



## WATT'S CURRENT

## Published Monthly by

HEWLETT - PACKARD COMPANY

Gaboratory Instruments for Speed and Accuracy

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Editor WILLIAM L. BIGLER

Production Assistant BYRD BEH

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No. 9

## -hp-Organizational Changes

Bill Myers, former Microwave Manufacturing Manager, transferred to Boonton Radio Corporation as General Manager.

Ray Demere has taken over duties as Division General Manager over Service and Parts.

Carl Mahurin, former Service and Parts Manager, has transferred to Marketing-Training.

Alan Watts left Palo Alto, October 5, 1962, to join the staff at HPLTD, Bedford, England.

Bob Stephenson returned from temporary assignment overseas with HPSA.

## This Month's Front Cover ...

... Bill Hewlett (left), -bp's- executive vice president, accepts President Kennedy's "E-for-Export" Award from California's U.S. Senator Clair Engle and Draper Daniels, national export coordinator for the U.S. Department of Commerce. For a description of this coveted award and -bp's- participation in the important "E-for-Export" program, see story on page 4.

## September Features

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## From Our President's Desk

E WERE ALL PLEASED to receive an "E" Award recently from the Department of Commerce, which recognized the fact that -hp- has done an unusually good job in developing foreign markets for our instruments. We have done very well in fact since we established HPSA in Geneva, followed by the manufacturing plant in Boeblingen and in Bedford, and more recently by our sales organizations in Germany, Canada, and the Benelux countries.

But this kind of success does not just happen; rather, it is the result of good and careful planning, followed by excellent attention to the myriad of details which such an activity entails. Bill Hewlett, ably assisted by Bill Doolittle, was largely responsible for the foresighted planning which was the foundation of our export program. Then Ray Demere did a real pioneering job for us by going to Germany, where he started the plant in a small rented building down by the tracks in Boeblingen. Here Ray brought together a group of people without previous experience and built a team which has the same elements of enthusiasm, loyalty, and skill which have made our company so successful here in the United States.

While we are tremendously proud of the job Ray Demere has done (and John Cage is keeping up the same standard in England), it is most gratifying that the European market for instruments made in our plants here in the United States has increased very rapidly as a result of our work in Europe. It is this increase in the export of our products from here to Europe which brought us the "E." This increase in our European market has helped us greatly here in Palo Alto, for there are many months each year when that order from HPSA makes the difference between a poor month and a good month for us.

The government has made some changes in the laws regarding foreign operations this year. Some of the new laws may help us and some will make our job more difficult. As I review what we have accomplished in Europe during the past four years, it is clear that our success is not the result of any particular export regulations but, more accurately, in spite of them. Our success has been entirely attributable to a group of very capable people in our organization who have done an excellent job in every detail. And capable people performing their day-to-day jobs with skill and enthusiasm will always be the key to such success as we may have the good fortune to enjoy.

David Packard

H-P's Fall Indoctrination Seminar was held Sept. 24-Oct. 5, with 35 men in attendance. Twenty-one were from sales representative organizations, 13 from -hp-Marketing (including two from -hp- Canada), and one from Dymec. The Audio-Video portion of the -hp- product line was studied during a program of lectures and experiment sessions. This seminar is designed primarily for our new field sales engineers and is intended to help them develop a basic understanding of the operation and applications of -hp-instrumentation.



In attendance at Fall Indoctrination Seminar were:
Back row, I-r: Hi Fujii, Bill Harper, Warren Leibfried, Jerry Tully, Dick North, Ken Kleidon, Jerry Richardson, Don Overton, Barrie Wilmarth, Bob Capps, Stu Slade.
Center row, I-r: Malcolm Spann, Chuck LaPorte, George Glenday, Norm Overacker, Bob Kolar, Barry Saper, Jack Dunn, Mason Byles, Jerry Bender, Terry Gildea, Dave Salter, Bill Reinschmidt.
Front row, I-r: Dick Willeke, Paul Mack, Glenn Sharp, Bill Blum, Don Lewis, Ted Doyle, Joe Fasulo, Al

Walcek, Bob Stringer, Bob Browning, Dan Devlin, Dick Knock.

## Operations News

AS WE HEAD down the homestretch of our 1962 fiscal year, we can look back with considerable pride at our over-all accomplishments. Our total corporate orders and shipments will be well over the \$100-million goal established at the outset of the year. Following a seasonal pattern, orders in some areas were a bit soft during September. We expect business to pick up in October, however, so that we'll be about on target for the entire fourth quarter.

Even more encouraging than our sales picture is our continuing improvement in profits. Thanks in part to our efforts to reduce and control costs, we expect to wind up the fiscal year with a very acceptable profit performance for the total corporation.

Highlighting our October activities is the dedication of our new plant in Loveland. The plant will be officially opened October 13 with appropriate ceremonies and an Open House. Among the dignitaries taking part in the program will be Governor Stephen McNichols of Colorado. We're expecting several thousand people to tour the plant, as our Loveland operation is one of the largest industrial enterprises in northern Colorado. We'll have a story and pictorial coverage of the big event in the next issue of *Watt's Current*.

Since the Loveland facility is the largest single building in our entire corporate complex, a few statistics about the structure may be of interest. It is 400 feet long—considerably longer than a football field—and provides 140,000 square feet of space. There are 130,000 square feet on the main floor and 10,000 on the mezzanine floor. The latter houses the Engineering Department.

The building cost \$1.7 million and was constructed in 12 months. Its air-conditioning system circulates 250,000 cubic set per minute, effecting eight air changes per hour. Cooling as supplied by 665 tons of refrigeration, and the heating capacity is nearly 8 million btu per hour. Like nearly all -hp- facilities, the building is of fireproof construction and fully sprinklered.

BY NOEL E. PORTER Vice President, Operations

The plant presently employs 360 people, but has a capacity for approximately 800. The fabricating facilities represent the latest in -hp- design, and the plant layout and material flow are set up for maximum production efficiency. We're truly proud of this new Loveland facility and are most enthusiastic about showing it off to our neighbors in the community.

While on the subject of building projects, HP Associates is well settled in its new addition at the Palo Alto plant site. This is an ultramodern facility with very comprehensive air-conditioning, waste-handling, process-gas, and utility-distribution systems. The new addition will enable HPA to expand its development of solid-state devices, which are becoming increasingly important elements in our entire instrument line.

Our corporate plant engineering group is working closely with Sanborn, Harrison, and the Oscilloscope Division people on their various building programs. According to present schedules, we expect to start construction on these projects next spring. The new Harrison plant will be about 40,000 square feet. Sanborn intends to add about 130,000 square feet to its present facility, nearly doubling its size. The first unit of the new 'Scope plant at Colorado Springs will be about 80,000 square feet.

Ralph Lee, our VP of Manufacturing, is currently on a twoweek trip to Europe. He's spending about a week each at HPGmbH in Boeblingen and HPLTD in Bedford. Both of these overseas operations are moving along well, and Ralph will be able to give them some good guidance in planning and managing their growing production activities.

While we talk a lot about growth from time to time, we want to emphasize that we don't grow just to get big. We grow only when we can make a sound contribution to the field of instrumentation and build quality and strength in our various product areas. This kind of growth, in addition to providing challenge and opportunity for everyone on the team, builds a solid base for future accomplishment.

# EXPORT "E" AWARD MADE TO H-P

# One of 15 California Firms To Receive Coveted Citation



Pennant now flies proudly over -hp-'s Stanford plant



EWLETT-PACKARD'S rapidly growing export progran\_recently received national recognition with the presentation to the company of President Kennedy's "E-for-Export" Award.

H-P was one of fifteen California business firms to receive this award, which includes both a certificate and a blue-and-white "E" pennant. Reminiscent of the "E" flag presented to -hp- and other firms for their excellence in defense production during World War II, the pennant now flies proudly over the company's Stanford plant.

The E-for-Export awards, originated by President Kennedy, signify national recognition of outstanding contributions to the nation's export expansion drive. The goal of the drive, spearheaded by the U.S. Department of Commerce, is to build



# The Secretary of Commerce

presents

The PRESIDENT'S "E" FLAG

Hewlett-Packard Company

Shown at right is President Kennedy's highly regarded "E-for-Ex-port" Award presented to Hew-lett-Packard Company by U.S. Senator Clair Engle and Draper Daniels, national export coordinator for the Department of Commerce.

For an outstanding contribution to the Export Expansion Program of the United States of America

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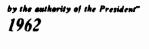
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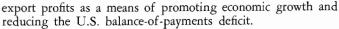
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by the authority of the President 1962





California winners of the award were honored at a civic luncheon at the San Francisco Commercial Club on September 7. Highlight of the luncheon was the presentation of the awards by Senator Clair Engle, of California, and Draper Daniels, national export coordinator for the Department of Commerce. Accepting the certificate and pennant for -hp- was Bill Hewlett, executive vice president.

In presenting the awards, Mr. Daniels commented that the export activities of -hp- and other "E" winners are "shining examples of what enterprising American businessmen can ac-

"More exports mean more profits for American business and more jobs for American workers," Mr. Daniels said. "As a na-



tion, we must boost U.S. export earnings to meet our security obligations overseas and to improve our international balance of payments."

In describing the export activities of the award-winning firms, Senator Engle noted that -hp- initiated its export program in 1954.

'Since that time," he said, "the company's overseas sales have increased from slightly over \$2 million in 1954 to nearly \$10 million in 1961. In recent years the growth rate has averaged more than 40 percent per year.

"This is an enviable record and one of which all Hewlett-Packard employees can be proud. It indicates that the company's export program is particularly aggressive and constitutes a valuable assist to our country's international trade efforts."



W. NOEL ELDRED Vice President, Marketing

#### RMC on Board

We are pleased to report that word was received just prior to press time that final details are about completed which will bring RMC Associates of New York City and New Jersey into the H-P family. A statement regarding this latest affiliation will be carried in the October Watt's Current.

# Seven More Sales Reps To Affiliate With H-P

Eldred Reports Good Progress
In Change to Direct Selling

HEWLETT-PACKARD has made considerable progress in its transition from selling through independent sales representatives to establishing its own nationwide sales organization, according to W. Noel Eldred, vice president of marketing.

"Over the past several months we've been negotiating with most of our sales representative firms with the aim of establishing these firms as direct sales arms of the company," Eldred said. "As a result of these negotiations, it now appears that we will enter our new fiscal year with seven new sales divisions and affiliates."

The seven organizations which intend to affiliate with -hp- include Neely Enterprises; Crossley Associates, Inc.; Horman Associates, Inc.; Yewell Associates, Inc.; Bivins & Caldwell, Inc.; Stiles Associates, Inc.; and Lahana & Company. Their affiliation, subject to the completion of necessary legal procedures, is scheduled to become effective November 1.

Two former sales representative firms have already joined the -hp-family. They are Earl Lipscomb Associates, Inc., which became an affiliate late last year, and the I. E. Robinson Company, which became an -hp- sales division on August 1 of this year.



All together, the nine firms which either have affiliated or are intending to affiliate with Hewlett-Packard represent the company in 42 states. They have offices in 29 major cities and a combined employment of 450. They sell to approximately 76 percent of the company's U.S. market.

Eldred described the transition to direct sales as a "gradual, evolutionary change dictated by the steady growth of the -hp- product line"

"Ever since our company was founded, it has sold its products through independent representatives," he said. "We have always been one of the principal proponents of the rep system, and down through the years have been fortunate in developing perhaps the strongest rep organization in the electronics industry.



"In recent years, however, the rapid expansion of our product line has placed increasing demands on the facilities and manpower of our rep firms. Compounding this situation has been the acquisition by -hpof several new affiliates, each with its own broad line of complementary products.

"It is interesting—and somewhat overwhelming—to note that the -hp- family of products now numbers more than 900 different instruments and accessory devices. Obviously it is unreasonable to expect that an independent representative can continue to do an effective, practical job of selling this large group of instruments and represent other manufacturers as well.

"Our goal, then was to set up a nation-wide sales organization which could concentrate its efforts on the -hp- family of products and which would retain all the advantages of the rep system."



In moving toward this goal, -hp-management decided at the outset that it would attempt to achieve a permanent affiliation with most of its representative firms. Eldred pointed out that while sentiment and loyalty contributed to this decision, it was "just good business to try to bring our existing sales groups into the -hp- family."



"By achieving a permanent tiein with our reps, we could provide them with the security and support necessary for them to continue to serve us on a long-range, uninterrupted basis."

He noted that the -hp- reps have represented the company for an average period of more than 12 years. One firm, Neely Enterprises, was -hp's- first representative, having been retained in 1939. Crossley Associates was the second, following Neely by only a few months.

"All our reps have contributed greatly to our 23 years of steady growth," Eldred declared. "They know our people, our policies, and our products. Even more important,

they know our customers. In fact, their customer-oriented approach to selling has been the greatest single factor in gaining such broad acceptance for our products."



In line with its trend toward divisionalization, -hp- intends to have its new sales affiliates operate with a maximum degree of independence and autonomy. This will enable them to maintain the strong local management and excellent customer relationships which have been instrumental in their past success.



"We want our reps to continue their policy of constantly seeking out and fulfilling the instrumentation needs of their customers," Eldred said. "This is their first responsibility and one which is essential to our mutual growth."

He pointed out that all the new sales affiliates currently represent other manufacturers and that it will take several months for mutual agreements to be worked out whereby these manufacturers can set up alternate methods of distribution.

"Eventually, of course, our sales affiliates will be handling only the hp- family of products, including instruments manufactured by Dymec, F. L. Moseley, Boonton Radio, Sanborn, Harrison Labs, and PAECO."

He also noted that in certain parts of the country special marketing situations exist which make it desirable for -hp- and its reps to continue their present relationship until satisfactory mutual arrangements can be made to set up direct sales groups. Specifically, those firms

which will continue to serve as independent reps include ARVA, Inc., headquartered in Seattle; S. Sterling Company, Detroit; and Harris-Hanson Company, St. Louis. Meanwhile, -hp- intends to establish its own sales office in upstate New York, a territory formerly covered by Edward A. Ossmann & Associates.

In summing up his views on the company's transition to direct sales, Eldred said the over-all progress has been "highly gratifying" to -hp-management.



"In all our negotiations we've been tremendously impressed with the cooperation and understanding of our reps," he said, "and we're delighted that so many of them are joining the -hp- family.



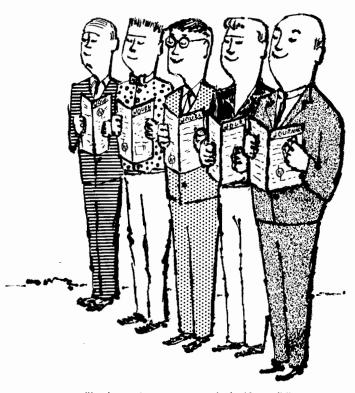
"Although their affiliation represents a major change in our organizational structure, our actual working relationships remain unchanged. We still have the same hard-hitting sales force and are assured that this force will now be devoting 100 percent of its energies to the sale of Hewlett-Packard products. We look forward to an even closer relationship with these fine firms and to many years of mutual growth and accomplishment."





H-P's vice president in charge of Research and Development, Barney Oliver (center), discusses forthcoming articles with "Journal" editor Frank Burkhard (right) and staff member Howard Roberts.

## VOICE OF THE H-P LABORATORIES



"In electronics everyone reads the 'Journal'

THIS MONTH we salute -hp's- technical publication, the Hewlett-Packard Journal, undoubtedly one of the better-known electronics publications among electronics engineers everywhere. The Journal is the vehicle by which our engineers are able to communicate the results of their engineering successes to virtually the entire electronics engineering profession. "Communicate" may be too mild a term, in fact, since with its 100,000 circulation the Journal enjoys a far wider readership than any of the regular electronics engineering magazines. Truly, in electronics if not in Philadelphia, "everyone reads the Journal."

To achieve its aims, the *Journal* seeks to engage its readers on the professional level, sometimes with how-to-do-it information, often with technical information on -hp- products. It does this by using only the most sophisticated techniques, since professional people are notoriously critical of poor taste in mass communications efforts. A receptive frame of mind among readers is maintained through the efforts of the *Journal* staff, which strives to achieve variety and interest, and to keep inviolate those indispensables of a technical publication, authority and reader confidence (see photo, right).

In its time (it is now concluding its thirteenth year), the Journal has unquestionably made its mark in the technical field.

At the time Sputnik I was shot aloft, for example, the *Journal* was the first technical publication anywhere to publish actual data measured from that satellite. Such information is farther afield than the *Journal* usually goes, but was published because of the high technical interest existing at that time. The *Journal* has also published a good deal of original technical material, and many readers (more than half by survey) permanently file it for that reason.

Obviously, a publication of the wide circulation and caliber of the *Journal* presents to the reader's mind, intentionally or not, an image of the -hp- organization, of its people, and of its products that no other means can. This image the editorial staff strives most carefully to mold in -hp's- behalf.

But the *Journal* further constitutes a splendid opportunity for engineers in the -hp- corporate family to achieve a better-than-average degree of recognition for their professional efforts and their products. This viewpoint is that of -hp's- vice president for engineering, Barney Oliver, under whose aegis the *Journal* flourishes: "It is certainly appropriate for all engineers in all -hp- divisions and affiliates to consider publishing the results of your projects in the *Journal*," he states. "Obviously, not every project will be suitable nor can all material be accepted. Obviously, too, this should not be done at the expense of established publications of affiliates, although another point of view might be employed for a second article in the *Journal*. In any case there is everything to be gained by discussing your project with the *Journal* staff."

David Packard feels much the same. "The Journal has won

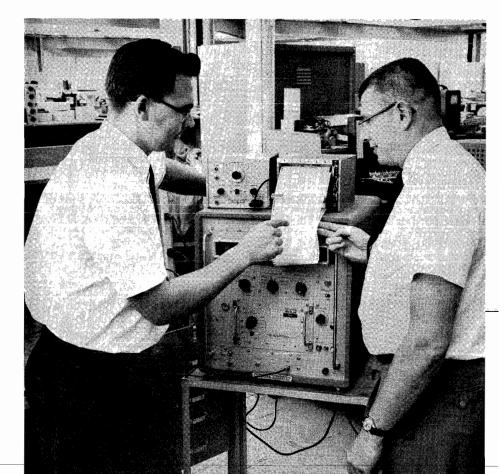


The "Hewlett-Packard Journal"

good acceptance in the engineering field and has an even wider acceptance to look forward to in the future. It is our policy to make the *Journal's* pages available to the over-all corporate group, and we invite participation by every engineering section," he stated recently.

Apprised of these statements as he worked among the stacks of paper, so characteristic of all editorial efforts, the *Journal's* busy editor was heard to make but one comment: "Help!" he said faintly. "Help!"

Lee Bodily (left) and Len Cutler of -hp- Frequency and Time laboratory examine data being taken for "Journal" presentation.





Carl Anderson accepts a first-edition copy of "Microwave Theory and Measurements" from Marketing Vice President Noel Eldred, on behalf of the many contributors

# Hewlett-Packard Microwave Staff Authors Textbook Title: "Microwave Theory and Measurements"-

THIS FALL, microwave students across the country are using a new textbook called *Microwave Theory and Measurements*. Published and sold by Prentice-Hall, Inc., the book was authored by the engineering staff of the -hp- Microwave Division, and represents our first such contribution to this area.

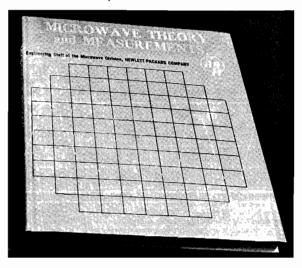
For many years, -hp- had felt the need for some sort of book dealing with the specialized skills involved in making microwave measurements. Despite many fine texts devoted to microwave theory (complete with complex mathematical presentations), there just were not available any easily understood sources of information for the beginning student, or for the engineer wishing to "brush up." In 1960, -hp- Application Note 46 ("Introduction to Microwave Measurements") was released—and the response was overwhelming. Based upon the reception for AN 46, plans were made to expand the content into a full-fledged book, and an agreement was worked out with Prentice-Hall (leading publisher of college text-books).

In May of 1961, the writing began. The introductory and theory sections of AN 46 were updated for use in the new book. John Minck, then Microwave Applications Engineer, coordinated the measurement experiments being prepared by various engineers in the Division. Carl Anderson, of Sales Promotion, organized the book content and handled liaison be-

tween -hp- and Prentice-Hall in New Jersey until the first book rolled off the press in August of this year.

This fine team effort has resulted in a real contribution to the educational field, as well as representing a source of longterm growth for -hp- microwave products.

New textbook may be obtained either as paperback or hard cover in -hp- blue.

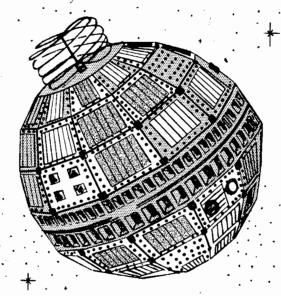


### BELL TELEPHONE LABORATORIES

MURRAY HILL, NEW JERSEY

H-P Aids Successful TELSTAR Program

> Appreciation Extended By Bell Laboratories



# International News

By BILL DOOLITTLE

(Editor's note: The following observations and evaluations were made by Bill Doolittle as a result of recent routine tour of -hp- facilities abroad.)

HPLTD—

John Cage's operation in Bedford is settling down to a smooth-running, profitable organization. The product line has been expanded from the initial 524C/D Counter program to include the 606A Signal Generator and the entire line of new transistorized counters, with work now in progress on getting the new 175A 50 MC Oscilloscope into production.

David Simpson has recently joined HPLTD as joint managing director and will take over the full reins of the company the latter part of next year when John Cage returns to Palo Alto for reassignment. During the past several years, David has been general manager of Hughes International U.K. of Glenrothes, Scotland. This is Hughes' U.K. semiconductor manufacturing facility. Prior to his association with Hughes, Simpson was associated with the U.K. instrument industry, being largely responsible for building up the electronics division of Microcell Limited, a prime U.K. electronics firm.

Our German sales organization, headquartered in Frankfurt, is branching out, and fully staffed offices for both sales and service are now located at Hamburg in the north of Germany and at Munich in the south. The effect of our expanded promotional activities has been felt in increased sales performance. For the first ten months of fiscal 1962, our West German sales are running 86 percent ahead of those for the same period last year. An all-time sales record was achieved during the month of August when total booked orders for the month exceeded our total booked sales in Germany for the entire ear of 1959. This is truly a remarkable performance, considering that the West German economy, which has been expanding so fast for the past ten years, is now slowing down to a more normal growth pattern. Joe de Vos and his entire organization are to be commended for their fine efforts.

TELEPHONE - AREA CODE 201 LOCAL 582-4761

July 23, 1962

MR. D. PACKARD President Hewlett Packard 1501 Page Mill Road Palo Alto, California

TELSTAR Satellite Communications Program

Dear Mr. Packard:

W. P. H. STEVENS

PURCHASING AGENT

Our recently launched TELSTAR satellite has successfully transmitted television, voice, data and facsimile in historic demonstrations of the practicality of active communications satellites.

We at Bell Telephone Laboratories are extremely gratified and proud of these achievements. At the same time we are aware that this immediate success has been achieved through the complete cooperation and teamwork of many of our suppliers and subcontractors.

Hewlett Packard should be justly proud of its significant contribution in furnishing electronic test equipment vital to the testing and development of component parts for the satellite ground stations. The outstanding teamwork of your personnel helped to make such achievements possible. Consequently, we express our appreciation to Hewlett Packard and all of its participating personnel for its effort in getting the project off to a successful start.

molewe

#### HPGmbH—

Our West German facility, now under the direction of Fred Schroeder since Ray Demere's return to Palo Alto, is one of the most modern manufacturing plants in Western Europe. HPGmbH, located in Boeblingen Industrial Park, has attracted scores of visitors from all parts of Europe who are interested in its unique architectural and manufacturing features.

The results of this expansion program are most gratifying, as there has been a substantial increase in the efficiency and profit level of this subsidiary.

Wally Klingman, formerly of Cort van Rensselaer's oscilloscope division, has now been assigned to HPGmbH and is serving as a staff assistant to Fred Schroeder. Wally's first assignment is to assist HPGmbH in expanding their oscilloscope production to include the entire -hp- line of oscilloscopes.

#### HPSA---

Our European marketing headquarters in Switzerland is now situated in its new 7000-square-foot office on the seventh floor of a large modern office building in Geneva. This badly needed space has made it possible for us to increase our staff and facilities so we may handle more efficiently the expanding paper work associated with our fast-rising European sales volume.

With the assistance and guidance of Bob Stephenson, an entirely new order-processing system has been installed this summer and now permits us to give our European customers speed in acknowledging their orders, comparable to that offered to our domestic customers. The Geneva office and our various plants in the United States are tied together with a daily direct wire "telex" contact for the transmission of orders and delivery confirmation as well as the handling of critical technical messages. This is another -hp- "first" to keep us a step ahead of hard-pressing competitors in the fast-growing European area.

