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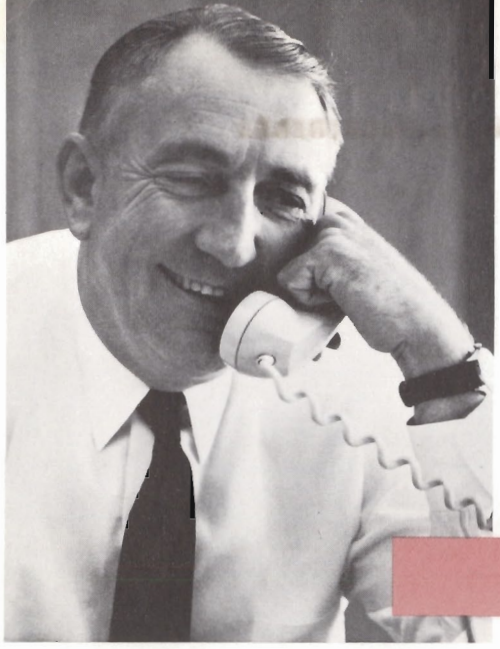
VICTORIA, AUSTRALIA

May 1964

Measure

In this issue



from the chairman's desk

AT OUR PRESENT LEVEL of operations it requires nearly ten million dollars every month to maintain the jobs for our 6,800 employees. In addition to wages and salaries, we must provide shops and offices, buy material for our products, set aside reserves for paid vacations and retirement, pay insurance premiums, and remit substantial amounts in taxes to local, state, and national governments. Furthermore, if we are to be sure we will have as many or more jobs in future years, we must have some funds left over each month to buy new facilities and equipment, and to increase the equity or pay dividends to stockholders who have invested their money in our company.

These ten million dollars we need each month to support your jobs come from our customers, and it is the responsibility of our sales organization to bring into the company new orders every month which average at least this amount. As you can appreciate, our sales group constitutes a very important part of our total operation.

In the short range, the level of our business, and therefore the number of jobs we can maintain, depends to a large degree on how well each salesman does his day-to-day job. He must plan his time carefully, often traveling long distances to see a potential customer for only a few minutes. He must continually sharpen his technical knowledge and be able to explain—fully and effectively—the advantages of our products over those of a competitor. He is a professional in every sense of the word and can't possibly do his job to either his or the customer's satisfaction within the limits of an eight-hour day.

Our sales people also have an important influence on the long-range growth of our business. They must strive to develop lasting, mutually beneficial relationships with the customer. As part of this effort, they are expected to follow up with the customer after he receives an HP instrument to be sure the instrument works properly and the customer is completely satisfied. A basic tenet of our marketing philosophy is that we be just as interested in what our customers will buy tomorrow as in what they will buy today.

We are currently moving to strengthen our regional sales offices, consolidating them where appropriate and increasing their efficiency with automated order handling processes and streamlined service capability. This will make it possible for every salesman to spend more time on what he is uniquely qualified to do—determining and fulfilling customer needs.

Because of the traditional pattern of our business, the great majority of our HP salesmen are specialists in the electronics market. Similarly, we have many people at Sanborn who are specialists in the medical field. In the future, we will be developing an increasing number of products for the chemical industry and other markets where we have little sales experience. Thus our goal, in addition to strengthening our regional sales offices in ways I have indicated, is to broaden their over-all selling capability so that we may effectively serve these expanding markets.

The growing scope of our operations presents a formidable challenge to our entire marketing group. I am confident, however, that with the help and support of everyone in the organization, our marketing people will continue to book more orders and be a key factor in our expansion into ever new and promising areas of instrumentation.

David Packard

BIRTH OF A SALESMAN

SOMEONE ONCE SAID that a salesman is made, not born. Then again, we often hear people described as born salesmen.

Whatever the truth of the matter, Mel Young thinks that becoming a salesman one way or another is a strenuous, demanding, exciting, sometimes nerve-shattering, and completely satisfying experience. Mel will earn his wings soon as a full-fledged field engineer for the RMC Sales Division in New York City after having proved that he was either born with or has acquired the necessary qualities to sell HP products successfully.

When he came to the company 3½ years ago from Sperry Gyroscope, he already had eight years of solid technical experience plus training at New York University. He worked first at RMC as an assistant staff engineer and, since last year, as staff engineer.

This latter job includes a variety of duties such as providing customers with technical assistance and information, verifying quotations, and obtaining information on customer needs for field engineers. In short, like other staff engineers, Mel has been a "salesman" all along—an inside salesman.

The thing he likes best about working "outside" as a field engineer is that he can deal personally with customers he served in the past over the phone. He likes personal contact, he likes moving around . . . and a field engineer gets plenty of both. Especially in New York City, that great megatropolis of diverse communities, where many of the world's giant corporations are headquartered alongside an uncounted number of small firms.

This is what makes New York different. It's a world within a city. And as a market for a seller of electronic equipment, the contrasts are pronounced. Mel Young—within a particular day of his break-in period as a field engineer—can call on major customers such as IBM and Columbia University. On the same day he might catch the subway for a call on a small research firm in the Bronx.

Whereas several HP sales divisions in other parts of the country often serve customers hundreds of miles apart, RMC's situation is just the opposite. Customers can be back to back with two or three or four located in the same building. But transportation is still the field engineer's problem in the city. Mel Young has found that driving is futile. Parking is never there when you need it. Traffic snarls are the rule rather than the exception. And battling Manhattan's cross-town traffic is an experience everyone should have at least once before retiring to the chicken ranch.

So Mel does what New York does. He relies on the fabulous subway system (see cover), busses, and an occasional cab. At the end of his busy day he heads for home at North Massapequa, L.I., where his wife Donna and sons Steve (10) and Chris (7) are just as excited as he is about the prospects of his becoming a field engineer.

The following two pages show how busy and interesting a day with Mel Young can be.

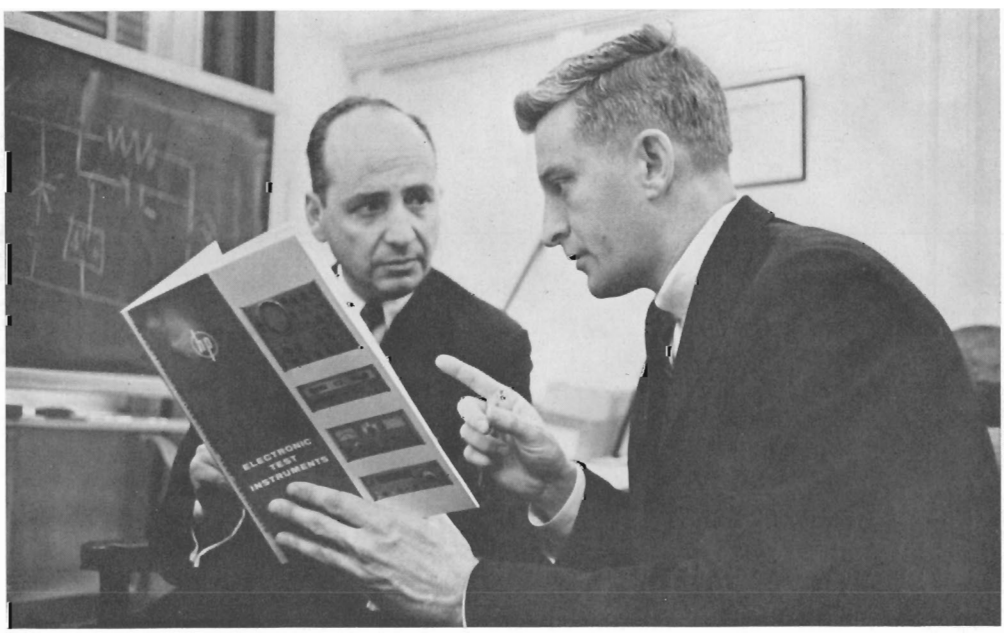
Birth of a Salesman (Continued)

9:08

First thing in the morning, Mel Young (foreground) verifies appointments with customers from his desk in RMC's well-appointed New York headquarters. Before making his initial customer visit, he also cleans up some paper work.

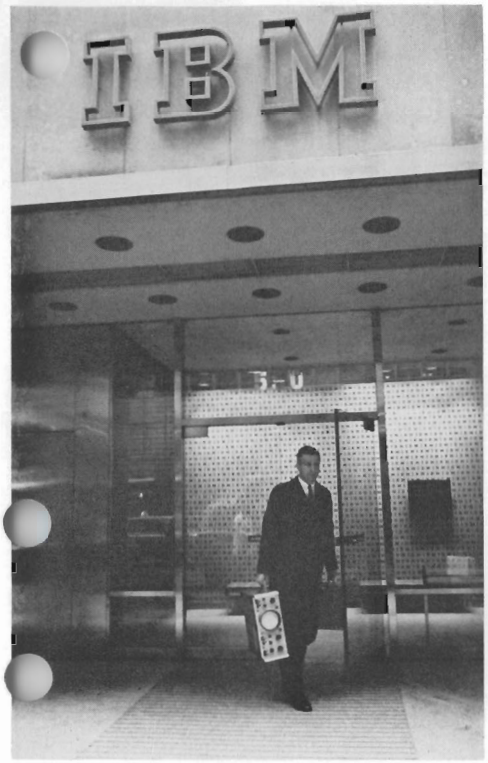
9:45

Rush hour continues as Mel rides swift subway to first appointment of the day. He's found that handling demonstration oscilloscope and catalogue case on public transportation requires agility.



10:50

A gesture helps emphasize a feature of instrument described in HP catalogue. Attentive customer is Dr. Victor Wouk of Electronic Energy Conversion Corp. in the IBM building. Mel's fine technical background serves him well in talking to accomplished engineers and scientists.



12:27

IBM building, like many other skyscrapers in Manhattan, houses several potential buyers of electronic instruments. Mel leaves building after making two customer calls.

12:40

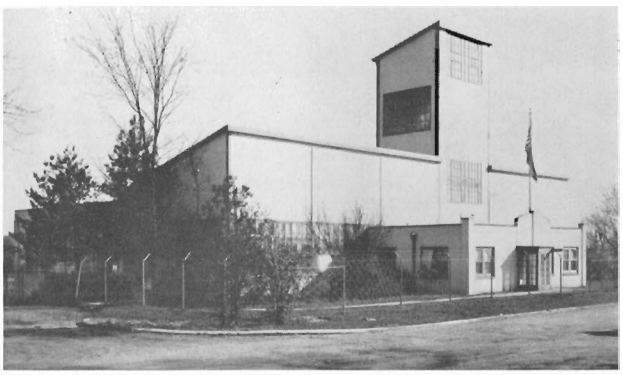
When time runs short, a street-side hot dog stand solves the lunch problem.

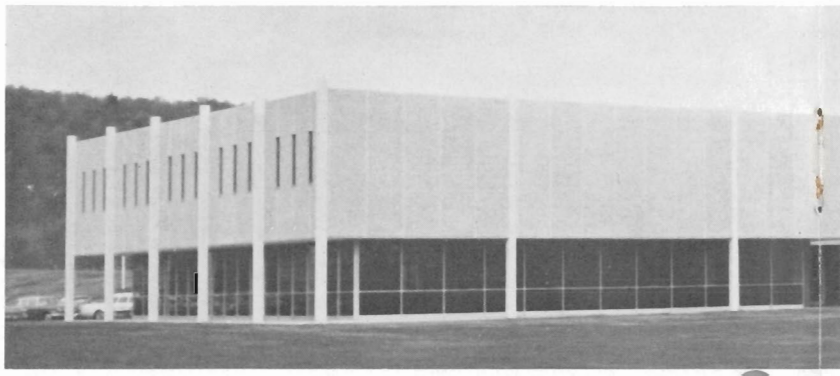
1:09

Field engineers learn to carry a pocketful of small change for frequent calls by pay phone. Here Mel touches home base prior to his last customer call of the day to verify the time for a scheduled staff meeting.

4:50

RMC staff meetings keep sales personnel up to date on business, product, and technical developments. Mel (back to camera, right foreground) finds these conferences particularly helpful since he is learning a new job. Rod Foley (standing) leads the discussion.





BRC claims life begins at thirty as it eyes a brigh

WHAT DOES A FOOTBALL PLAYER have in common with an electronics manufacturer? Very little, except that at age 30 both are considered old-timers in their business. In the case of Boonton Radio Company, however, there is no slowing down or reminiscing over faded press clippings. As General Manager Bill Myers puts it, "We're too darn busy around here to do much thinking about the past."

Anyone who knows Myers, a 20-year veteran of the HP organization, is well aware that Bill is never satisfied with the status quo. Right now he has his 185 employees working harder than ever to develop new and better products, improve manufacturing efficiency, and carve out a bigger share of the test equipment market.

New Home in Rockaway

Founded in 1934, BRC could well be excused for a little hardening of the arteries. It is the fourth oldest company in the United States devoted exclusively to manufacturing electronic instruments. But BRC thinks young. Three years ago, it moved from an outgrown facility in the town of Boonton, N.J., to a spanking new plant in nearby Rockaway Township.

This plant (shown in the long cut above) has nearly an acre and a half of space for manufacturing, engineering, and administration. Its contemporary beauty and efficiency are well appreciated in the area, and soon after BRC people settled there the New Jersey Manufacturers' Association presented them with its much-sought-after "New Good Neighbor" award.

The photo to the left of the new plant, for contrast, shows one of the early buildings where Boonton Radio developed and manufactured many of the products which were to make it successful.

In general, BRC manufactures precision instruments falling into three categories: impedance measuring equipment, signal generators, and instruments for calibrating aircraft navigation systems. An example of an impedance measuring device is a Q meter, perhaps BRC's major product, recognized as the finest available on the market from any source. The Q meter measures the quality of a coil—the "figure of merit" which is symbolized as Q. It has broad application in the testing of components and systems.

Other impedance measuring equipment manufactured by Boonton includes transistor test sets, production Q comparators, and rf bridges.

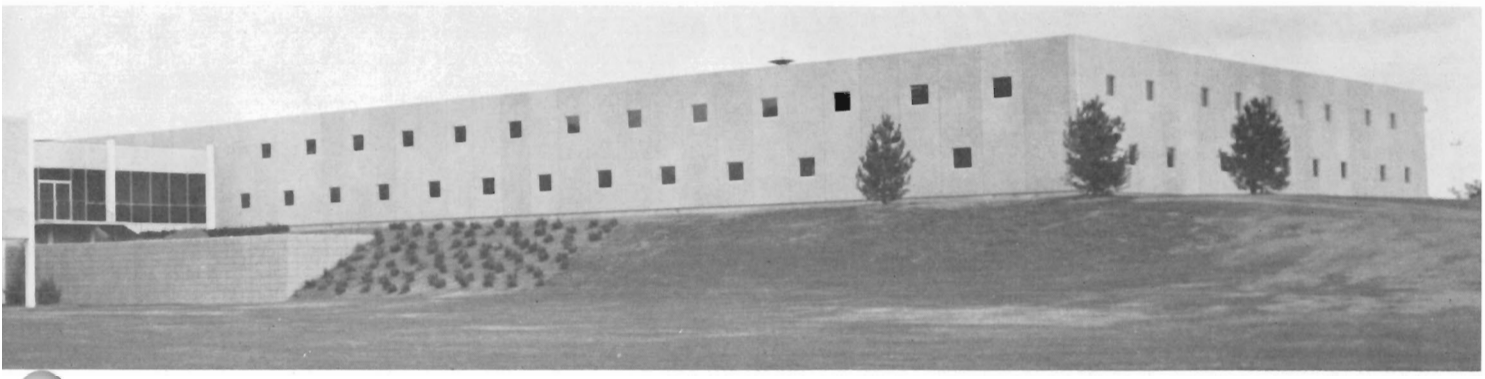
The second broad category—signal generators—finds many applications in general communications, broadcast FM, vhf-tv, and telemetering.

Specialized signal generators—the third category—are provided for VOR (very high frequency omni range) and DME (distance measuring equipment) aircraft navigation systems, ILS (instrument landing system), and the ATC (air traffic control) beacon.

World-Wide Markets

These products are sold throughout the United States, Western Europe, Canada, Japan, and many other parts of the world by Hewlett-Packard's established sales organization.

Boonton Radio was founded by the late William D. Loughlin and several associates. Mr. Loughlin became its first president and guided the course of the company through the early years. The new firm concentrated its engineering skill on creating new measuring equipment for the still-young radio industry. For example, manufacturers were confronted with the costly annoyance of making coils which would test out in their own labora-



ıt and busy future

tories only to be rejected by the purchaser because he had entirely different test instruments. Approved standards were necessary.

In the fall of the company's first year, Mr. Loughlin presented his first Q meter at a meeting of the Institute of Radio Engineers in Rochester. The instrument was immediately accepted as a standard by industry and research laboratories.

Before FM radio became practical for commercial and military use in the early 1940's, BRC had already developed an FM signal generator which was widely applied. During World War II the company developed important microwave signal generator equipment for use in testing radar systems. Several thousand of these units were supplied to the armed services.

Invisible Highways

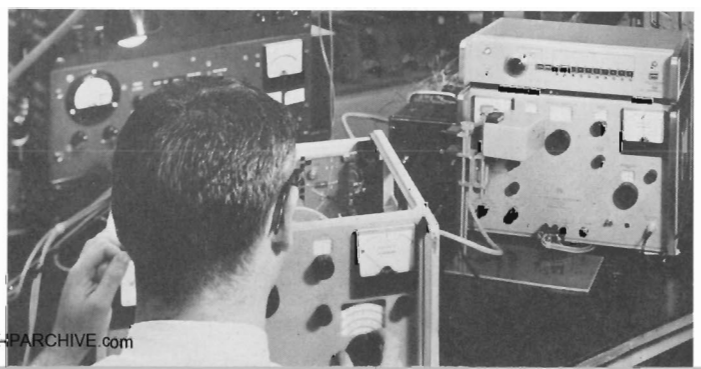
Toward the end of the war, Boonton pioneered instruments for testing and calibrating the new "invisible highway" aircraft navigation systems—VOR and ILS. As commercial jets replaced the slower prop-driven planes on the major trunk lines, the need for additional navigational aids and identification systems became apparent. Thus DME and ATC were developed, requiring even more sophisticated equipment for testing and calibration.

Boonton's latest contribution in this important area is a versatile DME/ATC test set, designed to accommodate the greater number of radio channels required by expanding airline operations. This set (Type 8925A) makes use of units produced by Boonton, HP's Microwave Division, and the Frequency and Time Division.

Bill Myers suggests that such a happy combination of components from different divisions into a single, smooth-functioning system is representative of the manner in which Boonton Radio has settled into the over-all corporate system since it joined Hewlett-Packard in 1959.

HP's new Eastern Regional Service Center will be housed in Boonton plant building. BRC executives study floor plan for Center, l to r: Harry Lang, sales manager; Fred Anderson, business manager; Bill Myers, general manager; and John Van Duyne, engineering manager.

ABOVE: Modern production lines utilize "lazy Susans." Women here are assembling FM stereo modulators. BELOW: George Sanford demonstrates application of a BRC FM-AM signal generator with a Dymec servo programmer. System reduces tedious calibration to a push-button operation.



around  the circuit

By Noel E. Porter, *Vice President, Operations*

OVER-ALL PERFORMANCE for the first half of our fiscal year (ended April 30) looks quite good. While we do not have exact figures as of this writing, preliminary estimates indicate that shipments increased over the same period in 1963 and orders were up about 10 percent. Moreover, we showed a substantial improvement in profits.

Since profits are closely related to costs, we'd like to point out some of the programs that are currently in effect throughout the corporation to reduce costs and, at the same time, improve our over-all operating efficiency. As a preliminary to this discussion, we might mention that last December our company received letters from President Johnson, Defense Secretary McNamara, and James Webb, head of NASA. These letters, sent to every major industrial firm in the U.S., described the government's efforts to reduce defense costs and solicited industry's cooperation with these efforts.

In our reply, we expressed our wholehearted agreement with the government's cost-cutting program and described some of our own efforts and achievements in this direction.

As you know, and as we pointed out to the government, we are in a highly competitive industry. This demands that we maintain a continuous program of cost reduction to go hand-in-hand with our efforts to upgrade product quality and performance. The ultimate objective is to provide all our customers, including government agencies, with products of maximum value and performance for the money spent.

Statistics show that we are making good progress in improving operating efficiency. For example, our total output of products during fiscal 1963 was about $116 million, an increase of more than four percent over 1962. During the same period the employment level for our combined manufacturing operations rose by just over one percent.

As another important measure of increasing efficiency, our productivity per employee was $18,320 in 1961. In 1963 it had risen to $21,366, an impressive 16 percent gain.

In the area of materials management, we have done particularly well in reducing costs. By consolidating purchasing requirements of our various operating units, we have been able to buy in larger quantities and therefore effect some real economies. Purchase agreements consummated over the past year will result in an estimated savings of $500,000, reflecting a potential 3.8 percent reduction in our total material costs.

We also are consolidating some of our operations in the Palo Alto-Stanford complex to make maximum use of plant and equipment. One of the first steps in this direction was the merging of the Dymec and Oscilloscope Division sheet metal shops. Along the same line, we are planning to consolidate the F&T and Microwave Division sheet metal shops. Another contemplated merger, still in the talking stage, involves our printing and some publications functions.

Although these are some of the more important steps we are taking to reduce costs, they are by no means the only steps. In every phase of our operations we are attempting to eliminate unnecessary expense, improve efficiency, and achieve a higher profit margin. This is a job for each and every one of us, as dollars saved in any area reflect in a better total corporate performance. There is still plenty of room for improvement, so let's see if we can't do an even better job as we move into the second half of 1964.

HP establishes Italian sales company in Milan

HEWLETT-PACKARD ITALIANA S.p.A. is the name of the new sales organization set up recently in Milan to handle sales in the Italian area. At present the company is concentrating efforts on selling Sanborn medical equipment. Starting August 1, the entire HP corporate line of products will be handled there.

Franco Mariotti, formerly a field engineer with HPSA in Geneva, Switzerland, has been named manager of the nine man sales operation which is located at Viale Lunigiana 46, Milan, Italy. Mariotti, originally from Padova, Italy, was with HP in Palo Alto for a period of time in 1961 following academic work at the University of California.

Youth learns about business

ABOVE: Sanborn's JA company produced snack server which won first prize for originality at regional convention in Atlantic City. L to r: Valerie Green, sales vp for CRIMTORN; Iris Poleon of Sanborn's cost department and a JA advisor; Matty Murtha, Sanborn assistant general manager. RIGHT: Sanborn Junior Achievers set up production line operation, made their product, then went out and sold it for a profit.

THE CRIMTORN COMPANY of Waltham, Mass., manufacturers of the popular Lob-Pic hors d'oeuvres tray, announced today that sales for the first quarter were $397.32 with earnings after taxes of $39.97. Miss Evelyn McMillan, treasurer, said that per share earnings equaled 15 cents for the period.

Sound fictitious? Not at all. It's just as real as the 19 teenagers who organized CRIMTORN, sold stock, bought materials, made bright red snack servers shaped like lobsters, advertised, and sold themselves into an enviable profit position.

In case you haven't guessed, it's all part of Junior Achievement, that tremendously successful nationwide program in which youth learns about business by doing business. Over 4,000 firms in the U.S. sponsor Junior Achievement activities, and HP is one of them. In fact, HP divisions sponsored three JA companies this year! Sanborn counseled CRIMTORN at Waltham; Loveland's group was called HAPCO; and the HP Palo Alto-sponsored company was called UNICO.

HP people as advisors give hours of their own time to this work because they have seen the good it accomplishes. Fifteen-year-olds with no conception of what free enterprise means or what business is all about learn quickly—not through textbooks, but by actually doing the basic work of setting up and operating a corporation. UNICO's annual report, for example, written by the teenage members themselves, is a mature 18-page document which is a model of good financial reporting.

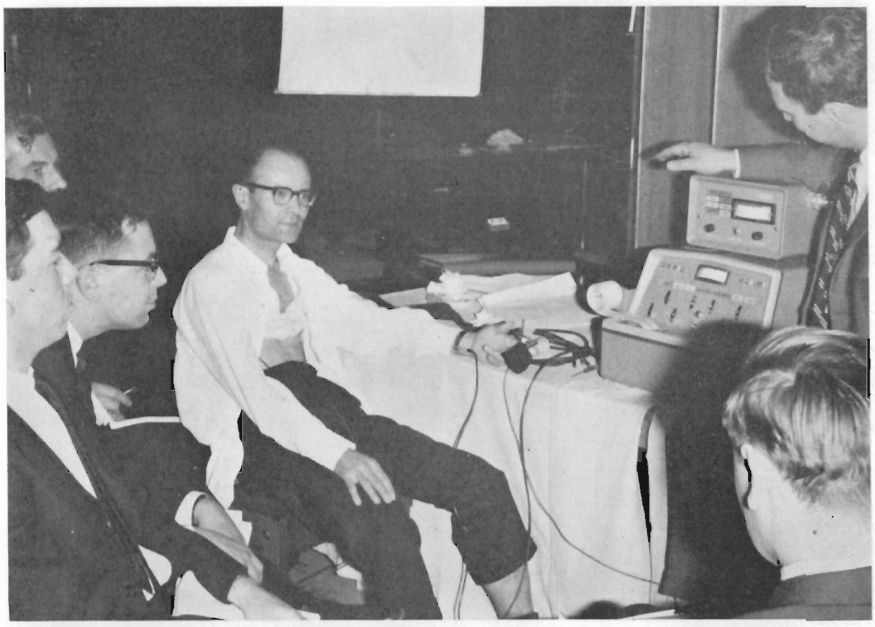
HP advisors for the 16-member UNICO group were Tony Malo, international sales; Leo Olsen, Jay Sevy, and Gerry Inman, all from the Frequency and Time Division. Tom Christiansen, international operations, is a member of the Santa Clara County Junior Achievement board of directors.

UNICO produced a fire starter kit this year (sold 880 of them), and Christmas gift wrapping and decorative bow kits. The members, ranging in age from 15 to 18, made a profit after tax of 4.65 percent.

Advisors for Loveland's 22-member HAPCO group are Jack Clagett, marketing department; George Ligotke, finance department; Bill Murphree, production; and Don Niewold, machine shop. HAPCO expects a remarkable 10 percent return on investment for their efforts.

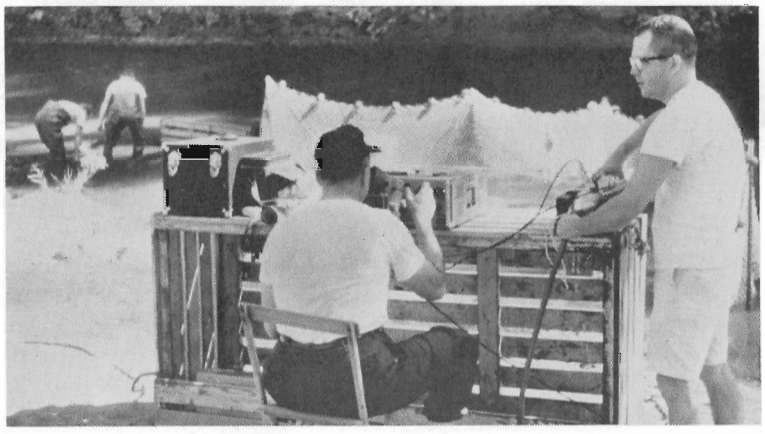
Sanborn's CRIMTORN Company was counseled by Margaret McDonald, materials and scheduling department; Iris Poleon, cost department; Herb Greene, drafting; and Dick Tracey, systems.

HP advisors at Loveland, Palo Alto, and Waltham all agree that shepherding these youthful companies along a profitable path is exciting—but the real fruits of their labor will be harvested by the young people in the years ahead.



SANBORN'S HIGHLY REGARDED line of medical equipment was demonstrated to marketing people from HP's European sales organizations during a seminar at Geneva the week of March 1. The meeting was first step in new plan for marketing Sanborn instruments overseas. L to r: Brian Humphries, Bill Wilkes (in back), Dennis Taylor, Jose Mealha undergoing heart rate test, Instructor Tony Polsterer, and Leon Hughes.

NEWS IN FOCUS



FISH STORY of all times may be developing along the banks of Northern California coastal streams, where scientists are recording electrocardiograms of trapped Pacific salmon. Dr. O. H. Robertson of Stanford University, conducting experiment jointly with other research groups, hopes information gathered will shed light on mystery of aging in humans. Man recording a salmon's heartbeat with HP oscilloscope and camera is Eric Swarthe, volunteer researcher from Lockheed.

ANOTHER FIRST for HP in the realm of customer and industry service was scored April 24 with the successful completion of a four-day symposium in Palo Alto.
The HP-sponsored series of seminars—attended by 125 people from a wide range of companies—was aimed at managers and supervisors of departments dealing with calibration, certification, maintenance, and repair of electronic instrumentation.
The session shown above featured (l to r) Russ Journigan, California State Department of Education; Ray Wilbur, HP personnel vice president; and John Galberth, Lockheed training coordinator.

people on the move

HP PALO ALTO

Jack Carlozzi, line supervisor, F&T Division—to Customer Service, F&T repair section, Eastern Service Center.

Ron Church, in-plant engineer—to production section manager, Microwave Division.

Steve Jackman, measurement standards staff—to Customer Service, calibration area, Eastern Service Center.

Duke Madsen, regional order supervisor, Marketing Department—to manufacturing specs, Frequency & Time Division.

Don Miller, digital systems engineering, Dymec—to magnetic recorder engineering, Microwave Division.

Les Oliver, manager, Palo Alto order processing — to manager, corporate order processing system, Marketing Department.

INTERNATIONAL

Gordon Brandt, section leader, Microwave production—to staff assistant, HP GmbH.

BOONTON

Andrew W. Lawlor, layout draftsman—to junior mechanical engineer.

Santo F. Pecchio, Ad-Yu Electronics, Passaic, N.J.—to electrical engineer, Boonton.

SANBORN

Leonard Lindauer, Jr., sales engineer, Biophysical Medical Sales —to junior sales engineer, Glendale branch office.

John Olivieri, technical advisor, Materials and Scheduling Department — to manager, parts sales order processing.

CROSSLEY

Jack Nally, field engineer — to district engineering manager, Detroit office.

NEELY

Bill Nilsson, staff engineer—to field engineer, North Hollywood office.

Jim Schmidt, staff engineer, San Diego—to field engineer, San Carlos office.

HP instruments shown at biology meeting

HEWLETT-PACKARD's expanding line of quality instrumentation for medical diagnosis and recording was prominently displayed and well received at a meeting in Chicago last month.

Instruments from Sanborn, Dymec, Moseley, Mechrolab, as well as the Oscilloscope and Loveland divisions, played leading roles in two booths at the Federation of American Societies for Experimental Biology meeting April 13-17.

Nearly 17,000 M.D.'s and Ph.D.'s representing six federated societies (physiology, biochemistry, pharmacology, pathology, nutrition, and immunology) attended technical sessions and visited displays during the week.

The day before the sessions got under way, the Sanborn medical division held a meeting of its own in Chicago for its branch managers. In addition to 16 field managers and home office personnel, the meeting was attended by Dave Packard, Ed Porter, and Noel Eldred.

The men discussed present and future medical marketing plans, new products and product areas, and, in general, the problems faced by the corporation when selling to the medical market.

Measure

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"I often say that when you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind . . ." LORD KELVIN (1824-1907)

SPACE LAB PASSES FINAL EXAMS

FINAL TESTS on UK-2 satellite are performed by Westinghouse and NASA scientists with help from impressive array of HP equipment. The 150-pound international satellite—sponsored jointly by the United Kingdom and the U.S.—successfully rode a solid propellant Scout missile into orbit March 27 from Wallops Island, Va. Westinghouse was responsible for several of the spacecraft's subsystems, assembly, and checkout. Loaded with instruments supplied by the British, UK-2 is sending back information on galactic radio noise, vertical distribution of ozone in the atmosphere, and the number and size of micrometeoroids in space. This was the second scientific satellite launching in the U.S.-British program. Ariel, the first international satellite, has been orbiting the earth for two years.