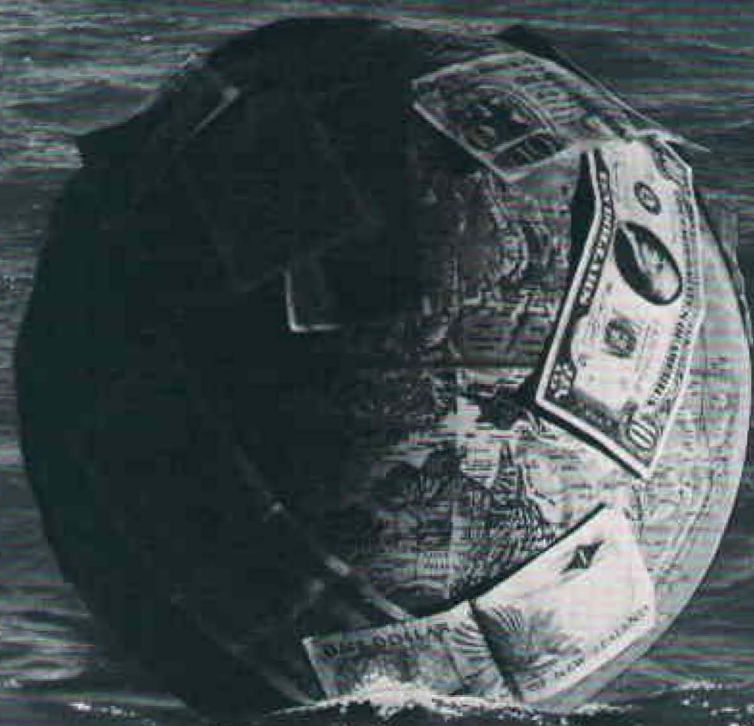
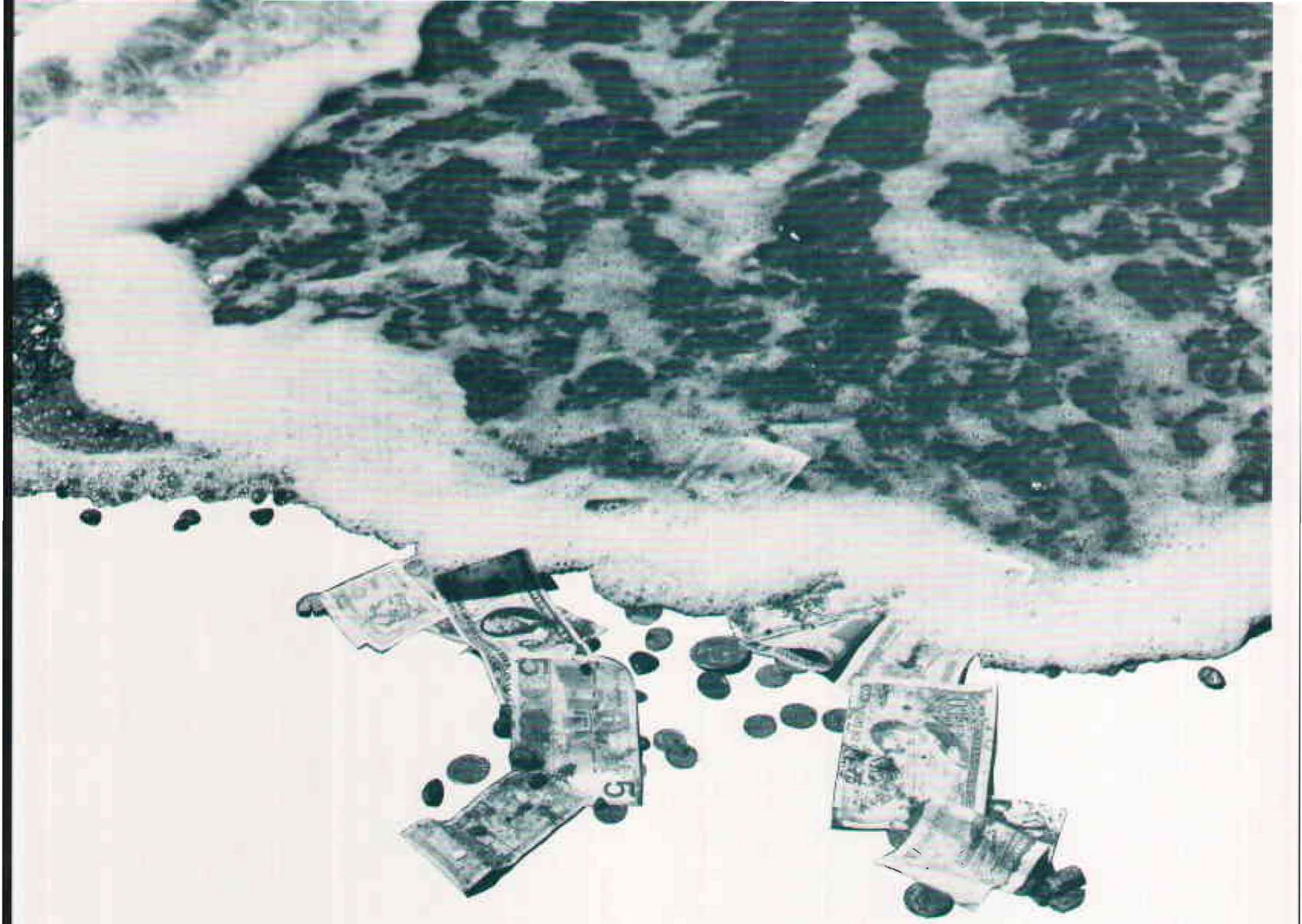


Measure

For the men and women of Hewlett-Packard / AUGUST 1977

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“Steady as she goes...”

the company's treasury experts seek a safe and secure passage for HP funds in the often hazardous waters of the “floating” international monetary market



□ In Geneva, Peter Schreve's day started with a news item. Overnight, another monetary problem had begun to brew, thanks to the failure of a well-known European enterprise, threatening the stability of the Swiss franc. And Peter, a monetary expert in HP's European headquarters, knew that a financial review was called for to assess the effects on the company's financial position.

Elsewhere around the world during the course of that same day, many other HP people were faced with making similar decisions in light of the company's stated policy which is to "maintain a financial position in countries outside the United States such that the company incurs neither a gain nor a loss in U.S. dollars should non-U.S. currency exchange rates move with respect to the U.S. dollar."

A continuing complication for them is the restless fluctuation of world monetary values known as "floating currencies." Like bobbing corks, the various monies of the world now move up and down in relation to one another, a state that has existed since the ending of fixed exchange rates in 1971.

Because of this, managing the company's money is a highly specialized activity in several particular HP locations requiring the attention of full-time "treasury" professionals. Three such locations function as money collection and investment centers — Palo Alto, Singapore and Geneva. Then there are other financial hot spots where HP treasury functions are carried out by local managers as a major part of their job.

The following is a "day-in-the-life-of" some of these departments and specialists as they deal with a representative set of situations. As the day begins at the International Dateline, Shu Asai talks over banking operations in Tokyo and Koh Boon Hwee shops the Asian investment market in Singapore. In the course of the day, Peter and the HPSA financial team in Geneva take action to protect HP investments in Europe; in Toronto, Gordon McLean undertakes a borrowing mission; in Palo Alto, an intracompany loan is underway at Intercon, and the corporate treasury department is reviewing the entire complicated picture of worldwide transactions.

TOKYO, JAPAN, 10:00 a.m. Thursday
(On the other side of the Pacific, it is still Wednesday in Palo Alto and employees are heading home for the day.)

Shu Asai, chief financial officer for the joint venture company, Yokogawa-Hewlett-Packard, is in the process of negotiating with two Japanese banks and one U.S. bank for an arrangement that would increase prepayment flexibility on YHP's lines of credit. Customarily, Japanese commercial banks do not allow prepayment of short-term loans, but Shu is hoping to persuade YHP's banks to become more flexible in this respect because customer payments have been coming in sooner than expected.

While Shu operates with considerable independence, he maintains close ties with Steve Lumm, finance manager for Intercontinental Operations in Palo Alto. Steve and Bas van Leersum, his counterpart in

Europe, find themselves in the ironic position of supervising considerable borrowing to finance overseas activities even though HP as a whole is in a healthy net cash position. Borrowing abroad is useful for several reasons. It gives YHP and the HP subsidiaries — which are set up as independent companies — a way to get the money they need for operating expenses and such special purposes as constructing a new building. Borrowing also helps keep a comfortable balance between local currency and U.S. dollars on hand in the country.

SINGAPORE, 8:30 a.m. Thursday
(Some 3,500 air miles to the southwest of Tokyo, the day has just started in another key HP location.)

Koh Boon Hwee, who took over cash investment handling for HP Southeast Asia operations in Singapore and Malaysia in



On their way to a conference in Singapore's financial district are Dennis Raney (left), controller for HP's operations in Southeast Asia, and Koh Boon Hwee, who handles cash and investments on his staff. Since HP has money to invest in Singapore, bankers usually come to them.

February, is shopping the Asian Currency Unit market to obtain the best local rate for cash investments. (The ACU is the Asian equivalent of the Eurodollar: dollars on deposit in banks outside the U.S. that are traded in a market of their own, usually at interest rates more favorable than for dollars in the U.S.) The Singapore government has left the money market relatively free to operate competitively, so almost every major bank in the world has a local branch.

To understand why HP's cash — in large amounts — is constantly swirling around the world, let's take a look at the factory and sister sales organization in Singapore.

Like all subsidiaries, the Singapore sales organization does business in local currency. It has established an HP price list in local currency, after taking a look at

(continued)

steady as she goes...

all the factors involved in doing business. Customers pay in local currency, and the subsidiary's own payroll and other operating expenses are met in local currency.

But the Singapore sales organization—like all subsidiaries—pays HP factories anywhere in the world for their goods in U.S. dollars. Singapore currency therefore must be changed into U.S. dollars for meeting those debts in the HP family.

Meanwhile, however, U.S. dollars are flooding into Singapore. The Singapore manufacturing plant, one of the company's largest and most successful overseas operations, is on the receiving end of some of those circulating U.S. dollars both from HP divisions and sales regions to which it sells. Boon Hwee is thus in the comfortable position of investing surplus U.S. dollars in the friendly Singapore market rather than borrowing money.

GENEVA, SWITZERLAND, 8:30 a.m.

Thursday

(Now the work day has ended at YHP, and Singapore is within an hour and a half of closing time.)

When Peter Schreve reaches the office, the morning papers have more details on the news he'd heard on the car radio driving to work. Already, yesterday's New York foreign currency closing rates sent to Geneva via COMSYS indicate some weakening of the Swiss franc. Timing is important; the exchange market opens again at 9 a.m., and a banker phoning from London with the newest rates confirms the Swiss franc situation.

The HPSA finance group goes into its daily huddle in Bas van Leersum's office. The company's books at the end of the prior month had shown more assets than liabilities—an "exposure." In such situations it is necessary to make an interim forecast of the financial position to determine what, if any, new action should be taken.

One useful hedge is to arrange, for a price, to sell Swiss francs for another currency in the future at a price agreed upon today. Less money would be exposed if the



Checking the backlog of European orders are HPSA financial team members (left to right) Peter Schreve, Tom Bjuhr and finance manager Bas van Leersum in Geneva. Fluctuations in currency rates could make a difference in the value of later payments.

Swiss franc did indeed go down. This precaution would also help maintain the present Swiss franc prices on the full line of HP products.

Such forward contracts can be purchased for periods of time ranging from a week to six months, with the interest rates rising as the time increases. Based on the forecast, a quick decision must be made on how much, if any, HP money to commit, and for how long. A fall in one currency will often bring down another country's currency in its wake.

By 10 a.m. Peter has asked two banks for quotes on forward contracts. It is decided to purchase dollars forward two months at the rate of 2.55 francs to the dollar.

Meanwhile Tom Bjuhr, assistant finance manager for Europe, has been on the phone to London to learn the day's deposit interest rates on Eurodollars.

With several million dollars usually in HPSA cash accounts on a given day, the challenge is to use all funds to earn interest—even those which are with the company for only a few days or weeks.

Eurodollars are just one of a number of choices Tom has for investing excess funds. Since the summer of 1976, the rates have been low for Eurodollars. Tom considers how much to commit for how long. His strategy is to invest funds for relatively

short periods when interest rates are low in order to have them available for reinvestment when rates increase. In the opposite situation—when interest rates are high and expected to go down—he would try to invest for the longest period allowed by the HP cash-forecasting system.

TORONTO, CANADA, 9:00 a.m.

Thursday

(Geneva headquarters is midway through Thursday afternoon when the business day starts in Eastern Canada.)

Gordon McLean of HP Canada finance is contacting investment brokers to get an indication of commercial paper borrowing rates compared to regular bank rates. "Commercial paper" is used in the U.S. and Canada as a means for companies to borrow from each other on promissory notes arranged through brokers. He finds that commercial paper is currently about 1 percent cheaper than other sources of money and, after consulting with Intercon finance, borrows 2,000,000 Canadian dollars. At the current level of borrowing, a 1 percent lower interest rate would save the Canadian organization as much as \$40,000 a year in U.S. dollars.



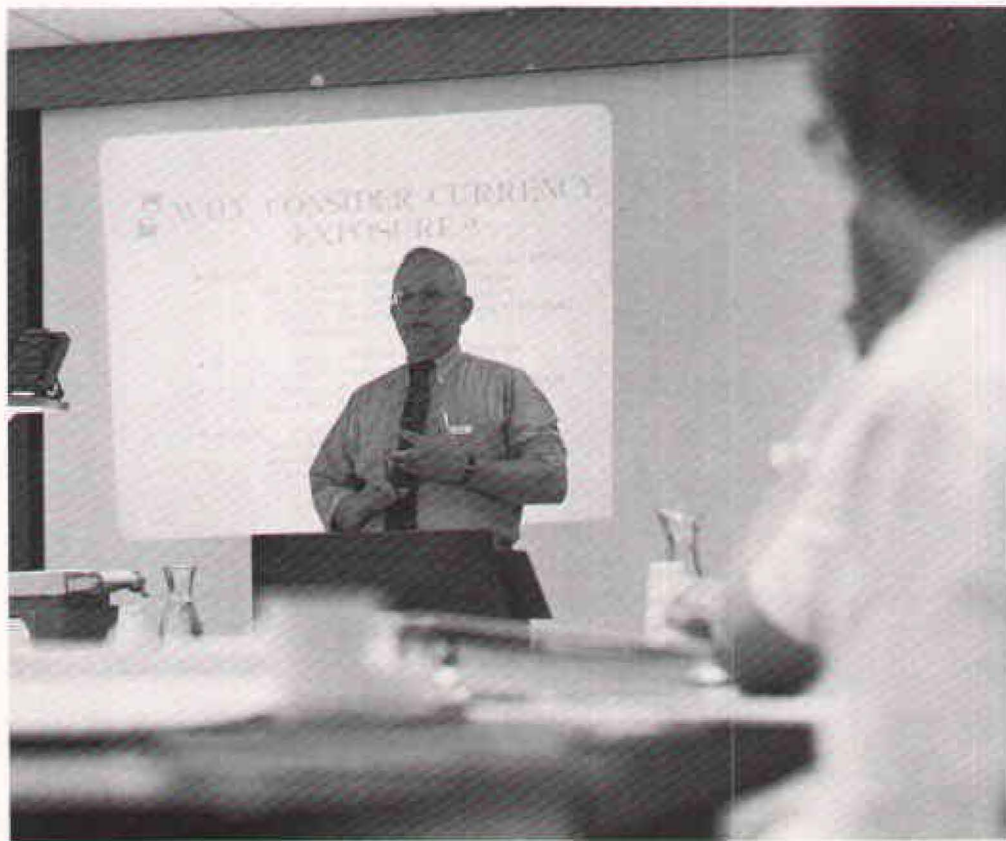
Intercon's finance manager Steve Lumm (right) and financial analyst Steve Pavlovich monitor the foreign currency "exposure" in each country in their area. Assets and liabilities in local currency must be in good balance.

**PALO ALTO, CALIFORNIA, 9:00 a.m.
Thursday**

(As Thursday's work day begins in California, it is nearly time for lunch on the East Coast. In Europe, the HPSA office has closed for the day. Across the Pacific in Singapore and Tokyo, Friday has begun.)

At Intercon headquarters, Steve Lumm and financial analyst Steve Pavlovich have finished reviewing each subsidiary's foreign exchange exposure — how much money is subject to fluctuations in value — in light of today's foreign exchange rates. Now they begin to work out details for a special kind of loan for HP Brazil.

In order to finance some construction and other working-capital needs in Brazil, Hewlett-Packard would like to make an intracompany loan to its country organization, HP do Brasil. But Brazilian regulations require offshore loans in U.S. dollars be made for a minimum term of five years — somewhat longer than HP usually wants to carry a loan. However, if a financial institution such as a commercial bank is the lender, the rules are different. The funds must still remain in the country for at least five years but the bank can accept payment from the original borrower after 18 months and then in turn re-loan the same funds to another corporation in Bra-
(continued)



Assistant treasurer George Newman explains to a Palo Alto HP management seminar how the company protects its assets against losses in foreign currency exchange.

steady as she goes...

zil. This reduces the minimum term of the loan to HP do Brasil to 18 months — a more manageable period. Two U.S. multinational banks are contacted for proposals on this loan. HP agrees to deposit an equivalent amount of money out of Brazil to back up the loan.

In the corporate treasury offices,

George Newman is looking over a monthly worldwide report on HP's currency exposure, one of several tools for keeping the financial team throughout the world posted on the company's foreign currency position.

This particular report shows HP's position both in terms of U.S. dollars and local currency for each country where HP operates.

One item — "translation exposure" — forecasts what would happen if all assets and liabilities were converted into U.S. dollars. Since HP is a U.S. company which

must report to shareholders in U.S. dollars, this "translation" information will eventually go into the annual and quarterly reports. At the end of any quarterly period, HP wants to have its holdings protected.

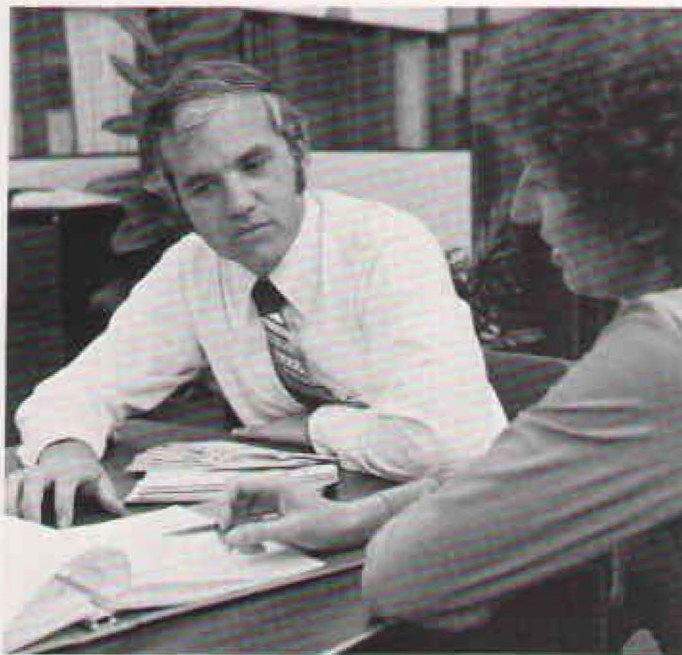
Another item — "conversion exposure" — shows George the actual gain or loss from converting a subsidiary's local currency into some other currency. A third item is the backlog of orders for which the price was fixed at the time the order was taken — events happening between then and the time of payment could alter the dollar value of the money HP receives.

John Gebetsberger, two desks away, heads the corporate cash management group which handles all cash coming in and going out for U.S. divisions and sales regions. U.S. collections from customers go into 10 bank lockboxes throughout the country which are given around-the-clock servicing in order to relay funds to the central Palo Alto bank account of Hewlett-Packard; dollar payments from overseas are transmitted at spaced intervals. John helps work out the schedule of intracompany payments so cash is in the right place at the right time. Today he may decide to delay a regularly scheduled payment due from a subsidiary to allow a buildup in dollars for use by that country organization. Despite the heavy flow-through of money, the Palo Alto bank balance is relatively small at the end of each week since incoming funds are promptly invested.

To monitor the whereabouts of HP money in all currencies, the corporate treasury office assembles a 13-week cash forecast in graph form. John begins pulling together all available information about forthcoming shipments and payments due, along with operating expenses during the period, and indicates safe levels of currency holdings. Predictions for the worldwide status of funds are double-checked each week to see if they are on track.

How does this all add up for HP?

In the recent years of "floating currencies," a number of prominent multinational companies have reported substantial gains and losses due to rate fluctuations. Meanwhile, HP was on an even keel. As a result of foreign currency management and interest earned on cash transactions, the company came out a little ahead in 1976. In the rough seas of foreign currency exposure, that's a remarkably smooth ride. □



It takes a heap of weekly bank statements to move money from all over the world through HP's central bank in Palo Alto. Corporate cash manager John Gebetsberger and assistant cashier Corrie Upham are in the middle of the pipeline of payments from overseas entities to U.S. factories.

Kay McQuarrie of corporate treasury assembles the 13-week forecast which shows HP's anticipated holdings in all foreign currencies.



This all too-common view is seen by the HP customer service team as it is wheeled to and from computer installations on Manhattan. But use of a circulating pool van to deliver and pick up customer engineers and service parts has greatly improved efficiency compared to use of individual autos.



The New York connection

HP's Manhattan computer service team comes up with an innovation that's just right for big-city customers . . .

□ Deep in the concrete canyons of New York City a van weaves its way through the crowded streets, following no apparent schedule. Here it stops to let out a man who quickly enters a nearby building. Blocks away it halts briefly to admit a bag-toting passenger who then is whisked off to another destination. Sometimes the vehicle pauses just to deliver a small package to a person waiting on the curbside. And from time to time the driver picks up a microphone and responds tersely to a voice crackling over the two-way radio. Round and round it goes, a hundred or more slow, zig-zag miles a day around the 30-square mile Manhattan megalopolis.

What kind of business is this, anyway?
(continued)

the New York connection

A typical day starts at the Paramus office, across the Hudson River from Manhattan. The HP customer service engineers — Steve Pinkham, Bob Free and John Phillips — prepare to board the van driven by Ken Martinez who doubles as roving parts inventory coordinator. Coordination is maintained through HP's two-way radio system KZW 209, staffed in Paramus by service coordinator Barbara Abrams, above.



Indeed, if you were a competitor of HP's computer service organization, Manhattan Island branch, you would be most suspicious — and worried.

Because from the very day of its inception in 1975, this method of servicing the many customer computer installations on Manhattan by a radio-controlled vehicle has been a winner. Today, Ken Martinez, driver and parts coordinator, routinely shuttles the various customer engineers from HP's Paramus (N.J.) office to their calls on the island, moves them around as needed, and responds to their requests for parts from a well-stocked mobile inventory. At day's end he returns them to Paramus.

Tying the whole system of need and response together is a special HP radio network. Its elements include a high-powered relay transmission station mounted atop the World Trade Center 1,400 feet above Lower Manhattan, a small directional antenna operated at the Paramus office by service coordinator Barbara Abrams, and several two-way radios.

The net effect has been to provide customers with faster service while greatly reducing problems of transportation and communication. For example, just elimi-

nating the need for the customer engineers to find downtown parking (or take cabs everywhere) has brought about a sizable saving in time and cost. Some of the security risk of leaving expensive equipment in parked cars, or of walking about with it, has also been minimized.

In fact, so well does the system work, according to Dale Sutton, computer service district manager for the New York area sales office, that it's planned to expand it into new territory across the Hudson River. □



Customer engineer John Phillips selects his service kits before heading into a customer's computer installation. Driver Ken Martinez discusses pick-up schedule, and will return all CEs back to Paramus at end of day. The van system provides an important measure of security as well as efficiency.



New HP facilities:

Fitting the environment...

□ When in Oregon, do as the Oregonians would want you to do: build low, spacious buildings which harmonize with the surrounding fields, forests and hills.

When in Singapore, do as the Singaporeans do: build higher structures that make more intensive use of the limited land available.

Two recently occupied HP buildings reflect these approaches.

The new facility at Corvallis, Oregon, is very much in the style of the western campus — open, low-lying, and finished

with natural appearing materials that blend with the environment. Almost all of the 840 full-time employees commute by cars from and to widely scattered homes. Parking is therefore a major requirement at the 139-acre plant site.

Singapore presented an altogether different environment to HP planners. For one, public transportation is plentiful and widely used. Also, population density is such that many people are inevitably in walking distance of almost any industrial development. This greatly reduced the

need for parking space.

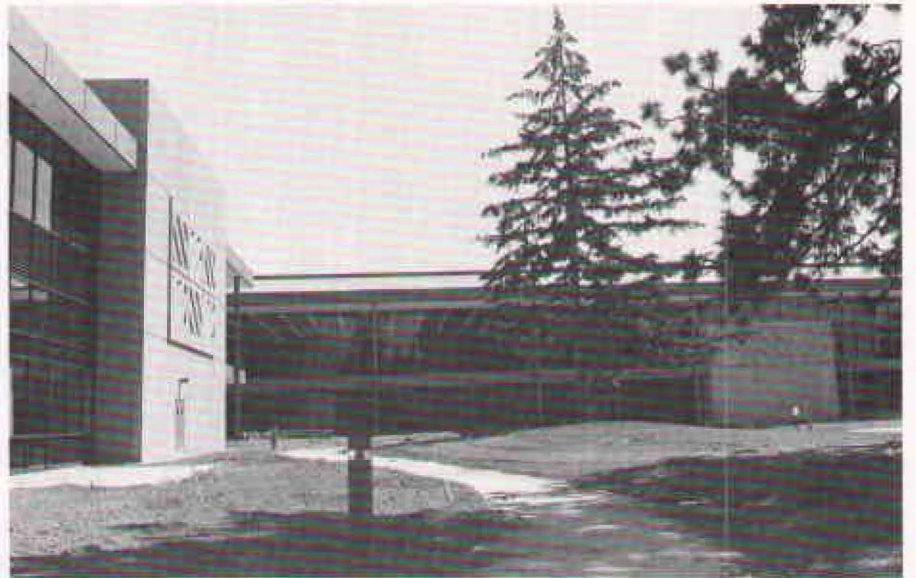
Which is fortunate, because the kind of acreage that HP generally seeks — 100 to 200 acres for a major facility — is simply not available there.

The new Singapore building, in fact, sits on a site of only 4.5 acres. Counting the partial basement, it's a five-level building, and the first HP structure to employ escalators (which can be used as stairways in emergencies). □





HP's Corvallis facility, above and below, represents the latest example of the modular prototype building design developed by the company several years ago. The design permits adaptations in style and arrangement to suit local needs.



In Singapore, the company's first "high rise" factory building is shown at left just prior to finish of exterior work and landscaping. Escalators provide floor-to-floor people movement — another first for HP.

In HP France “growing people” is a custom...

□ Gathered around Michel Lafon's desk are some people who provide living proof of his “green thumb” on the job — his talent for helping people grow to a high level of competence in a complex activity. In this case, the activity is centered in the headquarters of HP France at Orsay, near Paris, and involves “customs,” the business of clearing exports and imports of HP products.

It is worth noting, in preface, that for customs work in Europe, the role of a Chief Declarant, with full responsibilities

for bonded goods and fulfillment of all customs laws and regulations, ordinarily requires a number of years of special training on the job. The reason for this lengthy apprenticeship is that mistakes or misinterpretations of complex customs regulations can be very costly, including confiscation of bonded goods and stiff fines.

Lafon apparently has a knack for developing people in this field. In 1965, two years after joining HP, he first began to coach Camille Schlesinger on a part-time basis. Camille then was a clerk in the HP France advertising department. The challenge of customs work appealed to him, and in only two years with Michel he was able to take over as Chief Declarant for HP at the Orly airport. He then continued to take on more responsibilities and training, with Michel's encouragement, and eventually returned to Orsay as supervisor of inventory control.

Much the same story can be told of Jean-Claude Mercier. In 1970 Jean-Claude joined the traffic services department at Orsay as a truck driver. Though completely untrained in administrative work his meticulous, thoughtful performance was spotted by Camille who soon had Jean-Claude working full time in the bonded warehouse at Orly. Under Camille and later under Michel, Jean-Claude very quickly became proficient in export matters and the operation of a bonded warehouse. This led to his assignment as a group leader at Orsay responsible for managing HP imports involving more than five-million francs worth of customs taxes and duties monthly.

Meanwhile, others such as Ghislaine PrevotEAU and Gerard Dufor are being encouraged to grow into new responsibilities not only by Michel but also by Camille and Jean-Claude.

Actually, that's a fairly typical HP story — and a very reassuring one. □



From left: Camille Schlesinger, Jean-Claude Mercier, Michel Lafon and Ghislaine PrevotEAU.

HP News

Two HP-sponsored awards

PALO ALTO — Winners of two HP-sponsored awards in the fields of physics and electrical engineering education have been announced.

Professor Walter Eric Spear, Carnegie Laboratory of Physics at the University of Dundee, Scotland, was awarded the annual Hewlett-Packard Europhysics Award. The award was made by the European Physical Society at its Third Condensed Matter Division Conference in Leeds, England, in July. The award recognizes Dr. Spear's contributions to the physics of thin-film semiconductor technology, leading to the discovery of electrical properties that opened the way for a new range of semiconductor devices.

Leon Shohet, professor of electrical and computer engineering at the University of Wisconsin-Madison, was awarded the 1977 Frederick Emmons Terman Award as the outstanding young educator in his field. A leader in the field of plasma science, he is credited with advancing the frontiers of knowledge in this area, from linear mirror systems to the operation of the only stellarator in the U.S.

HP employee scholarships

PALO ALTO — One-hundred and six college scholarships valued at \$1,000 each have been awarded by the Hewlett-Packard Employees' Scholarship Program to the sons, daughters and dependents of U.S. employees.

The program was established in 1951 to help children of employees meet the cost of their first year of college. The funds for 1977 scholarships came primarily from contributions by more than 7,700 employees. Winners are selected on the basis of scholastic achievement, educational objectives, participation in school activities and financial need.



"This device will do for land survey work what the jet engine did for transportation," said President Bill Hewlett at a recent Colorado press conference to introduce the new HP 3810A total station. Developed at Loveland by the Civil Engineering

Division, the total station enables a surveyor to set up in one spot and make all necessary measurements automatically from that point. Each measurement can be made in less than six seconds. The need for a transit or theodolite is eliminated.



From the president's desk

As I'm sure you've noticed, there has been quite a bit of news in recent months regarding the investments of American companies in South Africa. These stories, for the most part, stem from the concerns expressed by some individuals and organizations about how the policies of the South African government affect the day-to-day operations of U.S. firms in that country.

In view of the growing interest in this matter, I thought it might be useful to give you some background on HP's involvement in South Africa, the current status of our activities, and some general thoughts about doing business there.

We established our HP sales subsidiary company in South Africa in 1968. Prior to that, HP products were marketed through South African sales representative organizations. As you probably know, we do not have any manufacturing operations in South Africa, or anywhere else on the African continent.

The market for HP products in South Africa has developed very gradually, and still represents a relatively small share of the company's business. In 1976, for example, sales in South Africa were approximately \$11 million. This represented about two percent of our international business, and about one percent of our total business. Profits and invested assets account for a similar share of corporate totals.

Our South African subsidiary currently employs 93 people. All are South African nationals, including Country Manager Tienie Steyn, and they are located in offices in Johannesburg, Cape Town and Durban.

As is common to HP sales organizations worldwide, we require technically educated, highly skilled engineers and technicians to sell and service our high-technology products. This degree of education and level of skill is found almost exclusively among the Caucasian population in South Africa; thus our employee population is predominately white.

However, 12 of our 93 employees are Blacks or other non-whites, and while some of them are engaged

in routine clerical and manual tasks others have considerable responsibility. One of these individuals is a senior order processing coordinator, two others are service technicians, and another is a records supervisor.

Consistent with our basic worldwide policy, we maintain equal and fair employment practices for all HP people in South Africa. Work areas, meetings, coffee breaks, performance award programs and other employee gatherings are fully integrated. There is one exception to this practice. Since our small sales staffs occupy rented space in public buildings, they use the segregated restrooms provided in the buildings. But, in all other respects, our people are integrated.

With regard to compensation, our South African subsidiary strictly adheres to the principle of equal pay for equal or comparable work. The same is true of fringe benefits; they are applied equitably throughout the organization. I might add that to the best of our knowledge, the pay scales and benefits for all our people in South Africa are well above local industry averages in every job category.

In another important area of employee relations, Tienie Steyn has devoted considerable effort to developing the capabilities of all of his people by providing challenging job opportunities, educational training, and programs to promote upward mobility. Among the training programs offered are a management development program similar to that given in the U.S.; weekly classes in personal economics and basic business procedures, given on company time and developed primarily for Black and other non-white employees; and job-related, after-hours courses, with the costs of books and materials and tuition fees paid for by the company.

Within the community, the company's efforts to improve the quality of life, particularly the lives of its Black citizens, have been concentrated in the field of education. For several years, we have had a funds-matching program to provide better school facilities for Blacks in the local community. More recently, Tienie has

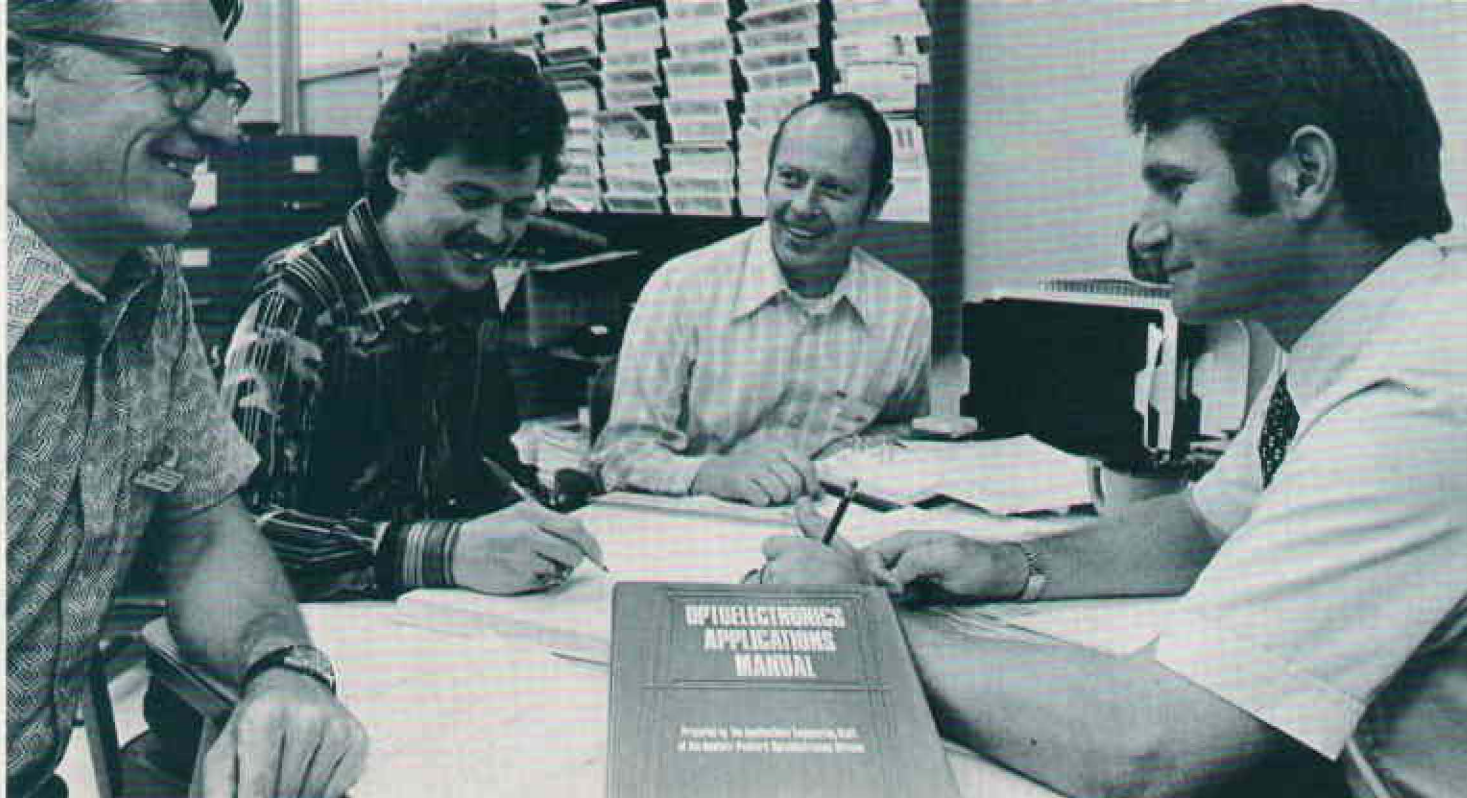
initiated HP's participation in a program to provide tuition for Black managers of small businesses who are pursuing a business education.

As I have indicated, these activities are largely undertaken at the initiative of Tienie Steyn and his staff. This is fully in keeping with company policy, which encourages HP managers throughout the world to exercise considerable initiative in establishing worthwhile community and employee programs. However, I should point out that while our South African policies and their implementation are largely local, top management at HP is fully aware of their scope and is wholeheartedly supportive.

As one indication of this, Hewlett-Packard recently adopted, and publicly endorsed, a Statement of Principles for U.S. companies operating in South Africa. Developed largely through the efforts of Leon Sullivan, a Philadelphia clergyman and a director of General Motors, these principles are primarily aimed at promoting fair employment practices in South Africa. They are fully in keeping with HP's Corporate Objectives. As of this writing, 44 American companies have subscribed to these principles, including some of the nation's largest corporations.

To briefly summarize, based on our activities and experience in South Africa I believe that our presence in the country is a positive, constructive influence toward improving the economic and social condition of South Africa's Black and other non-white population. HP intends to continue expanding the opportunities for these people to obtain meaningful, rewarding jobs, and to make increasingly important contributions to the progress of our company and to the betterment of their communities.





Autographing a copy of their book on optoelectronics applications are (from left) Hans Sorensen, Mark Hodapp, Dave Evans and Stan Gage.

Solid-state authors

You're not likely to find it on best-seller lists, but the book *Optoelectronics Applications Manual* is expected to be tops in its field. Written by Optoelectronics Division engineers, it is the first technical book authored by an HP organization since 1963, and the first published by McGraw-Hill.

The manual is the work of Stan Gage, Hans Sorensen, Dave Evans and Mark Hodapp, whose HP experience ranges from 19 years (Hans) to about 3 (Mark). They are all members of the applications

department at OED, and they compiled their text initially for use in their own seminars for customers.

Earlier manuals had been printed in limited numbers especially for the HP seminars. But requests for copies were received long after the supply was depleted, so the division decided to put out a more comprehensive version in larger quantities.

That was a little over a year ago — and that's when the real work began, according to Stan Gage, applications manager. Stan and the other authors burned the midnight

oil for the next three months to get the text and illustrations into shape for the HP printing. Then McGraw-Hill saw the book's potential and became interested in publishing it.

One advantage to HP is that the book will save time that might be spent answering customers' questions. Another, of course, is the prestige. Tyler Hicks, McGraw-Hill editor-in-chief for professional books, hosted a special luncheon recently and presented individualized, leather-bound copies to Bill Hewlett, Dave Packard and the four authors.

For their part, the four HP engineers also received the admiration of their peers, and the satisfaction that all successful authors must feel.

Measure

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