PHILCO NEWS





Philco in the Space Age Pages 4-5 The Many Worlds of Philco Pages 8-9

MAY 1961



That redheaded boy on Summit Ave. just got a transistor radio ... and a Courier satellite! Both were excellent buys good values because of Philos quality.

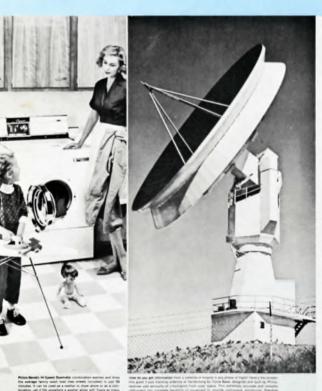








Reproductions in miniature of two double page advertisements of a series appearing in full color during 1961 in The Saturday Evening Post, depicting the wide scope of Philco's engineering and manufacturing activities and fostering the image of the Company as one of the nation's leaders in electronic research.



The folks on Elm St. just bought a new washer-dryer... and a satellitetracking antenna! Both were excellent buys ... good values because of Philos quality.









Published by the Public Relations Department of Philco Corporation —Mark Lutz, Editor.

VOL. 19 MAY, 1961 Nos. 2 & 3

AGGRESSIVE ADVERTISING HELPS SELL PHILCO PRODUCTS

Philco ads featuring consumer products reach 67,000,-000 prospects in the U. S.

International, G & I, Lansdale, TechRep, and Service and Accessory Divisions swell the total to giant, worldwide coverage.

Philco regularly invests in the development of current and future sales through a forceful, comprehensive, advertising and promotional program calculated to exert a tremendous impact on prospective customers. This includes the advertising conducted by Philco distributors and dealers under the company's cooperative advertising policy.

CONSUMER PRODUCTS DIVISION

While the Government and Industry Group, Lansdale, TechRep, and Service and Accessory Divisions are all large and active advertisers, the greatest, and most expensive schedules have been devoted to radios, TV sets and home appliances.

All the important advertising media are used each year to bring the Philco sales story to millions of homes throughout the country and abroad. For example:

Three hundred and twenty-nine newspapers in 196 cities regularly carry Philco advertisements, and a special campaign was recently inaugurated with a two-page spread in newspapers in 270 cities!

Ten national, mass-circulation magazines carry the story of Philco products and their features to over 67,000,000 people!

Full-color, "corporate-consumer product" ads in the

"Saturday Evening Post" alone, are seen and read by 30,000,000 people! This additional, new series started last February.

Products ads are also appearing in "Life," "Look," "Reader's Digest" and "TV Guide." These are designed to appeal to both men and women readers. To reach feminine buyers, color ads are scheduled in "McCall's," "Better Homes and Gardens," and "Sunset Magazine" on the west coast. Every year, in September, Philco products are seen by millions of viewers during the Miss America TV program. It is expected that, this year, the audience will reach a record-breaking total of 55,000,000 potential customers!

These schedules and programs reflect broad, intensive coverage of the entire country, with skillfully prepared advertisements produced by Batten, Barton, Durstine and Osborn, Inc., one of the leading advertising agencies in the U. S. Before appearing in publications, campaign themes, advertisements and copy are often pre-tested by the agency to insure their selling effectiveness.

In addition, dealers throughout the country are reached through Philco advertisements in business and trade papers such as "Electrical Merchandising Week," "Mart," "Home Furnishings Daily," and similar publications.

The widespread advertising effort, great as it is, constitutes only part of the story. For instance, the company often mails out a four-color, 8-page tabloid featuring all Philco products, to millions of homes throughout the 50 States. Large, colorful 24-sheet

(Continued on Page 14)

PHILCO IN THE SPACE AGE

Project Mercury—the Nation's program to put a man into space and return him safely to earth—is nearing the count-down, and Philco has a personal stake in it.

A group of 16 field engineers from Philco's TechRep Division will play important roles in monitoring the complex electrical and mechanical systems of the high-flying space craft carrying the Astronaut. The 16 engineers completed specialized orientation and training at the National Aeronautics and Space Administration (NASA) Space Task Group at Langlev Field, Va.

There they have been "checked out" on the functions of the space craft's complicated systems. They have learned how the Astronaut will control his flight and the electronic wizardry of the equipment which will report his physical well-being along with environmental conditions within the craft.

From Langley, now their home base, the 16 TechReps will fan out to monitoring stations scattered throughout the world shortly before the Astronaut's scheduled flight. Monitoring sites are located in the United States, Mexico, Canary Islands, Africa, Australia, Hawaii and aboard ships operating in the Atlantic and Indian Oceans.

At these sites girdling the earth, each of the TechReps will take his place at a three-man control console, a compact array of dials and switches and medical tape recorder to provide full exchange of operating, physiological and environmental information between the Astronaut, his space craft and monitoring teams below.

At the center of the console will sit a NASA engineer as Space Craft Communicator, who will correlate all information gathered by his monitoring team as well as that supplied by flight control centers located at Cape Canaveral and Bermuda. He will communicate with the Astronaut on UHF or HF voice links for six-minute periods as the space craft passes overhead and report necessary information to the flight control centers.

Sitting to the left of the Communicator will be an Aeromedical Monitor, a medical doctor who will observe and report the state of the Astronaut's well-being, including pulse, body temperature, suit pressure and environmental conditions inside the craft such as cabin pressure and temperature.

On the Communicator's right, a TechRep will be watching the performance of the electrical and mechanical systems of the craft. It will be his responsibility to observe the craft's attitude, pitch, roll, yaw motion, fuel and cabin and suit oxygen supply, temperature and pressure. He will report to the Communicator unusual functioning of any of the equipment. The three men at each monitoring site will have closed circuit communication with one another.

Should unforeseen and extreme hazard develop, the NASA man on the ground below will be able to bring the Astronaut and the space craft safely back to earth. However, if the flight goes as planned, the Astronaut will be in complete command of his flight and may even press the button that will trigger his descent. The space craft is equipped with a window so that the Astronaut can see his position in relation to the earth and a periscope provides celestial reference.

Astronauts have logged many practice hours in make-believe orbit through the use of a "procedures trainer" which throws the kind of problems at them they are expected to face during a real trip aloft.

For the time being, however, the 16 engineers are preparing for the flights by repeated and intensive practice sessions at a simulated monitor exactly like that which they will be called upon to operate when an Astronaut "lifts off" into space. These ground control consoles duplicate instruments the Astronaut will operate in the space craft.



The TechReps are learning now the procedures they will have to understand and follow without hesitation to ensure maximum safe operation of the space craft during its flight. They are even taking a refresher course in the use of a telegraph-type "key" so that they will be able to communicate in code if the Astronaut chooses to do so. NASA has been putting these control console teams through their paces handling simulated orbital information transmitted to them from aircraft flying overhead.

The TechReps involved in Project Mercury were selected on the basis of their experience, training and "their ability to react positively to stress situations with sound judgment." The 16 typify the high-calibre of engineers which the Division employs in world-wide assignments with industry, government and the military services.







Marvin Rosenbluth scans control console dials during "dry run" flight of would-be Project Mercury space craft. During real Astronaut ride into space, Marvin will operate same type of console at his monitoring site at Guayamos, Mexico. Other TechReps will be going to monitoring stations in the United States, Canary Islands, Africa, Australia, Hawaii and aboard ships in the Atlantic and Indian Oceans.

Upper Left:

Philco's Project Mercury team of TechRep field engineers gathered for this group portrait before beginning rigorous training schedule at Langley Field headquarters.



NASA instructor explains panel of 122 controls in Mercury space craft which Astronaut will manipulate during flight aloft. Behind instructor is mack-up of three-paneled control console to be attended by Aeromedical Monitor, NASA Communicator, TechRep Systems Monitor. In right background is space capsule fished from acean following successful space flight last year.

Seen through glass panel, TechRep Al Barker handles simulated man-in-space information flashed to his control panel by NASA engineers at equipment in foreground. Like other TechReps in program, Al will watch performance of electrical and mechanical systems in Astronaut's space craft.

TechReps Assigned to Project Mercury:

Albert W. Barker Richard L. Cross Louis A. DeLuca Harold W. Hopp Wilbur Huber Daniel Hunter John Longan Richard Rembert Marvin L. Rosenbluth Cyrus W. Rumbaugh Harold B. Stenfors James Strickland James L. Tomberlin William Wafford Lloyd H. White Ted. A. White Present world conditions called for priority handling of a Defense Communications Control complex recently installed and dedicated by Defense Communications Agency

in Arlington, Va.

On September 29, 1960, the Defense Communications Agency selected Philco Corporation to set up the Defense National Communications Control Center. Even optimistic estimates called for a year's effort for completion of the program, but Philco Corporation, in only 22 weeks, designed, developed, manufactured and installed the complex

equipments which make up this center.

With the Corporation's 2000 Electronic Data Processing System as heart and brain for processing and action, the complete system will tabulate, assemble, store and display information on current conditions of the components of the Defense Communications System. Approved requirements of authorized users will find channel and circuit allocation through the system, and continuous system analysis is task of the communications control network.

DEFENSE NATIONAL COMMUNICATIONS CONTROL CENTER DEDICATED

As prime contractor, Philco selected the Systems Development Corporation as an associate, to prepare an operational system description and operative analyses of the system, along with computer programming for the Philco 2000 EDP System around which the complex is built.

The display system complex occupies an area of more than 400 square feet. One display panel, eight feet high and 15 feet long, is an edge-lit map of the entire world. This panel shows the changing status of the major trunks and stations of the system. The displays also include traffic status readout and three command network panels.

The display panels are arranged around the main control room and are visible from either of two main control consoles. There are more than 17,000 illumination sources

in the displays with a life-span of more than seven years.

The solid state, high-speed switching display complex required approximately 4,000 transistors, more than one million soldered connections, and more than 50 miles of wire. Information presented on the display panels covers the full range of data necessary for intelligent analysis of this world-wide communications system. Included in the information are trunk status, assignment and availability of individual circuits, station status, and the scope priority and quantity of message backlog.

Multi-color presentations, unique shapes and positions were used in the display panels to present the data. Basis for Philco's display system design was a number of human engineering studies leading to evaluation of information presented to the system super-

visor for his decisions.

Adjacent to the display panel area is the Philco 2000. The computer is connected into an input system through a Computer Access Device which receives its inputs from relay switching centers throughout the Defense Communication System. The access device receives concurrently all inquiries from the control consoles about status of any point in the communication system. These queries are forwarded to the computer, which automatically answers them and returns the replies through the access device to the appropriate display panels.

Even without direct inquiry, the computer, through the Computer Access Device, automatically updates all displays to show actual status of the system. Automatic alarms are installed so as to demand immediate attention and decisions by the system supervisors.

The central computer's input/output processor offers capability for connection of 16 magnetic tape units or universal buffer controllers. Each magnetic tape unit or buffer controller can transfer information to or from the computer at the rate of 90,000 characters per second through two simultaneous channels.

Later phases of the program will be directed toward decentralizing system control into logical areas throughout the world, enlarging the data base for more timely and pertinent information, and enlarging the system's capability so that problems of managing a large communications system may be solved. Another phase will deal with real-time control so that distribution of all available communications facilities will efficiently and economically meet actual traffic demands under all foreseeable conditions.

Dedication ceremonies were held March 16 by Rear Admiral William D. Irvin, USN, chief of the Defense Communications Agency. The Agency was established by the Department of Defense to exercise operational control and supervision over DCA—which includes all world-wide, long-haul, government-owned and leased, point-to-point circuits, terminals, control facilities and tributaries required to meet specified telecommunications needs of the DOD for command and control, operations, intelligence, weather, logistics and administration.

A close-up view of one of two control centers in Defense National Communications Control Center. The three panels, below, give specific information on the status of military world-wide communications systems. The information comes from a Philco 2000 electronic data pracessing system, the electronic brains of the Center. The console in the foreground is controlled by a Systems Supervisor. The center panel is used for quering the computer. The panel next to the typewriter is an alarm panel which brings to the supervisor's attention any specific local alarms. The Traffic Status and System Status panels give the supervisor full information on communications throughout the world. The Readout Panel shows answers by means of back-projection of letters or numbers.



Brigadier General James R. McNitt, USAF, deputy chief of the Defense Communications Agency, left, and Brigadier General George P. Sampson, USA, director of operations, DCA, are shown right with President James M. Skinner, Jr. of Philco, second from left, and Jack Heckelman, Philco project manager of the DCA contract, right, as they examine a control console in the Defense National Communications Control Center following dedication ceremonies conducted by Rear Admiral William D. Irvin, USN, Chief of DCA.



Philco engineers are shown to the right as they check out the network panel control console at the Defense National Communications Control Center.





The Many Worlds of Philco

Philco occupies a major role in the rapidly expanding importance of electronic research and production in world affairs. These pages present a partial view of the facilities with which Philco is equipping itself to meet the demands of the future for defense, for industry and for the home.

How Philco facilities are exp



Research Division, Blue Bell, Pa.
Research Center occupied in April, 1961



Western Development Laboratories, Palo Alto, Calif.
Laboratory being erected for occupancy late in 1961



Computer Division, Willow Grove, Pa.

Building completed and occupied February, 1960

anding to meet new and broader horizons



Menlo Park, Calif.
Building enlarged and occupied November, 1960



Sao Paulo, Brazil
Producing for the Brazilian market



Mexico City
Producing for the Mexican market



Don Mills, Ontario, CanadaProducing for the Canadian market



Philadelphia
Television Receivers



Sandusky, Ohio Radio Receivers



Philadelphia
Government & Industrial Group



Lansdale, Pa.

Transistors, Cathode Ray and Receiving Tubes

INSTITUTE DISPLAY REPAIRED

Accidents do happen. Even in an institute guarded by the beneficent statue of a prudent Benjamin Franklin, mechanical forces overcome the best intentions of display-designers.

It was last Summer that a display in the Franklin Institute pulled loose from its anchor bolts and shattered on the floor.

Men from Philco's Research Division had installed that display in July 1958 as part of a story telling group of cases which showed the intricacies of semiconductors.

In the time of its use by The Institute, Research's case had been viewed by thousands of children and adults who sought information about a rapidly developing scientific field.

After broken glass and twisted cabinet parts had been swept away, insurance adjusters had to estimate the cost of replacing contents of the case also widely scattered.

Drafting Supervisor John Miller observes craftsmanship of Joseph Tarcia as he makes final repairs to the Philco display for Franklin Institute.

John Miller and Joseph Tarsia, Research Division technicians, undertook the long and exacting task of reconstruction in a Plant 2 laboratory before the Research Division moved to Blue Bell. After months of patient effort the display was restored in February and once more occupies its space in Philadelphia's museum devoted to the mechanic arts.

J. M. Skinner, Jr., receives a framed picture of Eastern Air Lines new jet serving Philadelphia, from William Allen, EAL's district sales manager. Mr. Skinner also received the Eddie Rickenbacker courtesy card from Mr. Allen.

RED CROSS BLOODMOBILE TO VISIT PHILCO PLANTS

The Philco Blood Program calls for Bloodmobile visits during the next several months to replace the 1000 pints of blood distributed to employees during the past year. Approximately 140 departmental recruiters from the Philco blood organization are set up to secure pledges for the drive. The 1961 Bloodmobile schedule is:

May 16, 17, 18 Plant 50, G. & I. Division May 17, 18, 19 Plant 10, Tioga Street area divisions

July 6 Computer Division
July 7 Research Division

The blood program at Philco is one of the most active and beneficial services offered employees. Your donation will insure you and your family blood free of charge should an emergency arise.

Helena DeMarco donates blood when the Bloodmobile visits our Computer Plant. Mrs. Edgar M. Wambold, chairman of the Old York Road Branch of the American Red Cross, and Gray Lady, Mrs. Joseph Koch, of Moreland, are onlookers while Mrs. Russell Kurtz, of Willow Grove, is the registered volunteer nurse.





Part of the information released to the public about advanced development at Philco is written by trade-press reporters and editors after interviews here. Thermoelectricity and its applications are discussed by Philco men, Peter Taylor and Lloyd Â. Staebler of Consumer Products Advanced Development Department with McGraw-Hill News Service reporter John Moore. At right is Robert A. Bernoff, director of research for Melcor, an organization supplying thermoelectric materials to Philco for our development work.



EUROPE _

FOR YOU

BECOMING A
REALITY FOR MANY

As a result of a series of inter-plant meetings of Philco employees interested in taking the 17-day, four country tour of Europe this summer during the vacation period, reservations are being rapidly received for the Company sponsored trip.

Slides and motion pictures taken by employees on last summer's trip were shown at the meetings as well as motion pictures of Europe supplied by Air France. Carl T. Weber, Plant 2; Stanley Zebrick, Plant 18, and Mary Jane Tyson, Spring City, were the employees who supplied pictures and described

their European experiences at the meetings.

The European trip will start the last work day before the vacation period and will end on the Sunday prior to the resumption of work. The price of \$695 includes the round trip trans-Atlantic jet flight; rooms at first class hotels, with bath, double occupancy; meals at top restaurants, sight-seeing in deluxe motor coaches with English speaking guides; all transfers and gratuities plus a number of entertainment features.

Due to the time saved by the jet flight an extended tour (at additional charge of \$35) is being made available to permit the exploration of old and new excavations of Pompeii and one night in Capri before returning to Rome for the return flight to Philadelphia. Naples, Amalfi and Sorrento will also be visited by this group. Those not taking advantage of the extended tour will spend the time in Rome viewing the Eternal City.

A pictorial map of the European trip to be taken by Philco employees this summer prepared by William Oldfield, Industrial Engineering, was displayed in the various plants in the Philadelphia area. The map graphically shows which European cities are to be visited—London, Paris, Lucerne, Venice, Florence and Rome—with the number of days stay in each.





Coins on display in the employee hobby show in Plant 10 are examined by Theodore Hess, R. C. Deakin and Alex Marshall who supplied the exhibits valued at \$4,000. The three collectors are interested in forming a coin club for beginners for the purposes of discussion, swapping, and friendly get-togethers. Other Philco coin collectors are urged to get in touch with the organizers of the club.

PHILCO hobby display



Philco Research Engineer "Manny" Herscher (left) at a rehearsal of "Guys and Dolls" given by the City Line Players. The production was repeated at the Veterans Hospital. Others in the photograph are Chuck Orlow, Harry Alexander and Wilbur Evans, who directed.



After working an eight hour day at Philco's Western Development Laboratories, Tom Moore finds time to engage in the following hobbies: boating, lapidary, jewelry fabricating, printing (typeset), writing (a member of the Santa Clara Valley Writers Association), and photography. The latter has proved not only interesting but lucrative as well. Tom has won thirty-two prizes in photography contests, including the Philco News 1961 Vacation Picture Contest. One winner made the national Modern Photography magazine. Tom, an engineer in the Environmental Lab, attended San Jose State, majoring in Industrial Arts. He has been at WDL since 1958.



Officers of the Plant 2 Galf Association and floor representatives for the Jack Poole Memorial Tournament held Easter Monday at the Yardley Galf Club are (left to right, seated) Tad Gadfrey, John Uetz, president; Alex Koslow, Francis Feeney, vice president; (same order, standing) George Conrad, Robert Nathan, Michael Welsh, John Matecki, Robert Cahill.

Making history in signing contracts to bowl at the Willow Grove Lanes are representatives from the Philco Communications System Division at Fort Washington and the Johnsville Naval Air Development Center. From left to right, front, are Albert Obrofta, secretary and William Dawson, president, of the Philco bowlers, and Johnsville representatives Karl Quirin, Rose Resice, and Marie Hutchinson. In the second row are Stan Raytinsky, manager of the new Willow Grove Lanes, and Andy Brohawn, from the Johnsville Naval Air Development Center.



BOWLING

BOWLING

BOWLING

(Continued from Page 3)

poster billboards are displayed on the nation's highways and streets where millions of people see the name of Philco. Radio commercials, written and recorded, are provided for use by dealers in their local programs. Thousands of newspaper advertising mats are prepared for dealer use throughout the year. In addition, there are monthly promotional programs on Philco consumer products for increasing sales at the dealer level. Millions of product line folders are used by dealers for direct mail.

PHILCO INTERNATIONAL

Philco and Bendix products are sold around the world through 200 distributors, 14 licensees, 4 subsidiary companies and 20,000 dealers!

Ten international publications are used by Philco International alone, and each of the local companies carries on intensive campaigns in its own market. The publications used by Philco International include:

Life International	(English)
Life en Espanol	(Spanish)
Selecciones del Reader's Digest	(Spanish)
Reader's Digest	(Arabic)
Reader's Digest Overseas Milita	ry Edition
Hablemos	(Spanish)
American Exporter	(English)
Exportador Americano	(Spanish)

Philco International sends its distributors and dealers a wide variety of advertising and promotional sales aids, such as consumer literature, newspaper ad mats, radio and TV spots, store and window displays, and posters. Many of these are in Spanish and French and, sometimes, in Arabic. Dealers also receive local advertising support through the Cooperative Advertising Policy applied on a world-wide basis.

An interesting and effective promotional medium is the "Philco World," which provides overseas distributors, dealers, subsidiaries and licensees with facts, information and news about the latest Philco products and their features; successful advertising campaigns used by Philco distributors in other countries; activities at headquarters; and announcements of current promotional material. The magazine is published in separate English, French and Spanish editions.

GOVERNMENT AND INDUSTRIAL GROUP

The Government and Industrial Group conducts five separate advertising programs and features its products and services in forty-five industrial and specialized publications. Just to list the many specialized publications utilized would take a whole page. A special "corporate image" campaign is running in such papers as "Aviation Week," "Electronic News," "Scientific

American." This schedule includes 111 ads in 15 publications with a total circulation of 847,000.

The Computer campaign includes 141 ads in 15 business papers with a total coverage of 1,775,000 readers. Industrial products are advertised in 129 ads in 23 specialized papers reaching nearly 600,000 prospective buyers.

LANSDALE DIVISION

The Lansdale Tube Division, always an active advertiser, has a stepped-up program for reaching its markets in 1961. "Fortune Magazine," "Aviation Week," "Electronics," "Automatic Control," "Electrical Industries," "Control Engineering" and "Electronic Design" are all being used, as well as "Electrical/Electronic Procurement" which reaches 185,472 established Purchasing Agents!

TECHREP DIVISION

The TechRep Division is another consistent advertiser of Philco products and services. This year, it has already scheduled a total of 61 ads in Army, Navy, Air Force, Electronic, Educational and Industrial publications.

The TechRep Division regularly participates, also, in shows and exhibits conducted by industrial, engineering and military-electronic associations.

The advertisements for Philco International, the G & I Group, TechRep, and Service and Accessory Divisions are prepared by Maxwell Associates, Philadelphia, who also produce the Company's promotional campaigns and consumer literature.

PUBLIC RELATIONS

The public relations department maintains a specialist in each division to provide a flow of news and information to the press and broadcasting stations, and to the public, government and industry. The department arranges interviews, press conferences, and factory tours; and conducts the varied public relations activities which generate valuable free publicity for Philco products.

In addition, it schedules year-round appearances by Miss America as another source of valuable publicity.

IT ALL PAYS

It has been said that advertising is "salesmanship in print." The retail salesman and the customer must meet before the sale can be made, but advertising operates on a broader and wider scale. It attracts, interests, and draws prospective customers to the stores where Philco products are sold. This is, and has been, the purpose behind Philco's extensive and many-sided advertising program.

RETIREMENT:

Church and charitable work will occupy the leisure hours of Harry Hess (center) who receives a gift from Chief Accountant of Electronics Operations, William DeFrates, on behalf of fellow workers in the Accounting Department. Harry has been with the Company twenty-five years.

Home interests will be followed by Ralph Meile who receives a farewell gift from Betty Carmody presented on behalf of fellow workers in Dept. 509. Ralph has retired after twenty-five years with Philco.

Travel at home and abroad will occupy the leisure time ahead for Ermano De Annuntis who was retired from Dept. 43-503 after twenty-six years of service. John Heary, his supervisor, has just presented a gift on behalf of fellow workers. After visiting in Florida and California Ermano and his wife will tour Italy.

After visiting friends and relatives in Florida and Arizona Catherine Friskey (seated, wearing corsage) will return to Philadelphia to make her home. Mrs. Friskey is shown at a farewell party given by members of the Accessory Division upon the occasion of her retirement from Philco after thirty-three years of service with the Company.



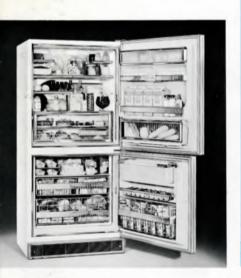














PHILCO CORPORATION
TIOGA AND C STREETS
PHILADELPHIA 34, PA.



J F SMYTH 6354 ALGARD ST PHILA PA 35

9791*