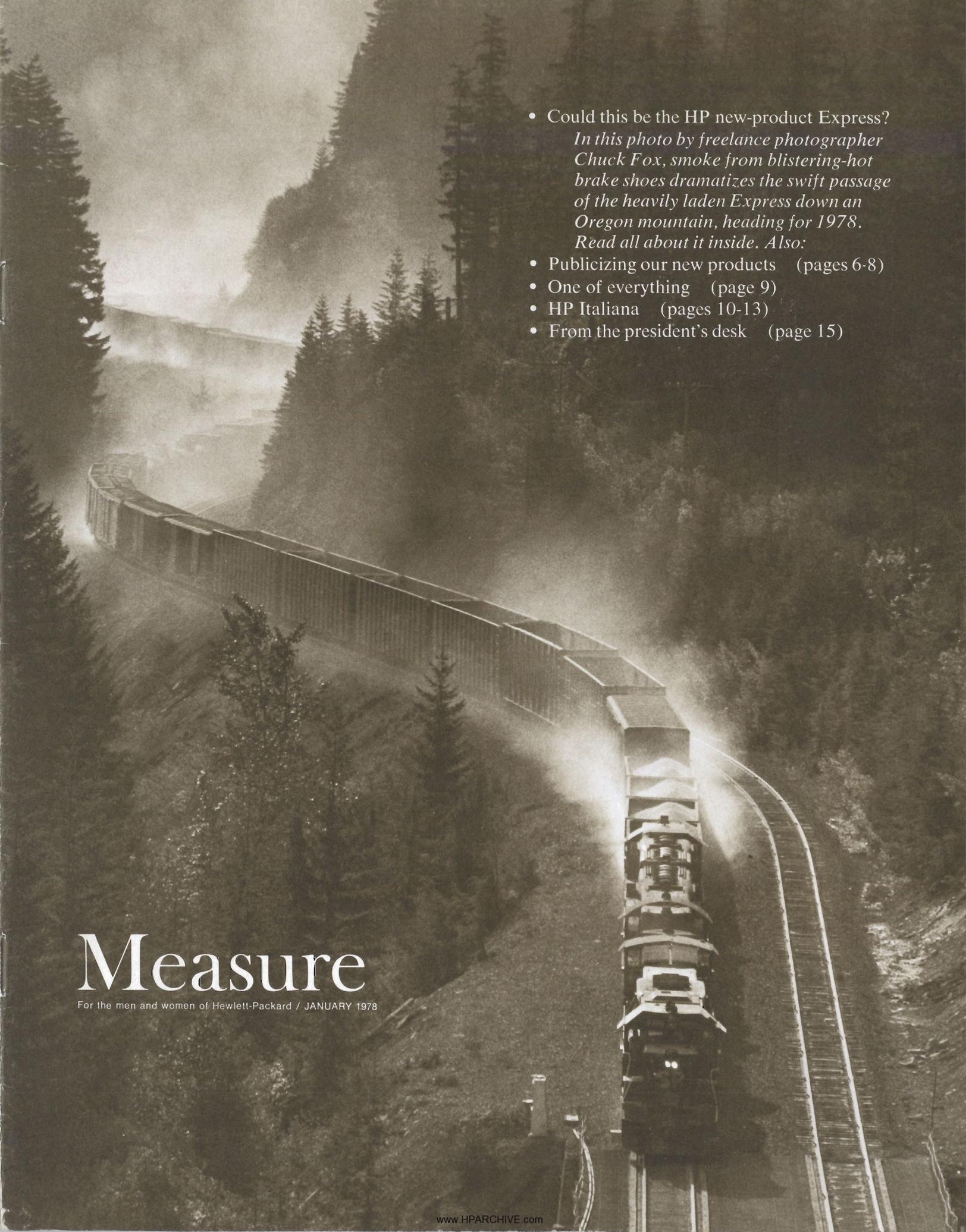


- 
- Could this be the HP new-product Express?
In this photo by freelance photographer Chuck Fox, smoke from blistering-hot brake shoes dramatizes the swift passage of the heavily laden Express down an Oregon mountain, heading for 1978. Read all about it inside. Also:
 - Publicizing our new products (pages 6-8)
 - One of everything (page 9)
 - HP Italiana (pages 10-13)
 - From the president's desk (page 15)

Measure

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

□ It's been said many times: a lot of the steam that propels the HP Express is generated by new products.

That was true again in 1977, as John Young reported in last month's letter "From the President's desk." He noted that the many outstanding new products resulting from an intensified R&D effort had given considerable zip to the company's performance. And with another high-powered payload of new products to add to its momentum, the Express appears headed for yet another successful journey in 1978.

The full trainload for all product categories other than parts now numbers 4,713 instruments and accessories. The 1977 additions of some 976 items included more than 100 major products. Quite a few of these supersede existing products. Others are totally new, or so completely beyond their predecessors in capabilities as to establish virtually brand new types of products. Some interesting additions also are in the category of software.

But hurry! We'll just have time to inspect a few of the really important new items before the Express departs:

Computer Systems Group

In what is currently one of the company's most dynamic markets, the Computer Systems Group enters 1978 with a most impressive array of new products. Probably most important is the DS (Distributed Systems) series — DS/3000, DS/1000 and DS/2026. A mixture of firmware (computer instructions imbedded in integrated circuits) and software (instructions written for use via the computer's regular memory) permit the HP computers — 3000/II, 1000, and 2026 — to intercommunicate freely, on line. Simple as that sounds, this is really a giant step forward in capability. As a result, HP can now offer a wider variety of on-line intercommunication abilities, among a larger number of different kinds of small computers, than anyone.

Meanwhile, HP made some excellent progress in computer peripherals. This

HP's new-product Express:

Coming around the

Computer Systems Group



is important considering that more than half of the typical computer-equipment purchase is made up of peripherals — either I/O (input/output) devices or memory devices. In the I/O area, HP introduced several new terminals, including the 2648A CRT display terminal for graphics, other new terminals for multi-lingual uses from Data Terminals, and a new printer and printer terminal. The latter two, out of Boise Division, are the first computer products to use the new SOS/CMOS integrated circuits from the Cupertino lab. A new memory peripheral, the 7920A disc memory out of Disc Memory Division (now also at Boise), provides three times more capacity than its predecessor, with comparable speed and ruggedness yet only minimal increase in price.

All in all, a lot of customers in the \$4-billion per year small-computer market are discovering that HP has the right answers for their needs.

Shown clockwise from top right are: 2631A printer; DS 1000 distributed system; 2026 computer system (business information); HP 3000 Series II Model 8 computer system; 2648A graphics terminal.

Calculator Group

The big news from Calculator Group has to be System 45, actually a very powerful, practical and producible computer system complete in one desktop unit. Developed at Loveland Calculator Division, System 45 offers several built-in peripherals, notably the CRT graphics display and optional high-speed thermal printer.

HP maintained its leadership position in calculator software, with Corvallis Division marketing some 40 different software books serving a wide range of applications. The division also brought out five new machines — the HP-01 wrist instrument; a portable printing model, the HP-92 for financial and investment analysis; the HP-10, first of a new generation of printing pocket-calculators; the

29C continuous-memory programmable scientific model; and the 19C, a handheld printing version of the 29C.

Shown clockwise from right: System 45 desktop computer system; HP-01 wrist instrument; HP 29C, HP 10, HP 19C, and HP 92.

Analytical Group

In one package, the 5985A gas chromatograph/mass spectrometer system, chemical and materials researchers are offered a powerful analytical tool with many computer-based capabilities built in. Developed by Scientific Instruments Division, the system allows simultaneous GC analysis of a sample and positive identification of its components — all at a price substantially below previous HP systems. Features include automatic tuning, a “library” of comparative test data, and automated operation.

Shown below: HP 5985A gas chromatograph/mass spectrometer and data system.

(continued)

mountain...



Calculator Group



Analytical Group

3



the HP Express

Components Group

At last there is an LED display that can be read easily in bright sunlight. Thanks to some design innovation at Optoelectronics Division, the new light-emitting diode is available in red or yellow for users who need to be able to read digital displays under high ambient light at distances up to 20 feet. Cockpits and auto dashboards are among the potential uses. Meanwhile, Microwave Semiconductor Division launched a new low-cost Schottky general purpose diode, the HSCH-1001. Offered in a rugged package, it's ideal for use in automatic production equipment.

Shown below: New high ambient red and yellow LED displays; low-cost general purpose Schottky diode.

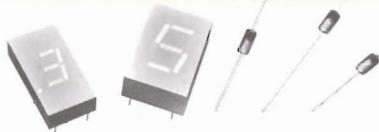
Medical Group

Physicians and hospitals are just now beginning to hear about the HP-78, the "1978 Hewlett-Packard ECG Analysis Program" first introduced at the meeting of the American Health Association in Miami late in November. It's basically a software program designed to work with the HP Model 5600C ECG Management System. It enables the physician to produce a greater volume of higher-quality electrocardiograph interpretations or readings in less time.

The program embodies two major contributions: first is the improved ability to measure ECG waveforms, using the latest techniques of mathematical signal processing; second is the development of features which enable physicians to adapt the program's interpretations to their own local situations — in effect develop their own customized, automated ECG interpretative system. In the long run, use of the HP-78 in an HP 5600C system should reduce the cost and improve the quality of this aspect of health care.

Below: The 47804A pulmonary data-acquisition system.

Components Group



Medical Group



Instrument Group

Today HP's traditional instrumentation business is challenged strongly to meet the demands being created by the almost universal application of computer technology. Within the HP product lines, the trend to the use of microprocessors has become a torrent, creating many more instruments that are faster, simpler, more accurate, more automatic and diversified. Another computer-related trend is seen in the increasing number of easy-to-use servicing instruments that make troubleshooting of very complex computer-type circuits much easier and faster.

A good place to start is with the logic analyzer family out of Colorado Springs whose latest member is the 1615A — a powerful general-purpose tool for studying, designing and troubleshooting complex digital logic circuits and systems. Santa Rosa brought out its next generation spectrum analyzer, the 8568A, which moves the state of the art clearly a full

generation ahead in precision, power, convenience and automation. Santa Clara unveiled three big ones: the 5004A Signature Analyzer for easier servicing of complex circuits; a time synthesizer, the 5359A for precise investigations of timing relationships in digital communications and computer circuits; and a new universal counter, the 5370A, for easy, accurate testing of components, radar systems, nuclear systems and digital communications. South Queensferry switched on an important new communications test instrument; the 3747A/B Selective Level Measuring Set is designed specifically to automate the testing of U.S. and European high-frequency communications systems. From San Diego came a new multi-color graphic plotter, the 7221A, which provides four-color hard-copy graphic plotting from remote

facilities. Boeblingen Instrument Division announced a new fully programmable signal source, the 8165A, which can store and immediately recall up to ten complete instrument settings. Stanford Park Division, looking to the bright promise of fiber optics in accelerating the technology of information flow, has developed the 84801A thermistor sensor, the first instrument for measuring the absolute power transmitted in optical fibers.

Clockwise from top right: The 8568A spectrum analyzer; 5359A time synthesizer; 1615A logic analyzer; 5004A signature analyzer; 7221A four-color timeshare graphic plotter; 5370A universal counter; 3747A/B selective level measuring set; and 8165A programmable signal source. □

Instrument Group



5



Electronic Products
 FOR SPECIFIERS AND BUYERS OF ELECTRONIC PRODUCTS
 Magazine
 November 1977

WAVES
 AMPLIFIER DESIGN
 DESIGN UPDATES DESIGN
 GAIN COMPRESSION
 OUTPUT GaAs FET SPECS
 POWER TRANSISTORS

ALLOWANCE	PIECEWORK
PRODUCTION NO ALLOWANCE	SPL SERVICE
PRODUCTION WITH ALLOWANCE	DAYWORK-DAYWORKER
COMPLIANCE	DAYWORK-TEMPORARY
PRECEDENCE	REWORK

SEND RESET ERROR ERASE CHAR

New product publicity:

The name of the game is "news value" ...

D
 Development

Electronic Design
 VOL. 25 NO. 11
 NOVEMBER 1977

A REMOTE 4-COLOR PLOTTER THAT CUTS COMMUNICATIONS COSTS

Four-color computer plotters are old hat, but Hewlett-Packard Co. has fashioned a new design that is economical and operates remotely. The model 7221A plotter, to be used for machine control, engineering design, and management information applications, stores data internally and is controlled by microcomputer control to generate characters, arcs, and lines, and other basic plot elements.



By a CW Staff Writer
 CUPERTINO, Calif. — Hewlett-Packard has extended its communications software to allow any terminal tied to an HP 1000 or an HP 2026 data entry system to interconnect with an HP 3000 Series II system in a distributed processing network. The HP 1000/2026 capabilities announced for HP 3000 Series II users last May with the introduction of Distributed Systems/3000 (DS/3000) [CW, May 16].

DS/2026 allows the 2026 to function interactively, the firm said. These systems, developed especially for entry and transmission of office information, formerly communicated only with one another or as passive RJE stations to large computers via standard IBM-compatible

Links Expands Net Capabilities; 1000, 2026 With 3000

bisynchronous IBM 2780 or multileaving Hasp protocols. The HP 2026 will be able to handle 16-Segment displays



The HDSP-6504 and HDSP-6506 four- and eight-character light-emitting diode alphanumeric displays have a 16-segment font, centered decimal point and

ASCII set sends 8-bit data over an interface. 3.8mm Hewlett-Packard

PROCESS MONITOR Hook to HP calculator for computational tasks.



You get a lot of computational capabilities when you combine the Digitrend 240 process monitoring system with a Hewlett-Packard 9825A calculator. The Digitrend 240 process monitor scans and measures up to 1000 points of thermocouples, RTDs, point-to-point, and other transmitter signals. Each signal is digitized, and converted to C, psi, or passing may be indicated.

keystroke programmable HP-19C. It has 98 fully merged program steps, 1000 words of memory, full editing and program branching functions, 30 data storage registers, and a quiet thermal printer. (Circle 9 on Reader Service Card)

Gas Chromatograph/Mass Spectrometer System

The gas chromatograph/mass spectrometer sits atop a desklike cabinet and has all-digital electronics, a microprocessor-controlled gas chromatograph, electron multiplier detector, hyperbolic quadrupole mass filter, electron multiplier detector, power supply, analyzer vacuum system, inlet vacuum system and a membrane interface. The data system includes micro-



Printing/display calculators Two new printing/display calculators from Hewlett-Packard are designed for business and financial applications. The HP-92 Investor is a 2 1/2 lb. portable unit that combines full financial evaluation

Analog/digital subsystem Simplifies product test

For product testing and real-time monitoring and control, Model 2240A measurement and control processor can handle both digital and analog data, and control their outputs. It can operate with any computing controller equipped with the IEEE-488 standard and is the first in a line using silicon-on-sapphire technology. Digital inputs/outputs are 32 bits. Digital input voltages are 5V. Analog inputs are 0-10V. Frequency range is 0-100 kHz.

□ The new product has been designed, tested and released to manufacturing; the sales force has been trained in its operation and applications; sales and profit targets as well as price have been set.

The time has arrived to tell potential customers about the product. One of the best avenues for reaching this important audience is through the news columns of magazines and newspapers read by engineers, businessmen and others who might buy the product or influence its purchase. The job of tapping this rich vein rests with the technical and product publicity arm of the Corporate Public Relations department.

On major new HP products, planning and fact gathering begin many months before the product is announced in the press. Working closely with divisional engineering and marketing people, a member of the PR staff will help identify the publications which most likely will be interested in the product, prepare the press release and gather supportive technical material, arrange for photos and see to it that the material gets into the hands of the appropriate editor or reporter in time for use on or shortly after the introduction date. In most cases, the new product will be unveiled simultaneously worldwide through close cooperation with HP press officers in HPSA and ICON regions.

It would be nice if each new HP product could be featured in all of the appropriate publications. The truth is, however, that some products command more attention than others. The reasons are varied: products that employ new technology, that do something not previously possible or faster or cheaper than previously possible, or that represent new markets, will most likely spark the interest of editors. The key word is "new" — as in news.

As the news value of each product is different, the methods used to introduce them in the press must be developed in

relation to their importance to HP, to editors and ultimately, to readers.

Probably the best known means of introducing a new product — or a rock star or prime minister — is the press conference. Surprising as it may seem, this is rarely the most effective way to get attention and is seldom used by HP. In recent years, formal press conferences have been held only for the HP 35 and 80, HP 3000 Series II and the HP-01.

Often a more effective way to let the right editors know about important new products is the press tour. In this ap-

proach representatives of engineering, marketing and PR visit the editorial offices of selected publications, usually with the product under arm. The gathering is informal. The product is demonstrated, its significance and technical contributions stressed, questions answered and press material left with the editors. Because many trade publications are monthlies with long lead times for printing, press tours may occur several weeks before the date of the actual product introduction.

Occasionally, it may be decided that the best way to introduce an important
(continued)



One way editors of trade and technical publications keep on top of new-product developments is by visiting their sources. Here, Harry Karp (center), editor-in-chief of McGraw-Hill's *Data Communications* magazine, visits Data Systems Division for an updating on HP's approach to distributed data processing. Bill Stevens (left), DSD product manager for distributed systems, and Ross Snyder, manager of technical publicity for Corporate Public Relations, review latest HP developments.

product publicity

new product is to see if it can earn a “cover story.” Corporate PR works with the magazine’s editors, sometimes to provide a color photo or art work, and always to make certain that extensive information on the new product — perhaps in the form of a technical article — is prepared. Cover treatment is generally negotiated on an exclusive basis with a single magazine, thereby limiting coverage of the product in other magazines with similar reading audiences.

Another popular tactic for gaining special attention for an HP product is to invite editors to visit the division where the product has been developed. There, HP engineering and marketing people are able to thoroughly inform key editors of the merits of the new product.

Because newsworthy new products emerge at a clip of about two a week (115 in 1977), most introductions are necessarily handled in more routine fashion. The fundamental ground work that goes into a more elaborate introduction is performed, but the new product release and photo are sent by mail to the appropriate magazines.

All of these methods can be tailored to suit a particular product or marketing

strategy, but the basic objective is to place interesting, informative, newsworthy material in the hands of the right editors in a timely manner. The “bells and whistles” that are attached to some new product introductions only achieve results if the product itself merits expanded editorial coverage. HP has limited its use of special appeals so as to retain editors’ trust in their importance and willingness to receive them.

With more than 30 divisions each developing new products, HP often is competing with itself, as well as with other companies, for editorial space. In order to achieve maximum coverage for as many HP products as possible, it is important not to solicit special editorial attention too often. The publicity efforts are most effective when editors are confident that when HP approaches them with a story, it is one in which their readers will be interested.

Publicity can play an important role in the overall marketing strategy. It generally is the first time a reader learns about the product, and when followed by effective advertising, it can greatly aid the HP field sales people to get favorable “buy” decisions. □

Press conferences are generally reserved for celebrities and major announcements — and that’s the way HP uses them. The most recent among these relatively rare HP events was held in Paris where — voila! — Christian Benoit, calculator sales manager for France, unveiled the System 45 desktop computer for 40 journalists.



JANTXIN5765	5*7	IDJ	5082-4592
JANTXIN6092	0	IDJ	5082-4595
JANTXIN6093	0	ID	5082-4597
JANTXIN6094	22	IC	5082-4620
JANIN5765	5*7	ICI	5082-4650
JANIN6092	14	ICI	5082-4655
JANIN6093	14	IC	5082-4657
JANIN6094	17	ICI	5082-4658
TX-4365	20	ICI	5082-4670
TXB-4365	26	ICI	5082-4684
TXV-7391	2*4	IC	5082-4687
TXV-7392	8	ICJ	5082-4690
TXV-7393	8	ICJ	5082-4693
TXV-7395	2	IC	5082-4694
IN5765	0	ICJ	5082-4695

N	PRODUCT/OPT	PRICE	AVAIL*	TY FTN	PRODUCT/DP
90100C		1687	3		90111B
90100D		1687	3		90112A
90100H		5	3		90113A
90100N		5	3		90118B
90110C		340	8		90122B

One of every product:

That'll be \$11,227,309.22, please!

□ Suppose that on your next call to your customer, the Prince of Opec, he orders one of everything. Super sale!

But how do you write it up?

Would you include all the instrument accessories, plug-ins, options and kits? Would you throw in every conceivable system? And how about parts? Somebody produced them, so why wouldn't you put those in the product bag, too?

Or, would you include just basic stand-alone products plus sufficient accessories to get them up and running?

Actually, those are real questions that come up when HP departments seek to define and describe the various HP product lines or to arrive at a total product count and value. It's not an easy problem to solve.

In looking for answers, probably the

best place to start is in the Product Availability Schedule that Corporate Marketing Systems publishes and distributes to the worldwide sales force each week. The schedule lists every manufactured item that HP offers for sale, other than parts, and shows its price and availability in days and weeks from the factory.

Let's start with the total count of listings in the schedule—approximately 8,700 in the December 19, 1977 issue.

From Gary Schlegel, whose department in Corporate Marketing Services is responsible for production of the Heart order-processing system and the availability schedule, you learn that many of those product numbers on the list represent "options." That is, they are variations on basic products, with some products having half a dozen or more such options.

Eliminating these, you are left with 4,713 different and identifiable instruments and accessories. You further learn that 976 of these were introduced in calendar year 1977.

Now, if you want to obtain a count of basic products you're going to have to settle for some round figures. Part of the difficulty arises from the turnover of products—the obsolescence of some offset by the introduction of others. The main problem, though, is the difficulty of categorizing some items such as software, "consumables," and videotapes that are sold. The current estimate—leaving out accessories including carrying cases, tripods, connections and other items—places the basic product count at close to 4,000.

In any case, you're now in much better shape to prepare a quote for the prince. With help from Dennis Carelli and Kathy Costanza of Corporate Marketing Services who prepare the monthly price list, you run that 4,713 figure through an HP computer which tells you that the December price list for all of those items is \$11,227,309.22 (of which \$3,106,571.55 is for the products introduced in 1977).

A princely sum! Looking back, in this case to the January, 1968 issue of MEASURE, you uncover a report that the equivalent total corporate figures ten years ago were \$2,306,227 for 2,163 products.

You can derive some interesting observations by comparing the figures for the decade. But first you had better allow about 100 percent inflation for the 1977 dollar figure, that is, cut it in half. On that basis it is possible to see that the average price for HP instruments has remained remarkably steady over the years. Yet the capability of those instruments has increased and expanded many times.

Tell the prince it's a deal; he'll never make a better one. □

HP in Italy

Beyond the headlines, a reality of success...

Which is the real Italy? Is it the troubled economic and political entity it's often reported to be — and that some companies shy away from? Or is it the success story of HP Italiana? Next fall the

HP sales subsidiary will move its headquarters from a crowded multi-story building in Milan to a brand new facility on the outskirts of the city. The move symbolizes an even greater commitment to what HP sees as a promising market for high technology.

□ By drastically reducing the large number of holidays Italians were accustomed to observing throughout the year, both the government of Italy and the country's labor unions recently acknowledged the need for increased productivity. Some businesspeople viewed it as a hopeful sign that the business climate of the country is improving.

Others would say there is still much room for improvement. By reputation at least, Italy is a country of labor unrest, government instability, high living costs and bureaucratic red tape.

The reality, insofar as it applies to HP's sales subsidiary in Italy, is far different. Here, in certain product lines, HP outsells its international competitors who have a decided edge in other world markets. Although the company doesn't

manufacture here as it does in Germany, France, and the United Kingdom, Italy is the fourth largest of HP's European country markets in terms of sales. Its dollar volume has been growing about 18 percent per year, with growth far exceeding that in some product areas. And sales have been evenly distributed rather than concentrated in a few large customers.

The reported growth figures don't tell the full story of HP Italiana's accomplishments — partly because they're expressed in dollars instead of Italian lire. "I consider the real measure of our growth to be the number of units sold," insists Roberto Albanesi, HP country manager in Italy. "When the lire-to-dollar ratio is going up, the number of units a customer can buy for the same amount of lire is going down. We have had to compensate for that in



Milan, Italy

order to increase our dollar volume.”

Roberto doesn't minimize such problems as fluctuating currency, but he emphasizes the strengths that have enabled HP to succeed in Italy in spite of a somewhat difficult business environment. "As in all of Hewlett-Packard, it's the quality of the people we have, together with the quality of HP technology," he says. "That's what has made it possible for us to not only survive but succeed here. Other companies with high technology but very bad organization have reduced or shut down their Italian operations."

While many of Italy's problems are real enough, it has also overcome a few that plague other European countries. It has managed, for instance, to achieve a good geographical distribution of industry. The "capital city syndrome" found in

France and the U.K., where so much industry is centered around Paris and London, is increasingly absent in Italy as the government has forced business investment in the south as well as the more industrial north.

The results show up in the fairly wide distribution of HP's customers. HP Italiana has eight sales and service offices located all over the Italian boot and on the island of Sicily, and they all serve cities of more than a half million people. Telecommunication is good, and the country's network of motorways is among the best in Europe.

A country of few natural resources, Italy imports most of the raw materials for its industry. Technology is largely an imported commodity as well, and will continue to be until the country gains momen-

tum in research and development. HP and other international companies providing the needed technology are looked upon favorably, with almost no protectionist or "buy Italian" sentiment weighing against them. Italy, in fact, has been a leader in efforts to unite Europe economically and politically.

If there is any barrier to the importation of technology, it's the language barrier. Most scientists and engineers have a good command of English, but as HP broadens its product mix there are more and more customers without technical backgrounds and without the necessary language skills. Translation of sales material and operating manuals is admittedly expensive for the product divisions — but any difficulty communicating with customers also adds to the cost of selling. "It's

(continued)

HP in Italy

not only a question of translating, but also of adapting literature," says Roberto, who feels HP has not met the language problem head-on.

Apart from the language, there are cultural considerations in communicating with Italian customers — but here again, the myth is somewhat different from the reality. According to the popular stereotype, Latin people make emotional rather than rational buying decisions. But the cultural influence is much more subtle than that, and studies have shown that it doesn't necessarily lead to irrational decisions. Generally, the Italian customer places more emphasis on his confidence in the salesperson than on the terms of a contract or a set of specifications. "The amount of cultural communication between buyer and seller is high," Roberto explains, "and the level of confidence they establish is based on a rational assessment. I would call it a rational approach, but with a different set of criteria than the German or Anglo-Saxon might use."

Whatever selling approach is called for, it comes naturally to HP field engineers who were born to the culture themselves. HP Italiana, after all, is an Italian organization staffed by Italian people.

But it's a typically HP organization at the same time, and while Roberto recog-

nizes that "the HP way" cannot be applied in the same way everywhere, he believes in it strongly and feels its basic principles have been adapted quite well to the environment of Italy. "The HP way" is the strategy," he says. "The tactics are our own."

A program of orientation in the basic company philosophies has been structured almost from the ground up to fit the Italian culture and language. "A concept or philosophy has to be taught in the employee's native language, even if the person speaks English," explains Roberto, who personally takes part in teaching employees about management-by-objectives, the value of individual achievement, and other elements of "the HP way."

In Italy, the open door policy is supplemented by a "works council," an advisory committee of employees whose function is protected by law. The council advises management in matters of personnel policy, working conditions, workload, holidays, employee communications and the like. And it voices employee concerns to top management.

Another popular notion is that Italians, particularly in the south, are too willing to accept both the positive and negative aspects of life. But today there is a strong will to challenge centuries-old traditions and fatalist attitudes. Franco Montelatici, HP Italiana personnel manager who grew up in Rome, confesses he is often surprised at the work ethic he finds in Italy today. "I'm amazed to see so many people who feel they are responsible for their lives, who feel that their jobs are important in their lives, and that they want to grow in their careers and be successful," he says. "Fortunately, I can say we have many of these people at Hewlett-Packard."

In politics, too, the image of Italy in the minds of people abroad does not match the reality from close up. Italy has existed for many years in a political climate Roberto Albanesi describes as "fairly unstable stability." It was the same 25 years ago. Today the communist party is more influential than it was, but — some say — also less revolutionary. It tactically supports the center-right coalition government and, acknowledges Franco, "They now recognize the importance of profit-oriented free enterprise within limits."

If conservative Italians see nothing alarming in the spread of "Eurocommunism," perhaps it's because they sense the



Personnel manager Franco Montelatici speaks highly of the approximately 335 people of HP Italiana, who are about evenly divided between administration and sales/service. "The HP way" has adapted well to the environment of Italy, according to Franco, and helps HP attract top-quality people.



basic strength of the entrepreneurial spirit in Italy. It's one of the reasons for HP Italiana's success, according to Roberto. For one thing, customers admire the entrepreneurial nature of HP's own beginnings. And they are able to witness the same spirit in the branch offices of HP Italy, which function under the MBO philosophy almost as individual small companies.

"Our 2000-year culture and history have helped today's population of 60 million people live well in spite of a difficult environment," Roberto concludes. "Since the Roman Empire, we have been trained to produce without natural resources. And that's forever, because it's unlikely we'll discover great reserves of oil tomorrow."

To his listeners, it becomes clear that — whatever its image in modern society — Italy's strengths are those of a civilization that gave the world its basic principles of banking and commerce as well as much of its great art and science. From Leonardo to Fiat, human resources and ingenuity have contributed the full "value added" to the goods and services Italy has offered the world. There's the reality. And in those human resources lies the potential of Italy and Hewlett-Packard Italiana. □



HP Italiana's new headquarters building is scheduled for completion in the fall of '78. At an earlier stage in the construction, HP country manager Roberto Albanesi (left) toured the site with Ed Towbin, HPSA public affairs manager.

HP News

AMD merged with Data Systems

CUPERTINO — In a move to strengthen the company's programs for developing and marketing computers and computer systems for instrumentation applications, the Automatic Measurement Division has been combined with the Data Systems Division.

"The unification of the two divisions will make it easier for our customers to take full advantage of HP's abilities in the test, measurement and control areas," said Dick Anderson, general manager of the Data Systems Division. "These systems are computer based and have IEEE-488 (HPIB) interfacing capabilities, so the combination is logical." Previously, both divisions produced systems serving the production, automatic test and process control markets.

Al Seely, former general manager for the Automatic Measurement Division, becomes program manager for measurement and control products and for automatic test systems, reporting to Anderson.

New Systems Engineer Organization

CUPERTINO — The Computer Systems Group has formed the Systems Engineer Organization (SEO), representing a new revenue-center basis in providing software training and support for computer systems. The various services performed by systems engineers in branch sales offices, both for customers and internally, became chargeable as of November 1, 1977.

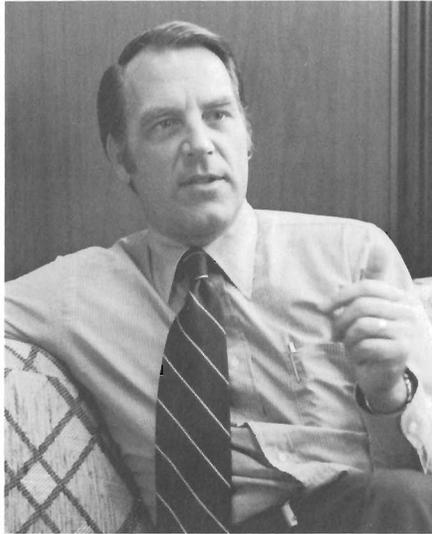
The new approach of splitting

out the systems engineering activity from field selling will enable customers to purchase contracts for software support when they need it, and give Computer Systems a sharper focus on field sales costs.

SEO managers will report directly to the region and country sales managers, with Jay Denny having worldwide responsibility as SEO manager for Computer Systems Group.



To mark its tenth anniversary since setting up a small sales office near Copenhagen, HP Denmark decided to invite customers to a special three-day open house. While there were appropriate festivities, the main attractions were a series of seminars on new product developments and an exhibit of new products from each discipline. According to reports, the 360 guests thought this a fine way to launch HP's next decade in Denmark.



From the president's desk

Over the years at HP, I've frequently heard the opinion expressed that the first-line supervisor has the toughest job in management. While this might be a hard proposition to prove, it's easy to understand the reasoning behind this point of view. First-line supervisors have the demanding job of providing the link between the people who perform the myriad day-to-day tasks of operating the business, and the management structure and operating policies of the company.

This is a very difficult assignment because, to be an effective link, the first-line supervisor has a dual role to perform. On the one hand, the supervisor is expected to be technically proficient in the job content of the people working in his or her group. On the other, the supervisor is expected to be equally proficient in understanding and interpreting company policies and operating procedures.

The first-line supervisor, whether in production or field sales, in many respects is the cornerstone of the "HP Way." Or put another way, a very high proportion of all the employee dissatisfactions that come to my attention stem from instances of poor first-line supervision.

Many years ago HP management recognized the need to provide some structured training and coaching programs for supervisors to help them deal more effectively with the complexities of their jobs. In looking back over the records, I found that the first Supervisory Development Program (SDP) was offered in 1959. This was a 20-hour session that covered organization, communication, leadership, personnel guidelines, and other management basics.

As might be expected, this program has been revised periodically to meet changing needs. Since a major revision has just been completed, I thought I'd comment briefly on some of the details of the new program, as well as on some of the other activities that are underway in the area of supervisory development.

The all-new Management Development Program (MDP) is the work of members of John Doyle's personnel staff, headed by Bill Nilsson, corporate training and management development manager. This new program consists of an intensive three-day "core" session, followed by eight half or full day workshops (over a period of several months) on specific subjects such as affirmative action, personnel selection and interviewing, salary administration, and other related areas.

The increase in the length of the program over the years from 2½ days to 11 days is in recognition of several factors. First, there have been totally new areas to learn about, such as affirmative action and job posting. Second, some of the more long-standing functions of supervision, such as performance evaluations and employee development, require considerably more emphasis to meet the needs of HP people today. Finally, as the company grows and becomes more dispersed, we must put proportionally more effort into management training at all levels to make sure HP maintains a superior work environment.

In parallel with the development of the new MDP, a manufacturing task force has been studying the position descriptions of the manufacturing management teams. They have found that some overlapping and blurring exists between the job definitions of line leaders and first-line supervisors in many areas of responsibility.

A number of working sessions have been spent with leads and supervisors to better identify and clarify the key duties of the supervisor and the technical support role of the lead. I expect that the result of these studies will be that there will be more positions identified as first-line supervisors.

HP has about 2,000 first-line supervisors, representing about half of our management team, and we'll be adding about that many more supervisors over the next five years. These people carry a very special responsibility — that of maintaining an environment where individuals, working together, can accomplish both group and personal work objectives.

In summary, the areas of supervision and people management will receive considerable emphasis during the coming year. It will start with a major workshop for top management at our annual management meeting to be held later this month. This will be followed by sessions in each division to make sure that everyone is clear on manufacturing management position responsibilities. MDP training will get underway in the divisions and field sales regions in February — and we'll aim for getting current by year-end.

As the company grows, it is important to each of us that sufficient time and energy is invested to preserve and enhance the people relationship that has set HP apart from many other companies.



The HP-01 goes to the Grand Prix...



Car racing fans will recognize not only the track shown here as Monza but also the man profiled in the photo at left as Stirling Moss, three times winner of the Formula I event ('56, '57 and '59) on the famed course near Milan. Appropriately, he is appreciating an HP-01 wrist instrument brought to the 1977 running by HP's vice president of Marketing, Al Oliverio. According to Al, who stopped at Monza in the course of a visit to HP Italy, what the top drivers are really looking for is an instrument that would mount atop the steering column and display lap times and number of laps run. That's one instrument HP seems to have overlooked, but there still are plenty of others to read about in the special report leading off this issue. And for more on HP in Italy see pages 10-13.

P.S. Yes, that black car carried Mario Andretti to a victory.

Measure

EDITOR
Gordon Brown

ASSOCIATE EDITOR
Dennis Cresswell

ART DIRECTOR
Tom Martin

GRAPHIC ASSISTANT
Teri McPheeters

MEASURE Correspondents — AMD, Karen Langford • APD, Dick Anderson • AUSTRALASIA, Robin Schmidt • AVONDALE, Mary Whittier • BOISE, Artie Stone • COLORADO SPRINGS, Betty Lotton • BRAZIL, Campinae, Jose Lacerda • CUPERTINO, Ardis Boland • DELCON/CSG, Ed Iigen • EASTERN SALES, Vince Macrina • FORT COLLINS, Pete Peterson • COMPONENTS, Kathy Belton • HP CANADA, Brian Wright • HP FRANCE, Jacques Marquizeau • HP GMBH, Ernst von Glasow • HP ITALIANA, Alice Pantera • HP SINGAPORE, Dick Love • HPISA, Josette Boulmier • WYERCOIN, Sy Sorenson • LOVELAND, Jim Colwell • MALAYSIA, Maria Malik • MANUFACTURING, Charlie Marshall • MCKINNVILLE, Chuck Walker • MIDWEST SALES, Jessica Tollman • NEELY, SA Peters • NEW JERSEY, Bob Muggleston • Bob Reade • SANTA CLARA, Robert Lewis • Dave Curry • SCIENTIFIC INSTRUMENTS, Edlin Varnali • STARFORD PARK, Joanne • UNITED KINGDOM, David Reed • WALTHAM, HP, Mtsako Harada

HEWLETT-PACKARD COMPANY
1501 Page Mill Road
Palo Alto, California 94304

BULK RATE
U.S. POSTAGE
PAID
MENLO PARK, CALIF.
PERMIT 414



1501 Page Mill Road, Palo Alto, California

47-14293
KENNETH L MACY
403 MEADOW DRIVE
BOULDER CREEK, CA. 95006