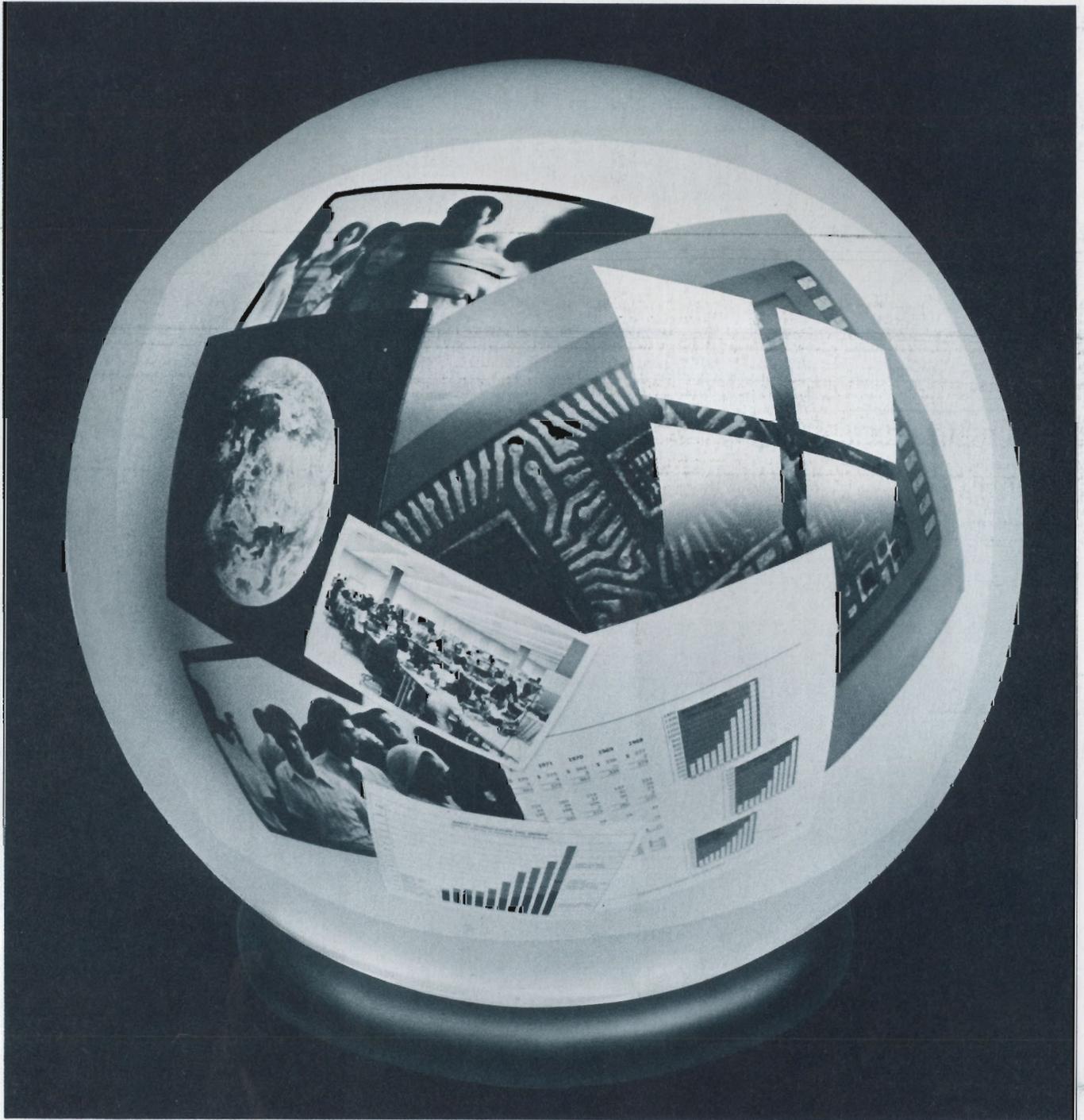


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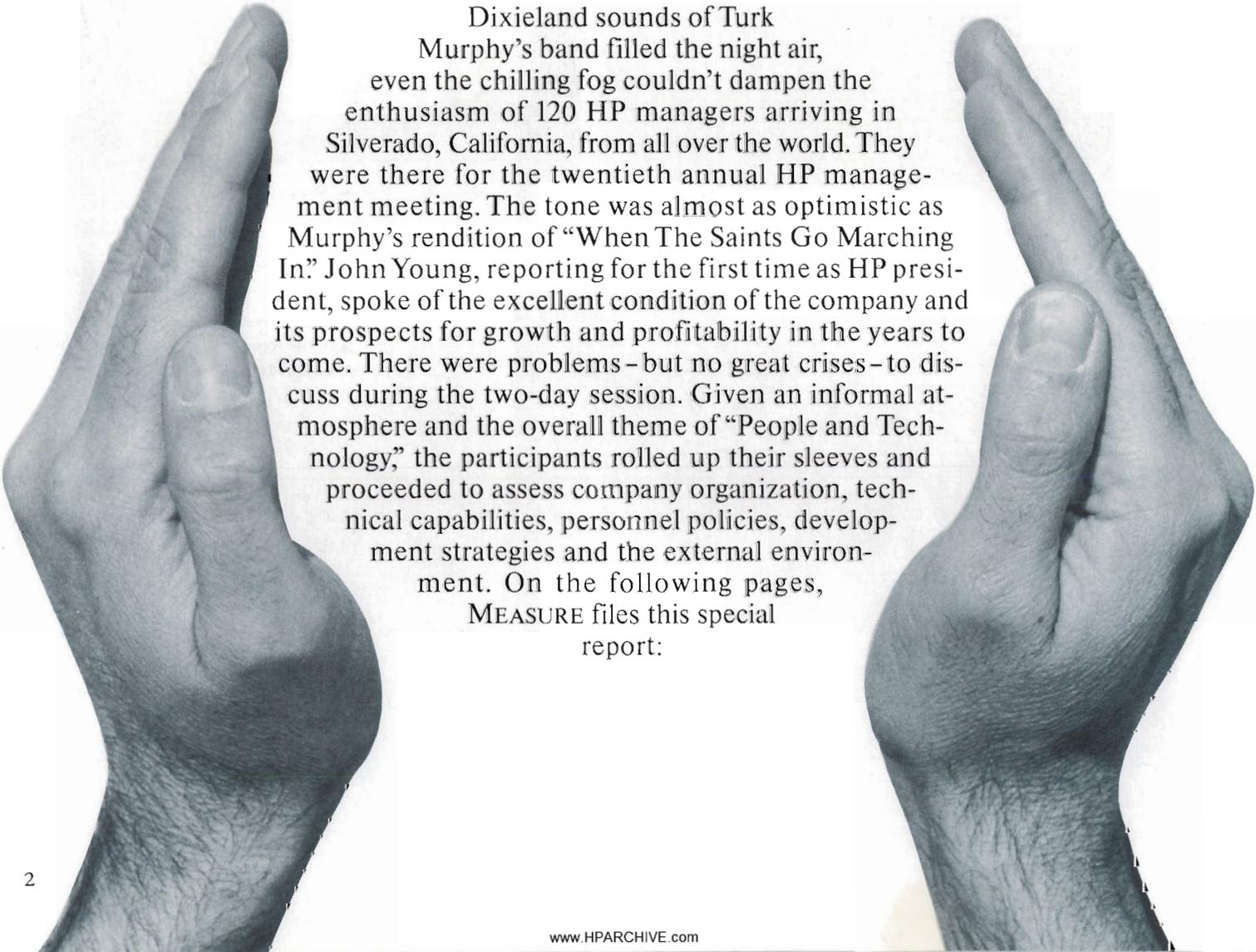
For the men and women of Hewlett-Packard FEBRUARY/MARCH 1978

Focus on the future...a special report



The HP management team looks ahead:

people-technology-environment



As the
Dixieland sounds of Turk
Murphy's band filled the night air,
even the chilling fog couldn't dampen the
enthusiasm of 120 HP managers arriving in
Silverado, California, from all over the world. They
were there for the twentieth annual HP manage-
ment meeting. The tone was almost as optimistic as
Murphy's rendition of "When The Saints Go Marching
In." John Young, reporting for the first time as HP presi-
dent, spoke of the excellent condition of the company and
its prospects for growth and profitability in the years to
come. There were problems - but no great crises - to dis-
cuss during the two-day session. Given an informal at-
mosphere and the overall theme of "People and Tech-
nology," the participants rolled up their sleeves and
proceeded to assess company organization, tech-
nical capabilities, personnel policies, develop-
ment strategies and the external environ-
ment. On the following pages,
MEASURE files this special
report:

Bill Hewlett:

On becoming a legend

Bill Hewlett recalled that when he was a student at Stanford the depression-era engineering lab was equipped with several lined wooden troughs to catch leaking rainwater. When anonymous pranksters put goldfish in them, the eminent Professor Frederick Terman thought Bill was the culprit. Bill says he didn't do it, but the story persisted and he eventually stopped denying it.

Legend would also have it that Bill developed the HP-35 calculator. "I won't tell you that I didn't have anything to do with it," he said. "But I didn't have anywhere near as much to do with it as people give me credit for, and for several years I said so until I just finally quit saying it. I decided if people wanted to have a legend, why spoil it?"

The fact that Bill and Dave have become almost legendary figures in the company is one that Bill said he sometimes finds difficult to swallow: "So many people around the company come up to shake my hand and say 'Bill, I'm delighted to see you,' as though they expect never to see me again. They just want to take the opportunity to shake my hand before I disappear into thin air. Well, I assure you I don't intend to disappear into thin air."

Bill said the fact that he and Dave have held such a special position at HP can't be duplicated. "John Young will not be a Bill or a Dave," he said, "and I think it would be wrong if he were." Acknowledging that the style of management may change, Bill added that the traditions we know as "the HP way" will undoubtedly endure. "Even if the new management team had an inclination to change the character of the company, they would have a hard time doing it. Because each one of you — multiplied by the 35,000 people in the company — would be there



to protest indirectly and to say 'This isn't the way it's done at HP.'"

Since the company began to divisionalize in the late fifties, other major organizational changes have come approximately every five years, Bill told his Silverado audience. "We've not been static in the past, and there is no reason to believe we will be static in the future in terms of our organizational structure." We should expect some changes, according to Bill, and welcome them as signs of a healthy and growing company.

Bill explained that HP's management philosophies require developing managers over a long period of time. John Young, now HP president and soon to become chief executive officer, was not only well qualified but also well known to HP people and board members when he was chosen to lead the next generation of management. "I have more at stake in this company than anyone besides Dave," Bill concluded, "and I want to tell you that I feel very comfortable with the new management team."

John Young:

Four fundamental influences

In taking a broad look ahead, president John Young reported that HP started the fiscal year "in exceptionally fine shape." He said the company has an outstanding management team, has solid programs underway, and its financial condition is simply outstanding.

"In fact," he recalled, "things looked so good when I came aboard as president in November that Dave Packard kidded me about having only one way to go!"

In spite of that strong position, John suggested that, because HP is a dynamic company in a dynamic industry, a lot of changes are to be expected as we move ahead. Some of these changes will be created by short-term factors such as product introductions and economic cycles.

"In the long run," he said, "it seems to me there are four fundamental influ-

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ences that will create change in our organization — growth in size and complexity, shifts in the product mix, changes in technology, and of course the external environment.

“In the matter of growth, the company shows a record of sustained high performance. If you simply extend the trend-line of that growth through the next five years, you find that we will be hiring some 20,000 additional people, building more than seven million square feet of floor space, and passing through the \$3-billion level in annual sales

“Now, the floor space and the facilities won’t come easy. But these are things we can manage. A new task force already is at work identifying our needs and investigating sites.

“Our real challenge will be in managing people — in enhancing the HP way as we continue to grow. It seems to me we have done a very good job through the various seminars and programs that have been developed in training upper and middle managers to the problems of growth.

“On the other hand, we have a number of problems in the area of first-line supervision. What it boils down to — as I noted in my letter in the January issue of MEASURE — is that first-line supervisors are really our cornerstone in managing people. They make up about half of the 4,000 managers we have throughout the company. Overall, we need to provide a better definition of the supervisor’s job.”

Young said a task force set up through the Operations Council has prepared a report containing findings and recommendations on the supervisory situation which will be given major emphasis this year. Noting that the company expects to develop another 2,000 first-line supervisors during the next five years, he said they must be given every opportunity through coaching and training to be successful. But we must expect and we must get good performance.

Looking at product-line interaction and especially at the effects of digital technology on all lines, John said we may need to organize our businesses along lines somewhat different from the classical HP approach. That approach, he indicated, has become comfortable for us and offers an excellent place for motivating people and for achieving tactical objectives. But it has limitations in generating the common strategies and coordination that increasingly are required by highly interactive product lines, integrated applications and customer solutions.

“I think this represents our top problem area,” John added. “I’m not prepared to offer a solution at this moment, but it will be given very high priority this year. What I think is at stake is how we preserve the strong divisional structure we have, yet move into a more strategic mode that will let us coordinate the divisions and groups in a way we haven’t achieved today.”

In the area of technology, John discussed the coming impact of very large scale integrated circuitry, then asked the

managers to give full consideration to the implications of their integrated circuit operations, making sure that today’s strategy fits tomorrow’s problems. He said the trend to a higher content of HP-produced circuits in major product lines means we must be very cost conscious if we are to be competitive. The new engineering council, headed by the group engineering managers, has been asked to make IC strategy a top priority matter.

Finally, John commented on the recent fourth-quarter performance, noting disappointment in the control of spending. “I can tell you that we are going to put a great deal more emphasis on quarter-by-quarter performance and on meeting the targeted net profit in each and every quarter on a stand-alone basis.

“Let me add that management meetings tend to focus on problems and not on the areas that are in good shape. We are a very successful company, and success means change. The problems we are talking about are the problems of success. I feel confident we are well equipped to deal with these issues.”

What kind of shape are we in?

Dean Morton:

A look at 1977

“In terms of overall performance, clearly 1977 was one of the best years ever,” reported executive vice president **Dean Morton**. It was not only the bottom line he was referring to, but also to figures showing that productivity was up and inventories were held at comfortable levels.

Dean was concerned with the way HP arrived at those end results — not always smoothly or according to plan. Expense control at year end stood out as one of the worst problems, partly due to a “good year” psychology which prompted people to spend more in the fourth quarter. Dean urged HP managers to take a harder look at their targets, to try to do a better job of revising their plans as situations change, and to smooth out performance throughout the year.

Bob Boniface:

Administration in action

Bob Boniface, executive vice president for administration, reviewed corporate headquarters expenses, pointing out where the increases came, and compared the company's general and administrative costs of the past several years. "We're putting a lot of study and effort into controlling administrative expenses," he said, "and we still have a lot to learn."

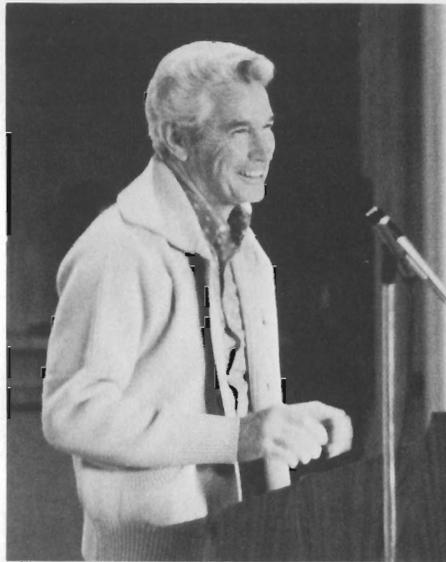
Significant increases in personnel costs were solely due to compliance with new government requirements, according to Bob. Substantial administrative expenses are foreseen during the current fiscal year as well, and targets call for holding those costs at a fairly even percentage of shipments in the future. "We don't know what the 'right' percentage is yet," he explained, "but we should probably be making some reductions in the high growth sales years." He said he was pleased with corporate staff performance in 1977, except for the year-end bulge in spending.

Bob reviewed the major changes in corporate staff organization over the past several years, including the establishment of the controllership function, the strengthening of the Legal and Personnel staffs, and the reorganization of Manufacturing Services and Corporate Services.

Looking ahead in each functional area, he said Corporate Marketing will be working with the product groups in developing strategies to balance marketing capabilities with available resources and expand on an orderly basis.

The Treasurer and Controller functions will continue to refine HP's accounting systems for better internal control and management information.

Manufacturing Services will be emphasizing quality assurance in the coming year, while Corporate Services will go on developing and coordinating strategy for information systems, making increasing use of HP's own computers. "We may develop the real strength of the 'next bench syndrome' for computer systems," Bob speculated. He also reported that the



Bob Boniface

department will be looking for several new manufacturing sites.

The Legal staff will be working toward assuring that HP meets all legal requirements in every country in which it operates. "There should be no exceptions," he said. "Managers must understand international legal requirements and keep in mind that each country organization is a separate corporate entity subject to local laws and regulations. It's not like doing business with another U.S. division down the street."

Personnel will be giving special attention to training at the supervisory level, and to improving personnel services internationally. Public Relations will also be strengthening its international activities, and working closely with Government Relations to communicate effectively with national, state and local officials.

General managers of the six product groups were cautiously optimistic as they reviewed 1977 performance and looked a year or more into the future.

Medical Products Group

Since becoming general manager of the Medical Products Group at the start of the fiscal year, **Dick Alberding** said he had confirmed three key characteristics of the organization:

- An HP reputation in the medical electronics field second to none;

- A spirited and experienced medical products team, thoroughly professional yet appropriately conservative to match the business environment;
- A group with sound administrative practices, lean in overhead, etc.

Nevertheless, HP's medical instrumentation efforts face some interesting challenges, the most significant being a drop off in health-care spending and an expectation of this trend's continuation. Among the pressures at work, according to Dick, are aggressive government efforts to legislate hospital cost containment, voluntary efforts on the part of hospital organizations to do the same, "certificate of need" reviews for new hospital investments, etc.

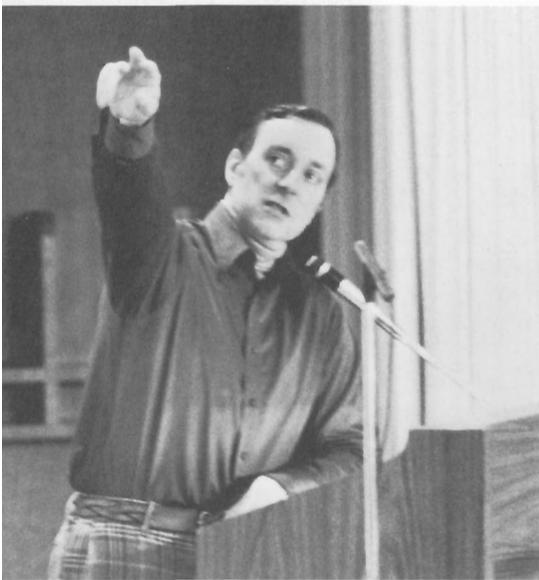
The result — a formidable challenge to deal with a health-care market accustomed to a Cadillac appetite but now on a Chevrolet budget.

Can HP cope? Yes, but it's going to take a strengthened commitment to technical contribution, identifiable product features for improved cost effectiveness, competitive price tags, etc. Really nothing new, but a direct challenge to do the job better and more consistently. It's not going to be easy, but it can and will be done while having some fun in the process.

Computer Systems Group

Reporting on Computer Systems Group, vice president **Paul Ely** noted that the group's performance was very satisfactory in 1977; orders, shipments and profit showed big gains over the prior year and over targets. Paul sees a large number of calculator and computer manufacturers converging on the rapidly expanding \$5-billion small-computer market. He thinks the various market segments will disappear with time, and the competition will step up considerably.

The group is aligning itself into two
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Paul Ely

system families, generally based on types of applications rather than size: the systems most suitable for technical applications, using the evolving 2100-series architecture, and business systems consisting of the HP 3000 and other products under development.

Central to HP's computer strategy is to concentrate on selling to manufacturing companies with requirements similar to HP's, according to Paul. He also outlined the need to expand the field sales team, keep the group's product lines strong and balanced, and place top priority on maintaining customer satisfaction. Another major objective for 1978 is to improve service.

Calculator Products Group

Bob Watson, general manager of the Calculator Group, reviewed the highlights of 1977, which he described as a year of change for the calculator divisions. Many of the changes involved the Corvallis site, which he called "one of the most attractive in the company," and where a high-volume integrated circuit facility has just been completed.

Price competition made it a difficult year for Corvallis. "But I think we're now in a much better position on our product program, and should soon begin to see the return on our investment in in-house technology," Bob said.

The year's "star performers" in the division's product line were the HP 67 and 97 programmable calculators. The handheld printing models introduced near the end of the fiscal year are also selling well, and Bob outlined some exciting product developments now in R&D.

Fort Collins (Colorado) Division (transferred to Computer Systems Group subsequent to Silverado meeting — ed.) has had mixed success with its 9896 small business system. "We were a little slow in getting applications software customized for some countries," Bob explained, adding that the dedicated sales force for the system had grown from 9 to 45 field engineers by the end of the year.

Construction is progressing on the Fort Collins site, and Calculator Products Division, now in Loveland, will begin to occupy the site along with the Fort Collins Division during the next year. At

Tomorrow's technology

A penetrating look into tomorrow's product technology was provided by a series of speakers. Most of the subject matter was quite confidential. All of it was impressive.

The tone was set by Barney Oliver, vice president-Research and Development, who said that in reviewing the area of technology we examine the very foundations of our business. He said that since the introduction of the first integrated circuit in 1960, each year has seen a doubling in circuit density. From 1960 to 1970 it went from 1 to 1,000 circuit elements on a board. Now it looks as if, by 1980, the density will be in the order of 1,000,000 elements on a chip.

While noting there are limitations to how far VLSI (very large-scale integration) can be taken, it will make a tremendous difference in what we can do.

One of the new pathways for achiev-

ing that technology — the E-beam (electron beam that "writes" circuit designs) — was described by Don Hammond, director of the Physical Electronics Lab of HP Labs. Fred Wenninger, IC Systems manager for Loveland Calculator Products Division, described applications that will pack large-computer capabilities in pocket-size packages. Ed Olander, engineering manager for Calculator Products Group, said VLSI represents the next generation of controller devices.

Marco Negrete, engineering manager for Computer Systems Group, commented on the dramatic reduction in the cost (per bit) of computer memory. He said the continuing shrinkage in density of memory will push us into higher and higher levels of function integration. VLSI is going to make distributed data processing a very easy thing to do. For people who only want to solve a problem, computation will be made quite simple.

Al Bagley, engineering manager for the Instrument Group, raised the question of how customers will use 100,000 memory bits in an instrument? He answered



his own question by indicating that processing of data is "where the action is" in instruments, and that it is hard to imagine an instrument that couldn't use a microprocessor. As an example, he described the 8568 spectrum analyzer from Santa Rosa Division; because of a microprocessor, it behaves almost like a friendly Bureau of Standards at your fingertips. He added that "VLSI is catching!"

CPD, it was "the year of the 9825," Bob reported, referring to phenomenal sales of the division's workhorse desktop computer. Other HP divisions were among the best customers as the 9825 was used as a controller in a number of instrument systems. It also appears that the 9845 desktop with built-in CRT display is another product success story in the making. Introduced in October, it has been selling well during the first quarter of the 1978 fiscal year.

Challenges Bob sees during the next year for the Calculator Group include gearing up IC production, relocations, increasing the size of the field force, and training new people.

Instrument Group

"1977 really was an outstanding year," said **Bill Terry**, vice president and general manager of the Instrument Group. He reported that production costs declined, quality improved, sales and orders were high, resulting in record profits for most divisions and product lines.

Sixty new products were introduced during the year, and Bill emphasized that the group's new-product program is the key element in its success. Explaining how product development affects growth, he talked about the different types of new instruments: "The classical 'B' models keep our base strong. Their timing is very important — particularly as it relates to technology changes and competition — but they really don't add much of a dimension of new growth. Then we have product line extensions that are valuable contributions in both performance and lower cost. If we do a good job in that area we can grow faster than the market. And then there are the entirely new areas or diversifications in which we start whole new product lines without affecting our existing base." He cited the logic analyzer family from Colorado Springs as an example of an all-new line of products with both excellent results plus growth potential.

Looking ahead, Bill sees a growing interdependence among divisions and groups, and he called for more interaction and sharing in IC strategy, product lines, R&D, and sales-force selling assignments.

Over the long term, the problems are perhaps more theoretical but nonetheless real. "I'm always worried about the organizational question," Bill said. "How big

can a division be and still be manageable? How can HP keep that vital sense of responsibility, freedom of action and accomplishment? We've examined this in a lot of different ways."

Bill described the subdivisional or "operations management" concept being practiced in Colorado Springs and Santa Clara. He said it seems to be working well, that it generates an enthusiastic sharing of the workload — as in a small company — and is getting good results, but the group is approaching it cautiously. "We want to be sure there are fundamental reasons for this approach, such as differences in markets, products or technology," he explained, "and that we're not just doing it to expand the organization."

The biggest long-term challenge, as Bill sees it, is "maintaining a sense of HP teamwork. We really are growing together, and that's where our strength is, and yet there are many things that can pull us apart. We are in different businesses as we've said, but they're really not fundamentally different. We're very well organized these days. We know the territory on a global basis better than ever before, and we have very sophisticated and timely information systems. But we need to take more care that we don't become the 'frozen bureaucracy,' the inward-looking type of organization in which the scorekeeping becomes more fun than the game-playing."

Bill cited some examples of what he viewed as bureaucratic behavior within the company, and he urged HP managers to work on the fundamentals — and *together*. "Competition is healthy, but going out of your way to help the other guy is even more important. There can be no individual winners if HP doesn't win."

Analytical Products Group

Emery Rogers, general manager of the Analytical Products Group, talked about the trend toward systems with "brains" — calculator and computer controllers, microprocessors, and integrators — and what he termed "mutual backscratching" between divisions and between Analytical and the other product groups. He was referring to the exchange of technology and products between divisions, the trend toward combining different analytical techniques as in the new gas chromatograph/mass spectrometer systems, and the use of such products as computers, peripherals and

recorders in analytical systems. Those systems, in turn, are used for environmental monitoring and materials studies throughout the company.

Following this "mutual backscratching" philosophy, the group now manufactures gas chromatographs in Germany as well as the U.S., and the German-developed liquid chromatographs in Avondale, Pennsylvania in addition to Karlsruhe, West Germany. Another trend Emery cited is that "smaller equals larger" — that is, smaller systems are resulting in larger sales volume.

Emery reported on 1977, a good year for Analytical, and showed that each product line contributed to the group's profit picture. The major challenge for 1978, he said, is to reduce the warranty percentages and failure rates of analytical instruments.

Components Group

"HP is not a broad-based semiconductor supplier, but in those markets we serve we tend to be a leader," said **Dave Weindorf**, general manager of Components Group. "This approach does not exclude some high-volume business, on a selective basis." He acknowledged that HP components are not always the lowest priced, but their quality and reliability are high.

For Optoelectronics Division 1977 was a tough year, because of declining demand for calculator and watch display digits. Dave reported that the first quarter of 1978 has been good, but the group's profit picture this year will be affected by the cost of moving Microwave Semiconductor Division to its new site in San Jose.

The group is strengthening its international sales and marketing forces in Europe and the Intercontinental Region, and continuing to build up its worldwide network of distributors. "We believe there is more international business than we're capturing," Dave explained. He also stressed the need to work toward stable employment opportunities in HP's South-east Asian manufacturing operations.

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John Doyle:

The personnel role

"After another year in personnel — my second — I have a basic feeling that managers do not expect enough from their personnel departments." John Doyle, vice president-Personnel, said the trouble seems to be that some managers have a hard time accepting help in people management.

"In fact," said Doyle, "not asking for any help here is somewhat like not using a computer in designing a complex new circuit; you can do without the computer but it sure is a lot more work that way."

Doyle pointed out that there are plenty of people in HP personnel departments who are able to help managers manage. They could make the whole task much easier. Various universities also are providing good training in the personnel field and, in view of our large recruiting program as well as other personnel needs, the divisions should look to those sources as well as within the company for talented professionals in the future.

"We need them not just for today but for managing the much more complicated company that we're going to be in the 1980's," Doyle said.

Doyle recalled that when he was a general manager (Manufacturing Division and AMD), he too didn't give too much thought to the personnel role. "But," he added, "if I were a general manager today I would be much more demanding of the personnel function, and I would staff the department differently from the way it was in those days.

Among the reasons compelling a reconsideration of the personnel role, Doyle said, is the fact that \$677 million — almost exactly half of the company's total revenues in 1977 — went for payroll and benefits. Even quite small changes toward more efficient and productive use of our people resources can quickly pay very significant returns when working with sums of that size.

The important job of more clearly defining the roles of first-line supervisors and skill specialists was reviewed in workshop sessions. This one was led by Bill Parzybok (left) and Peter Carmichael, the general managers respectively of Loveland Instrument and South Queensferry divisions.

Touching on the first-line supervisor situation, Doyle noted several problem areas. First, given the number of people now involved, there are some who do an unsatisfactory job. Then there is the problem of definition — who is and who is not really a supervisor? What are their responsibilities? And how do we define and utilize the lead or skill-specialist function?

HP must do something about all of these problems because the first-line supervisor is so important to the welfare of the company. There is no question that people management is the job of the manager and cannot be delegated to personnel. This is true at HP as at most other companies. However, it does not mean that the job has to be done entirely alone without advice and assistance from anyone, and here personnel can and should often be helpful.



John Doyle

How the new retirement "guarantee" will work for U.S. employees was explained to workshop participants by Ed Truitt, corporate compensation and benefits manager. It was noted that funding of the program will not affect profit sharing.



Ray Wilbur:

Meeting affirmative action goals

Progress and problems in the area of equal opportunity and affirmative action were reviewed by Ray Wilbur, vice president-Human Resources. He noted that while customs and laws vary around the HP world, the principle of fair and equal treatment of people should be considered basic throughout the company.

In discussing affirmative action programs, Wilbur presented data showing the company has done well in relation to its own position of previous years, and in relation to other companies that have compliance reviews.

"We are doing well in our overall gain in percentage of minorities," he said. "What is evident is the need for continuing efforts to upgrade the minorities and women that we now have with us."

On the other hand, according to Wilbur, much time and attention has been devoted to resolving problems and com-

plaints. To help minimize such situations, Wilbur advised the managers to give serious attention to insuring equal opportunity during and after employment in the areas of pay, age, promotions, qualifications, transfers, training, recruiting, and attitudes.

"We must learn from our mistakes," he concluded. "We must know our weaknesses, and initiate steps to treat all our people as well as job applicants fairly. These are management requirements in HP. To do them well is most rewarding to you as managers and certainly to our people and to HP's reputation."

In anticipation of his retirement in April after 21 years with HP, Ray then took the opportunity to pass along some observations about the company and its future. These remarks will be presented in a near-future issue of MEASURE.



What kind of "climate" do we face?

Dave Packard:

The impact of social change

In introducing the subject of HP's external environment, Dave Packard touched upon an often-overlooked way in which the environment outside the company is important to HP. "Over the years we have been very highly dependent on the external environment for the technology we use," he explained. "We have generated very little fundamental scientific knowledge within the company, but we have an unusual ability to take advantage of the research done by universities and other organizations outside our company — and to take that technology and convert it into products."

Dave also commented on the changes brought about by the political and social upheaval of the sixties, affecting the business community along with many other established institutions. "Here in the U.S. we often thought of the student uprisings of that decade as a reaction to our involvement in Vietnam, but actually they were not limited to the U.S. — they occurred simultaneously in Europe and Japan and even the People's Republic of China. It was almost as if the young people all over the world caught some disease and suddenly became concerned about the 'establishment.' It's not possible to draw any significant conclusions about that move-

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Dave Packard

ment, but we are certainly aware that it changed public attitudes very rapidly.”

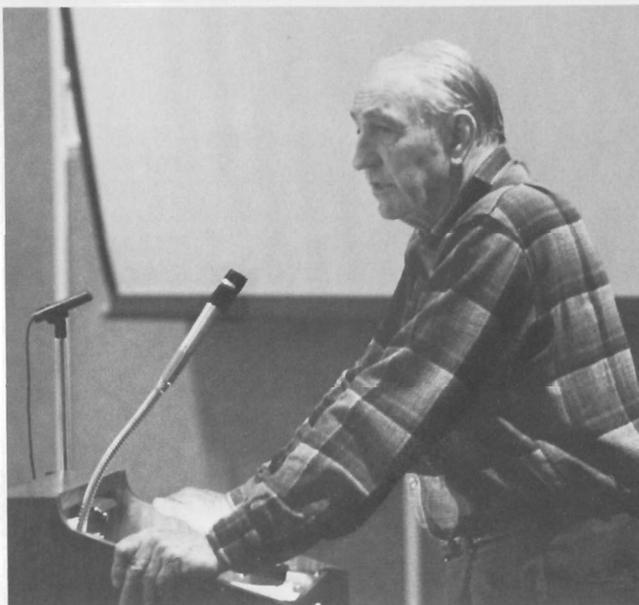
Dave spoke of people’s changing expectations, and the failure of business and other institutions in meeting them. Historically, when such gaps have existed in a society, change has been precipitated in three basic ways.

“One way is that pressure groups will build up,” Dave explained. “This was, in a sense, the genesis of the labor movement. And of course we now have pressure groups of consumers, environmentalists and others concerned about the way the establishment is performing, including the way business is doing its job.

“The second thing that happens is that the concerns of society are translated into action by a higher authority such as government. And when the changes are written into the law they can become problems for us.

“The third thing that can happen — and that *should* happen to a greater degree — is that these concerns set off a self-correction process within the institution. To the extent that the institutions themselves are able to perceive the changes, adapt to them, and anticipate the proper action to take, they can avoid a great deal of difficulty. I think that’s the course that business and industry should follow, and we need to put a great deal more energy into it.

“I think we have a pretty good record in that regard. We recognize some of these concerns in our corporate objectives, and I think we’ve been out in front in terms of our concern for the communities in which we operate, in equal opportunity and other areas. I think it’s going to be very important for us to continue to stay out in front to the extent that we can.”



Jack Beckett: *Proliferating laws and regs*

Jack Beckett, HP government relations manager, reported on the proliferation of proposed new laws at all levels of government, and the difficulty of keeping up with those that would affect HP. Bills in Congress and the state legislatures are being introduced at record rates. “States vie with one another to be leaders in experimenting with new ideas, which are quickly picked up by other states and frequently the Federal Government,” Jack told HP managers. “This results in a multiplicity of rules and regulations that become an administrative nightmare for those who must comply.

“Congress is not unaware of the problem. The Federal Paperwork Commission, in its report to Congress in September of 1977, highlighted the \$65 billion cost of compliance with these regulations — particularly reporting requirements — and the rapidly increasing burden this represents to the consumer purchasing goods and services and to the taxpayer, who in addition to being a consumer must support the government portion of the cost.”

Jack cited HP’s recent experience with the Minish Bill, dealing with “renegotiation” of government contracts, as an example of an effective industry campaign to make its position known on proposed legislation.

The bill would have renewed the Renegotiation Act and created a powerful

permanent agency to control profits on government business. Few legislators understood its implications, and most industry lobbyists assumed the bill would pass. According to Jack, HP was instrumental in rallying opposition, and “by telling our story well, enlisting support from a variety of interests which were effectively bipartisan — and with a little bit of luck — we won an important legislative battle.”

What other issues are important to HP, and when should the company speak up? Chairman Dave Packard has testified before a Senate committee in support of the Chiles Bill, which would consolidate and clarify many existing procurement laws. Another bill Jack mentioned as being of concern to business is the so-called Labor Reform Act, which would give unions substantial leverage in organizing workers. “The bill provides for severe penalties on companies and no penalties of any kind for unfair practices of unions and their leaders,” Jack reported.

Other issues causing some concern:

- Remedial legislation to re-establish tax advantages for Americans working overseas. A new law curtailing exemptions on income earned abroad is now being held in abeyance until 1979, and the issue is expected to come up again in this session of Congress. Experience suggests it’s important to HP to maintain this incentive for American expatriates.

- Hospital cost containment legislation, introduced in several bills. Some include limits on capital spending, which

could seriously affect sales of HP medical products.

● A bill requiring the Federal Government to award all contracts of less than \$10,000 to small business. According to Jack, small dollar purchases don't necessarily equate to small business as some legislators believe (the average HP government order is \$3489) and it would be a mistake to take the bill lightly. "Worse bills have become law because businessmen failed to speak up," he said.

Jack also stressed the need to stay abreast of the many rules and regulations that emanate from government agencies. "The main problem with the regulatory process is that regulations become law unless public comment strongly suggests that there needs to be modification. It is imperative that we as an industry comment whenever a proposal appears to be inappropriate, unnecessary, or just plain wrong."

In many cases HP depends upon industry associations to speak out on issues, and will continue to do so. But Jack feels the company should also express its own views. "Hewlett-Packard has established a good reputation in Washington for knowing what we are talking about — of speaking in a forthright manner, of being a leader on certain subjects, and for being constructive in our criticism. We want to keep it that way, and to do this we must actively coordinate our efforts internally, respond to government requests for comments when appropriate, be cooperative, but assert our independent viewpoint when necessary."

Dave Kirby:

Restoring public confidence

Dave Kirby, HP director of public relations, addressed HP management on the subject of public attitudes toward business. Opinion research reveals that public confidence was high until it began to erode quite rapidly in the late 1960's. Other institutions such as government and the medical profession have also lost public trust, but business "has really taken a bath," he said.

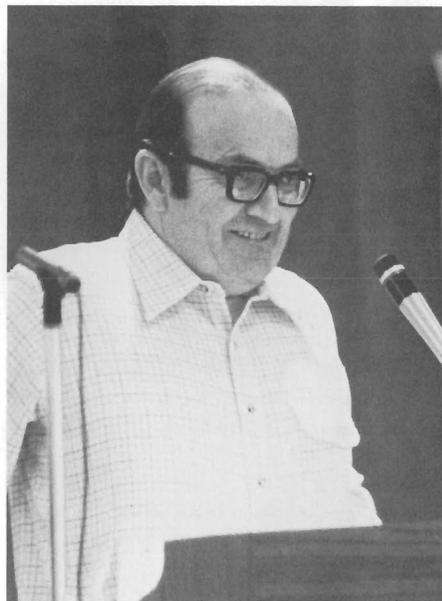
The problems this creates are very real. "One has only to note how difficult it is to muster public support for any program that might benefit business. Or, on the other side of the coin, to observe the avalanche of government regulations that

are suffocating business, yet whose advocates are secure in their belief that this is what the public wants and needs."

Dave outlined some of the typical business reactions, including the attempts at economic education. "Many businessmen hold the view that the reason the public doesn't love us, or at least trust us, is that it is ignorant about economics and our free enterprise system."

Such programs miss the mark, Dave feels, because they don't respond to the real problem of mistrust. "What people are saying to business is this: 'You don't have to lecture us on the merits of the private enterprise system. We believe in it as much as you do. What bothers us, and why we mistrust you, is that you yourselves don't always observe those fundamental responsibilities that make the system work effectively — the responsibility to provide needed products and services that are safe and reliable, the responsibility to treat people fairly, to be honest and straightforward with us. Do these things and we will trust you.'"

Dave suggested that some economic education is useful, but will do little to restore public confidence. He went on to suggest some specific ways Hewlett-Packard people can help in that regard. "One of the first things we can do, of course, is to make sure our house is always in order. We have ethical standards by which we intend to conduct our affairs — they are stated clearly in our corporate



Dave Kirby

objectives — and we must constantly reinforce and reiterate our determination to live up to them.

"We also should make it clear that we do not condone unethical business practices on the part of other companies. In *no* way do I suggest we become a watchdog over other firms. What I *am* suggesting is that we begin to share the public's justifiable anger and concern over bribes, kickbacks and other corporate hanky-panky. Too often the response of some businessmen is a mere shrug of the shoulders. Or an off-hand comment to the effect that 'everybody does it.' Everybody *doesn't* do it. *We* don't do it. And it's time for those of us who don't participate in this kind of behavior to be publicly concerned with those who do."

Dave also urged that businesspeople not get defensive, lashing out at the press or other institutions. "Every institution has its flaws," he said, "and as responsible people we have every right to complain when business is being treated unfairly. But let's stop short of paranoia."

Another point Dave emphasized is that the company should avoid becoming bureaucratic and impersonal in its public contacts, as it strives to do in its relationships with its own people. "HP's message is best conveyed by people — not advertising, news releases or slick brochures. We, and all HP people, must continue to work hard at being visible to the public, and at building positive, personal relationships with those whose trust we seek — customers, civic leaders, the press, educators and so on."

And finally, business should not feel threatened by changes in the social environment, according to Dave. He cited HP's flexitime policy, and the reactions to it on the part of employees and the public, as a positive example. "The trick is to be on top of change, to be quickly responsive to it — perhaps even to help shape it — rather than being pulled along by it. Happily, HP has a tradition of being at the vanguard of change."



How do our planners plan?

One of the least tangible and therefore least understood activities in modern corporate life — business planning — is also well on the way to becoming one of the most important. At Hewlett-Packard the function is managed by a small corporate department reporting directly to the president. Yet, in a real sense, virtually everyone in HP is involved in or affected by the planning role. That's because long-range planning — despite the sound of its name — is really aimed at anticipating problems and improving the quality of today's decisions as they affect future performance.

As a discipline — some science, some art — formal planning is relatively new, perhaps no more than 25 years of age. This is not to say there was no planning before that time; obviously as long as business has been done there have always been business people making plans. But the essential features of modern planning practice — deciding in advance the strategic what, where, when, how and who of doing something, and continually adjusting the plan as the future materializes — are an outgrowth of experience that more or less began with World War II. Until that period, business leaders and economists accepted the boom-and-bust economic cycle as a way of life. Business commitments, consequently, were inclined to be of a short term tactical nature.

The war, with its emphasis on mobilization of national resources, and its effects on business growth and complexity as well as technological advancement, brought about a different viewpoint. The idea grew that businesses no longer need to bob helplessly in the turbulent sea of market forces; with longer range planning they could stabilize the corporate vessel and even find smoother seas to sail upon.

To do that, many corporations went all out in setting up the hot new future-looking activity. Planning departments were formed and expanded to meet the onrushing future of the 'fifties. In some firms, attempts were made to *plan* the future, to map it out in great detail, rather than plan *for* the future with all its shifting uncertainties. But, in time, business planning gained some necessary perspectives, among the more important being that the function should fit the objectives of the business, and be a natural expression of its unique management style. Economic forecasting also has gained in sophistication and accuracy in the past decades.

Corporate planning, as such, came to Hewlett-Packard in 1965. Until then, it had been an integral but unidentified

element of the Dave Packard and Bill Hewlett talent for decision making. In that year, however, the company embarked on a program of diversification. As Dave Packard noted then, "With the slowup in defense spending and the expectation that the government will continue to curtail or modify many of its programs, we are working hard to broaden our base and expand our technology into new fields. We are doing this through our internal research and development program and, in addition, through acquisitions where we think they will enable us to enter new fields or markets." In March of that year, Cort Van Rensselaer was asked to head the new office of Corporate Planning and get the show on the road.

In the years following, the department — now evolved to Corporate Development — has remained small and essentially a staff-support activity. Today, the department consists of Fred Schroeder as director, and Austin Marx as manager of planning and economics, assisted by two analysts and one secretary. In addition, formal planning is coordinated for HP Europe by a small department under Toni Polsterer in Geneva.

Small by industry standards perhaps, but right for HP is the self description of their organization by the corporate planners. They say they provide guidance and consultation in planning, economics, forecasting, statistics, and analysis to the var-

(continued)



Corporate Development director Fred Schroeder (left) and Planning manager Austin Marx confer in departmental library. In addition to providing HP organizations with long-range planning inputs, the department evaluates the many business proposals that come to HP from within and without the company.

ious corporate departments, groups and divisions.

Commenting on the HP style of planning, president John Young recently told a meeting of Canadian managers that planning alone is not what determines HP's future. The most important factor in setting the future directions of the company, he noted, is its current activity, especially that of developing and marketing proprietary new products. That's where we put our money and that's where we look for growth.

Young pointed out a very interesting aspect of that growth: on the one hand, the company's continuing investment in proprietary product programs by the divisions provides strong assurance of steady growth; on the other hand, we are in an excellent position to take opportunistic advantage of technological developments out of HP Labs that can add new broad dimensions to the company — such as the HP-35 diversification. He added that we can do that sort of thing again, but no one can plan it.

Nevertheless, long-range planning is important in the business processes of the company. It provides the necessary forward looking economic forecasting and analysis techniques used by all parts of the organization in target setting, and in making decisions regarding capital spending, inventories and receivable control, net cash availability, return-on-investment trends, inflation pricing, new business ven-

tures, recruiting, business cycle turning points, and coping with unexpected events.

The tools available for doing these tasks are of a wide range of sophistication. For the most part, however, HP planning sticks to relatively straightforward methods — effective and well understood by the many end users of the information.

One tool is the use of our own time-share computer to consolidate the inputs from the groups and regions, analyze them, and simulate financial statements beyond normal targets to reflect the inputs under varying economic scenarios.

The annual planning cycle begins each spring when a six-year planning outline is issued to group managers. The outline includes economic environment, instructions, planning formats and calendar. About ten weeks later plans are due back for consolidation and corporate review. In particular, the reviewers look for inconsistencies or significant changes in the new plan. HP managers have become proficient planners, and very few plans now are questioned for inconsistencies or over-optimism.

The plans themselves are less detailed than monthly quotas or targets. In turn, the first-year plan, when approved, becomes a guideline for the next year's targets.

The corporate planners also are interested in longer-term questions of strategy, from five to fifteen years out. Again,

planning analysis and computer simulations have proved very useful in answering complex questions — such as meeting future needs for trained people, new plant sites, field service, and self-financing from retained cash.

How about the question of "future shock" — the traumatizing experience that many corporations, along with society, first encountered in the 'sixties? Among the causes were the Vietnam war, the equal rights struggle, the youth revolution, hijacking, inflation, pernicious unemployment, environmentalism, consumerism, political assassinations, terrorism, energy prospects, oil boycott, nuclear proliferation, population growth, weather, and — finally — Watergate. How can we deal with their future equivalent?

There are indeed specialists — called futurists — who attempt to prepare organizations for events of that kind. Their methods include polling experts about their view of the future (Delphi), analyses of the cross impact of future events, scenario building that draws a word picture of the future under certain conditions, and econometric projections.

Hewlett-Packard does not employ futurists, but the corporate planners are certainly aware of the techniques involved and the many outlooks they produce. Actually, all good corporate planning makes allowances for needed adaptation and flexibility in the future.

Fortunately, the planners have more than mathematical models to go by. Our Corporate Objectives set the basic strategy for the company and its people, providing them with guidelines on why we're in business, priorities, and *how* to proceed into the future. Unquestionably, that's the starting point of planning. The annual plan provides a coherent point, a snapshot of where all the pieces of our complex organization plan to be during the next six years. No other part of the organization provides this needed function. □



Corporate planning analysts Will Nicholl (standing) and Dick Kumaishi review changes being made in the 1978 HP economic plan program. Extensive use is made of computer timesharing.

HP News

1978 off to good start

PALO ALTO — The company reported a 23 percent increase in sales and a 25 percent increase in earnings for the first quarter of fiscal year 1978.

Sales for the quarter ended January 31 totaled \$368.2 million, compared with \$298.3 million for the first quarter of fiscal 1977. Net earnings amounted to \$32.5 million, equal to \$1.14 per share on 28.6 million shares of common stock outstanding. This compares with earnings of \$26.1 million, equal to 93 cents a share on 28.1 million shares, during the corresponding period last year.

President John Young noted that sales and earnings continued to show good strength, and incoming orders were the highest in HP history. They amounted to \$433 million, up 30 percent from orders of \$334 million in the first quarter of fiscal 1977.

International orders were particularly strong, amounting to \$216.6 million, up 33 percent from last year's first quarter. Domestic orders rose 26 percent to \$216.4 million.

Young said all product groups contributed to the higher level of sales and orders in the quarter.

The net earnings of \$32.5 million were achieved after setting aside about \$3.5 million — equal to about 5 cents per share — in the quarter to supplement U.S. employee retirement benefits. No such deduction was made from the comparable 1977 quarter.

Ray King to Corporate Mfg., Dick Moore to head Corvallis

PALO ALTO — Ray King, formerly general manager of the Corvallis Division, has been named Corporate manufacturing support manager.

In his new position, King will work with all HP groups and divisions to develop worldwide

manufacturing strategies and plans, reporting to Raymond Demere, vice president for manufacturing services.

Dick Moore, formerly general manager of HP's San Diego Division, has been named to replace King as general manager of the Corvallis Division.

Ft. Collins joins Computer Group

CUPERTINO — The company's computer operations have been strengthened by adding the Fort Collins Division to the Computer Systems Group.

"Fort Collins' present and future products are small computer systems for business use," commented Doug Chance, Computer Systems Group marketing manager. "They are designed for many of the same markets now being served by our computer sales force. By merging their products and sales organization with those of the computer group, we will increase the effectiveness of both."

The Fort Collins Division previously was part of the Calculator Products Group.

Cobbe heads Intercon Marketing

PALO ALTO — George Cobbe has been named to the new post of marketing manager for HP's Intercontinental Region.

Cobbe had been serving as Intercon's Instrument regional marketing manager.

In a related move, Steve Lumm, formerly finance manager for Intercon, has been named to the new position of sales region controller/administrative manager.

Big patient monitoring order from Walter Reed

WALTHAM, Mass. — HP has received an order for \$2.5 million worth of electronic patient monitoring systems from the U.S. Defense Personnel Support Center. The medical equipment will be installed this summer at the new 1,280-bed Walter Reed Army Medical Center now under construction in Washington, D.C.

It represents the largest single domestic order for medical equipment ever received by Hewlett-Packard, according to Dick Alberding, general manager of the Medical Products Group.

Changes announced at CPD, HP Germany

PALO ALTO — Srinivasa Nageshwar has been appointed to the newly created post of International Marketing Manager for the Loveland Calculator Products Division, resulting in a series of management changes in Germany.

Klaus-Dieter Laidig replaces Nageshwar as manager of the Calculator operation in Boeblingen.

HP wins trademark suits

PALO ALTO — Hewlett-Packard Company, widely known as "HP," has won a consent judgment enjoining two companies from using the trademark "HP" on stereo headphones and other products.

The judgment, handed down by the U.S. District Court for the Northern District of California in San Francisco, prevents Nippon Gakki, Co., Ltd., Hamamatsu, Japan, and its U.S. subsidiary, Yamaha International Corporation, Buena Park, California, from using any designation on their products that infringes upon the "HP" trademark.



Fate accepts Destiny...

They describe it as the first wedding between computers. The machines, two Hewlett-Packard mini computers named Fate (a 2000 F) and Destiny (a 2000 G) were first brought together at ETC Carpet Mills in Santa Ana, California, last year. According to Dave Mitchell, ETC data processing manager, the computers worked so well and so closely together that management felt they should not go on exchanging data indefinitely with benefit of clergy.

In order to perform the electronic nuptials with all improper dignity, President Mike Berns mailed \$5 to the Universal Life Church of Modesto and was promptly ordained as Reverend Berns. In a brief ceremony followed by lengthy festivities, Fate and Destiny exchanged vows of lifelong software support and bus compatibility. In the ceremony they were represented by the two 2640 Series terminals shown receiving the blessings of Reverend Berns.

On the same day, it should be added, and in the same Southern California milieu, a fall fashion show was held at Newport Beach — for dogs, and in Buena Park a peanut-butter-and-jelly-sandwich eating contest was held by the light of a full moon.

Measure

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