

August 1963



# M e a s u r e

**In this issue**

*FRAGILE: Electronic Instrument*

*RMC: The East Side Story*



A monthly magazine  
for the Hewlett-Packard family  
of affiliated companies



*from our  
president's  
desk*

ONE OF THE MOST important, and most difficult, problems in guiding the course of our company is to predict the rate of incoming orders and to gear our production accordingly. Our products are all standard models, listed in our catalog, and our customers expect us to be able to deliver them without delay. This is no small task, since it requires several months to order the parts, fabricate the materials, and assemble and test a production quantity of instruments. Furthermore, because we have hundreds of different instruments, we have to fit them all into a complex production schedule.

To do this job well requires that we predict what our customers are likely to order many months in advance. If our predictions are too low, we may not be able to deliver our instruments when customers want them and we run the risk of having them buy from our competitors. If our predictions are too high, we may tie up all our resources in inventory and there is a practical limit as to how far we can afford to go in this direction.

During the first part of our current fiscal year orders were a bit below our predictions and, as you know, we have been holding our production down to avoid excessive inventory build-up. During June and July, however, our order rate showed a sharp increase, and as a result we may have to step up our production in many areas.

We normally have an increase in orders during the summer, largely because the government agencies, like everyone else,

tend to put things off. Then they have to order heavily at the end of their fiscal year to catch up. This year, because of some changes in their procurement policy, they were further behind than normal, and their last-minute buying has been greater than normal. We can't evaluate the over-all effect of this buying surge until about the middle of August, but we do know that our orders hit an all-time high in July.

Perhaps even more encouraging are the reports from our sales people who were recently in Palo Alto for the annual sales seminar. They believe business during the last half of the year will be well above the first half.

With the trend going this way, our production planning people are already working out accelerated schedules for this fall and, in certain areas at least, we will be very busy.

One important policy we follow in our production planning is to try as best we can to avoid peaks of hiring new people which might result in subsequent layoffs in slack periods. This policy demands that we smooth out our production schedules by extending them, use some overtime for short-term peaks, and in other ways strive for the best possible balance between the demands of our customers and our responsibility to our employees. Our production planning people have done well in striking a good balance between uniform employment and good delivery to our customers, and we have every reason to believe that this balance will be maintained in the months and years ahead.

*David Packard*



# rmc



## The East Side Story

**T**HE BRONX is up and the Battery's down, as the song goes, and right in the center of the tight little island known as Manhattan is one of HP's larger sales divisions—RMC.

Located on New York City's East Side just a few short blocks from Central Park, RMC services what has been called the most "dense" territory in the world. (They would rather refer to it as the "most concentrated.") Almost within shouting distance of RMC's two buildings at 236-238 East 75th Street is about 10 percent of the world's electronic instrumentation and engineering component market.

RMC was founded in 1953 by Robert Asen, Milt Lichtenstein, and Charlie Sargeant (who has since retired). The initials of their first names gave the name to the company which today employs 37 people at the 10,000-square-foot facility in Manhattan, and another 9 persons at a 2,000-square-foot branch office in Englewood, New Jersey.

In addition to serving such well-known industrial firms as Western Electric, Bell Telephone Labs, Sperry Gyroscope, and Grumman Aircraft Engineering, RMC lists such unique customers as the United Nations and Les Paul and Mary Ford. "Les and Mary once bought an oscillator from us," reports Dorothy Clink, one of the original RMC employees. She couldn't say whether or not the oscillator was responsible for some of the unusual sounds produced by the pair. "We even have one customer at the top of the Empire State Building," she added.

Before forming RMC, both Bob Asen and Milt Lichtenstein were associated with Burlingame Associates, one of the first HP sales representatives. Milt joined Burlingame in 1946 after serving as an electrical engineer in the U.S. Signal Corps. Bob started a year later after service in the Navy and a stint as a salesman and sales manager, selling electrical equipment to shipyards.

RMC currently has nine outside field engineers and three staff engineers. Working out of the New York office are Rick Alexander, Howard Greenwald, Herb Kulik, Hal Palmjack, and Stu Yellen. Engineers in the office are Mel Young and Bob McAll. Over in New Jersey, where Rod Foley is in charge, are field engineers Bob Adams, Joe Arcidiacono, and Harry Mayo. Bruce Barnes is Jersey's staff engineer. To cut down on travel time, most of the field engineers live



East Side, West Side . . . all around the town. RMC field engineers maintain a fast pace in the city which boasts 10 percent of the world's electronic instrumentation and engineering component market.

*continued*

# rmc

## The East Side Story

*continued*



Milt Lichtenstein (left) and Bob Asen enjoy brief respite from busy routine on the patio adjacent to field engineering section. Milt and Bob—engineers, authors, and jazz fans—founded RMC in 1953 along with Charlie Sargeant, since retired.

near the area they service. In addition to New York City, RMC covers Long Island, Westchester, and Rockland counties in New York and the northern half of New Jersey as far south as Middlesex, Somerset, and Hunterdon counties.

With no customers more than two hours away, RMC does not have the problems of some HP sales affiliates whose accounts are sometimes as far as 600 miles distant. From the logistics standpoint, RMC finds it comparatively easy to schedule sales meetings, seminars, and demonstrations to provide customer service.

In 1955 RMC formed an organization called Electronic Engineering Representatives. EER includes four local representative companies who combine their efforts to put on road shows in the fall of each year.

RMC promotes HP products in many ways. They distribute HP literature to a mailing list which numbers 8,000. In addition, both Milt Lichtenstein and Bob Asen are active

authors. Their articles have appeared in *Electronic Markets*, *Electronic Design*, *Sales Management*, and *Agent & Representative*. Never being ones to pass up a promotional opportunity, they even loaned an HP 524 counter to Mr. Wizard for his coast-to-coast Sunday science show.

Being located in the heart of Manhattan has advantages other than the close proximity to customers. The sidewalks of New York around the RMC office are lined with internationally famous restaurants, quaint antique shops, art galleries, and a myriad of other sights and sounds which only a city like New York can offer.

Given these advantages, it's not surprising that RMC has maintained a stable organization. Outside of the three men (Bob MacVeety, Sid Case, and George Tamaki) who were called upon to open HP's new sales division in Syracuse recently, RMC has not lost any key people throughout its ten years of steady growth and progress.

Because the geographic territory is small, sales staff can be pulled together for planning sessions with comparative ease. At this meeting, clockwise around the table from the far left, are: Bob Asen, Harry Mayo, Hal Plamjack, Bob McAll, Howard Greenwald, Stu Yellen, Joe Arcidiacono, Herb Kulik, Mel Young, Bob Adams, Rick Alexander, Rod Foley, and Milt Lichtenstein.







Behind RMC's facade on East 75th is one of the most modern and well-equipped sales offices in the electronic industry. The division occupies two buildings totaling 10,000 square feet.



Service to the customer gets top priority in RMC's daily activities. Service Manager Bob Wolfe (third from left) directs the department which includes (left to right) Ted Majkowsky, Tom Coyne, Wolfe, Fred Kenneth, Erwin Conrad, Al Toth, Don Gunkel, and Hank Wilson.



RMC's customer mailing list numbers 8,000. Jack Scarnecchia is shown collating RMC's MEASUREMENT NEWS with HP promotional literature for a special mailing in the territory.

Cleveland Brooks is shown filling an order in the Parts Inventory Section of the New York office. The section, supervised by Don Flash, makes sure that parts needed by customers and RMC's Service Department are readily available.



Covering northern New Jersey is the job of Rod Foley (foreground) and his busy crew at RMC's Englewood branch office.





# FRAGILE

## ELECTRONIC INSTRUMENT



In 36-inch drop test, a packaged instrument is dropped on all corners, on the bottom, end, and side. TOP PHOTO: Larry Lund installs meter in Moseley recorder for measuring impact (G's). MIDDLE PHOTO: Harry Wood shows the recorder in new "post pack." Wood calls this the company's most promising packaging development in recent years. Inner carton or instrument itself is suspended within outer carton by four notched corner posts made of plastic foam. BOTTOM PHOTO: Lee Smith steadies lift truck as Martin Manson releases clamp to let package drop 36 inches to pavement.

**T**HE MAN LIFTS the neat-looking carton and pushes it into the air like a mid-court basketball shot. It drops with a thud at a point on the concrete pavement 20 feet away. He repeats this four times and finally, the box is eagerly opened.

Inside is a delicate electronic device—perhaps a cathode ray tube—with a component so fragile it can be blown out of shape by mere human breath.

A seemingly miraculous thing has happened. The instrument is in perfect condition and its package has passed the last of a series of rough-handling check points, including up to 18 punishing shock tests.

The men are pleased, but not particularly surprised. Many hours of engineering and experimentation went into the design and construction of the package. It just figured to do the job.

Tossing packaged instruments around on the paved areas at HP's Palo Alto plant (see cover) never fails to "stop traffic" and draw good-natured remarks from employees regarding the sanity of the situation. But the still more startling aspects of the program to perfect packaging must be expressed in saved dollars, saved time, and protection of product quality.

Harry Wood, packaging engineer in the Process Engineering Department, guides the program with a sure and sometimes "merciless" hand. (Merciless in the sense that he has no patience with the package that fails to live up to expectations.)

Wood has dedicated himself, during the past four years at HP, to evaluating shipping materials and designing packages which are smaller, stronger, and "safer." He has and is succeeding remarkably. In the 1958 to 1959 period, one in 200 instruments was damaged en route to customers—actually not a bad average at that time compared to the rest of the industry. In 1961, the casualty rate was one in 3,200, and last year it was less than one in 5,000.

"For Waveguide," he reports, "we passed the figure of 100,000 pieces shipped without a single damage. And now, of all things, after two and a half years, we just received our first loss reports involving three instruments." Wood is restlessly looking into this blemish on a perfect record.

The object of his activity is to develop packages for HP products which will be smaller in cube size, cost less, require fewer pieces of packaging materials, reduce man-hours in handling and space required for storage, weigh less, and provide greater protection by letting as few G's as possible reach the units. (A "G" is the force of gravity.) Everybody benefits, including the customer, the carrier, and Hewlett-Packard.

Wood and his assistants continually pursue new ideas and evaluate new packaging materials. Two years ago, they found that polystyrene foam had an unusual ability to absorb shock—or G's—while being feather-light, so they devised packs with this foam as the cushioning material. In the case of one instrument, two foam pads replaced 11 pieces of corrugated dunnage previously used. The package size was reduced by 25 percent, its weight by 2½ pounds, and its cost by several cents.

*continued on page 8*



Package being given the "parcel post" test on MEASURE's cover looks like this inside. Bob Holcomb holds cathode ray tube with two special plastic foam and corrugated board end pieces which "float" tube in the single carton. Spring-like corrugated pieces and two cartons (22 pieces) absorb less shock than the 3-piece "floater."



Harry Wood shows inside elements of the highly successful floater package. The two pads, which fit the instrument top and bottom, permit floating action vertically and horizontally (or technically, in shear as well).



Skin packaging equipment was first installed at HP in 1960 and has since proved a big money saver for protecting small items. Ginger Bradley is shown holding polyethylene film which is lowered over group of components, then heat-sealed skin-tight.

Compared to old manual method of packaging similar items, this has increased productivity over 200 percent, reduced package material costs 40 percent.



John Bickmore steps off elevator with latest in packages for 536A frequency meter. Compare materials he holds (3 pieces) with materials needed previously to package same instrument (16 pieces). As a result, new carton is half the size of old one being pushed onto elevator and "out of plant" by Bill Wambaugh.



# FRAGILE

## Electronic Instruments *continued*

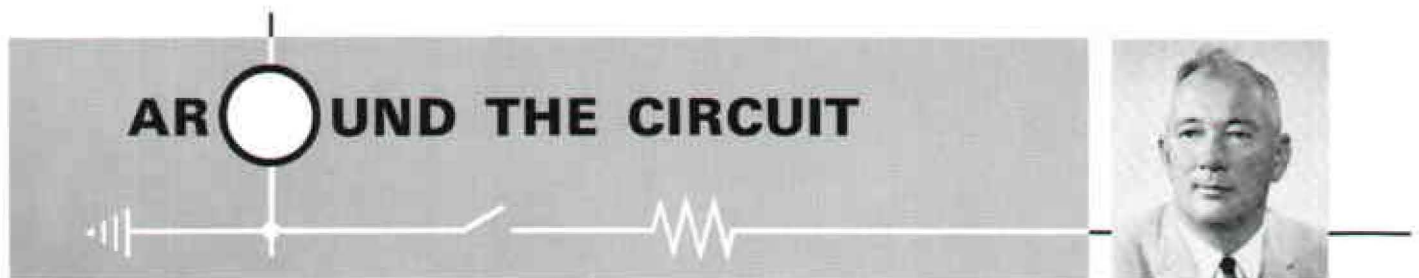
One of the package engineering group's proudest achievements is development of the "float pack." This consists of two pads which fit snugly over the top and bottom of the instrument in the carton. As the name implies, the pads "float" the instrument away from the carton corners and sides where damage from hard knocks is most likely to occur. The pads are made up of a sheet of heavy-duty corrugated "cardboard," two blocks of polyurethane, and a thick piece of die-cut corrugated, all bonded into a single unit. After three years of using float packs, the company has reduced shipping weight by a half-million pounds compared to the packages previously used.

In a time when most people get used to the idea of costs climbing relentlessly upward, it may come as a surprise to find instances where the trend is reversed. "In military packaging, using what we call Method II B," Wood points out, "material costs are 42 percent lower than in May, 1959. This is because

we reduced size and weight of the inner package and changed from wooden boxes to corrugated."

Wood insists that in spite of the progress made in packaging to date, more remarkable materials and methods are coming along all the time. He'll hand you a piece of "triple-wall corrugated," which, even though it's made of paper, is as tough as a hickory board. "This tests to 1,100 pounds compared to our average 350-pound test container material," he comments. "We replaced wooden boxes with triple-wall just last year and the weight is commonly 70 percent less."

And then if you're not convinced that packaging is better than ever, Harry Wood might toss you a long, narrow carton and explain that it's the latest thing in float packs. It contains a \$160 cathode ray tube, he points out—highly destructible. But don't worry, because the package was designed to let through a minimum number of G's. And not a G more.



BY NOEL E. PORTER, *Vice President, Operations*

**B**USINESS PICKED UP considerably during the third quarter of our fiscal year. For the three-month period ended July 31, orders were at record highs for nearly all our operating units. In the parent group we not only had a high level of "normal" orders, but recently received notification of a very large Navy contract for militarized oscilloscopes.

While we're enthusiastic about the improved business picture, we're not planning to increase our production schedules appreciably. Since we've been building up a sizable inventory all across the board the past few months, we're in a good position to ship from stock and get our inventories down a bit where they belong. Moreover, much of the increased order level calls for scheduled out deliveries, which means we're building up backlog and can do more efficient production planning for the months ahead. All in all, it's a very healthy situation.

Highlighting our activities this past month was the week-long field sales seminar in Palo Alto. This was the first such seminar in which essentially all our field sales organizations participated as part of the HP corporate family, either as divisions or affiliates. We had a most successful series of meetings, and our field people are now back to their posts with renewed enthusiasm and vigor. Most important, they've been brought up to date on the technical aspects of all our new products. This increased knowledge will hold them in

good stead for the tough selling days ahead.

We do a lot of talking about the importance of new products, and we mean it. For example, we've just set up a corporate office of Advanced Technical Planning. The principal function of this office is to look into new fields of instrumentation and new areas of application for existing instruments in our line. Heading up this important activity is John Cage, who recently returned from England after getting Hewlett-Packard Ltd. off to a successful start.

In line with our continuing efforts to improve operating efficiency, Paeco is no longer a separate entity but is now part of the Frequency and Time Division. Paeco's role is essentially unchanged in that it will supply transformer products to the Stanford-Palo Alto complex and to selected outside customers. The various product development programs at Paeco are being transferred to other divisions. The new manager of Paeco is Gene Daniels, who reports directly to Jack Petrak, plant manager of the F&T Division. Jack Beckett, who so ably managed Paeco for the past few years, is now engaged in special assignments for the corporate marketing staff.

As we enter the final quarter of our fiscal year, we're increasingly optimistic over the corporate-wide business picture and are more hopeful than ever of reaching our 1963 order target of \$120 million.



## WESCON Plans in High Gear

HP's participation in the upcoming Western Electronic Show and Convention (WESCON) in San Francisco later this month will be the most extensive in the company's history.

"Measure-ama" is the title HP has chosen for its presentation of measuring instruments to the anticipated 35,000 visitors August 20-23. The 80-foot HP booth on the main floor of the Cow Palace will be faced across the aisle by the Boonton, Moseley, and Sanborn booths. The entire area, including the aisle, will be carpeted as at previous shows. At least a dozen new instruments will be on display, including the company's 3440 digital voltmeter, 208A test oscillator, 140A oscilloscope, 690 series sweep oscillator, and the frequency synthesizer.

In addition to the booths on the main floor, Dymec and Harrison Laboratories will occupy four booths in the south hall and HP Associates will have one booth in the north hall. This will be HPA's first entry in a trade show.

Hewlett-Packard has been asked by WESCON officials to participate in the show's opening ceremony along with a select group of other firms. The company's frequency synthesizer will be featured in a special demonstration to the press.

Several HP people have been working hard these past months on various WESCON committees. They include Cort van Rensselaer, chairman of the banquet committee; Harry Lewenstein, vice chairman of exhibits; Tom Christiansen, vice chairman of registration; Dave Kirby, public relations and industrial design committees; Dan Lansdon, technical tours; Jack Booher and Roger Brannon, facilities committee; and Jack Melchor, exhibit judging committee for the Future Engineers Show. On the distaff side, Mrs. Bill Doolittle is serving as chairman of the women's activities committee.

The WESCON technical program will include the presentation of a paper by HP Vice President Barney Oliver, and Egon Loebner of HP Associates will serve as a panelist at a technical session.

Big turnout of visitors to the HP booth at the recent Hanover Fair in West Germany brought smiles to these HP YmbH employees, from left: Herbert Hüttich, Hamburg; Justus Sienknecht, Frankfurt; Karin Burmester, Hamburg; Gerd Heusinger, Hamburg; Martha Kaffanke, Frankfurt; Joachim Schlüter, Frankfurt; and Peter Greve, Hamburg.



## HP Moves Up on Fortune List

Hewlett-Packard is now the 408th largest industrial corporation in the U.S., according to the July issue of *Fortune Magazine*.

Each year *Fortune* ranks the top 500 firms in the nation based on sales volume. With sales of \$109.2 million for 1962, HP moved up the *Fortune* ladder from 460th to 408th.

This ranking makes the company the largest northern California-based electronics firm and the 12th largest industrial concern with headquarters in the San Francisco Bay area.

There was no change in the top ten firms on the 500 list. They include General Motors, Standard Oil of New Jersey, Ford, General Electric, Socony Mobil Oil, U.S. Steel, Texaco, Gulf Oil, Western Electric, and Swift.

## Loveland Engineers Time Derby

Hunched over to cut wind resistance, the driver moved down the 750-foot track in 22.165 seconds flat. And that's really rolling for a 15-year-old boy behind the wheel of a home-made soapbox racer!

This action took place at Loveland, Colorado, recently, where HP instruments were called on to provide super-accurate timing for the annual soapbox derby. Loveland R&D engineers Bob Bump and Jim Colwell designed the timing device which consisted of two photo receptors, a 523D counter, and a 560A printer. One photo receptor—including a spot lamp, a G-30A photoconductor, and a transistorized amplifier—was placed at the starting line to trigger the counter. The second, located at the end of the track, provided the stop trigger. From this point, the printer went into action to record elapsed time.

Ray Burnham, the youngster with the run of 22.165 seconds, won the race, a \$500 savings bond, and a crack at the big national event in Akron, Ohio.



Stiles Sales Division field engineers received indoctrination in the operation and uses of Boonton equipment at a recent seminar in Orlando, Fla. Harry Lang of Boonton gives presentation attended here by (clockwise from front left): Al Dryden, Ed Wood, Gene Stiles, Bob Rogers, Bob Browning, and Gene Dashiell. Stiles took on the Boonton line July 1 and is now 100 percent HP.



CAPPING the recent opening of Yewell Associates' new branch office in Middletown, Conn., was a traditional ribbon-cutting ceremony. Assisting President Tiny Yewell with the "scissors bit" were assorted Yewell colleagues, civic officials, camp followers, and pretty girls. To name just a few, the front row shows (left to right) Marilyn Dore, Middletown Mayor John Roth, Chamber of Commerce President Nelson Demers, Tiny, Branch Manager Tom Duffy, Chamber Secretary Walter Gliniski, and Dolores Harrower.

## NEWS IN FOCUS

YOU CAN TAKE a 50-mile hike and never leave home, with the new Model 18 treadmill now being sold by Sanborn to physicians, medical institutions, and researchers. The equipment enables medical men to study patients under simulated working conditions. A speed range up to six mph is standard and the unit can be inclined automatically to duplicate a 25 percent grade. The treadmill is designed for evaluating work capacity, pulmonary function, and coronary conditions. Sanborn is sole distributor for this item manufactured by Quinton Instrument Company, Seattle.



WITH THE HP-YOKOGAWA joint venture up for final approval by the Japanese government, two department heads from Yokogawa Electric Works in Tokyo recently completed a four-week study at HP's Stanford plant. Giichi Yokoyama (left), chief of electronic measuring instrument manufacturing, and Eiichi Maeda, chief of the Yokogawa machining department, watch Kathryn Adams doing her skilled work as a wiring technician. The two gentlemen also spent a few days in Loveland studying HP engineering and manufacturing methods.





# People on the move

## HP—PALO ALTO

*Dean Abramson*, staff engineer, customer service department—to sales engineer, Microwave Division.

*Jack Beckett*, general manager, Paeco—to special assignment, Corporate Marketing.

*Jay Biggerstaff*, R&D engineer, Paeco—to engineer, Advanced R&D.

*Vic Buell*, manufacturing manager, Dymec—to manager, corporate manufacturing specifications and procedures.

*Mason Byles*, materials management, customer service—to central Quality Assurance.

*Ron Church*, R&D engineer, microwave lab—to in-plant engineer, Microwave Division.

*Art Dauer*, engineer, customer service—to applications engineering, Frequency & Time Division.

*Paul Ely*, project supervisor—to section manager, R&D, Microwave Division.

*Hudson Grotzinger*, section leader, Advanced R&D—to materials engineering staff.

*Marshall Johnson*, marketing supervisor, Paeco—to marketing staff, Frequency & Time Division.

*Duane Lingeleter*, R&D engineer, Paeco—to engineer, Advanced R&D.

*George Mathers*, section manager—to advanced microwave techniques, Microwave Division.

*George Moore*, tool engineering, Frequency & Time Division—to systems and procedures staff.

*Harmon Traver*, waveguide production manager—to manufacturing manager, Microwave Division.

*Ron Whitburn*, promotion and advertising manager, HPSA—to manager, overseas sales, Palo Alto.

## LOVELAND

*Darrell Coble*, environmental engineer, HP Palo Alto—to engineer, environmental test, Loveland.

*Cliff DeLude*, process engineer, manufacturing, HP Palo Alto—to manufacturing engineering, Loveland.

*Dixon Freeman*, tool engineer, central tool engineering—to Components Division, tool engineering, Loveland.

*Ray Hansen*, engineer, Bell Tel Labs—to engineer, R&D, Loveland.

*Craig Walter*, engineering pool, HP Palo Alto—to engineer, R&D, Loveland.

## LAHANA

*Richard Hinshaw*, engineer trainee, HP Palo Alto—to staff engineer, Denver office.

## NEELY

*Jim Bunn*, senior field engineer—to district manager, Las Cruces office.

*Rodger Fagerholm*, staff engineer—to field engineer, North Hollywood office.

*Bob Martinek*, staff engineer—to field engineer, Albuquerque office.

*Tom Tinkle*, field engineer—to district manager, Albuquerque office.

## RMC

*Bruce Barnes*, sales coordinator, Boonton Radio—to staff assistant, Englewood office.

## YEWELL

*Dick Perry*, project engineer in digital systems design, Nortronics—to field engineer, Burlington office.

## BOONTON RADIO

*Steve Vitkovits*, project manager, frequency synthesizer group, Westrex Company—to senior development engineer, Boonton Radio.

## F. L. MOSELEY

*Al Shirley*, production supervisor, Oscilloscope Division—to production supervisor, F. L. Moseley.

## COLORADO SPRINGS

*William Grein*, product engineer, Oscilloscope Division, Palo Alto—to R&D engineer, Colorado Springs.

*Alan Henshaw*, tool engineer, Oscilloscope Division, Palo Alto—to tool engineering, Colorado Springs.

*Ralph Jensen*, product development engineer, high frequency engineering group, Oscilloscope Division, Palo Alto—to high frequency engineering group, Colorado Springs.

*Floyd Siegel*, manager, high frequency engineering group, Oscilloscope Division, Palo Alto—to manager, high frequency engineering group, Colorado Springs.

## DYMEC

*Bob Schaeffer*, special projects, cathode-ray tube lab—to manager, fabrication, sheet metal and machine shop, Dymec.

## HP ASSOCIATES

*Ed Hilton*, R&D engineer, Frequency & Time Division—to head of photoconductor lab, HP Associates.

*Herb Shear*, materials engineer, Purchasing—to product engineer, photoconductor manufacturing, HP Associates.

## HEWLETT-PACKARD S.A.

*Paul Warnock*, corporate consolidations and governmental accounting, Palo Alto—to European corporate accounting manager, Geneva.

# 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)





*Look Magazine Photo*

## DAMN THE TORPEDOES!

This Jonah and the Whale scene was enacted before the lens of an alert photographer covering a feature article on boats and boating for the July 16 issue of *Look Magazine*. Jonah in this case is Bard Rice, a member of the Hewlett-Packard Sailing Club, who was intent on crossing San Francisco Bay during the annual Bullship Race and in no mood to be bullied off course by a mere 32-million-pound freighter. So, exercising the right-of-way granted by International Rules of the Road, Bard maintained a tight but anxious hold on the tiller of his tiny El Toro and, by golly, it worked. The giant *C. E. Dant* backed down and changed course as Bard's 8-foot craft sailed proudly by. No comment could be obtained from the captain of the *Dant*. Skipper Rice says he's pleased the good captain remembered the traditional rule of sail over power. *Look* called Bard's near miss "the day's most memorable event."