



# Measure

For the men and women of Hewlett-Packard/DECEMBER 1967



## **Who's minding the store?**

Notwithstanding the pot-smoking, bead-swinging, free-loving, law-taunting, card-burning elements of the population, the Establishment is probably the only thing on God's slightly scorched earth than can provide any meaningful amount of stability.

And YOU are the Establishment.

No matter what your age, sex, race, location, job, education, or marital status — you are it.

Your sense of responsibility for your fellowman, and for yourself, is the glue that holds the whole thing together. Without this sense of responsibility there is only disregard, discontentment, and dissolution. With it there is service, satisfaction, and strength.

From any angle, the key element is service. That's what makes the Establishment go. A desire to serve. On and off the job.

You affirm your support of this position through your regard for your family, your neighbors, and your community. You reaffirm it every workday in doing your job to the best of your ability.

The pages that follow show examples of how you and the more than 12,000 other Hewlett-Packard people are contributing through service to others each day.

**Who's minding the store?**

**You are.**

# CON TRI BU TION

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Mary Greenleaf, Glen Campbell, Sam Matrisciano, John Zimmerman, Fred Stocker, Ed Farkas, Anne-Marie Bousquet, Otto Talle, Glenn Sharp, Max Biggins, Dick Crawford, Tom Hayes, Larry Nielsen, Bob Graves, Dick Dillman, Marion Wallace, Heidi Dimoni, Charlie Black, Peter Schloss, Curt Edelmann, Toni Polsterer, Ab Mulders, Lila Sebastian, Will Workman, Achille Prod'hom, Steve Anderson, Alden Erickson, Pat Elles, Terese Menichini, Janett Urquart, Fernand Savary, Bruno Bergamini. . . . It is packages for Vietnam, advanced research into new semiconductor materials, Catch-A-Calf contests, the 1501 Coagulation Analyzer, person-

to-person recruiting, a new plaque on an office in Melbourne, ACP, the HEWLETT-PACKARD JOURNAL, an evening visit to the Naval Research Laboratory, the Tick-Tock Day Care Center, a 15-year-old research observer, a volunteer fireman wading through the Great Swamp at midnight, a new bright-dip line, rescue squads in South Plainfield and Scotch Plains, Tiger, a new blend of international business enterprise known as HPSA . . . .

These people and their activities are representative of the contributions made by HP men and women each day. Their stories and others are told on the following pages.

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**OFFERING A CHALLENGE:** To maintain technological and business leadership, you have to attract several hundred top-notch professionally trained young men and women each year. How HP goes about attracting these engineering, science, and business graduates is the story of a unique program. Instead of sending out teams of professional recruiters, as many corporations do, HP first puts the people who will do the actual hiring and supervising directly in touch with the job candidates right on the campus. The scene above is typical. Ronald Bauer and Frederick Schott of the UCLA engineering faculty (left), welcome Moseley's Otto Talle and Neely's Glenn Sharp. For both parties, the campus interviews inevitably become enlightening. As Norm Williams, professional recruiting manager, puts it, "The program gets our people away from their jobs and gives them the opportunity to think about their job and the job they are offering. It also provides opportunity for interchange of ideas between interviewers and students, and has been very successful in bringing us the people who see a challenge in joining HP."



**NITTY-GRITTY RESEARCH:** Objects the eye can barely see, materials that didn't exist before — it's at this level, in the microcosmic world of semiconductor materials, that HP concentrates an important part of its research effort. The materials it deals with are rarefied, but the research goals are nitty-gritty: developing semiconductor materials and processes for new and advanced products that are the lifeblood of the company. As an example, a number of new HP products and product improvements were dependent on the development of a special step-recovery diode — not obtainable then from outside sources. The new higher range of frequency provided was essential to such products as the heterodyne converter and expanded the capability of others. Similarly, hot-carrier diodes developed through HP research enabled the company to venture successfully into sampling scopes. More recently, integrated circuits developed by HP Labs and F&T Division researchers for the company's own products are becoming of increasing importance in helping it maintain a position of leadership in a widening range of product areas.



**STATE OF THE ART:** Good patient care is increasingly dependent on accurate testing. In years past, many important tests — such as how fast blood will clot — have relied on the eye of the technician. Needed was an instrument that would monitor and detect the clotting action, save time, and reduce potential errors in observation. The new 1501A Coagulation Analyzer from the Waltham Division does this and more. Versatile, it can run the whole spectrum of coagulation studies — three at a time — on either whole blood or plasma. It is also simple to operate, needs no attention once a test has started. According to Waltham's Tom Hayes (project group above includes, from left: Hayes, Larry Nielsen, Bob Graves, Dick Dillman), "the 1501A should produce improved objectivity in testing and give technicians the confidence to put into everyday use many tests which have been difficult to perform." That seems to sum it up for the scores of state-of-the-art product developments contributed by HP men and women throughout the years in the fields of electronics, chemical analysis, as well as medicine.



#### **A BRIGHTER BRIGHT DIP LINE:**

By nature and training, a plant engineer just is not going to stand still for simply copying a process or system. No matter how successful the original, he will want to improve on it — make it faster or smaller, more versatile or lower in cost. HP manufacturing divisions abound with such projects. Typical of many of them is the new bright dip line at HP's Colorado Springs plant. Designed by Fred Stocker with assistance from production people at the Loveland Division plant as well as Waltham's Ken King, its job is to cleanse, brighten, and lacquer the sheet metal used for instrument manufacturing at the Springs. Except where the sheet metal parts are hooked on or taken off, the line is fully automatic in contrast to the manual batch operation previously in use. Estimates are that it has more than paid for itself in reduced costs in the 10 months since the start button was first pushed. In addition, the precise functioning of the mechanized line makes for a higher degree of controlled dipping time — important with caustic materials and lacquer coatings which affect the finished appearance of products.



#### **COMMUNICATING CLEARLY:**

In the quiet of a customer's office — when he takes time to read the trade and technical literature of his profession — will he see our ad, our news release, our technical story — or those of our competitors? HP goes to considerable efforts to be properly represented at such moments. One way HP takes aim at this prime-time of communication is with its technical publications. Each month, more than 150,000 people receive copies of the HEWLETT-PACKARD JOURNAL — a big production job for Art Director Alden Erickson, above. Founded 19 years ago by Frank Burkhard, the Journal has been edited since last March by Ross Snyder. Authors are drawn chiefly from the HP engineering staff. "Our hope," said Snyder, "is to earn the best efforts of HP authors as the means of building the respect and readership of customers." That it is getting into their hands is confirmed by distribution that almost exactly matches the geographical pattern of HP sales. That it is communicating clearly is demonstrated by the high reader rating given the Journal in a recent "unaided recall" survey.



#### **ONE INPUT, MULTIPLE OUTPUTS:**

In spite of the popular attention directed at new products and ventures, some of the most creative work in industry is aimed at halting the threatened avalanche of paper work. HP's order processing system, now installed to serve North American and European customers, must be ranked very high among recent achievements in this area. Mechanically complex and sophisticated, the system is beautifully simple in concept: an order put on the Telex system in any of the company's sales offices automatically triggers the total order handling system. All necessary paperwork, including the bill to the customer, is created as a result of that one input. It's known as getting multiple outputs from one input of data. According to Les Oliver, international administration manager (shown outlining the system at the new Montreal office), the order processing system creates a number of important by-products. It helps provide an accounting of inventories, order backlog, and cost of goods sold. As another byproduct, sales managers will now get a complete statistical picture of sales performance.

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**CREATIVE SELLING:** There is a touch of drama in many an HP sale. Recently, for example, a young field sales engineer named Will Workman of the Rockville, Maryland, sales office faced such a situation when he called at the Naval Research Laboratory, Washington, D. C. In one of the laboratories of the acoustics division, a leading acoustics scientist, Vince Del Grosso, was measuring the speed of acoustic waves in pure water (similar to measuring the speed of sound in air) — research important to the Navy's underwater navigation and sonar programs. Del Grosso was experiencing a problem in determining when the reflected acoustic wave went through a wavelength. Workman thought an HP vector voltmeter might solve the problem. Recognizing its urgency, he returned to the acoustics lab that same evening with an instrument and his solution proved correct. Del Grosso (right, above, with Workman) and his associates were able to finish their measurements begun early in the day. Result: a problem solved, an instrument ordered, a good relationship reinforced. And, a fine example of HP's marketing philosophy.



**EVOLUTION IN SERVICE:** How important is a customer in Addis Ababa, Ethiopia, or in Alice Springs, Australia? Very important. And the proof is furnished by HP's expanding international marketing organization, now found in 106 offices located in 59 countries. Australia is a recent example of this evolutionary development. To keep pace with this rapidly growing market, the company established Hewlett-Packard Australia Pty. Ltd. last July, replacing and absorbing in part a distributor group. Why? Sales had reached the point where they dominated the distributor's effort. Special training and service in HP products was needed. HP wanted the flexibility to put branch sales offices where they suited needs. And, more interchange between the Australian sales personnel and the other parts of the company was desirable. The parting, between Sample Electronics and the HP portion of its business was amiable and smooth — typified, perhaps, by Field Engineer Max Biggins. Max joined Sample's Melbourne office in 1963, worked full time in sales and service while attending night school, made the switch to HP in July.



**A PIONEER FREIGHT SYSTEM:** Ever since mid-1963 it has been possible for a customer in the New Jersey-New York area to uncrate and use an HP instrument less than 24 hours after it has left any of the company's California plants. The reason? Daily air freight service from San Francisco and Los Angeles to Newark, N. J. Known as the Air Consolidation Program, it represents continuous efforts to provide improved service to customers through faster shipments. Thousands of man-hours were spent in creating the massive study that backed this pioneering venture. Now, in the past nine months, the ACP has added Boston, New York, and Philadelphia to its destination roster. As an added bonus, customers are finding that deliveries cost no more in most cases than the cheapest methods of surface transportation. Further off — perhaps a year or so from now, according to HP's Traffic Manager Rod Ernst — the company is hopefully expecting to institute air consolidation shipments from the HP divisions in the East to distribution points in Denver, Los Angeles, and San Francisco.

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## The view from the top

Your son's math teacher will tell him that the whole always equals the sum of the parts. No more, no less. Yet, as the leader of a classroom he knows that you just can't take inventory of living, breathing, interacting people that way. Somehow, a group takes on character, personality and drive of its own. Coaches sometimes call it morale or drive. Whatever the description, it comes down to the fact that, by working as a team, people are able to make a contribution beyond their numbers. This mysterious "X" factor may not always be apparent to the person working on a production line or in the office. But to an HP division manager, for example, with his view from the top, it is an asset at least as visible and vital as materials and machinery.

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Product Engineer Toni Polsterer flips through massive product data file—which he can read easily in four languages. The U.S.-style informality represented by Toni's jacketless attire is unfamiliar to most European businesses. It's catching on, though.

The combination of multiple languages plus taxes and import regulations for every country HPSA deals with makes for an extraordinary amount of paper work per dollar of sales. Here, Terese Menichini searches files for engineering data.

Commercial Manager Curt Edelmann, an Argentine who speaks German with a Spanish accent, gives briefing on HP procedures to Peter Schloss, a young Dane who later helped open the new sales office in Oslo. Schloss' field is finance.

The HP concept of complete customer service—before, during, and after sale—is reflected in HPSA's Geneva service center. Technicians Raymond Metral, foreground, and Lucien Peron are shown. Extensive training in the U.S. precedes service assignments.



To generations of older Americans, Europe was a place they or their parents were anxious to escape from. But times change—and today the “huddled masses” reaching the eastern seaboard of the U.S. are for the most part travel-weary American tourists—weighted down with cameras, souvenirs, and vacation memories of a picturesque and exciting Europe.

American industry has been a visitor to Europe too. It found the continent to be a land of brilliant business promise and stayed on to create permanent organizations to serve it.

But the pitfalls are many, and not all have succeeded. Success seems to hinge on treading a thin line of distinction. You must allow for the differences in outlook and social structures of your host country, but not let yourself become so native that you lose your original identity.

The people that make up Hewlett-Packard S.A. and its subsidiary companies have proved to be sure-footed. Together they are creating a new international blend of business enterprise.

That blend can be seen in action by visiting HPSA offices in Geneva, Switzerland, or any of its subsidiary company offices located in 10 other European countries. Each location is unmistakably HP. And it's not just the company symbols and products on display that tell you this. It's the people.

This is particularly apparent if one has experienced the formality of true European-style offices.

“Walk in on any HP group and you feel right at home,” was the reaction of a Palo Alto manager who visited Europe recently. “Usually the coats are off. First names are in use. Doors—where they exist—are seldom closed. The people take great interest in what's going on.”

Yet, in contrast, the staffs of these offices have all been drawn from the countries they serve, while the Geneva office—with some 90 people from many differ-



Thorny problems resulting from the complexity of economic and geographic boundaries require very careful attention from HPSA's traffic specialists Achille Prod'hom, left, traffic supervisor, and Fernand Savary, shipping and receiving.



HPSA's Geneva warehouse is in bonded, duty-free area which allows business to ship between various countries without paying local customs taxes. Warehousemen, from left, are Roger Parmelin, Lucien Roulet, and Ernest Schindler.

ent cultural backgrounds — is a United Nations assemblage in miniature.

What complications do these people face in the everyday business world? Taxes and tariffs, for one thing. These add to the sales prices of HP instruments, making competition more difficult. To combat this, HPSA sales rely heavily on instruments and systems that excel in quality and sophistication.

The continuing labor shortage is another problem to be faced. This is particularly true of engineers who are able to perform training functions. To get around this, trainees travel to Palo Alto or other HP U.S. locations, or in some cases training personnel are sent from the U.S. to the European office.

Even if this transoceanic interchange may not be as economical as having a complete training center in

Geneva, it does serve the purpose of bringing the American and European staffs into closer personal contact. They have many interesting things to learn from and about each other.

The variety of languages is another factor with which HPSA must deal. This is solved within the various countries quite simply by a policy of hiring local citizens. But in Geneva, practically every one in the organization needs to speak several languages. Fluency in four or five is not uncommon. For those who need an additional language, free weekly lessons in English and French (Geneva is in the French-speaking zone of Switzerland) are offered.

Marketing in Europe also presents some conditions not found in HP's U.S. markets. Europe is an older society, and not as fluid and flexible in its per-

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Staffing Datel machines in Geneva, where European and stateside communications connect, are Pat Elles, left, and Heidi Dimoni.



Training is one of HPSA's important functions. Labor shortage, however, has made frequent training visits to and from the U. S. necessary. Here, service people from European offices gather in Geneva office for seminar with F&T's Dick Isaacson.



Managing Director Dick Reynolds reviews model of HPSA's new headquarters.



On recent trip to check European time standards, F&T's Ron Hyatt, rear, brought HP atomic clock to Felix Lazarus' standards lab in HPSA service center facility.

sonal or commercial relationships. In approaching a customer firm, for example, an HPSA field engineer must make sure in advance that he is following protocol in selecting his customer contact.

So, HPSA has its problems, but it also figures it has the people to handle them. Including manufacturing facilities in West Germany and Great Britain, the organization has some 1,200 people, almost all of whom are native Europeans. Together, they are meeting the obstacles head on and as a result are building an enviable record. They point to expected sales exceeding \$40-million for fiscal 1968, a new communications network linking it with other parts of the company, new markets in the offing, and a new headquarters building under construction.

A number of developments inside and outside

the company favor a very positive view of HP's future in Europe, according to Dick Reynolds, HPSA managing director. For one thing, the organization now is able to give increased attention to many smaller markets whose excellent potential has yet been relatively undeveloped by the company. For another, recognition of HP is improving as a result of such devices as the mobile demonstration labs. And finally, the prospect of a true common market economy in Europe, with tariff and trade barriers reduced, glitters with many potential benefits for the company.

The people of HPSA working together as one have certainly demonstrated that HP has an international flavor, and that the universal spirit of science, engineering, and industry is not bound by borders or language barriers.

## CON TRI BU TION

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# People helping people

After a full day on the job it isn't easy to rush home and become an instant den mother, scout leader, city councilman, fund drive chairman, parent teacher helper, precinct worker, board of education member, community center volunteer, church building fund coordinator . . . yet these are just a few of the many roles that must be filled voluntarily by responsible people if the needs of a community and its members are to be met. They can't all be left up to the non-working housewife or the professional organizer. The working community needs to be represented, too. Fortunately, a great many people throughout the HP organization do find the interest and energy to contribute time and talents to community work. Their reward, for the most part, is the personal satisfaction of helping people who need and appreciate their help, as the following examples reveal:

**A PACKAGE FROM HOME:** Christmas on the front lines of Vietnam may or may not be passed with the respite of a real truce. But it will be a good deal less grim for a number of GI's there thanks to some thoughtful project planning and action by production employees at the Waltham Division. The project — packages for servicemen in Vietnam — began on the recorder line. Soon, under the guidance of Janett Urquart and Mary Greenleaf, the project spread throughout the plant. While special attempts would be made to get packages to sons and relatives on active service, it was decided that many packages should go for general distribution — including one group to be dropped directly in the combat zones. Many sources came forth to help fill the packages. Several employee groups who had previously held Christmas "grab bag" exchanges of gifts donated this year's funds to the project. Fruit cakes were baked. Local merchants and suppliers contributed a variety of items. The company agreed to help coordinate and defray the expenses of shipping the packages to Vietnam and Thailand. From spontaneous beginning to shipping date was just a little more than two weeks. The packages still await the proper and traditional moment for opening. But the true spirit of Christmas has already performed its heartwarming work in a sector of the home front.



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**BROADENING HORIZONS:** Charlie Black may or may not come to work for HP some day. Right now he's a little young—a 15-year-old sophomore in senior high school. But two hours a week Charlie shows up at HP Labs and plunges as deeply as he wishes into the world of science. With the help of Engineer Dick Crawford, above, he is learning how to use instruments, exercise his powers of logic, and have some fun in the bargain by working up an electronic game of tic-tac-toe. Later he may apply these electronic aptitudes to his favorite subject—biology. It's all part of the Research Observer program of the Palo Alto School District with which HP is cooperating along with other science-oriented firms in the area. A number of students besides Charlie Black are scattered throughout Stanford Industrial Park as "observers." They can bring in any scientific project of their choice and work on it with the aid of the instruments available. "It allows you to actually apply and learn as you do," said young Black in his application for the program. In a sense, the Observer Program is an extension and a symbol of all of the many other programs of training and education—vocational, professional, customers—which the company sponsors or supports. All are aimed at broadening the aptitudes and horizons of HP people and the people they do business with.

**A COMMUNITY WAVEMAKER:** The former Tick-Tock Bar & Grill in Avondale, Pennsylvania, is hardly recognizable. It now houses the Southeastern Day Care Center, and performs a vital service in caring for scores of pre-school children whose mothers must leave home during the day, generally to work in support of their young families. The Center must look to the community of Avondale for its support—and Marion Wallace, a director since the start of the center three years ago, has made it her mission to rouse and rally that support at the neighboring HP plant where she works in electronic assembly. Marion has succeeded so well in this that toys, food, clothing, and games arrive in a steady stream. Her special campaign for fruit juice brought in more than 100 large cans for the kiddies. This year, for example, employees have decided not to exchange Christmas cards, but instead will hang dollars to a money tree for donation to the center. The pattern of community service is clearly revealed in the Avondale activity: one good wavemaker can be the source of ever-widening action and service. Is there any community that couldn't use more such wavemaking?





**THE VOLUNTEER:** Why does a man risk life and limb racing through town to put out somebody else's fire? Or tramp through a wilderness swamp at midnight looking for a child unknown to him? Perhaps some answers can be found in the observations of four Harrison Division employees (from left: Glen Campbell and Sam Matrisciano, kneeling, Ed Farkas and John Zimmerman, standing). Matrisciano, a member of the Green Village Volunteer Fire Department since 1947, says "I know my neighbors in the department are protecting my home and family while I'm at work, and I like to feel I can do the same for them." Campbell, one of 50 members of the Berkeley Heights Volunteers, feels the challenges and the need outweigh the hazards (getting to the fire is the toughest part, he says). Zimmerman spends an average of 8 to 12 hours per week driving an ambulance for the South Plainfield Rescue Squad, has assisted in everything from the birth of twins to the cleanup of tragic highway and train disasters. "I'm trying to help my town," he says, "but even more, it gives me a feeling I'm helping others." Ed Farkas of the Scotch Plains Rescue Squad responds to some 45 emergency ambulance calls per month. Like the other volunteers, his reasons are clear and simple: "There is a real need in the community for this service — and you just can't turn down someone who needs help."

**SCHOLARSHIP ON THE HOOF:** The annual Catch-A-Calf contest at Loveland, Colorado is not, strictly speaking, a scholarship event. But beef is big business in Larimer County, and helping young people gain knowledge and experience in this area is an important undertaking for the Loveland Beef Eaters' Club. Last year, a 14-year-old named Steve Anderson entered the rodeo arena, took after a lively looking calf, and came up with Tiger — HP's donation to the contest. That was the fun part, and a great sight for spectators. Thereafter — day in and day out — Steve tended to Tiger's feeding, watering, and weighing. The last was important because Steve's efforts eventually would be judged the way all work is judged — in the marketplace. The fact that Steve realized an overall profit of \$87 in raising Tiger was important as one measures success. But it went beyond money. "It has been a project I will never forget," he wrote in one of his monthly reports to Ray Demere, division manager. Why would an electronics firm offer assistance so far outside its range of business? "Our interest lies in young men like Steve," says Demere. "If we have given him an opportunity to build knowledge and character, then the community is strengthened — and we are among the beneficiaries."





Many years ago when we first put our corporate objectives down on paper, the word "contribution" appeared again and again. There have been some minor revisions to our objectives in the intervening years, but "contribution" has remained an underlying philosophy.

Although you may not have thought of it in this way, the contributions we make as a company are no more than the accumulation of the contributions of each individual. There is nothing trite in saying this because it is basic in

our approach to business, and the history and progress of Hewlett-Packard bears this out well.

Because of your individual effort and enthusiasm, our company continues to grow each year, and 1967 was no exception. We produced and shipped nearly a quarter of a billion dollars worth of equipment; we created some 1,000 new jobs throughout the company, increasing the number of HP people to more than 12,000; and we added more than 300,000 square feet to our laboratories, factories, and offices.

We are very appreciative of your individual contributions this past year, and trust that the new challenges and opportunities in the year ahead will provide ample motivation for your continued efforts.

Our country also faces challenges in the year ahead and perhaps each of us, in our own way, can make some measure of contribution toward solving the dilemmas we face in searching for world peace and the solutions to pressing domestic problems. Our responsibilities here go hand-in-hand with the contributions we make in the world of business, for there cannot be one without the other.

We hope your new year will be one of accomplishment and satisfaction, and we extend our best wishes to you and your families for a joyous holiday season.

*Dave and Bill*

# Measure

**EDITOR**  
Merle Mass

**ASSOCIATE EDITOR**  
Les Carpenter

**ART DIRECTOR**  
Tom Martin



1501 Page Mill Road, Palo Alto, California 94304

**CONTRIBUTING EDITORS** — AVONDALE: Charles Butler • COLORADO SPRINGS: Ed Igen • EASTERN SALES: New England area, Ruth Ambrose • New York City area, Dorothy Cline • Philadelphia area, Berna Wisnath • FREQUENCY & TIME: Karen Austin • HARRISON: Dorothy McMahon • HP ASSOCIATES: Suzanne Sarraf • HP BENELUX: Amsterdam, Cathy Koster • Brussels, Helene Meuniers • HP IDAHO: Doug Paddock • HP GERM: Klaus-Dieter Löffel • HP FRANCE: Jacques Brugère • HP LTD.: South Queensland, Jane Campbell • Slough, Anika Hantsland • HP S.A. Sid Mann • HP VERBOD: Hans Rubingh • (LOS ANGELES) Nancy Sorenson • MICRO-WAVE: Dean Abramson • MIDWEST SALES: Ken Rosen • MOSELEY: Frank Hicks, Jr. • MOUNTAIN VIEW: Ray Tisman • NEELY SALES: Mike Tolson • PALO ALTO: Joe Bailey • ROCKAWAY: Jane Ricci • SOUTHERN SALES: Regional-Atlanta area, Virginia Thomson • Florida area, Geta Cline • Texas area, Helen Hobson • WALTHAM: Janet Dale • Y-HP: Yosuke Ishikawa

