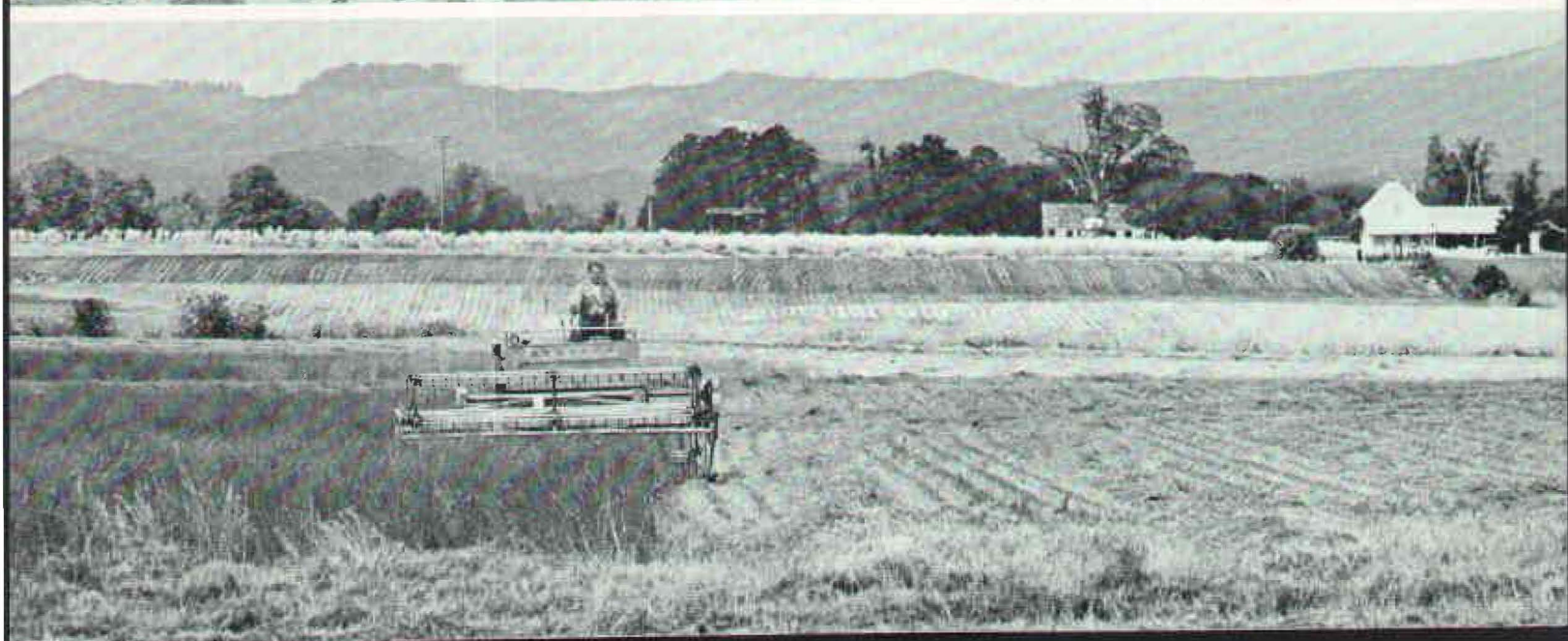


# Measure

For the men and women of Hewlett-Packard/AUGUST 1978

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## Report from Corvallis:

# Now that the dust has settled...

□ It's been four years since the *Corvallis Gazette-Times* headlined news of HP's plans to manufacture calculators in this small Oregon community. It was news that stirred the emotions of local residents who took to heart the "come to visit, but don't stay" philosophy of then-governor Tom McCall.

Even Governor McCall's strong support for HP ("This is the type of industry we've been saving Oregon FOR!") didn't prevent that announcement from sparking the biggest controversy in Corvallis since the 1950s, when fluoridating the city's water and serving liquor by the drink were major issues.

Because the HP property was located outside the city limits, the issue became more and more complicated. But the basic arguments pro and con were clear enough. Many people wanted the jobs and economic stimulus HP would bring; others rejected outright the prospect of growth and change.

It soon was apparent that HP had arrived in a city at the crossroads, and that city wasn't about to make a decision about its future until all the facts were considered. Spirited hearings were held, a thick Environmental Impact Report was prepared and debated, and a play-by-play account of the proceedings was chronicled in the *Gazette-Times*. No less than 142 letters-to-the-editor, 10 editorials and 800 inches in news stories were carried in the local newspaper during the four month period between the first headline and the final decision.

Many people wanted the issue put to a public vote; others insisted that the city council "bite the bullet." In the end, the council did just that—tallying a pro-HP vote.

Corvallis' reaction to HP's coming said a lot about the people of Oregon and their tradition for becoming involved in political issues. In fact, citizen political involvement has deep roots in Oregon. In the early 1900s, the state established itself as an innovator by adopting such concepts as the initiative, referendum and recall since copied by most other states. The HP issue itself led to a local referendum demanding that Corvallis citizens be allowed to vote on all future annexations—and it passed handily.

The headlines and street corner debates about HP are history now. So are the days of the hour-long bus trips between Corvallis and McMinnville, where the division's first employees worked while the first building was being built on a 140-acre parcel on the northeast edge of Corvallis.

Moving day was in September, 1976. Since then, a second building has been completed, the HP property has been annexed with the company's blessing, and employment has passed the 1,000 mark. Local residents hired on at HP—and those HP people transferred into Corvallis—have had time to assess the impact of Hewlett-Packard's presence. How has that presence affected their lives and the community? MEASURE asked some of them:



Field frames HP plant.

COVER: A stone's throw from the HP property line near Corvallis, Oregon, is the Willamette River, which meanders north through the valley for 183 miles before entering the Columbia River. The Willamette has had a profound effect on the valley. From the time the first trappers arrived until the railroads were completed, it served as the primary carrier of commerce. Towns grew up around the river, and shipping points and lumber mills were established nearby. The river provided the valley with the rich soil that has made it a prime agricultural region. An annual rainfall of 40 inches enhances an eight-month growing season. Most of the nation's northern climate grass seed (bent, fescue, bluegrass and rye) is produced here, as well as a wide variety of berries, fruits and nuts. However, lumber hauled in from surrounding forests for processing still brings in most of the valley's income. All three cover scenes are within minutes of the HP Corvallis plant, according to Peter Krupp of the division's marketing communications department, who took all the photos for this story.





An adventuresome HP group rafts through rapids on the MacKenzie River, located a short distance from Corvallis. Nancy and Bob Piercy (center, without hats) rafted in California, too, but now they enjoy the sport more because of their close proximity to good rivers. "Rafting and skiing are so much more accessible than in the Bay Area," says Bob. "And you can do things here without waiting in lines or making reservations." Although Bob's an Oregon native and wanted to return, Nancy had some concerns. "Once we passed through on a vacation, and all I could remember was driving by lots of farms, then stopping at this ugly little grocery store." Their preview trip gave Nancy another impression, however. Now they own wooded property with deer and other wildlife and are building a vacation home at the coast—on land they both agree probably wouldn't have been financially available to them in California.



"HP is the best thing that ever happened to Corvallis!" exclaimed June Moore, a 25-year resident who joined the company in 1975. "It's not just me that feels that way. My friends, neighbors, relatives and people who own downtown businesses say it, too. People here always are asking questions about the company." June, who owned a doughnut shop in town before HP arrived, reflected on a past decision: "I sold the shop before HP came because I was working seven days a week with no time off. If I'd known more about the company, I wouldn't have sold—I could have made a fortune!" June feels one of the most positive HP impacts has been jobs for young people. Many of those she knew when she owned the doughnut shop now work at HP. "They still call me 'the doughnut lady'!"

*(continued)*



# Corvallis

"This has been a very relaxing move for us," says Pat Griffin, whose husband Harry and son Randy also work for HP. "We love to go to the Oregon coast, to explore. We love our yard and the beauty of the countryside. I had been taking tranquilizers when we lived in the Bay Area. After four weeks here, I got up and said, 'Why am I taking these?' I haven't taken one since." The Griffins have gone berrypicking like 'real Oregonians,' and the jams they've made now go to visiting California friends. Says Harry: "We've probably seen as much or more of our old friends since coming here. We've had company nearly every other weekend since arriving two years ago."



Career advancement opportunities were mentioned by several transfers as being a primary reason for moving to Corvallis. Buddy Greene, a regional merchandising specialist, is one—but that wasn't his only reason. "I also wanted an opportunity to establish myself in the community by purchasing a house. I wouldn't have been able to buy a home like the one I have if I'd stayed in the Bay Area." He echoes the sentiments of other HP people on another subject: "It's a small town, and everything seems to cost more here. It's probably because there's no competition. That's also why there seems to be a lack of services here. If you want something done, you wait in line." It's been four months since he ordered a bar for his home. "It's still not in," he adds with a sigh.



Steve Grant, born and reared in Corvallis, left a job in a local restaurant to work in the HP cafeteria. But now he's no longer serving cafeteria patrons; he's one himself. "Before HP came, if you wanted a job you could work in a mill, a restaurant or a downtown business. After I started work in the cafeteria, I saw a lot of other jobs that looked like fun. So I joined plastics fabrication, then the IC operation. I never was much of a student, but now I'm going to school studying to become a technician. HP's changed my life; it's given me motivation. And that goes for a lot of my friends who work here, too."





Logging truck joins downtown traffic.

"I'm finding out I'm not a big city person after all, just a little country girl who was big-city raised," remarks Sue Peck, a production supervisor. "It took time for me to adjust to the small-town environment. I went through a lot of withdrawals—shopping is limited, there's a lack of restaurants and social activity. But I've learned to love the slower pace of life up here. I've done things up here I used to only think about doing—canning, baking, planting a garden, playing sports, and taking up hobbies like stained glass work. And I love the beauty of Oregon. In the Bay Area, we used to talk about it's being 'a short drive' to the country. Here, it's all around you!"



"Everything's great now," says Will Tucker, a buyer for the division. "But the transition from the Bay Area to small-town Corvallis was very difficult. Lynne and I got caught up in the excitement of moving, at the prospect of change... and we really didn't consider what effect the move would have on our lives. After the first winter rains, we had some adjustment problems. I guess I would simply caution others to take time before deciding to completely change their lifestyle." The Tuckers, including son Willy and 4-month old Stephanie, raise cattle and chickens on their 1½-acre farm in North Albany, just north of Corvallis—and they're now in the market for a larger piece of property. Lynne's become involved in a local service sorority, and Will is a board member for two agencies serving handicapped persons. "It's easy to get involved, and I get a lot of satisfaction from helping." He's one of many HP people now working with and for community organizations.

(continued)



## Corvallis

Adjusting from the hustle-and-bustle of the Bay Area to small town Corvallis can be difficult for some, according to production engineering manager Larry Gravelle. "I'm a bachelor, and I left an active lifestyle and a lot of friends. Because of the rain, people spend a lot of time alone here; you have to develop a knack for entertaining yourself." Larry's answer has been to buy a house and, between fix-up projects, start some indoor hobbies—like building remote control airplanes. Larry echoed the feelings of some other HP people when he added: "Yet, when you want to be alone and anonymous, it's not always easy. The company is such a big entity; you see HP people everywhere you go." A self-professed "ski nut,"

Larry describes Oregon skiing as being "heads-and-shoulders above California skiing because it's so much less crowded here."



Oregon State University, alma mater of HP president John Young, long has been the dominant institution in Corvallis. Today, OSU is the city's largest employer with about 4,000 full-time jobs, and its students make up nearly one-third of the city's population of 40,000. The university's well-respected School of Engineering was a major reason for HP's choosing Corvallis as a plant site. The company has hired 30 OSU graduates full-time, provided 92 summer jobs for university students the past two years, and has many full-time employees enrolled in continuing education programs.

"I was like all the others," says Susie Marshall, a native Oregonian who's now a production clerk at HP. "I didn't want those Californians up here. As a kid, I used to shake my fist at cars with California plates!" But Susie feels that HP's arrival has had a positive effect on Corvallis. "I'm really impressed with the plant! I love to drive up in the morning with the sun shining through the trees. And HP's meant good jobs for Corvallis people. I even have two relatives working here." Susie's a "traditional" Oregonian; she does her own canning—pickles, green beans, salmon—makes her own jam, and enjoys hunting and fishing.







"For the outdoors person, lack of time is the only limitation to keeping busy during leisure hours," says Stan Wight, who transferred from Stanford Park Division to become fabrication manager at Corvallis last year. "Fishing for steelhead and salmon in nearby rivers is fantastic. And I've already applied for a number of hunting licenses." Stan will trek to eastern Oregon to hunt muledeer and elk when the seasons arrive. He and his family also enjoy camping, exploring—and horseback riding. They own three horses and ride them on a 200-acre undeveloped area adjacent to their own five acres. "We certainly couldn't have found a comparable home 10 minutes from work in Palo Alto."



Farm scene next to HP plant.

## The view from Corvallis

Oregon's history is rich with stories of trappers, fur traders, lumberjacks and homesteaders. Richer still is its land, providing the lumber and farm products that have been the mainstay of the state's economy since the region's earliest settlement.

Much of that fertile ground is in the Willamette Valley of western Oregon, a 30-mile wide lowland ranging roughly from Eugene in the south to Portland in the north. It's bordered on the east by the Cascade Range, on the west by the Coast Range. The history of this valley really is the history of Oregon. It was the final destination of many homesteaders from the days of the westward migration, and even today, it contains the vast majority of the state's population. Near the center of the valley lies Corvallis, a college town that is one of HP's newer hometowns.

For many people, Corvallis has held a "small-town, slow-growing" image for years, and it still does have a small town look to it. But, until recently, it's not been

growing slowly. While the state doubled its population between 1940 and 1975, Corvallis' population boomed by nearly 500 percent. Since 1960, in fact, it's about doubled.

Most of that growth was attributed directly to the growth of Oregon State University, which reached a peak enrollment of 16,600 in 1975. A legislative enrollment ceiling for OSU and a drop in the number of young people coming into local high schools tended to stabilize the university's growth in recent years. Nevertheless, many people were surprised to learn that the city's population in 1978 actually was lower than the projected figure, which had been based on the historic growth pattern.

Even HP's arrival didn't push the actual population figure up to the projected level. Comments Corvallis Mayor Donald L. Walker, "Many people were surprised that HP's impact on Corvallis hasn't been as dramatic as was expected. It shows, I think, that the impact has been spread through the valley."

A contributing factor, too, has been the company's commitment and ability to hire the majority of its people from the

local community. Local hires make up 64 percent of the current work force.

Division manager Dick Moore arrived in Corvallis last February. "I was told about the sensitive nature of the HP-Corvallis relationship, but I found the community's attitude very positive," says Dick. "Ray King (the division's first general manager) had done some effective missionary work. He had a lot of community involvement, so the striking need for it really had disappeared."

Dick added that the division's first community Open House, which attracted more than 9,000 valley residents, had much to do with the change in attitude. "Local people had an opportunity to see the plant—which in itself is an asset to the community—and to talk with HP people on a one-to-one basis."

In addition to HP's constructing an attractive, non-polluting plant, there have been other positive impacts, according to Mayor Walker. "HP has provided jobs for many young people and, when one of our local plants closed, it took up the hiring slack. The company has provided a broader scope of employment opportunities for the area, too."

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## Corvallis

Rain in Corvallis means snow in the mountains—and skiing. That's the philosophy of many area newcomers, including Bill Martin, a manufacturing engineer who rents a ski cabin at Mt. Bachelor each winter. Bill, who's Massachusetts born and bred, isn't one to complain about the rain on another score: "Compared to the five feet of snow and freezing temperatures I lived with in the east, the rain's a piece of cake," he says with a grin. "And the summers here can't be beat." Softball is one of his summer passions. "I don't think you'll find another town this size that has such an active softball program. There are about 140 teams, and, of course, many HP people are playing."



There can be little question that HP jobs have been important. As one example, the division ran a one-line advertisement for a few people and received about 1,000 applications the following week.

Since six of the county's eleven largest employers—including Oregon State University—are exempt from paying property taxes, HP's financial contributions have helped the city as well. In addition to its property tax, HP has a \$1.4 million monthly payroll. And it made the largest single United Way contribution in the county last year. "More than monetary contributions, the management expertise that our people can provide has been very much in demand within the community," remarked Moore. Indeed, many HP people are active in a variety of local civic, service and business organizations. Some hold elective positions. Said the mayor, "I have yet to have an HP person turn down a request to serve on a committee or board."

"Overall, I consider HP a very good asset. I think the company is well-accepted in the community, even by the people who may have spoken against its coming here. I've lived here 18 years, and I think Corvallis is a much better place to live now than when I first arrived." □



Personnel manager Dick Anderson poses with a few new friends he's made since transferring to Corvallis. Dick owns a 46-acre farm 12 miles northeast of the plant. "Getting your own chain saw shows you're fitting in," he says. He's in the market for a tractor, too—and building a barn. He's raising hay, has three acres of apples, and—obviously—owns some livestock. "I wouldn't say we've changed our lifestyle since coming from the Bay Area. We've always been family-oriented and loved the country and gardening. But we certainly have changed the scale! As far as I'm concerned, I have the best of both worlds now; I'm working where I want to work and I'm living where I want to live."



Flexitime:

# If it's good for you, it's great for the corporate image, too!

Flexitime, now as comfortable as an old shoe at Hewlett-Packard, continues to attract a lot of favorable outside attention. That includes media comment, regular inquiries from other companies, as well as some serious-minded attention from scholars who document the changing social environment.

□ More than a decade has passed since HP's plant in Boeblingen, Germany, adopted the new *gleitzeit* or gliding hours pioneered that same year, 1967, by a Munich aerospace company. It was later picked up by the South Queensferry, Scotland, plant, then by Waltham Division after a six-month test in 1972.

The idea of flexitime, which gives people an opportunity to begin work at any time during a two-hour period and leave after an eight-hour day, slipped into HP quite naturally. In 1973 the company offered the program to other divisions for their consideration, and a year later flexitime was in general use throughout HP manufacturing plants. Today flexitime is standard for 90 percent of the 39,500 HP people at facilities around the world. Exceptions are those employees on shifts where work must be synchronized, some smaller manufacturing plants, and sales offices geared to customers' schedules.

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HP has won a lot of press mention for flexitime, also called variable or sliding or random or gliding or adaptable hours. All terms suggest flexible hours geared to the individual employee rather than staggered work hours for entire shifts.





## flexitime

Flexitime, which HP helped pioneer on two continents, has had a mixed acceptance among other employers.

European countries have been far quicker to adopt the idea of flexible work hours, with half the office workers in Germany, 30 percent of the total French labor force and 40 percent of all Swiss workers now on some form of flexitime. In the United Kingdom, which has moved more slowly, the government recently approved flexitime hours for 500,000 civil servants.

Adoption of flexitime has been more gradual in the United States, where Hewlett-Packard is still one of the largest corporate users. Best guess available, by the American Management Association, is that an estimated 5.8 percent of all employees nationwide were on flexitime in 1977, with that figure expected to rise to 7.8 percent by the end of this year. More than 70,000 government employees are reported to be on flexitime, and more would be added by legislation now awaiting Senate action which would set up a flexitime experiment for certain civil service employees.

Interestingly, Hewlett-Packard doesn't attempt to back up its faith in flexitime with a lot of formal statistics on absenteeism, tardiness, productivity and other hard-nosed measurements to prove that the program has a pay-off. (Gathering such numbers would not be easy anyway, since HP employees use the honor system in reporting hours to their supervisors.) In a recent article on flexible hours, nationally syndicated columnist Sylvia Porter quoted



“an HP spokesman” as saying that flexitime “is such an accepted part of HP’s personnel policies that we are no longer looking for reasons to justify it.” The purpose of the program has always been to allow HP people greater flexibility in arranging their personal schedules, and the only index occasionally monitored is how employees like it (see box).

Has flexitime helped HP in recruiting new employees? Yes, says personnel manager Dick Anderson at the Corvallis Division, where word about flexible hours has spread through the compact community. He finds that most job applicants have already heard something about the benefit, even if they don’t know the details.

“Flexitime is probably one of the most visible examples that HP is a different company,” Dick says. “It seems to symbolize to applicants that Hewlett-Packard has some basic human standards and values, that we treat people like responsible adults.”

Dave Curry, personnel manager at the Santa Rosa Division, says he actually spends some time underselling flexitime to local applicants: “People have heard there is complete freedom at HP and you can come in whenever you want!”

At the New Jersey Division, which attracts employees from a number of nearby communities, personnel manager Bob Mugglestone believes that few applicants are familiar with HP’s flexitime although it is listed among the company’s benefits in employment ads. But flexitime definitely helps, once people are in the door.

“It’s one of our ‘friendly’ benefits, such as our retreat in the Poconos, that I really enjoy talking about when I inter-

### How do you like flexitime?

At the Avondale Division, a questionnaire on flexitime designed by MBA candidates Joe Bohnert of that division and Don Swartz of the King of Prussia sales office was answered this spring by 150 employees.

People were asked about the effect (positive, negative or nil) of various aspects of flexitime: productivity, tardiness, absenteeism, safety, morale, scheduling hours, traffic conditions, leisure time, and interfacing with other departments, among a number of questions. Ninety-four percent of those answering felt the flexitime program was successful, with the only significant criticism (22 percent negative) leveled at interfacing with other departments.

“After we published the results, some people were so excited that anyone would complain about flexible hours that they stopped me in the hall to comment on it,” says Joe.

Similarly, recent sample surveys in the Loveland, Colorado, divisions showed that flexible work hours is way out in front as the most appreciated of 19 “environmental” benefits listed. Other items on the list were no rotating shifts, no time clocks, cafeteria on the premises, job posting, coffee breaks, etc.





Featured on a recent TV show about flexitime as a solution to job stress were three Microwave Semiconductor Division employees in Palo Alto. Personnel manager Polly Johnson (left), who wrote the HP booklet on flexitime, explained how flexible hours allow people to control their own day. Lab technician Shirley Richards (center) prefers coming in early during light traffic "but you don't panic that you're going to be late if you have a flat tire some morning." Accountant Dave Satterfield thinks flexitime "loosens an employee up" and it gives him time for softball coaching afternoons. The "Turnabout" show, originated by KQED in San Francisco, was aired in 148 cities throughout the U.S.

view people," says Bob. "They can relate to choosing their own hours as part of the nice, informal atmosphere we have here at HP." Professionals, who traditionally have somewhat more leeway in their hours than non-exempt workers, still like to hear that flexitime is a policy at the company.

From a community standpoint, flexitime's effect of spreading out arrival and departure times has won important points for Hewlett-Packard when proposing developments. The company's flexitime policy was cited approvingly as a way to cut down on peak-hour traffic congestion in environmental impact studies prepared prior to construction of the Corvallis Division facility in 1974 and, more recently, for the new Corporate headquarters building which will be built in Palo Alto. It has even been suggested that flexitime leads to more uniform use of a community's facilities such as golf courses and that power usage would be more spread out.

Periodically, reporters rediscover flexitime at Hewlett-Packard. Company files contain thick folders of newspaper clippings, magazine articles and book excerpts citing the experience of HP employees with flexitime. Television crews have filmed footage at the McMinnville Division and elsewhere. Some writers have drawn up long lists of on-the-job and off-the-job benefits of flexitime, including such an admitted advantage as "marching to the beat of your own metabolism." HP is usually listed as an example in any formal report on flexitime prepared by a U.S. governmental agency or research foundation, such as a GAO survey on altered work schedules submitted to Congress in 1976.

Also interested in flexitime are other companies, although the first rush of management questions inspired by wire service stories about the launching of the program throughout the company in 1973 has died down.

Andover's John Flaherty, formerly at Waltham Division, has worked with flexitime longer than any other HP personnel manager in the United States. He finds himself sought out as a speaker for professional meetings where the subject is discussed. In March 1977 he was a panelist at a joint meeting in Chicago of the Association for Higher Education and the National Committee for Alternative Work Patterns, and early this July he spoke at a workshop held in Boston by metropolitan and state transportation authorities.

"We are asked and consulted and have shared our experiences a lot, but I don't know how much we've influenced other companies in actually adopting flexitime," says John.

"I do think that the concept of flexible hours has to fit the personality of a company and the way it operates. Flexitime works in a company like ours where employees are willing to assume responsibility, but it's certainly not a panacea for a company that hopes to do something about morale problems.

"Most of what I see written in books about flexible time emphasizes the mechanics of how you set up core time and how you communicate the program to your employees. Not much is said about how flexitime should fit the style and character of the company—but an atmosphere of mutual respect is absolutely necessary to make flexitime work." □

## Women and flexitime

Credit for first proposing flexible work hours goes to West German economist Christel Kaemmerer, who published a paper in 1965 suggesting the concept as a way to make it possible for mothers to enter the work force.

Her words ring an echo in the United States today, where nearly half of all adult women are now working, including one-third of the women with preschool-aged children and one-half of all women with children in school.

"Flexitime is a crucial issue for women and their families," Jeannine Green, executive vice president of the national organization Catalyst, told MEASURE. "With the changing number of women in the work force, flexitime allows both parents to share job responsibility and family responsibility in a way that is not possible with rigid working arrangements.

"We see flexitime in the corporate structure as a benefit for men but an absolute necessity for women with family responsibilities."





## Project Prelude:

# Dawn of the global business meeting— where everyone stays home!

☐ Communications people around the world are still buzzing over Project Prelude. Using the most sophisticated “standard” equipment, including HP computer systems linked via a satellite, the project has convinced its observers that they’ve just seen their industry’s future in action—and it works.

Conducted by Satellite Business Systems between October 1977 and March 1978, the experiment tested not only the technical feasibility of new concepts in satellite communication, such as “electronic mail,” “teleconferencing,” and data processing, but also their usefulness in the eyes of businesspeople.

Some of their findings:

- A conference between people at widely separated sites—with video providing live or “freeze frame” pictures—offers acceptable and often better communication than face-to-face sessions.

- The motive for a teleconference is better meetings and time saved—not just money.

- Business people would quickly learn to use new communication tools and to install systems that met their needs—such as high-speed facsimile for transmitting messages.

- They would significantly increase their use of terminals for data inquiries if terminals were installed in convenient places.

- Participants came away from the experiment hoping the new communications tools will soon be theirs to use on a regular basis. Overall, they agreed that the use of satellites—instead of terrestrial lines—to link widely dispersed plants and offices will have a far-reaching impact on business communications.

For HP, Project Prelude began with a call from SBS early last year: would the company care to participate? And could it furnish the computer systems and service to meet the highly advanced requirements of the test?





NASA's Communications Technology Satellite, 22,300 miles altitude in geosynchronous orbit over North America, provided the link between widely separated locations for Project Prelude tests. Portable earth stations beamed and received the communications which permitted the participating organizations to conduct a single teleconference between people at two sites. HP-3000 computers handled complex data processing chores.

It was not a test to be taken lightly or speculatively. It called for twin systems, one at each of two sites which would shift three times during the course of the test. Included were HP 3000 Series II computers (model 6), plus three interactive 2645A terminals, graphics terminal and line printer in addition to disc storage, tape drive and special interface equipment. Their job would be to coordinate the project through data processing and computer-to-computer communication.

At each site a variety of cameras, cassettes, projectors, facsimile machines and other items would be in simultaneous operation, communicating with each other via the satellite in geosynchronous orbit 22,300 miles above North America.

The key to the computer operation was the powerful software HP brought with it. When Larry Hartge of General Systems Division arrived at the Comsat lab at SBS to review the HP system for a preliminary test, there was considerable doubt among non-HP participants that it could be up and running for months at least. The doubt was based on the assumption that the software requirements were too futuristic to be readily available.

Hartge and a crew of HP systems engineers, trained for the project by GSD's Rita Williams, knew otherwise. While there was plenty for them to do in getting ready, they knew that the various HP software products—Image/3000, Query/3000, Del/3000 and DS/3000—were well tested in the required areas. In under three weeks it was all systems "go." As many as 60 HP people participated, including factory teams as well as

customer engineers and operating systems specialists from local sales offices near the six sites used.

What does all this mean in terms of communication? As an example, one of the three tests took place between two branches of Montgomery Ward, one in Chicago, the other near Baltimore. The environment was a realistic "live" meeting to discuss a business proposal.

As the people arrive for the meeting, the computer network is used to register them, creating a local data base. While the meeting is in progress, the two systems exchange registration data, and keep the data bank constantly updated as late people arrive.

Then a need arises in the discussions for certain missing sales information. Through the computer system, the participants request the information from several possible sources such as corporate library or department files. The remote librarian responds to the message received on the library's terminal, finds the missing information and transmits it via

facsimile to the local meeting site. The twin site has the option of receiving the information in various forms—on the fax machine, the screen of the terminal, or as a line printer copy. Though composed and used in tabular form, on request it is quickly processed into a graph of a sales curve on the HP graphics terminal.

Meanwhile, of course, the meeting has been in process, with split-screen techniques used to bring the participants together visually. The action can be "live", or it can be "freeze frame" on a document under discussion.

The attendees agree to compose a memo outlining the substance of the meeting. The text is entered via an HP CRT terminal at one site, with edits and amendments passed back and forth via the satellite link until agreement is reached. The meeting is adjourned.

Even as the participants leave, copies of the memo are being printed out on terminals in their various offices, its recommendations awaiting their action.

Of course, though still in the future, that's a scenario which Hewlett-Packard recognizes as a major opportunity. The General Systems people and their representatives in the field are making extensive use of HP's participation in Project Prelude. Their use includes publicity in leading business and industrial media, as well as slide presentations to customers and other interested groups. In addition, the GSDers are taking a closer look at a product-development strategy for communications, based on the company's experience with actual satellite communications. Project Prelude may indeed be just that for HP. □



In General Systems computer room, Rita Williams and Larry Hartge discuss some of the things HP learned in Project Prelude. More than 60 HP factory and field people contributed to the test involving two HP-3000 II systems that were moved to various sites around the United States.



## Large site optioned in Northern California

PALO ALTO—The company has taken an option to buy about 1,100 acres (444 hectares) of land in an industrial park north of Roseville, California. If purchased, the property would serve as the site for a future plant to be occupied by part of the Data Systems Division, now at Cupertino, California.

Construction would begin several months after a purchase agreement is completed, and operations would begin in a leased facility. Plans now being drawn would call for development over a period of years of a campus-like setting which combines extensive landscaping with a maximum of open space.

## Spokane site optioned

PALO ALTO—The company has taken an option to purchase about 150 acres of land near Spokane, Washington, as the site for a future electronics plant.

The property is located about 11 miles east of the city, and is part of a proposed planned residential and industrial park.

Purchase of the property hinges on receipt of appropriate zoning for the area. Positive results of soil testing and drainage surveys and satisfactory arrangements for utilities and roads are also necessary.

Bruce Wholey, HP vice president-corporate services, said that if the property is purchased it will initially be occupied by part of the Stanford Park division, now located in Palo Alto, California. The major portion of the division will remain in Palo Alto. Operations at Spokane would start in a leased, interim facility of approximately 50,000 square feet.

## Desktop Computer Division named

FORT COLLINS—A change in name from Calculator Products Division to the Desktop Computer Division has been announced. The change coincides with the relocation of the division's manufacturing plant and administration offices to the new Fort Collins site from Loveland, Colorado.

Don Schulz, division general manager, said the change more clearly reflects the nature of its products which have grown in computing power to the point where they rival minicomputers in many respects.

## Dave Packard on Boeing board

SEATTLE—Dave Packard has been elected to membership on the board of directors of The Boeing Company. He is also a member of the board of directors of Caterpillar Tractor Company and Standard Oil Company of California.





## From the president's desk

The June issue of MEASURE contained an updated HP company organization chart. If you took the time to count the number of divisions, you'd find we had 36—each slotted into one of six product groups. The sales of all of the groups' products are through six sales regions: four in the U.S., and two covering international markets.

With so many organizational entities and over 5,000 products in our combined product lines, one might well wonder how we keep in touch with what's really going on. The answer is, it's not easy, and in fact requires considerable effort to accomplish.

A principle vehicle for effecting this communication is the division review. Since this is an annual event at almost every division and sales region, I thought you might like to know something about its history and purpose.

Division reviews didn't really start at some specific time, but are the natural outgrowth of the personal interest and hands-on style so characteristic of HP. As a small company, a group of managers might collect at an engineering bench to evaluate a new product about ready for production. As divisions were formed, and particularly those remote from Palo Alto, we found more and more business matters besides R&D programs were of interest.

Today's division or region reviews cover a full range of business matters: financial performance for the past year, outlook for orders, shipments and facilities for the next three years, detailed presentations on product development strategy and key programs, and very importantly, a look at people management including training, recruiting and affirmative action goals and results. A very broad cross-section of division personnel are involved in organizing for and presenting reviews. This is an excellent forum to become acquainted with the growing numbers of people that are key to the success of all these programs.

The visiting group of reviewers shifts a bit depending on

the location and schedules, but generally includes several members of the executive committee, heads of corporate staff departments such as personnel and controller, appropriate group managers, and usually division managers with a special interest in the programs. At a recent review in Santa Rosa we also had several HP outside directors attending, since we had a board meeting at that location the day following the review.

Often the technical portion of the review is repeated a second day for a broad representation of engineering management. This proves to be a very effective means of stimulating the flow of technical information across the company.

One of the not so obvious benefits of the review mechanism is the opportunity to see how well some of our policies and programs work. Policies originate from many places: personnel, legal and marketing, to name a few. However, they all come together at the division, and not infrequently we find that some fine tuning is indicated to achieve the desired results.

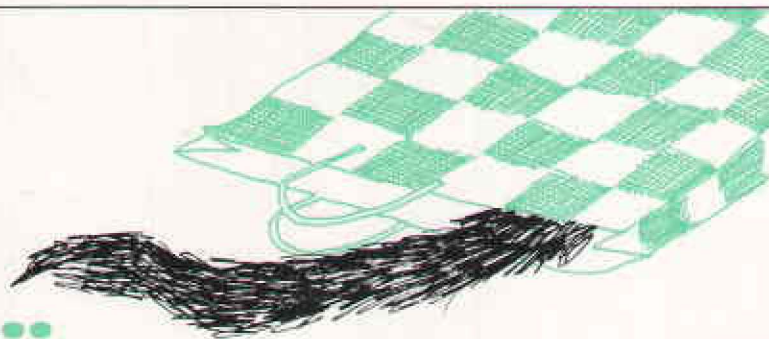
With all the top policy originators and implementors in one place at one time, the usual communication paths are short circuited, and we can focus on results. I think this has helped significantly in keeping policies and programs flexible and responsive to the real needs of the organization and avoiding bureaucratic rigidities.

Division and region reviews take quite a block of time for the top level management of the company. In looking at my calendar, it averages one day every other week, not counting travel time. We feel the time is well spent and those participating feel the same way.

Reviews have served HP well in furthering personal contact and in contributing to the flow of information that critically shapes our company's direction. It's a tool we'll continue to rely on in the future as HP grows and becomes even more complex.



# Cat's Tale...



**SCENE I:** A small California community. Two women, both friends of an HP employee, are driving together to a luncheon. A cat hurtles across the street and is killed by the car. The upset women find the cat's owner—very distraught—who pleads with them to take the remains to an animal hospital for disposal. She gives them an empty plastic shopping bag, an elegant closable printed bag furnished by a very fashionable store. They place the broken furry body inside, put the bag on the back seat of the car, and drive off to have lunch before acting further on behalf of the deceased.

**SCENE II:** Seated in the restaurant, the women are able to observe their car in the parking lot. They see another car park nearby, a well dressed woman step out, peer into their car, and reach inside the open window. Next, the amazed friends see her walk coolly into the restaurant with an elegant printed shopping bag in hand, order lunch, finally open the bag—and faint dead away with choking, gasping sounds.

**SCENE III:** Unable to arouse the woman, the restaurant manager phones for medical assistance. As the ambulance crew slides the stretcher-borne victim into their vehicle, a waitress rushes out and carefully places a purse and elegant shopping bag beside the collapsed woman.

Exit all, with siren wailing.

The friends are still wondering what happens next—as the woman is revived, as the hospital admittance staff takes inventory of her effects, or... make up your own ending.

## Measure

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