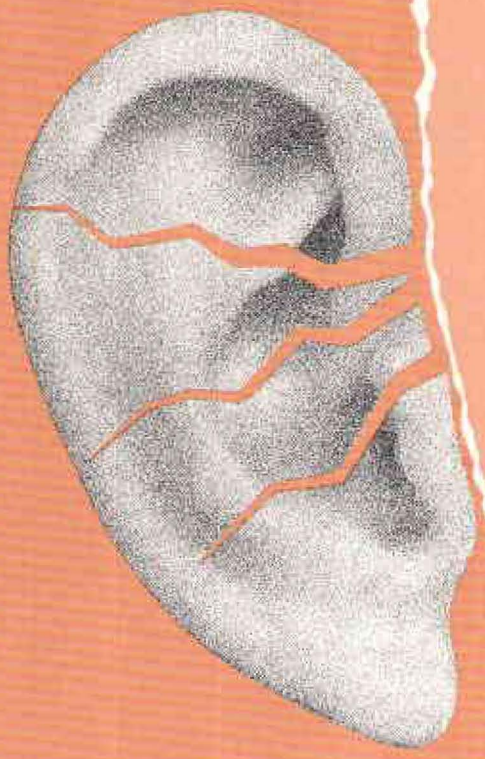


Measure

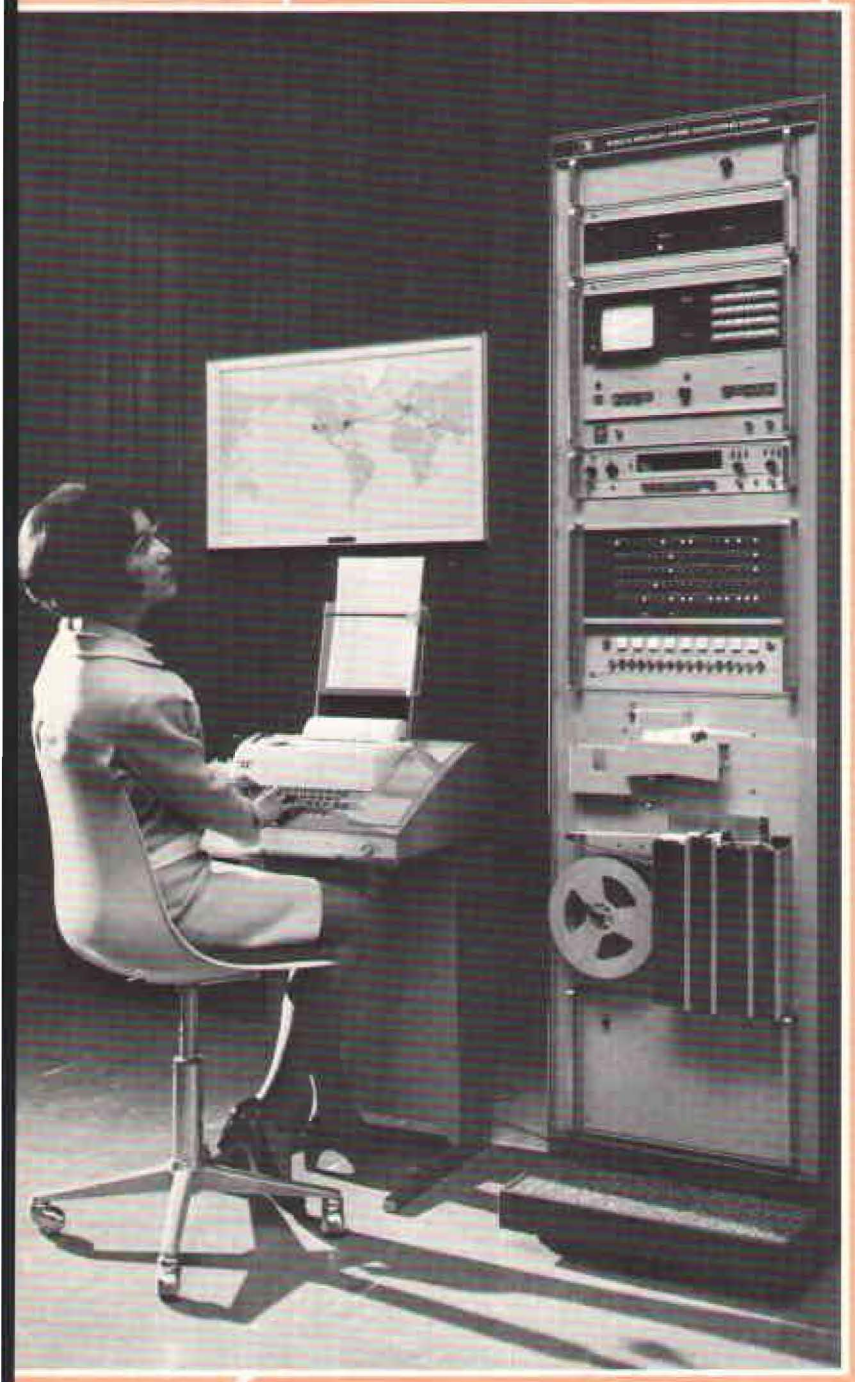
For the men and women of Hewlett-Packard/JUNE 1969

The racket busters of Boeblingen

□ For years, it seems, Flight "X" out of the Stuttgarter Flughafen — a well-used international airport just a few miles east from the HP GmbH plant at Boeblingen, West Germany — has gotten away with early-morning mass murder. Each weekday, near the ungodly hour of 2 a.m., the jet would blast off at full power, effectively killing the silence and serenity of the half-dozen or more villages surrounding the Stuttgart field. Everyone knew "X" was guilty of exceeding the noise-limit regulations. The pilot knew they knew it — because of the many complaints registered. But little could be done about it as no means existed to pin the acoustic crime directly and scientifically to Flight "X." And the pilot chose to ignore the situation because his way was faster — and he was always in a hurry.

Well, Flight "X" has at last been brought to heel. Tonight, should he choose to gun his engines excessively or fly outside of the prescribed flight pattern, he will do so with the knowledge of certain detection — instantaneous instrumented scientific certainty — followed by corrective action directed by the control tower. The basis of that certainty is a monitoring system developed and produced at the nearby Hewlett-Packard plant.

As the product brochure for this system states: "The Hewlett-Packard 80500A Aircraft Noise Monitoring System is designed to measure sound level at a number of locations in or around an airport and then immediately process the data at a central location to provide results in the optimal form for evaluation by relatively untrained personnel. These



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Aircraft violating noise-limit regulations at Stuttgart stand very little chance of escaping detection by the HP Noise Monitoring System installed there recently. The system, first of its kind, features seven terminals positioned around the airport to pick up all takeoff signals and transmit them to the central station shown here. When reference levels are exceeded, the computerized central station logs all pertinent data. Shown above is a plot profile of sound-level variations as recorded for a jet transport on takeoff — actually not part of the Stuttgart system. Control tower operators can make use of system to direct corrective action while flight is still in progress or use tape for later study. The central station here consists of an HP scanner, spectrum analyzer, counter, computer, paper-tape reader, high-speed punch, and teletype.

Looking something like a short flagpole, outdoor microphone is attached to roof, below, of a noise monitoring terminal building. Inside, Helmut Finkh, R and D project leader at left, and Rainer D'Arcy, acoustics product manager, conduct final testing at one of the seven terminals around airport.

the racket busters

results can be used to determine effective methods of reducing the annoyance to neighbors of the airport and to detect deviations from preset flight routes or unusually low flying. The system can even identify evasive flight maneuvers which a pilot might perform to avoid detection at a Noise Monitoring Terminal."

The Stuttgart noise abatement installation is a landmark (or airmark?) not only for HP and Stuttgart but also for Europe and, it is believed, world aviation — and the public which is increasingly annoyed and concerned over sonic disturbances. It is the first system having such comprehensive monitoring capability and could very well be the prototype of many more to come.

In West Germany, for example, the Bundestag is considering a new law which would require the installation of aircraft monitoring systems in all its civil airports — 12 in all including Stuttgart. In the United States regulations are in the works both for subsonic jet aircraft operations and for other aircraft — such as helicopters — that operate near city centers and suburbs. Above and beyond these, of course, is the whole other problem of sonic booms, and the supersonic transports due to be introduced during the next few years. This particular problem, however, is generally considered to pose a question more to federal and international agency regulation rather than to the individual municipal airports. Because of this, in fact, the Stuttgart system screens out sonic booms.

Aviation people are hopeful that the ability to regulate noise will help bring an end to the "chicken or the egg" conundrum, the "who came first" hassle that has plagued relations between airports and their neighbors for years. In the early days of commercial aviation, many cities established their proud new airports in what they hoped would remain the uncluttered countryside. But as the air industry grew it created its own way of life. Airports became magnets for their own employees, for service and supply organizations, and for travelers. Since the advent of jets, a great many salesmen have moved into nearby communities, the better to commute by air. Similarly, many companies locate their offices near these same airports, the better to send out and receive products and representatives. In effect, aviation has created a whole new community of its own, clustered around airports in much the same way the maritime industry created seaports. The Stuttgart Airport, for example, now has between 15,000 and 20,000 people living close to its boundaries, in place of the handful of farmers who previously occupied the land. At the same time, traffic handled by the runway has risen significantly to several hundred takeoffs and landings per day. More significantly, protests against jet aircraft noise rose almost to jet-engine pitch.

How does the 80500A system work? First, noise monitoring terminals including microphones were installed in each of the seven villages surrounding the airport. The aircraft noise received at these terminals is converted into electric signals which are sent via telephone wires to a central station. The signals enter the central station via a computer-controlled scanner which selectively relays data to an HP counter which in turn transmits measured data to the small HP computer. The computer converts the counter readings into sound levels and other facts that summarize the irritation level of the noise. A time-base generator program clocks the data second by second, day by day. Results are printed out to show excess levels and are also taped for later study and use. Most important, the results are available in easily understood form in time to take action — even while the offending aircraft is still in the vicinity and can thus be warned or ordered to change course. The system offers a further bonus because the computer can be used for general-purpose off-line computations.

At the Boeblingen plant, which has a very strong acoustics lab program going under Heiner Blasser, the hope and the betting is that Stuttgart Airport is just the first stop. Surely more large aircraft noise abatement systems will be wanted around the world. Anyone interested in furthering that cause can start by phoning the friendly airport manager the next time Flight "X" buzzes dreamland on takeoff. □

Since aircraft noise at Stuttgart Airport had raised considerable controversy, the installation of noise monitoring system was of wide public interest. Here, Rainer D'Arcy conducts press conference at terminal. Map shows locations of the various terminals.

Her Majesty is graciously pleased...

Proud of their product, proud of Queen's Award is this HP Ltd. team responsible for microwave link analyzer: Peter Carmichael, team leader, is at center; Dennis Taylor, HP Ltd. managing director, is second from right. Other members are Finlay MacKenzie, Lance Mills, Alistair Lucas, Owen Livingston, Alan Bradley, David Leahy and Harry Elder; absent were Tom Crawford and Don Reid.

☐ If Paul Revere and all those other troublemaking American colonials hadn't severed the ties of empire with Britain so completely, perhaps Hewlett-Packard would have won a Queen's Award years ago. Well, the wait may have seemed long, but — to a dedicated team of engineers at HP Limited's plant at South Queensferry, Scotland — it was worth it. Thanks to this team's efforts the company has indeed won this highly coveted award.

The official citation issued in April said that the Queen "Has been graciously pleased to confer Her award for technological innovation in microwave link analyzers." In announcing the electronics development award it was noted that the analyzer represented "a breakthrough . . . that is significantly improving and maintaining the standards of both worldwide microwave telecommunications and colour TV links . . ."

There is a growing body of evidence to support that claim. One of the large orders received from British sources came from Her Majesty's Post Office itself, to be used in the microwave trunk radio relay network. There is also a very substantial volume of business expected in export sales. Many overseas orders have already come in, including a substantial one from the U.S.

The HP Limited people are naturally very enthusiastic over the product and the recognition it has won from Her Majesty's government. Dennis Taylor, the managing director, said, "The award is, of course, a great tribute to that section of the team, led by Peter Carmichael, responsible for the conception and development of this analyzer; but it is regarded also as an honor for all working in the company, because in their various spheres of activity they have made their contributions to the successful growth that Hewlett-Packard Limited has enjoyed since its establishment in Britain eight years ago." ☐

John Dockstader focuses videotape camera on work operation in Waltham's machine shop area — but only with the willing cooperation of the people involved.

Waltham's methods actors

□ Instant replays as practiced at the Waltham Division may lack the drama of a Superbowl touchdown and have little in common with World Series heroics at nearby Fenway Park, but they have won a high rating at the Route 128 plant. In particular, videotaping has become a useful technique in permitting Waltham-plant people to observe, analyze and revise their own work methods.

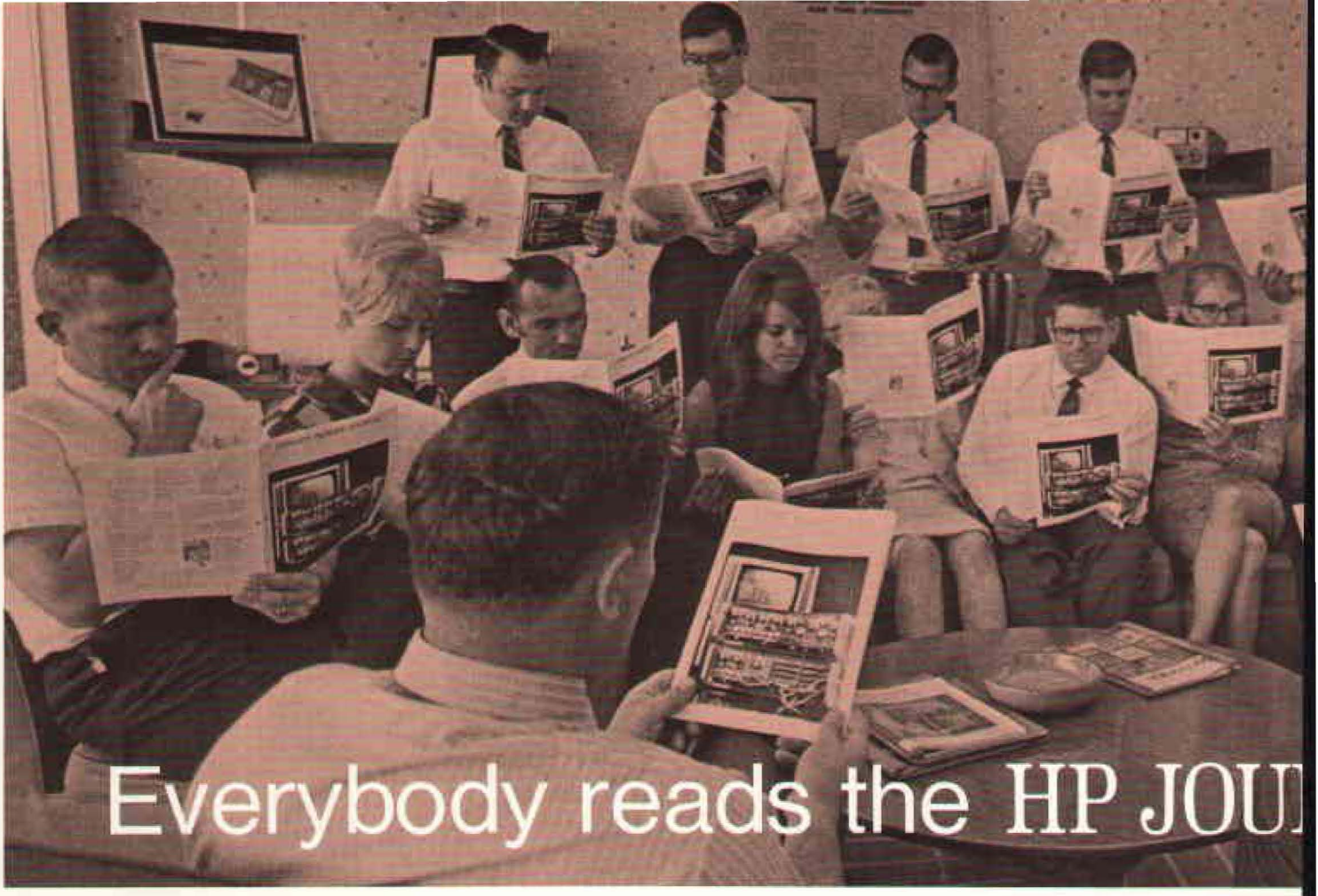
John Dockstader, a division tool engineer, came up with the idea of using videotape for methods improvement during a convention of the American Management Association in New York last year. There he saw many demonstrations of the effectiveness of videotape in training new people. Why, he asked himself, couldn't it be adapted to improving the methods of people who already were trained in their jobs? Help them work not harder but smarter?

Burt Dole, the division's manufacturing manager, saw things the same way. It helped, of course, that the division had previously equipped itself with videotape equipment for training of customers and sales people.

An ardent supporter of this new technique, John Black, fabrication manager, promoted its use in the shop. As a first subject, Black and Dockstader selected the milling department. Studying the recorded action or the video monitor allowed a machinist, Bert Lomas, to make important changes in the operation of milling parts. Figures show he was able almost to double production of the work in process.

Such extraordinary results are highly unlikely in most situations. What the camera has revealed in a number of cases has simply been the opportunity to do a job with less physical effort and complexity, thus reducing end-of-day tiredness and mistakes. In the dozens of operations recorded on the shop floor, every one has been done with the cooperation—the enthusiasm, in fact—of the people involved.

"It's really a communications method, not a manual," says Dockstader. "After we tape a fellow at work he can play it back as often as he wants. After a while it becomes very clear if a certain action is unnecessary. Basically, he is creating his own solutions. It's fun too." □



☐ That's true . . . to a large extent. In the world of technical electronics publications, Hewlett-Packard's JOURNAL is very probably highest in circulation and possibly also in readership. Publishers of other monthly magazines in this field claim figures well below the 185,000 HP JOURNALS that will be mailed throughout the world this month.

Who actually reads the JOURNAL? The basic audience is people professionally concerned with electronic measurements. It's a worldwide audience, too, increasingly international in makeup, reflecting the company's fast global growth. For the most part they are people who freely use higher mathematics, which sometimes appears in JOURNAL articles.

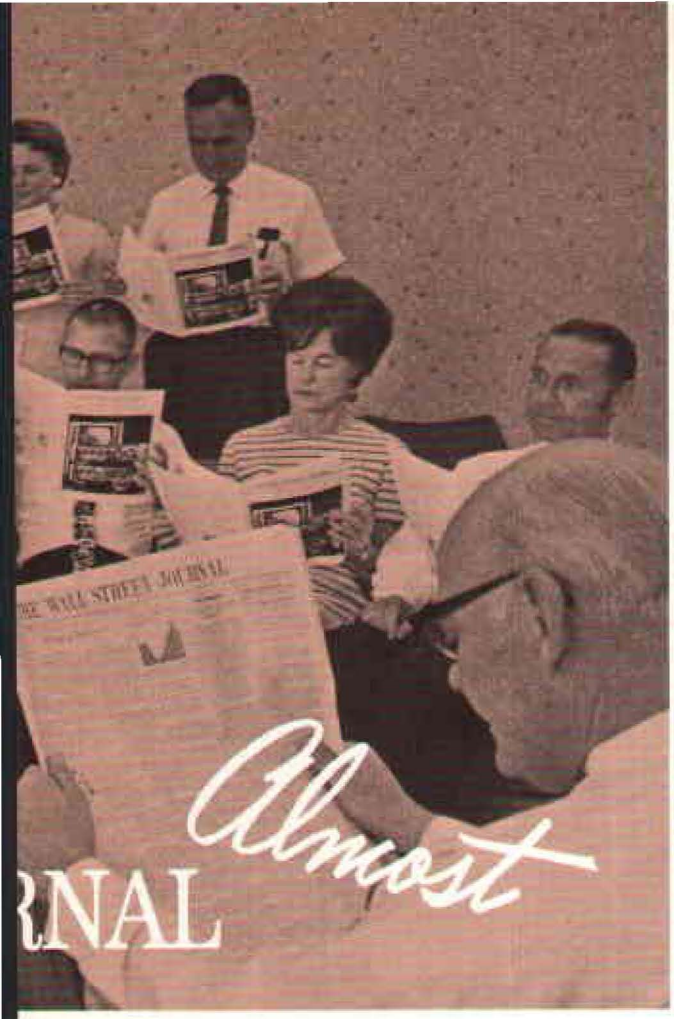
Who writes for the JOURNAL? Since the magazine is the company's official medium for disseminating technical information from HP's various product engineering laboratories, authors almost without exception are HP engineers and scientists involved in product development.

Competition for publication in the JOURNAL is quite keen. As Editor-in-chief Ross Snyder admits, the ultimate decision on what articles are accepted, and which rejected, is a most difficult one: "HP produces far more new engineering developments than we can possibly report in the JOURNAL's approximately 20 pages each month," he said. "Moreover, every article represents an HP investment of several thousand dollars. We try to be fair to everyone, first considering the interest of our readers. But we also bear in mind that the company is paying the bill and is entitled to a fair return, and we remember that part of the JOURNAL's basic mission is to give HP technical people credit, where credit is due."

At present two professional editors assist Ross in working with the selected authors. Larry Shergalis and Dick Dolan are both graduate electrical engineers. Each also has a graduate degree, Larry in law, Dick in EE. Generally they get together with authors two months before deadline.

According to Dolan, "One of the universal problems is lack of time for writing. It takes time to produce polished prose. Another problem is that the engineers are so close to their subject they often assume the reader knows more than he actually does. It's our job to make the articles understandable to the JOURNAL's broad audience."

Technical accuracy is another major consideration. The authors have the prime responsibility to supply accurate information, since their names will appear with the articles. In addition to the considerable support the editors can give them in this regard, there is also an informal technical review. Many senior engineers and scientific people in the company are asked from time to time to pass on the technical acceptability of manuscripts.



Graphic illustrations for the *Journal* are very carefully conceived to provide display of data that is accurate, easy to see and pleasing to the eye. Here Editor-in-chief Ross Snyder discusses typography with Maridel Jordan, *Journal* production assistant. Use of many mathematical and technical symbols make this a very critical phase of production.

Future article in HP *Journal* is discussed during this story conference at San Diego Division. Subject is the new HP Model 9125 X-Y Plotter, which the authors — Tom Vos at left and Dan Allen, center — helped develop. Larry Shergalis, *Journal* editor at right, will work very closely with the authors in preparing drafts, developing illustrations and getting all materials ready for publication.

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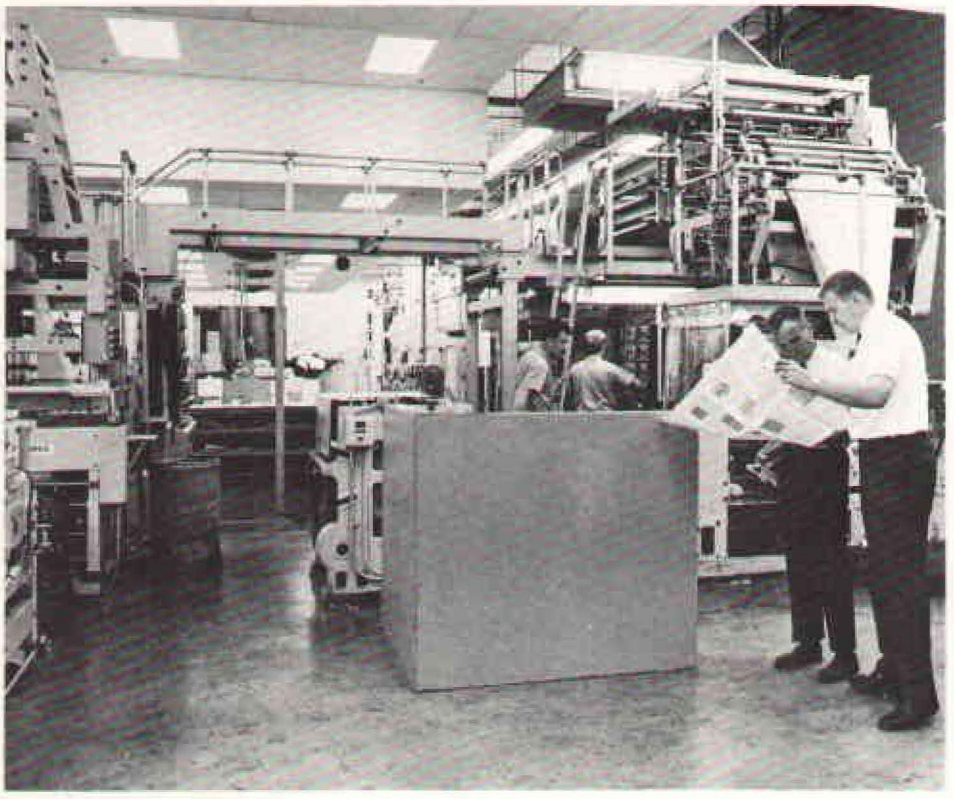


In the world of trade publications the HP *Journal* is definitely a major leaguer. Its 185,000 monthly circulation requires constant attention to the economics of printing. This now calls for a high-speed web press that prints from giant rolls of paper much like big newspaper press — but far more precise. Larry Shergalis, editor who also doubles as production chief, is shown here, at left, checking press proofs with Jim Stark, production supervisor for Los Angeles Lithograph Company which has printing contract. In photograph below, copies of the *Journal* move through bindery operation that staples, trims and bundles the issue ready for mailing.

the HP JOURNAL

Today, of course, the JOURNAL does not serve all of the audiences HP must now reach. To that end the company supports such other technical publications as ANALYTICAL ADVANCES published by Avondale Division, MEASURING FOR MEDICINE by the Waltham Division, and KEYBOARD from Loveland Division for owners of HP calculators. Although differing widely in subject matter, all share in the objective of bringing useful or newsworthy information of high technical value to audiences needing it.

How well do they succeed at this? Well, the JOURNAL has a habit of showing up at or near the top of the list in readership-recall studies and other such surveys made by publishers. It has even received a few queries from advertisers about the possibility of purchasing space! No question, the JOURNAL's circulation is very valuable. Electronics advertisers — not excluding HP divisions — would willingly pay for the right to advertise in it.

But the editors don't see that as a likely or desirable prospect. "The JOURNAL is not an advertising or promotional medium," says Snyder. "It's an HP technical information channel. We wouldn't want anything to change that."

Such concern for the reader goes a long way in explaining why — on the eve of the 20th anniversary of its founding by Frank Burkhard — the JOURNAL continues to grow in technical stature as well as circulation, issue by issue. □

Unit of the first production run of new computing counters is checked by Dick Ollins, engineering project leader, prior to shipment. The 5360A is outstanding not only for its performance but also because of the many new features and approaches used in design and production. For example, projecting above counter is new type of display device, using HPA's light-emitting diodes, for testing register boards.

Inside that conventional-looking counter beats a computerized brain — and 458 integrated circuits. Indeed, the 5360A goes a long way in establishing a claim among electronic instruments as the

First of the New Breed

☐ One of those Murphy-type "laws" states that even though something is just barely possible, if enough people come to think of it as desirable or useful then ways will inevitably be found to make it practical. Some of the workings of that Irish imperative seem to have been actively involved in the creation of HP's new 5360A computing counter.

The F&T project was, first, a demanding technical one: the concept for it existed years before the technical means were achieved that made it feasible. In fact, efforts were started in design for the computing counter several years prior to the availability of integrated circuitry. It soon became clear, however, that it might finish up as a power-hungry instrument on the order of four feet tall. But the concept was kept alive, and as IC technology came into being the F&T engineers saw a whole new road open. Three years ago the team that built the 5360A was formed.

A high priority was assigned to the activities of the team. Everybody on it understood and appreciated the fact that the 5360 had to be more than just a significant contribution to measurement technology. Much of the market leadership in counters that HP had earned through its pioneering efforts was at stake. The need was not only to boost HP's position in the market but give an upward jolt to the market itself.

With that kind of a goal and with an increasingly complex technology involved, the project was more than ordinarily demanding on the people who conducted or supported it. Very few of them were in a position to view the entire progress of the instrument's development. For three years, in fact, some of them saw only a parade of requisitions for more hours and money. In the face of this, however, the project engineers discovered a widening interest

(continued)

the new breed

Of the 458 integrated circuits used in new counter, 86 have been designed and produced by HP. Here, packages of the miniature circuits receive final test on HP-designed test system operated by Evelyn Homel. Test puts ICs through hot, cold and room-temperature cycle.

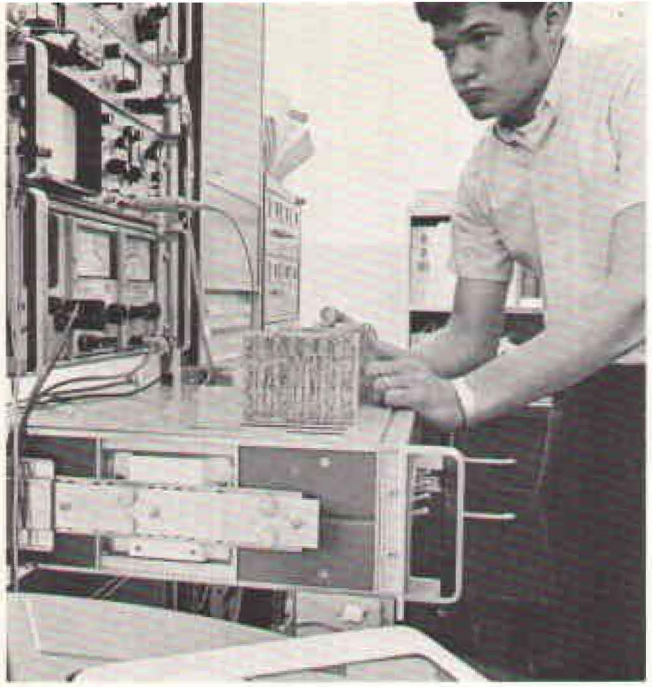
Versatile computational abilities of new counter are based in large part on extensive use of printed circuits and IC's. Here Gladys Kinney works on artwork for new PC board.

and enthusiasm not only among their own members but throughout F&T Division, the integrated-circuit department people who worked on the special IC's (putting into one package what had taken nine before), and in other areas of the company. Murphy's law was on the move.

The result is an extraordinary instrument, one that a recent issue of ELECTRONICS magazine said was "Probably the most technically significant instrument at the (IEEE) show . . ." The HP news release that officially announced it to the world did so with an untypical preface stating that "everything electronic counters have done before is done better — a hundred, even a thousand times better in some respects . . . it will also do some useful things no electronic counter could do before!"

Indeed it will do many remarkable things, such as enable scientists to measure accurately to within one foot of the moon because of the ability to count and compute reflected signals with exactitudes of one nanosecond or better. But this is not the place for technical details. Suffice to report here that the 5360A is, as its marketing staff claims, "an order of magnitude" ahead of anything else in sight.

There is always that big question, of course, as to "who wants a $6,500 counter?" (That indeed is its price tag, complete with input module.) Indications are that a great many people will want one, particularly after they have had some coaching in the many new and different things the 5360 will do for them. In addition, HP sales organizations that have been introduced to the instrument also have responded very positively to the 5360 after some initial concern over price. Market research has confirmed that many potential applications exist in entirely new areas of industry, many of them unknown at this time. All in all, F&T feels confident that the new counter will meet the goals set for it and become a contributor to the division's growth and profitability on the same order as the 5245 counter line — the most successful



Computerized system tests integrated circuit boards by comparing them with identical board known to be flawless. Dave Kuykendal conducts the comparator test.

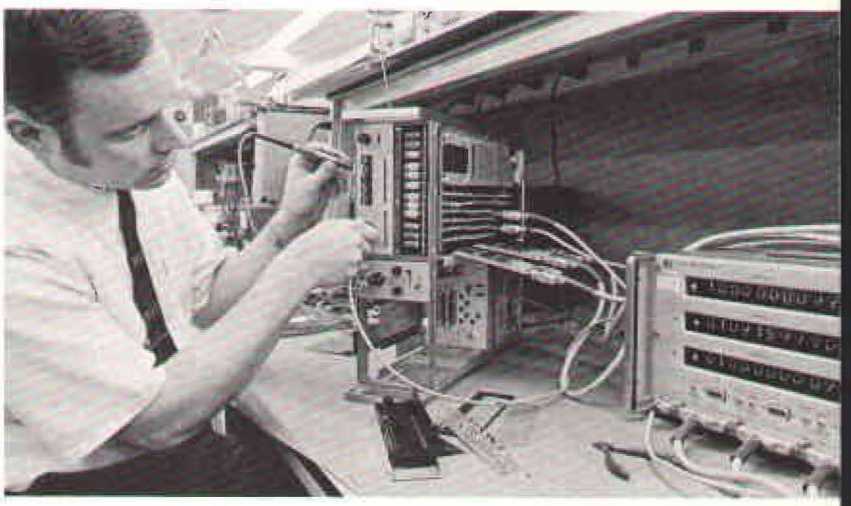
HP product line to date. In support of this optimism the F&T men like to recall that the original forecast in 1952 for the 524 counter was that, at $3000 (considered very expensive at that time) about 100 of them would be sold to certain crystal manufacturers — then stop. Of course it sold in the thousands as a standard instrument and led to the transistorized 5245's.

For F&T and Hewlett-Packard, then, the computing counter is significant in itself. But beyond this, though, is the fact that it is the first representative of the new kind of computerized instrumentation that has been predicted for many other HP traditional lines. In effect, the 5360A contains its own small, built-in computer. It's not just a case of incorporating a new technology in a new instrument. Rather the ability to compute is an essential function of the measurements it makes.

In turn, the circuitry and complexity required to bring this about also entailed or has suggested new methods for the design, manufacture, and testing of instruments. Among these was, for example, programmed wiring for making some 2,000 interconnections. Then special automatic testing was developed to test those connections — all in the matter of one second if no problems occur. Similar computerized comparator tests were developed for the PC boards. Also inside the machine is a variety of self-checking or calibrating features. As in the Loveland calculator, the circuit boards can be readily replaced on the spot by field service engineers.

Certainly the crowds that gathered about the 5360 demonstrations at the IEEE show in New York last March were enthusiastic and reassuring. Very much so. All except one fellow who just couldn't believe the instruments could possibly do all the things that were being claimed for them: "Why don't you tell us what you've got hidden behind that booth," he challenged. "I just know there's a big computer back there running those little machines." □

Nearing end of production line, maze of wiring is organized by Jean Gilles. Counter's back plane features more than 2,000 interconnections made by automatic machine.



Engineering team now is concentrating on improvements and accessories. Bench check is performed here by Roger Smith. More than 30 man-years went into the development of the instrument. Market prospects are very bright.

News in brief

Cleveland — Midwest Sales Region people in the Cleveland-area sales and service office have moved to new leased quarters. The new address is 25575 Center Ridge Road.

Palo Alto — The company reported significant gains in both sales and earnings for the six-month period ended April 30. Sales totaled $151,959,000, a 19 percent increase over sales of $127,513,000 for the first half of fiscal 1968. Net earnings amounted to $11,688,000, equal to 93 cents a share on 12,608,317 shares of common stock outstanding. This compares with 1968 first-half earnings (restated to reflect the retroactive effect of the 10 percent income-tax surcharge) of $8,903,000, equal to 71 cents a share on 12,523,504 shares. President Bill Hewlett said that second quarter sales totaled $80.4 million, a gain of 12 percent over the first quarter. Incoming orders for the second quarter reached a new high of $87.8 million, bringing first-half orders to a level of $164.4 million, representing a 23 percent increase over orders of $133.3 million for the corresponding period of 1968. A substantial portion of this business, over 30 percent, came from international customers. Hewlett said all product groups are contributing to the company's higher level of business in fiscal 1969.

Santa Clara — Occupation of the company's big new Santa Clara manufacturing facility became official on June 7 with the move in of plant management people, including the division manager, Al Bagley. The division, formerly Frequency & Time Division, now takes the name of Santa Clara Division. Last month between 600 and 700 manufacturing, marketing and engineering people transferred to the new plant from the HP facilities in Palo Alto. Several departments have yet to make the move, including those in digital analysis, standards, and integrated circuit manufacturing. They will do so following completion in September of the second phase of construction at the 300,000-square-foot Santa Clara complex located approximately 12 miles south of Palo Alto headquarters.

Palo Alto — David Weindorf has been appointed general manager of HP Associates, the company's Palo Alto-based subsidiary that manufactures diodes, optoelectronic devices and photoconductors. He succeeds Don A. Smith, who resigned to enter the venture capital field. Weindorf joined HPA's semiconductor group in 1963, serving as chief engineer, manufacturing manager and semiconductor manager.

People on the move

Corporate — Tom Snodgrass, to computer programming, from R&D, F&T; Bob Clark, to marketing services, from data processing supervisor, Customer Service Center; Charles King, to videotape production, Product Training, from Microwave marketing; Kiyohiko Kadoya, to Customer Service Center repair, from Y-HP.

Data Products Group

Cupertino — Dick Shannon, to quality assurance, from Microwave quality assurance.

Mountain View — Bill Lyon, to fabrication supervisor, from fabrication supervisor, Manufacturing; Dick Monnier, to engineering manager, from electronics research, HP Labs; Al Pozzo, to R&D, from production engineering, F&T; Papken der Torossian, to R&D section manager, from frequency standards, F&T.

Palo Alto — Walter Steele, to plant engineering, from Corporate Engineering; Pete Bonnet, to materials staff, from materials handling, Manufacturing.

Operations Group

Avondale — Paul Caulfield, to personnel, from Corporate Personnel.

Avondale West (Palo Alto) — Attilo Malera, to R&D, from Avondale; Bob Moody, to manager, from physical electronics research section leader, HP Labs; Harold Rocklitz, to R&D, from physical electronics research, HP Labs.

Loveland — Bill Barton, to personnel manager, from engineering; Gary Ruppel, to personnel staff, from Corporate Personnel; Jerry Woodland, to manufacturing engineering, from signal analysis, Microwave.

Waltham — Keivan Towfigh, to engineering project leader, from project engineer; Walt Henry, to plant engineer, from production engineering; Joe Brown, manufacturing engineering manager, from production engineer.

Palo Alto Electronics Products Group

HP Associates—John Minck, to solid-state display manager, from marketing manager, Microwave; Dave Jordan, to personnel manager, from Corporate Personnel.

Manufacturing—Norman Galassi, to materials staff, from product design, HP Associates; Alan Groves, to accounting, from printed circuit manufacturing; Frank Williams, to personnel manager, from Corporate Personnel.

Microwave — Jim Otts, to marketing, from systems; Ed Sweeney, to photo shop supervisor, from photo shop, Colorado Springs; Howard Martin to signal analysis, from microcircuits; Charles Epps, to marketing, from production engineering; Wayne Frederick, to components, from marketing.

Santa Clara (formerly F&T) — Dick Buchanan, to computing counter marketing, from R&D; Randall Goodner, to computing counter marketing, from instrument manufacturing; Dan Bechtel, to materials handling manager, from materials handling manager, Manufacturing; Ken Capen, to personnel manager, from personnel manager, San Diego; Larry Deeley, to marketing staff, from marketing staff, Microwave; Ed Pineda, to materials handling, from quality assurance, Manufacturing.

Systems—Tosh Kondo, to engineering, from materials staff, Manufacturing; Scott Grundemann, to quality assurance manager, from Corporate Service Center; Edward Miller, to engineering, from semiconductor R&D, HP Associates.

Eastern Sales—Rod Foley, to regional sales manager/basic instruments, from area manager, Syracuse; Al Kennedy, to area manager, Syracuse, from district manager, Rochester; Joe Arcidiacono, to district manager, Paramus, from account manager, Paramus; Bruce Barnes, to account manager, Paramus, from field engineer, Paramus; Phil Nace, to account manager, Paramus, from field engineer, Paramus; Steve Stark, to field engineer/computers, Paramus, from computer applications engineer, Paramus; Guy Capone, to field manager/medical, King of Prussia, from medical sales representative, Baltimore; Al Walcek, to account manager, Rockville, from field engineer, Rockville.

Neely — Frank Rasmussen, service staff, Portland, from Customer Service Center.

From the president's desk

Last month our Board of Directors held its regular meeting in Geneva, where our European activities are headquartered. This was the Board's first meeting outside the United States, and also marked the tenth anniversary of HP's operations in Europe. It was in 1959 that we established Hewlett-Packard S.A., our Geneva-based subsidiary which is responsible for all of our operations in Europe.

Following the board meeting, the directors participated in the official opening of HPSA's new building. This event included an Open House attended by the Mayor of Geneva and other civic dignitaries, as well as our Swiss customers, suppliers, neighbors and friends. Also joining us for the occasion were several directors of our HP subsidiary companies in Europe.

That evening many of us from HP got together for an informal dinner which was attended by our Swiss directors, Mr. Max Gamper, Dr. Maurice Merkt, and Mr. René Merkt, our German directors of HP GmbH, Dr. Carl Hauss and Dr. Herman-Siegfried Graf du Münster, and by Mr. Kenneth Sinclair who is a director of HP Ltd. Special recognition was given to Max Gamper and Dr. Hauss who have been with HP since the start in Europe.

In the days following the Geneva meeting, the directors had an opportunity to visit our plants in West Germany and Scotland. At each location we met with various HP managers to review their current operations and to discuss their plans for the future. We also spent considerable time touring the laboratories, production areas and offices, meeting and chatting with as many people as possible.

It was a busy trip, and judging from the comments of our directors, a most successful one. They were impressed, as I always am when I visit our overseas operations, with the tremendous enthusiasm and dedication of our people. This spirit is clearly evident when one steps into an overseas plant or sales office and has contributed, perhaps more than any other single element, to the success of our international operations.

As you know, our overseas plants, including Y-HP in Japan, are fully-integrated operations with responsibility for inventing and developing products as well as manufacturing and marketing them. In this respect we differ from some American companies who use their overseas facilities primarily for assembling products invented in the United States.

Our overseas companies are justifiably proud of their product development efforts. In Germany, for example, HP GmbH has done some excellent work in the field of acoustical measurement and HP Ltd. in Scotland recently was presented a highly coveted Queen's Award to Industry for its contributions in the area of microwave-link analysis. As time goes on we expect our overseas laboratories to develop an increasing number of new and useful products for worldwide markets, including the United States.

As indicated by our operating results for the first half of fiscal 1969, our international business continues to show good strength. Orders are running about 50 percent ahead of last year and may well total close to $100 million at year-end. Accompanying this growth is an encouraging trend among all our people to "think internationally," to generate cross currents of ideas and technology that will make our company stronger, more dynamic, and better able to take advantage of the opportunities that are bound to come our way.

Bill Hewlett

Happy day at HPSA

There was plenty to celebrate at HP's European headquarters in Geneva last month. For a start, there was the official opening of the new HPSA headquarters building at Meyrin. Then there was the fact that 1969 marks HP's 10th anniversary of establishing business in Europe. The frosting on the cake, of course, was provided by knowledge that this business — actually the company's international business as a whole — is such a pacesetter. In the light of this, some 200 guests were treated to a pleasant open-house visit May 16. In conjunction with this, HP directors held a meeting there (and later toured the company plants in Germany and Scotland), the first ever outside the U.S. At right, President Bill Hewlett and HPSA's Managing Director, Dick Alberding (center) greet the newly elected mayor of Geneva, Claude Ketterer. Further highlights on the HP international scene are reported on pages 2–6 and 15.

Measure

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