

The Old World sets a fast new pace



HP EUROPE 1976

At HP's 11th annual European management meeting in Montreux, Switzerland, the growing importance of the company's international business was expressed in a number of ways.

In particular, the strength, problems and diversity of the European organization came into sharp focus . . .



COVER: In overcoming many adversities, the Anglo-French Concorde supersonic aircraft is a fitting representative of the technological and economic development of the New Europe, now a source of great strength for the HP organization. In fact, HP equipment was used extensively by many of the several hundred European firms contributing to the Concorde project. There are, of course, many tests ahead for the aircraft and its backers. Meanwhile, some of HP Europe's tests and goals are spelled out in this special report.

THE FACTS-With some 5,000 people operating 15 country marketing organizations, 5 manufacturing divisions, 2 manufacturing operations, plus a European distribution center for parts and consumer products, HP Europe today generates about one third of total HP sales. Last year, in the face of a very difficult economic climate, HP Europe grew some 17 percent in sales -faster than the other major segments of the HP organization. Such growth helped to propel the company's total international sales ahead of domestic U.S. sales for the first time. And Europe's pace continued through the first quarter of the current fiscal year.

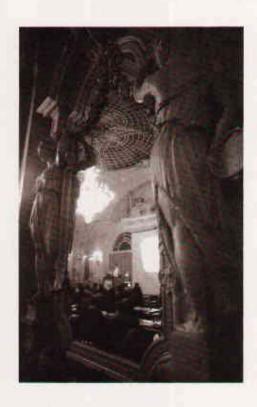
Looking back a bit, HP Europe had orders of some \$24 million in all of 1965. Today that's less than an average month's performance. Also ten years ago and less, product development in the company's German and United Kingdom factories was struggling to find a niche. Today, a growing number of European developed HP products from all of the European divisions are competing very successfully in world markets, and some very promising new products are in the R&D wings.



Many of the elements behind HP Europe's success were evident in the discussions at the recent European management meeting in wintery Montreux, Switzerland. The Continental conference brought together 73 European managers led by HPSA director Dick Alberding, and a contingent of 16 corporate visitors led by Dave Packard. In size, style, tone, purpose and format, the Montreux meeting looked very much like the mid-year Corporate management meetings that bring in top managers from around the world. The comparison is apt, for indeed HP Europe is not one market but rather a gathering of nations and national markets, and a crossroad of languages, currencies, customs, traditions and peoples.

These facts, outlined in some informal remarks by Bill Doolittle, vice president-International, make significant differences in the way other HP organizations interact on a day-to-day basis with the European organizations. This report on the Montreux meeting is intended to give some perspective to that important interaction . . .

Progress and problems



Amidst the baroque decor of Montreux Palace hotel (special low winter rates!), HP managers outlined the progress and problems in doing European business at the start of the last quarter of the 20th century . . .

Fred Schroeder, Greater European Region manager, pointed out that 1975 had exited on a somewhat pleasant note in Europe. The European economy shifted from reverse gear into low forward gear.

Fred noted that such gear shifting is very much a manual operation for each country ("There's no automatic system, no real theory or formula to cover all events"). Nevertheless, the European nations showed great individual adaptiveness in recovering from the combination of "oil shock" and recession. Solutions varied considerably in accordance with national policies: Germany and the United Kingdom generally employed tax incentives; France and Italy chose the route of direct investment in areas such as construction.

Schroeder, an HP Europe veteran whose experience includes being the first European general manager of the Boeblingen plant, produced a "watch list" of potential opportunities and pitfalls. A strengthening of the U.S. dollar, he said, would increase the payment problems that European customers have. More and more price complexities and trade barriers can be expected as the various countries seek to protect and encourage their own industries.

"Our destiny in Europe," he concluded, "is very much linked to our technological strength, to our ability to innovate and market new products."

Chairman Dave Packard expressed great satisfaction in being able to report on the company's success in managing its assets. He recalled that European management had been challenged to that task two years ago. Thanks to the response there and throughout the company, he said, "going into 1976 we are probably in the strongest financial position ever in our history." Packard reviewed a wide range of recent results and future problems. Among the goals is to maintain integrity in all of HP's relationships inside and outside the company. "We must continue to work with absolute honesty, and a sense of integrity in meeting our legal requirements, as well as fairness, justice and compassion in our dealings with people."

Bob Boniface, executive vice president-Corporate Administration, reported on financial results for 1975. For the first time, he said, U.S. and International business began to track each other after years of being out of phase. This new parallelism has a tendency to give somewhat greater swing to business trends. He added that Europe was a strong factor in HP's solid 1975 performance.



A typical between-sessions meeting brought together Klaus-Dieter Laidig, European sales region administration manager at left, and Steve Ford, administration manager at Boeblingen.

John Doyle, Corporate Development manager, described the company's longer-range prospects, pointing out that corporate interest in the international side of HP's business is strong and getting stronger. The growth outlook of the company is such, said Doyle, that by 1980 it is possible that HP Europe's business volume will virtually match that of the company as a whole today.

Government intervention in matters affecting people and employment is more important than ever before in Europe, as it is in the United States. This trend was reported to the HP managers by David Lincoln, Personnel manager-Europe.

Lincoln said that intervention is particularly prevalent in the area of compensation-through the control of wage levels, the use of taxes to redistribute income on a more uniform basis, and the widening influence of social security systems in buffering the impact of unemployment and in protecting pensions against inflation

Legislation also is being strengthened in some countries in such employment areas as participation in decision making, equal employment opportunity, dismissals, and training. Similarly, Common Market nations are seeing more and more legislative proposals affecting what might be called the "quality of working life." Included here would be benefits re-

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lating to education, political and social participation, health-safety programs, "consumerism," and the concept of a "social balance sheet" for corporations.

In facing up to these and other trends, Lincoln said, the personnel function in HP Europe has grown considerably stronger, not only in size but also in professionalism. For example, as a means of preserving the company's competitive position in regard to benefits and compensation, HP has undertaken a high level of surveying of industry including pioneer surveys in some countries. He noted also that the training and development function was progressing along similar general lines to corporate programs but with some emphasis on local languages and European orientation.

Klaus-Dieter Laidig, sales region administration manager, tackled a nagging but vital question: Why is the CPOD (cost per order dollar), i.e., the cost of selling and supplying a given product, higher in Europe than in the U.S. sales regions? He noted that more support people are presently required in Europe per field engineer than in the U.S., thus increasing the overhead costs, resulting in higher field selling costs. He added that reporting requirements in Europe are quite heavy, and that this will be one of the challenges for the European organization to explore in attacking the high CPOD situation.

Hank Morgan, Administration manager, Europe, described efforts to improve cost accounting in the field as well as streamlining of reports to management. In many cases, he said, more information is being reported than is needed, so much attention will be given to elimination of unnecessary detail. He reported that the country sales organizations will soon be able to do all local accounting up to their



A discussion on personnel matters absorbs the attention of David Lincoln, personnel manager for Europe, at left, and Peter Ward, personnel manager at the South Queensferry plant.

financial statement to Geneva headquarters, on a decentralized minicomputer system that will provide automated reporting to Geneva headquarters.

A proposed parts ordering system that will ship parts directly to the customer service engineer was outlined by Tony Vossen, customer support manager for Europe. Such a system, Tony said, will make life easier and more efficient for the field engineer because the need to pick up parts orders at a sometimes remote office will be eliminated. Vossen also described other efforts to improve the turnaround time of ordered parts. He noted that by mid-1975, 70 percent of orders were being filled by the European parts center in 3 days versus much slower rates previously. The European service organization, he added, would grow to almost 940 people this year-a big business.

"What's going on in your area?" This trio had much ground to cover. From left are HP's man-in-Moscow Bob Creager, Dieter Lindenau, Analytical sales manager for Central Europe, and physicist Dr. Martin Peter, an HPSA director.

From the product groups

Calculator Products:

Franco Mariotti, European calculators marketing manager, reported that sales of APD's advanced personal calculators (hand-held and portable) through dealers was growing at a faster rate than via other forms of selling. He pointed out that "dealer selling" can mean different things in different countries. In some countries department stores are the main retail outlets, while specialty stores, outside-sales stores, and student organizations are most effective in other countries.

George Newman, Calculator Product Group manager, stressed the importance of Europe in overall calculator sales, saying that Europe represented a substantially higher percentage of the group's sales than the average for all HP products. George pointed out that Europe, along with all other HP markets, will experience a strong impact by new HP calculator products in 1976.

Components

European Components marketing manager Jean Baillod opened by noting differences in recent sales performance between the microwave components and the optoelectronics lines. The latter, he said, have moved up steadily during the past year, whereas the microwave business experienced its first recession.

Programs for the current year include the consolidation of component headquarters at the Boeblingen factory by mid year, stronger factory support in the field, improved field efficiency, and a better balance between HP's own component sales force and the distributor organizations.

Facing these efforts will be stronger European competition, emphasis on European protectionism, standards and requirements, and the maturing of some lines and applications.

Components Group manager Dave Weindorf reported that Europe-especially the larger countries-was very important to the group's worldwide selling plan. He added that certain segments of the market were very volatile and dynamic, making the market environment for 1976 somewhat uncertain-"but I'm encouraged by our start."

Instruments:

David Baldwin, European Instruments marketing manager, told the Montreux participants that HP's traditional markets in Western Europe, including Germany, France and the United Kingdom, are showing a good return to economic strength. Baldwin also noted growing opportunities in other important markets, including the East European and Mediterranean countries. As a result, he projected a healthy picture for Instrument sales in that market area this year.

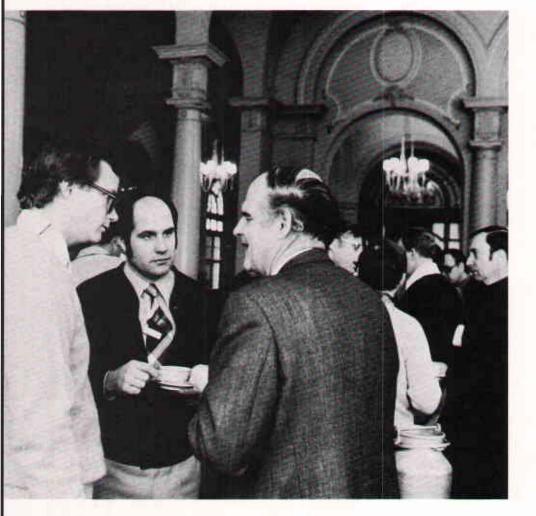
The direct linking of Instrument sales to Instrument service, he said, had already resulted in substantial benefits in the past year. These benefits occurred not only in coordination of activities within HP country organizations but also have become an important element in customer satisfaction and negotiations with customers.

Productivity will be an important theme during the year, Baldwin said, with emphasis on all of the elements that are used in supporting the sales force, such as factory support, public relations and advertising. "There is also a realization that in order to give better support to maintaining the HP Way, we have to be careful not to overload the information system so as to put blocks in the way of local decision making."

Baldwin added that the contribution of new products will be very important to the success of the Instrument Group's performance in 1976—as always.

Ray Deméré, vice president-Instrument Group, reported a very satisfactory 1975 performance in a difficult economic

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environment. All instrument divisions and sales forces were managed aggressively to maximize volume with good cost and expense control. In spite of a significantly increased investment in product development, profit margin increased.

Deméré described a strong Instrument program for 1976 highlighted by: a major customer assurance campaign with the involvement of all departments in every division and the recently verticalized field service operation, and the payoff of increased R&D investment and a technological explosion with 76 new product introductions in 1976. Among important new products to emerge during the year will be those from the South Queensferry and Boeblingen Instrument Divisions.

Computer Systems:

Heiner Blaesser, Computer Systems marketing manager in Europe, recalled at the 1975 Montreux meeting—in the midst of a difficult time for computer sales—he expressed confidence in their goal for the year. Fortunately, that optimism was well founded. Business did pick up substantially. The group was able to move ahead with a restructuring program—and with better spirits. Further, meeting their sales goals now enables the team to work on other problems they have.

Among those problems being tackled, Blaesser said, are achieving productive par with U.S. sales, reducing heavy dependence on "top 20" customers in certain markets, and increasing HP's penetration-that is, our share of installed data systems.

The European organization, he added, will employ a strongly European-oriented advertising and direct mail and public relations program to help create a greater level of awareness of HP as a leading supplier of computers, computer systems and peripherals.

Group manager Paul Ely reported that it was an exciting first year with substantial improvements in profit and orders. The organizational restructuring of the Computer Systems field sales team was the biggest factor in the group's strong order performance last year. Discussing various divisions in the group, he noted that HP Grenoble had experienced problems in finding orders a year ago; now it has the problem of keeping up with orders (and it also now has a solid R&D program).

Ely added that the group's shipment numbers will be the prime determinant of profit performance in 1976. Other important factors will be new products as well as product quality.

Medical:

Economic recovery of the medical market in Europe has somewhat lagged behind other markets, reported Medical manager Toni Polsterer. Governments, he said, have tended to spend their money in other areas that seem more critical to recovery.

In this environment, Toni said, HP has given priority to maximizing the field time of sales and service people, to serving receptive markets with accepted products, and to new opportunities. Products that should do well, he indicated, are those where superior technical features are most visible and those that can visibly demonstrate cost savings. Users clubs and other means of demonstrating HP's continuing support of customers will be increasingly important in marketing efforts.

In spite of some problems, HP has forecast a substantial growth in European medical sales this year, and there is even hope of beating that forecast.

Dean Morton, vice president and Medical Products Group manager, pointed out that the ratio of U.S. and International sales for medical differed from other HP product areas. The U.S. portion is somewhat larger, he said, because that country's health-care program has grown at a faster rate. However, other parts of the world are expected to move ahead.

Regarding public concern over the growing cost of personal medical care, Morton said that expenditures for medical electronics are less than 1 percent of the cost of medicine. "I feel we are part of the solution, and that there will be more opportunities for participation

Discussing some new strategy are, from left: Dick Alberding, managing director of HP Europe, David Baldwin, European Instruments manager, and Pierre Ardichvili, country manager of HP France.

Off in a corner with homework are, from left, Doug Herdt, head of Middle East sales, and Heiner Blaesser, Computer Systems manager in Europe.





A new country organization, HP Iran, gets some thoughtful attention. From left are Bill Doolittle, vice president-International, and Bob Bond, manager of the half-year old HP Iran team.

in solving cost problems in medical care. And I think that no one is in better position to bring technology to bear here than HP."

Analytical:

The strong European role in the success of HP analytical products was very evident in the presentation of Emery Rogers, Analytical Group manager (Georges Vallet, European Analytical marketing manager was ill at meeting time). European customers are among the largest that HP has in the analytical field. Europe also has a very important mission in analytical product development and manufacturing.

Rogers said that 1975 was a year of

chemical industry recession, but that recent months indicate it is on the recovery road.

HP is approaching the current year with a number of major product introductions, a building program to provide room for growth, an attack on the warranty problem, and the development of new directions in chemical analysis.

The 5830A keyboard-controlled gas chromatograph system in some ways represented more instrument capability than many customers at first knew what to do with, Rogers said. So with our upcoming new products, he added, we are going to show them the full range of abilities in advance, making special use of product literature to help do the job.

Some messages to America with all due respect

From a communications standpoint, the world is a much smaller place than it was when HP first entered the European market. Intercontinental travel is easier, HP's COMSYS has made telecommunication reliable and inexpensive, and computers can "talk" to one another and exchange data from opposite sides of the Atlantic.

But overcoming the barriers of distance, language and world economics is not as easy as it sounds, and Europeans sometimes feel cut off from the mainstream of HP management. Policies created at the divisions can have unanticipated effects in sales regions that are far removed physically and culturally from the U.S.

To find out what messages HP's European organizations would most like to communicate to the product divisions in the U.S., Measure asked four country or area managers at Montreux to discuss the communications "gap" as it relates to their areas. Pierre Ardichvili of HP France, Eberhard Knoblauch of HP GmbH in West Germany, Peter Kohl, area manager of the East Europe countries, and Ian MacGeorge of Norway:

Pierre:

If we talk about organization, we have national entities and we have sales entities which vary greatly in size and structure—ranging from a relatively small country like Ian's to a very large country—or almost a region—like Germany.

Eberhard:

I think Americans understate the differences—perhaps not in size but in customs, duty payments, culture, mentality, language, you name it. The United States is very uniform by comparison, and every American, the first time he comes over here, is to some extent puzzled. He travels 300 kilometers and everything is different. But he sees it only as a cultural shock and does not really appreciate what it means as far as business is concerned.

Pierre:

There are also very often vast understatements of the technical capability of European customers. Americans just don't believe they have such a level of technology.

Also, I would like the divisions to recognize the two layers of selling. There are the outside people who buy our equipment, of course. But we also have to "sell" the HP sales force as well, and if the divisions don't keep these people informed and knowledgeable, they will not be able to sell to the customers. As a result, sometimes the U.S. people are surprised when one of their products doesn't sell in our markets. If the factory would try to sell it first to the sales force, they in turn would sell it to the customers. There are some efforts in this direction now, but still more could be done.

Peter:

That's an important syndrome, I'm afraid. You find that more and more field engineers make the statement—

that I couldn't even imagine, actually, in earlier days—that "the company let me down." They really don't believe they're looked at from the divisional point of view as being a key customer.

Ian:

Size is imporant here as I see it. Sometimes the divisions, when they put out demands for information flowing to them or put information in the tube that flows to the field, envision something like the Santa Clara sales office. You know, they think that's the kind of structure they're interfacing with-and they may not realize that the scale is entirely different here. That we may have a sales manager who, in theory or by definition, is not a sales manager. He's a field engineer, but he's doing some managing on the side. And you have the same thing in accounting and service administration. They have a tendency to see a model of what they're interfacing with and make demands that, for us, might not have a good price-performance ratio. When you're forty people, it's much harder to do many of these specialized things than when you are much larger.

Eberhard:

I think one important message is that there should be more concern for providing local-language literature. And it's an absolute *must* that the U.S. organization take a better look at some of the European standards or local country standards, because if they don't, we run the risk of being locked out of some countries.

Ian:

I think one problem is that, in a company managed by relations between people—rather than by very formal, detailed communication lines and procedures—it becomes very much a question of talking to the right person at the right time to reach a certain ob-

jective. And in that sense we are, in Europe, at a disadvantage because of distance. I was in the U.S. after the senior sales seminar for the Instrument Group, and saw some of what the divisions had presented. It's apparent that the proximity to the divisions makes field sales in the U.S. operate much more smoothly.

Of course we see great distances on the globe, but if we compare the costs of airline tickets it isn't that much more expensive to fly to San Francisco than to fly from Oslo to Geneva, and a hotel room in Palo Alto is a fraction of the cost here in Europe. So I think we should think less about the globe and more about the actual communications costs. We should look at the distance on a dollar basis rather than in kilometers or miles so we can have this human interface. I realize this is not all that easy, especially as more U.S. divisions are located outside the San Francisco Bay Area.

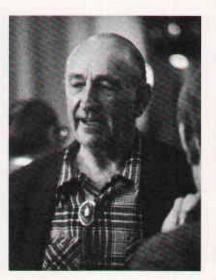
Peter:

I have an "image" problem in a sense -not so much with Europeans but with Americans You know, when we entered the East Europe market seven years ago, you couldn't find office space or hotels in some Iron Curtain countries. But we've made great strides. If you walked into an office in Moscow, I don't think you would feel it's much different from any other HP sales office-although it's smaller. In Poland our office is in just as nice a building as in many other countries. Hotelsas far as finish and styling and quality is concerned - are much like western hotels, and the same is true in Rumania. The people operate in pretty much the same way as in a district of another country. But Americans won't believe that, and they're hesitant to visit. There are differences, but doing business there is not as different as you might imagine.

Work shops at work...

Is HP's organizational concept the correct one, is it adaptable to varying market conditions, and do people understand it in terms of making timely decisions? What are the true cost differences between Europe and the U.S., to what extent are those differences influenced by inflation, what could we do to get better information, and are there better ways to measure cost performance?

Those weighty questions, concerning organization and costs, were the basis for two concurrent workshops in which all the Montreux visitors participated.



On organization: The discussions here tended to center around questions of "who is responsible?" that arise in an organization having complex reporting and communicating relationships. Repeatedly, however, participants got back to the point that such responsibilities can be too finely defined, and that-especially in areas such as European country organizations-the company ought to let MBO (management-by-objective) take its course. Country managers have a great responsibility in seeing that their organization actually fits local requirements-which is sometimes different from just wanting to have a 'neat' and 'logically' structured organization chart.

On costs: "Can we-in Europe-improve sales productivity?" In asking this question, the European managers reviewed a

Dave Packard - down-to-earth as usual.



wide range of factors. It was brought out, for example, that special support services are required in Europe because of language differences and distance from division support. Suggestions were made that marketing support plans by the divisions could provide for easier worldwide adaptation. It was also noted that the country discipline organizations in Europe tended to "verticalize" such support functions as secretarial rather than sharing. But the main discussion dealt with ways of reducing the volume of work that goes into preparing quotations, and reducing the overload of data being received and sent throughout the HP world. Reviewing the workshop, Dave Packard suggested a task force be created to dig into these problems, and then said it is time HP got the targeting process back into basic focus.



Two concurrent workshops were used to raise broad-ranging discussions into the key topics of costs and organization. Session at left is led by Dean Morton, vice president and head of Medical Products Group, at the blackboard, with an assist by Hank Morgan (left), administration manager for HPSA, Workshop above considered questions arising from HP's organizational structure.

HP NEWS

First quarter sales up, earnings down

PALO ALTO-Hewlett-Packard has reported an 11 percent increase in sales and an 18 percent decline in earnings for the first quarter of the company's fiscal year.

Sales for the quarter ended January 31 totaled \$235,639,000 compared with \$212,019,000 for the first quarter of fiscal 1975. Net earnings amounted to \$15,076,000, equal to 54 cents per share on 27,751,146 shares of common stock outstanding. This compares with earnings of \$18,413,000, equal to 67 cents a share on 27,405,179 shares during the corresponding period last year.

Incoming orders totaled \$279,238,000, up 16 percent from orders of \$240,937,000 in the first quarter of fiscal 1975.

"Production problems in some areas of our computational products operations resulted in shipments substantially below those we had anticipated," said President Bill Hewlett.

"On the positive side, our incoming order level was the highest in the company's history."

Later, in a report to the 19th annual meeting of HP share-owners, Hewlett spoke of prospects for an improved showing in the second half of 1976. He said the improvements will develop mainly from the sale of new products and a reduction in some expenses. Overall, Hewlett told the shareowners, he expects the company's 1976 performance will exceed its 1975 performance.

Hewlett noted that domestic orders during the first quarter of 1976 amounted to \$132,459,000, up 11 percent from last year's first quarter. International orders continued to account for a growing portion of the company's business, increasing 20 percent to \$146,779,000, or 53 percent of total orders.

Large point-of-sale computer order

AMSTERDAM—Makro, a leading international wholesale cashand-carry organization with stores in Europe, South Africa and Brazil, has ordered 21 Hewlett-Packard minicomputer systems for point-of-sale invoicing and simultaneous record updating.

Each Makro store will have two HP-3000 mini data centers for a total of 42 HP-3000s, the largest single order for HP minicomputer equipment. The systems, costing a total of approximately \$6 million, will be delivered during 1976. First installations will be in The Netherlands.

With the new system, Makro clerks will be constantly updating the store's data base as they are preparing customer invoices from

input terminals at checkout stands. As many as 30 checkout stands can be active at the same time in each store. From each terminal there is instant access to the data base of product, price and customer information. As goods are checked out, the system produces a full customer invoice while simultaneously logging transaction data which will be processed to company head-quarters.

The system also keeps track of outstanding orders, of goods received, of price changes and other information to be processed to the central system to enable management to base its financial and marketing decisions on complete and recent data.

Bob Turner heads Avondale Marketing

PALO ALTO-Bob Turner has been named to fill the vacant post of marketing manager for the Avondale Division.

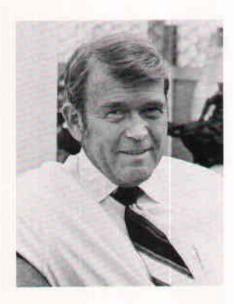
Before his appointment,
Turner managed worldwide marketing of pocket calculators for
HP's Advanced Products Division
in Cupertino, California. In his
new position, Turner will have
responsibility for product management and worldwide market
development and sales promotion
for Avondale Division's instruments for chemical analysis including gas chromatographs,
integrators and laboratory
automation systems.

Dick Alberding joins Operations Council

GENEVA – Dick Alberding, managing director of HPSA, the company's European head-quarters organization, has been appointed a member of the Operations Council. In addition to the new HP-Europe representative, members of the Operations Council include the executive vice presidents, product group managers, and the vice presidents of Marketing and International. The Council is responsible primarily for turning policy decisions into corporate action.

Passing of Maurice Merkt

GENEVA – Maurice Merkt, a long-time associate, legal counselor and former director of HPSA, died on February 6 at the age of 80 following a prolonged illness. His son, Rene, continues as a director and counselor of HPSA, the company's European headquarters organization.



From the president's desk

I am sure that by now all of you have seen the first quarter earnings report: I will bet your first reaction to the numbers was just like Dave's and mine—and I might observe, the stock market—one of dismay. But, like many other situations, things are not always as bad as they first seem and this is the case with regard to first quarter earnings. Let me try to explain what is happening.

The first and foremost fact is that the all important order picture was very strong, being up about \$38 million over last year. The problem is that shipments did not track, rising only about \$26.5 million. Yet the average division is under the impression that it shipped very well. Why this discrepancy?

I have no hard data as yet as to the actual causes, but I can make a shrewd guess. Several years ago we found that during the last month of the fiscal year everybody was making a tremendous effort to get all the shipments they could out the door. That was good. The problem lay in the fact that a high percentage seemed to be shipped to HP international sales subsidiaries for overseas customers, and often these shipments were made during the last week or so. Thus, as far as the divisions were concerned, they had shipped the product and it could be recorded as "sold."

Unfortunately, life is not that simple. We and our auditors take the position that an item is not "sold" until it is actually shipped and billed to the customer. Thus, everything that was in the international "pipeline" simply had to be counted as inventory and therefore eliminated from reported sales. I might mention also that these last minute high shipment rates tended to cause other problems such as delays, as well as errors in billings and the like.

In an endeavor to rectify this problem, we stated that no shipments to international sales subsidiaries should be made during the last two weeks of the fiscal year. This had the dual advantage of allowing us to get credit for most of what was shipped, plus a general clearing out of what was in the pipeline. But, as often happens, you solve one problem only to create another. It is this emptying of the pipeline (for all of its desirable effects) that has caused much of our current discrepancy.

Now that the pipeline is emptied at the end of the year, we promptly refill it at the start of the new year, and this impacts the first quarter results. This is why divisions think they did very well, but the results do not turn up as reported shipments or contribute to profit. Of course, as our international business has grown, this problem has become more acute. Certainly one action that would help considerably would be if the divisions got in the habit of shipping more uniformly throughout each month, instead of shipping between 40 and 45 percent of their products in the last four or five days as is typical in many divisions. There are also other solutions as well that we will be looking at.

Another important factor affecting first quarter results was our R&D spending, which is running \$5-3/4 million higher than it did in the same period last year. This is by plan, and continues a trend that was initiated in 1975, but it does impact earnings.

Finally, in the first quarter of fiscal 1975 we took off three days before Thanksgiving because, let me remind you, the order picture was so poor.

The above two items alone just about compensate for the difference between the earnings of the fiscal quarters of 1975 and 1976.

I don't want to leave the impression, though, that Dave and I are overjoyed with the first quarter results. We are not. But, the results are far better than first blush would indicate. The order picture is strong, we have filled the pipeline, 1976 will be seeing the fruits of our major R&D push last year, and our financial position is greatly improved over a year ago. I think that 1976 could be a good year for HP.

Bill Hewlest



Helping hand for the handicapped

Some disheartening statistics show that handicapped children have less than one chance in ten of finishing high school. One reason is chronic absenteeism-they simply are unable to attend many of their classes.

In Amherst, New York, Laura Van Curran (above, right) and about a hundred other handicapped kids are learning at home via cable TV. A federally-financed demonstration project called TEL-CATCH-an acronym indicating that lessons are not only televised but computer-assisted as well-allows Laura to take her classes whenever she wants to and learn at her own speed.

Heart of the system is an HP 2000F timesharing minicomputer, chosen because of the broad range of educational software that has been developed by universities and users. A \$150 keyboard/coupler transforms the TV set into a sophisticated computer terminal for self-paced instruction, and the student gains access by simply dialing a telephone.

The staff of TEL-CATCH consists of a curriculum coordinator, a technician and two special-education teachers (including Molly Richardson, pictured). The computer does almost everything else. It keeps the scholastic records, tailors lessons to the needs and progress of each student, stands ready to teach any time of the day or night, and even offers a variety of simulations and games from the HP program library.

In Laura's case, a slight handicap caused by encephalitis had not prevented her from being an A student. But one day last year, after enduring the cruel taunts of her classmates, she announced to her parents that she would not go back to high school. She began spending most of her time in her room, withdrawn and afraid.

The TEL-CATCH staff learned of Laura and designed a program of courses for her. In just a few weeks, her enthusiasm for her studies returned and she became noticeably happier. Now she ventures out of the house for social functions, and recently hosted 18 teenagers for a night of computer-generated recreation.

"TEL-CATCH was the answer," Laura's mother says. "It has opened doors for her when everything else failed. Believe me when I say we are thankful for it."

Measure

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