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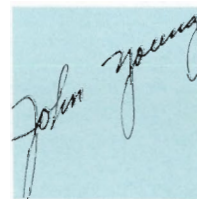
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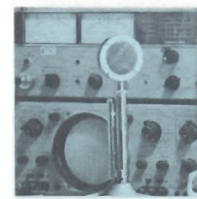
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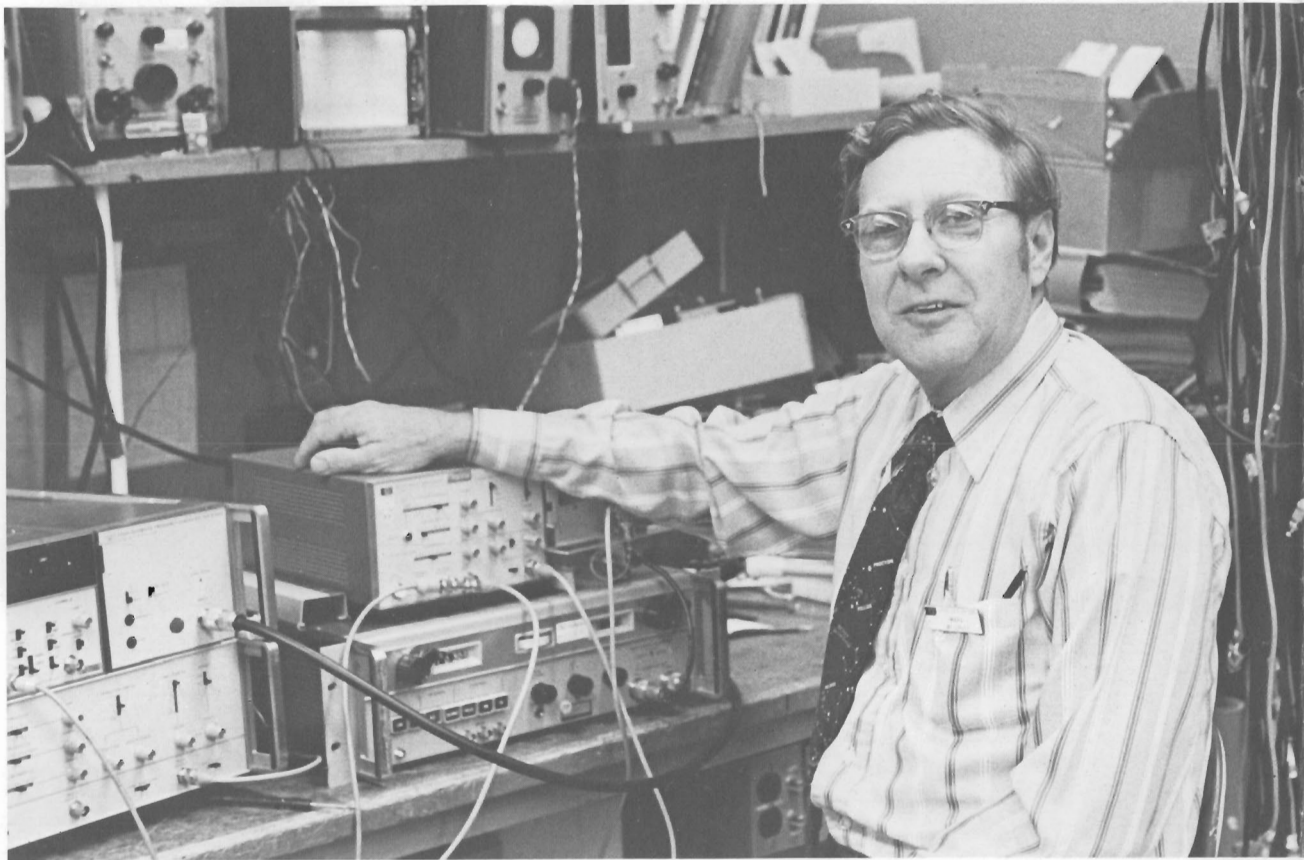
For the men and women of Hewlett-Packard/JULY 1978



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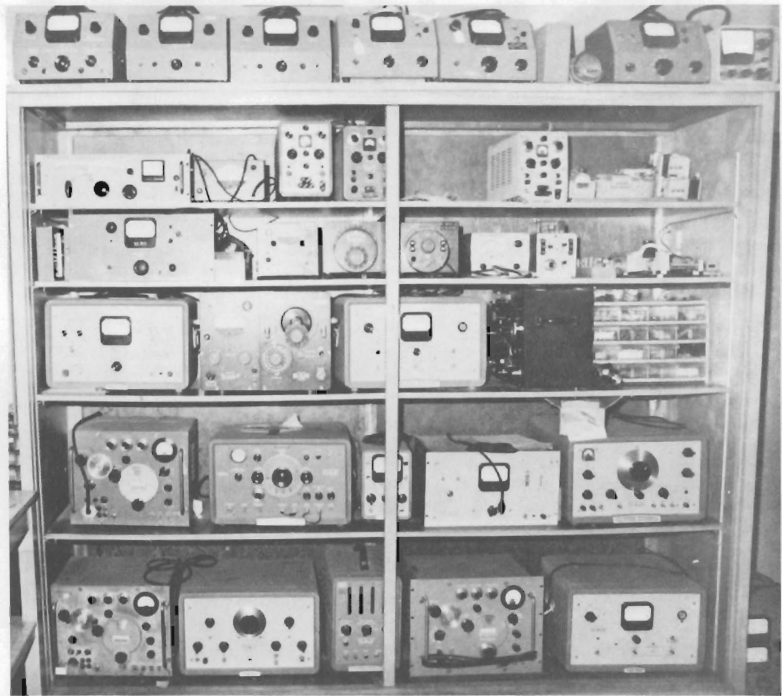
Marv Willrodt:

The quiet giver...

□ To read only the news releases and program notes out of South Dakota State University one might think that HP's Marv Willrodt was some kind of wheeling-dealing engineering alumnus. In quick succession this year, the university named an engineering laboratory after him, and then selected him to receive a Distinguished Engineer Award from its college of engineering.

In truth, the honors came as a bit of a surprise to Marv, who is now the customer-applications engineer at Santa Clara Division. He really hadn't the means to make any big-money endowments to the university, and had not even returned

Still useful older HP instruments abound in the "Marvin Willrodt Measurements Laboratory" in the engineering department of South Dakota State University. Here is just one corner of the lab that's been largely filled over the years by donations from the Santa Clara Division applications engineer.



to the campus at Brookings for 29 years. But over those years, since joining Hewlett-Packard in 1951, he had thoughtfully acquired and donated a wide range of used HP equipment.

He did this for several reasons. First, he felt good about his experience at the university. He had enrolled there first in 1939, a farm boy whose contact with the broader world outside of Chamberlain, South Dakota, had been gained as a ham radio operator. World War II interrupted Marv's school program, but the U.S. Army Signal Corps introduced him to the most sophisticated communications engineering then in existence. He returned to South Dakota following the end of hostilities, graduated in 1949, and then did a year's graduate work at the University of Illinois before joining Hewlett-Packard as an R&D engineer.

One thing these experiences made clear to Marv was the disadvantage that the various farm-belt state universities had in relation to engineering equipment. State legislatures would fund almost any agricultural research program, but engineering was somewhat down on their list of priorities. Why should they invest heavily in the education of engineers who would most likely have to leave the state to find employment?

In any case, Marv gradually became involved in rounding up spare items of engineering equipment and shipping it off to the Brookings campus. He knew it would be most welcome. Some of it was equipment he no longer needed in his own electronics lab at home. But mostly the items were acquired at HP auctions. Here,

equipment no longer needed by a lab is put up for bid to private HP buyers after other HP organizations have had an opportunity to buy it. Marv also would do a fair amount of fixing up of this gear in his own time. In this way a lot of older but quite functional electronic test and measurement instruments arrived on the South Dakota campus.

But, according to Harley Halverson, R&D project manager at Stanford Park Division, there's more to the story than that. "Marv graduated a few years ahead of me at SDSU," said Harley, "but he had a great influence on my career. He left his mark all over the engineering laboratory with the test equipment he built there, including an oscilloscope he had put together from bits and pieces. He also had built the campus radio station. I was very impressed by all of that, and so when I graduated I aimed straight for HP.

"The close relationship we now have with the university is a direct result of that background. They may be a bit short

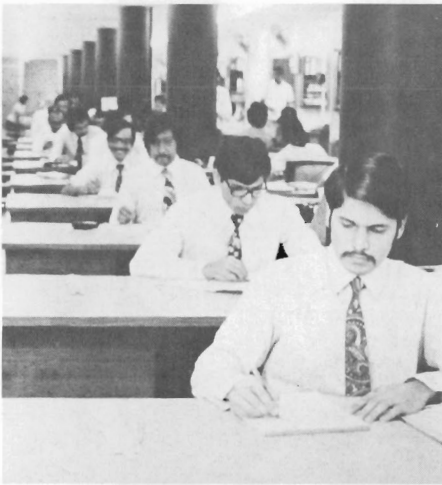
on the latest equipment, but they attract good people, and this past year we recruited the top student in the graduating class. And that's not the first time!"

Indeed, it's a matter of record that Byron Anderson, manager of transistor production at Santa Rosa Division, was recruited by Harley in 1964. Byron was a top engineering student at SDSU, its student body president, and later a Harvard MBA. He does not recall ever knowing about Marv Willrodt in school, but says the evidence of Marv's contribution to the university's engineering lab was very strong, and the recruiting link seems equally obvious.

All of this is recorded not to single out a certain university nor simply to add to Marv Willrodt's recognition. The point really is to bring out how one person of moderate means but with an idea and with persistence, can create waves that favorably influence events and people far removed in time and place from the source. And have a lot of fun in the bargain. □

HP's Intercontinental distributors:

They mean business!





□ Seeing them in a group, you think: “Aha! They’re making a James Bond movie at HP! And these widely assorted guys are taking roles as international operatives gathered in Palo Alto from the far corners of the world to share special plans and information common to their global network!”

You’re not really far off—except that it’s a real-life meeting of managers and owners of key distributing firms that represent Hewlett-Packard products in a wide range of “new” and developing nations.

Their host—and network manager—is HP’s Intercontinental Sales Region in Palo Alto. They come from Bolivia, Chile, Colombia, Costa Rica, Guatemala, Hong Kong, India, Indonesia, Israel, New Zealand, Nigeria, Pakistan, Panama, Peru, Philippines and Thailand. They represent HP in those countries as others do in many other countries because—generally—the company would find it impractical and uneconomic to set up its own sales and service organizations therein.

After meeting and talking with these visitors, it’s clear that family resemblances just about cease beyond the HP relationship. In business styles, origins, size, programs, and economic environment, they are about as varied as their languages and locations. In other words, they have some interesting stories to tell—among other things, about the way HP products are sold in some of the more exotic places on this planet:

Risks and rewards . . .

One key quality you’d expect to find among the HP distributors is enterprise, the willingness to seek out business opportunities, pursue them vigorously, and take calculated risks in making a go of them. And it is there—in abundance.

Berca, the firm handling HP sales in Indonesia, is a basic example of such entrepreneurship. It came together only in 1970 when three men of diverse back-

grounds—one a trader, one an electrical engineer, and the third a mechanical engineer—decided to found “the best” technical firm of its kind in the country.

Typical of their style, they spotted HP at a trade exhibit in Singapore, introduced themselves, and followed up with negotiations that persuaded HP they could do a better job as its Indonesian representative. Such persistence has paid off in Berca sales last year of \$24 million by a staff of 240 people. HP, of course,

is just one of a number of firms served by Berca and represented in these figures.

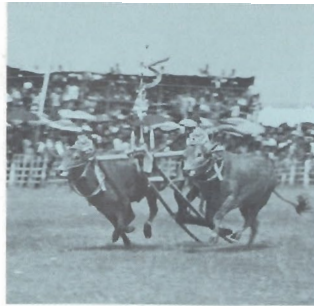
In Panama, **Electronico Balboa** got its start in 1959 by four young U.S. nationals who bought a small radio-TV repair shop for \$750. They started by servicing the ships passing through the canal. One thing led to another, and soon they were in the distribution business as well. Today, the original firm and three sister companies—one of them operates a radio station—employ almost 100 people, and represent and service all HP lines other than computer systems.

In the Israel of 1948, most businesses were necessarily modest in size. The country had just gained independence, and resources and markets were quite slim. But expectations were high, and for Moshe Bassin the time seemed ripe to start his own business of installing public address systems. He and an apprentice were the entire work force. Ten years later, under the name of **Electronics and Engineering Ltd.**, the payroll was at eight people.

Then things began to accelerate. In 1958, for example, Bassin stopped by HP’s booth at the IEEE show in New York, and began a conversation with Bill Doolittle, now HP’s vice president-International. The meeting led to a handshake agreement. From a part-time activity, HP sales there soon began to grow at a 50 percent rate. Four years later the firm entered a joint venture with Motorola Inc., and itself became Motorola Israel. Today, the firm employs more than 900 people organized in four divisions where functions include not only representation but also manufacturing for export. HP sales are a significant portion of the Electronics and Engineering Division, with all product lines represented.

(continued)

they mean business



By any standard, Korea's **Samsung Group** is the epitome of business enterprise. Begun in the late 1930's with a rice mill, Chairman B. C. Lee and his team have built a 24-company organization that's aiming for more than \$2 billion in sales this year. The Samsung philosophy of "Let all parties benefit" has been a key factor in this growth and in attracting relationships with other companies such as HP.

That specific relationship is with Samsung Electronics Co., itself a leading manufacturer and exporter of electronics equipment, chiefly for the consumer and appliance markets. Samsung Electronics became distributor for HP in Korea in 1976, and in typical Samsung style the sale of all Hewlett-Packard lines have boomed. Today almost 50 sales and service people represent HP product lines, a figure which probably will soon be well out of date if the Korean boom continues.

The fit survive ...

The ability to adapt to difficult conditions is another characteristic that's been important to many of the ICON distributors.

The record of **Schmidt & Co. of Hong Kong** is definitely that of a successful survivor. The firm was first founded in 1896 in Tokyo to specialize in the representation of instrumentation for medicine, science and industrial research. It soon became well known throughout the Far East.

The first acid test occurred at the end of World War II. The company lost all of its business. Members of the firm in China reactivated the business there, but again the revolution forced the abandonment of active operations out of Shanghai. In 1953 the remaining Schmidt management moved to Hong Kong to become the nucleus of today's very successful enterprise in pharmaceutical and photo-

graphic products as well as the medical and scientific instrument businesses. It survived because its reputation and know-how were still solid in spite of these buffeting.

By 1960, Schmidt's technical expertise had made it well aware of the importance of electronics in its various fields of interest. In 1969 the company became HP's agent for local representation and service. With Hong Kong's electronics industries booming as never before, that's an important partnership.

Difficulties that a western business can hardly imagine are commonplace for **Mushko & Company Ltd.** of Pakistan.

Political upheaval one day is followed by economic dislocation the next. That's been going on for ten years. And of course there was the civil war of 1971 that resulted in the formation of Bangladesh as a separate state. That alone lopped off a quarter of the company's entire business, including a large branch.

Another complication is the Moslem weekend. The Pakistan government has substituted Thursday and Friday as the official weekend, as provided by religious custom, in place of the usual Saturday and Sunday. The result is that Mushko's international business is shut down four days of the week.

Nevertheless, Mushko thrives. It's been doing local business on behalf of HP for 17 years and, with its other lines, employs 70 people who did some \$3.5 million in business last year.

Nature took a very rough hand in redirecting the career path of **Alfredo Gallegos Gurdian** in Costa Rica 15 years ago. Previously he had represented Sanborn (later HP) medical instruments since 1949, but retired in 1959 to operate a large dairy farm.

Between March 13, 1963 and Decem-

ber 1964 the neighboring Irazu volcano erupted, spewing volcanic debris to a depth of 21 inches over the farm.

Farewell to farming, back to selling. Fortunately, the latter has been a success, and Cientifica Costarricense, as Gallegos' firm is named, has built a reputation for service and innovation. The company installed Central America's first intensive care units, and has furnished the great majority of ECGs and all ICUs employed in Costa Rican hospitals. Its representation of instruments, desktop computers and personal calculators has been along similar lines.

Rules of the game ...

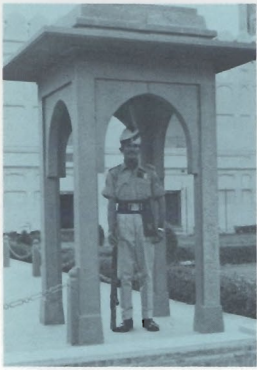
Even when selling highly technical products in a number of developing countries, the "who you know" is often at least equal in importance to "what you know."

Fred Wakcham, president and managing director of **Compania Electro Medica** in Lima, Peru, phrases it nicely when he says that "Social orientation is very important in doing business in Latin America. I'm on a first-name basis with all of the medical professionals I call on. We meet socially. Selling, therefore, is not a matter of going door-to-door or making scheduled calls."

Fred actually splits his time between managing the firm and representing the HP medical line. The company now has 14 members and carries all HP product lines. In the face of Peru's economic and constitutional difficulties, the "know who" factor may become more important than ever.

Sam Solarin, managing director of Nigeria's **TEIL (The Electronics Instrumentations Ltd.)**, expresses similar ideas.

"You've got to know the rules of the game," he says, pointing out that the first rule is not to press too hard for payments.



Solarin's business was incorporated in 1970. TEIL, with a sales-service force of six people, markets HP product (other than computers and other sophisticated systems) lines to Nigerian universities, technical colleges, research institutions, engineers and government agencies. "You must understand that the wheels turn slower here," Solarin said, "particularly the government bureaus which are involved in many of our sales."

"Eventually you will get your money. But you must have patience, and let things happen. And that's why it's important to know your customers well, and why they need to know the kind of person you are. The system would not work otherwise. Because to send debt collectors or to "write off" an unpaid bill would be considered a deep insult to the customer's integrity. That would be the end of your business."

A belief in people . . .

Codes and philosophies of business conduct quite compatible with HP's Corporate Objectives are no longer all that uncommon in the world's market places.

In the Philippines, for example, **Online Advanced Systems Corporation** espouses a set of goals very much in the HP style. One aims to recognize, develop and reward employees according to their skills and contributions, while another pledges the company as corporate citizens to help fulfill social and economic responsibilities to the nation and its people.

Even though Joey Yujuico, Online's president, learned about HP while studying for his EE and MBA degrees at the University of California at Berkeley, the philosophy was established independently. "Good business ethics simply make for good business," he says.

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What is an HP distributor?



Last year on behalf of the Intercontinental Sales Region (ICON), distributors accounted for almost exactly one-third of total business. Their role, generally, is to do a job of selling and servicing HP products, as well as of other firms they represent, in those scores of countries where the cost, task or risk of self representation is too great. In that sense, according to Alan Bickell, ICON general manager, distributors are really our partners in business.

Late this spring some of the largest such firms were invited to attend the first ICON distributor seminar. For most, it was also their first chance to meet their fellow businessmen, discuss common problems, get acquainted firsthand with the HP way of business, and generally come to see themselves as part of a team. All said they wanted to come back for more, and all thought it inevitably would lead to a bigger and stronger relationship with HP.



It shouldn't come as too much of a surprise to discover that HP's distributor in Hong Kong, Schmidt & Co., does business out of one of the upper floors of a skyscraper. Around the world, distributors exhibit great diversity in experience, style, size, and range of related business interests.

they mean business



Formed in 1975 especially to market HP computer and programmable calculator products, Online now represents almost the full HP spectrum.

A belief in the worth of people is basic to the corporate philosophy of India's **Blue Star Limited**. That belief encompasses employees, customers and the public they serve.

I. P. Israni, vice president of Blue Star's Electronics and Data Systems divisions, affirms the influence of HP's corporate philosophy: "We are very much in tune with HP, and have extended some of that philosophy not only into the electronics business we represent but also to all of our other businesses. For example, we will not sell anything a cus-



Service capability is of paramount importance in a distributor organization, just as it is in an HP sales organization. Here is a view of the electronics lab maintained in Bombay by Blue Star, Ltd., HP's distributor in India.



HP's new-product advances enjoy almost as much interest in distributor countries as in the larger industrial nations. Both want the latest and best. A logic-state analyzer is the subject of this discussion at Motorola Israel's Electronics and Engineering Division.

tomor would not be pleased with and use over the long term. Also, our people tend to remain with us. They are given authority and responsibility as they earn it—a 'meritocracy of equals.'"

That business began in 1943 in a waterfront shed in Bombay, making machines that made popsicles. Today, seven divisions staffed by more than 2,000 people serve a wide range of India's high-technology needs—yes, still including machines that make frosty confections.

And seesaw economics . . .

Virtually all of the ICON distributors have had to contend with unstable economies—but some more than others.

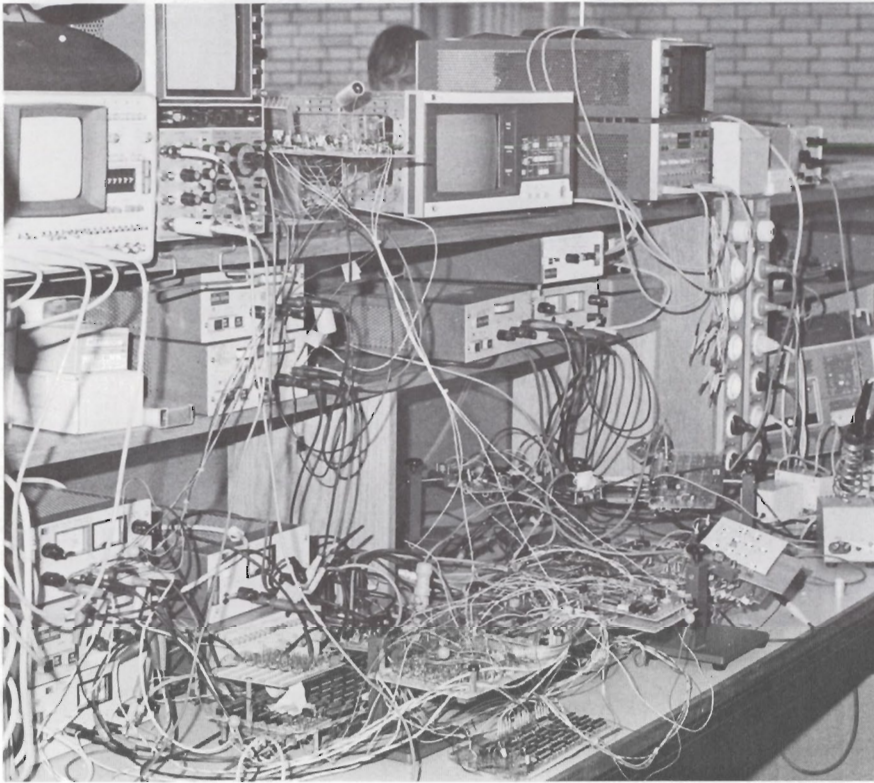
According to Henrik Langebaek, a Dane whose **Instrumentacion** firm has been doing business in Bogota, Colombia since 1950, that country has come up against a very special problem.

"Until quite recently," says Henrik, "Colombia was quite poor. Coffee prices were low and the country regularly ran at a deficit of about \$800 million a year. Then bad weather ruined the Brazilian coffee crop. The price of beans soared. On top of that, a huge amount in money has come into the country illegally as a result of smuggling of 'Colombian gold' and other drugs."

The result is a surplus of capital—particularly dollars—which no one could have counted on. The government has had to absorb those dollars by using its own national currency, which further inflamed the inflation. And the trouble is that—in an undiversified economy—who can plan for the future when the bottom may drop out of the coffee market tomorrow, or next year?

For Instrumentacion and its 42 employees, the economic swing has reduced some of their business with the government, but overall they are riding it out quite comfortably. □

Is this the place that launched a thousand "rifleshots" heard around the world?



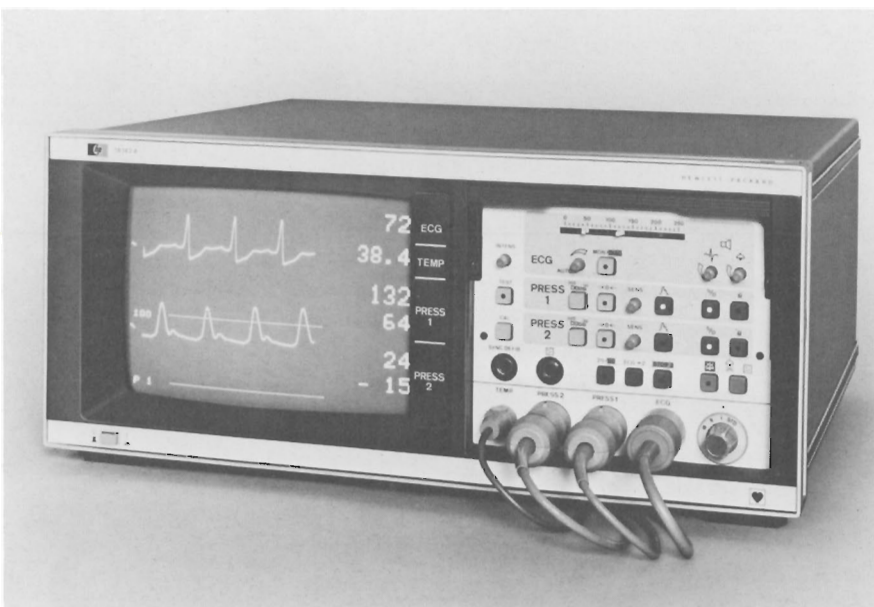
□ Everyone knows that engineers secretly love chaos and confusion; the bigger the mess, the greater their opportunity to straighten things out and make them work properly.

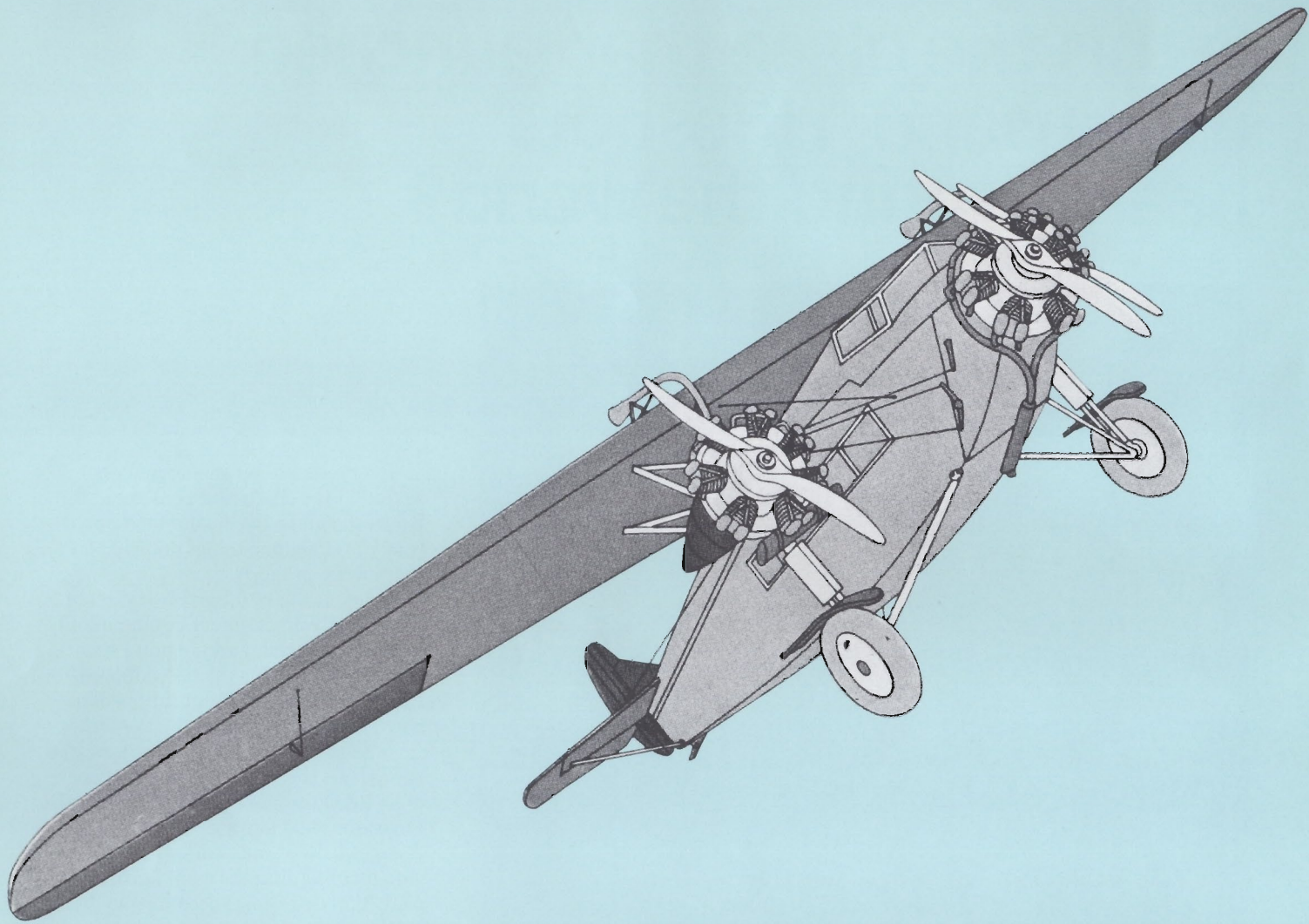
Look at the photograph at top left. Surely, only an engineer could possibly devise, understand and operate such a kluge. Actually, it's the "breadboard"—or first experimental circuit setup—of a new HP medical product.

The breadboard is seen as it existed almost two years ago, on the workbench of an R&D team at Boeblingen Medical Division. The team's goal was a family of eight patient monitors whose individual configurations would give hospitals a precise choice according to their particular needs, at lower cost. Appropriately, it's called "rifleshot."

The result is represented in the photograph at lower left. Manufactured and introduced simultaneously by Boeblingen and the Waltham medical divisions, it's the 78342A patient monitor.

It's just hard to believe that in that neat, orderly body beat the same signals and pulses as that breadboard parent! □





HP man's search:

Journey into a time warp

In Colorado, Charles Kingsford-Smith has not been exactly a household name these past years. To fellow employees at the Loveland Instrument Division as well as to family friends in Loveland, it summoned up the picture of a quiet, pleasant design engineer, neighbor and family man, Charles Kingsford-Smith, Jr.

Ten-thousand miles or so away in Australia and New Zealand—more or less at the opposite point of the globe—the name is a myth, a memorial and a legend. Like a Lindbergh, a Wiley Post or an Amelia Earhart, it stands for a hero and a mystery all in one.

□ That heroic role got its start exactly 50 years ago last month, on June 1, 1928. A Fokker trimotor plane, *The Southern Cross*, took off from California's Oakland airport, heading west into the sunset. The goal was Australia, a large enough target, but the vast intervening oceanic spaces broken only by tiny island stopping places were intimidating to most aerial navigators of those times. It hadn't been done before. It was close to suicide, they thought.

But that was not what the young Australian World War I ace fighter pilot, Charles Kingsford-Smith, had in mind. He had an experienced crew—Harry Lyon, Charles Ulm, and James Warner. Their plan was to island hop via Hawaii and Fiji, then reach Brisbane, Australia, on June 9.

And that's what they did. But not without incident and real hazard. The takeoff of the heavily fueled plane, witnessed by more than 1,000 people, seemed agonizing in its slowness, barely clearing the runway. As night settled in, naviga-

tor Lyon (an American, as was Warner) dropped calcium flares whose drift to the ocean 4,000 feet below told him how well *The Southern Cross* was holding course. Ships were passed and greetings exchanged by blinking lights.

Then came Hawaii. In order to take off with the 1,300 gallons of gasoline needed to carry them the 3,144 miles to Suva, the plane was flown to Kauai where a long, firm beach would provide the necessary runway.

Aloft at 3,000 feet, a major tropical rainstorm with powerful headwinds threatened to force a return. But, risking some of that fuel, Kingsford-Smith—"Smithy" as he was popularly known—took *The Southern Cross* up to 5,000 feet. No relief. Then to 8,000 feet before breaking clear.

After 32 hours in the air, Fiji was spotted. But it took a ground loop to avoid a crash landing—thus completing history's longest non-stop flight over

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The trans-Pacific flight of *The Southern Cross* in 1928 has been memorialized in Australia with the engraved likeness of its captain, Charles Kingsford-Smith on that country's \$20 note. Exactly 50 years later, on June 1, an HP engineer, Charles Kingsford-Smith, Jr., set out on exactly the same journey.

Journey

water. And again, a special beach had to be found for takeoff on the third and final leg of their saga.

Ahead lay Brisbane, "only" 1,780 miles away, a comfortable prospect. Then Lyon noted that the craft's most important navigation instrument—the earth-inductor compass—was not functioning. Now they were at the mercy of steering compasses—which soon became almost useless as another heavy storm wrenched the plane and the compasses about. But they made it, 110 miles south of their target. Turning north, they arrived on schedule and a perfect landing before 15,000 cheering Australians.

Suddenly, Australia and indeed the whole Pacific Basin woke up to vistas of the new Age of Flight, of a new closeness and connection among themselves and the rest of the world. And just as Charles Lindbergh had been acclaimed in Paris one year before, Charles Kingsford-Smith set the Aussies off on round after round of cheers. A hope and a promise had been fulfilled.

That took care of the Trans-Pacific frontier. Ahead lay the Australia-to-Britain route, the path of Empire reaching across the Indian Ocean, to the Mediterranean, and on to London. Kingsford-Smith launched himself on that route in a Lockheed monoplane named the *Lady Southern Cross* on November 8, 1935. He was never seen again, the only evidence of his fate being that of a wheel washed ashore on a Burma beach two years later.

Charles Kingsford-Smith, Jr., was three years old at the time of his father's disappearance. At that too-young age, both the father and the spirit of his adventures were lost to him. But, in recent years, Charles Kingsford-Smith, Jr., has

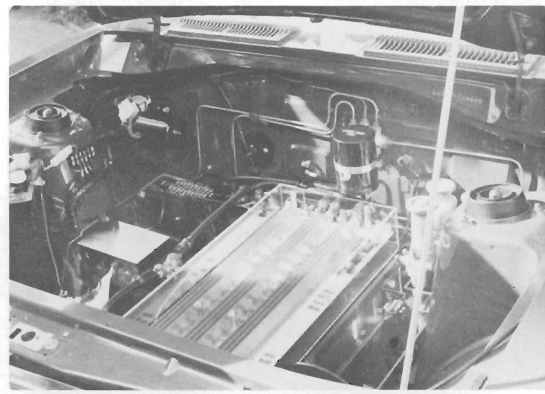
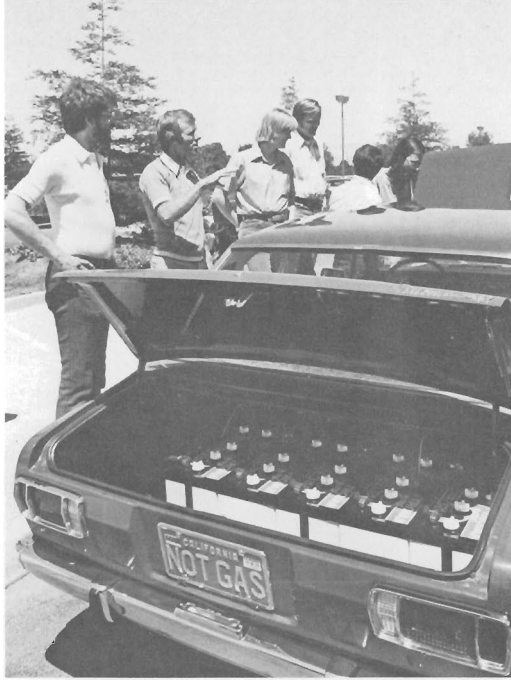


Fifty years to the day after his father's historic flight, Charles Kingsford-Smith, Jr. enjoys some of the acclaim given "Smithy" on arrival at Brisbane, Australia in 1928. Following his commemorative flight in the twin-engined Cessna 340 in the background, the Loveland Instrument Division engineer said he would give up trans-oceanic flying in small planes, and would return to Colorado in a big commercial jet. Photo courtesy of *The Courier-Mail* (Brisbane).

given thought to that loss. On June 1, 1978, he and an Australian co-pilot, Keith Rose, set out from Oakland in a specially equipped Cessna aircraft on exactly the same trans-Pacific flight as *The Southern Cross*.

As he waited for takeoff in Oakland, the younger Kingsford-Smith told reporters that: "I'm a pilot of sorts, though not a very experienced one. But I'd like to see what it's like to fly the Pacific. I'd like to experience what it was like for my dad. It's important to get some taste of the experience for myself."

Flying the Cessna across the Pacific at 180 mph was one thing. Returning to the United States a few weeks hence via the jet of sponsoring airline, Qantas, will be another. It will be quite unlike his father's adventure, but was, perhaps, part of his dream. □



The California license plate says it all in two words, but Bill Williams (center, gesturing) found himself answering a lot of questions about his electric car conversion the day this crowd gathered around it in a GSD parking lot. He said overnight recharging gives the car a range of 25 miles. The energy cost is about a penny a mile, whereas even his thrifty Volkswagen takes 2½ cents worth of gasoline per mile.

We are driven - electrically!

□ Borrowing the words from a current advertising slogan, you might say nobody demands more from a Datsun than—well, than HP's Bill Williams. Bill, a systems programmer at GSD, has just finished converting his 1972 model to run on stored electricity rather than gasoline—a project he started in late 1976. And if you ask him why he was willing to put 1152 man-hours of his own energy into producing an energy-efficient car, the answer you get is simple: “I was frustrated with the price of gasoline.”

It's not that the car was a bummer before. “I was getting outstanding gas mileage with it,” Bill says. “In fact I was reluctant to tear a good car apart.”

Still, the idea had been in the back of his mind since the gas crunch of 1974, when he began looking around for a better way of commuting. The obvious alternative vehicle, the bicycle, was not for him. “I broke my leg in a motorcycle accident in 1955,” he explains, “so I was a little afraid of being exposed like that.”

Bill noticed that the U.S. Postal Service was using some small electric vans. He inquired about them, and a helpful postal employee in Cupertino directed him to the Electric Auto Association. Through that organization he learned

that he was not alone in what he was contemplating. “I found out that the technology existed and people had done it,” he says. A whole world of electric car buffs—amateur automobile engineers, mechanics, weekend scientists and energy-conscious commuters like himself—was suddenly opened up to him.

The clincher came when the car blew a head gasket. Faced with \$700 worth of repairs to the damaged engine, Bill reasoned that for a little more than that he could replace it with an electric system. (His final out-of-pocket expenses were over \$1200, but he's recouping some of that by selling parts from the gasoline engine.)

Bill joined the Electric Auto Association and began swapping ideas with other members. None of the designs he looked at seemed suitable for his own project. (“Everybody does it his own way, and there were things I didn't like about most of the ones I saw.”) But he began working with a retired engineer who was building a system, and when they had refined and tested it thoroughly, Bill began a similar one for his own car.

The motor is a 30-horsepower starter-generator. Top speed is 35 to 45 miles per hour, not likely to win any races. It's

powered by eight 6-volt batteries which give it a range of 25 miles before recharging—plenty adequate for Bill's 12-mile daily commute to and from the new General Systems Division building on the Cupertino site. The controller for the system is a privately made kit. “I also designed the system to be adaptable whenever a better battery is made,” says Bill, “or if something like solar power becomes practical.”

The brakes and the rest of the drive train—clutch, transmission and drive shaft—are the original equipment. Bill also took the opportunity to painstakingly restore the automobile to like-new condition, so it now looks more like a “show” car than a commuting workhorse.

Bill is also working toward energy independence in other ways. He installed a solar heat system for his swimming pool, and he's investigating windmill power for some of his other energy needs. In those technologies, too, the serious amateurs seem to be leading the way in coming up with practical day-to-day applications. And, like any good product designer—amateur or professional—Bill is already thinking about his “second generation” electric car. □

HP News

New Argentina, Venezuela managers

PALO ALTO—New country managers have been named to head HP subsidiaries in Argentina and Venezuela.

Horacio Manifesto, who has been country manager for HP Venezuela since 1973, will now return to his native country to serve in the same capacity for HP Argentina. Manifesto originally joined Hewlett-Packard in Argentina in 1968, where he was discipline manager for computers and calculators before transferring to Venezuela.

In his new position, he replaces the late Luis Brennan, who died in April of this year.

Taking over as country manager for HP Venezuela is Helenio Arqué, who joined the subsidiary in 1973 and became computers sales manager the following year. A native of Spain, he is now a Venezuelan citizen.

Medical Marketing changes

WALTHAM—Ben Holmes has been named marketing manager for HP's Medical Products Group. He succeeds Bob Hungate, who was named to the newly created position of manager of consumable products. The new assignments were announced by Dick Alberding, group general manager.

Prior to his new assignment, Holmes was marketing manager for HP's Andover Division. His replacement there has not been named.

Hungate will be responsible for planning, developing and coordinating the worldwide marketing strategies and sales of HP medical consumable products, an area of fast-growing activity.

Toni Polsterer heads Austria/East Europe sales

GENEVA—Toni Polsterer has been named general manager for HP sales and service operations in Austria and East Europe, based in Vienna. Previously he served as European planning manager for HPSA in Geneva.

Toni is a native of Austria, helped pioneer HP sales in the Eastern European market, and was Medical Product Group sales manager in Europe from 1969 to 1976.

Computer systems family grows

PALO ALTO—Hewlett-Packard has introduced two new computer systems, strengthening its position at the high and low ends of its family of business computers. At the same time, the company announced its first applications software products for manufacturing companies.

At the low end is the new HP 250, a small computer with full data base management capability for use by small companies and divisions of large firms. Base price (U.S.) is \$24,500.

The HP 3000 Series III, a new entry at the high end, has four times the memory capacity, twice the throughput (speed of operation), and lower cost memory than earlier HP 3000 models. It offers advanced on-line business transaction processing capability. Price range (U.S.) is from \$115,000 to \$175,000.

MFG/3000 is a series of on-line materials management applications products for use with HP 3000 computers.



For the first time, a number of European country organizations were reviewed in the same manner as other HP entities, reflecting their growing importance in the context of strong European sales (\$458 million in orders for 1977). Shown are some of the senior European managers during the review at HP France. (The fellow in the center is Franco Mariotti, European managing director.) Other reviews were held in the United Kingdom, the Netherlands, Italy, Germany and Spain.

From the president's desk

About four years ago, Bill Hewlett started an informal lunch once a month with a small cross-section of employees from divisions, sales regions, and other areas of the company. The Executive Vice Presidents quickly joined in as it provided a fine opportunity for us to hear directly what HP people have to say about the company and their jobs, and to field questions that came up.

One area for questions at nearly every lunch had to do with understanding the HP pay program. People weren't complaining, but simply didn't understand how our merit system worked. After one luncheon discussion, I returned to Palo Alto intending to send each participant a write-up describing the HP salary program. To my surprise, no comprehensive description existed - little wonder some employees were unclear on the details.

John Doyle, Vice President of Personnel, and his staff, along with others have been working to remedy this situation and we now have a new training module for the management development program. Many supervisors have taken the course already this year with most others scheduled over the balance of the year.

Because HP has an outstanding pay program, it's important that every employee understand it fully. I'll outline below the philosophy and operation of our salary program and how it relates to your own career at HP. If you want more information, your supervisor or someone in your personnel activity is now well prepared to supply it.

A basic concept at HP is that the performance of the company is a reflection of the quality and loyalty of HP people, and the personal contribution and dignity of the individual should be reflected in our policies and actions. Based on this starting point, it was decided many years ago that our personnel should be evaluated and compensated on an individual, rather than a group basis. It was felt then, and now, that this "merit" system is the best method for encouraging, recognizing and rewarding individual capabilities and contributions.

With this policy as a base, how do we manage a salary administration program that will insure fair, equitable and consistent salary practices for HP people throughout the organization?

The first step is to be sure we clearly define every job classification performed in the company. Operating people working with personnel staff support, prepare a written description, defining as accurately as possible the primary function, reporting relationships, required education and skills, levels of responsibility, and specific duties.

Although there are variances in the wording of these descriptions, nearly every job has counterparts in other areas of the company in terms of complexity, responsibility and qualifications. Therefore, a difficult but necessary task in salary administration is identifying, comparing and matching comparable jobs regardless of the functional areas (production, R&D, marketing, etc.) in which they originate.

Every job is assigned to a pay range, and from each range we select what are called "benchmark" jobs - jobs that are commonly found throughout industry. We then compare information with other well-known quality companies that provide working conditions and benefits comparable to HP's, to assure that our benchmark jobs are in fact representative and that the pay ranges we've assigned them are consistent and competitive. Incidentally, these comparisons are made without considering HP cash profit sharing as an element of compensation since, as the name implies, profit sharing is an over and above payment.

These pay ranges are far from static. We review and adjust them at least annually to reflect competitive factors for individ-

ual skills and to insure equity between jobs within HP. A very important aspect of this process is that we increase the pay curves by our best forecast of what salary levels will be at the end of the curve lifetime. This is a key feature because it means that all employees are evaluated ahead of the market and that the curves are competitive for the full year after their issuance. You can see then that the salary administration system anticipates adjustments for cost-of-living since this is a continuing integral part of the program.

Supervisors and managers pick up the major responsibility for salary administration at this point. Decisions regarding movement within a range and promotion from one range to another are based on evaluation of individual performance. Salary range curves are divided into four equal bands, each relating directly to performance as is indicated below:

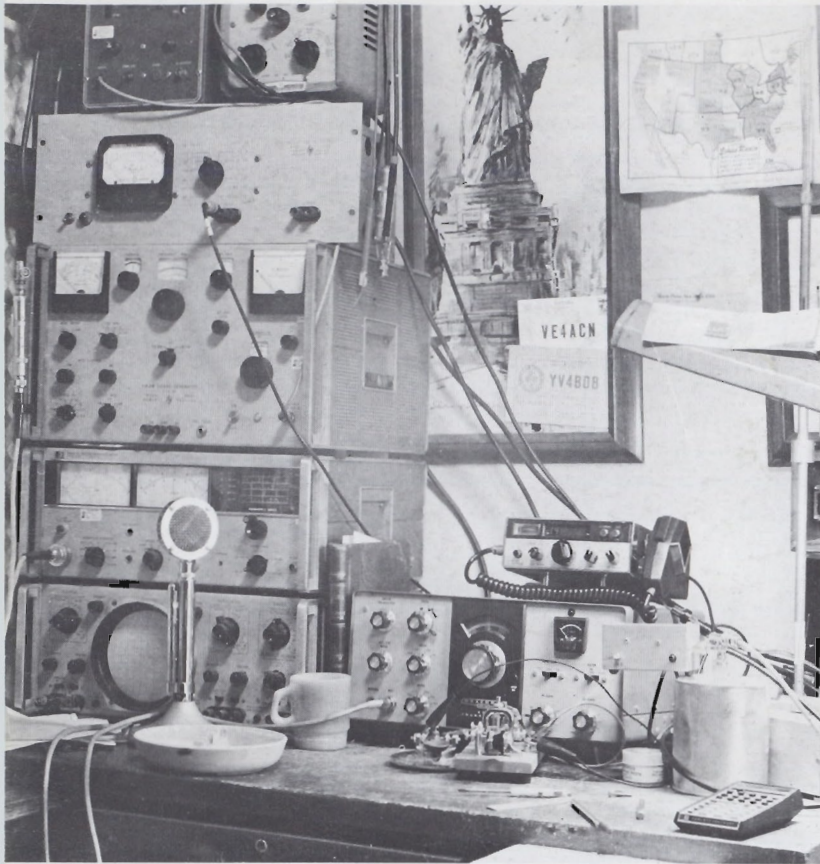
Upper Band	75%-100% of range	10% employees	Exceptional - Performance consistently far exceeds expectations and is superior to the vast majority of employees
Upper Middle	50%-75% of range	40% employees	Very Good - Performance consistently exceeds expectations and job requirements
Lower Middle	25%-50% of range	40% employees	Competent - Performance consistently meets expectations and job requirements
Lower	0%-25% of range	10% employees	Acceptable - Performance usually meets expectations and minimum requirements for the job

Wage reviews are conducted quarterly for nearly all employees, thus providing frequent opportunities to review performance and adjust salary positions as appropriate. The timing between pay increases for an individual is normally about 12 months, although it can vary from 3 to 18 months. New hires or recently promoted employees, for example, often receive increases after 6 months of satisfactory performance.

Occasionally a person's pay may be below the lower band of his or her assigned salary range. There are three reasons for this: 1) the individual is new to a complex job and is essentially a trainee; 2) the salary range has been adjusted upward very recently, and there is a time lag in moving people into position again; 3) the individual's performance is below the requirements of the job.

Hopefully, these comments will help to clarify the philosophy and the major workings of the HP salary program. The company has grown considerably since the program was put into effect, but I believe that we maintain an outstanding system to recognize personal contribution and advancement and assure HP employees are paid at rates fully competitive with leading companies in industry.





Pete Olin's ham radio shack in New Jersey is largely HP in its equipment makeup. While not exactly typical, this is also not unexpected: Pete is in the business of servicing instruments at the Eastern Repair Center in Paramus. He points out that all but one of the HP items shown are now out of production. If you can't reach Pete at WA2IZP, drop him a note and add your name to the worldwide HP ham roster.

Calling all HP hams...

"This is Pete Olin of the Eastern Region Repair Center at Paramus, New Jersey, calling on all you fellow hams around the HP world to join our glorious, growing global network of amateur radio stations.

"So far, as a result of some advertising in *QST* (the ham magazine), our HP-Paramus club has uncovered interest by more than 220 of you in 12 countries, plus six HP-licensed stations. We've stored all this information on a 9830 calculator tape.

"We suspect, however, that there are many more of you out there who would be interested in an international network. We'd like to add your names to the roster, see what it all adds up to, and then come up with some ideas about contacts, contests and public service communications. With so many thousands of technically sophisticated people in this company, our ham club could rival the best.

"This message is being broadcast via *MEASURE*, a global HP print medium, as a public service."

Measure

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