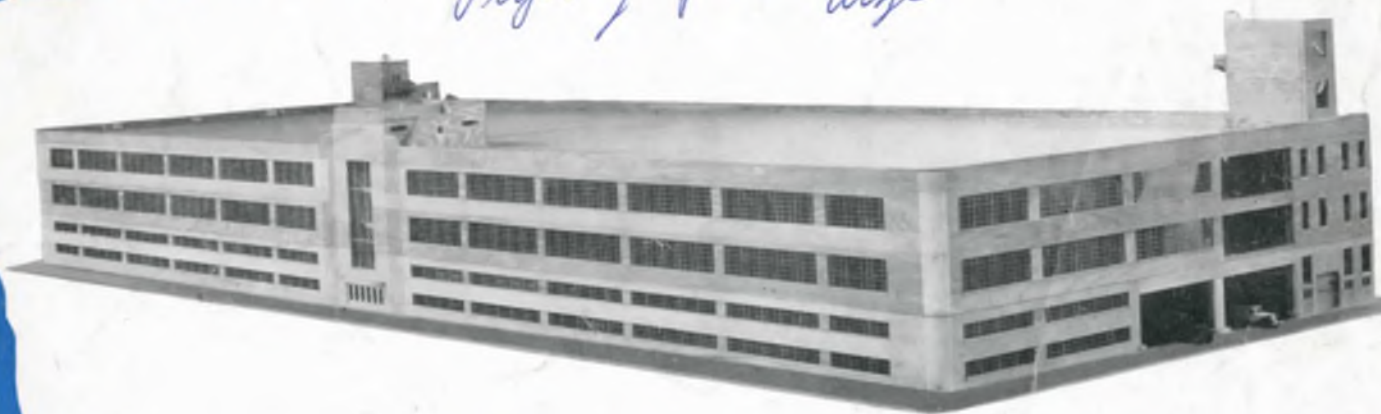


# Phileo News

AUGUST

1946

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# PHILCO NEWS

Published Monthly for Employees of the Philco Corporation Plants in Philadelphia and Vicinity.

J. N. HUNSBERGER, JR., Editor

MARK LUTZ, Associate Editor

Articles, photographs and drawings are invited. Please send to Editor.

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## Editorial

As we have previously stated, one objective of the PHILCO NEWS is to try to give employees of one division greater understanding of those in the various other divisions of the Corporation.

In this issue of the NEWS we salute the radio production department. All divisions concentrate their efforts to carry out their particular assignment so as to turn over to the production division work so well done that sets may be produced with the minimum amount of delays and trouble.

Any mistakes in design, trouble in parts, etc., that reach the production department are almost certain to result in increased costs and reduced output. The success of the Corporation, and therefore its ability to employ larger numbers of people, depends upon the sale of large quantities of quality products. This sale, in turn, depends upon the ability of the manufacturing division to make products in large quantities and at standard costs.

In no other division does the teamwork of all divisions show up so clearly as it does in the radio manufacturing division. The story of production is, for this reason, one we urge you to read carefully. Successful production is the lifeblood of the Corporation: help keep it flowing in ever-increasing volume.



PHILCO ENGINEERS FLY to Florida to attend a special radar school. Twenty-one radar engineers of the Company are shown beside the Silverliner plane of Eastern Air Lines on their arrival at Orlando, Fla., from Philadelphia en route to attend a special radar school at Boca Raton, Fla. After completing their course the engineers will be assigned to foreign service.

## Army Radar Field Engineers Trained by Philco

A special plane chartered by Philco to carry twenty-one radar field engineers for the Army Air Forces on the first lap of an overseas assignment recently took off from Philadelphia.

"This group of field service engineers includes the first contingent of several hundred who are being trained by Philco in the installation, operation and maintenance of all types of military airborne and ground radar equipments," Robert F. Herr, vice-president in charge of the service division of Philco, an-

nounced. "Our engineers will also aid in training Army personnel in all phases of servicing radar devices. They will be stationed at United States military bases in all parts of the world, and will aid in salvaging much equipment that would otherwise have to be junked."

Mr. Herr pointed out that the Company is continuing its wartime activity of providing trained field service engineers to the Army and Navy. These men receive an intensive course in radar maintenance in one of the Philco plants.

TELEVISIONING A HAIRDRESSING COMMERCIAL — Philco Television Station WPTZ and Gimbel Brothers recently made television history by presenting the first regularly scheduled telecast sponsored by a department store. This is the first regularly sponsored series of studio programs presented by Philco in 14 years of television broadcasting.

◀ OUR COVER THIS MONTH — A scale model, both exterior and interior, of Plant 3 now under construction, covering the entire block from Westmoreland to Ontario at C Street. This model, prepared in detail according to plans and prints for the new building, was built by Tony Picozzi (left) and Harry Hartstein (right) of the Carpentry Shop.





## Large Order for Philco Products Placed by Chinese Distributor

Orders already placed for Philco radio receivers and refrigerators by Central Radio Manufacturing Works, Shanghai, China, indicate that this company may well become one of the largest of Philco's 140 export distributors.

"Central Radio, with headquarters in Shanghai and branches in Tientsin, Chungking, Kunming, Hankow, Canton and Nanking, will distribute Philco products in central China," Dempster McIntosh, president of Philco International Corporation, export subsidiary of Philco, explained. "Despite the ravages of an eight-year war, Chinese purchasing power remains substantial, and the market for American appliances is rapidly expanding.

"With the spread of electrification in China, the prospects for radio receivers, radio-phonographs and refrigerators, and eventually freezers, air conditioners, television sets and other appliances, look most promising. Large preliminary orders have been placed by Central Radio for a small Philco table radio receiver and the popular Philco Model 350 portable for AC-DC battery operation, as well as for several new Philco refrigerator models. These orders will be shipped as rapidly as possible, and we regard them as merely a sample of future business in China.

"The rapid spread of radio broadcasting is being encouraged by the Chinese government, since it represents the quickest and most effective medium yet available for mass education.

"To indicate the extent to which Central Radio is planning to merchandise and service Philco appliances, six Chinese radio engineers, all employees of Central Radio, are now taking an intensive course in one of the Philco plants in Philadelphia in the approved methods of servicing all Philco appliances.

"These six engineers, headed by An Wang, of Shanghai, are all graduates in radio engineering from Chinese universities, and have recently received their Master of Science degrees in communications engineering in America. During the years from 1940-45, these engineers worked in the Central Radio plant, then moved to Kweilin, away from Japanese-held territory, and aided in the design and production of military transmitters, receivers and other equipment for the Chinese army.

"Shortly after completing their specialized course in Philco servicing methods, the six engineers will return to China. There they will travel all over the country to instruct dealers and dealers' service men in the correct procedures for installing, maintaining and repairing appliances manufactured by Philco."



Six Chinese radio engineers, all with Master of Science degrees, representing Central Radio Manufacturing Works, Shanghai, China, one of the leading export distributors of Philco products, take an intensive course in servicing Philco appliances at one of the Company's Philadelphia plants.



DEMONSTRATING AT WILLS EYE HOSPITAL that even a sightless man can operate the new Philco 1201 radio-phonograph with its automatic record player. Left to right: Frank Martin, Philco dealer and Lions member; Jerry Fadden, Philco Distributors, Inc.; Melvin L. Sutley, superintendent, Wills Hospital; Adam Beshak, eye patient from Kingston, Pa.; Thomas G. Chadwick, president, Southeast Delco Lions Club; Paul Feinberg, Philco dealer; A. I. Staeley, secretary, Lions Club. The Lions Club presented this radio-phonograph to Wills Hospital at the request of sightless patients who needed entertainment in convenient form.

# PHILCO Radio Production Division

One of the busiest places in the entire Philco organization these days is the production division, which is turning out, in increasing quantities, all models of radio receiving sets and radio-phonographs to meet the pent-up demand for Company products. In this division material is received, inspected, stocked, manufactured, tested and prepared for shipment in the most efficient manner possible.

Before the production division has the green light to go ahead, much preliminary work has been done by other departments, especially engineering, purchasing, factory engineering and material control. When at last the wheels are ready to turn, however, the production department goes ahead with full speed to manufacture sets which uphold the world-wide Philco reputation for quality.

Incoming material for the radio production division has as its final destination the sub-base rivet section, where all sub-assemblies requiring machines are made. A metal sub-base is started through the eyelet and rivet machine to accumulate tube sockets and other parts before being delivered to the wiring assembly conveyor.

The chassis sub-bases are loaded on this conveyor, counted, and then begin to flow progressively past the operators. These operators assemble the chassis, step by step, doing balanced operations and using, as the need calls for, screw drivers, hand wrenches, wiring pliers, soldering irons, or air guns, until the sub-base becomes a completely wired radio set except for the tubes and cabinet, and, in some cases, the speaker.

These wired radio sets continue along the conveyor, where they are visually inspected. A rejected set is fixed, or a substitute put on the conveyor for it, to insure an unbroken flow of production through a group of continuity testers whose duty it is to check, through electrical means, all circuits to see that none are open or shorted, and that all resistors are of the correct values and that the set has been properly wired. Any sets not passing these tests are removed by a continuity trouble shooter and replaced with approved sets.

Approved sets are also given a check inspection to insure further a high standard of quality before they are supplied with tubes and stamped with the date, model and code. They are then transferred to the test conveyor.

All radio sets are assemblies of many parts, such as condensers, resistors, coils, etc. Due to manufacturing tolerances, these parts vary slightly one from the other. To overcome these differences, small compensating condensers and coils are adjusted (padded)



Joseph A. Logora, Production Manager



INCOMING INSPECTION DEPARTMENT.



FARM BATTERY MODELS ON PRODUCTION LINE



TESTING PT MODELS

# -Geared for New Peacetime Records



of the radio division, Philadelphia Philco  
ents.

so that each radio set will give the best performance.

Philco has made its test operations so efficient that they, like the manufacturing processes, can be accomplished on a continuously moving conveyor. This is a real achievement because of the complexity of testing and adjusting a radio receiver. The radio set, continuing along the test conveyor, is first connected to the necessary electric current and the switch turned on to heat the tubes. The next group of operators perform the operations known as intermediate frequency or IF padding. After this output meters are observed to see that the set passes a predetermined sensitivity limit.

Sets failing any of these tests are removed from the conveyor and the cause of the trouble found by trouble shooters.

Completing this test, the radio frequency or RF and antenna padders are adjusted, and the set is checked for dial tracking and sensitivity. This test shows if reception will come in with satisfactory volume at the proper dial locations.

At this juncture the cabinet enters the picture. It is received packed in its final shipping carton. The cabinet is placed on the conveyor for assembly, while its carton is transferred to the final packing station.

Operators using air-driven screw drivers mount the set in its cabinet, after which it passes into a sound-proof booth. Here operators listen for tone quality, hum, dial tracking, distortion and over-all performance.

Upon completing this series of electrical checks to insure quality, the next operators visually inspect the cabinet, knobs and other mountings for any defects or deviations from Philco quality standards.

Quality control makes a final sample check of finished sets for appearance and performance just prior to packing. This close control again insures that only quality merchandise is shipped to Philco dealers.

Further along the conveyor, operators pack and seal the radio sets in cartons specially designed to insure safe delivery to their final destination. The packed set is transferred to a conveyor which delivers it to the shipping department.

It is interesting to note that the Philco straight-line production system requires no extensive warehouse facilities. Components flow into the plant, and finished radio receivers and radio-phonographs flow out directly into waiting freight cars or trucks. Thus the production department achieves the highest mass-production efficiency, no floor space is wasted, and the radios for which America is waiting reach the consumer in the shortest time.



2 LOOP WINDING



5 CABINET MOUNTING ON TABLE RADIO-PHONOGRAPHS



6 MOUNTING OF LARGE RADIO-PHONOGRAPHS

**SUNSHINE CLUB OUTING**  
ENGINEERING DEPT. PHILCO CORPORATION



NO RACING RECORDS were broken but a great deal of fun was reported by the girls at the Engineering Department outing at Somerton Springs.

**PHILCO**



"NICE WORK," says Fred Grab between mouthfuls of pie in one of the pie-eating contests.



THE JUDGES LINE UP: Members of the Engineering Department who served as judges for the male bathing beauty contest show the boys how to pose.



"CHAMP PIE EATER" was the title given Mrs. Mary Buffington, winner of the pie-eating contest for girls in the Engineering Department.



TWO BIRTHDAY CAKES are presented to Enrico Picozzi, Dept. 72, by members of his department, who congratulate him upon passing another milestone.



RECEIVES DIPLOMA—George N. Stover, engineer in charge of quality control at the Philco Storage Battery Division, was a June graduate of the Drexel Institute Evening School in Electrical Engineering.

# Pictorial Parade



KP DUTY is done by Nels Johnson, chairman of the Research Department outing, while Joe Tellier does a bit of wood chopping.



BASEBALL ENTHUSIASTS George Laurent (at bat) and Oscar Simpson (catcher) enjoyed several good games before lunch.



"THE WATER'S FINE" agree Warren Welcome (facing the camera), Ted George, Richard Waggener and J. H. Lawton.



SUN BATHING is enjoyed by Mary Jo Roney (facing the camera), Betty and Doty Bowers at the Research Department outing.



DREXEL GRADUATE—R. W. (Bob) Cooper, Project Engineering, recently awarded a diploma by the Drexel Institute Evening School of Power Plant Engineering. Sarah Langille (right) and Mary Mullally examine his diploma.

THE FISH THAT DIDN'T GET AWAY is photographed with members of the Test Engineering group of Dept. 20 who recently went on a fishing trip to Fortescue, N. J.



# Philco News



Honor guests (left) at a dinner party given recently at Eilers Restaurant for newlyweds of Depts. 20 and 35. The photograph at right shows members of the departments attending. Those honored, each of whom was given a wedding present of a new Philco radio, are (left to right): Jane Craven Dougherty, Betty Lazzaro Martin, Shirley Galle Brooks, Ann Cox Brennan, Colie McGinn Gardiner, Mary Saville Barbieri and Joseph Barbieri.

## GI NEWS • • • Here and There

T/S ROBERT J. MILLER, Dept. 27, has been transferred from Fort George Meade to Fort Custer, Battle Creek, Mich.



Letters from friends at Philco would be appreciated by PFC. NORMAN NOSKOFF, he writes. His address is Battery E, 94th Construction Squadron, APO 225, Co. P.M., New York, N. Y.

While on furlough, PVT. JOHN NAKOWITSKY, Dept. 14, visited friends at Philco. On the strength of his work with the Company and grades he received in examinations, Pvt. Nakowitsky has been given a special assignment to Santa Fe, N. M., where he will work on the Manhattan project.



PVT. FRANK N. REVELIS, Dept. 14, writes that he is taking a course in radar at Boca Raton, Fla.



### NEW BROACH MACHINE

Albert Reuss (center), superintendent of the Metal Division, and Floyd Roberts, foreman, inspect work as it comes from the machine operated by Dorothy Henderson. The Metal Division, after extensive studies and research for the best methods of producing tuning shafts from production and quality standpoints, have incorporated a new manufacturing set-up using the latest development on machining of this type. Included in this new set-up is the machine shown. This broach machine has a production capacity of over 2,000 pieces per hour. One of its features is the ability to produce to standards of 1/10,000th of an inch, thus producing shafts of various sizes for many different models.



BLOOD DONORS—Sylvester Gendek and Mike Jakelwicz, who between them have donated 53 pints of blood for emergency blood transfusions, tell Miss Helen Swan, nurse at Plant 6 dispensary, about a recent call for assistance they answered at St. Christopher's Hospital.