



In his new San Diego assignment as printed-circuit line supervisor, Don Shumake has acquired much broadened responsibilities — and the expanding personal horizons that go with them. Here, Don and repair girl Dottie Field review a project; at left is Ray Field, lead man and programmer for the automatic PC testing system at rear.

 \Box In the past 12 months, new job opportunities created by the Hewlett-Packard organization have meant the addition of 2,300 people to the company's payrolls. This means that on October 31, there were 15,900 Hewlett-Packard people (estimated)—a 17 percent increase over the final 1968 total.

The increase didn't "just happen." Your efforts—in engineering, marketing, manufacturing, field sales and administration—to meet or productively exceed targets had a big part in making these jobs possible. So did the company's programs of investment in new products, new equipment, new facilities and strengthened sales organizations. And so also did the new people as they proved themselves on the job.

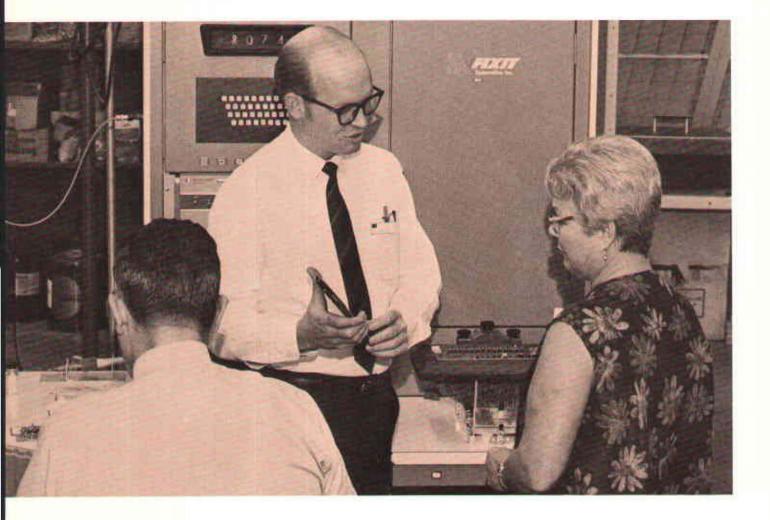
In fact, these 2,300 new jobs are significant in a number of ways. Brought together in one location, for example, they would add up to an economic nucleus capable of supporting a community of at least 20,000 people. As a group, the job additions also would outrank in numbers any of the existing HP divisions. And historically, it wasn't until after nearly 20 years in business, in 1958–59, that total employment by the company approached and then passed the 2,300-people mark.

Startling as such figures and comparisons are, they are not too easy to comprehend. The human dimensions seem blurred. Perhaps one way to look at them might be to zoom in on just one HP job and see what that means: to an individual, his family and his community.

2300

JOBS

1969



...one man's job

At Los Angeles during a cool February week in 1965, all that stood between Don Shumake and a one-way ticket back to Texas was the \$40 left in his wallet-plus the possibility of a job with a Pasadena company he had never before heard of. It was a tough decision to make because another week's rent was coming due and a down-payment might have to be made on the employment agency's fee. He had no California unemployment insurance or local friends to turn to-just Temple, Texas, 1,600 miles away.

At Hewlett-Packard's Pasadena plant, the personnel section was in the market for a test technician to work on the 7000 X-Y recorder line. The young Texas applicant looked promising: some pre-engineering courses at Baylor U., electronics training as a Navy fire-control technician, and 18 months work with a Houston-area electronics firm whose slackened business in 1964 caused him to look to California.

Inevitably, the moment of decision arrived. Temple, Texas, would have to wait.

"First thing I did after accepting the job with Hewlett-Packard," Don recalls, "was to pack up and move into a modest apartment in Pasadena. Very modest. For entertainment I'd listen to the car radio. Once in a while I would splurge and buy a newspaper."

Shumake also kept up a steady correspondence with a pretty, lively girl from Nottingham, England. They had met in Houston, but since then she had moved to San Francisco to work as part of her plan to see America. In August of that year, Don made another decision by asking her to marry him. He took out a \$100 loan to cover the extra costs, including the move into a larger apartment.

The job was going well, too. After his first six months, Shumake received a raise and then a promotion to supervisor of a small section in the electrostatic table department.

(continued)

... its impact

At the same time, he found himself becoming interested in real estate. He began taking courses and later passed the licensing exam for real estate salesman. He viewed it not as an alternative career to HP and industry but as a parallel activity, as a means for personal investment.

Don and his wife, Barbara, found themselves enjoying Pasadena and the Los Angeles area-the shops, the sights, the people, and the opportunities. So it created quite a dilemma for them when the division announced the startup of the San Diego facility and asked Shumake to consider a transfer there.

"Quite frankly, I wasn't sure at first. What did entice me was the opportunity to grow in a bigger job. By then I had been working a couple of years in the same area, and I was ready for a change?'

The new job assignment would involve supervision of the printed circuit line being transferred to the leased plant in Rancho Bernardo Industrial Park north of San Diego. But before it could take place, there was considerable new background and information for Don to acquire. Included was a week in New York learning all the ins and outs of a complex new machine the division had purchased, a \$40,000 automatic system for rapid analog testing of printed circuits. He also had to become expert in line procedures and in the engineering of other devices that would greatly speed up the loading of PC boards.

In effect, he found himself becoming "heir," so to

speak, to the responsibilities of supervising a dozen people and a facility representing an investment in special equipment of about \$85,000 plus a substantial assortment of other items of equipment and inventory.

Realizing these responsibilities, Don is planning to take some engineering and business administration studies in evening courses at Palomar College-just as soon as he gets a couple of real estate investment courses out of the way.

The economic impact of the Shumakes on the north San Diego County area is interesting for the reason that it has only just begun. They have made very few final decisions, and thus are very much "in the market" for such major items as a home, a new car, appliances, and even a community to live in.

What about those 2,300 new HP jobs? A couple of years ago the Economic Research Department of the U.S. Chamber of Commerce prepared an estimate of what 100 new industrial workers would mean to a community. Based on this estimate, HP's 1969 additions would directly represent 2,300 new households amounting to 8,257 people including 2,093 school children; they would bring in 2,231 registered passenger cars, \$17,250,000 more personal income per year, \$5,750,000 in bank deposits, and \$8,050,000 in annual retail sales. To meet their needs, the community would also add another 4,395 people in service jobs (plus their households) along with 69 new retail establishments. In the beginning was one new job.



"Escondido is an interesting town. We do most of our shopping here. The population is about 33,000. Our landlord tells us that the town was a real 'sleepy hollow' just a few years ago, but now it's jumping in an effort to keep up with the growth that industry has brought. When we first came here, there was just one movie house. Barbara's a movie fan, and that didn't go over too well. But now two new theaters are under construction plus a drive-in."



"We drove down from Pasadena one weekend just to look things over," said Don. "We ended up renting an apartment in Escondido. We haven't bought a home yet because we don't know the area well enough. I still don't know whether I want to buy or build."



and...

more jobs in the making



Two-handed ribbon-cutting technique is successfully employed by HP President Bill Hewlett, left, and Santa Clara Mayor Gary Gillmor at dedication of new plant.



The attractiveness of HP's new Santa Clara facility is obvious in this view across reflecting pool which also serves as secondary supply for emergency fire fighting. The three-building complex includes large roof-top patio, 500-seat cafeteria and 300-seat auditorium. Moving of former F&T Division to Santa Clara freed much needed space for growth by Palo Alto-based divisions.

Some of the large-scale effects of the job-making process within the company were evident in two events that made news last month—the awarding of construction contracts by the San Diego Division at Rancho Bernardo Industrial Park, and the open house held by the Santa Clara Division in official dedication of its very attractive new home.

Each facility represents a substantial investment by Hewlett-Packard. At Santa Clara it amounts to some \$6million for the completed 300,000-square foot plant. At the San Diego property (cover photo shows view of site preparation work), an initial 132,000-square feet for occupancy late next year will be constructed under a \$2,350,000 contract.

Both plants offer much needed space to accommodate divisional growth and both sites allow for more than doubling in size and employment in the future. Elsewhere, Loveland Division is well underway in building its third large structure, while a number of other divisions and sales regions also are in the midst of plans for additional space.

Commenting on the company's role as an employer and a community neighbor, President Bill Hewlett told the Santa Clara dedication audience: "Since the very first days of the company, we have recognized that people are our most important asset. We are in business for the long haul. For this reason we have avoided the contract type of business that might require layoffs after the contracts run out. I believe the record will show that we have been quite successful in providing employment that is secure, yet interesting and challenging."

Here's what the Santa Clara visitors saw . . .







Santa Clara open house was first chance for many HP families to see mommy or daddy's new workplace. The cafeteria got plenty of the action, but so did chairs and benches as kiddies tried them on for size.

Open house was livened by some irreverent going-ons: A large banner draped over entrance proclaimed the building to be "BAGLEY'S BOATHOUSE"; division manager Al Bagley himself, seen second from left, watches unscientific attempts to maneuver BAGLEY'S BARGE, a unique craft employing an old Model 524 counter casing as superstructure.



HP's Up,

Off to South America to help train nurses there in the use of HP medical products goes Maryanne Schreiber. A member of the Medical Electronics Division marketing staff, Maryanne enjoys the travel — and her role as teacher which keeps her in close contact with important developments in nursing practice.



Up and Away nurse

□ If you believe that television and movies exaggerate tension and drama in their portrayal of medical subjects, you just haven't talked with Maryanne Schreiber, nurses' training consultant in the Medical Electronics Division at Waltham.

"In the operating room or intensive care ward, everything may seem calm, professional and efficient," Maryanne said. "But the real atmosphere can be controlled panic. That's because they're dealing with life and death-literally. If something goes wrong with a piece of equipment, the physician doesn't care about excuses; even if it's his own fault. It's got to work, no matter what. And that's the way he expects our equipment to operate."

Helping to bring that point of view home to medical division engineering and marketing people, few of whom have experienced a real life-or-death situation in a hospital operating room, is one of Maryanne's two main missions at Waltham. The other, as her job title suggests, is showing nurses in hospitals around the country and overseas how to make the best use of Hewlett-Packard medical products.

Maryanne brings a special background to her HP assignment: She is a registered nurse, and, prior to joining the company just over a year ago, was head nurse in the cardiac intensive care unit at New York's famed Mt. Sinai Hospital. She had also worked in surgery and recovery rooms, been in charge of a medical floor, and served in pediatrics, labor and delivery rooms, at hospitals in New Jersey, New York, Florida and California.

Her two roles actually go hand in hand because the nurses and other medical people Maryanne meets in the course of training visits are very practical and ask many pointed questions. They leave little room for doubt as to the way they think things should work. As a result, Maryanne is able to bring back an accurate picture of the nursing profession's reactions to the company's products and services.

Maryanne, of course, is far from being alone in gathering such medical marketing insights for the division.

Medical field engineers and service specialists along with marketing and other training professionals all come in regular contact with medical customers and organizations. Because of her background, Maryanne is very aware of how different the engineer's approach is to medical equipment compared to that of medical people.

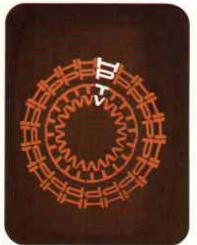
"Early in my work here, Mike Rudd was giving a series of seminars to factory people at Waltham when it suddenly struck me that most of the engineers didn't really understand the basic medical functions of our instruments. They knew them very well electronically, of course, but they weren't seeing the equipment the way the doctor does. Then, as the seminars progressed, I could see them becoming more and more interested and excited as the human life-saving role of their products became clearer. A number of our engineers now are reading quite deeply in medical subjects. I know that many hospitals now have programs for sending surgical residents to engineering schools for some basic training in medical electronics."

Since joining Hewlett-Packard, Miss Schreiber has logged thousands of miles in travel to hospitals and seminars around the United States. This month she will set out on her first overseas business trip, showing the new arrhythmia trainer and trainer torso to nursing groups in the major South American medical centers.

"It's an experiment." Maryanne said, "But I expect to be doing a lot more of this kind of training abroad. I've been studying Spanish just to be able to say a few words to the customers. The approach to nursing there is quite different from this country, so I'm going to have to learn how best to get our story across."

Nurse Schreiber frankly enjoys the travel and the prospect of more in the future. "We nurses are an independent tribe. We enjoy change and people. The nurses I meet envy me my job—the travel and the variety. I know I would envy me—if I weren't me."

Medium well done:



"brought to you over the worldwide facilities

At a conference held three years ago, HP managers took a close look at the feasibility of using a new method of communicating within the company and with customers: television. They liked what they saw—a dramatic aid for training people, a medium to help introduce new products, and a convenient means of exchanging service information.

Since that meeting, a sophisticated corporate videotape studio has been established, basic videotape production facilities installed at most manufacturing divisions and sales regions, and playback equipment placed in use at almost 50 sales and service locations around the world. Much has been happening in the brave new world of HP-TV.

Last month, for example, more than 150 copies of nine videotaped programs dealing with new products were shipped to the worldwide HP network. In turn, these tapes were studied by hundreds of HP sales engineers and service specialists as well as hundreds of other people working for customer organizations. That was by no means an unusual month for HP-TV.

Here's what is happening today:

- The corporate HP-TV studio in Palo Alto, under the wing of Carl Mahurin's Corporate Training department, is scheduled months ahead for use of its very advanced facilities and professional people. Its services as a clearing house and counselor to the full company television network are also much in demand.
- Videotape cameras are in action at a dozen divisions. A few are used in producing new-product tapes, most in recording service information programs. Division people also are using video facilities in supervisory

training and work performance-grooming people by letting them study playbacks of themselves in action.

- Customers around the world are being shown tapes presenting very sophisticated introductions to new HP products. Other customers are making use of special programs purchased from HP-TV for training their own service technicians and troubleshooters.
- In scores of sales offices, staff and field engineers and even order processing people sit in on showing of new-product tapes. Many of the field men also are rehearsing their sales and seminar presentations in front of cameras at regional headquarters.
- At Colorado and the Bay Area, HP engineers are sitting in on new-style university cooperative education programs videotaped or piped right into the plants over closed-circuit hookups.

What does TV offer HP that it didn't have before? Basically, industrial television does the same things that movie film can do: take a big or complex subject and shrink it down in time, space and thought to the tidy dimensions of a roll of tape. It also permits widespread distribution of expertly prepared material for viewing by audiences at their own convenience. But mainly, videotape is faster and much less costly than film production. Moreover, through instant replaying it offers great flexibility to the producer and user.

But perhaps the chief advantage of videotape for HP is in its ability to reinforce and sometimes replace written communications and personal visits. Some of the important ways in which it is performing these tasks are shown in the following photo report:



Now common sight in sales offices around the HP network, salesmen — in this case Neely staff engineer Rolf Fromm bone up on HP products by studying tape. Service people also make extensive and enthusiastic use of videotape which is considered ideal for such training needs.

of HP-TV"



Sophisticated setup of corporate HP-TV studio is evident in this view: In the soundproofed studio beyond, actual camerawork is performed, in this case on subject of new 3721A correlator from South Queensferry. In left foreground, director Chuck King observes HP Ltd.'s Bill Bryan and instrument on monitors 1 and 2. To Chuck's right, TV system manager Walt Robson checks action on control and special effects console operated by Len Gibson.

(continued)



Basic kind of videotape production typical of divisions and sales region headquarters is shown here. Palo Alto Division's Bill Hower serves as his own producer and performer in preparing tape on service, while Edie Paré works camera, Bill has developed hand signal code to advise Edie when to zoom in or out.





At left, shipment of tapes to HP network is readied by Eileen Zimmerman in corporate tape library. Big reels at left are original master tapes from which duplicates are run. An average of some 150 duplicate tapes are shipped monthly. More and more customers now want to buy tapes on instrument service and operation for their own use.

Production of duplicate tapes is an important function of this equipment in corporate studio. Operator is Cliff Jones of Corporate Training, sitting in for hospitalized Al Petretto. Industrial TV specialists foresee a number of exciting technical advances within their medium in the near future.



Production areas are beginning to find more uses for videotape. Here, in the Medical Electronics Division at Waltham, tape of press operator Bert Lomas is played back on monitor so he could review it and find ways to make his work easier. For this, Bert won his "Star Performer" button.





Personnel departments around the company are using videotape in a variety of ways — training, orientation, special announcements. At right, Mary Harrington of Medical Electronics Division at Waltham is the talent in a tape session designed to introduce new performance appraisal program. Beyond are Wes Draper at camera and personnel manager John Flaherty serving as producer.



Engineering economics class videotaped two days earlier at Colorado State University is observed at Loveland Division class session by HP engineers. Similar in-plant graduate courses were introduced recently to Bay Area plants in cooperation with Stanford University. In each case a number of local companies support and participate in the televised programs.

News in brief

Palo Alto - A restructuring of the company's international organization to provide "more effective management of HP's rapidly expanding overseas activities," was announced by Bill Doolittle, vice president for international operations. Effective November 1, the company is establishing two international operations offices. One, the European Operations Office, will have responsibility for all HP manufacturing and marketing activities in Europe. Heading the office as director of European operations will be Dick Alberding, previously managing director of the company's European sales region. Alberding will continue to be located at HP's European headquarters in Geneva, Switzerland. A counterpart of the European office will be the Intercontinental Operations Office, headquartered in Palo Alto. It will have responsibility for all of HP's manufacturing and marketing activities outside of Europe. Appointed director of Intercontinental operations is George Newman, previously administrative manager of international operations.

"By establishing two distinct organizations, each with total oper-

People on the move

and drilling) from section manager; Jim Paul, to lab stock materials staff, from systems engineer, Colorado Springs; Randall Temby, to supervisor waveguide section, from fabrication.

Microwave- Bruno Bienenfeld, to R&D staff. from production engineering; John Bliss, to photo lab from same position, Santa Clara; Tony Cano, to production control expediter, from production: Eric Johnson, to production engineering, from special handling; Tom Lauhon, to microcircuits manufacturing manager, from manager, network analysis and passive instruments production; Mike Norton, to special handling engineer, from production technician; Ruby Miller, to documentary and logistics, from Manufacturing gage lab; Marcus Nilson, to technician, from HP Associates, same position; Charlotte Russell, to administrative specialist, from administrative assistant, microelectronics; Jim Zellers, to R&D staff, from same position, Santa Clara.

Santa Clara – George Bower, to materials engineering, from lab stock, Manufacturing; Glenn Stewart, to marketing, from field engineer, Neely-Palo Alto.

Systems – Bob Byers, to publications, from hardware development publications, Cupertino; Tor Larsen, to project engineering, from R&D, Mountain View.

Operations

Delcon – Stan Whitten, to finance manager, from payroll manager, Corporate Finance.

Loveland – Wayne Danielson, to plant engineering staff, from same position, Santa Clara. ating responsibility within a specific geographic area, we can provide stronger management support to our various manufacturing and marketing organizations overseas." Doolittle said. "We also will be able to plan and manage our growth more effectively, and provide better service to our many international customers." Doolittle noted that HP's international business has more than doubled in the past three years and will exceed \$100 million for the fiscal year ending October 31. The company now sells its instruments and systems in more than 120 countries.

International – Dave Blecki, to data products support manager, HPSA, from sales engineer supervisor, Cupertino

Eastern Sales -- Chuck Hults, to district manager, Albany, from Import Marketing manager, International,

Midwest Sales – Len Petraitis, to field manager, solid state and microwave components, from electronics field engineer. Chicago South District; Jim Thompson, to field engineer, Chicago South District, from staff engineer, Skokie.

Neely - Jim Arthur, to Group A sales manager. Neely Sales Region, from district manager. North Hollywood; Tom Bailey, to medical sales district manager, Palo Alto, from medical sales rep. Sacramento; Gary Beach. to analytical instrumentation sales rep, Palo Alto, from same position, North Hollywood: Dave Beardsley. Group B field engineer. Fullerton, from staff engineer, North Hollywood; Dick Blasing, to district manager, from field engineer, Palo Alto; Fred Bode, to district manager, Fullerton, from field engineer, North Hollywood; Bruce Brackett, to field engineer. Portland, from field engineer, Bellevue; Roy Brandt, to Group B field engineer. Fullerton, from staff engineer, North Hollywood; Ed Brown, to order processing manager, Fullerton, from order processing coordinator, North Hollywood; Jim Bunn, to district manager. Denver, from same position. Las Cruces.

(Listing of current Neely changes will be completed in December issue.)

Southern Sales- Jim Barton and Bob Sandefer, to district managers, from field managers (Richardson).

Corporate – Frank Bertalot, to CSC (Repairs) from computer systems production, Microwave: Clarence Blom, to HP Labs (Physical Electronics), from frequency standards, Santa Clara; William Freise, to CSC (Signal Generators), from special handling. Microwave; Arnold Joslin, to Industrial Design, from same position, Loveland; Joe Parks, to CSC (Parts Center systems analyst), from accounting supervisor, Midwest Sales-Skokie; Rod Ralston, to CSC (Repairs), from production staff, Microwave.

Data Products Group

Cupertino-Roger Wilder, to R&D, from publications, Mountain View.

Mountain View- Jim Barnes, to R&D, from HP Labs (Electronics Research Lab); Bob Colpitts, to R&D, from HP Labs (Electronics Research Lab); Stan McCarthy, to engineering section manager, from engineering staff, Medical Electronics; Val Vonheeder, to publications, from technician.

Palo Alto-Bob Nelson, to materials staff, from CSC (Inventory Control).

Electronic Products Group

Manufacturing-Keith Bayne. to production control scheduler, from pilot run expediter. Microwave R&D; George Bligh, to fabrication shop manager (turning and secondary) from section manager; Doug Carnahan, to maintenance manager, from facilities engineering staff; Corbin Goin, to supervisor, turret lathe section, from fabrication turning; Bert Jackson, to fabrication tool engineer, from manager, new product tooling, San Diego; Satsuki Nakano, to process engineering secretary, from transformer winding, production; Dennis Paboojian, to fabrication shop manager (milling

From the president's desk

Ordinarily, we do not think of the electronic business as a hazardous industry. Compared to many, it is not. There are, however, safety hazards in almost anything that we do-driving to work, washing windows at home, or even the much publicized danger of falling in the bathtub. We live with these hazards so intimately that we have learned to be careful.

At work, one is in a different and often changing environment that is equally abundant in hazards, but unfortunately, their source and magnitude are not always recognized. When the company was much smaller, we had to learn this the hard way. We had to learn that flying bits of wire cut off with wire cutters could lodge in the eye; we had to learn that the improper use of wire cutters produced a temporary but crippling tendonitis in the arm; we had to learn that riveting machines or circular saws can easily cause the loss of a finger. To reduce the exposure to such hazards, we have introduced, over the years, a number of safety regulations, guards on machines, personal safety equipment, and procedures to enforce their use. To the new employee or to the over-confident employee, many of these regulations may seem arbitrary or unnecessary. Let me assure you, they are not. They are a product of hard-won experience.

This subject is brought to mind by a series of serious accidents that have occurred in recent months despite the existence of normal safeguards. I believe it is helpful to review what might be called the hierarchy of safety.

First, it is the direct responsibility of the corporate management itself to insure that an effective safety program is in existence, and that it is enforced.

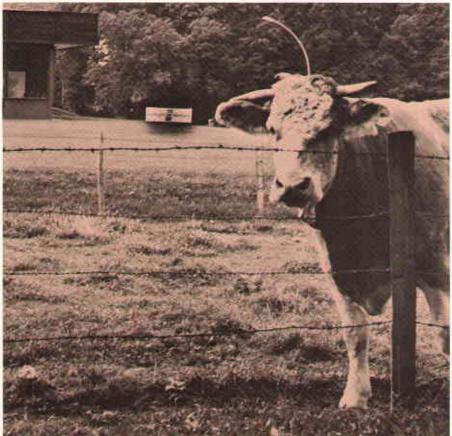
Second, it is the responsibility of each manager and his immediate staff to assume full responsibility for safety within his division. This includes methods to insure that all applicable regulations are understood and enforced. It is also his responsibility to insure that proper safety equipment is installed on hazardous equipment and that proper safety procedures are followed, including safety equipment such as glasses.

Third, it is the direct responsibility of firstline foremen and supervisors to monitor this program to guarantee that it is carefully followed. Employees who use unsafe practices should be corrected and instructed in the proper procedure. If an employee consistently ignores such advice and continues to work in an unsafe manner, it may be necessary to terminate him.

Fourth, and perhaps most important to you is the responsibility of each employee to not only follow the safety regulations and procedures, but in the words of Ralph Lee, to "work defensively." This means to think about the dangers of a given act and the consequences of the failure of equipment or the accidental or thoughtless act of a fellow employee. We preach the concept of "Drive Defensively on the Highway," why not "Work Defensively at the Plant." The accident you save may be your own!

Bill Hewlest





"I suppose you think I'm just an ordinary run-of-the-milk Swiss cow, don't you? You believe I have nothing better to do than stand around outside the Hewlett-Packard Geneva building? You're sure I've got nothing more on my mind than

You believe I have nothing better to do than stand around outside the Hewlett-Packard Geneva building? You're sure I've got nothing more on my mind than Nestlé hall-of-fame winners? Well, take another look, there on top of my head. Unusual, n'est-ce pas? I'm sure it has something to do with these strong vibrations and compulsions I feel. Anything moves around here without proper authority—pow!—I'm on to it in a flash. Now why don't you just check in at the front desk before you take any more unauthorized pictures?"

WATCHCOW

Measure

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hp

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