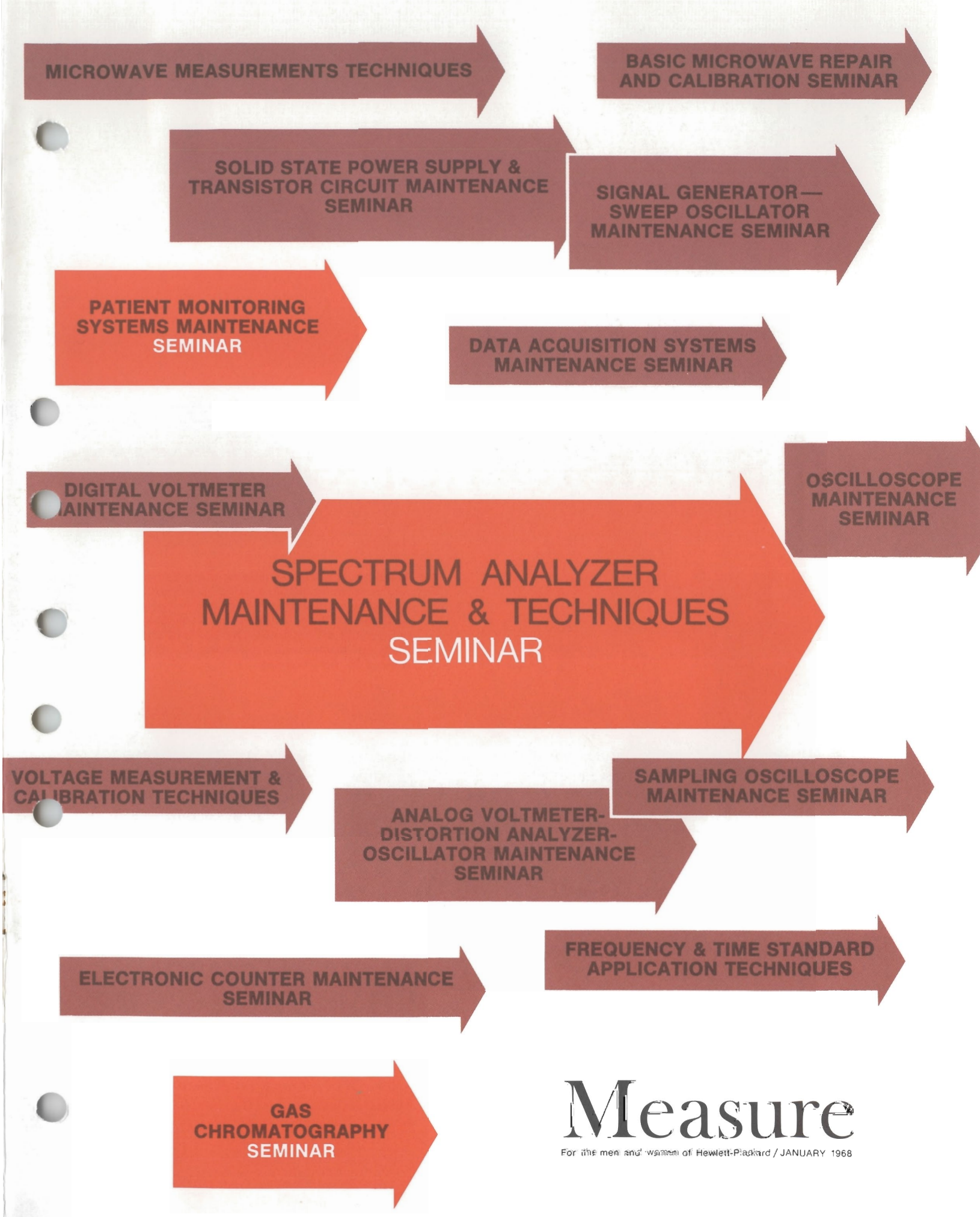
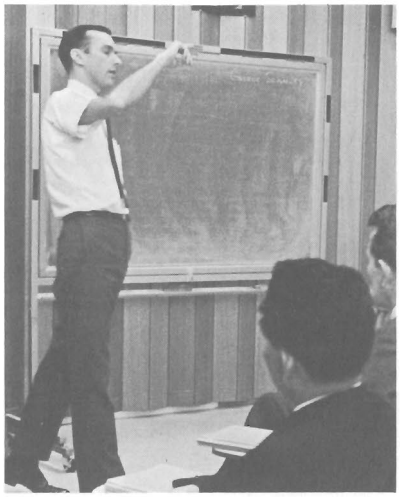


Measure

For the men and women of Hewlett-Packard / JANUARY 1968



HP's customer college

Members of customer training class gather for a maintenance and calibration lab on new HP spectrum analyzers. This enables the technician to make his own diagnosis of problems and correct them on the spot. Attendees typically represent many parts of the world, and put in a minimum of one week studying maintenance procedures. In-plant training is supplemented by field courses.

☐ Although there doesn't seem to be any direct connection between a Caribbean cruise, a gathering of 50 nurses in Philadelphia, a visitor from Antarctica, a meeting with a Venezuelan presidential candidate, Danbury Hospital, and a book entitled "Transistor Basics," there's a tie-in that relates directly to HP's success in the market place.

Each is concerned with the education of HP customers at some point of customer contact. In all instances, the process begins when an HP field sales engineer makes a first call on a potential customer. He has the ability to understand the customer's needs and relate them to the instruments and systems in the HP product line.

But, the HP concept of customer education goes far beyond the sales call. Last year it also included almost 300 seminars and short courses attended by some 10,000 customers in and from all parts of the free world (including that man from Antarctica). Currently, some new approaches are being expanded, particularly in the use of videotape and closed-circuit television for product introductions and customer service training.

The fact is that customer training programs are becoming bigger and more complex year by year. Why? One major reason is that more than half of the HP products sold today did not exist five years ago, so there is a continuing need to keep customers informed and educated concerning these new instruments. In addition, the instruments are increasingly more complex, with new and improved functions and new types of components and materials. Finally the educational approach is absolutely essential in attempts to explore new types of industrial markets or to gain a foothold in new geographical markets.

To keep up with all of this, some new dimensions are being added to the HP customer training programs. Traditionally it has been possible to think in terms of two kinds of training: instrument operation and application techniques on the one hand, and repair and calibration on the other. But in reaching out into new

markets and with the increasing sophistication of its instruments, HP has uncovered a whole new area of need for education in basic electronics.

According to Bob Bridge of corporate Product Training, it became clear that many instrument technicians in industry were most in need of a logical approach to troubleshooting, along with a more practical backgrounding in the makeup and materials of modern instruments.

To meet this situation, the product training group devised a special program known as the "transistor course." Success was almost too much. Every customer, it seemed, wanted the program given to his maintenance and operating people. One answer to this booming demand has been to include more material of this type in most of the training programs offered at the main training centers or in the field. Another result has been commercial publication of "Transistor Basics — A Short Course," a book authored by George Stanley, who helped develop the course for Product Training.

Still another approach to customer training is taking shape in the company's television studios. Already, videotape programs produced within the company are proving an important means of introducing new products to, and for training of, field engineers. The expectation is that these tapes will also help expand the company's ability to present a greater variety of customer training materials in more varied ways to more people.

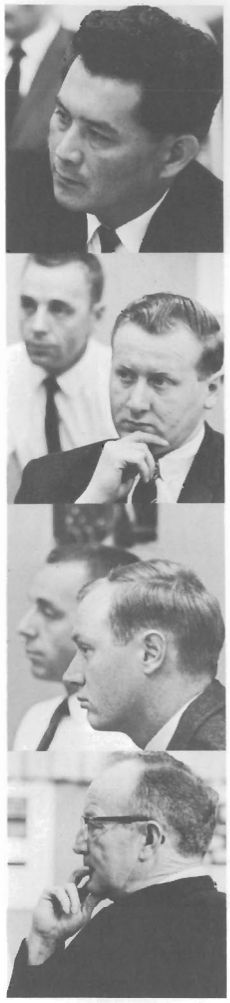
Not that tapes will ever totally replace person-to-person instruction. No customer is ever likely to sit still for a full day of television — let alone the five days usual for major product seminars. But the videotape equipment will permit special presentations and provide closeup views of products and parts. In addition, the instructors are able to screen-test their own performances by playing back tapes of their training sessions.

This year, the Waltham division will follow a pattern set in Philadelphia last year by going into more and more hospitals with training seminars in the opera-

(continued)

Videotape programs produced within the company will have an increasingly important role in training and educating customers about HP instruments and services. At the Palo Alto studio, Mike Massey rehearses his training presentation while Don Lutz operates the camera.

customer college



Customers who send qualified people to HP for instrument training have high praise for results. The courses, such as that given here by George Stanley, stress the application and techniques possible with HP instrumentation.

tion of intensive care equipment. The audiences will mostly be nurses.

"There's a big demand for this training," said Waltham's Marketing Manager Harold Norman. "The strain of intensive care work on nursing personnel creates a high turnover. Our new patient monitoring systems can help ease this situation."

What do customers think about HP's emphasis on education?

The best answer, perhaps, is the time and money customer companies spend in taking advantage of this special training.

A letter from Union Carbide recently noted that it had invested more than $250,000 in sending 385 people to a gas chromatography course offered by the Avondale division. The corporation "got its money's worth" the letter concluded.

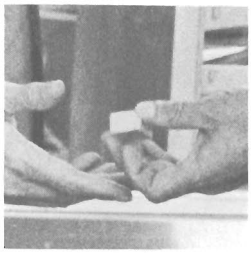
One large customer, a major electronics manufacturer in Texas, was willing to subsidize the entire production of a special course by HP, so anxious was it to have its people properly trained in troubleshooting. The subsidy offer was politely turned down as HP feels that such service training comes with the product.

There have been thousands of individual comments about the effectiveness of HP product training programs. The following two are typical.

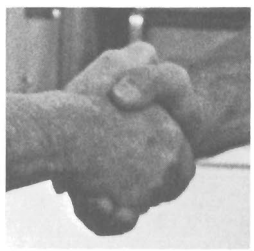
A repair technician from Sylvania said of his recent maintenance training session in the HP spectrum analyzer that he won't have to get on the phone so much. "Now I'll be able to handle problems myself."

Regarding an intensive care seminar, a nurse wrote that it would definitely contribute to their ability to provide better life-saving care of cardiac patients.

As for that Venezuelan presidential candidate, he was one of a group of scientists to attend an HP gas chromatography course last October. And, his was the ultimate in customer response — an order for several HP analytical instruments. Proof that customer training also makes a significant contribution in establishing future customer confidence in HP and its products. □



"It's been more than just a job..."



"When I heard about a job with HP I was a professional house painter," recalls Jack Goodwin. "The building industry was very uncertain then right after the depression. Besides, I was a Palo Alto boy, and because of gas rationing I had to look for something local. My friends told me it was a good group to work for. One of them, Bert Jackson, joined the year before me and is still here as a tool engineer. It's great to work with good people you've known and liked for many years."

□ Weighing the outlook for an HP career, prospective employees would have received some good insight by dropping in on service award presentations held around the company last month. With a little eavesdropping they would have overheard some of the company's veterans reminiscing about their early days on the job, and discussing the future with considerable optimism.

"When I joined just over 25 years ago," recalled Goodwin of the Palo Alto Division, "there were 20 employees, and that included the founders.

"I remember — about a year later when we moved into the redwood building — hearing Dave Packard say that if and when that space was filled we would be as as they would want the company to grow. But of course it just took off from there, and the rest is history.

"There was always plenty of opportunity, and we all worked where we were most needed — the machine shop, shipping, or in assembly. The bosses would be working right alongside of us."

At Waltham, whose history goes back to 1917 (*making it the oldest organizational component in the company*), the veterans spent some time recalling how much slimmer they were when they joined. But mainly they talked about the division's future and its promise ew products, new markets, and new facilities.

Throughout the company during December, some 961 employees were awarded pins emblematic of service ranging from 5 to 40 years. Of these, 593 were for 5 years; 213 for 10 years; 83 with 15 years; 27 with 20 years; 23 with 25 years; and one each for 30 and 40 years. The last two, as well as 15 of the 25-year awards, were claimed by people at the Waltham division.

Including this year's award winners, it is estimated that approximately 40 percent of total HP employees have five years or more of service, and that one out of every eight persons has in excess of 10 years' service. Considering the rapid growth in employment in recent years, these figures clearly indicate exceptionally low turnover and high stability rates far more favorable than national averages for all industry.

The HP awards themselves were made in a number of different ways, depending on the local plant or division preference. In many cases the 5-year awards are given personally by either supervisors or department heads, while other locations held gatherings of those eligible for the longer service awards.

Representative of many HP veterans, Jack Goodwin's role with the company has grown over the years. Today he has responsibility for all wire and assembly testing in the Palo Alto Division's instrument manufacturing section, involving supervision of from 75 to 80 people. Some of his other recollections as he looked back over his 25 years follow below. □

"You know it's been more than just a job in my life. I met my wife here. And dad, who had been an orchardist in the county for many years, came out of retirement during the war to work here as a coffee man. He liked it so much he stayed on for almost 12 years. Even though I joined the company as a painter, I never once touched a brush on the job. I never felt sorry about that."

"A lot of us who joined in those early years hadn't even heard of the word 'electronics'. But the morale was always great. There was profit sharing right from the start for all eligible employees. It used to be figured out and announced each month and paid out in the weekly check. When we had a real good month you would sure hear a whooping and hollering. When it was down, we just worked all the harder. I really think the opportunities are greater than ever."

Hewlett-Packard

January

HP Canada moved into new headquarters in Montreal, opened an office in Edmonton, and expanded facilities in Ottawa and Toronto . . . Annual Management Conference in Monterey had the theme "Resources for Growth". . . HP issued its first annual, hard cover catalog, displaying medical and chemical instrumentation as well as electronics line . . . Colorado Springs Division received $1.6-million scope order from U.S. Navy.

February

HP GmbH in Boeblingen, West Germany, announced plans for a 65,000-square-foot addition to its facilities . . . The company acquired Varian's quantum electronics operation in Beverly, Mass.—later renamed it F&T East . . . Sales for the first quarter, ended January 31, were up 27% and earnings up 13% over first quarter 1966 . . . HP Board of Directors declared a regular semi-annual dividend of 10 cents a share on common stock.

March

Mountain View Division was established to consolidate all HP magnetic recording products and operations . . . Southern Sales Region moved into new Atlanta headquarters building . . . The company's vacation policy was improved to provide an additional day each year for employees with six, seven, eight, and nine years' service . . . Jack Melchor named general manager of Palo Alto (then Dymec) Division, and Don Smith became general manager at HPA.

July

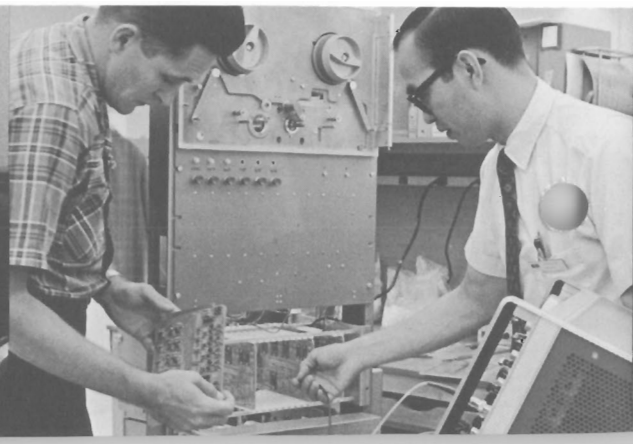
HP began direct marketing of all three disciplines, electronic, medical, chemical, in Australia with the establishment of HP (Australia) Pty., Ltd. headquartered in Melbourne . . . Colorado Springs Division announced completion of its 154,000-square-foot plant addition . . . The HP Board of Directors declared a regular semi-annual dividend of 10 cents a share on common stock . . . Bill Hewlett was elected a vice president of Stanford University's board of trustees.

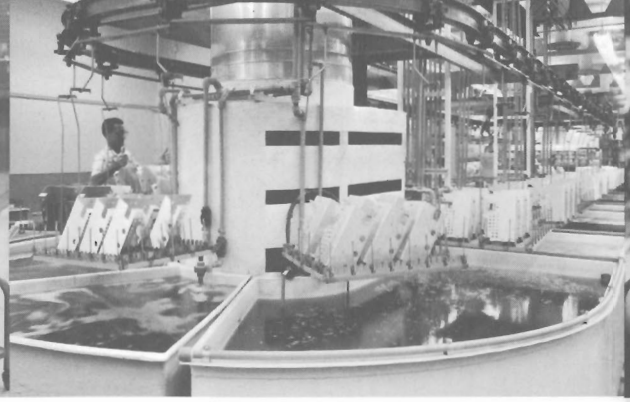
August

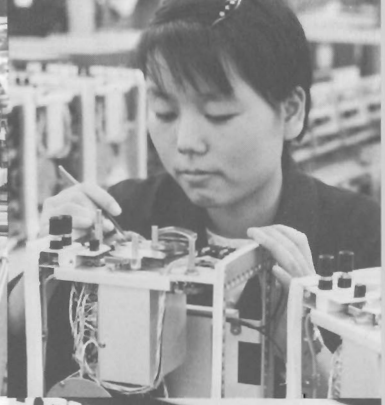
The company introduced 3 dozen new instruments at the annual Wescon show . . . In its 9-month financial report, for the period ended July 31, HP showed sales up 22% and earnings up 20% compared with the same period in fiscal 1966 . . . HP's customer service organization was restructured to improve speed and repair of customer instruments . . . Construction was started on a new area marketing/district sales office in Dallas suburb of Richardson for Southern Sales Region.

September

HPSA announced start of construction of its new headquarters building in Meyrin (Geneva suburb) and new HP France headquarters building near the Paris suburb of Orsay . . . Stan Selby was appointed assistant to the vice president for western operations and Bill Terry named general manager of Colorado Springs Division . . . HP educational assistance program expanded to include job-related courses at junior colleges . . . Jean Chognard appointed general counsel for the company.







Highlights of 1967

April

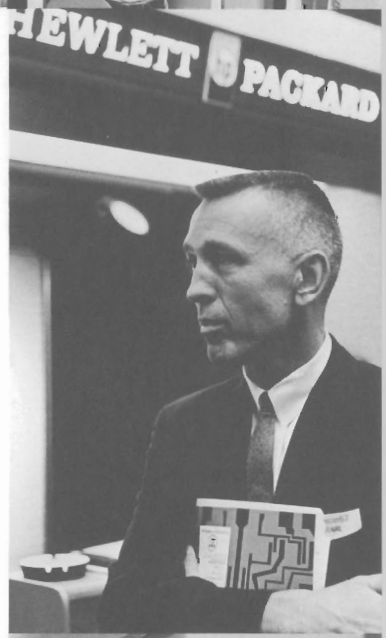
Construction was under way on a new 60,000-square-foot headquarters building at Paramus, N[illegible] for the Eastern Sales Region . . . Dave Packard was appointed by President Johnson to an eight-member advisory committee to study and recommend adjustments in top federal salaries . . . New Neely Sales Region office was completed in Las Cruces, N. Mex. . . . HP distributors appointed in Ceylon and Vietnam.

May

Avondale Division's new 48,000-square-foot plant addition was completed . . . For the six months ended April 30, HP reported sales up 26% and earnings up 23% over the first six months of fiscal 1966 . . . Marketing of Delcon Division products transferred from distributors to HP sales divisions . . . The company distributed $2.4-million to employees under the profit sharing plan . . . HP distributors appointed in Colombia and the Philippines.

June

Thirty-two youngsters awarded HP scholarships . . . HP climbed in Fortune magazine's top 500 company listing, reaching 341st in sales, 241st in net income . . . Building 1A in Palo Alto, a 30,000-square-foot building for HP Labs, was completed . . . The company established a new monthly record in receiving over 24 million dollars in orders . . . A new sales office was opened in the Albany, N. Y., suburb of Colonie.



October

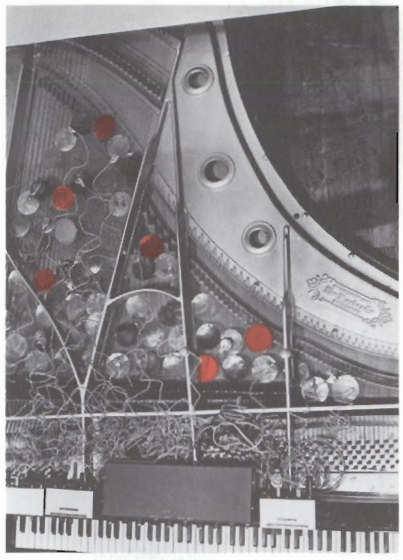
Waltham Division observed its 50th anniversary . . . Three di[illegible]ons get new names—Palo A[illegible] for Dymec, Avondale for F&M Scientific, Waltham for Sanborn . . . HP employment figure went over 12,000 . . . Westinghouse Electric Defense &[illegible]ace Center named HP "vendor of the month" for August . . . Over 300 employees became participants in HP's retirement program, joining 2,100 already enrolled in the plan . . . HP purchased Addison-Wesley building in Stanford Industrial Park.

November

HP established sales subsidiaries in Denmark, Finland, Norway, Argentina, Brazil, and Venezuela . . . International Operations reported its 2 largest-ever orders, one for $705,000, the other for $450,000 . . . John Brown appointed general manager of the Moseley Division in Pasadena, Calif. . . . HPA announced completion of its 65,000-square-foot second building, and HP opened a new district sales office in Oklahoma City.

December

International Operations' Palo Alto staff moved into recently purchased Addison-Wesley building in Stanford Industrial Park . . . For fiscal year 1967, HP reported sales of $243.4-million and net earnings of $20.1-million, or $1.62 per share of common stock . . . The company distributed $2.2-million to employees under the profit sharing program, bringing the year's total to $4,645,000 . . . Emery Rogers appointed general manager of the Avondale Division.



The sounds of

Stars of the world of electronic music, David Tudor, left, and Gordon Mumma create crashing performance that left audience and critics limp. Accordion-like instrument is technically a bandoneon. However, it is the semi-automatic electronic circuits controlled here by Mumma which build the sounds and create the musical continuity. Photo above shows special hookup of piano for performance by Tudor, considered the world's leading avant-garde pianist.

electronics

☐ For centuries songwriters have written about the moon and the stars. But now, thanks to electronics, they are actually plugging into outer space for some out-of-this-world musical compositions.

And not only are they listening to colliding galaxies and clashing atoms. One composer wants to create a symphony for seismic disturbances. Another already uses amplified human brainwaves for a throbbing concerto. A third has tuned in to the earth's magnetic field, while others record the beat of rain, traffic, and the vibrations of the electron itself. You can have a lot of fun thinking up names for such compositions, but the fact is that music—like science, medicine, and industry in their time—is undergoing an electronic revolution of its own.

It has been estimated by one observer that there are now more than 150 music studios around the world equipped for electronic composition. In addition, all of the popular music groups rely heavily on electronic modulation and amplification. And, increasingly, those sound effects and music heard in radio and TV commercials are likely to be of electronic origin.

This is not to suggest that the old ivory keyboard, the violin, or the other traditional acoustic instruments are being abandoned entirely in favor of electronic instruments. But their role is changed, particularly in avant-garde compositions. In many such cases, an accordion or a piano becomes not a maker of the music you hear but rather a source of signals. These are processed through electronic instruments and amplified into orchestrations that would boggle the mind of a Beethoven or a Bartok.

Loudness does indeed seem to be one of the attributes of the modern electronic music. Many rock 'n' roll musicians are reported to be losing their hearing due to the constant battering of noise. And describing a serious work presented recently at the First Festival

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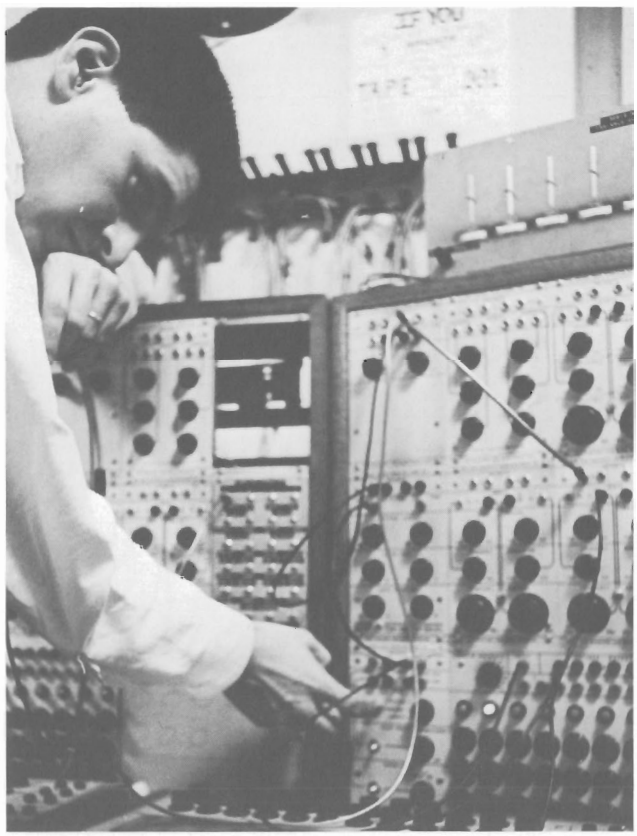
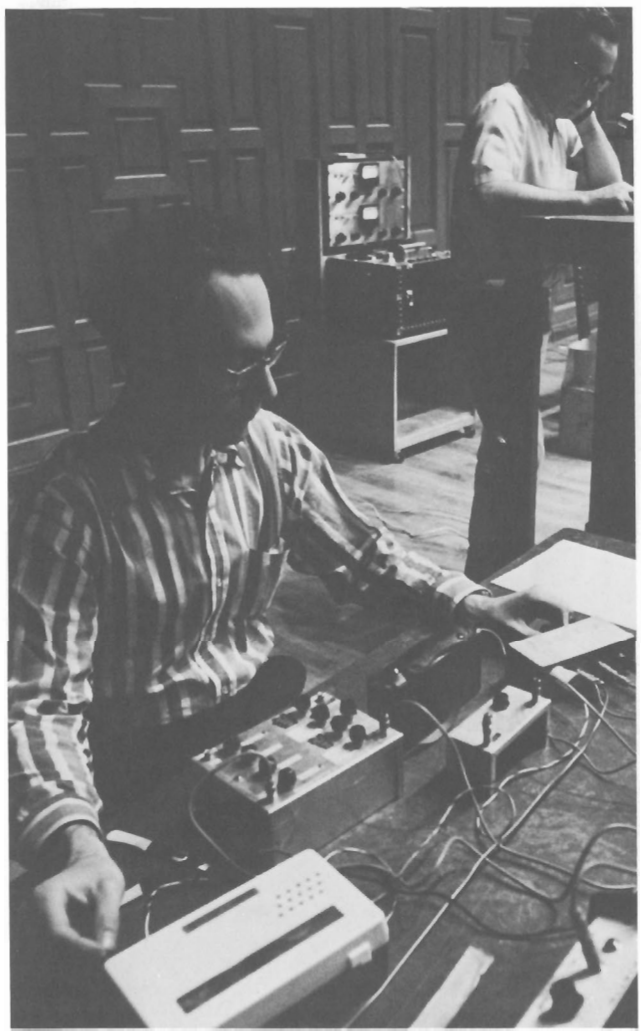


Sound synthesizing console used in the composition of electronic music is explained by Tony Gnazzo, director of Music Tape Center at Mills College. An incredible range of musical sound is possible with such devices. Newer models are now being built in more portable packages.

sounds of electronics



Any sound that can be plugged in and processed electronically is a potential source for musical composition by the new-wave composers. One wants to tune in on earthquakes, another has already used human brainwaves. Here, the voice of Robert Ashley is electronically manipulated by Composer David Behrman to create sounds beyond the imagination of the human ear.

of Live Electronic Music at Mills College, Oakland, one critic noted that "the din at its height reached frightening proportions comparable to that in the engine room of an ocean liner going full speed astern."

Technically, there is no requirement that the new music be loud. Indeed, there is virtually no audible limit to the range, variety, and subtlety of sound obtainable with the newer electronic instruments.

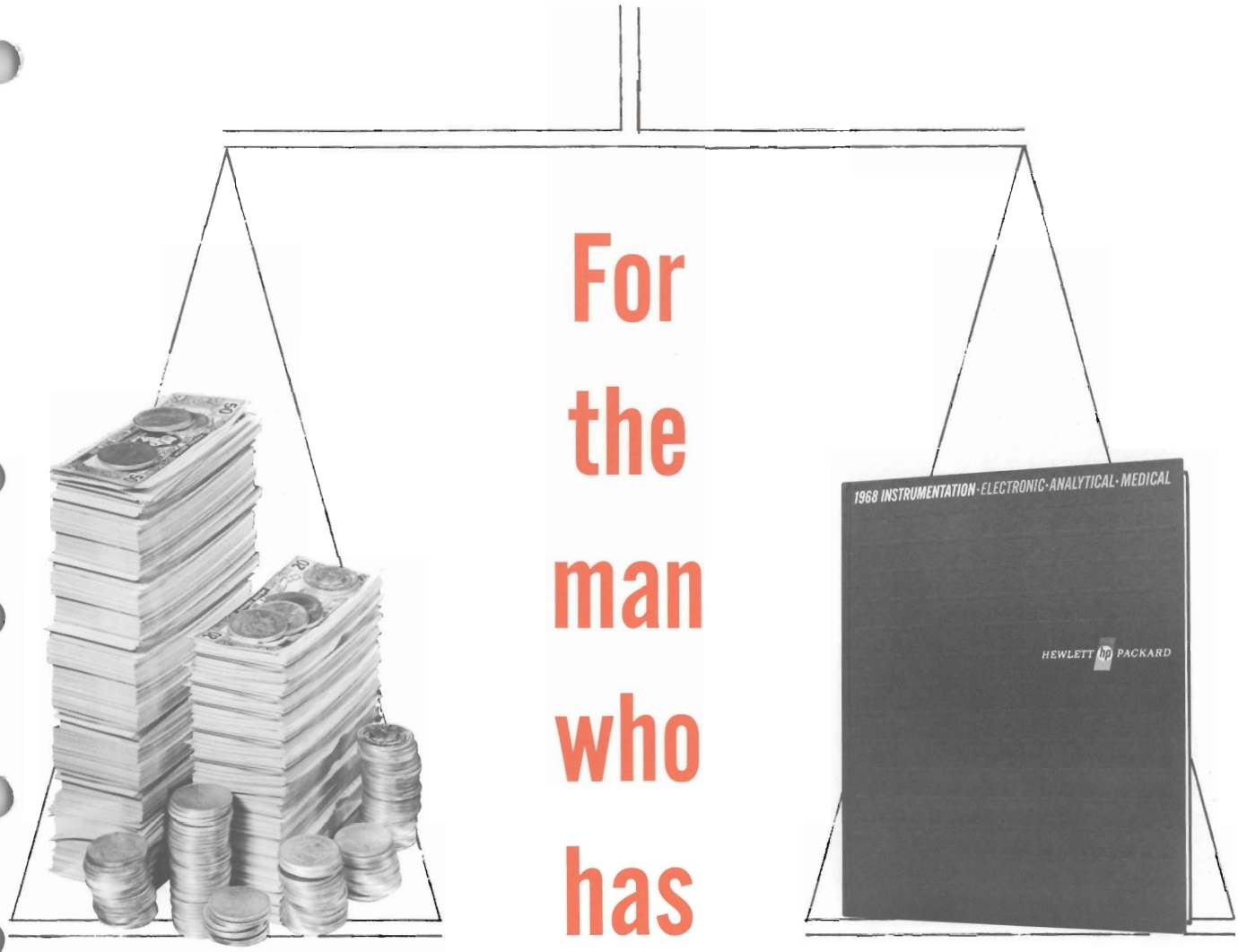
Many HP people would readily recognize the basic circuitry of the music box components. In fact, it would be very possible to combine HP instrumentation to achieve some pretty spectacular musical productions. Trouble is, from the musicians' point of view, the company's products are too specialized and costly compared to their relatively simple needs. Nevertheless, a number of their studios do make use of HP equipment in testing, developing, calibrating and powering the sound synthesizers.

One of the first all-purpose, portable electronic composing modules is located at the Mills College Tape Music Center. This and the newer sound synthesizers now make the composer's work almost a breeze. At his finger tips in a convenient console are clustered such components as oscillators which generate sine, square, sawtooth, pulse and white noise signals; power supply; four-channel mixer; and other units designed to provide dynamic variation of frequency and amplitude through voltage control. A manual keyboard, actually a five-octave voltage control unit, may provide the only recognizable link with the traditional world of instrumental music. Working at Mills, one composer completed in only three days a tape composition that once "would have taken a year" with the old hand-crafted types of electronic instruments.

The new electronic compositions don't necessarily stop with sound. Tony Gnazzo, director of the Mills Tape Center, recently staged a performance which required 20 projectors, half a dozen TV sets, four big weather balloons, four frying pans, video and audio tape recorders, aerosol sprays, dancers, a motorcycle, a rock band, and eight different programs. The objective of such efforts is total take over of the audience by the multiple presentation. All of the senses – hearing, sight, smell, taste, and touch – are reached.

Part of such presentations now often include feedback of electronically produced sound to create a visual analogy to the music. In effect, the waveforms so familiar to the electronic engineer looking at his oscilloscope are turned into an art form.

If it all seems pretty far out, and much of it really is, remember that's what they said about so many now familiar things – including the steam engine, the submarine, television, Bing Crosby, the electric guitar, and soft landings on the moon. □



For the man who has $2,306,277

For the man who claims to have everything, the contents of HP's newly published 1968 instrumentation catalog presents quite a challenge. To acquire the 2,163 products in the five-pound, 649-page publication he would need to invest an estimated $2,306,277, not including taxes and shipping costs.

Actually, he would be the owner of 1,391 identifiable instruments along with 772 accessories. Leading in number of instruments offered is Microwave Division with 318. The Waltham Division leads the combined total of instruments and accessories with 497. However, the Palo Alto Division is pretty well out in front in terms of value, with 107 products given a total market tag of $454,598.

The new catalog, titled "1968 INSTRUMENTATION/Electronic . . . Analytical . . . Medical," is itself a major production feat. Well in excess of 100,000 copies have been printed, and first distribution to customers and company representatives is being made this month.

The 1968 book is the second HP catalog to be published on an annual basis. The many major and minor product changes and replacements occurring each year made this cycle necessary.

So, for the man who has everything, hand him a 1968 HP catalog and let him take off on a brand new experience.

News in brief

Avondale, Pennsylvania — To provide time for college teaching assignments, scientific research projects and community activities, Aaron Martin has elected to relinquish his position as research manager and become a half-time consultant to the Avondale Division. His research group has been merged into the engineering department, under Mason Byles. Additionally, Gene Bennett's corporate chemical applications group has been dissolved; its research-oriented personnel have joined the engineering department, reporting to Charles Euston, and its customer-oriented people now report to John Schmit, training director in the marketing department. Bennett has been appointed secretary of HP's newly formed analytical instrumentation council, and will also have additional responsibility in the area of corporate applications.

Boeblingen — HP GmbH has completed its third building, a 65,000-square-foot plant that provides additional manufacturing space.

Paramus, New Jersey — Eastern Sales Region headquarters, New York area, and New Jersey district offices have moved into the newly completed, 60,000-square-foot facility in Paramus. Later this month they will be joined by Eastern customer service facility personnel and International Operations' Eastern commercial services office presently located at Rockaway, N.J.

Palo Alto — Three HP international marketing executives are receiving new assignments. Dick Reynolds will return to the U.S. in mid-1968 after completing his tour as HPSA managing director. He will be succeeded by Dick Alberding, whose post as manager of HP Inter-Americas has been assumed by Harry Lang, formerly HP's Far East marketing manager and Y-HP co-marketing manager.

Palo Alto — HP has liberalized its sick leave plan. Employees now are eligible for sick pay for their first day's absence due to illness after only one year's full-time employment.

Geneva — HPSA has established three marketing area managerships, paralleling HP's U.S. marketing structure. Serge Goemaere, HP Benelux managing director, becomes area manager for Belgium, France and The Netherlands. Franco Mariotti, HP Italiana manager, supervises marketing in Italy, Switzerland, and West Germany. Dennis Taylor, HP Limited marketing division manager, oversees HP subsidiaries in Denmark, Finland, Norway, Sweden and the United Kingdom. The three area managers temporarily retain their former responsibilities as well.

People on the move

Corporate — Paul Caulfield, to Palo Alto Personnel staff, from asst. personnel manager, Avondale; Jimmy Davis, to product training, corporate Marketing, from Microwave production engineering; Olaf Meyer, to product training, corporate Marketing, from F&T marketing.

CSC — John Miller, to CSC (waveguide), from technician, Microwave (waveguide); Frank Rasmussen, to test engineer (audio), CSC, from test maintenance, Palo Alto Division.

Delcon — James Hood, to development engineer, from Microwave R&D.

F&T — John Mahorney, to in-plant engineering, from production engineer, pulse generators, Colorado Springs; Roger Martin, to marketing staff, from field engineer, HP Australia; Bob Wind, to contract administration, marketing, from same position, Loveland.

Harrison — Dan Calik, to order processing supervisor, from sales; Bill Dudley, to sales engineer, from engineering.

International — Bo Holmstedt, to HP Instrument AB, Sweden, from product training, International Operations; Brian Humphries, to product specialist, Import Marketing, International Operations, from Eastern Regional Manager, HP Ltd. (Slough); Chuck Hults, to Import Product Manager, from field manager, Eastern Sales Region; Lauri Malk, to field engineer, Finland, from product training, International Operations; Dick Mobilio, to marketing services manager, HPSA, from international sales manager, Waltham; Gi Nakatsukasa, to administrative trainee, International Operations, from special projects, Y-HP; Arnold Staufer, to South American sales manager (Buenos Aires), from same position, Palo Alto, HP Inter-Americas; Alex Woodtly, to manager, International Commercial Services (East) from order processing supervisor, International Commercial Services (East).

Microwave — Keith Bayne, to manufacturing engineering from production control; Bill Bowman, to special handling, from R&D; Art Case, to fabrication production control, from production control; Mike Chambreau, to shop production control, from production control; Mike Cunningham, to marketing staff from HP Labs (physical electronics); Ed Fisher, to fabrication production control, from shop services; Glen Fraser, fabrication production control, from production control; Fritz Kohne, to spectrometer production, from special handling; Gordon Pritchett, to fabrication production control, from production control; John Rhodes, to R&D, from production engineering; John Stokdyk, to cost accounting, from accounting supervisor, Midwest Sales Region.

Moseley — Ed Morgan, to manufacturing manager, from production manager; Al Shirley, to stockroom supervisor, from buyer.

Mountain View — Bob Letsinger, to order administration supervisor, from Microwave marketing staff; Don Noakes, to production control expediter-scheduler, from production control, Microwave.

Palo Alto Division — James Brownson, to computer production control supervisor, from Palo Alto computer operations.

Rockaway — Glenn Green, to marketing manager, from sales engineer.

Waltham — George Breed, to international sales manager, from marketing staff.

from the chairman's desk

We now have the final, audited figures for fiscal 1967, and the annual report to shareowners will show that we had a reasonably good year. Specifically, sales rose to $243.4-million, orders were $249.8-million, and net earnings reached $20.1-million or $1.62 a share.

There were noteworthy achievements in many areas of the company this past year. Our field sales people did very well attaining or exceeding their order quotas. Six of our manufacturing divisions met or bettered their return on asset targets, and seven of them reached their shipment goals.

But there were disappointments, too, particularly in the second half, and this was reflected in cash profit sharing last month. Our shipments showed some increase in the second half, but rapidly rising costs caused our overall profit margin to slip.

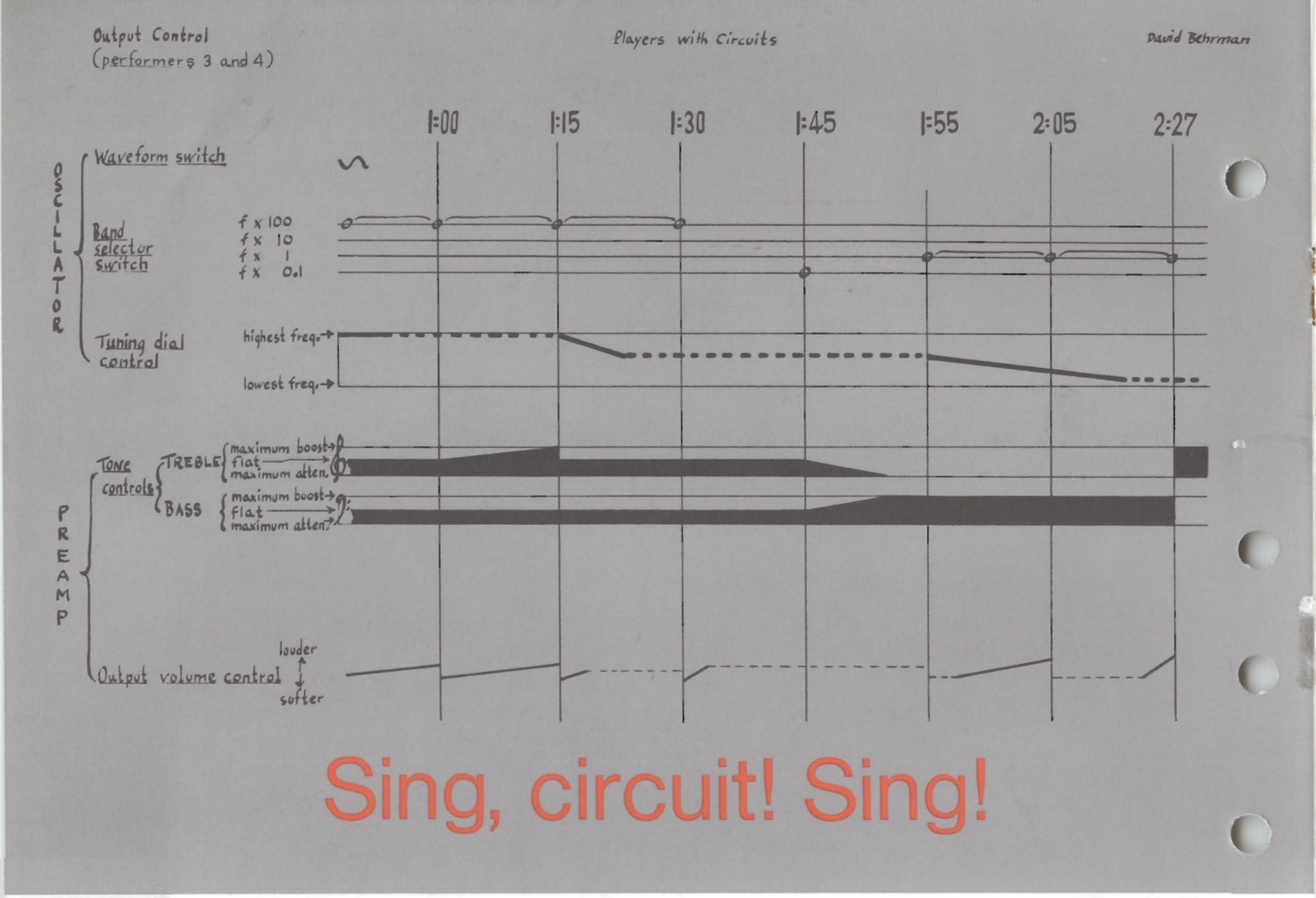
Taking the year as a whole, our failure to get products out the door on schedule contributed more to the slowdown in earnings growth than any other factor. But some serious slippage in meeting controllable cost targets also had a major effect. Many factors influence profits, so meeting one or two targets is never enough. All spending targets must be reviewed continuously in relation to shipment targets. If we find that our shipments are down, then it is doubly important to take another look at our controllable costs to get them in line.

Some of the factors that we will certainly want to take a closer look at this coming year are scrap and rework, inventories, our present policies of instrument obsolescence, warranties, and overtime. Some of these are management responsibilities but others fall on the shoulders of each of us individually. Such seemingly minor things as the proper use of our phones, conscientious control of supplies and parts, and constant care in the work that we do, can make valuable contributions to the company's overall achievements.

Because of our 1967 performance, all of the divisions, the sales regions, and the corporate groups have taken another look at their 1968 targets, and there have been substantial reductions in projected expenditures. These efforts to tighten up on costs will not have an effect on wage and salary programs. Our schedule of merit increases for fiscal 1968 will be carried out as planned.

In place of this year's management conference at Monterey, we are holding a series of one-day meetings during January at a number of plant locations in the U. S. and Europe. We will spend very little time reviewing the past year, preferring to devote the major portion of the program to ways in which we can improve our performance during 1968.

I feel confident, in light of the progress that has already been made, that out of these meetings will come an enthusiasm for improvement that will spread to all levels of the company. For it will only take a little extra effort on the part of each one of us over the next nine or ten months to bring our costs into line, to achieve a significant measure of growth for our company, and to fulfill our personal goals and aspirations.



Sing, circuit! Sing!

Yes. It's true! That really is music. It diagrams part of a work that "integrates electronically modified conventional instruments with synthesized sound sources." CBS Composer David Behrman presented it at the First Festival of Live Electronic Music given at Mills College, Oakland, in December. On the same program was heard a work created by the spinning electro-magnetic particles which track between the poles in the magnetic fields above the earth. Both are representative of the far-out sounds musicians are creating with the aid of electronic instruments familiar to HP people. For more on this trend see pages 10–12.

Measure

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